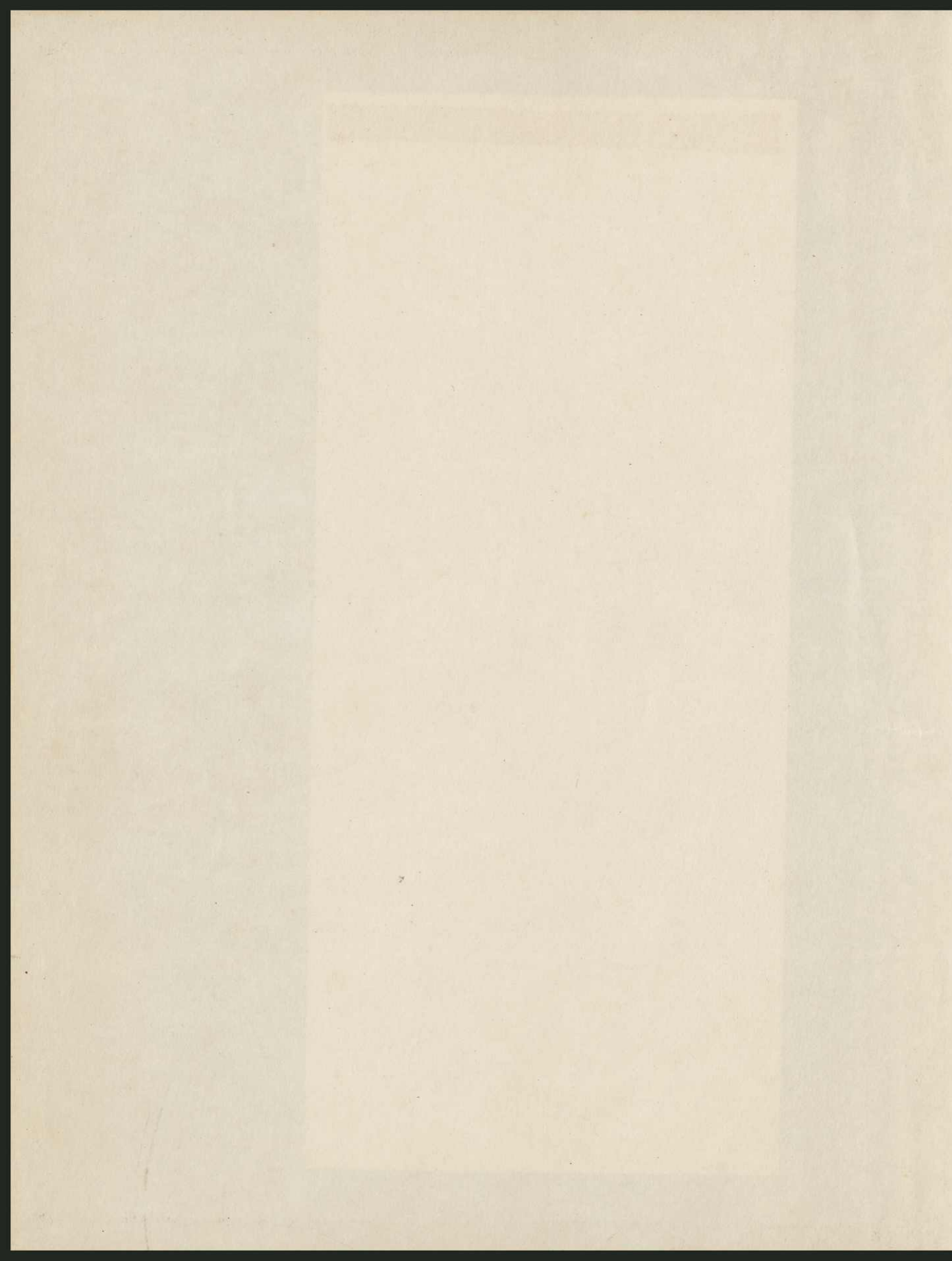


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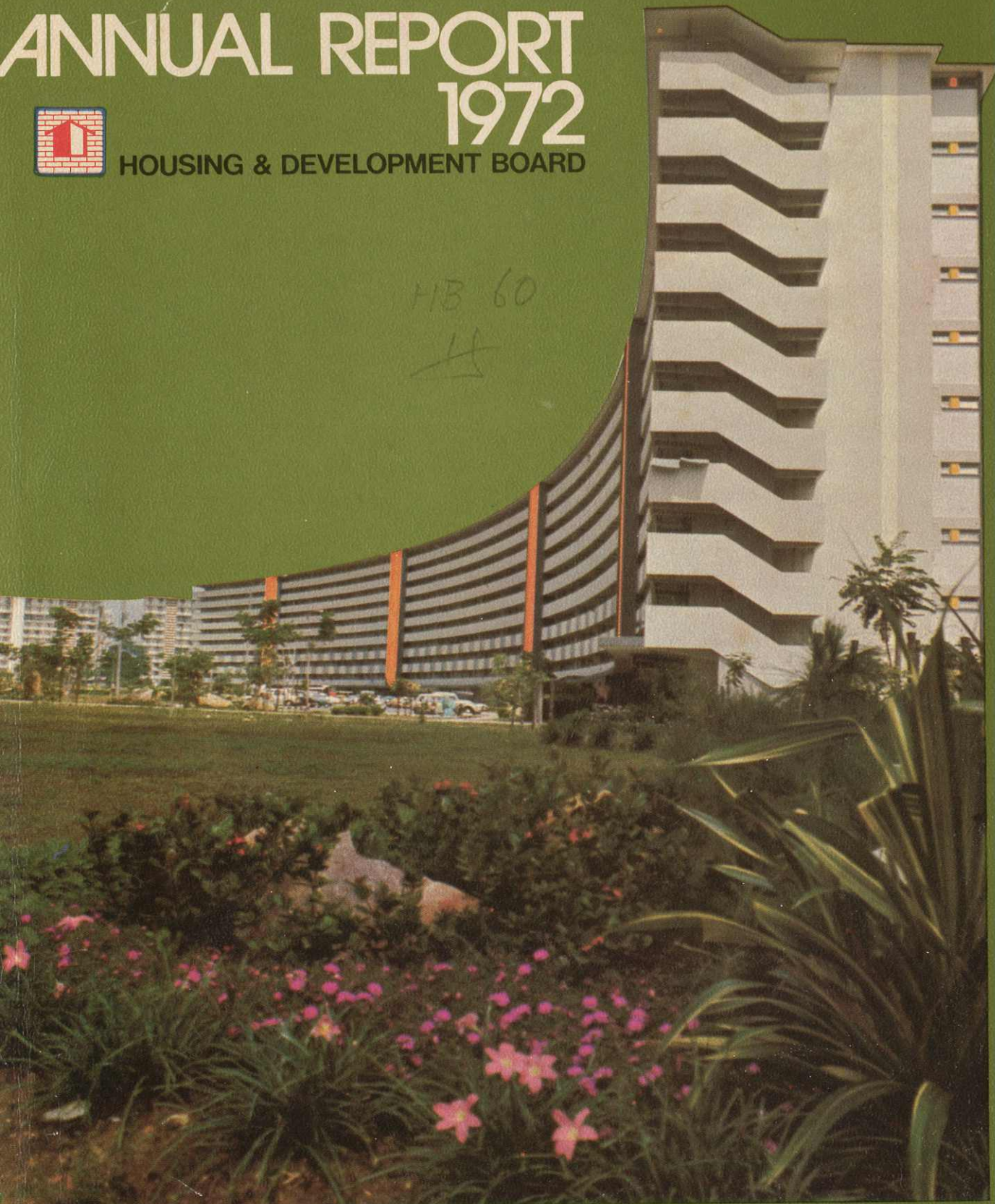
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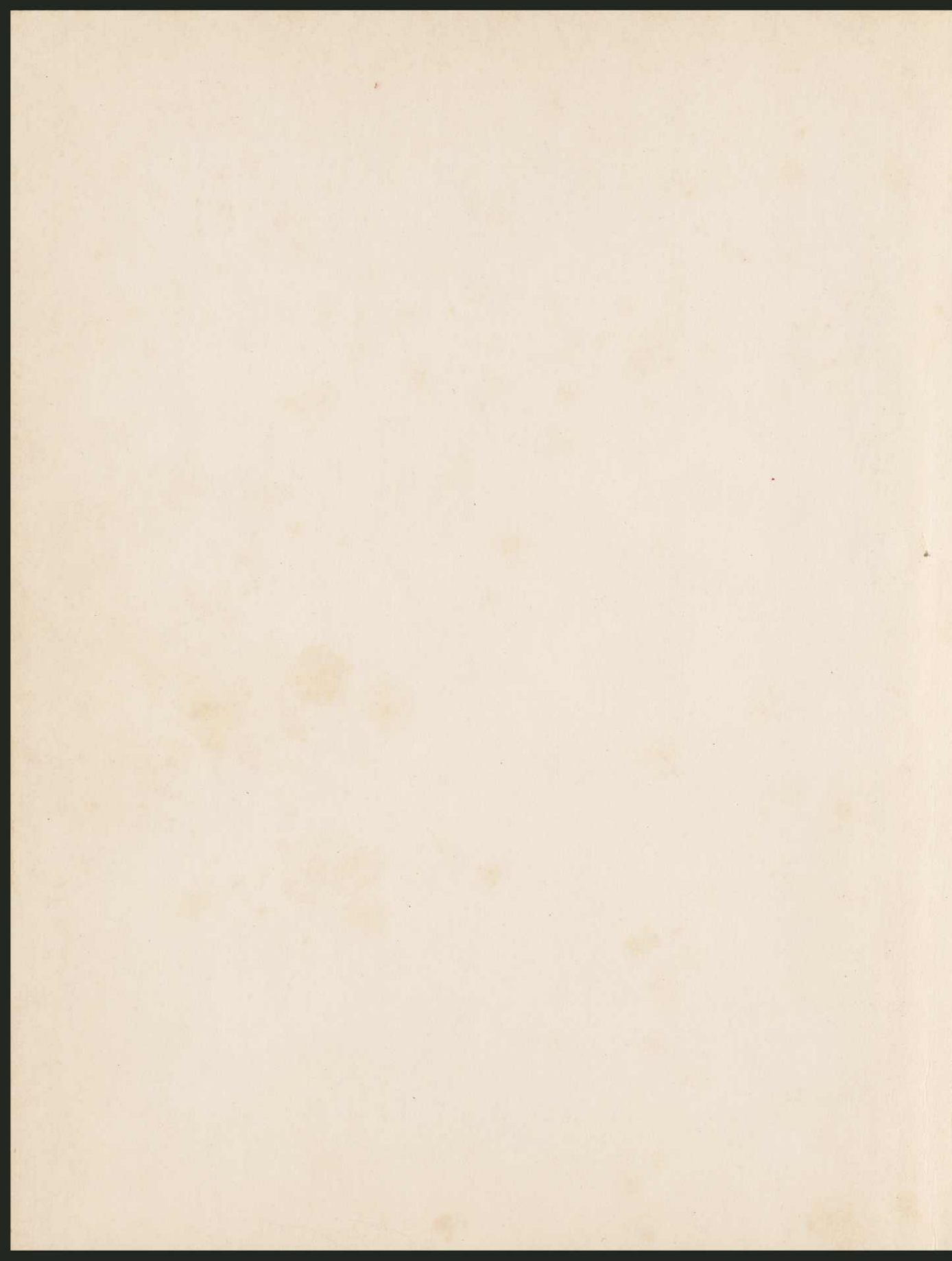
ANNUAL REPORT 1972

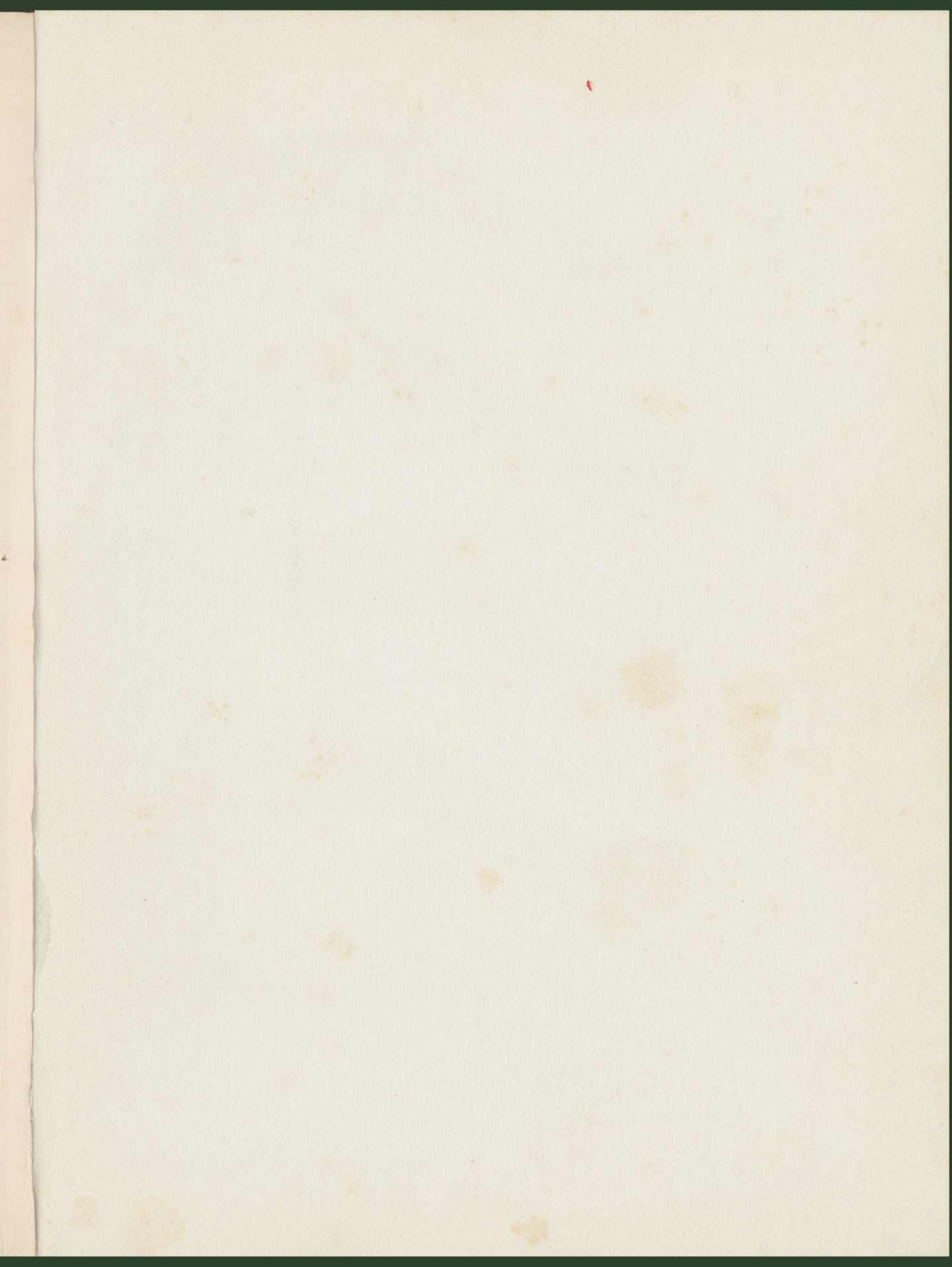


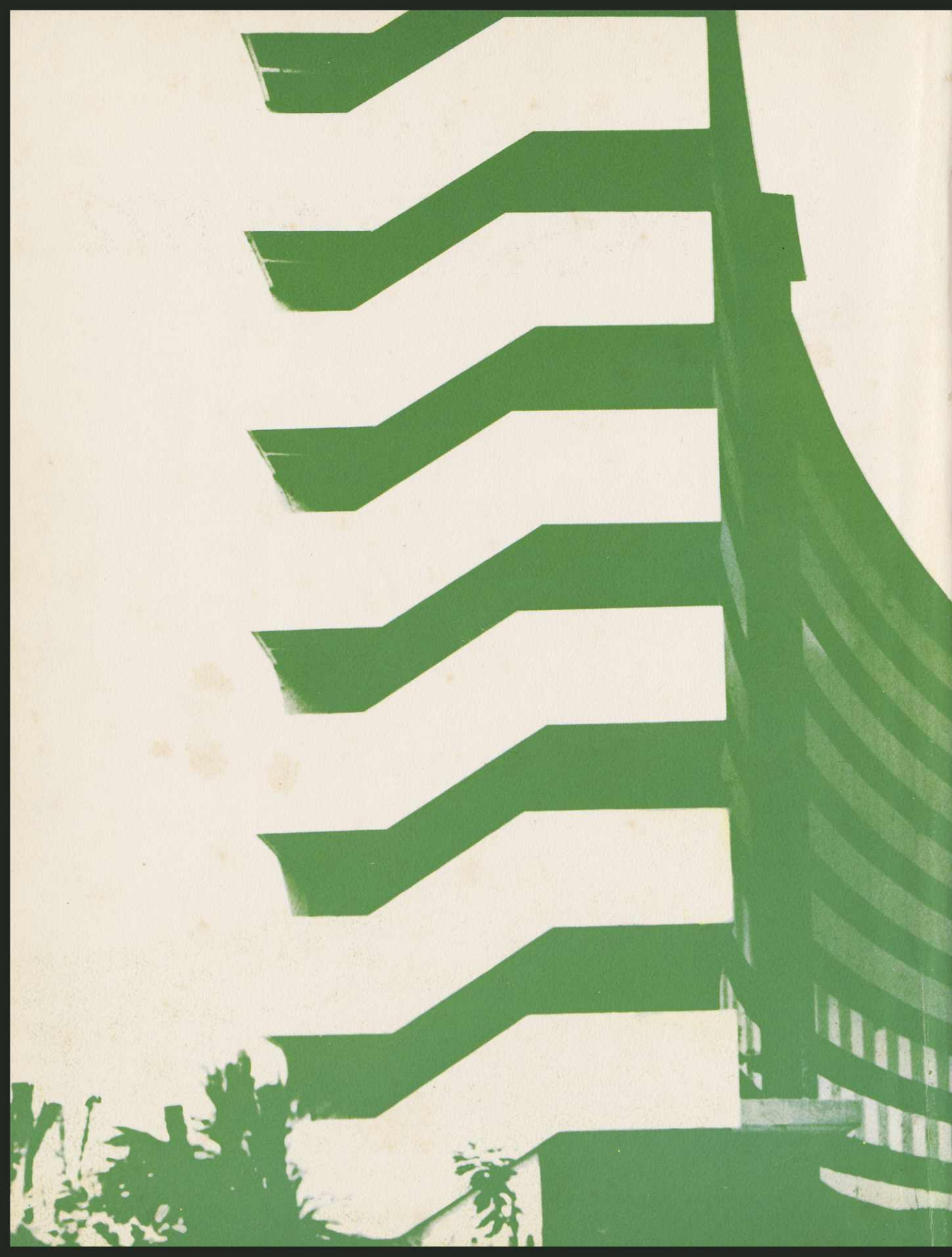
HOUSING & DEVELOPMENT BOARD



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ANNUAL REPORT 1972

HOUSING & DEVELOPMENT BOARD



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CHAIRMAN'S REVIEW

Demand for Public Housing

During the year the Board received a record 36,532 applications for flats, 11,888 to rent and 24,644 to purchase. These applications almost double those of 1969, bringing the number of outstanding applicants awaiting the allocation of flats to 78,096 at 31st December, 1972. This enormous increase in demand for public housing has resulted mainly from the rising affluence of workers in an economy of near full employment and better Central Provident Fund benefits. The raising of family income limits to permit those earning up to \$1,500 pm to qualify for the purchase of a Board flat; the lowering of the number of persons constituting a family eligible for public housing to a minimum of two and the current tendency for young married couples to live separately from their parents are other additional contributory factors.

Review of Building Programme

The increased demand for public housing inevitably required a review of the Building Programme, the result of which was the Government's decision to raise the target under the Third Five-Year Building Programme (1971-75) from 100,000 units to 125,000 units. The increase in units will be reflected in the annual output from 1973 although the shortage of construction workers and building materials and the timely provision of public utility and sewerage services to meet the accelerated programme could be restraining factors.

Finance

The building programme in the first years of the Third Five-Year plan recorded an increase in monthly capital payments to contractors on housing projects from \$5.9 million in January 1971 to \$12.9 million in January 1972 and further to \$20 million in December 1972. The

Building Programme

In 1972 the Housing & Development Board completed a record 20,252 units of flats and shops, with a further 36,560 units under various stages of construction at 31st December. These figures are the highest attained by the Board since its inception in February 1960. The volume of work executed in the year is almost twice that of 1971, and four times that of 1968 and capital expenditure rose to \$238 million; an increase of \$102 million over 1971.

About 800,000 Singaporeans are now residing in housing estates under the Board's management. These include 45,000 families living in flats purchased from the Board under the "Home Ownership Scheme."

loan allocation to the Board of \$207 million in the Development Estimates for April 1972 to March 1973 was fully drawn and approval of a supplemental provision amounting to \$53 million is being sought. Capital expenditure on housing (including land costs) for 1972 was \$260 million and \$86 million of the Board's other funds had to be temporarily used for public housing pending provision of the additional loans.

Technical Staff

The shortage of professional Architects and Engineers still constitutes a serious problem. Recruitment exercises mounted by the Board during the year were able to attract only sufficient professional staff to replace those who have resigned. To improve the situation, additional incentives have been introduced to encourage suitably qualified architects to join the Board. Promotional posts within the Board have also been created to provide better prospects for experienced staff.

Shortage of Building Materials and Building Workers

The shortage of various types of building materials, especially cement and squat pans at the beginning of 1972 and Public Utilities Board's electrical cables in mid-year, delayed the occupation of several thousand units of completed flats.

To prevent these shortages recurring, the Board has arranged to import squat pans, cement and sand to supplement local supplies. The Board's quarry plants are being expanded to increase granite production and a brick manufacturing factory has been set up to achieve self-sufficiency in the supply of clay bricks. In addition the Board is looking into the possibility of acquiring a sand quarry site to supply sand.

To overcome the shortage of skilled and unskilled workers and to keep the number

of workers at work sites to the minimum, the Board is encouraging contractors to mechanize.

A study was also made into the feasibility of introducing industrialised construction methods for the building of flats and several local and international building construction firms were invited to submit proposals. Six quotations have been received and are now being processed by a Committee appointed by the Ministry.

Rise in Building Cost and Housing Subsidy

Another serious problem facing the Board was the escalation of construction cost which increased by 10% during the year. Prices of building materials—other than cement and steel which are controlled by Government—and wages of construction workers reflect this increase while land costs rose even higher.

Owing to the rise in land and construction costs, the subsidy per unit of 3-room flat sold under the "Home Ownership Scheme" is now \$5,000 while maintenance of the properties involves a further subsidy of \$10 per unit per month. These and other subsidies have caused increasing deficits in the Board's operations.

Promotion of Industries Within the Housing Estates

The Board together with the Economic Development Board has actively promoted the setting up of clean and labour-intensive industries in new housing estates. This policy has been extremely successful in Toa Payoh where well-known international industrialists have established ten major factories providing employment for some 16% of the working population living in this estate. Another 100 acres of industrial land are being developed at Bedok New Town. Several well-known international industrial firms have already entered into contracts with the Board to establish factories there.



East Coast Reclamation

Phases I and II of the East Coast Reclamation Scheme from Bedok to Tanjong Rhu have been completed while Phases III and IV at Nicoll Highway and from Bedok to Changi are in progress. During the year a total of 123.6 hectares (306 acres) of land were reclaimed under Phases III and IV contracts. When these schemes are completed at the end of 1975, a total of 1,071 hectares (2,645 acres) of land will have been reclaimed from the sea.

Under the Master Plan for the East Coast, one-third of the land along the edge of the reclamation will be set aside for a park stretching continuously for more than 16.2 km (10 miles) from Tanjong Rhu to Changi Point. This continuous sandy beach-line will provide good swimming and aquatic facilities and much needed recreational areas for local residents and tourists. The planned coastal highway along the reclaimed land will relieve traffic congestion from the eastern part of the island to the City. The remaining reclaimed area will be utilised for public housing, schools, hospitals, commercial and other projects.

Estates Management

The 155,000 units of properties in the Board's various estates housing about 40% of the Republic's population impose problems of management. Continuous reviews have been carried out to further improve the management of estates where possible.

The setting up of the Essential Maintenance Service Centre and of the Lift Emergency Unit has enabled the Board to provide a much needed service. Complaints regarding defective water pumps, electrical and sanitary fittings are attended to and put right within the hour in most instances and any resident trapped inside a lift can expect to be released in less than half an hour.

In July, the Board published the first issue of an official magazine "OUR HOME" which

was distributed free to all residents. Three quarterly issues were published during 1972; this number will be increased to six in 1973 on a bi-monthly basis.

The main purpose of the magazine is to keep residents better informed of the Board's policies and procedures and to acquaint them with the many services provided in the housing estates. The magazine also serves as an additional medium of communication between the Board and its residents and amongst the residents themselves.

Resettlement

A new resettlement policy introduced at the end of 1971 providing better compensation terms has assisted resettlement work during the year. A large percentage of farmers due for resettlement now prefer free 3-room flats to alternative farmland which is limited in supply. Resettlement in urban areas slowed down during the year due to the shortage of suitable alternative premises for shops and industrial cases. Alternatives are now being worked out.

Statistics & Research

A series of surveys was conducted by the Board during the year to obtain feed-back information for policy decisions and to improve the design of buildings and management of housing estates. One such survey has provided information on existing employment patterns and available manpower in housing estates. This will assist the Board in planning greater employment opportunities for the residents. Important data have also been obtained from the Survey on Car Ownership and Parking Facilities in HDB Estates. The survey revealed that more than 70% of car owners are in favour of paid carparks and a policy on paid carparks is now being formulated by the Board to ensure orderly and adequate provision of parking spaces for residents.

Urban Renewal

The Government in October 1972 announced

the formation of an Urban Renewal Authority. During the year the Urban Renewal Department made advance preparations to bring about a smooth transition to its new status as an independent Statutory Authority.

Plans to accelerate the pace of urban renewal in the Central Area in accordance with revised development targets have commenced and good progress has been made in the development and construction of sites sold under the Urban Renewal Sales Scheme.

Changing Role of H.D.B.

When the Board was formed in 1960, the main objective was to construct the maximum number of public housing units of acceptable standards at minimum cost for the lower income group. As a result of rapid economic development in the Republic in the last few years, more Government funds are being made available to progressively improve the standard of public housing. Larger and better type flats are now being built, the average size of a flat being about 700 sq. ft. or 150 sq. ft. per person. The standard of public housing provided by the Board is not only among the highest in Asian countries but is also comparable to European and American standards.

The Board has also implemented a programme to convert existing communal and semi-communal flats into self-contained units. During the year 1,720 units of semi-communal 1-room emergency flats were converted into 908 units of self-contained larger flats. The remaining 14,102 units of 1-room emergency flats built under the First Five-Year Building Programme will be similarly converted.

Owing to boom conditions the values of properties in the Republic have risen substantially in the past 3 years. The selling prices of housing developed by private enterprise are no longer related to income and are beyond the reach of many middle-income earners who now look to the Board to provide them with homes. During the year

the Board built more than 85% of the total housing units constructed in Singapore as against some 15% by the private sector.

The large number of housing units provided by the Board at low rental and selling prices has achieved the twin objectives of improving the standard of life as well as stabilising to some extent the cost of living. The average rental paid by residents is less than 15% of the family income and the average price of a 3-room flat made available by the Board to citizens is generally less than twice the annual family income of the purchaser.

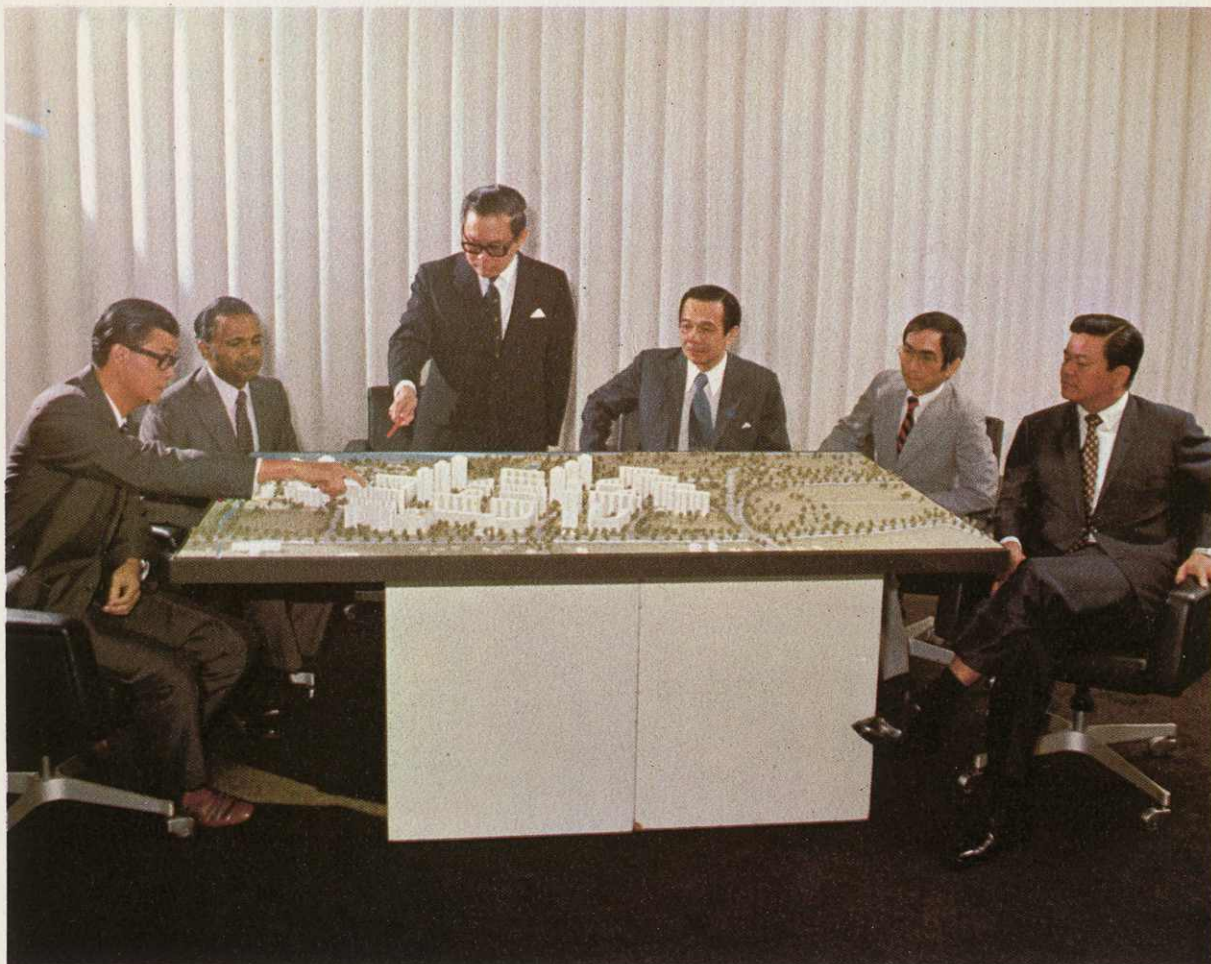
General

In the planning of new estates, priority has been given to provide recreational facilities for sports, play areas and open spaces. In Queenstown, a sports complex with five swimming pools and an Olympic-sized running track have been built. Toa Payoh New Town will be host to the SEAP Games contingents in September 1973. A Games Village complete with accommodation for the participants, a practice running track with a grandstand and a landscaped garden are now under construction. These, together with the five-pool swimming complex which will serve as the venue for the swimming events of the Games, are scheduled to be completed in mid 1973.

The Board has had a successful year in 1972 and this is due in no small measure to the efforts of its staff, especially Senior Officers who despite operating under difficult conditions, have produced extremely fine results. With the further acceleration in the Building Programme, greater efforts are needed. The Board is confident that employees at all levels in the Board will respond positively to the challenging tasks ahead.

LEE HEE SENG
CHAIRMAN
HOUSING & DEVELOPMENT BOARD
March, 1973

Board members of the Housing & Development Board seated in front of a model of Marine Parade. From left to right: Messrs Cheng Tong Fatt, M. Coomaraswamy, Deputy Chairman, Lee Hee Seng, Chairman, Michael Fam, C.A.V. Chew and Baey Lian Peck.



MEMBERS OF THE BOARD

Chairman:

Deputy Chairman:

Members:

Mr Lee Hee Seng

Mr M. Coomaraswamy

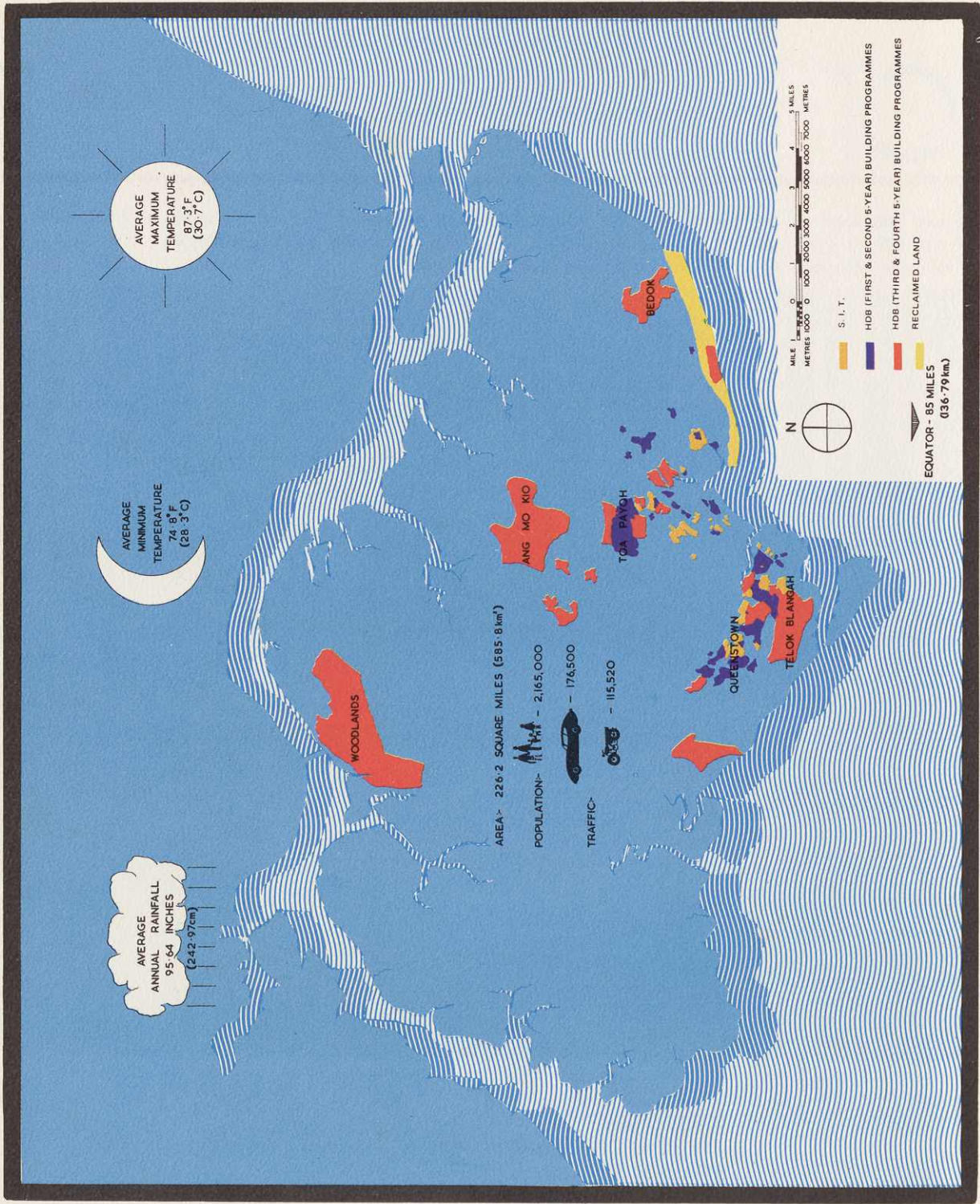
Mr C.A.V. Chew

Mr Michael Fam

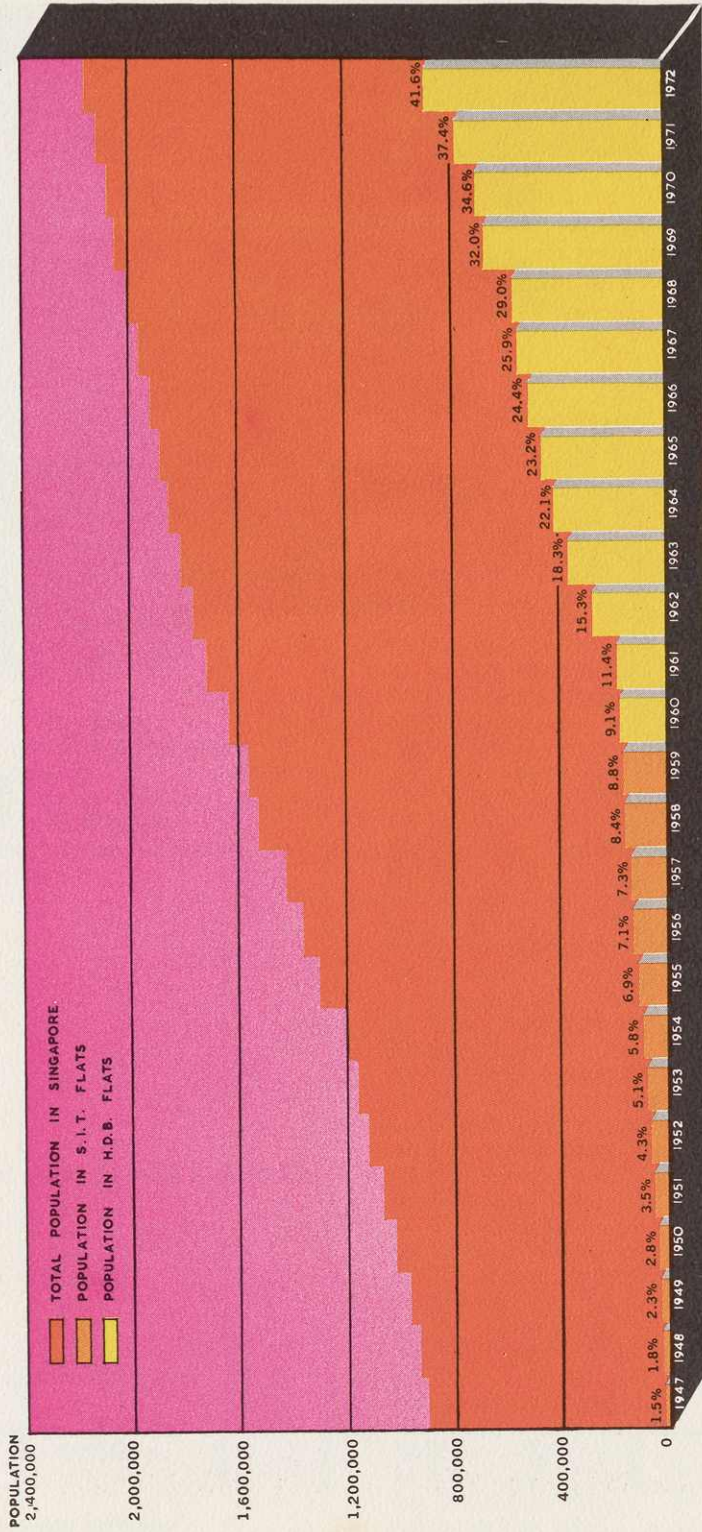
Mr Baey Lian Peck

Mr Cheng Tong Fatt

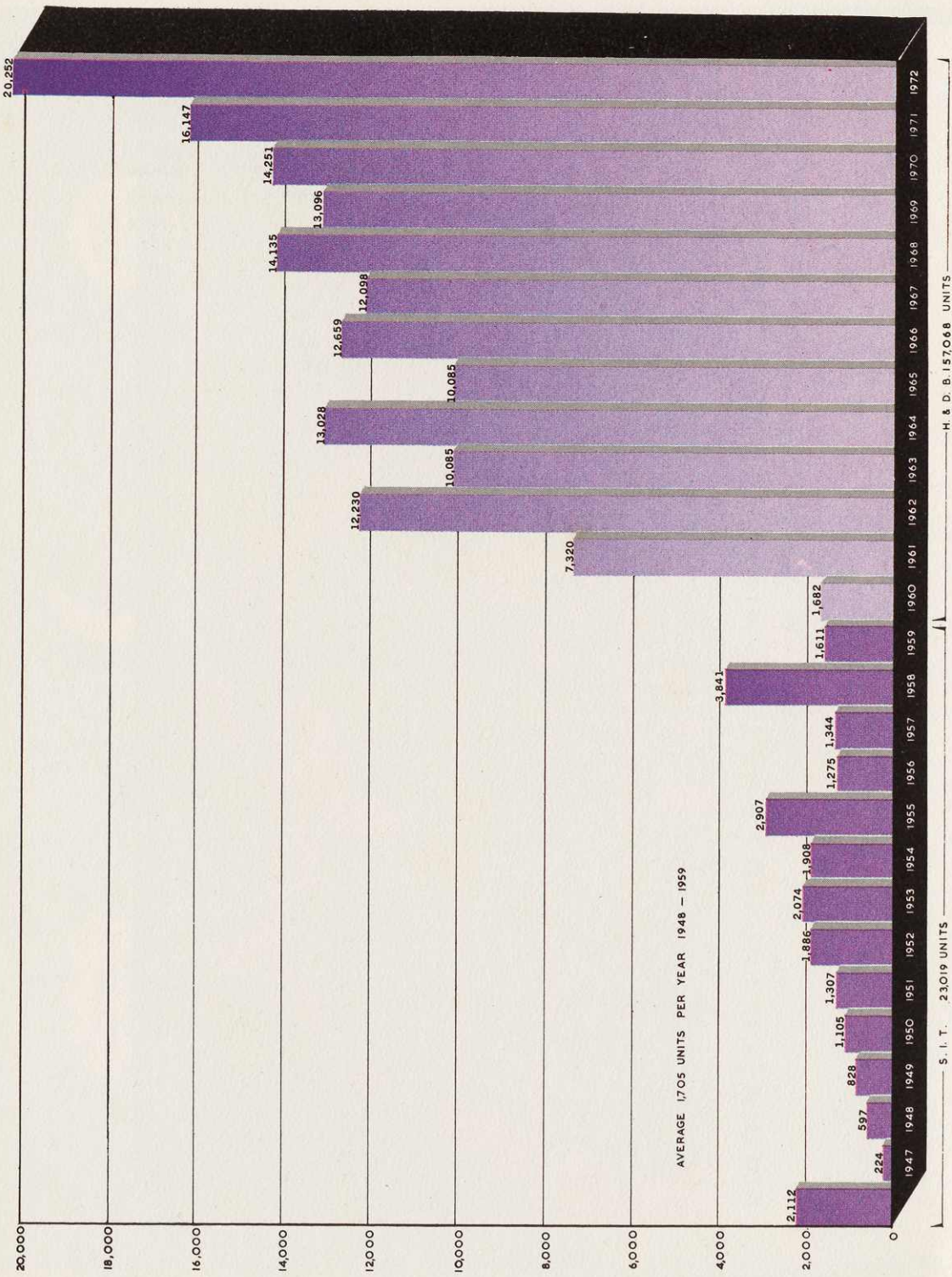
MAP SHOWING THE LOCATION OF PUBLIC HOUSING ESTATES.



POPULATION HOUSED IN HOUSING & DEVELOPMENT BOARD FLATS



HOUSING & DEVELOPMENT BOARD BUILDING STATISTICS



PRINCIPAL OFFICERS

AS AT 31ST DECEMBER 1972

Chief Executive Officer
Secretary
Secretary (Special Duties)
Chief Architect
Estates Manager
Head, Urban Renewal
Head, Resettlement Department
Financial Officer
Honorary Head, Statistics & Research Department
Principal Architects

Principal Civil Engineer
Principal Structural Engineer
Principal Surveyor
Principal Contracts Officer
Principal Estates Officer
Principal Resettlement Officer
Senior Architects

Senior Architects (Urban Renewal)

Senior Civil Engineer

Senior Structural Engineer

Senior Surveyor
Senior Estates Officers

Deputy Financial Officer
Internal Auditor

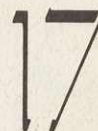
Mr Teh Cheang Wan
 Mr William Chee Tiang Chin
 Mr Lim Koon Poh
 Mr William Wong Wai Ying
 Mr Tan Tian Boon
 Mr Alan F.C. Choe
 Mr Lim Hoon Yong (Ag.)
 Mr R.F. Scully

Dr Stephen Yeh
 Mr Liu Thai Ker
 Mr Si Hoe Kok Sing
 Mr Au Eng Kok
 Mr Tan Tiong Beng
 Mr V. Fernando
 Mr Yeoh Hooi Heng
 Mr Ng Boon Ong
 Mr Teo Hee Cher (Ag.)
 Mr Chee Teck Chiang
 Mrs Wong Choong Leng (Ag.)
 Mrs Yap Lau Wai Chen (Ag.)
 Mdm Iris Chen (Ag.)
 Mr Tay Siow Hwa (Ag.)
 Mr Tan Bin Yee (Ag.)
 Mr Heng Fook Seng (Ag.)
 Mr Loo Teck Hin (Ag.)
 Mdm Tan Ai Fong (Ag.)
 Mr Tan Keng Joo (Ag.)
 Mr Goh Hup Chor (Ag.)
 Mr Loh Swee Seng (Ag.)
 Mr Lee Weng Yan
 Mr Soh Gin Teck
 Mr Tan Wee Lee
 Mr Chau Po Liang
 Mr Chew Seong Yean
 Mr Liu Hua An
 Mr Yao Chee Liew
 Mr Pok Sheung Foo
 Mr Chua It Meng
 Mr Ng Suan Chung
 Mr Yeoh Joo Pheng (Ag.)
 Mr Phang Wong Yew
 Mr Chong Kim Chang
 Mr Swee Kee Siong
 Mr Fong Kok Woh
 Mr Ho Eng Hock

} Alternating



Swimming pools will be a main feature in all new towns. In Queenstown, the swimming complex is very popular with residents. A second pool will soon be added to the satellite town.



ADMINISTRATION

The Chairman and Board Members

The Board is headed by the Chairman, Mr Lee Hee Seng who is also the Managing Director of Singapura Building Society Ltd. Mr Lee has been Chairman since 2nd April 1971 and was a Board Member for almost five years prior to being appointed Chairman.

Mr Lee is assisted by the Deputy Chairman, Mr M. Coomaraswamy, a senior partner in a firm of solicitors and four other Board Members—Mr C.A.V. Chew, an Architect, Mr Michael Fam, a Company Director, Mr Baey Lian Peck, another Company Director and Mr Cheng Tong Fatt, Permanent Secretary in the Ministry of National Development.

Organisation

There are seven Departments in the Board—the Secretariat, the Finance Department, the Estates Department, the Building Department, the Urban Renewal Department, the Resettlement Department and the Statistics & Research Department.

The Secretariat

Of these, the Secretariat is the central co-ordinating body liaising between the various Departments and the Board. It processes and comments on all papers addressed to the Chairman and the Board seeking approval for proposals, plans and projects to be carried out and in turn ensures the implementation of the Board's decisions on such papers by the relevant Departments.

The Secretariat is also responsible for personnel administration, public relations, staff training and systems and methods.

Personnel Administration

1972 saw the successful conclusion of a collective agreement, affecting junior officers, with the Singapore Housing and Development

Functions of the Housing & Development Board

The Housing and Development Board, a Statutory Board established on 1st February, 1960 by the Housing and Development Act, Chapter 271 under the portfolio of the Minister of Law & National Development, is the Republic's public housing authority.

Charged with wide-ranging responsibilities, the Board builds homes for the people, clears areas required for development, resettles families affected by clearance schemes, provides loans for the purchase of its flats and manages those properties sold or rented.

The Premier of New South Wales, the Hon Sir Robert Askin being greeted by a resident in her 4-room flat in Queenstown.



Board Workers' Union known as the "Housing and Development Board's Junior Technical Staff Agreement 1971".

This agreement providing for four new salary scales for Technical Grades with effect from 1st April 1971, was implemented on 27th January 1972. 782 technical officers opted for the new technical scale and only 3 officers elected to remain on the original salary scale.

In September, the Board accepted a new wage structure recommended by the Review Committee for daily-rated employees in the Government, the Public Utilities Board and

the Housing and Development Board. The new wage structure included the introduction of a wage scale for cleansing and other allied workers.

Salary revisions for the posts of Hawker Liaison Officer, Resettlement Inspector and Area Supervisor were looked into and implemented during the year.

Promotional Bar Examinations for Clerical Assistants and Typist/Clerical Assistants were held in April and again in October. Following the examination in April, 95 Clerical Assistants and Typist/Clerical Assistants were promoted

Dr. S. L. Mansholt, President of EEC, being presented with a Souvenir medallion by Chairman, Mr. Lee Hee Seng. On the right is Mrs. Mansholt.



to Clerks and Clerks/Typists. Several Senior Clerk appointments were also upgraded during the year.

The Personnel Section dealt with a record number of 11,977 applications for junior and senior posts in the Board. On the advice of the Public Service Commission, 55 Senior and designated junior officers were appointed by the Board. Ad-Hoc Selection Boards were constituted to advise on other junior appointments and promotions and 871 junior officers were appointed or promoted on the advice of these Selection Boards which in most instances,

were chaired by a Board Member.

A new scheme of service for Architectural and Engineering graduates from Taiwan Universities was implemented in 1972 to ease the difficulty in recruiting fully qualified Architects and Engineers. A new salary scale of \$650 x 50A-\$750/\$800 x 50A-\$1250/\$1300 x 50A-\$1500 for Architectural and Engineering Assistants was formulated after discussion with the Public Service Commission and the Public Works Department.

Further inducements to attract Engineering and Architectural graduates from overseas



The first three issues of Our Home—a publication edited and produced by the Housing Board and distributed free to all flat-dwellers.

universities include air fares for the recruit and his wife, subject to a service bond, and accommodation at reasonable rates for recruits who are not eligible for public housing.

Taking the lead set by the Government, the Board made two additional salary payments of a month each to its staff during 1972—one in March and the other at the end of the year.

Central Provident Fund contributions were also increased from 10% to 12% of the employee's monthly salary with effect from 1st April 1972. Arising from the increase in CPF payments, the Board, with the concurrence of the Minister, agreed to wind up the Housing & Development Board Provident Fund, with effect from 30th September 1972. From 1st October, all contributions to the HDB Provident

Fund were made direct to the Central Provident Fund.

Public Relations

On 26th July 1972, the first issue of the Housing & Development Board publication for residents, OUR HOME, was published.

OUR HOME, a quarterly magazine, is distributed free to every family in HDB estates. It is primarily published to gain closer rapport with the 800,000 persons who are presently living in the Board's estates.

Changes in the Board's policies, views and related matters are conveyed to the residents through the magazine and in return, residents are invited to reciprocate with their views and suggestions.

Mr. Lee Hee Seng, Chairman HDB, briefing the Royal Family on Telok Blangah New Town and the Marine Terminal tourist project that links the Town to Sentosa Island.



During the year, the Board participated in the Family Planning Campaign in conjunction with the Ministry of Health. Lectures and film shows were organised to explain the Government's policy of keeping the family small. The Board also participated in the National Tree Planting Campaign.

A general publicity film "Better Homes for our People" in four languages was completed during the year. The film showing the achievements of the Board and its future development schemes, was screened to local audiences as well as overseas audiences in the Republic's

missions abroad.

The highlight of 1972 was the visit of the Royal Family: H.M. Queen Elizabeth II, H.R.H. Prince Philip and H.R.H. Princess Anne in February.

During their visit, the Royal Family were briefed on the Board's housing programmes and approved future housing schemes. They were also conducted on a tour of the Toa Payoh New Town where residents turned up in full force to give the Royal Family a truly royal welcome.

Other distinguished visitors to the Board during the year were:

NAME	DESIGNATION
The Rt. Hon. Roy Jenkins, MP H.E. Dr R.J. Ouko	British Member of Parliament (Labour) East African Minister for Common Market and Economic Affairs
H.E. Mr Kim Lyong Taek	Dy. Foreign Minister, Leader of Friendship Delegation, Democratic People's Republic of Korea
The Hon. Stanley Stephens	Minister for Housing & Co-operative Societies, New South Wales, Australia
H.E. Mr Peter Keuneman	Minister of Housing & Construction, Ceylon
The Hon. Sir Robert William Askin, KCMG, MLA	Premier of New South Wales, Australia
H.E. Mr Abdus Samad Azad	Foreign Minister of Bangla-Desh
H.E. Mr H.M.D. Mintaredja	Minister for Social Affairs, Indonesia
Sir William Goode	Chairman, Water Resources Board, United Kingdom
Papua-New Guinean Delegation	
H.E. Mr Julius Chan, MHA	Minister for Internal Finance
H.E. Mr Ebia Olewale, MHA	Minister for Education
H.E. Mr Donatus Mola, MHA	Minister for Business Development
H.E. Mr John Poe, MHA	Minister for Trade and Industry
H.E. Colonel Mobolaji Johnson	Military-Governor of Lagos, Nigeria
Dr S.L. Mansholt	President of the European Economic Community
H.E. Dr Malai Huvanandana	Chairman, Interior Policy and Planning Advisory Board, Thailand
H.E. Mrs Kate Strobel	Federal Minister for Youth, Family Affairs and Health, Federal Republic of Germany
Lord Snowdon	United Kingdom

(The above listing is in chronological order)

The activities of the Housing & Development Board continued to attract considerable interest both inside and outside the Republic. Throughout the year, the Board received over 1,000 overseas and local visitors, among them, architects, town planners, journalists, study groups and university students.

Staff Training

In 1972, a planned training programme for Board personnel was initiated for the first time. The programme comprised mainly induction courses for new employees, job orientation courses, supervisory training courses and management development courses.

The Queen and Prince Philip touring Toa Payoh.



A total of 322 officers participated in the programme. The participants were drawn mainly from the junior supervisory and executive grades.

As the demand for supervisors for construction contracts grew (more than 500 contracts were let out in 1972), the Board expanded its training programme for Works Apprentices to be trained as Supervisors or Clerks-of-Works.

Under this training scheme school leavers were recruited to undergo on-the-job training at the construction sites during the day and

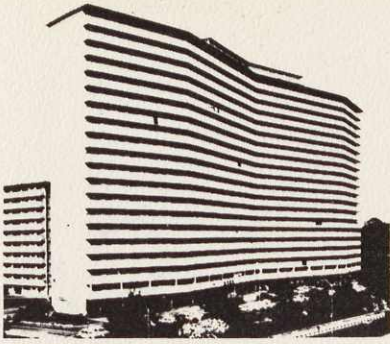
attend lecture sessions conducted by the Board's Engineers and Architects in the evenings. During the year 187 Works Apprentices attended the courses.

Systems and Methods

Set up in October 1971, the Systems & Methods Unit reviewed in depth the organisation and administration of the Resettlement, Building and Finance Departments in 1972 as scheduled and undertook examination of specific systems and procedures within the Board.



Children's playground in Redhill Estate. An increasing number of playgrounds are provided in the Board's estates.



FINANCE

Capital Expenditure on Housing

The Board's 1972 budgeted capital expenditure for public housing and related projects was originally \$211.58 million but was subsequently increased to \$268.45 million in order to cover the accelerated building programme.

Building contracts amounting \$219.68 million were awarded in 1972 and capital expenditure on projects completed and work-in-progress, including contracts from previous years, was \$260 million.

Payments made to contractors and others for capital expenditure totalled \$219.42 million. This brought the accumulated excess of payments for capital expenditure over loan drawings at the end of the year to \$85.77 million, which amount was met by temporary use of other funds such as provision for repairs, renewals and redecoration and contractors' and purchasers' deposits.

Allocation of "Loans to Housing & Development Board" in the Republic's Development Estimates, April 1972 to March 1973, was \$180 million and request has been made to increase this to \$260 million.

Loans drawn during 1972 amounted to \$196.70 million (\$3.38 million and \$193.32 million against 1971/72 and 1972/73 Development Estimates, respectively).

Revenue Income and Expenditure

By the end of the year, there were 155,301 accounts under financial management. These covered 98,669 flats and shops; 6,282 hawkers' stalls and pitches; 3,561 parking lots and bus bays; 1,173 land tenancies and 592 kiosks, offices and miscellaneous non-housing accounts for letting to the public; and 45,024 units of flats and shops sold mainly under the "Home Ownership for the People" Scheme.

Loans were granted to the public to purchase flats under the "Home Ownership for the People" Scheme. These loans are repayable

The functions of the Finance Department cover the implementation of the Board's financial policy; budgetary control; the proper accounting of all income and expenditure; the compilation of annual accounts and budgets; and decentralised financial management of the Board's housing schemes through 14 sub offices (called area offices).

Building programmes of the Board are financed by loans from Government and approved by Parliament in the Republic's Annual Budgets. Such loans are repayable over 60 years at $7\frac{3}{4}\%$ interest per annum in respect of rented properties and 10 years at 6% interest per annum for sold flats.

As the rentals and sale prices of public housing are fixed at sub-economic level and are subject to Government approval, annual revenue expenditure exceeds income and the resulting deficit is met by Government by means of a revenue subsidy provided in the Republic's Annual Estimates.

over periods of 5, 10, 15 or 20 years at an interest rate of $6\frac{1}{4}\%$ per annum. During the year sale of flats amounted to \$50.12 million and mortgage loans outstanding at the end of the year aggregated \$167.60 million. Interest and principal repayments (including lump sum payments) received in 1972 were \$10.29 million and \$32.11 million, respectively. During the year \$22.14 million of Central Provident Fund credits were utilised by purchasers in payment towards the cost of their flats. This amount was paid by the Central Provident Fund Board direct to the Accountant-General in reduction of loans drawn by the Board in 1972.

The Revenue Account for the year showed a deficit of \$15.46 million. This brought the total deficit since 1960 to \$59.39 million. The annual deficit of the Board is subsidised by Government and a total of \$43.93 million has been received up to 31st December, 1972.

Total income for the year was \$85.30 million of which rental, including recoveries for service and conservancy charges of \$11.54 million, constituted \$68.32 million and other income \$16.98 million.

Total expenditure for the year was \$100.76 million. The main items were for repayment of principal and interest on Government loans which accounted for \$45.70 million and Property Tax, \$18.52 million. Administration of the Board, including costs of service and conservancy charges, was \$26.96 million and maintenance of Board properties cost another \$9.58 million.

Provident Fund

The Housing & Development Board Provident Fund was wound-up with effect from 30th September 1972, and monies due to members were transferred to their Central Provident Fund accounts by the end of the year, except for those who had opted to use their monies to purchase paid-up life assurance policies.

Agency and Related Functions

During the year the Board continued to undertake agency work on behalf of its subsidiary, the Development and Construction Company (Pte) Ltd, Government and other Statutory Bodies.

The total cost of all agency work for 1972 was \$39.97 million. The main items were: East Coast Reclamation \$12.95 million; Colombo Court \$11.53 million; housing and land clearance for Jurong Town Corporation \$9.09 million. Urban Renewal Department administration costs \$1.98 million; expenditure relating to Resettlement Department \$2.77 million and Kallang Reclamation \$1.89 million.

Mechanisation of Accounts

The unit card machines installed in 1963 for the Board's rent collection, sale of flats accounting, payroll and Provident Fund were replaced in December 1971 by a Third Generation Computer utilising punch-cards.

To cope efficiently with the rapid growth of housing units under the Third Development Plan, the Board approved in December 1972 an improved Computer Configuration with a faster printer and four tape drives in place of card storage. Installation is expected to take place early in 1974.

Internal Audit

The Internal Audit Section continued to maintain continuous checks on all Board activities complementary to the Statutory Auditor's functions. The establishment of the section has been strengthened to carry out more effective departmental checkings.

DISPOSITION OF INCOME, 1972

		1971	
		Estimated	Actual
EXPENDITURE	LOAN CHARGES	\$35.66M (42.9%)	\$36.20M (42.8%)
	PROPERTY TAX	\$17.69M (21.3%)	\$17.57M (20.8%)
	ADMINISTRATION	\$9.94M (12.0%)	\$10.10M (12.0%)
	CONSERVANCY AND SERVICE CHARGES	\$10.70M (12.9%)	\$10.94M (12.9%)
	MAINTENANCE	\$9.06M (10.9%)	\$9.70M (11.5%)
	PROPERTY TAX	\$18.52M (18.4%)	
	ADMINISTRATION	\$13.07M (12.9%)	
	CONSERVANCY AND SERVICE CHARGES	\$13.89M (13.8%)	
	MAINTENANCE	\$9.58M (9.5%)	
	LOAN CHARGES	\$45.70M (45.4%)	
INCOME	CONSERVANCY CHARGES	\$68.32M (67.8%)	\$61.28M (73.8%)
	RENT, SERVICE AND		\$63.48M (75.1%)
	MISCELLANEOUS	\$16.98M (16.9%)	\$11.85M (14.0%)
	DEFICIT (HOUSING SUBSIDY)	\$15.46M (15.3%)	\$9.18M (10.9%)

Principal repayments of loans from Government to build flats for sale are excluded from Loan Charges.
 Property Tax relates only to rented properties. Property Tax for sold properties is paid by purchasers.
 Principal repayments on mortgage loans made by purchasers of flats are excluded from Income.

Well-constructed car parks are provided within the Board's housing estates.





STATISTICS & RESEARCH

Carpark Survey

The aim of the Survey was to study the present pattern of vehicle parking in Board's estates as well as to project the trend of car ownership among HDB residents for the next two decades.

At the time of the Survey there were about 8,100 HDB families in the Central Area and 112,300 HDB families in the Suburban Areas giving a total of 120,400 HDB families. The numbers and types of vehicles they owned are given in the table below.

Computed in terms of cars-equivalent and assuming one car-equivalent occupies one parking lot, the demand for parking lots in HDB estates at the time of the Survey was about 32,000. This, compared with about 21,300 parking lots provided by the Board, gives rise to a shortage of 1 parking lot for every 3 cars-equivalent. In terms of absolute numbers, the shortage was about 10,700 parking lots, which reflects the seriousness of the present parking situation in HDB estates.

The rising affluence among HDB residents in the past decade is reflected in the sharp increase in the number of cars owned during the same period. In the Survey it was established that car ownership among HDB residents has been on the increase from 6 cars per 100 families in 1963 to 16 cars per 100 families in 1971, an average annual rate of increase of 12.4 per cent.

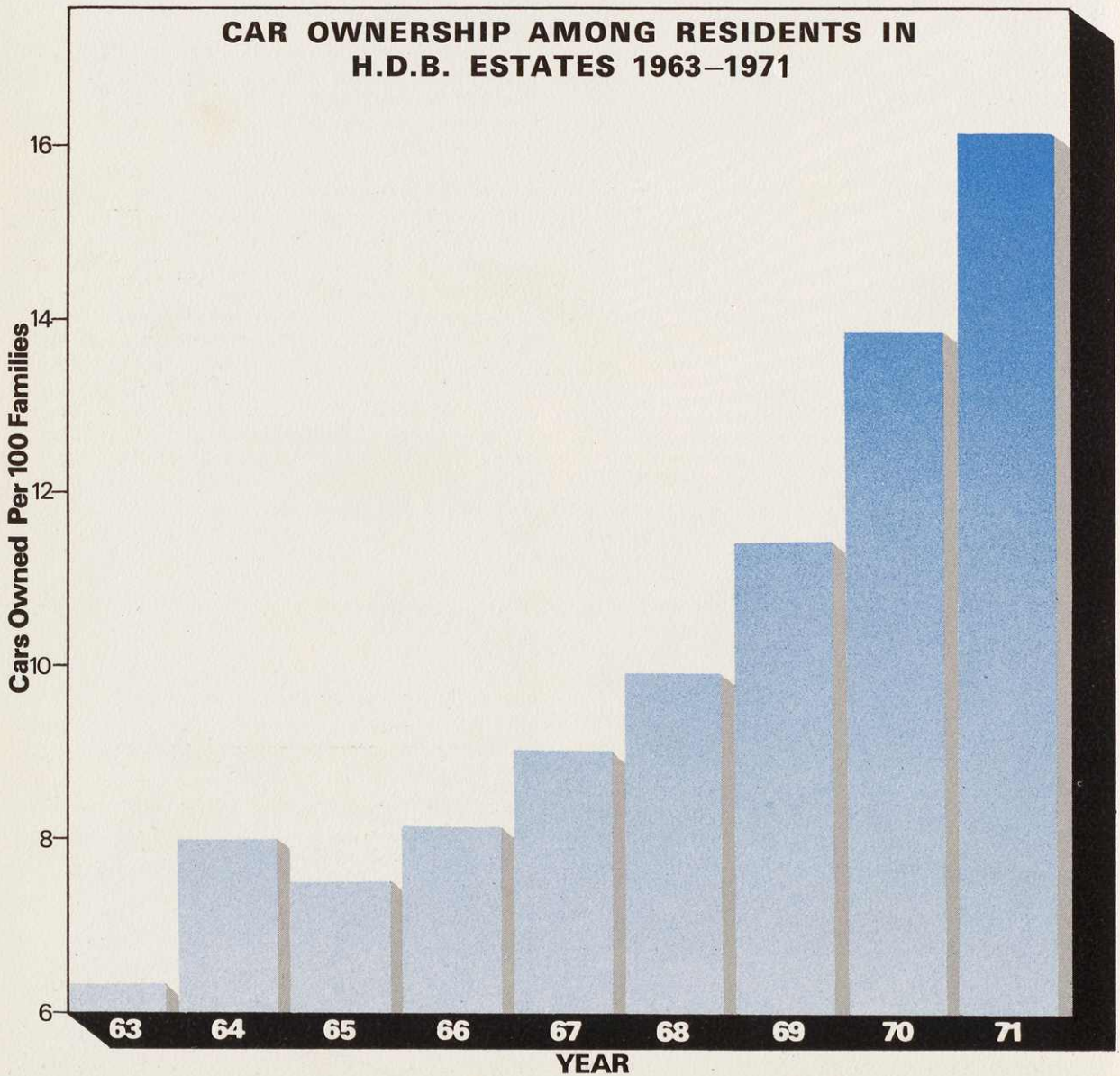
The Statistics & Research Department was established in 1969. The functions of this Department include the setting up of a data bank through research and computerisation of records using scientific data-processing techniques. The Department also provides feedback information to assist Management in policy formulation and in improving housing designs and estate management.

Summary reports of the more important projects carried out by the Department during the year are:

DISTRIBUTION OF VARIOUS TYPES OF VEHICLES IN HDB ESTATES

Type of Vehicle	Central Area	Suburban Area	Total
Car	930	19,049	19,979
Taxi	30	1,608	1,638
Mini-bus/Van	102	1,958	2,060
Bus/Lorry	41	804	845
Motortricycle	41	801	842
Scooter/Motorcycle	794	15,804	16,598
Tricycle/Trishaw	122	1,570	1,692

**CAR OWNERSHIP AMONG RESIDENTS IN
H.D.B. ESTATES 1963-1971**



Household Formation 1970–1990

The Department projected the expected number of households in Singapore up to the year 1990. A summary of the expected maximum and minimum number of households is given in the following table.

ESTIMATED NUMBER OF HOUSEHOLDS

YEAR	Estimated Number of Households	
	Minimum	Maximum
1975	423,000	463,000
1980	492,000	563,000
1985	570,000	685,000
1990	695,000	757,000

The anticipated rapid growth of households in the future can be ascribed to an interaction of three factors.

Firstly, the increase in the number of persons of marriageable age leads to a corresponding rise in marriages. Most of these marriages would result in new nuclear family households.

Secondly, development and modernisation in Singapore means not only longer life expectancy, higher education and income levels, but also changes in certain social values particularly a stronger preference for nuclear family living. Consequently, more and more marriages are expected to result in new households rather than becoming part of an existing one.

Thirdly, continued availability of low-cost HDB flats to a wide range of income groups directly and indirectly encourages greater household formation not only from marriages

but also from the splitting of multi-family households.

Employment Survey

In November 1972, the Department carried out a Census of industrial establishments, shops and hawker stalls/pitches within HDB housing estates. The main objectives of this Census were to find out the employment opportunities created by the industrial and service sectors in the HDB housing estates as well as to estimate the percentage of workers living in HDB estates and in non-HDB estates.

Preliminary results show that industrial establishments, shops and hawker stalls/pitches within HDB housing estates absorbed about 60,480 workers. Of these, 56 per cent are female workers. More than half of the 60,480

Against a backdrop of Redhill Henderson housing estate rise the flats of Neighbourhood 1, Telok Blangah New Town. In the foreground snakes Mt. Faber Road where it overlooks Telok Blangah and the rest of the island.



EMPLOYMENT CREATED IN HDB ESTATES

Administrative Area	Industrial Establishments			Shops			Hawker Stalls			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Balestier (Kampong Java)	227	606	833	187	94	281	138	74	212	552	774	1,326
Bukit Ho Swee	—	—	—	554	300	854	489	316	805	1,043	616	1,659
Bukit Merah	1,439	3,976	5,415	488	280	768	95	86	181	2,022	4,342	6,364
Chin Swee	—	—	—	4,395	2,134	6,529	271	248	519	4,666	2,382	7,048
Henderson	3,754	629	4,383	436	226	662	429	305	734	4,619	1,160	5,779
Kallang	160	119	279	805	557	1,362	276	235	511	1,241	911	2,152
Kallang Basin	1,746	5,595	7,341	1,385	668	2,053	348	247	595	3,479	6,510	9,989
Macpherson	—	—	—	807	606	1,413	708	511	1,219	1,515	1,117	2,632
Queensway	225	997	1,222	448	360	808	209	119	328	882	1,476	2,358
Stirling	—	—	—	921	556	1,477	349	261	610	1,270	817	2,087
Tiong Bahru	516	4,439	4,955	658	362	1,020	329	211	540	1,503	5,012	6,515
Toa Payoh Central	203	949	1,152	836	427	1,263	91	82	173	1,130	1,458	2,588
Toa Payoh East	243	2,454	2,697	755	440	1,195	469	273	742	1,467	3,167	4,634
Toa Payoh West	390	3,496	3,886	503	305	808	383	272	655	1,276	4,073	5,349
	8,903	23,260	32,163	13,178	7,315	20,493	4,584	3,240	7,824	26,665	33,815	60,480

workers are engaged in the industrial sector within the HDB housing estates.

The above Census also shows that about 78 per cent of these workers are living within the HDB housing estates.

Mechanisation of Resettlement Files

In the middle of this year, the mechanisation of resettlement files was implemented. The system of data collection for the Resettlement Census was streamlined and essential data from "history files" were kept on punch cards. This would provide systematic and up-to-date

information for Management and the Resettlement Department and enable them to evaluate past trends and current situation for future decision making policy.

Toa Payoh New Town from the air. Taking shape in the foreground is the multi-million dollar sports stadium (left) and a swimming complex (right) that the Board is building for residents.





BUILDING

A Third Five-Year Building Programme is currently being implemented. At the beginning of the programme, the Board's target was 100,000 units of flats at a total estimated cost of \$1,062,600,000. However, the Board has since revised this target to 125,000 units in order to cope with the increasing demand for public housing.

Besides designing, planning and implementing public housing projects, the Building Department also looks into improving the layout of public housing estates and the design of flats. Emphasis is placed on attractive landscaping and the provision of swimming complexes and children's playgrounds within estates.

Performance

During the year the Board completed 20,252 units of flats and shops, with a further 36,000 units of flats under construction at 31st December.

The Board also constructed community centres, swimming complexes, children's playgrounds and other amenities within estates.

New Developments

In 1972, development began at Telok Blangah, the Board's third new town, Bedok and Marine Parade (on reclaimed land), while contracts for the erection of industrial workshops were awarded for the fourth new town at Woodlands.

Labour Costs and Materials Prices

During the year prices of building materials and labour costs increased by about 10%.

Building contracts awarded progressed fairly well in 1972 except for a slight setback caused

The Building Department plans, designs and supervises the construction of all public housing projects in the Republic.

The Board's building activities are carried out in Five-Year Building Programmes, which are incorporated in the Republic's overall development plans. Contracts for building projects are awarded to building contractors by public tender.

The Board has already successfully implemented two Five-Year Building Programmes. Over 50,000 units of flats were built at a cost of \$192 million during the First Five-Year Building Programme (1961-65) and over 60,000 units of flats at a cost of \$305 million during the Second Five-Year Building Programme (1966-70).

by a shortage of squat pans in the Republic. About 10,000 pieces of squat pans had to be imported from China to minimise the delay in the completion of building projects.

To avoid similar shortages in the supply of materials, projected requirements for basic building materials were worked out and made known to manufacturers and suppliers to help gear production accordingly. Contingency plans could be put into effect, when necessary, to avert serious shortages occurring.

Mechanization

The Board has been looking into mechanizing various building processes to achieve greater speed in construction without a corresponding increase in labour resources. In addition to dumpers and mixers the Board has, for instance, introduced motorised winches and air-compressors at building sites.

The Board's contractors were also advised to employ powered machines to cut and bend steel reinforcements. Further possibilities of mechanizing building processes are being examined.

Research and Improved Designs

During the year the Design & Research Unit within the department undertook the planning of 2 new towns: Ang Mo Kio, north of Toa Payoh; and Ayer Rajah, west of Telok Blangah. The Unit also designed flats for civil servants to be built in the East Coast reclaimed area.

New towns continued to utilise the Neighbourhood concept but with further refinement of land use. Spaces for recreation and amenities were better provided to make the new towns more self-sufficient.

During the year the overall development programme of public housing for the future was reviewed. This exercise was made feasible through the availability of additional research

data. A study to clarify the Board's planning concept and to update planning standards and design guidelines has been undertaken.

It is anticipated that when the findings of these studies are available, they will help further improve the quality of public housing.

In designing the first phase of Woodlands industrial development, the Unit undertook studies of various forms of industrial development in Singapore. A series of prototype industrial units of varying floor areas were proposed. These took the form of terraced factories.

Conscious efforts were also made to standardise the details of each type of flat and also to explore the planning possibilities of each residential block. Murals were also introduced into buildings at Toa Payoh Town Centre and at Old Kallang Airport.

Besides studies done jointly with the Statistics & Research Department, the Unit also carried out specific investigations on day-to-day problems, such as a study on children play habits and play equipment design.

NEW TOWNS

Queenstown

Queenstown, covering about 700 acres of land, will have 27,000 units of flats for a population of about 140,000 to 150,000 persons.

The emphasis in the overall planning of the town is on spaciousness with towering point blocks as focal points. This first new town boasts of a landscaped town centre, complete with fountains, cinemas, shops, restaurants, emporium and library.

Further recreational facilities can be found at the satellite town's Japanese Garden & Shopping Complex where the setting is enhanced by a scenic pool and fountains decorated with lights. The Garden has proved to be extremely popular with the residents.

An aerial view of Neighbourhood 7—the last neighbourhood in Queenstown.

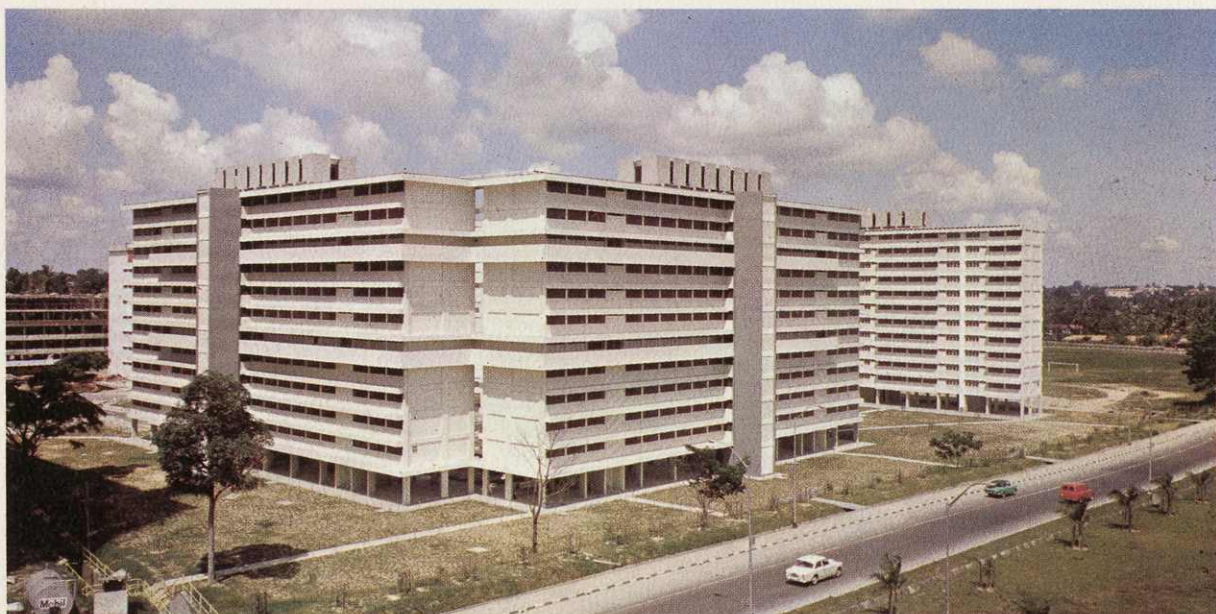


Sporting facilities are found at the Queenstown Sports Complex, comprising 5 swimming pools, an Olympic-sized running track and a football field. The complex is very well attended by residents.

In Queenstown Neighbourhood VII, the last

Neighbourhood to be completed, a total of 6,461 units of flats and shops are under construction with 1,943 units to be completed in January 1973. A shopping area with market/hawkers' centre and an area office will serve this Neighbourhood when completed in 1973.

More new homes. Newly completed 3- and 4-room flats in Toa Payoh New Town.



There will also be a 7-storey flatted factory and a swimming pool.

In Queenstown Neighbourhood IV, a children's playground and a miniature park were built for the enjoyment of its residents. The existing Area Office was also extended.

By the end of 1972, a block of 4-room flats consisting of 228 units at Queenstown Neighbourhood VI was near completion, while a children's playground was planned for Queenstown Neighbourhood III.

Toa Payoh

Toa Payoh is the second satellite town to be built by the Board. It covers an area of about 620 acres.

Like Queenstown, the town was conceived in its entirety: its road system, neighbourhoods, shopping and town centre, and sports complex.

When completed, it will have more than 36,000 units of flats and will house between 170,000 to 190,000 persons.

The development of Toa Payoh New Town began during the Second Five-Year Building Programme (1966–70). There are already four Neighbourhoods in this new town which is located about 4 miles from the city centre. The fifth Neighbourhood is under construction.

The focal point in Toa Payoh will be the town centre which will cover an area of 45 acres. It will provide a wide range of facilities for shopping and entertainment. Light clean industrial development is strategically located at various parts of the town offering employment to 16% of the working population resident in the new town.

Development on the Toa Payoh Town Centre and the Swimming Complex intensified in 1972, in readiness for the 1973 SEAP Games.

A running track with grandstand is also included to serve as practice ground for the SEAP Games contingents while 4 nearby point-block flats and some low blocks will form part of the SEAP Games Village.

A children's playground surrounded by tasteful landscaping in Toa Payoh New Town.



The Swimming Complex, which will serve as the venue for swimming events and Town Garden at the south of the town centre, will be completed by September 1973, for the SEAP Games.

The first phase of the town centre comprising 118 shops, 5 eating houses and 406 flats was completed in 1972. The remaining four 25-storey blocks of flats, cinema, market, hawkers'

centre, library, emporium, post office, area office and creche were still under construction and would be completed by mid-1973.

At the north of Toa Payoh in Toa Payoh Neighbourhood IV Contracts 17 and 18, a total of 1,741 units of flats including 20 shops and 3 eating houses will be completed soon.

In Toa Payoh Neighbourhood V, at the north east of Toa Payoh, 4,300 flats will be built on

New homes rising in Telok Blangah New Town.



another 70 acres of land. The shopping centre together with the 558 units of flats were under construction by the end of 1972.

Telok Blangah New Town

Telok Blangah, the third satellite town, will form a segment of the Western Corridor proposed in the island-wide Master Plan.

The site comprises approximately 900 acres of which only 240 acres are devoted to public housing. The rest of the area except for land occupied by the Port of Singapore Authority, and pockets of privately-owned land, will be developed into a parkland with tourist development projects on spot locations along the ridge.

When the town is fully developed by 1975, it will provide public housing for about 100,000 to 120,000 people. About 20,500 housing

units will be completed under the Third Five-Year Building Programme.

Telok Blangah New Town will provide residential facilities within two miles of the Central Business District. Its undulating natural topography will allow for special open spaces to be planned within the new town that did not exist in the two earlier new towns, Queenstown and Toa Payoh.

Residential units will be built in clusters which will be linked together by pedestrian routes extending throughout the town. This network of pedestrian routes leads the pedestrian from his home to the shopping areas, schools, playfields, open spaces and other communal facilities. Wherever possible, the pedestrian network is segregated from vehicular traffic by overhead bridges which take advantage of the terraced terrain.

During the year, the Board started work on

Neighbourhoods I and IV sited on the western part of this satellite town. By the end of 1972, a total of 4,605 units were under construction. Plans for Neighbourhood II were finalised and tenders for building another 1,818 units will be invited in early 1973. Other facilities planned for these Neighbourhoods include open spaces, gardens, shopping areas, markets and schools.

Discussion is underway to consider siting the town centre in such a position that it serves not only the new town but also the existing residents in the Tiong Bahru Road and Redhill areas.

Woodlands New Town

Woodlands New Town, encompassing an area of about 2,500 acres, lies on the northern portion of Singapore, facing the Johore Straits. This site is relatively unencumbered by existing structures. When planning the new town, advantage has been taken of the gently rolling terrain.

Woodlands is planned to be part of the Ring Development proposed by the State & City Planning Concept Plan. Consideration has been given to its relationship to the island-wide development in mass transit system, road network, distribution of existing and proposed industries and distribution of population.

Its future population of a quarter million persons, will obtain employment and essential facilities within the town. Residential planning is based on the Neighbourhood concept. Each Neighbourhood will accommodate a population sufficient to support basic community and shopping facilities within walking distance.

The town centre may be considered a frontier development serving the inhabitants living around it as well as tourists coming through the Causeway. The Customs & Immigration Check Points will be planned integrally with the centre. When completed, an entirely new network of roads from both Singapore and Malaysia would serve the centre. There will

be parking provision for cars, taxis and buses. Pedestrian malls will link all commercial buildings to such other facilities as government offices, markets, post office, clinic, banks and theatre. A recreational area consisting of a series of landscaped pools is sited at one end of the centre.

The new town will be developed in stages—the first 1,300 units of flats were halfway towards completion at the end of 1972.

In order to generate incentives in this area, the first phase of industrial development has already broken ground. To follow soon is the town centre, and more housing and industrial development.

Bedok New Town

The planning of Bedok New Town has been conditioned by the flat terrain caused by cut hills and by the existing topography of some high ground at the site.

Consideration has also been given to the town's relationship to the overall island road network and the overall distribution of population.

The new town covering 1,080 acres will have a population of between 120,000 to 150,000 persons. Employment will be offered within the new town. Residential and industrial planning is based on the Neighbourhood concept, with 200 acres of land being reserved for industries; 70 acres for parks and a sports complex; and 500 acres for low-density housing. More than 60 acres of land at the town will be reserved for a hospital and a junior college.

The focal point of the new town is the special landscaped parks and the sports complex to be located at the highest ground which is also dominated by an existing Chinese temple. The commercial centre will be located closeby.

In order to have a more efficient road network, the existing Upper Changi Road will be demolished and a new road will be constructed across the site to join the future middle ring

The first blocks of flats going up at Marine Parade. The estate is being erected on land reclaimed under the first two phases of land reclamation.



road. When completed, the new town will have approximately 44,000 units of flats and shops at a housing density of 80 units per acre.

The development of Neighbourhood I in Bedok New Town comprising 3,286 housing units began at the end of 1972.

NOTES ON OTHER ESTATES

Ang Mo Kio Industrial Estate

Originally designed for the resettlement of

small-time motor workshops in town affected by the Urban Renewal Programme, Ang Mo Kio Industrial Estate now includes residential and community facilities as well.

The headquarters of the Registrar of Vehicles with a vehicle pollution-testing centre, together with the Public Works Department's workshops and land for their fleet of heavy vehicles will also be sited at Ang Mo Kio. This development is a unique case of a centralised motor repair industry.

Under Stage I development, 21 blocks of

Construction in progress at the Board's project in Balestier Road. In the foreground are workers building a bridge.

motor workshops of 269 units each were under construction. A further 144 workshops will be built under Stage II in early 1973 on a piece of neighbouring land of some 17 acres.

Residential units under Contracts 2 and 3 were mainly of the 3-room improved type of 584 units with 6 eating houses and 32 shops-cum-living quarters. Contract 4 consisting mainly 198 units of 4-room flats and Contract 5 comprising 396 units of 1-room improved flats will be completed by early 1974.

Marine Parade Estate

This is the first public housing scheme carried out by the Board on 84.5 acres of reclaimed land along the East Coast.

There will be eleven towering point blocks, presenting an impressive skyline from the sea in Phase I. The new 5-room flats will be introduced to this locality which will also be served by a new Area Office, a market and shops. Tenders have been called for contracts in the Phase I development. A total of 5,808 units are now under construction.

Work on Phase II which has an area of 31 acres will commence in 1973. There will be 1,324 units of flats and facilities like a hawkers' centre, market, post office, clinics, creche and shopping facilities.

The commercial centre at Marine Parade Estate will serve not only residents of the estate but also inhabitants in the East Coast Corridor.

Farrer Road Development

The Board began work in 1972 on Phase I of Farrer Road comprising 684 units and 28 shops.

There will be two 25-storey point blocks incorporating the new 5-room flats. Another 22.7 acres would be developed under Phase II for 1,670 units of flats, market, community centre, school and playfield.



Balestier Estate

The 64-acre site formerly occupied by 1,344 units of artisan quarters will contain 4,929 flats after redevelopment.

In 1972, 2,049 units of flats and shops were completed with a further 1,404 units of flats, a market, hawkers' centre and shopping centre under construction.

Tampines Estate

Under the first contract, 1,456 units of shops and a market were under construction in 1972. 1,950 housing units and light industrial

Bukit Merah Redevelopment Project—note the variation in design of flats. In the foreground is a landscaped garden for the enjoyment of residents in the area.



workshops will be built in 1973. Other amenities such as recreational facilities, shops, emporium and school will also be provided for the above estate.

Most of these units when completed will be allotted to resettlement cases affected by the Paya Lebar Airport Extension Scheme.

Kallang Basin Redevelopment

Kallang Basin Estate was built partly on reclaimed swampland. When completed, there will be approximately 20,000 units of flats located in five Neighbourhoods. Sims Avenue will be an area of mixed development of flats and industries.

In 1972, 3,012 units of flats and shops and a community centre were completed with 5,286 units of flats and shops under construction.

Other projects under construction were 184 single-storey terrace factories, 2 blocks of market-cum-hawkers' centre, 1 Area Office and 1 creche.

Redhill/Henderson Road Estate

During the year, 3,047 units of flats were completed with another 2,439 units under construction.

Other facilities such as a shopping centre, market, hawkers' centre and recreational as well as sporting amenities will be provided in this estate.

Kampong Silat/Kim Tian Road

This estate when completed will form part of the Redhill/Henderson Estate. At the end of 1972, 1,260 flats were under construction.

EAST COAST RECLAMATION SCHEME

Phases I & II Reclamation

Within a period of five years, 405 hectares (1,000 acres) of 9 kilometres long foreshore

from Bedok to Singapore Swimming Club (Phase I Reclamation) and 52.7 hectares (130 acres) of 1.6 kilometres long foreshore from Singapore Swimming Club to the tip of Tanjong Rhu were successfully completed in 1970 and 1971 respectively.

Twenty-three million cu metres (30 million cu yards) of earth from Siglap Plain were used to achieve this large-scale reclamation using automatic bucketwheel excavators. The soil was then transported by belt conveyors and deposited into the sea by a spreader.

A new method of shore protection by placing a series of breakwaters along the low water line to dissipate the wave energy before it reaches the sedimentary shore, was adopted. This system of breakwaters has resulted in stabilising the new shore-line and in the formation of good sandy bay beaches.

Phase III Reclamation

Reclamation of 66.8 hectares (165 acres) foreshore from Tanjong Rhu to Singapore River began in March 1971.

Back-filling of a dredged channel along the periphery of the reclamation with coarse sand was completed by June 1972. By the end of 1972, construction of a stone bund up to mean sea level along the sand filled channel was nearly completed.

Reclamation works began on 26 April 1972. Material for reclamation was discharged onto hopper or flat top barges through specially designed swinging conveyors supported on a jetty extending 152.4 metres from the existing shoreline at Bedok reclaimed land.

The hopper barges were either self-propelled or towed by tugboats from Bedok to Tanjong Rhu. Materials were then dumped directly onto a dredged basin within the reclaimed area. The material so deposited was dredged by a suction cutter dredger and spread immediately behind the constructed stone bund through floated pipes and land pipes.

An aerial view of the East Coast Reclamation Project extending from Bedok to Tanjong Rhu. Under Phases 1 and 2, 1,125 acres of land have been reclaimed. In the foreground is Phase III of reclamation in progress.



By the end of 1972, 1.3 million cu metres (1.7 million cu yds) of earth, comprising 31% of the total volume of earth-work, were conveyed and deposited, resulting in the reclamation of 18.6 hectares (46 acres) or 28% of the reclamation project.

Phase IV Reclamation

Work started in June 1972 on Phase IV to reclaim 546 hectares (1,350 acres) of the foreshore from Bedok to Tanah Merah Besar along a coastline of 5.6 kilometres (3½ miles).

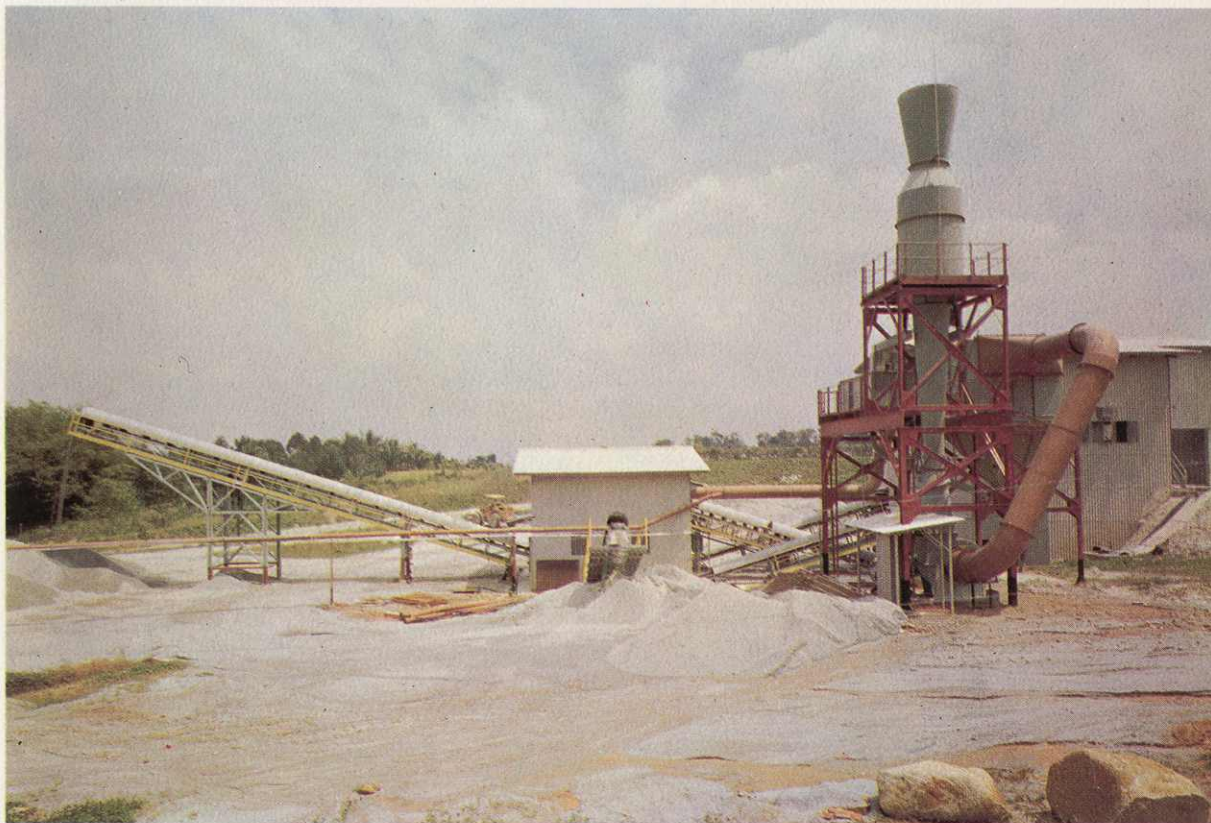
The earth was excavated from the hills within the Cut Site which covers an area of

some 110 hectares (270 acres) adjacent to the old Bedok Reservoir north of Upper Changi Road.

Excavation was carried out 24 hours a day by bucketwheel excavators and belt loaders. The material was then transported by belt conveyors and deposited at the Fill Site by a tripper and spreader, before final compaction by conventional equipment. This method, besides being highly efficient, creates minimum noise and dust pollution.

18 million cu metres (23.6 million cu yds) of earth required for Phase IV was excavated in two stages. Stage I involved reducing the

The Board operates its own granite quarries to meet its building requirements.



existing hills within the Cut Site to a level of 10.6 metres (35 feet) above mean sea level, is to be completed by August 1973.

Stage II (August 1973 to early 1976) will involve excavating downwards to 3.05 metres (10 feet) below mean sea level to create a storage reservoir. An additional 3.5 million cu metres (4.5 million cu yds) of earthworks to cater for supply to the Phase III Scheme was incorporated as a variation to the Phase IV Contract.

Drainage and shore protection works followed closely the progress of the filling operation.

By the end of 1972, a total of 5 million cu metres (6.5 million cu yds) of earth comprising 27.5% of the total volume of earthworks was excavated. Of this, 1.3 million cu metres (1.7 million cu yds) were supplied to the Phase III Reclamation. The total area reclaimed in Phase IV amounted to 105 hectares (260 acres).

Kallang Basin Reclamation

A total of 470 acres was reclaimed at Kallang Basin Reclamation. Reclamation work continued in Neighbourhood IV bounded by Sims Avenue, Aljunied Road, Kallang River and

Piles for more new housing estates. These are manufactured by the Board's own plant in Mandai.



Lorong 3, Geylang.

With the completion of the second 3 × 100 ft prestressed concrete bridge across Kallang River, it is now possible to travel from one side of Kallang Basin to another without any interference from city traffic.

At the end of 1972, development concentrated at Neighbourhood III, bounded by Kallang Bahru Road, Kallang River and Kolam Ayer Expressway. By early 1973, a total of 4,300 units of flats and shops will be completed in this area.

MANUFACTURE OF BUILDING MATERIALS

Granite Quarry

Crushing Plant 'B' at Mandai Quarry was commissioned in early 1972. The total monthly production of $\frac{3}{4}$ " aggregates at Mandai Quarries increased to 35,000 metric tons or 65% over the 1971 production.

With the Pulau Ubin Quarry producing 8,500 metric tons of $\frac{3}{4}$ " aggregates a month in 1972, total production of $\frac{3}{4}$ " aggregates by the Board's

The Board's flats under construction in Kampong Chai Chee.



Quarries exceeded half million tons in 1972.

HDB Brickworks

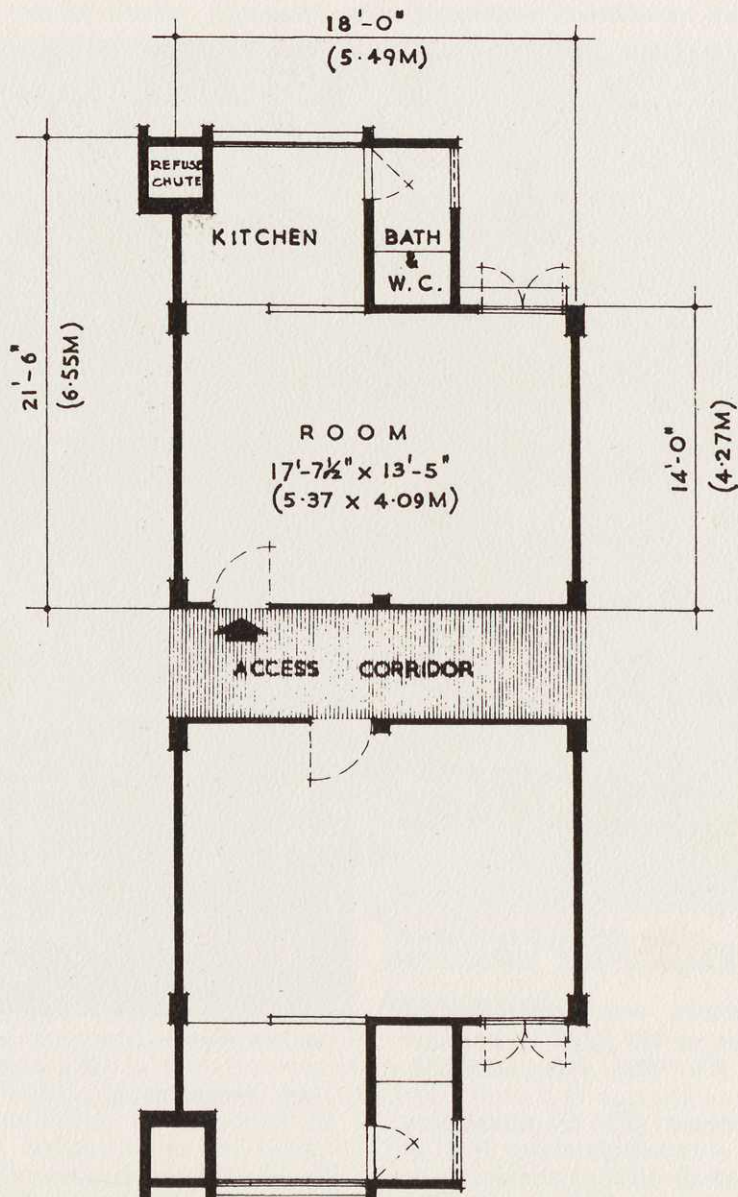
The HDB Brickworks was commissioned and began operations in late 1972 to produce facing bricks and all other clay products.

Piling

The Board's concrete pile manufacturing and driving plants entered its third year of operation. By the end of 1972, concrete piles with diameter ranging from 350 mm to 500 mm were produced.

To ensure that a shortage of bricks does not occur to slow down its building pace, the Board erected a brick manufacturing plant of its own in Jurong.

The Board continued to use concrete precast piles, large diameter bored piles and steel H-section piles for building foundations.



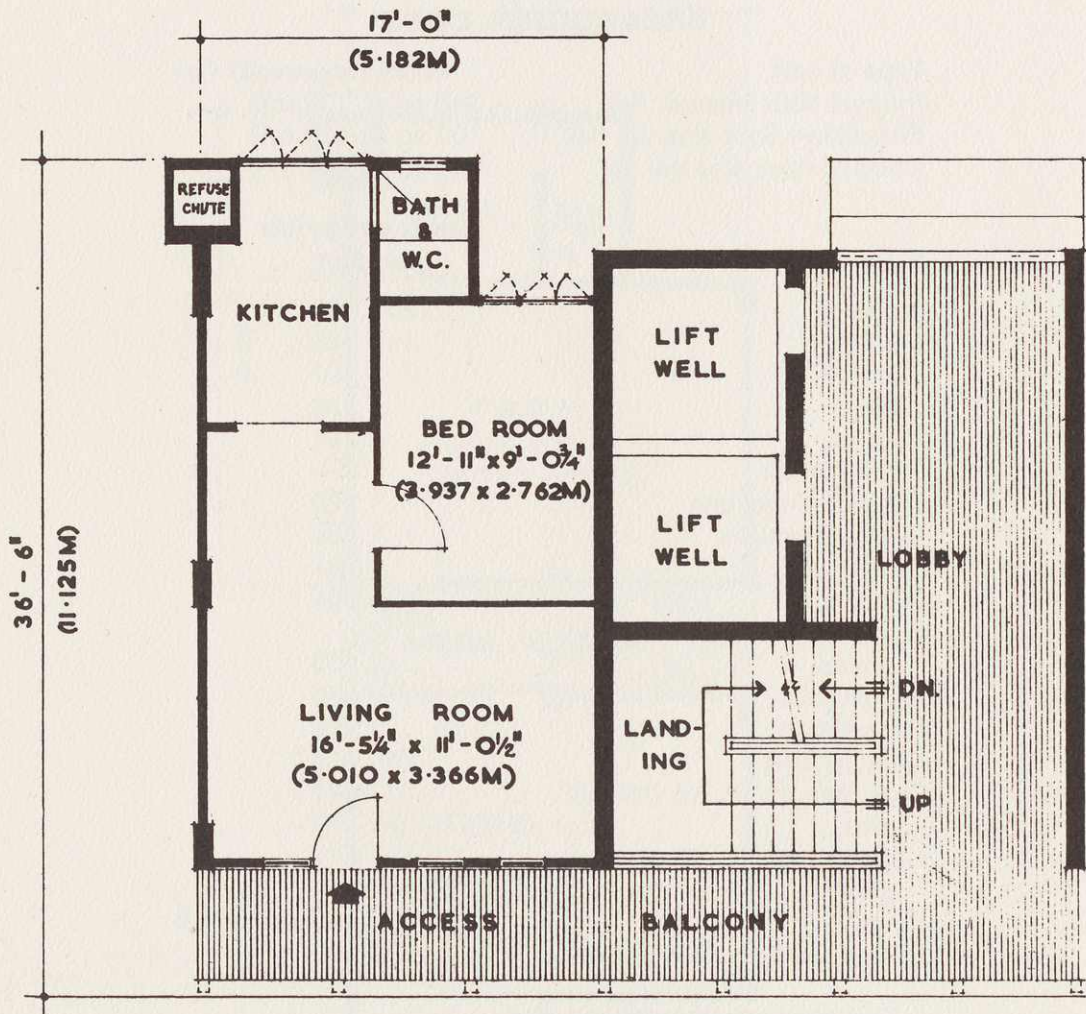
Typical 1-Room (Improved) Flat

BREAKDOWN COST

Type of unit	1-Room (Improved) Flat
Internal floor area per flat	348 sq. ft. (32 m ²)
Circulation floor area per flat	101 sq. ft. (9 m ²)
Covered floor area per flat	449 sq. ft. (41 m ²)

Type of work	Contract price per flat
Building	S\$2,538
Sanitary	528
Electrical	122
Lifts	335
Roofing	91
T.V. Antenna	—
Water connections	20
Gas connections	30
Sewers	91
Piling	954
Roads, carparks, culverts and drains	203
Earthworks	86
Supervision	18
Cost per unit	S\$5,016 *
Cost per sq. ft. of internal area	S\$14.41 (S\$157/- per m ²)
Cost per sq. ft. of covered area	S\$11.17 (S\$122/- per m ²)
Rental	S\$30.00 per month
Selling price (in New Town)	S\$3,300

* This does not include land cost.



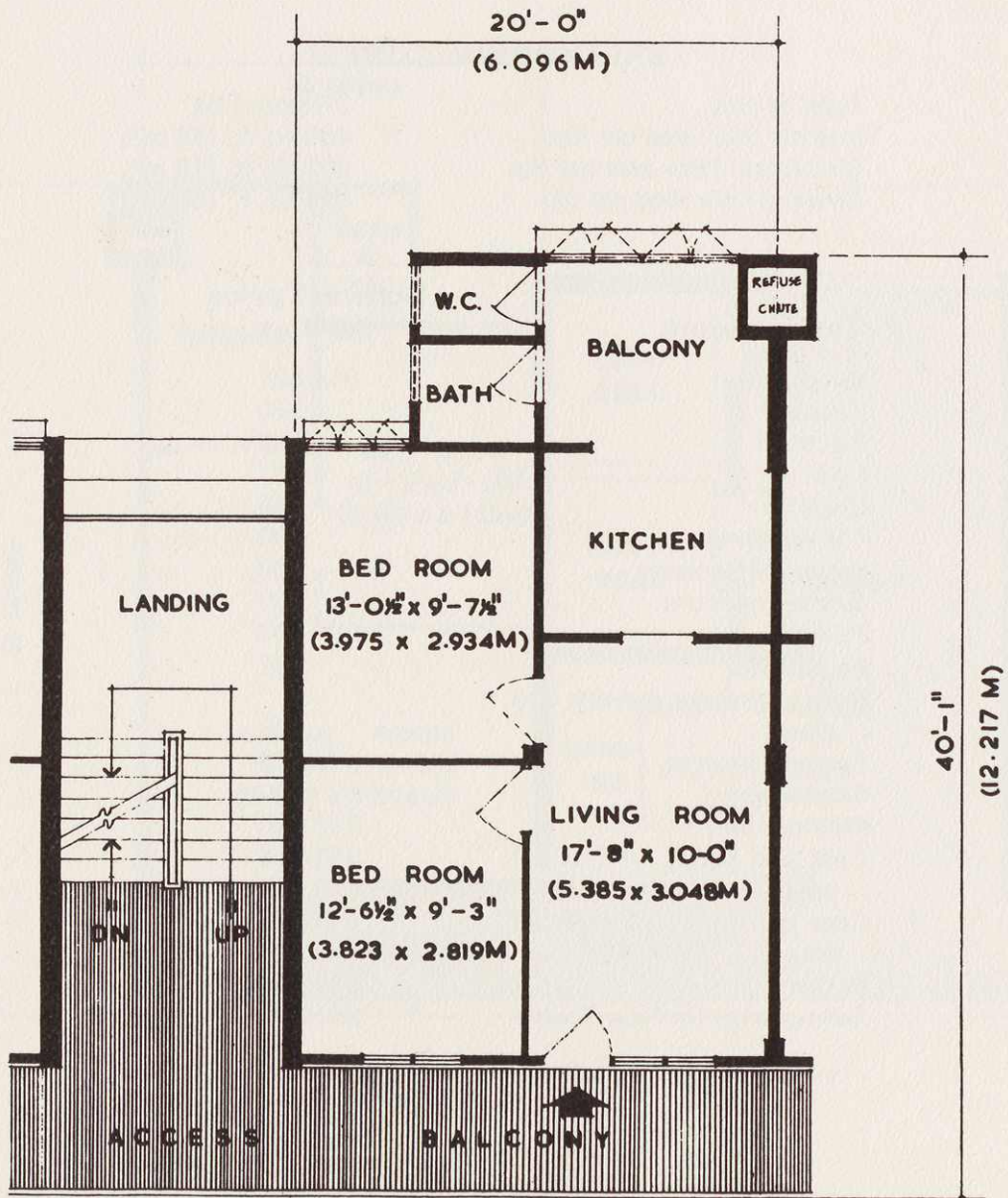
Typical 2-Room Flat

BREAKDOWN COST

Type of unit	2-Room Flat
Internal floor area per flat	495 sq. ft. (46 m ²)
Circulation floor area per flat	203 sq. ft. (19 m ²)
Covered floor area per flat	698 sq. ft. (65 m ²)

Type of work	Contract price per flat
Building	S\$4,381
Sanitary	660
Electrical	132
Lifts	457
Roofing	85
T.V. Antenna	30
Water connections	30
Gas connections	30
Piling	794
Earthworks	162
Roads, carparks, culverts and drains	135
Sewers	84
Supervision	40
Cost per unit	S\$7,020 *
Cost per sq. ft. of internal area	S\$14.18 (S\$153/- per m ²)
Cost per sq. ft. of covered area	S\$10.06 (S\$108/- per m ²)
Rental	S\$55.00 per month
Selling price (in New Town)	S\$4,900

* This does not include land cost.



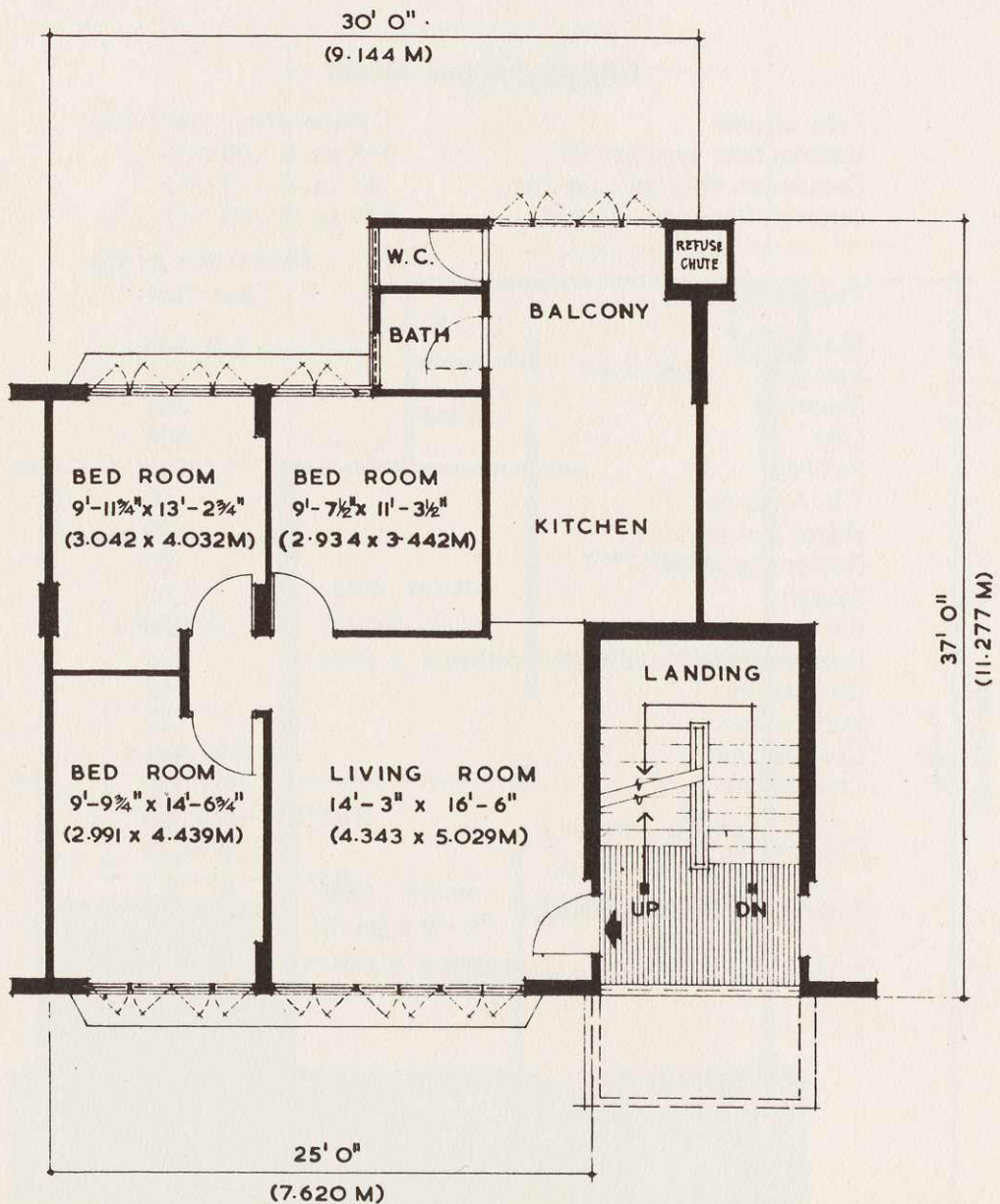
Typical 3-Room (Improved) Flat

BREAKDOWN COST

Type of unit	3-Room (Improved) Flat
Internal floor area per flat	648 sq. ft. (60 m ²)
Circulation floor area per flat	91 sq. ft. (9 m ²)
Covered floor area per flat	739 sq. ft. (69 m ²)

Type of work	Contract price per flat
Building	S\$5,989
Sanitary	711
Electrical	264
Lifts	508
Roofing	132
T.V. Antenna	30
Water connections	30
Gas connections	30
Sewers	355
Piling	879
Roads, carparks, culverts and drains	305
Earthworks	142
Supervision	80
Cost per unit	S\$9,455 *
Cost per sq. ft. of internal area	S\$14.59 (S\$158/- per m ²)
Cost per sq. ft. of covered area	S\$12.79 (S\$137/- per m ²)
Selling price (in New Town)	S\$7,800

* This does not include land cost.



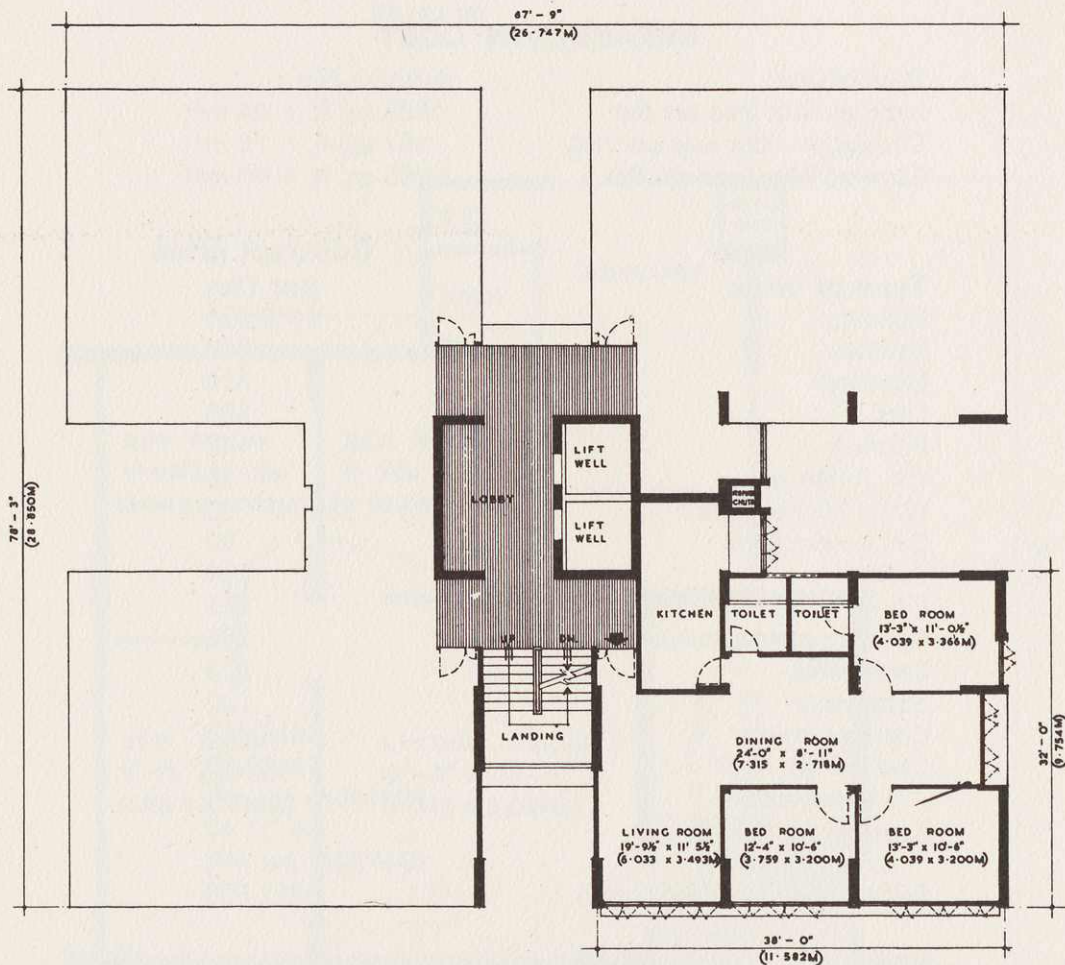
Typical 4-Room Flat

BREAKDOWN COST

Type of unit	4-Room Flat
Internal floor area per flat	898 sq. ft. (84 m ²)
Circulation floor area per flat	167 sq. ft. (16 m ²)
Covered floor area per flat	1,065 sq. ft. (100 m ²)

Type of work	Contract price per flat
Building	S\$ 8,425
Sanitary	903
Electrical	315
Lifts	558
Roofing	142
T.V. Antenna	30
Water connections	30
Gas connections	30
Sewers	254
Piling	863
Roads, carpark, culverts and drains	360
Earthworks	203
Supervision	100
Cost per unit	S\$12,213 *
Cost per sq. ft. of internal area	S\$ 13.60 (S\$145/- per m ²)
Cost per sq. ft. of covered area	S\$ 11.47 (S\$122/- per m ²)
Selling price (in New Town)	S\$12,500

* This does not include land cost.



Typical 5-Room Point Block Flat

BREAKDOWN COST

Type of unit	5-Room Point Block Flat
Internal floor area per flat	1,300 sq. ft. (121 m ²)
Circulation floor area per flat	183 sq. ft. (17 m ²)
Covered floor area per flat	1,483 sq. ft. (138 m ²)

Type of work	Contract price per flat
Building	S\$12,688
Sanitary	1,320
Electrical	599
Lifts	1,726
Roofing	203
T.V. Antenna	60
Water connections	30
Gas connections	30
Sewers	518
Piling	1,827
Roads, carparks, culverts and drains	974
Earthworks	447
Supervision	180
Cost per unit	S\$20,602 *
Cost per sq. ft. of internal area	S\$ 15.85 (S\$170/- per m ²)
Cost per sq. ft. of covered area	S\$ 13.89 (S\$149/- per m ²)
Selling price (in New Town)	S\$22,000

* This does not include land cost.

Cooked food stalls at Bukit Merah.





ESTATE & LAND MANAGEMENT

An Essential Maintenance Service van on its way to answer a call for aid. The service is 24-hours.



The main function of the Estates Department is the management of buildings, hawker stalls, markets, car parks and other properties belonging to or vested in the Board, such management comprising in particular, services such as the maintenance and conservancy of housing estates, tenancy supervision, attendance to public enquiries or complaints and the continual overall improvement of the estates. The Department is also responsible for land acquisition and other land matters.

At the end of 1972, the Estates Department managed a total of 155,301 units as indicated in page 73. During the year, 15,131 units were taken over for management. At the same time, a total of 1,151 units were reverted, demolished or under conversion.

To manage the additional properties, 2 new Area Offices were established during the year—one in Kallang Basin and the other in Toa Payoh (Central).

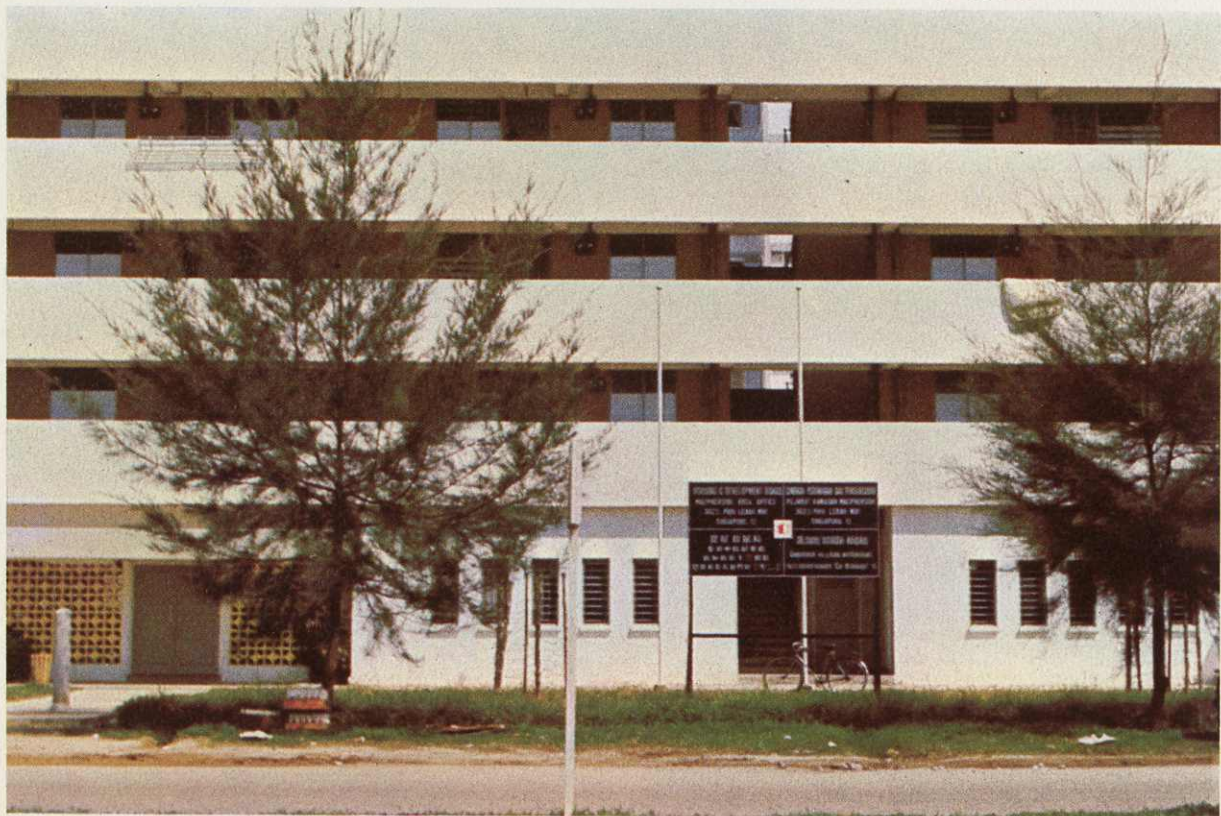
The Department continued to make provision for better recreational facilities in housing estates. Children's play-grounds and leisure areas were constructed and landscaped areas provided for.

During the year, the Chairman visited several Area Offices to view at first hand the management of the Board's housing estates.

Essential Maintenance Service Centre

The 24-hour Essential Maintenance Service Centre was set up in September 1971 as a centralised unit to attend promptly to residents' calls for urgent repairs to breakdowns of a wide range of essential services, ranging from lift breakdowns and defective water pumps to sanitary and electrical faults.

A view of the Board's newly completed flats at MacPherson Estate. Area Office below.



All calls are received through the switch-board (913333) at the Centre housed in the National Development Building. These calls are immediately transmitted through the direct private speech-line to the respective Area Offices where uniformed maintenance crews are stationed round-the-clock for immediate action.

During the year, lift breakdowns with passengers trapped in lift-cars were handled by the Lift Emergency Unit with teams stationed in MacPherson, Bukit Merah and Chin Swee Area Offices. These teams can commence rescue work within 30 minutes from the receipt

of a call by the Centre.

The Board spent an average of \$24,000 a month to maintain the Centre. This expenditure will increase as more regional centres are set up to serve new properties taken over for management.

The Board is continually on the lookout for ways and means to improve the Centre with the view to providing even better service for its residents.

Labour & Welfare Unit

Labour

There was a shortage of male labourers in

Newly-completed single-storey market in Upper Thomson Road.



1972, particularly for the conservancy and cleansing of housing estates. To ease the situation, 600 female labourers were employed and the recruitment age limit of male labourers was raised from 40 to 50 years.

Conservancy & Cleansing Contracts

The Department's Conservancy & Cleansing Contracts of 13,404 units expired at the end of 1972. Arrangements were made for the calling of new contracts for another two years, commencing 1 Jan 73. This would cover the

expiring contracts and 9,751 new units totalling 23,155 units in all. In addition, Conservancy & Cleansing Contracts were revised to ensure greater efficiency.

Hawkers

The Board continued to provide more hawker centres with a view to maintaining the high standard of cleanliness and hygiene in its estates. Improvements in the layout of several older hawker centres such as at Kallang Basin and Tiong Bahru were carried out including

A new hawker centre in St. Michael's estate. Behind is a new flatted factory building.



the modification of old drainage systems and ventilation and lighting. Similar renovation works were in progress at Bukit Ho Swee and Toa Payoh hawker centres at the year's end.

In its efforts to supervise hawkers, the Hawkers Control Unit has set up a Central Register of all authorised hawkers in the estates to facilitate the leasing of stalls, transfer of tenancies and checking of unauthorised hawkers. Its Hawkers Liaison Officers reported a declining number of assault cases and attributed this fact to the engagement of Police escorts who provide greater protection on their rounds.

A list of Board's hawker stalls/pitches under management is shown in pages 74 and 75.

Applications & Lettings Section

This Section processes the letting of flats,

shops, offices and other business premises and transfers to new accommodation. The following statistical data indicate the number of applicants on the rental register:

Outstanding cases brought forward as at 1 Jan 72	21,214
New registrations during the year	11,888
Reinstatements	387
TOTAL	33,489
Less Settled Cases (including cancellations)	8,494
Outstanding cases on waiting list as at 31 Dec 72	24,995

Last year, a monthly average of 990 rental applications were received as compared to 889

A view of the redevelopment project comprising 4-room units at Moulmein Road.



applications in 1971 and 1,027 applications in 1970. The bulk of new applications were for 1-room (Improved) flats which are popular with the lower income groups.

Transfers of Accommodation

As at 31 Dec 72, there were 5,789 out-

standing transfer cases, 75% requested for larger and better flats in the more popular estates, indicating a desire for improved housing.

The Board undertook to modernise some of its older flats. 816 units of semi-communal 1-room flats at St Michael's Estate were converted into 2-room flats. Tenants of these flats

The clean and pleasing lines of a new Philips factory in Toa Payoh New Town.



were allocated alternative accommodation and were allowed to purchase new flats in Toa Payoh, Kallang Basin and Balestier Road Redevelopment Estates. Another 198 units in Lorong 3 Estate will also be redeveloped. Tenants there will be rehoused in Kallang, MacPherson and Upper Changi Estates. 103 families have already been rehoused mostly in Kallang, MacPherson and Kallang Basin Estates.

Rehousing

A total of 76 families affected by fires during the year received accommodation in Board flats nearest their gutted homes. Three major fires occurred at Sturdee Road, Lorong Jodoh and Ah Hood Road involving some 62 families who were later rehoused in Kallang Basin, Toa Payoh and Queenstown.

Shops

461 shops and other business premises were let out on a competitive tender system. These premises cater for a wide variety of trades in housing estates. Accepted tenders were based not only on the rental offered but also on the

type of trade that would meet the needs of the Board's residents.

An average of 38 shops and other business premises were let out each month, more than 50% of these being new shops.

Sales Section

Flats Sold

During the year 7,808 flats were sold under the Home Ownership Scheme (these consisted of 6,089 new flats and 1,719 existing flats) bringing the total number of flats sold under the scheme to 45,024 units by the end of 1972. The table on page 76 shows the number of flats sold in the various housing estates.

New Applications Registered

Some 24,644 applicants registered to buy flats during the year bringing the cumulative total to 53,101 on the waiting list as at 31 Dec 72. The table on page 77 shows the demand for flats in the various Board's housing estates.

During the year 3 new policies were implemented to allow the following categories of people to apply for flats under the Home Ownership Scheme.

- (i) non-citizen surviving spouse of a Singapore Citizen may now apply for a flat under the Scheme subject to:
 - (a) the applicant being a permanent resident and the surviving spouse of a deceased Singapore Citizen;
 - (b) one or more of the surviving spouse's children must have been born in Singapore; if the eldest is less than 18 years of age, the surviving spouse must submit a valid application for Singapore citizenship for the child.
- (ii) an orphan who can form a family group with one or more other persons may apply for a flat. The orphan status of the applicant must be established by valid documentary proof.
- (iii) spinsters are now able to apply to

Time for an impromptu game of basketball for this young group of Toa Payoh residents.



purchase/rent flats subject to:

- (a) the spinster grouping together with 2 or more persons of similar sex;
- (b) at least one of them being 40 years old or above.

Thirteen applicants took advantage of the above relaxation in policy and registered with the Board to purchase flats.

To improve the security of residents within estates, the Board implemented a scheme of selling flats to police personnel. To-date, 166 police personnel took advantage of the scheme.

Extension of Free Maintenance Period

In the past flat-owners enjoyed a 6-month free maintenance period for defects found in sold properties. This free service has been extended to 1 year.

Housing Estates Management

It has always been the Board's policy to establish and promote good landlord/tenant relationship and to this effect housing estates are managed by a decentralised system of Area

Henderson Area Office—one of the Board's 14 Area Offices where residents of the area may go to, for help or pay their rentals. A community hall on the 1st floor is available for rental for social functions.



Offices whose work is coordinated by the Central Administration. Housing estates are divided geographically into 14 areas, each with a nearby Area Office which is in charge of up to some 15,000 units.

In addition, the Board also provides quarters for Resident Housing & Maintenance Inspectors within housing estates. This enables residents to seek assistance outside office hours, where necessary.

Equally important are the officers who explain the policies of the Board. These officers guide and enlighten residents towards cultivating a communal spirit particularly in the case of new tenants who have yet to adapt to their new environment.

Block Representative Scheme

The Block Representative Scheme, set up in 1970 to encourage a closer liaison between the Board and residents, was further strengthened particularly at Chai Chee Estate. Here, a 3-room flat was allocated to the Block Representatives

as a communal hall and meeting place and a ceremony was held to introduce the Representatives to the residents. Block Representatives have so far successfully organised and co-ordinated the general efforts of tenants to keep the flats and the common areas clean.

Landscaping Unit

The Landscaping Unit comprises the Nursery Division and the Field Division.

The Nursery at Kay Siang Road was extended from 6 acres to 13 $\frac{1}{4}$ acres following the closing of the Queensway Nursery to make way for the expansion of the existing shopping centre.

This extension would provide an additional 200,000 plants annually, principally for the Bedok/Tanjong Rhu Reclamation Scheme and other new projects.

The Field Division undertook landscaping and planting works for all Area Offices and Departments of the Board.

Two tree-pruning emergency teams were set up in March 1972 to enable the constant trimming of expansive foliage on roadside trees and to remove any trees uprooted in heavy storms.

The newly set-up Landscaping Mobile Teams visited all landscaping/planting sites and continued its extensive landscaping in 8 housing estates. During the year, the Unit also participated in the annual Horticultural Show and in the National Tree Planting Day Campaign.

Legal Unit

The Legal Unit handled all legal matters of the Estates Department. The work of the Unit can be classified into the following categories:

- (a) Tenancy
- (b) Sale of Flats
- (c) Acquisition Problems & Appeal Cases
- (d) Industrial Leases and
- (e) Ancillary Matters

Another pollution-free factory among homes in Toa Payoh New Town.



Girls assembling cameras in a camera factory at Chai Chee. In many of the Board's estates, land is set aside for light clean labour-intensive industries.



Tenancy Matters

Cases where residents committed breaches of their tenancy agreement (eg non-payment of rent, assignment, sub-letting, causing annoyance to neighbours and change of use of premises without Board's consent) were referred to the Legal Unit as a measure of last resort.

In 1972, 741 rental cases were referred to the Legal Unit for action. Of these 292 District Court Summonses and 8 High Court Summonses were issued; 197 District Court Judgments, 5 High Court Judgments and 101 District Court Writs of Possession and 2 High Court Writs of Possession were obtained. 72 cases were pending judgment. The rest were settled out of court.

Sale of Flats

On receipt of Titles from the State, the Legal Unit carried out the necessary registration process as required under the Land Titles Act. In 1972, 11,357 leases and 10,098 mortgages were registered.

The Legal Unit also prepared and processed Discharge of Mortgages where loans are deemed. Transfer Instruments from purchasers who wish to resell are examined and approved by the Unit before the Board endorses its consent on these Instruments. 1,103 Instruments of Discharge and 290 Transfer Instruments were handled by the Unit, during the year.

Breaches of terms and conditions of sales, leases or mortgages and/or default in the payment of loan instalments were also referred to the Legal Unit for legal proceedings. Of the

premises which were sold, 245 cases were referred to the Legal Unit for legal action. Of these, 34 High Court Writs, 21 Judgments and 2 Writs of Possession were obtained. 40 cases were pending while the remaining were settled out of court.

Acquisition Matters

All legal problems connected with acquisition proceedings by the Board's Acquisition Teams were directed to the Legal Unit.

Industrial Premises and Other Properties

The Unit handled legal matters encountered in the management of the Board's industrial premises, factories and other properties. These included the drafting of building agreements, leases, licences and other related documents and the giving of advice on possible infringements.

Lands Section

Alienation

By the end of 1972, the Board had leased out a total of 29 petrol station sites by tender to oil companies for the construction of petrol stations. The total revenue from these sales amounted to \$11,128,677. Eight other sites covering a total area of 459 acres were leased out for the establishment of light industrial factories. These brought in a total premium of \$8,338,589.

Management

113 industrial leases were under Board's management including the issue of building agreements, leases, action on assignments and the endorsement of plans for alterations and additions. It also managed a 7-storey flatted factory at Ganges Avenue and 8 units of

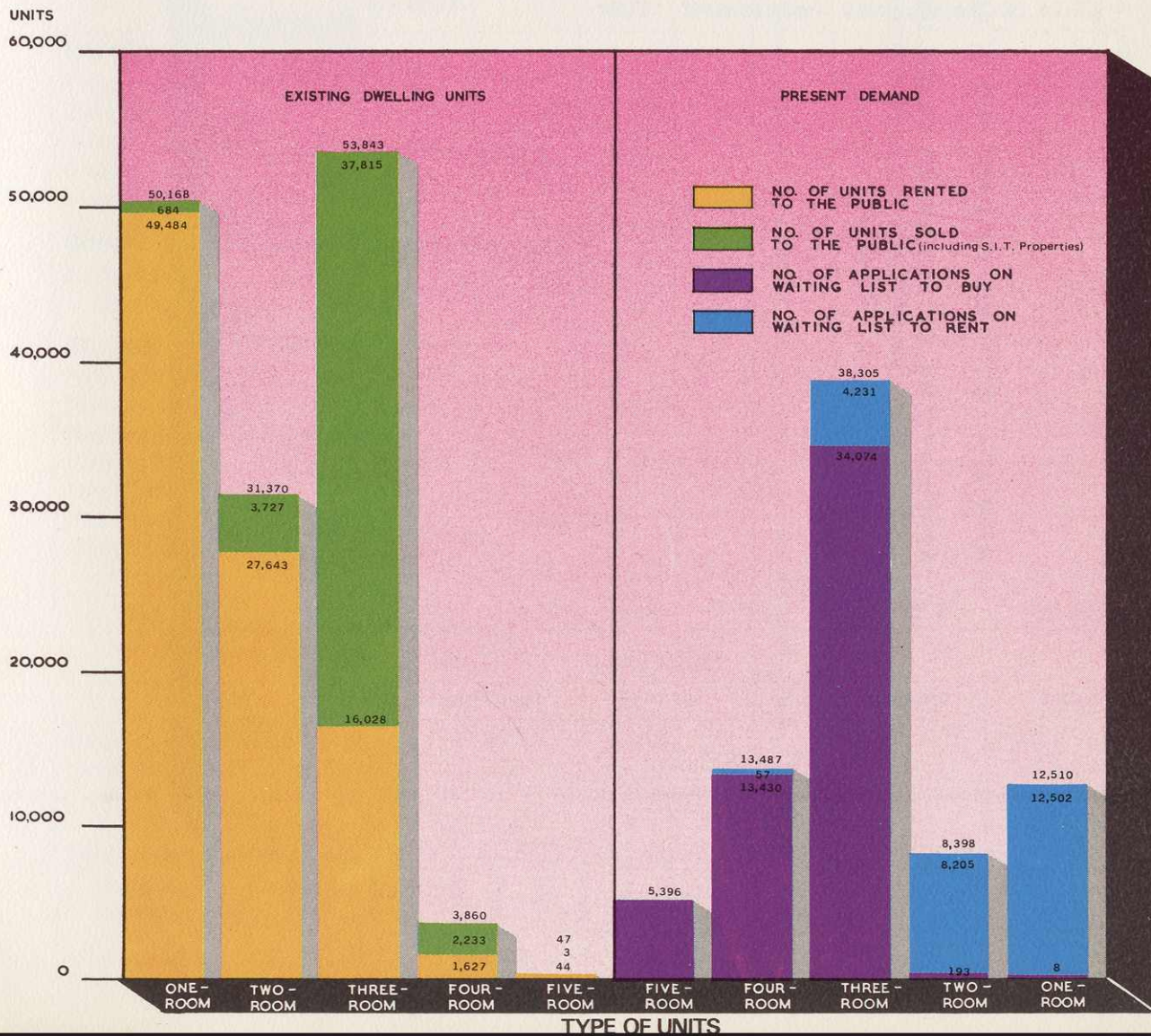
single-storey warehouses at Geylang Bahru, Kallang Basin. A Land Management Unit was set up during the year to manage lands acquired by the Board. This Unit is responsible for taking action against trespassers, unauthorised erection of structures and conducting demolitions.

Land Acquisition

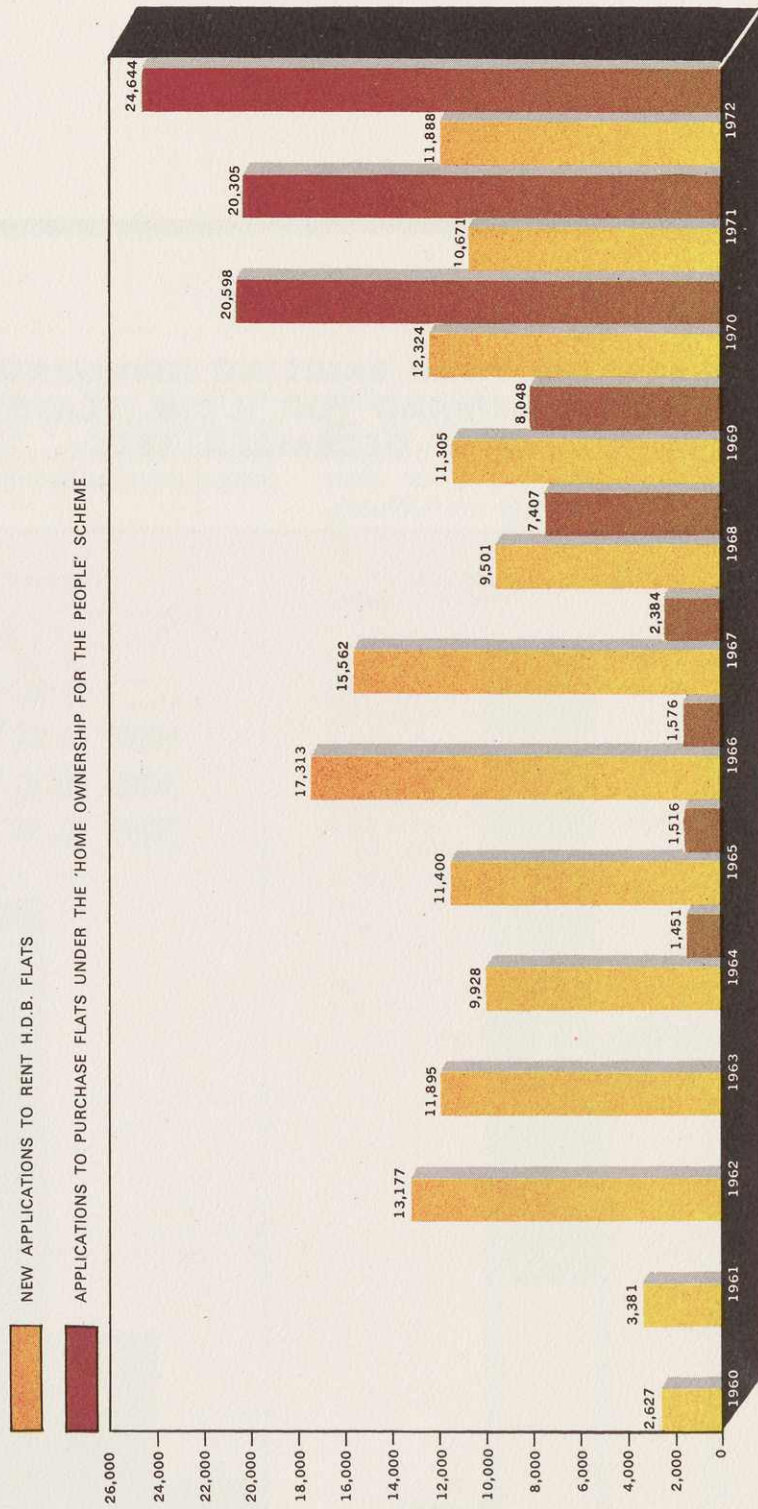
During the year, the Board acquired a total of 214 lots covering an area of approximately 242 acres for development. The total compensation paid for the acquisition of these 214 lots was \$11,146,553. Details of these are shown on page 78. In addition, the Board also acquired some State land totalling 236 acres for its Housing Programme.

To meet the growing demand for Housing Board flats, it was necessary to increase the number of building projects. This has resulted in the further gazetting for compulsory acquisition of 363 lots covering approximately 1,099.8 acres for the phased development of Ang Mo Kio New Town, Bedok New Town and other estates shown on page 79.

HISTOGRAM SHOWING EXISTING DWELLING UNITS AND PRESENT DEMAND FOR H.D.B. FLATS AS AT 31ST DECEMBER, 1972.



NEW APPLICATIONS TO RENT H.D.B. FLATS
APPLICATIONS TO PURCHASE FLATS UNDER
THE 'HOME OWNERSHIP FOR THE PEOPLE'
SCHEME



UNITS UNDER MANAGEMENT DURING 1972

Properties	Units as at 31.12.71			Units Taken over in 1972	Units Withdrawn		Units as at 31.12.72
	HDB	BECD prop. taken over by HDB	Total		Reverted or Pending Demolition	Under Conversion	
Dwellings							
1-room	43,077	—	43,077	7,104	13	—	50,168
2-room	30,717	269	30,986	384	—	—	31,370
3-room	49,682	990	50,672	3,171	—	—	53,843
4-room	3,190	—	3,190	670	—	—	3,860
5-room	44	2*	46	1	—	—	47
Shops							
Lock-up cum Dwellings	4,177	—	4,177	228	—	—	4,405
Miscellaneous							
Non-housing units	—	11	11	—	—	—	11
Hawker stalls	4,058	—	4,058	1,229	—	414	4,873
Hawker pitches	1,307	—	1,307	489	387	—	1,409
Parking lots	1,947	—	1,947	1,397	—	—	3,344
Land Tenancies	1,199	—	1,199	311	337	—	1,173
Bus bays	217	—	217	—	—	—	217
Others (kiosks, offices, etc)	434	—	434	147	—	—	581
TOTAL			141,321	15,131	737	414	155,301

* Bungalow and Dormitory Complex

SUMMARY

Period	Dwellings	Shops	Miscellaneous	Total
Units as at 31.12.71	127,971	4,177	9,173	141,321
Units taken over in 1972	11,330	228	3,573	15,131
	139,301	4,405	12,746	156,452
Units reverted or pending demolition or under conversion in 1972	13	—	1,138	1,151
Units as at 31.12.72	139,288	4,405	11,608	155,301

HAWKER CENTRES UNDER MANAGEMENT IN 1972

No.	Hawker Centres	Location	No. of Stall
1.	Bukit Ban Kee Pr. S1 C5	Jalan Kukoh, Blk 1	153
2.	Bukit Ho Swee Ph 3 C9	Havelock Road, Blk 50	81
3.	Bukit Ho Swee Ph 3 C11	Havelock Road	38
4.	Bukit Merah Redev. C7	Redhill Lane, Blk 79	270
5.	Kallang Basin N1 Ph2 C6	Bendemeer Road, Blk 29	288
6.	Kg Tiong Bahru (Bal) C2	Jalan Membina	10
7.	Kg Tiong Bahru (Bal) C8	Kim Tian Road, Blk 121	168
8.	Kim Tian Rd/Tiong Bahru Road	Tiong Bahru Road	31
9.	MacPherson Estate Cooked Food Centre	Circuit Road, Blks 79 & 79A	148
10.	MacPherson South Ext C2	MacPherson Lane, Blk 84	168
11.	Outram Road C1	Outram Park	20
12.	MacPherson South (Bal) C19	Circuit Road Blks 80 & 89	440
13.	Princess Elizabeth Park Estate	Hillview Avenue	52
14.	Queenstown N2 Ext C2	Commonwealth Avenue	86
15.	Queenstown N3	Commonwealth Crescent, Blks 119/125	92
16.	Queenstown N4 Ph 2 C3	Commonwealth Drive	76
17.	Queenstown N6 C10	Mei Ling Street, Blk 159	305
18.	Redhill Estate (Bal) C9	Lengkok Bahru	162
19.	Tg Rhu/Mountbatten Road	Jalan Batu	166
20.	Tiong Bahru Estate	Lim Liak Street	74
21.	Toa Payoh N1 C7	Lorong 7 Toa Payoh Blks 22A/D	80
22.	Toa Payoh N1 C7A	Lorong 7 Toa Payoh Blk 22	132
23.	Toa Payoh N1 C9	Kim Keat Avenue, Blks 64/66	146
24.	Toa Payoh N2 C4A	Lorong 5 Toa Payoh Blk 75	36
25.	Toa Payoh N3 C2	Lorong 4 Toa Payoh Blk 93	162
26.	Toa Payoh N4 C7A	Lorong 1 Toa Payoh Blks 131/135	64
27.	Upper Aljunied Road Redev. C3	Upper Aljunied Lane, Blk 9	168
28.	Upper Changi Road Estate	Jalan Chai Chee	28
			3644

TAKEN OVER DURING 1972

29.	Bukit Merah Redev. C8	Redhill Lane, Blk 85	96
30.	St. Michael's Estate	Jalan Tenteram	156
31.	Kg Tiong Bahru (Bal) C7	Jalan Bukit Merah	138
32.	Kallang Basin N2 C1	Bendemeer Road, Blk 42	148
33.	Kallang Basin N1 C4	Petaling Road, Blk 5	228
34.	Upper Thomson Rd 5 ms C1	Upper Thomson Road, Blks 4 & 9	238
35.	Toa Payoh N3 C12	Lorong 6 Toa Payoh Blk 188	33
36.	Toa Payoh N2 C10	Lorong 4 Toa Payoh Blk 74	192
			<u>1229</u>

HAWKER PITCHES UNDER MANAGEMENT IN 1972

No.	Estate	Location	No. of Pitch
1.	Bukit Ban Kee Pr. S1 C5	Jalan Kukoh Carpark	55
2.	Bukit Ho Swee Estate	Beo Crescent Concourse	162 (1st shift) 79 (2nd shift)
3.	Cambridge Road	Cambridge Rd/Back & Side Lane	143
4.	Delta Estate	Havelock Road	71
5.	Kallang Estate	Carpark at Blks 46 & 77	100
6.	Kg Silat Estate	Silat Square	44
7.	Princess Estate	Strathmore Avenue	32
8.	St Michael's Estate	St Michael's Market Concourse	80
9.	Tg Rhu/Mountbatten Road	Jalan Batu Market Concourse	154
			<u>920</u>

TAKEN OVER DURING 1972

10.	Bukit Ho Swee Ph 3 C9	Havelock Road	41
11.	Toa Payoh N2 C10	Lorong 4 Toa Payoh	141
12.	Brickworks Estate		120
13.	Toa Payoh N4 C7	Lorong 1 Toa Payoh	187
			<u>489</u>

**FLATS SOLD UNDER THE "HOME OWNERSHIP FOR THE PEOPLE" SCHEME
AS AT 31st DECEMBER 1972**

ESTATES	1-Room		2-Room		3-Room			4-Room			TOTAL			
	Improved	Standard	Improved	Standard	Improved	Standard	Point		Terrace House	Improved		Point		Terrace House
							Block	House				Block	House	
Alexandra Hill	—	—	—	204	—	—	—	—	—	—	—	—	—	204
Ang Mo Kio	—	—	—	—	584	—	—	—	—	—	—	—	—	584
Balestier	—	—	—	—	420	—	—	—	—	—	—	—	—	420
Bukit Ho Swee	452	480	—	2,454	—	—	—	—	—	—	—	—	—	3,386
Chin Swee Road	—	—	192	—	44	—	—	—	—	—	—	—	—	236
Delta	—	—	—	—	160	—	—	—	—	—	—	—	—	160
Geylang Serai	—	391	—	98	—	—	—	—	—	1	—	—	—	490
Henderson Crescent	—	—	—	—	—	—	—	—	—	472	—	—	—	472
Kallang Basin	—	—	—	—	1,263	138	—	—	—	—	46	—	—	1,447
Kallang/Tanjong Rhu	—	312	—	1,038	—	—	—	—	—	—	—	—	—	1,350
Kg. Tiong Bahru	—	3	—	728	220	—	—	—	—	40	—	—	—	991
MacPherson	—	405	—	4,186	468	—	—	—	—	56	—	—	—	5,115
Maude Road/ Kitchener Road	—	—	—	—	—	133	—	—	—	—	43	—	—	176
Moulmein Road	—	—	—	—	—	—	—	—	—	—	76	—	—	76
Outram Road	—	—	8	—	5	—	—	—	—	280	—	—	—	293
Prinsep Street	—	—	—	—	112	—	—	—	—	—	—	—	—	112
Queenstown	—	1,099	—	5,888	3,211	342	58	—	96	114	36	—	—	10,844
Redhill/Henderson	232	94	—	656	1,058	—	—	—	120	—	—	—	—	2,160
Siglap Fire Site	—	83	—	—	—	—	—	—	—	—	—	—	—	83
St. Michael's	—	—	—	704	—	—	185	—	—	—	—	—	—	889
Tiong Bahru	—	—	8	—	354	—	—	—	10	—	—	—	—	372
Tew Chew Street	—	—	—	—	—	—	—	—	—	—	72	—	—	72
Toa Payoh	—	160	30	782	12,852	—	—	—	797	—	—	—	—	14,621
Upper Changi	—	—	—	—	471	—	—	—	—	—	—	—	—	471
TOTAL	684	3,027	238	16,738	21,222	613	243	1,872	351	36	45,024			

**No. of Applicants on waiting list
for purchase of flats as at 31.12.72.**

Estates	1-room	2-room	3-room	4-room	5-room	Total
Beach Road	—	—	43	170	157	370
Brickworks	—	—	183	14	—	197
Bukit Ho Swee	3	32	94	—	—	129
Chin Swee Road	1	2	68	298	—	369
Covent Garden/Delta	—	—	1,877	459	184	2,520
Farrer Road	—	—	742	1,478	1,239	3,459
Geylang Serai	—	6	7	1	—	14
Katong	—	—	1,374	1,544	1,439	4,357
Kallang/Tg Rhu	—	10	39	22	—	71
Kallang Basin	—	—	4,139	1,137	191	5,467
MacPherson	—	26	2,836	121	19	3,002
Maude Rd/Kitchener Rd	—	—	7	5	—	12
Moulmein Road	—	—	—	17	—	17
Outram Road	—	2	5	18	—	25
Prinsep Street	—	—	19	—	—	19
Queenstown	—	85	4,444	1,931	446	6,906
Redhill/Henderson	4	5	5,064	1,170	—	6,243
Sago Lane	—	—	274	3	—	277
Tampines	—	—	514	111	10	635
Telok Blangah	—	—	2,016	1,223	744	3,983
Tew Chew St/Ellenborough	—	—	5	43	—	48
Toa Payoh	—	22	4,168	1,520	651	6,361
Upp Changi/Bedok/Opera/Siglap	—	3	2,062	492	235	2,792
Upper Thomson	—	—	791	235	11	1,037
Victoria Street	—	—	19	—	—	19
Whampoa/St Michael's	—	—	3,039	1,281	12	4,332
Woodlands	—	—	245	137	58	440
TOTAL	8	193	34,074	13,430	5,396	53,101

LAND ACQUIRED AND POSSESSION TAKEN IN 1972

No.	Locality	Date of Gazette Notification	No of lots	Area in sq. ft.
1	Havelock Road	28.2.69	2	25,744
2	Tanjong Pagar Rd/Craig Rd	29.3.69	11	22,986
3	Cross St/Club St/Mohd Ali Lane/ Amoy St	27.9.69	8	16,387
4	Land bounded by North Bridge Rd/ Middle Rd/Victoria St/ Bain Street	29.9.69	2	3,113
5	Blanco Court Phase I	29.10.69	22	50,951
6	New Bridge Rd/Tew Chew St/ Boat Quay/Keng Cheow St	7.11.69	1	1,638
7	Sago St/Banda St, etc	8.12.69	37	43,503
8	Land at North Boat Quay/ High St/Hallpike St	20.2.70	1	10,468
9	Fire site at Aljunied Road	13.6.70	2	10,677
10	Blanco Court Phase II	13.6.70	30	32,151
11	Lorong Krishna	13.6.70	2	2,502
12	Orchard Rd/Koek Rd/Cuppage Rd	29.6.70	6	60,970
13	Fire site at Lorong 37, Geylang	3.7.70	1	1,774
14	Land at Upper Changi Road	13.7.70	1	439,956
15	Rochore Canal Rd/Ophir Road	27.7.70	10	13,674
16	Paya Lebar Road	27.7.70	12	1,171,687
17	Land at North Bridge Road	27.7.70	3	7,618
18	Land at Upper Changi Road	27.7.70	2	2,142,640
19	Land bounded by Lorong Chuan/ Lorong Kinchir/Burghley Dr	11.8.70	15	4,043,246
20	Somerset Rd/Killiney Rd/ Devonshire Rd/Exeter Road	21.8.70	10	76,197
21	Land at Farrer Road	30.10.70 } 27.2.71 }	4	998,958
22	Land at Telok Ayer Street	7.4.71	4	2,840
23	Land off Upper Thomson Road	27.7.71	13	1,351,983
24	Raffles Place	24.11.71	2	4,075
25	Ann Siang Road	23.12.71	13	20,309
			214	10,556,047
				or 242 acres

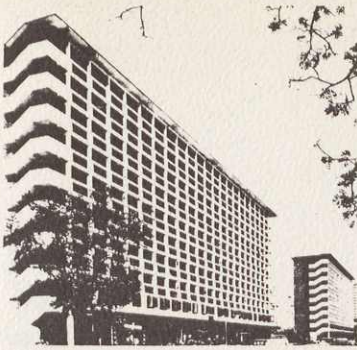
LAND GAZETTED FOR COMPULSORY ACQUISITION IN 1972

No.	Locality	Date of Gazette Notification	No. of lots	Area in sq. ft.
1.	North Bridge Road/Arab Street Fire Site	7.3.72	2	2,110
2.	Land between MacPherson Estate/Sims Avenue	18.3.72	190	2,958,641
3.	Sturdee Road Fire Site	27.6.72	1	5,187
4.	Land at 6 $\frac{1}{2}$ -7 ms Upper Changi Road	21.7.72	20	9,626,490
5.	Jalan Sultan Road Fire Site	7.8.72	1	1,567
6.	Land at North Buona Vista Road	11.8.72	12	2,099,559
7.	Land at Ang Mo Kio	16.9.72	81	32,582,880
8.	Land at Kallang Basin	3.10.72	25	495,781
9.	Kramat Road/Kramat Lane	26.10.72	31	138,960
			363	47,911,175

or approx. 1,099.8 acres

Urban Renewal—the contrast between old and new is evident in this picture of a 22-storey Point Block at Ellenborough Market Redevelopment Project.





URBAN RENEWAL

The year's activities were therefore marked by considerable forward planning related to the legislative, financial, staffing and other aspects of the proposed new Authority.

At the same time, advance planning was made to accelerate the pace of urban renewal in the Central Area in order that a better living and working environment will replace congested and dilapidated housing conditions in the inner city area.

Sale of Sites

The Urban Renewal Sale of Sites Programme proved to be an effective tool in stimulating real estate development and economic development in Singapore. Each of the three previous Sales of Sites conducted in 1967, 1968 and 1969 were carefully scheduled to encourage the development of amenities and facilities previously lacking in Singapore.

The 1967 Sale of Sites emphasised the development of hotels which were then in short supply. In 1968, urban renewal sale sites were for the development of prestigious office buildings whilst in 1969, sites were sold for the development of entertainment centres, medium-cost apartments and shopping centres.

During the year, the Department invited tenders for the development of tourist projects at Changi and Pasir Panjang. Four sites were successfully tendered for development into restaurants, cabanas, a bowling alley, night clubs and other entertainment facilities. In addition, tenders were called for the construction of an overhead pedestrian-cum-shopping bridge at Shenton Way.

Six more projects were fully completed and opened for business during the year. They include the Oasis Theatre Floating Restaurant/Night Club, Far Eastern Bank Building, OG Building, Maxwell House, Nehson's Building and the Pasir Panjang Paradise Tourist Resort. This brings the total number of projects completed to date to 16.

The Urban Renewal Department, established in 1966, undertakes redevelopment of the city centre. Its programmes also include sale of urban renewal sites to encourage private participation by local and foreign investors and participation in projects which promote tourism in Singapore.

During the year it was decided that a separate Urban Renewal Authority will be formed sometime in 1973. Pending the formation of the Authority an Urban Renewal Steering Committee was established to provide guidance to the department during the transitional period.

Two projects were partially completed and opened for business during the year. They are the Golden Mile Shopping Centre and Hotel Merlin. The remaining projects are in various stages of construction.

To date, a total of 50 urban renewal sites were sold by tender and negotiation. This generated a record investment of approximately \$500 million and created direct employment for 50,000 people.

Meanwhile, the Department continued to assist and guide developers, their architects and lawyers on a variety of matters to ensure the early completion of more urban renewal projects.

Public Housing Schemes in the Central Area under Urban Renewal Programme

In view of the growing demand for Board's flats, the rate of construction of public housing in the Central Area was stepped up. Improved 2-room to 5-room flats have been planned for the Central Area to induce more middle-income residents and help generate more night life in the inner city area.

The redevelopment programme in Precinct South I and North I of the Central Area was almost completed by the end of 1972. More public housing schemes in other precincts deeper into the Central Area will be launched in 1973.

During the year, a 22-storey Point Block was completed at Ellenborough Market under the first phase of redevelopment in that locality. It comprised, among other facilities, 72 units of 3- and 4-room flats which were sold mainly to resettlement cases under the "Home Ownership Scheme".

Several public housing contracts at Chin Swee Road/Havelock Road, Pearl's Hill Terrace and Sago Lane/Banda Street would be ready by early 1973. These projects would yield 1,697 units of flats and 187 units of shops, besides providing a range of other amenities like

carparks, electric sub-stations, eating houses, restaurants and offices. They would be used mainly for the relocation of shops and households affected by urban renewal.

Several other projects are currently under construction in other localities. They include Park Road Redevelopment, two contracts at North Bridge Road/ Sumbawa Road and Victoria Street/Rochor Road Redevelopment. These contracts would together provide an additional 1,269 units of flats and shops and a whole range of social and infrastructural amenities. A new 3-storey Kampong Glam Community Centre, designed by the Urban Renewal Department is currently under construction and scheduled for completion by early 1973.

Besides active implementation of the above Contracts, tenders were also called during the year for public housing projects at Petain Road, French Road, Towner Road, Neil Road/New Bridge Road and Ellenborough Market Contract IB. These would eventually produce another 2,083 units of flats and shops.

Resettlement Projects

An experimental resettlement scheme involving self-help in clearance and resettlement among shops and businesses affected by clearance in the Central Area was implemented in 1972. Clearance cases formed themselves into a group and raised the necessary finance in order to participate in urban renewal projects.

The first of such resettlement groups successfully negotiated the sale of a piece of land in South Bridge Road/Hokien Street for the construction of an office/shopping/residential complex. Similar schemes for other resettlement groups would be implemented provided conditions relating to their investment, design proposal and finance are satisfactorily met.

The Department also initiated the construction of "transit shops" for temporary relocation

Anson Centre—one of the many office/shopping complexes built in the city.

In the foreground, a pedestrian overhead bridge is provided in view of the heavy traffic at peak hours.

of businesses affected by urgent clearance. These shops are less costly and are easily built to meet immediate needs. They can be easily demolished when necessitated by development. The first block of 15 units of such shops was completed at Canal Road in October. More such shops may be built in future if proved useful for resettlement purposes.

During the year, terrace factories were built to house back-yard industries which were dislocated by urban renewal in the Central Area. Work on 184 units of single-storey terrace factories at Kallang Basin commenced in December.

Hawker Centres and Markets

Adequate numbers of Hawker Centres and Markets within the Central Area to accommodate an estimated 15,000 static street hawkers over five years is a key objective in the social upliftment programme of the Department.

In order to provide convenient marketing facilities and eating places set in clean and hygienic surroundings, notwithstanding the high cost of land in the Central Area, sites have been set aside for the construction of markets and hawker centres in adequate numbers to accommodate static street hawkers over the next five years.

The relocation of street hawkers into permanent stalls with basic amenities would remove the many squalid and unsightly backlane stalls, which are often health hazards and obstruct traffic.

By the end of 1972, the construction of a major 2-storey market and hawker centre with 425 hawker stalls at North Bridge Road was nearly completed. It would be used to relocate hawkers from Palembang Estate and Clyde Terrace Market. At the former Marine Police Station site in Empress Place, 98 hawker stalls, similar to those at the Satay Club, along the Esplanade were nearly completed. It would



provide a scenic river-side eating place for office workers in the vicinity.

Other hawker centre projects were finalised during the year as part of a Five-Year Programme. These included the proposed hawker centre at Jalan Besar, Beach Road and Boat Quay, undertaken on behalf of the newly-established Ministry of the Environment.

Preservation and Rehabilitation of Building

The Department also undertakes, as part of its urban renewal functions, the preservation and rehabilitation of buildings of architectural and historic interests.

One such scheme undertaken last year was the rehabilitation of the Telok Ayer Market into a major eating centre accommodating 144 new food stalls. When completed, the centre would cater to the needs of office workers along Shenton Way. The octagonal cast-iron building with unique architectural qualities would serve as an interesting contrast to the great concrete structures now emerging in Shenton Way urban renewal sites.

Landscaping and Environmental Improvement Schemes

The Department accorded high priority on improving the quality of the environment in Singapore to help create a clean, green and gracious "Garden City". Great emphasis was placed on the need to provide more landscaped sites, city parks, pedestrian malls to complement the intensive development in the City.

The Raffles Quay landscaping was undertaken in the latter half of 1972 to provide a much needed green "lung" in an area of intensive development. The landscaped open area from Raffles Quay to the PSA Free Trade Zone will provide workers and pedestrians a congenial place to meet and relax.

Another landscaping scheme undertaken by the Department was at a fire site in the corner

of Raffles Place and Chulia Street. The fire site was temporarily landscaped and converted into a "Spanish-look" garden to provide shoppers and pedestrians in Raffles Place, a place for relaxation and refreshment, whilst pending future development. The project was completed in October 1972.

The latest major landscaping project was launched at People's Park in November. The scheme will link the People's Park Cooked Food Centre, People's Park Shopping Complex, OG Building and the Majestic Theatre. The enclosed T-shaped landscaped mall/plaza will eventually feature fountains, sitting areas, decorative plantings and shade trees. It will highlight and enhance surrounding buildings and also act as focal point for shoppers.

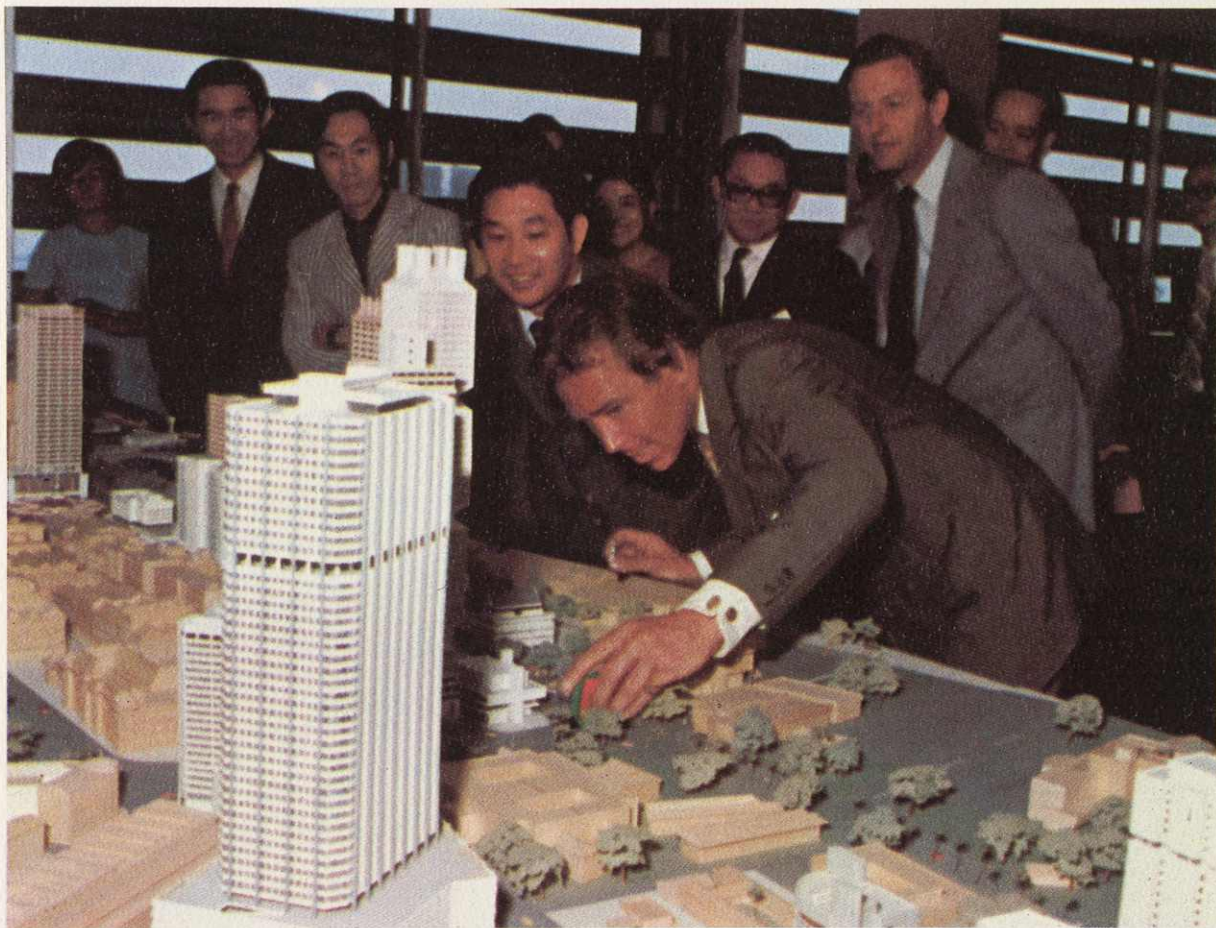
Besides landscaping, an improved environment in the Central Area also involves proper street design, traffic circulation, adequate pedestrian links and proper segregation between pedestrians and vehicles, advertising control and the devising of appropriate urban design standards adapted to local conditions. Some of these have already been applied by the Department in its public housing and sale projects. Lessons learnt in the process will constantly be reviewed and improved in subsequent schemes.

Overhead Pedestrian-cum-Shopping Bridge

As part of plans devised by the Department to provide proper and safe pedestrian links and segregation of pedestrian and vehicular traffic, the Overhead Pedestrian-cum-Shopping Bridge at Collyer Quay was initiated under the UR Sale Projects. It will be the first shopping arcade in the air complete with air-conditioning and escalators.

A similar bridge will be built at Shenton Way, to provide a link to the four major buildings now under construction on both sides of Shenton Way. The proposed bridge will in-

Lord Snowdon, inspecting the model showing Singapore's changing skyline. Briefing him is Mr. Alan Choe, Head of the Urban Renewal Department.



corporate 3,500 sq. ft. of shopping space and will be fully air-conditioned for the comfort of pedestrians and shoppers. Tenders were invited towards the end of 1972.

UN Sub-Project

The United Nations Development Programme (Special Fund-Project) which started in May 1970 entailed the preparation and evaluation

of a detailed plan for the Central Area based on State & City Planning Concept Plan for 1992. A small group of UN Consultants were attached to the Department during 1972 to work with local counterparts from the Department. The Sub-Project studied and analysed distribution of land uses in the Central Area, road and traffic system, land floor space intensities, open space and carparking needs and other related problems. It developed

The Merlion—an agency project undertaken for the Singapore Tourist Promotion Board by the Urban Renewal Department.



methods and techniques in urban renewal planning applicable to the Central Area and established procedures for economic evaluation of such plans. The Sub-Project was completed at the end of 1972.

Agency Work

Under the Urban Renewal Programme, the

Department also carried out agency work for several development projects ranging from master planning to architectural work, graphics and physical construction. These agency works include the Cable Car System, Marine Terminal, Sentosa Tourist Complex, Container Port Terminal, Merlion and several Hawker Centres and Markets.

Projects such as the Cable Car, Sentosa

Model depicts Shenton Way after comprehensive Urban Renewal. It will eventually function as a major commercial, financial and shopping centre.

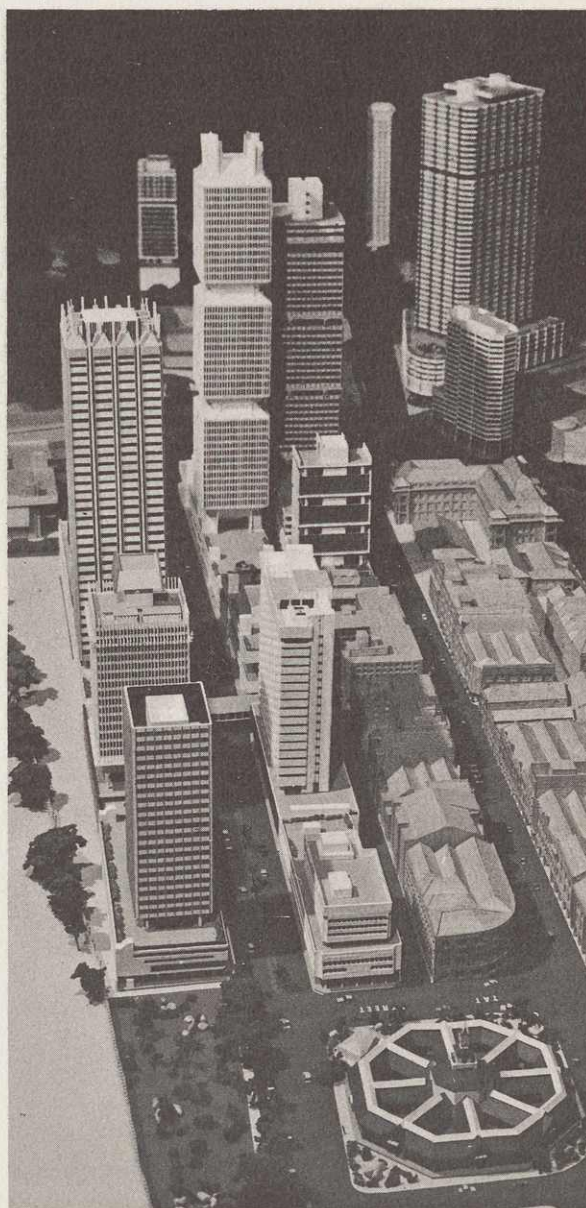
Development and the Merlion are essentially tourist promotion projects undertaken together with other statutory bodies to augment the number of tourist attractions in Singapore. The creation of man-made but imaginatively conceived projects would not only serve to attract tourists but at the same time provide additional places of recreation for the local people.

The Merlion, successfully completed by the Department in July 1972, is one such tourist project which have proved immensely popular with the public and tourists. The 25 feet water-sprouting sculpture is situated on a landscaped promontory at the mouth of the Singapore River. It is lighted at night and is graced by fountains, landscaping and piped music. The installation ceremony was conducted by the Prime Minister, Mr Lee Kuan Yew on 12 September 1972.

The Department performed the role of co-ordinator in the Cable Car Project and was responsible for the design of the three Cable Car Stations and their tower supports at Mt Faber, Jardine Steps and Sentosa. The Cable Car System Project offers exciting travel from Mt Faber to Sentosa Island by cable car at a height of 200 feet above sea level.

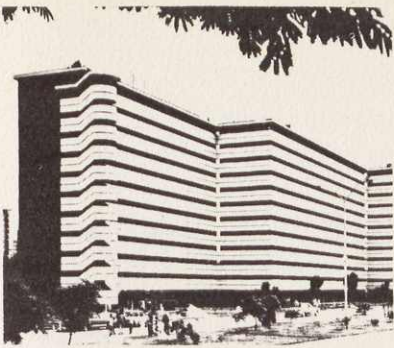
The Urban Renewal Department, in conjunction with the Sentosa Development Corporation, continued to provide architectural services and assistance in the development of Sentosa Island into a major tourist resort. A number of attractive tourist projects in Sentosa are planned for completion by November 1973 when the cable car comes into operation.

Other agency work such as the Marine Terminal and the PSA Container Port Terminal at East Lagoon were undertaken by the Department to assist in port development and also to redevelop properties adjacent to the Central Area.





The provision of sporting facilities for residents forms an important part in the planning of the Board's estates.



RESETTLEMENT

The Year's Operation

In 1972, the Department cleared a total of 4,060 squatters and incurred \$9.2 million in ex-gratia payment. This figure is almost double that of 1971. The increase in ex-gratia payment is mainly due to the compensation rates being increased from 1st July, 1971. The table on page 95 provides annual statistics on the number of squatters cleared and the amount of compensation paid since 1960.

The 4,060 squatter cases cleared comprised 3,215 residential families, 178 commercial establishments, 54 industries, 267 farmers and 346 squatters of other categories. A total of 1,693 units of various kinds of structures were demolished.

During the year clearance work was concentrated on only 35 project sites because of the lack of suitable alternative accommodation. However, 50 more sites were listed for clearance at the request of the development departments, bringing the total to 317 sites on the list for clearance at 31st December, 1972 as compared with 302 sites at the beginning of the year. Details of the sites cleared are shown in the table on page 96.

Impact of New Resettlement Policy

The new Resettlement Policy introduced on 1st July, 1971 has been fairly well received by people affected by clearance mainly because it offers better resettlement benefits to those who are affected by clearance.

This is particularly illustrated in the case of farmers where 99 out of the 267 farmers resettled opted for either a cash grant of \$7,800 or a free flat. In 1971, only 20 out of 99 farmers opted for cash grants or free flats. It is anticipated that with farming land becoming more limited in supply, more farmers affected by clearance will change their livelihood and opt for outright cash grants or free flats in the coming years.

The Resettlement Department functions primarily to clear slums and development areas and resettle squatters cleared from State land so as to provide unencumbered sites for public housing, urban renewal, industrial estates and other public works projects.

The Department undertakes land clearance for the Housing & Development Board, Government Departments and other Statutory Boards such as the Public Utilities Board, the Jurong Town Corporation, the Singapore Telephone Board and the Port of Singapore Authority.

This is the majestic 22-storey VIP block in Queenstown, so called because visitors to the Board are brought here to enjoy a panoramic view of the island.



In the category of residential families, 2,538 out of the 3,215 families resettled last year, accepted rehousing offered by the Board. Of these, 673 preferred to purchase instead of renting Board's flats. In 1971, only 229 out of 3,374 resettled families purchased Board flats.

Page 97 shows the category and number of squatters cleared and the scheme of resettlement they opted for.

REVIEW OF CLEARANCE SCHEMES

Kampong Tiong Bahru

During the year, a total of 750 squatters were cleared from Kampong Henderson and rehoused in the adjoining public housing estate at Redhill. Clearance of this site provided space for the building of some 1,500 units of flats.

Another parcel of land at the fringe of the Kampong Tiong Bahru Fire Site was cleared during the year resulting in 386 squatter families being rehoused in Housing & Development Board flats at Redhill Estate. This site will provide space for some 1,200 units of flats to be built.

Telok Blangah New Town

Active clearance continued at Kampong Radin Mas, which has been earmarked for development of Telok Blangah New Town, Neighbourhood II. Some 448 residents were rehoused in various Housing & Development Board estates, particularly at Queens Close and Bukit Merah View, leaving only 12 squatters on the site. The site is expected to be totally cleared in early 1973.

Kallang Basin

In Kallang Basin, the Kim Hong Village at Lorongs 1 and 3 was completely cleared

during the year. Site preparation for the building of an extension to Geylang Square Housing Estate is now in progress. The 414 squatter families in this community were relocated at the adjoining Housing & Development Board estates at Geylang Square and Bendemeer.

MacPherson South

A census survey was conducted at one of the biggest remaining squatter areas occupying 155 acres of land at MacPherson South. This site is bounded by Paya Lebar Road and Paya Lebar Way (previously known as Middle Ring Road).

The survey, completed in the second half of the year, revealed that some 4,500 squatter families were living in overcrowded and squalid conditions. Some 100 cases of cottage industries such as shoemaking, carpentry and engineering and motor repair workshops were also found in the area.

The Resettlement Department initiated clearance action and cleared a parcel of 10.4 acres of land at the fringe of this slum area along Paya Lebar Way. The scheme involved the clearance and resettlement of 291 families and the demolition of 98 huts. This site will provide space for the construction of public housing which will be used to rehouse squatters to be cleared from the rest of the slum area.

Ang Mo Kio New Town

Some 250 residents, 4 shops and 35 farmers on 200 acres of land at Teck Ghee Village were scheduled for clearance to make way for the First Phase of Ang Mo Kio New Town. By the end of the year, all preparatory work pertaining to clearance had been completed. The displaced families would be rehoused in accommodation at Sin Min Road estate scheduled to be completed for occupation in March 1973.

An aerial glimpse of Ang Mo Kio New Town, showing flats and motor-car repair workshops.



Toa Payoh New Town

Some 100 acres of low-lying land at Potong Pasir, stretching from Braddell Road to Jalan Toa Payoh, were earmarked for the expansion of Toa Payoh Satellite Town. Under this clearance scheme some 500 families, 17 shopkeepers and 70 farmers would be resettled in alternative accommodation at Toa Payoh Neighbourhood III which is scheduled for completion in June 1973.

Queenstown—Farrer Road/King's Road

Clearance action was initiated on this site

for development into a housing estate. 275 squatter families living in 125 huts would be cleared from the Farrer Road/King's Road area. Residential families would be rehoused in Queenstown Neighbourhood VII scheduled to be completed in the first quarter of 1973.

Upper Changi/East Coast Reclamation

Some 250 acres of land at Upper Changi/Kampong Chai Chee areas involving 400 squatter families of whom 56 were farmers and 344 residential cases were cleared for

the Second Phase of the East Coast Reclamation Project. At the close of the year, a total of 385 families were cleared, leaving 15 families scattered on the fringe of the site. 90% of the land was then handed over to the Building Department for excavation work. The remaining families would be cleared in the first quarter of 1973.

A site of 10 acres of land for Rollei Singapore (Private) Limited, was urgently cleared within a tight schedule of four months. Some 89 families were moved to Chai Chee Housing Estate at very short notice.

Changi Creek/Telok Paku

A Crash Programme was launched in November 1972 to clear three sites at Telok Paku and Changi Creek areas for the development of recreational facilities at Changi Beach. This involved the clearance of some 227 squatter families and demolition of 125 squatter huts. At the end of the year, the majority of these residents were relocated to Housing & Development Board flats at Kampong Chai Chee and at the artisan quarters at Telok Paku, leaving 17 squatter families still on site. The site would be completely cleared of encumbrances in the first month of 1973.

Slum Clearance in Urban Renewal Areas

Progress was made in the clearance of the Kee Seng Street/Cheng Tuan Street area in Tanjong Pagar, earmarked for public housing projects, and of the Upper Hokien Street area in Hong Lim. Another site at Anson Road/Choon Guan Street was completely cleared for development.

In the North Precinct, 650 residential families, 90 shops and industries and 30 other categories were involved when clearance action was initiated at two parcels of land totalling some 10 acres in the Rochore area, bounded by Queen Street/Ophir Road and Rochore Canal

Road. All affected families were asked to register for Housing & Development Board flats at either Balestier Road or Kallang Basin. However, only one third of the families responded. Vigorous efforts are being made to persuade the remaining families to accept the offers.

Census surveys were conducted in North Precinct 2 (Rochore area), in Clyde Terrace (Crawford area) and in Bencoolen/Waterloo Streets/Bras Basah Road in North Precinct 7. All surveys were completed before the end of the year.

Public Utilities Board Water Schemes

Some 72 acres of land were cleared for the construction of a dam across the Kranji River estuary to serve the proposed Kranji Reservoir.

Expansion of Airport Extension Project

The site for a proposed housing estate at 6 $\frac{3}{4}$ m.s. Tampines Road was completely cleared of squatter encumbrance in the third quarter of the year and taken over by the Building Department for construction. The proposed housing estate, when completed, will provide sufficient accommodation for the resettlement of some 1,000 families affected by the Airport Extension Project.

Jurong Town Corporation Projects

During the year, some 300 squatters who were mainly farmers were cleared from various clearance sites at Jurong for the Jurong Town Corporation, rendering some 800 acres of land free of encumbrance for development into industrial estates, low-cost housing, roads and parks.

Of the 800 acres of land, 10 acres on the north of Chin Bee would serve as an extension to Chin Bee Housing Estate, 50 acres adjoining

Neighbourhood I taking shape in Woodlands New Town.



the Jurong Park would be used for a Japanese Garden and Golf Course; while the remainder of some 600 acres of land at Lokyang would be used for the construction and extension of Upper Jurong Industrial Estate.

Engineering & Survey

The Survey Teams carried out demarcation, re-pegging and subdivision of lots, siting of self-built houses, and verification of acreages occupied by farmers.

The Engineering Team supervised the construction of 24 units of terrace houses

and septic tank at a cost of \$102,315/- at Resettlement Area 114, 16 $\frac{1}{4}$ m.s. Chua Chu Kang Road and undertook the preparation of earthworks, turfing, roadworks, drainage system, and bin centres to develop approximately 159 acres of land at the cost of \$461,000/- at Resettlement Area 116 Phase I, 17 $\frac{3}{4}$ m.s. Lim Chu Kang Road. The Team also supervised contracts for earthworks, drains, culverts and the removal of coconut trees to improve some 47 acres of reclaimed land at Resettlement Area 106 Ext. Phase I. The total cost inclusive of water supply is approximately \$26,800/-.

CLEARANCE AND COMPENSATION STATISTICS

YEAR	Moved to Resettlement Areas	Rehoused in Board Accommodation	Found Own Accommodation	Total	Compensation Paid
1960	132	45	207	384	\$ 0.3M
1961	57	77	160	294	0.3M
1962	198	342	277	817	0.9M
1963	307	589	285	1,181	1.7M
1964	150	2,584	909	3,643	3.2M
1965	182	4,570	1,758	6,510	5.5M
1966	266	4,158	1,594	6,018	5.1M
1967	90	4,002	1,892	5,984	4.1M
1968	123	4,063	1,677	5,863	3.1M
1969	416	3,924	2,179	6,519	4.8M
1970	277	3,922	1,926	6,125	4.1M
1971	145	2,263	1,474	3,882	5.5M
1972	235	2,668	1,157	4,060	9.2M
TOTAL:	2,578	33,207	15,495	51,280	\$47.8M

LIST OF SITES CLEARED IN 1972

No.	Locality	Date Cleared
1.	Clearance of Pulau Pesek	10.1.72
2.	Clearance of Lokyang Area Phase III—Hill 64	25.1.72
3.	South Precinct I—Stage XV	31.1.72
4.	Land at Junction of Queensway/Alexandra Road	10.2.72
5.	Jalan Toa Payoh Development (Supplementary)	14.2.72
6.	Clearance of 35 Grange Road	25.2.72
7.	State Land Lot 242—170 T.S. XVII at Flanders Square	28.2.72
8.	Making Up of Reserve Roads between Robin Road/Bukit Timah Road and Stevens Road	29.2.72
9.	Telok Blangah New Town Stage IV and Supplementary	29.2.72
10.	Nicoll Drive Beach Resorts Redevelopment	29.2.72
11.	Camp Site at Sungei Godong Extension	29.3.72
12.	Pan Island Expressway (Section A & B) Paya Lebar Road to Jalan Ubi	31.3.72
13.	Pulau Brani Clearance Site (Kg. Selat Sengkeh)	28.4.72
14.	North Precinct III—Stage I (Swatow Street)	28.4.72
15.	Pan Island Expressway—Whitley Road to Bukit Timah Road/Jurong Road Phase II	31.5.72
16.	Proposed Treated/Raw Water Pipelines for Kranji/Pandan Scheme	31.5.72
17.	Clearance for Woodlands New Town Phase II (Neighbourhood 2A)	31.5.72
18.	Telok Blangah New Town Neighbourhood II Stage I	30.6.72
19.	West of Mobil Site Hill Nos. 49, 50, 51, 53, 54A and 54B	25.7.72
20.	Land West of Mobil Hill 55, 56, 57, 61, 62 and 63	25.7.72
21.	Making Up of Reserve Road off Jervois Road Opposite Cable Road	31.8.72
22.	Garbage Composting Plant at Toh Tuck Road	31.8.72
23.	Clearance for Woodlands New Town Phase II (Industrial Area)	30.8.72
24.	Bedok/Upper Changi Road Coastal Reclamation Phase XIA	31.8.72
25.	Reburial Site at Telok Blangah	31.8.72
26.	Airport Extension Scheme—New Tampines Estate	31.8.72
27.	Proposed 2nd Shopping Centre at Upper Thomson Road	30.11.72
28.	Widening & Extension of Ganges Avenue from Delta Circus to Kim Seng Road	30.11.72
29.	Proposed Refuse Tipping Site Phase II on State Land off 16 m.s. Chua Chu Kang Road	30.11.72
30.	East Coast Reclamation Scheme Contract 2 Sector E1	30.11.72
31.	Kampong Tiong Bahru Fire Site Phase VI	30.11.72
32.	Industrial Land at Upper Changi Road M/s Rollei S'pore (Pte) Ltd	1.11.72
33.	Area Bounded by Jurong Road/Nanyang Avenue/Jalan Bahar for 66"22/6.6 K.V. Station	30.11.72
34.	Clearance of Guillemard/Mountbatten Road	30.11.72
35.	Telok Blangah New Town Neighbourhood I (Extn)	30.12.72

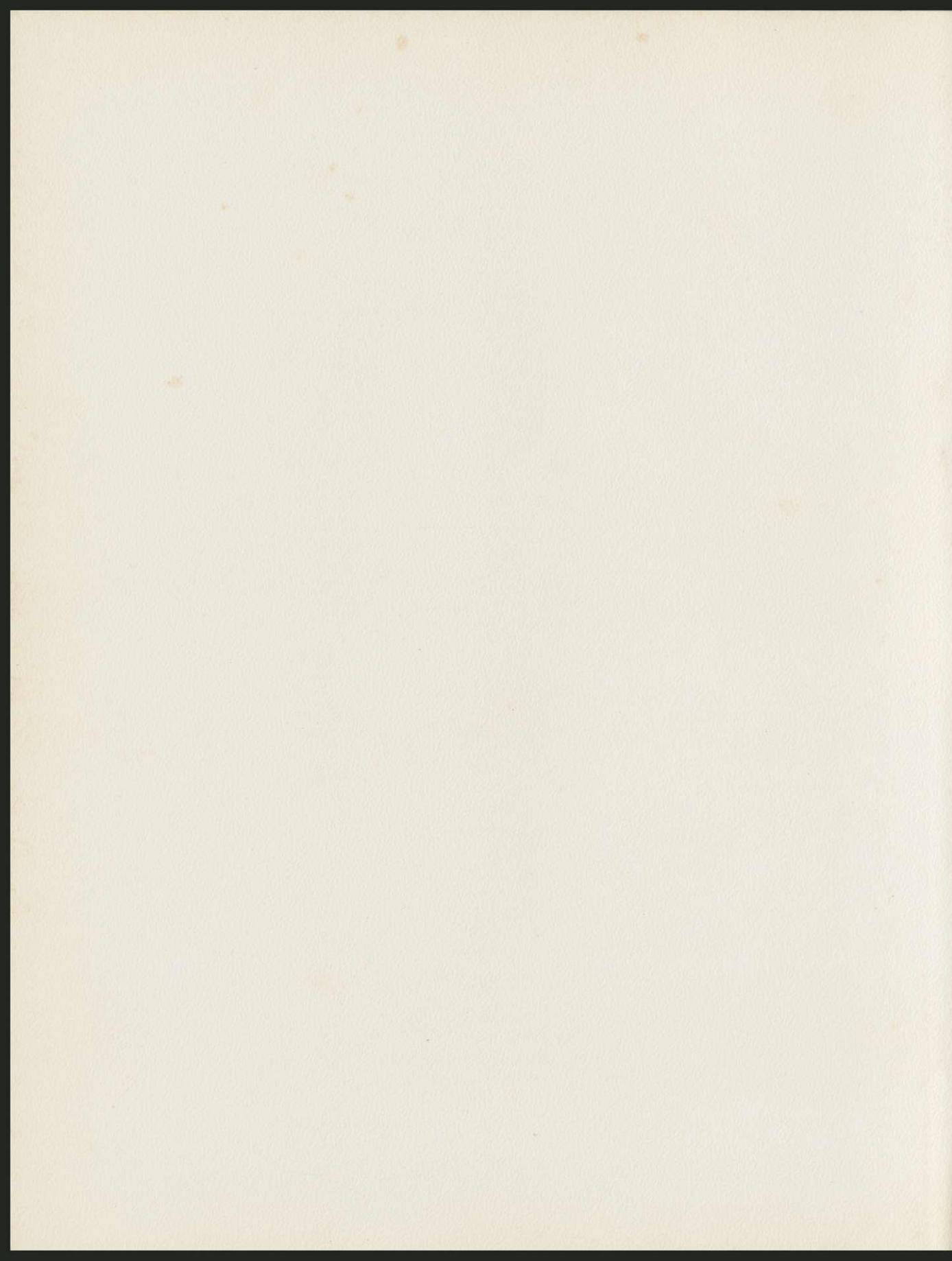
CLEARANCE STATISTICS FOR 1972

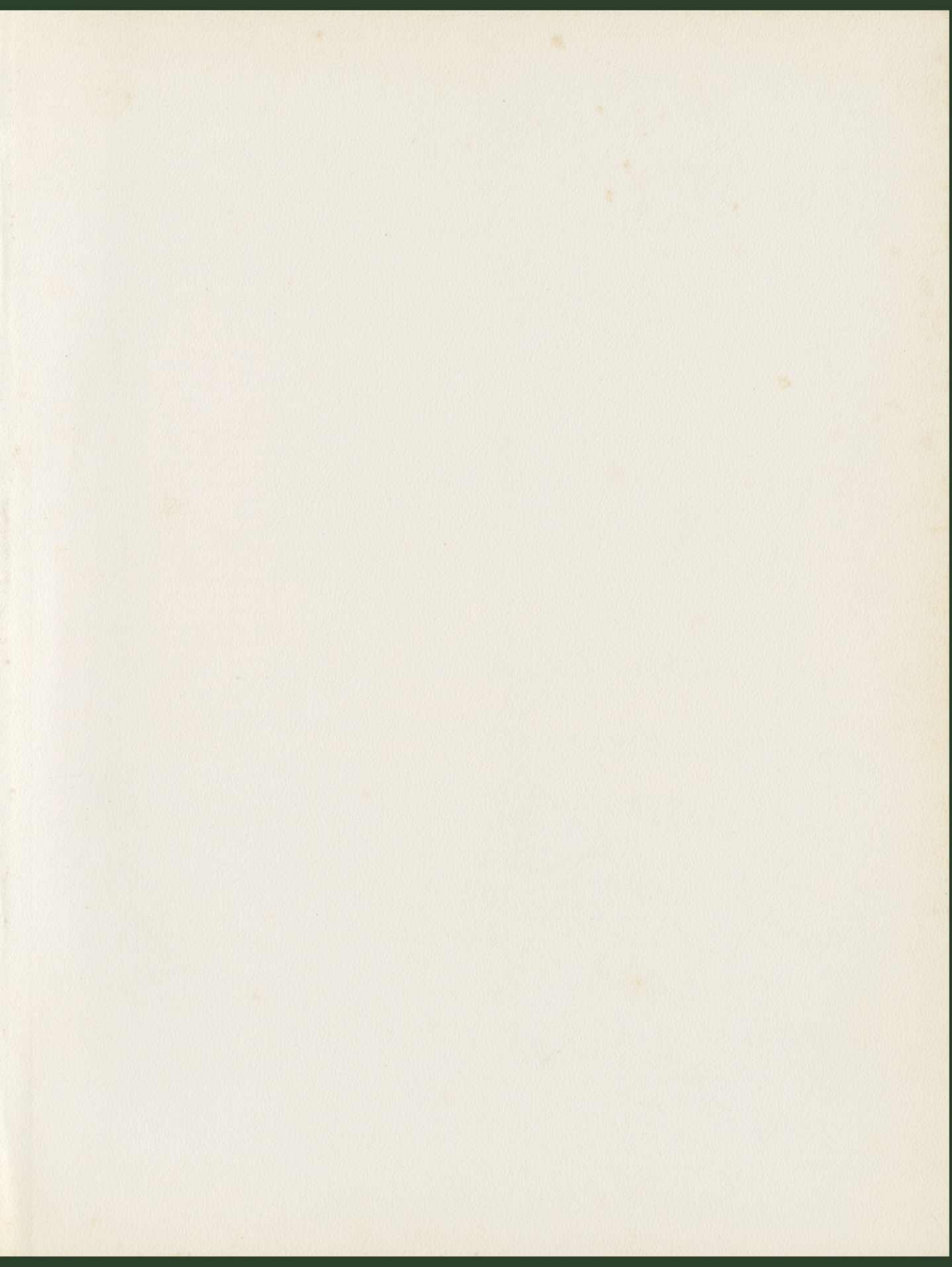
1. General Commitment:			
No. of sites required to be cleared as at 1.1.72		.....	302
No. of new requests received in 1972		.....	50
No. of sites cleared in 1972		.....	35
No. of sites under clearance as at 31.12.72		.....	317
Total no. of structures demolished in 1972		.....	1693
2. Category of squatters cleared during the year:			
FARMERS	{	Allocated land	168
		Given free flats	28
		Found Own Accommodation with Cash Grant	71
			267
FAMILIES	{	Purchased flats	673
		Allocated flats	1814
		Allocated house lots/terrace houses	51
		Found Own Accommodation	677
			3215
SHOPS	{	Allocated shops	138
		Found Own Accommodation with Cash Grant	5
		Found Own Accommodation without Cash Grant	35
			178
INDUSTRIES	{	Allocated Accommodation	24
		Found Own Accommodation with Cash Grant	0
		Found Own Accommodation without Cash Grant	30
			54
OTHERS	{	Encroachment	103
		Office/Stall/Association/etc.	243
			346
TOTAL			4060
3. Total Amount of Compensation Paid in 1972:			
			\$9,230,604.00

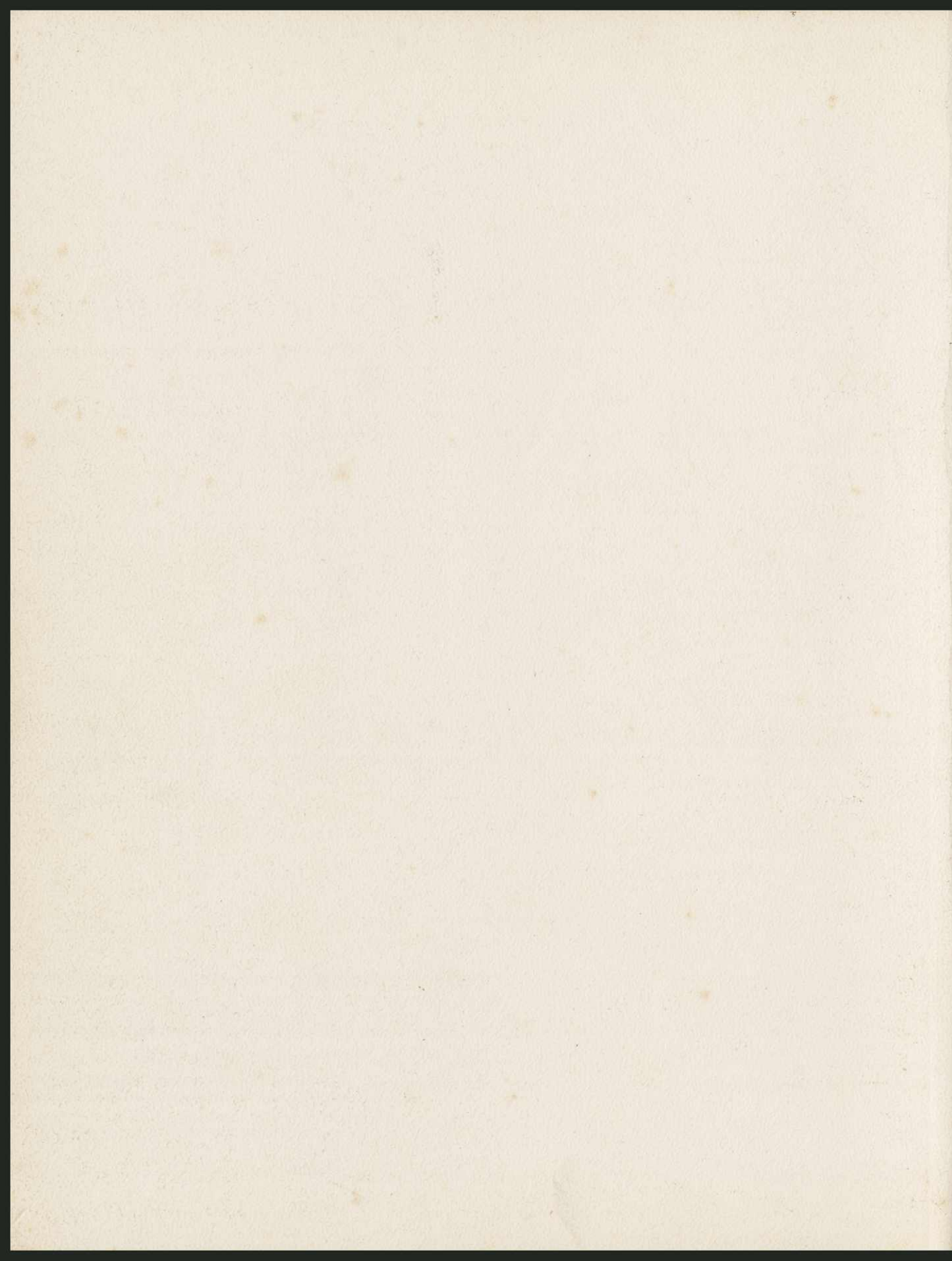
A panoramic view by night of the Town Centre and Swimming Complex at Toa Payoh.









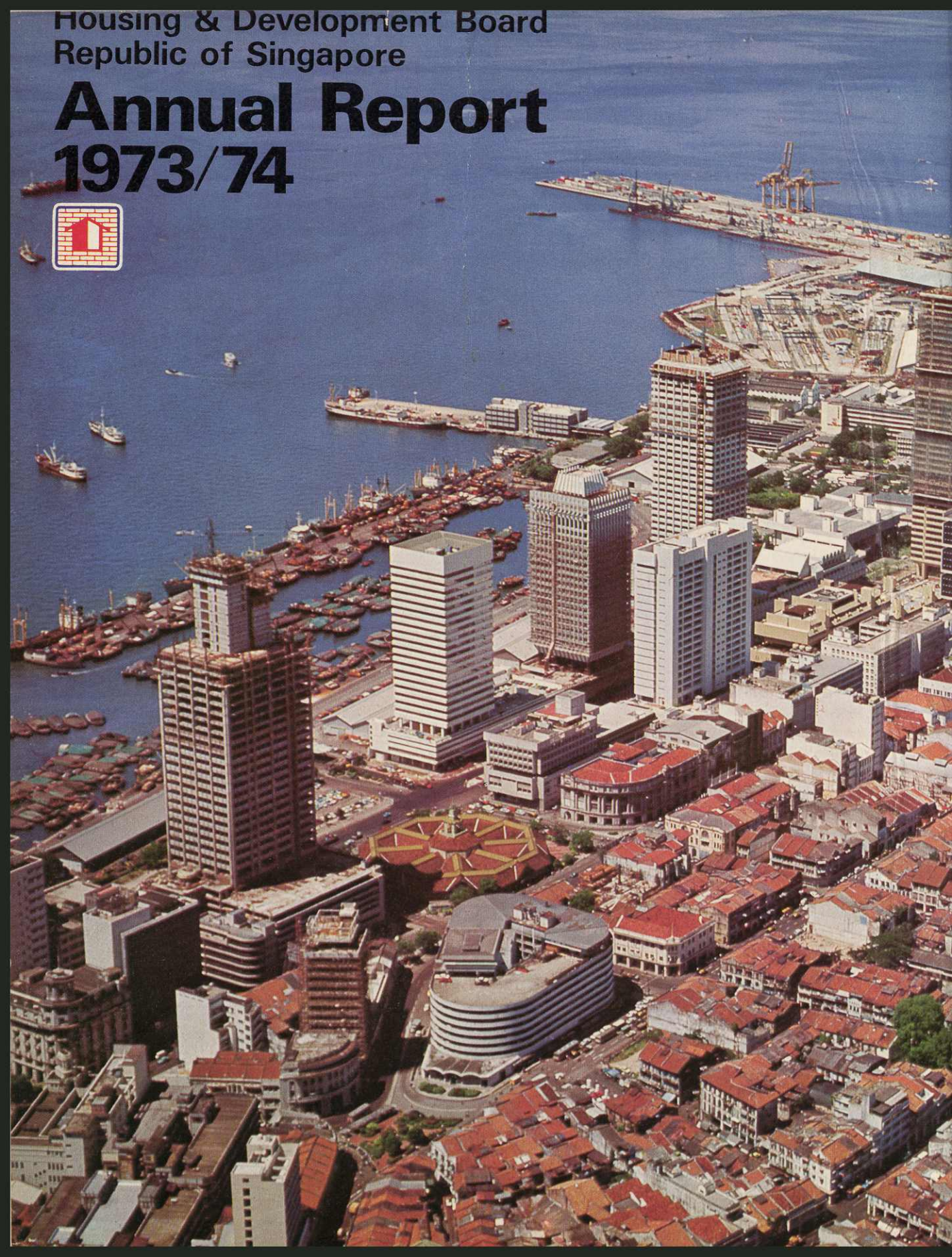


Housing & Development Board **Annual Report** **1973/74**



Housing & Development Board
Republic of Singapore

Annual Report 1973/74





With the Government
HOUSING DEVELOPMENT BOARD

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Four-room point block flats in Henderson Hill Estate.
The foreground shows the garden along Tiong Bahru Road.



CHAIRMAN'S REVIEW

Change in Financial Year

The financial year of the Housing and Development Board was changed from the period 1st January—31st December to 1st April—31st March by the Statutes of the Republic of Singapore (Miscellaneous Amendments) (No. 2) Act, 1973. This Annual Report consequently covers a period of 15 months from 1st January 1973 to 31st March 1974.

Building Programme

During the 15-month period the Board completed 28,422 units of flats and shops bringing the total number of units completed under the Third Five-Year Building Programme (1971-1975) to 64,821. Between January and December 1973, a record 23,224 units of flats and shops were completed and at 31st March 1974, 33,907 housing units were under various stages of construction.

At the end of the period under review, some 940,000 persons or 42.7% of Singapore's total population were residing in housing estates under the Board's management. This figure includes the 63,369 flat-owning families who purchased their flats under the "Home Ownership" Scheme.

The target under the Third Five-Year Building Programme was advanced from 100,000 to 125,000 housing units. Of the 25,000 additional units, 13,000 units are scheduled for completion within the programmed period by 1975 while the remaining 12,000 units are expected to be completed in 1976. By 1980 a total of not less than 250,000 units of public housing will be built under the Third and Fourth Five-Year Building Programmes.

Unabated Demand for Public Housing

There were 105,851 applications for flats at the end of March 1974—25,473 to rent and 80,378 to purchase. During the last 15 months the Board received an unprecedented 62,137 applications for public housing of which 54,770 applications were registered in 1973. This unabated demand for public housing is principally attributed to three factors:

- (a) The prevailing situation of near full employment enabling a larger number of workers to utilise their Central Provident Fund credits to own homes by purchasing Board flats;

- (b) The increased prices of properties developed by the private sector which placed the ownership of houses beyond the reach of most wage earners; and
- (c) The tendency of multi-nuclear families to split up and live separately.

It is envisaged that the number of applications in 1974 and subsequent years will be less than that of 1973 as currently more than one million people have already been housed by the public sector—940,000 in Board estates and another 150,000 in housing provided by Jurong Town Corporation and other Public Authorities.

Constraints on Building Programme

Spiralling construction costs

The most serious problem faced by the Board was the severe inflation in building costs. During the 15-month period under review building costs increased by more than 35%—the highest rate of inflation experienced by the Board so far as against an annual average of between 1% and 2% in the decade of the 1960s, and between 10% and 12% in 1971 and 1972.

The price of cement increased by 92% from S\$60 per metric ton on 1st January 1973 to S\$115 per metric ton on 31st March 1974, while the price of steel reinforcement bars rose from an average of S\$400 per metric ton in January 1973 to S\$850 per metric ton in March 1974—an overall increase of 112% in 15 months. Many factors responsible for these unexpected increases were beyond the Board's control such as the higher prices of imported raw materials like clinkers and scrap iron needed to manufacture cement and steel and the increase in oil prices at the end of 1973.

The costs would have gone up higher if the Board had not operated its own granite quarries, brick kiln and concrete piling plant, and made special arrangements for stockpiling and the regular supply to contractors of other essential building materials.

Shortage of Professional/Technical Personnel

The shortage of professional/technical officers, especially Architects and Engineers, continued to be acute. Recruitment exercises mounted by the Board both within and outside

the Republic were barely adequate to replace those who resigned and were not sufficient to fill all the posts created to undertake the Board's enormous building programmes.

A comprehensive exercise was carried out during the year to promote deserving officers. Various avenues to induce more professional staff to join the Board's service were also explored. The Ministry of National Development will be launching a five-year Apprenticeship In-Service Training Scheme for higher school certificate leavers to supplement other formal Architectural courses. This Apprenticeship Scheme aims at producing qualified Architects at the end of the five-year training period to serve the needs of the public sector.

Shortage of Building Workers

The shortage of skilled workers, especially carpenters and plasterers, has continued throughout the period under review. To meet this shortage the Board in conjunction with the Ministry of Education has formulated an apprenticeship scheme for the training of primary school leavers in construction trades. The Board also introduced an Incentive Scheme to encourage citizens on completion of their National Service to join the building industry.

Increased Housing Subsidy

Despite the increase in selling prices of flats from January 1974 the gap between actual construction costs and the sale prices was greater at 31st March 1974 than that at the beginning of 1973 when flats were sold at the old prices because of the very substantial rise in the cost of essential building materials in the last 15 months.

The Board's annual deficit subsidised by the Government has increased from S\$10 million for 1971 to S\$19 million for the last financial period and over S\$30 million for the financial year just ended.

Industrialised Building Systems

To expand the capacity of the building industry and to introduce greater mechanisation at the construction sites the Board awarded three contracts to build a total number of 16,332 units of flats using industrialised and special building systems over the next three to five years.

One of the contracts is completely industrialised and was awarded to a joint venture by a Danish company and a Singapore firm to build 8,820 units of four-room flats by means of the industrialised system of construction in the next five years. At the end of March 1974 the factory for producing the building components was under construction at Bedok.

The other two contracts extending over three years involve a combination of the industrialised and traditional methods of construction. One of these contracts was awarded to a joint enterprise between an Australian firm and a Singapore company to build 6,072 units of three-room Improved flats by means of the "Progressive Strength" system of construction. The other contract was awarded to a local construction company to build 1,440 units of five-room flats using the "Metal Formwork" method of building.

The Board's Architects and Engineers will be closely watching their progress with a view to adopting these techniques for future contracts. It is anticipated that the new construction systems will achieve better workmanship in the finishes and substantially reduce the number of workers required at the construction sites.

Incentive to Contractors

In 1973 the Board introduced the Merit Star incentive scheme to retain good contractors to execute more building contracts and to encourage other contractors to improve their speed of construction and standard of workmanship. The Board also incorporated fluctuation clauses in its new contracts to reduce the financial risks for contractors undertaking various contracts in this period of uncertainty in prices of materials and labour. Contractors have responded well to these measures.

East Coast Reclamation

The progress of the East Coast Reclamation Scheme has been satisfactory. In Phases I and II of the reclamation 458 hectares (1,130 acres) of land from Bedok to Tanjong Rhu were reclaimed. By the end of March 1974, another 54 hectares (134 acres) of land were reclaimed under Phase III and a further 250 hectares (620 acres) under Phase IV. The Phase V contract awarded to two Japanese

firms to reclaim 141 hectares (349 acres) of land at a total cost of S\$88.78 million was finalised. Phase V is the last phase of the East Coast Reclamation Scheme.

In accordance with the Master Plan, one-third of the land along the sea-ward edge of the reclaimed East Coast site will be set aside for a park. A 16-kilometre (10-mile) stretch of sandy beach will provide the largest recreational seaside area in Singapore for swimming and other aquatic sports.

An expressway running along the East Coast will provide easy access to the city centre or to by-pass the city and link up with other road systems leading to the western sector including Jurong.

Part of the reclaimed area has already been used for public housing. By the end of March 1974, the first 1,038 units of flats built on the reclaimed land were sold by ballot to the public. The remaining reclaimed land will be used mainly for the development of condominium housing, recreational, tourist and commercial projects.

By 1978 the total land area reclaimed under the five phases of the East Coast Reclamation Scheme stretching from Nicoll Drive at Changi to Prince Edward Road at Telok Ayer Basin will be 1,151 hectares (2,844 acres).

Finance

The Board's building programmes are wholly financed by loans from the Government. During the 15-month period ending 31st March 1974 these loan advances totalled S\$439.48 million, comprising loans drawn during the first quarter of 1973 amounting to S\$65.67 million and the allocation in the Development Estimates 1973/1974 of S\$373.81 million.

Capital expenditure on housing including land costs during the period was some S\$480.00 million and the accumulated excess of capital expenditure over loan advances amounting to about S\$69.16 million was met by the temporary use of other funds of the Board, such as provisions for repairs and renewals, and sundry deposits.

Estate and Land Management

Within the housing estates the Board is responsible not only for the management and

maintenance of properties but also for the provision of extensive communal and social facilities such as markets/hawker centres, children's playgrounds, sports complexes, car-parks, landscaping and gardens. Post offices, community centres, creches, police stations and kindergartens are also built by the Board as agent for other Authorities.

Estate management policies are reviewed from time to time and revised where necessary in line with national objectives. During the fuel crisis immediate action was taken to cut down substantially electricity consumption in common areas in housing estates by reducing lighting points and lighting hours.

Since the introduction of the 24-hour Essential Maintenance Service Unit and the Lift Emergency Unit in 1971, the number of justifiable maintenance complaints from residents has been substantially reduced. To further improve this service, Management is looking into the feasibility of providing Very High Frequency (VHF) communication between its emergency service vans and Head Office Control.

The Board's bi-monthly magazine for residents, "Our Home", played its role as an additional medium of communication in keeping residents better informed of Board policies and administrative procedures and acquainting them with the many services provided in housing estates.

To meet the land requirements of the accelerated building programme for public housing, 1,062 hectares (2,625 acres) of land were acquired for public housing.

Resettlement

With the demand for more cleared sites to facilitate the enormous development programmes undertaken by Government and Statutory Authorities, the Resettlement Department achieved an all-time record of resettling 12,067 cases in the 15-month period under review. In 1973 alone the Department resettled 10,691 cases including a number of farmers, most of whom preferred to accept "free" flats in lieu of alternative farmland.

Statistics and Research

A series of surveys was conducted during the period under review to obtain feedback to

guide the formulation of policies and improve the planning and management of housing estates.

At the beginning of 1974 the Board approved the establishment of a Live Register for applicants and occupants of its flats. Under this system all information on residents of flats and individual members of households on the waiting list amounting to 1.5 million people or almost three-quarters of Singapore's total population will be on the Live Register. This will enable the Board to exercise more efficient supervision over the management of estates and control of applications for flats. It is anticipated that this Live Register will be completed in early 1975. The Register will be constantly updated with socio-economic data on residents of Board estates.

Urban Renewal Steering Committee and the Urban Redevelopment Authority

The Urban Renewal Steering Committee (URSC), which was set up in 1971 to co-ordinate the Urban Renewal Department's functions with other Authorities and to prepare for the eventual formation of a statutory body, contributed effectively to the creation of the Urban Redevelopment Authority (URA). During the period under review the URSC considered the draft Urban Redevelopment Authority Act and recommended its acceptance. URSC also considered the Fourth Sale of Urban Renewal Sites to be launched in early 1974 and the development of the Marina Centre Complex which forms part of Phase V East Coast Reclamation Scheme.

The Urban Redevelopment Authority Act was promulgated by Parliament on 28th January 1974 and becomes operative from 1st April 1974.

Middle Income Housing

The Board was a party to the formation of a private company, the Housing & Urban Development Co (Pte) Ltd, to undertake middle income housing projects. This company is jointly owned by the Board and the Urban Redevelopment Authority. Plans are now under way to build up to 4,000 units of flats each with an area of between 140 sq metres (1,500 sq ft) and 158 sq metres

(1,700 sq ft). These flats will be sold to members of the public whose incomes are between S\$1,500 and S\$3,000 per month.

Improvements in Public Housing and Increased Home Ownership

In accordance with the policy of constantly improving the standard of public housing, the Board introduced new designs of three- and four-room flats incorporating substantial improvements over existing designs.

Amenities in the new housing estates as well as services to residents have also been considerably improved. The ratio of carparks to flats has been increased by about 20%. Larger and better equipped children's playgrounds and multi-purpose sports complexes will be introduced in the newer estates. The amenities in new towns now under development will be even more comprehensive than those at Toa Payoh New Town which was better planned and served than the older Queens-town.

During the 15-month period under review, ownership of housing units built by the Board has risen from 45,024 at the end of 1972 to 63,369 by the end of March 1974, an increase of 41%. With more flats being built and offered for sale by the Board at prices within the means of the majority of Singaporeans, the Republic is well on the way to making the concept of home ownership for every working citizen a reality. Despite the recent increase in the prices of Board flats effective from January 1974, the cost of owning an improved three-room flat remains at about twice the annual family income of the purchaser.

Concluding Remarks

In spite of the special problems encountered during the period under review the overall performance of the Board has been creditable. This is attributable in no small measure to its dedicated management and the hard work and co-operation of staff at all levels.

LEE HEE SENG

CHAIRMAN
HOUSING & DEVELOPMENT BOARD

MEMBERS OF THE BOARD

chairman

LEE HEE SENG

deputy chairman

M COOMARASWAMY

members

C A V CHEW

MICHAEL FAM

BAEY LIAN PECK

CHENG TONG FATT



An aerial view of Kallang Basin Estate. The estate in the background is Neighbourhood II.

PRINCIPAL OFFICERS

AS AT 31ST MARCH 1974

Chief Executive Officer Teh Cheang Wan

Finance, Accounting & Administration Division

Secretary/Legal Officer William Chee Tiang Chin (Ag)
Secretary (Special Duties) Lim Koon Poh
Chief Financial Officer R F Scully (Ag)
Honorary Consultant, Statistics &
Research Department Dr Stephen Yeh

Property & Resettlement Division

Manager, Property and Resettlement Tan Tian Boon
Senior Principal Estates and Lands Officer Ng Boon Ong
Head, Resettlement Department Lim Hoon Yong

Building & Development Division

Chief Civil Engineer Au Eng Kok (Ag)
Chief Structural Engineer Tan Tiong Beng (Ag)
Chief Architect Liu Thai Ker (Ag)
Senior Principal Architects Si Hoe Kok Sing
Chee Teck Chiang
Senior Principal Civil Engineers Liu Hua An (Ag)
Chew Seong Yean (Ag)
Senior Principal Contracts Officer Yeoh Hooi Heng (Ag)
Principal Structural Engineers Chua It Meng
Ng Suan Chung
Principal Civil Engineers Yao Chee Liew (Ag)
Low Siew Aik (Ag)
Tan Kuang Whye (Ag)
Principal Surveyor Yeoh Joo Pheng (Ag)

Urban Renewal Department

Head, Urban Renewal Department Alan F C Choe
Principal Architects Tan Wee Lee
Chau Po Liang (Ag)

The shopping mall at Toa Payoh Town Centre.



MAP SHOWING LOCATION



MEAN DAILY MAXIMUM TEMPERATURE
(Jan - Dec 1973)
86.9°F (30.5°C)



MEAN DAILY MINIMUM TEMPERATURE
(Jan - Dec 1973)
74.3°F (23.5°C)



TOTAL ANNUAL RAINFALL
(Jan - Dec 1973)
116.38 INCHES (2,956.0 MM)

AREA: 226.4 SQUARE MILES
(586.4 SQ KM)



POPULATION: 2,203,500



EQUATOR-136.79 KM (85 MILES)

MILE 1 0 1 2 3 4 5 MILES
METRES 1000 0 1000 2000 3000 4000 5000 6000 7000 METRES



S.I.T.



H.D.B. FIRST AND SECOND 5-YEAR BUILDING PROGRAMMES



H.D.B. THIRD AND FOURTH 5-YEAR BUILDING PROGRAMMES



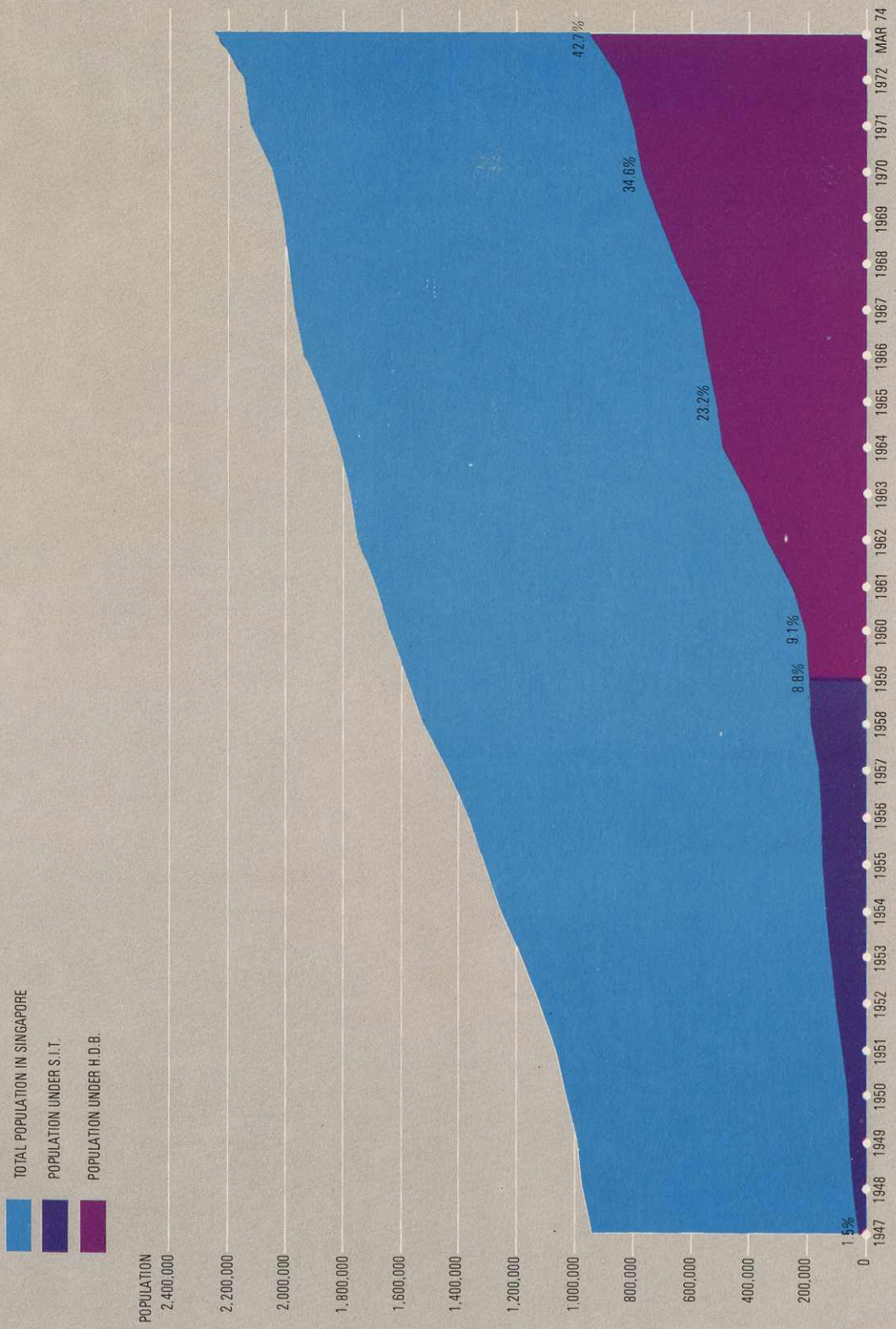
RECLAIMED LAND

WOODLAND

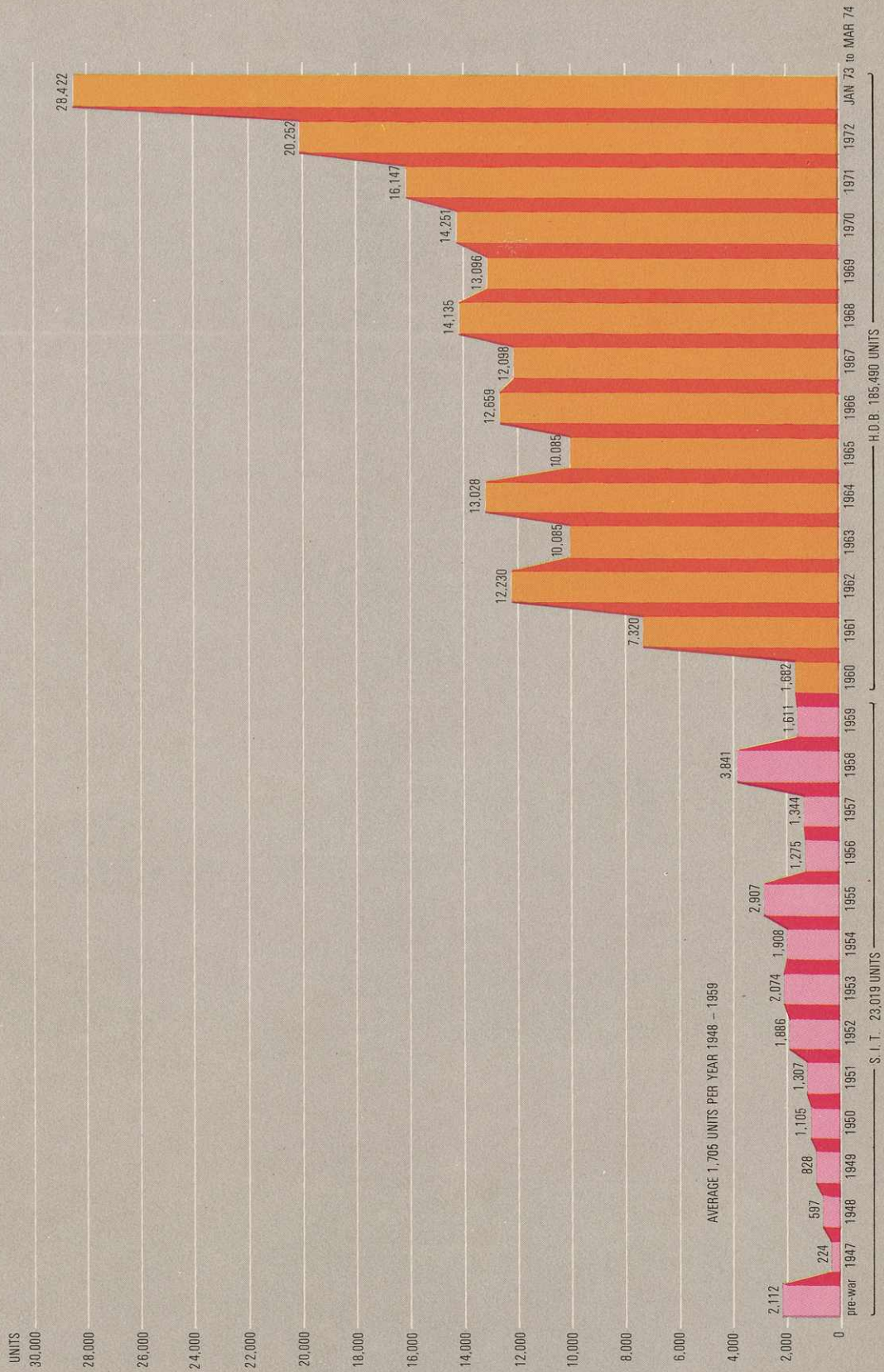
OF PUBLIC HOUSING ESTATES



POPULATION HOUSED IN HOUSING & DEVELOPMENT BOARD FLATS



HOUSING & DEVELOPMENT BOARD BUILDING STATISTICS



New flats at Henderson Estate with a landscaped area behind the buildings.



ADMINISTRATION

Functions of the Board

The Housing and Development Board, the Republic's public housing authority, was established on 1st February 1960 by the Housing and Development Act, Chapter 271. The Board is under the portfolio of the Minister for Law and National Development.

Entrusted with a wide range of responsibilities, its principal functions are the acquisition of land for public housing, the clearance of areas for development, the resettlement of families affected by redevelopment, and the building of flats for rental and for sale under the "Home Ownership for the People" Scheme. The Board also builds flatted factories, shops, markets, hawker centres, creches, swimming pools, sports complexes and other recreational facilities for residents of its housing estates. It also provides management and conservancy services in respect of sold and rented properties.

Composition of the Board

The Board is headed by the Chairman, Mr Lee Hee Seng, who is a Director of Singapura Building Society Limited and the Chief General Manager of Overseas Union Bank Limited. Mr Lee has been the Chairman of the Board since 2nd April 1971 and had served as a Board Member for approximately five years prior to his appointment as Chairman.

Mr Lee Hee Seng is assisted by the Deputy Chairman, Mr M Coomaraswamy, a senior partner in a firm of solicitors, and four Board Members—Mr C A V Chew, a senior partner in an architectural firm, Mr Michael Fam, a Company Director, Mr Baey Lian Peck, a Company Director, and Mr Cheng Tong Fatt, Permanent Secretary to the Ministry of National Development.

Organisation

A major restructuring of the Housing & Development Board's organisation was carried out in 1973/74. Under the restructuring the functions of the various departments were re-grouped under three divisions. Each division, namely, Finance, Accounting and Administration Division, Property and Resettlement Division, and Building and Development Division, is headed by a Manager who is responsible for

the planning and co-ordination of the departments within the Division.

The Finance Department, Secretariat, and Statistics and Research Department were amalgamated under the new Finance, Accounting and Administration Division, whilst the Estates Department and Resettlement Department were integrated to form the Property and Resettlement Division. The Architectural, Civil Engineering, Structural Engineering, Contracts, Survey, and Electrical Sections of the Building Department were grouped to form the new Building and Development Division.

The restructuring would streamline the establishment, bring about a more effective grouping of functions and provide better opportunities for the career development and advancement of professional and administrative officers.

Following the restructuring of the establishment of the Board the Estates Manager, Mr Tan Tian Boon, was promoted to become Manager, Property & Resettlement Division in 1974. Other principal officers who were promoted to higher grade posts were Mr William Chee Tiang Chin, the Secretary of the Board; Mr R F Scully, the Financial Officer; Mr Ng Boon Ong, Principal Estates Officer; Messrs Si Hoe Kok Sing and Chee Teck Chiang, Principal Architects; Messrs Liu Hua An and Chew Seong Yean, Principal Civil Engineers; and Mr Yeoh Hooi Heng, Principal Contracts Officer.

Messrs Au Eng Kok, Liu Thai Ker and Tan Tiong Beng were promoted to Senior Principal Civil Engineer, Senior Principal Architect and Senior Principal Structural Engineer respectively to head the Civil Engineering, Architectural and Structural Sections.

The Urban Renewal Department—a HDB department since 1966—was not included in the above exercise as it would be established as a statutory body to be known as the Urban Redevelopment Authority from 1st April 1974.

The Secretariat

The Secretariat continued to be the central co-ordinating body liaising with the various Divisions and the Board. The functions of the Secretariat include the processing of Board papers seeking approval for proposals, plans and projects to be effected and the institution of controls to ensure the implementation of the Board's decisions by the Divisions.

▲ H E Mr Dzemal Bijedic, President of the Federal Executive Council of the Socialist Federal Republic of Yugoslavia, being briefed by the Chairman, Mr Lee Hee Seng.

▼ The Hon E G Whitlam, Prime Minister of Australia, visiting a flat in Queenstown.



The Secretariat is also responsible for other assignments, including personnel administration, public relations, staff training, and systems and methods.

Personnel Administration

The Personnel Section processed a total number of 8,399 applications for employment in 1973/74. During the period under review 56 senior and intermediate professional officers and 516 junior officers were recruited.

Various schemes were initiated to help overcome the serious shortage of technical personnel at all levels generated by the building boom in the Republic.

Recruitment of Architects

Efforts were made to encourage Engineers and Architects from overseas to join Board service. The inducements offered included return air passage, housing allowance and a gratuity payable at the end of the contract.

The Board has introduced attractive Architectural bursaries for undergraduates of the University of Singapore with a view to encouraging the graduands to join the Board's service on completion of their course.

In-Service Training Scheme to produce qualified Architects

To increase the number of qualified Architects within the public sector, the Board will be participating in the Apprenticeship Scheme for Architectural Assistants-In-Training being organised by the Ministry of National Development.

The five-year intensive in-service training scheme aims to attract pre-university school leavers to pursue careers in Architecture and to supplement the technical manpower resources that would be generated by the local institutions of higher learning. The scheme envisages the establishment of a Government Architects Training Centre to be set up by the Ministry of National Development utilising the services of professional Architects in the public sector to assist in the training of the Architectural Assistants-In-Training.

The Architectural Assistants-In-Training will be paid monthly allowances ranging from S\$295 to S\$335 during their first three years of

training after which on successful completion of the Intermediate Examinations they would be appointed as Architectural Assistants at a commencing salary of S\$650 per month in the scale S\$650-S\$1500. On completing another two years of in-service training, they will be eligible for appointment as Architects in the scale S\$880-S\$1850 per month.

Training Schemes for Building Workers

Two schemes were launched to attract trainees to be trained as tradesmen in the building industry. The first was a 24-month Apprenticeship Scheme for discharged National Servicemen. Under this scheme the trainees would undergo "on-the-job" training with the Board's contractors at a minimum wage of S\$8 per day payable by the contractors. In addition, they will be paid allowances ranging from S\$30 to S\$120 per month with Central Provident Fund benefits during the period of training. On completion of the 24-month "on-the-job" training, the average Apprentice would have acquired a skill enabling him to earn up to S\$15 per day.

The second scheme to induce skilled tradesmen to join the building industry was organised by HDB in conjunction with the Industrial Training Board. The Housing & Development Board/Industrial Training Board Construction Trades Training Scheme provided for "on-the-job" training and courses of instruction at the vocational institutes.

Trainees under this scheme are paid S\$100 per month during the first year and will be given increments based on proficiency attained in the trades for the second year of training. This scheme, directed at the primary school leavers between 14 and 16 years, initially attracted 226 participants. Plans are being made to expand this scheme with a view to attracting between 400 and 600 school leavers a year.

These two schemes, if successful, would in the next five years increase the supply of skilled tradesmen for the Republic's building industry.

Emplacement of Technicians (Clerks-of-Works) on the Permanent Establishment

In February 1974 the establishment of Technicians (Clerks-of-Works) was revised to enable such personnel to be emplaced on the

- ▲ H E Mr Michael Somare, Chief Minister of Papua-New Guinea, being greeted by the Board's Chairman, Mr Lee Hee Seng, on his arrival at the Board.
- ▼ H E General Carlos P Romulo, Secretary of Foreign Affairs, Republic of the Philippines, having a panoramic view of Queenstown. He was accompanied by (left to right) H E Mr Delfin Reuto Garcia, Philippines' Ambassador to Singapore, Mr Teh Cheang Wan, the Board's Chief Executive Officer, Mr Cheam Kim Seang, Singapore's Ambassador to the Philippines, and Mr Alberto Katigbak, Philippines' Chief of Protocol.



permanent establishment after a minimum of seven years' satisfactory service. A number of promotional posts for Technicians was created to provide advancement for the more experienced Technicians required for the supervision of construction sites.

Revision of Salaries of Upper Timescale and Superscale Grade Officers

In 1973/74 the Personnel Section implemented the salary revision in respect of officers in the Upper Timescale and Superscale Grades. This salary revision exercise implemented on 1st March 1973 affected 50 senior officers of the Board and was in accordance with Government approved salary scales.

Departmental Examinations

In 1973 Departmental Examinations were held for Parking Supervisors, Clerical Assistants and Technicians. A total of 254 officers sat for the Departmental Examinations which were conducted as required under the Board's Terms and Conditions of Service.

Leave Compensation Scheme

Following the Government's introduction of a scheme of monetary compensation for reduced annual leave for officers in the Public Service, a similar scheme was adopted for Board staff from 1st January 1973. This scheme was also extended to new employees of the Board.

Wage Allowances

The Board also implemented two wage increases recommended by the National Wages Council. These were the 9% wage increase based on the officers' substantive salaries at 30th June 1973, implemented from 1st July 1973; and the S\$25 monthly interim wage supplement payable to officers whose substantive salaries were less than S\$1000 per month, implemented from 1st February 1974.

All officers of the Board who were in service between 1st January 1973 and 31st December 1973 received an annual allowance equivalent to the officer's monthly salary in December 1973.

Long Service and Conspicuous Bravery Awards

34 officers who had served the Board and its predecessor for 25 years or more were each presented with a gold medallion and a Long Service Certificate at a ceremony held on 22nd March 1974 at the Club HDB premises at Stirling Road. During the ceremony three officers who had performed acts of bravery beyond the call of duty were presented with Commendation Certificates and Gift Vouchers.

Public Relations

Our Home

The magazine for HDB residents, "Our Home", which was first published on a quarterly basis in July 1972, became a bi-monthly magazine from January 1973. "Our Home" serves as an additional medium of communication to keep residents informed of the Board's developments and new policies. The magazine is distributed free to all HDB householders and its circulation has increased progressively from 140,000 copies in July 1972 to 189,600 copies in March 1974. To assess the readership of "Our Home" and to determine readers' preferences the Statistics & Research Department conducted a readership survey of "Our Home". Results of the survey are shown in Page 29.

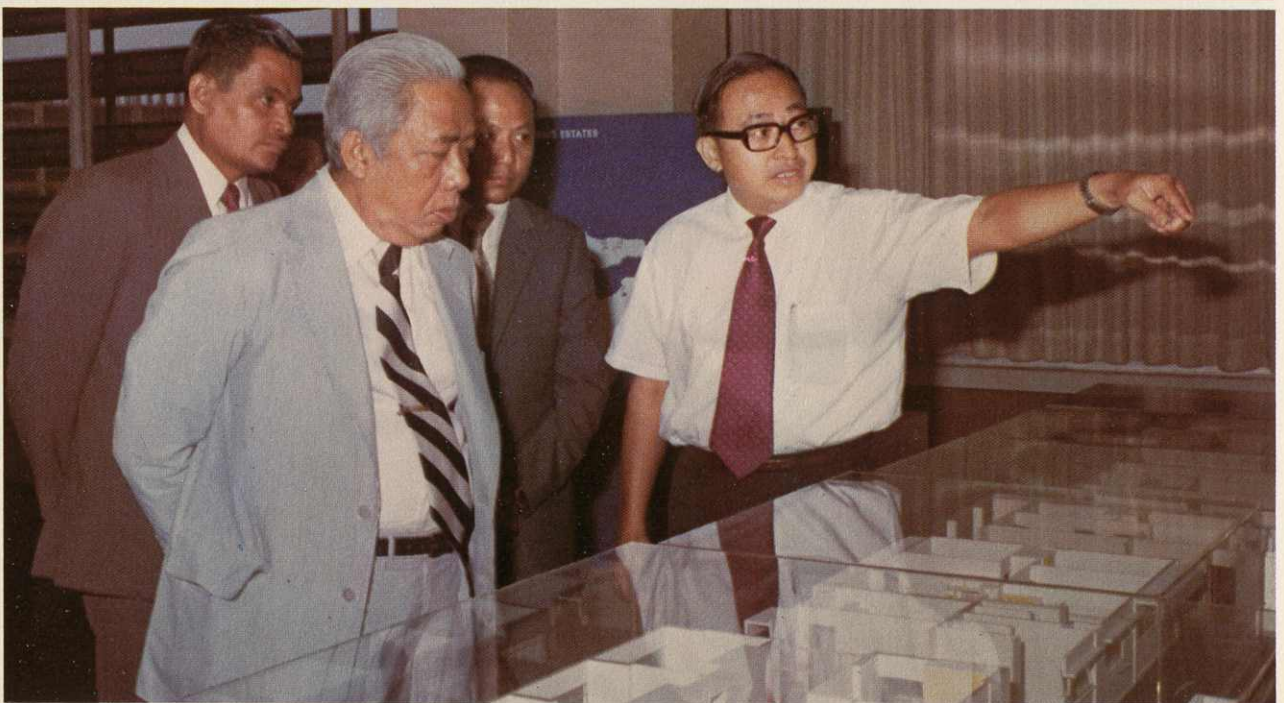
Residents' Guide Handbook

In August 1973 the Residents' Guide Handbook was published in the four official languages and distributed free to existing and new HDB householders. The Handbook contains essential information on the various types of services and amenities available to tenants and lessees, for example, repairs and maintenance, essential maintenance service, central TV antennae, community halls, etc. It also includes other useful information such as housing loans, transfer of accommodation, alterations and additions in shops and purchased flats, and essential telephone numbers for dealing with emergencies.

Visitors to the Board

The Republic's achievements in the field of public housing continued to interest some 1,300 foreign and local visitors, excluding local

- ▲ H E Datuk Ong Kee Hui, Minister for Technology, Research and Local Government, Malaysia, being presented with a souvenir medallion by Mr Lee Hee Seng, Chairman of the Board, during his visit to the Board.
- ▼ H E Mr Mohamad Nur, Governor of East Java, Republic of Indonesia, being briefed by the Chief Executive Officer, Mr Teh Cheang Wan.



student groups, who visited the Board. Amongst the prominent dignitaries who visited the Board during the period were H E Mr Dzemaal Bijedic, President of the Federal Executive Council of the Socialist Federal Republic of Yugoslavia, and The Hon E G Whitlam, Prime Minister of Australia. Other distinguished visitors to the Board were (in chronological order):

NAME	DESIGNATION
Prince Masitsela	Minister for Local Administration, Swaziland
H E Mr Dugersurengyn Erdembileg	Deputy Minister for Foreign Affairs, Mongolia
H E Mr Michael Somare	Chief Minister of Papua-New Guinea
H E Mr Peter Schulz	President of the Senate & First Mayor of the Free & Hanseatic City of Hamburg
H E Mr N M Perera	Minister of Finance, Republic of Sri Lanka
H E Mr Pham Kim Ngoc	Minister of Economy, Republic of Vietnam
H E Mr Duong Kich Nhuong	Minister for Public Works, Republic of Vietnam
H E Datuk Ong Kee Hui	Minister for Technology, Research and Local Government, Malaysia
The Hon J T Tonkin	Premier of Western Australia
The Hon W A R Rae, MLA	Minister for Lands and Forestry, Queensland, Australia
H E Dr Kamal Hossain	Minister for Foreign Affairs, People's Republic of Bangladesh
H E Mr Mohamad Nur	Governor, East Java, Republic of Indonesia
H E Herr Helmut Greulich	Minister for Economics and Public Works, Lower Saxony, Federal Republic of Germany
The Hon Geoffrey T Virgo	Minister of Transport, South Australia
H E Mr Charunphan Isarangkun	Under-Secretary, Ministry of Foreign Affairs, Thailand
The Hon R J Tizard	Minister of State Services and Health, New Zealand
H E General Carlos P Romulo	Secretary of Foreign Affairs, Republic of the Philippines
H E Dr Choi Hyung Sup	Minister for Science and Technology, Republic of Korea

Participation in National Campaigns

During 1973/74 the Board participated in the national "Family Planning" and "Home Safety" Campaigns. In conjunction with the National Safety First Council, the Board organised an essay competition on "Vandalism And How To Stop It" for school children between the ages of 12 and 18.

Balestier Estate Redevelopment where the single-storey artisan quarters built before the war were demolished for redevelopment into an estate with 4,900 units.



Swimming and Christmas/New Year Carnivals

The Public Relations Unit in conjunction with Club HDB organised the first HDB Swimming Carnival in November 1973. This was followed in December 1973 by a Christmas/New Year Carnival for Board staff at the Wonderland Amusement Park. Both functions were well attended by members of the staff and their families.

Staff Training

During the period under review 480 officers participated in induction courses, job orientation

courses, supervisory and inplant management training courses.

In addition, Board officers participated in seven seminars and forums, three study tours and five overseas scholarship courses and benefited from exposure to new techniques and skills and sharing of experiences.

Systems & Methods

In 1973/74 the Systems & Methods Unit directed its efforts on Management surveys of the Board's ancillary manufacturing units which include the Brickworks, the Granite Quarry and the Pile Manufacturing Plant.

HDB publications for residents.



An aerial view of Henderson Hill Estate. In the background is Telok Blangah New Town.



FINANCE

Functions

The Finance Department implements the Board's financial policy; exercises budgetary control; maintains proper records and accounts of all income and expenditure; compiles annual budgets and accounts; and conducts internal audit on Board activities.

Administration, central accounting and internal audit are controlled from Head Office. Financial management of completed housing estates and other properties is dealt with through 14 Area Offices in the housing estates.

Financing

The Board's building programmes are financed by loans from Government as provided for in the Republic's Annual Development Estimates. Loans for construction of properties for rental are repayable over 60 years with interest at 7½% per annum and loans for construction of properties for sale are repayable over 10 years with interest at 6% per annum.

The Board's annual revenue deficits are subsidised by Government in the following year, after the accounts are audited. Such subsidies are also provided for in the Republic's Annual Estimates. Annual expenditure exceeds income because rentals of public housing are fixed at sub-economic levels and are subject to Government approval.

Mortgage loans are granted by the Board to the public to purchase flats under the "Home Ownership" Scheme. These loans are repayable over periods of 5, 10, 15 or 20 years with interest at 6½% per annum.

Sale of Flats

Sale of flats during the period amounted to S\$183.20 million. Mortgage loans outstanding at 31st March 1974 totalled S\$ 253.42 million. Interest and principal repayments, including lump sum repayments received during the 15-month period, were S\$12.78 million and S\$90.96 million respectively. S\$67.01 million from Central Provident Fund credits were utilised by purchasers towards payment of their flats. S\$64.24 million was paid direct to the Accountant-General by the Central Provident Fund Board to reduce the loans given to the Housing and Development Board during the period for construction of properties for sale.

Capital Expenditure

S\$349.00 million was originally budgeted for capital expenditure on public housing for 1973. Due to the change in the financial year, the 1973 budget was treated as the budget for 1973/74 and this amount was subsequently increased to S\$423.77 million to cover the accelerated building programmes and land costs. Capital expenditure for the period January to March 1973 was S\$57.90 million bringing the total estimated capital expenditure for the 15 months to S\$481.67 million.

Building contracts amounting to S\$253.55 million were awarded during the period and capital expenditure on projects completed, work-in-progress and land costs, including contracts from previous years, was S\$480.00 million.

Payments made to contractors and others during the period for capital expenditure totalled S\$423.63 million. This brought the accumulated excess of capital expenditure over loans drawn from Government as at 31st March 1974 to S\$69.16 million, which amount was met by temporary use of other funds such as provision for repairs, renewals and redecoration, and deposits from contractors and purchasers.

S\$349.00 million was originally allocated in the Republic's Development Estimates under "Loans to Housing & Development Board" for 1973/74. This amount was subsequently increased to S\$374.00 million, which when added to the amount of loans actually drawn during January to March 1973 totalled S\$439.67 million. Total loan drawings during the 15-month period amounted to S\$439.48 million.

Revenue Income and Expenditure

At 31st March 1974 there were 190,069 accounts under financial management. These covered 110,145 flats and shops, 8,260 hawkers' stalls and pitches, 6,497 parking lots and bus bays, 952 land tenancies and 846 kiosks, offices and non-housing items which were let to the public; and 63,369 flats which were sold under the "Home Ownership" Scheme.

The Revenue Account for the period showed a deficit of S\$41.92 million bringing the accumulated deficit since 1960 to S\$118.05 million. Up to 31st March 1974, a total of S\$70.98 million has been received from Government as

subsidy. Further amounts will be paid to the Board after the 1973/74 accounts are audited.

Total income for the period was S\$121.17 million of which rent accounted for S\$75.68 million, recoveries for service and conservancy charges S\$15.95 million, and other income S\$29.54 million.

Total expenditure for the period was S\$163.09 million of which repayment of principal and interest on Government loans accounted for S\$80.68 million; property tax S\$28.21 million; administration of the Board, including costs of service and conservancy charges, S\$41.02 million; and maintenance of properties S\$13.18 million.

Agency and Related Functions

During the period the Board continued to undertake agency work on behalf of its subsidiary company, Development and Construction Company (Pte) Limited, and Government and other Statutory Authorities.

The total cost of all agency work for the period was S\$74.51 million. The main items were: East Coast Reclamation — S\$21.65 million; housing scheme for Government officers — S\$5.88 million; housing and land clearance for Jurong Town Corporation — S\$25.11 million; expenditure relating to Urban Renewal Department — S\$7.80 million; Resettlement Department — S\$4.80 million; and the Board's subsidiary company — S\$4.9 million.

Mechanisation of Accounts

The Board's main accounts are maintained on keyboard accounting machines. Accounting for rent collection, sale of flats, payroll and related computations is processed by a third generation computer utilising punched-cards.

To cope efficiently with the rapid growth of housing units, the computer configuration was improved and expanded with the installation of a faster printer and four tape drives in early 1974. The card key-punch machines will be replaced by tape key-punch machines by mid 1974.

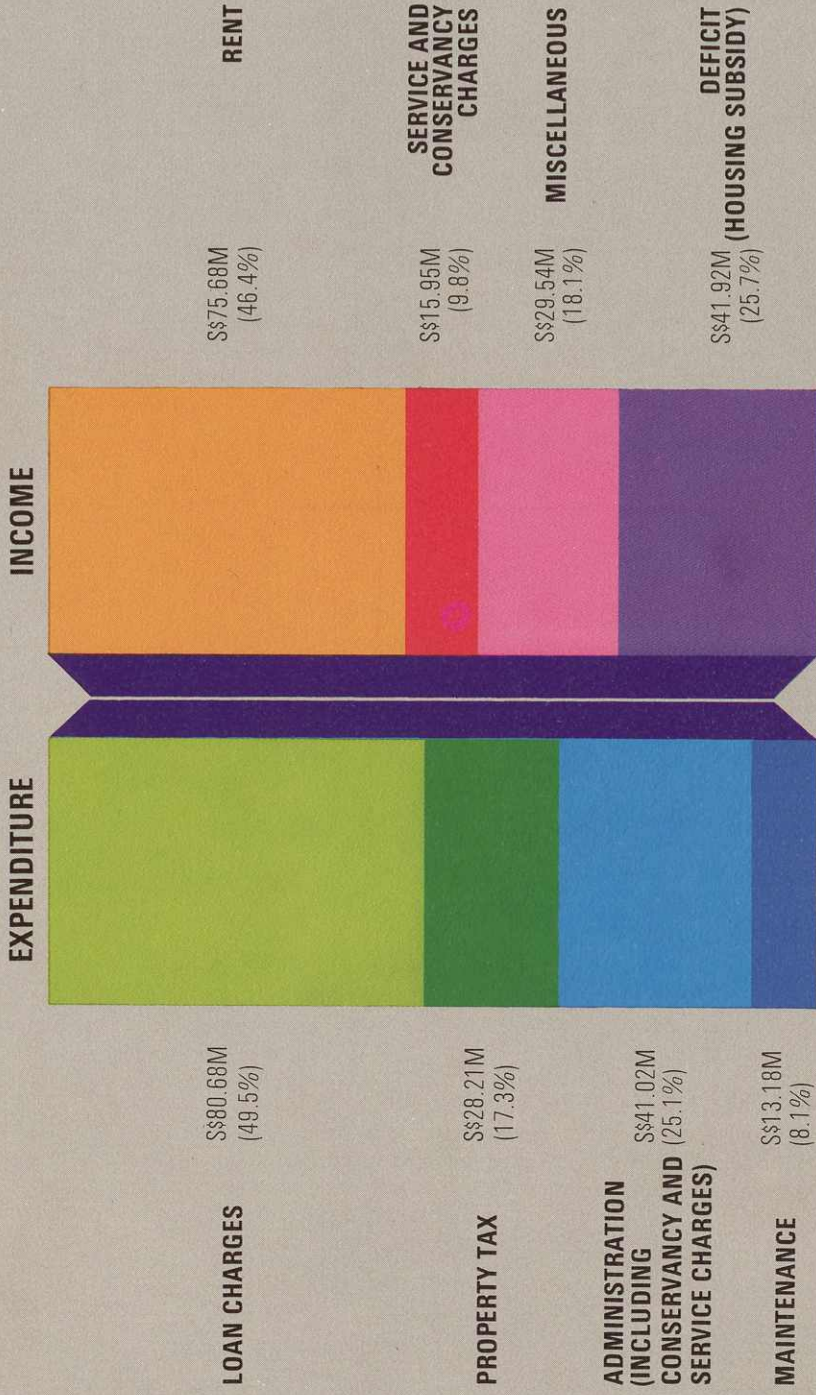
Internal Audit

The Internal Audit Section, which operates independently, continued to carry out continuous checks on all Board activities. Due to the rapid expansion of the Board's activities,

the establishment of the Section has been further strengthened in order to carry out more effective departmental checks.

DISPOSITION OF INCOME

JANUARY 1973—MARCH 1974



Principal repayments of loans from Government to build flats for sale are excluded from Loan Charges.

Property Tax relates only to rented properties. Property Tax for sold properties is paid by purchasers.

Principal repayments on mortgage loans made by purchasers of flats are excluded from Income.

Kreta Ayer Phase I Redevelopment in the heart of the town. The old buildings in the foreground are due for demolition for redevelopment in the next phase.



STATISTICS & RESEARCH

The Statistics and Research Department serves as the data bank of the Board by providing Management with statistical feedback and analyses to aid policy formulation and implementation. Summaries of major projects carried out by the Department are given below.

1973 Sample Household Survey

As constant and continuous feedback is necessary for effective planning and administration, a second survey on the socio-economic characteristics of households in HDB flats was undertaken in early 1973 to update the data gathered in the 1968 Sample Household Survey. A five per cent sample was taken, with distinction made between residents in rental and purchased flats.

The results showed overall improvements in living standards: average household size declined from 6.2 persons in 1968 to 5.7 persons in 1973; household monthly income increased from S\$318 to S\$445; and the number of income earners increased from 1.7 persons to 2.0 persons per household.

In the survey all the indices for 1973 were

more favourable than those for 1968 except those for parking facilities and control of gangsterism and vandalism. This indicated greater overall satisfaction with public housing conditions in 1973 than in 1968.

"Our Home" Readership Survey

A second Readership Survey was carried out in mid December 1973 to further evaluate the Board's mass circulation magazine for residents, "Our Home". The survey results showed that among the population aged 14 and above living in HDB flats, a high proportion of 77 per cent was literate in at least one of the official languages. The survey results further showed that in more than 71 per cent of households, at least one household member read "Our Home" magazine. The December 1973 issue reached a total number of 259,700 persons, that is, on the average a copy of "Our Home" was read by 1.6 persons per household living in Board flats.

A significant proportion of the readers (93%) found the contents of the magazine interesting. However, many readers would like to have more articles on education, sports, home economics and Board activities.

LITERACY AND READERSHIP RATE

Language	HDB Population Aged 14 & Above (600,000 persons)		Readers of "Our Home"	
	Literate Population	Literacy Rate	Readers Literate In	Readership Rate of Literate Population
Chinese	339,000	57	183,000	54
English	290,000	48	165,000	57
Malay	96,800	16	43,900	45
Tamil	16,100	3	10,300	64
At Least One Official Language	467,000	77	259,700	55

New four-room flats at Queenstown, Neighbourhood VI.



Woodlands Village Survey

In mid 1973 a study was carried out on the housing and household conditions of the people living in Woodlands Village before their relocation to HDB flats in Woodlands New Town. (A follow-up study of these households will be made after they have settled in Board flats for one or two years.) The survey results showed that most of the dwellings in the village were single-storey structures, built mainly from semi-permanent materials such as zinc, plywood, planks and attaps. The occupancy pattern showed that only one-third of the households lived in single-household housing units, while the remaining two-thirds lived in multi-house-

hold housing units. Each household occupied an average of 1.7 rooms or cubicles, or an average of 3.4 persons per room or cubicle. Not all houses had amenities such as water, electricity, bathing and toilet facilities and some households shared some or all of these facilities with other families.

Quarterly Statistical Reports

The Statistics and Research Department continued to produce quarterly statistical reports which provide information on applicants for rental and purchase flats. Some of the economic and household characteristics of applicants are given below:

ECONOMIC AND HOUSEHOLD CHARACTERISTICS OF APPLICANTS FOR PURCHASE AND RENTAL OF FLATS AS AT 31ST MARCH 1974

Economic and Household Characteristics	Applications to Purchase Flats				Applications to Rent Flats			
	2-Room	3-Room	4-Room	5-Room	1-Room	2-Room	3-Room	4-Room
Proportion of Nuclear Family	86.4	77.4	72.0	71.3	91.9	86.4	82.3	64.6
Average Household Size	3.9	4.7	5.1	4.4	3.3	4.0	5.2	6.7
Average Monthly Household Income	S\$348	S\$416	S\$625	S\$996	S\$237	S\$347	S\$410	S\$504
Average Number of Income Earners Per Household	1.4	1.7	1.9	1.9	1.2	1.5	1.8	1.8

Balestier Estate Redevelopment.





New homes under construction at Telok Blangah New Town, Neighbourhood I.



BUILDING

The Building & Development Division consists of the Architectural (including a Design & Research Section), Civil Engineering, Structural Engineering, Contracts, Survey, and Electrical Engineering Sections.

The main function of the Division is to prepare master plans of large development areas, site plans of individual housing estates, design of buildings, all contract documents and supervise construction works. In addition, the Division carries out design experimentation and research works, and operates plants for manufacturing essential building materials. Building contracts are awarded to private building contractors on the basis of the open tender system. The Division's scope encompasses all public housing in Singapore and related facilities such as communal, commercial, industrial and recreational developments and agency projects for Government and other Statutory Authorities such as the East Coast Reclamation Scheme, executive flats, swimming pools, sports complexes, community centres, and other buildings providing social amenities.

The works of the Division during the 15-month period from January 1973 to March 1974 are reported in five sections—*The Building Programme, The Construction Industry, New Directions, Scope of Activities, and Progress of Works.*

The Building Programme

Two Five-Year Building Programmes have already been successfully implemented. Over 50,000 housing units were provided during the First Five-Year Building Programme (1960-1965) at a cost of S\$194 million. During the Second Five-Year Building Programme (1966-1970) over 60,000 housing units were built at a cost of S\$305 million.

1973 was the third year of the Board's Third Five-Year Building Programme (1971-1975) whose target has been increased to 125,000 housing units. By March 1974 64,821 housing units have been completed bringing the total number of units built by the Board since its inception in 1960 to 185,490.

During the 15-month period under review 28,422 units of flats and shops were completed and another 33,907 units under construction by March 1974 of which 27,561 and 33,136 units respectively were flats. Besides continuing

with the development of existing housing estates, the Board has broken new ground in Ang Mo Kio New Town, Ayer Rajah New Town and Ghim Moh Estate during the 15-month period.

The Construction Industry

1973 was a year of world-wide inflation which made an impact on the local construction industry to the extent that the cost of public housing construction increased by about 35% between the beginning of 1973 and the end of March 1974. Besides rising land cost, the building cost of a typical dwelling unit increased from about S\$130 to S\$190 per square metre (or S\$12 to S\$18 per square foot) during the 15-month period.

Materials

Generally, the Board had adequate building materials to sustain its operations in spite of periodic shortages of cement due to lack of raw materials. Cement was imported from the Philippines, South Korea and Taiwan. Cement and steel prices were de-controlled by Government last year and are now obtainable at open market prices. As a result the price of cement became variable, reaching a new height of S\$115 per metric ton in March 1974, an increase of 92% over the price of S\$60 per metric ton in January 1973. The price of steel also rose to about S\$850 per metric ton representing an increase of 112% over the price prevailing in January 1973. Other major building materials were similarly affected by inflation; for example, timber and paint prices increased by 100%.

To provide sufficient buffer stocks of certain essential building materials, stockpiling of squat pans, hollow blocks and galvanised iron pipes became necessary. This exercise is now extended to cover glazed stoneware pipes. Periodic exercises were carried out to inform the related industries of the Board's material requirements to enable the industries to plan their production according to increasing demand. Such arrangements would help to forestall serious shortages of building materials.

Labour

Due to the unprecedented building boom, wages for labour increased appreciably. To help overcome the problem, the following measures were implemented by the Board:

▲ A panoramic view of Marine Parade Estate built on reclaimed land along the East Coast.

▼ An aerial view of Chai Chee Estate. The low buildings in the centre are the shopping centre and the bus terminus.



(a) Apprenticeship Scheme for Discharged National Servicemen

The Board in conjunction with the Ministry of Defence introduced an apprenticeship scheme in October 1973 to encourage discharged national servicemen to acquire skills as tradesmen in the construction industry. Under the two-year scheme apprentices are assigned to the Board's contractors for on-the-job training and are paid a minimum wage of S\$8 per working day by the contractors. In addition, during the first year each apprentice is given an allowance of S\$120 per month by the Board with full Central Provident Fund benefits. The allowance for the second year will be reduced bi-annually by 50% but the contractor will pay an increased wage to reflect the skill which the apprentice has acquired during the training period. These apprentices are required to sign a bond with the Board to work for two years.

The response to this scheme has not been favourable; only a few apprentices are now working at the construction sites.

(b) Training Scheme for Primary School Leavers

In December 1973 the Board in conjunction with the Industrial Training Board introduced a scheme to train primary school leavers between the ages of 14 and 16 for jobs in the construction industry for a period of two years. The two requirements are that their height should be at least 1.5 metres (5 feet) and their weight not less than 45 kilograms (100 lbs). Under this scheme the trainees are given on-the-job training for four days and instruction at the vocational institutes for two days per week. A trainee is paid an allowance of S\$100 per month during the first year and S\$130 per month during the second year. Trainees are required to sign an undertaking to pursue the training for the minimum period of two years after which they will be allowed to work for any contractor.

The response to this scheme has been encouraging; 226 trainees are presently receiving training at the Board's construction sites. On completion of their training they will be able to earn wages commensurate with their skills and experience.

Fluctuation Clauses on Labour and Material

The spiralling of construction cost became particularly acute in mid 1973, aggravated by

uncertainties in prices of materials and labour. To provide adequate protection for contractors participating in the Board's building projects, the Board introduced fluctuation clauses on labour and certain materials in its contracts in June 1973. This proved successful and periodical revisions and updating of the fluctuation clauses were carried out to reflect changing circumstances. But in late 1973 and early 1974 the prices of building materials became so unpredictable that these fluctuation clauses, despite being kept up-to-date, still proved to be inadequate. In February 1974 the Board reviewed the fluctuation clauses in their entirety to cover a wider range of building materials, thus providing contractors with greater protection. Contractors responded well to these measures.

Incentives to Contractors

In February 1973 the Board introduced the Merit Star Scheme to retain good building contractors to execute more building contracts. This scheme will also encourage other contractors to improve their speed of construction and standard of workmanship.

Under the Merit Star Scheme a contractor who executes his building work with speed and good workmanship will gain a merit star for every S\$1 million worth of contract. A maximum of five merit stars may be awarded to a good contractor. Considerations for the award of merit stars will also depend substantially on overall performance.

Under this incentive scheme a merit star earned by the contractor will enable him to gain a ½% advantage of the tender sum over those contractors without merit stars. As a good contractor may be awarded a maximum of five merit stars, he could therefore gain a maximum of 2½% advantage in any tender submitted by him.

Under the Merit Star Scheme a good contractor will, therefore, have better chances of being awarded more contracts by the Board as the evaluation of the tender position will take into account the merit stars to his credit.

If subsequent contracts executed by a contractor awarded merit stars are managed poorly in terms of performance and workmanship, each merit star previously awarded will be withdrawn for every S\$1 million worth of contract not satisfactorily completed.

An aerial view of Buona Vista Estate adjoining Queenstown and its surrounding suburbs with private housing around the Holland Road area.



As at March 1974 12 contractors have been awarded one to five merit stars each.

New Directions

During the 15-month period new concepts in public housing were introduced as reflected in the Board's activities.

New Designs of Flats

A new series of flats incorporating substantial improvements over existing designs was introduced. The term "new flats" is used to distinguish these flats from the "standard flats" built during the First Five-Year Building Programme (1960-1965) and "improved flats" built during the Second Five-Year Building Programme (1966-1970) and the early part of the Third Five-Year Building Programme.

To maintain a realistic balance between the construction cost and the economic capacity of the people living in one- and two-room improved flats, only minor modifications were made to these flats. Substantial changes were incorporated in the new three- and four-room flats, principally by way of larger floor space, the inclusion of a storeroom and improved toilet facilities. In the case of the new three-room flats the access corridors were widened and the floor level in the flats raised slightly above that of the access corridor to provide more privacy. In the new series the five-room flats, so far available only in point block forms, were modified in layout but with the floor area remaining unchanged. To provide greater flexibility in site planning new five-room flats in slab blocks were designed and would be initially introduced in Ang Mo Kio New Town.

Metrication and Modular Co-ordination

In line with the Republic's conversion to the use of SI metric units and the Board's objective of increasing mechanisation in building method, the Division undertook an in-depth study of metrication and modular co-ordination, with special reference to the highrise frame structure. Following this study the layout of Board buildings has become fully standardised. Changes are allowed only on a collective basis to ensure that feedback is constantly reflected in future designs. By now practically all building contracts are based on the new series of standard flats drawn in metric dimensions and incorporating the principles of modular co-

ordination. By means of minor alterations, these flats can be readily adapted for the industrialised method of construction.

System Building

To increase the capacity of the building industry greater mechanisation at the construction sites was introduced largely through using the industrialised and special building systems.

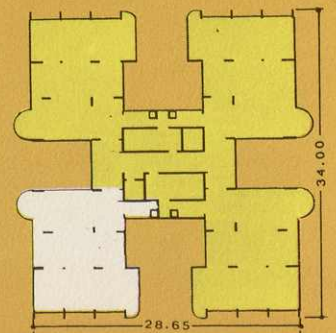
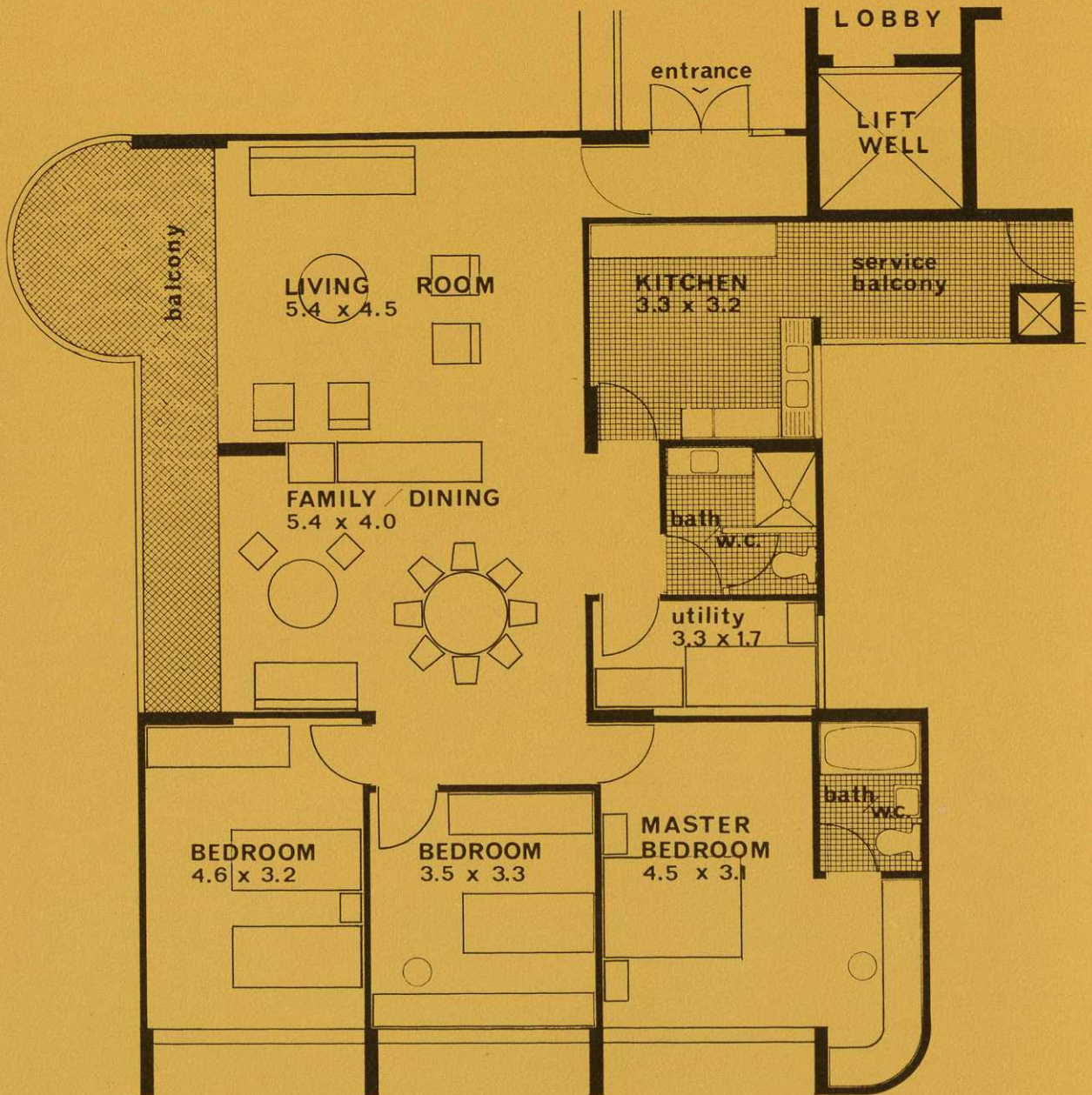
(a) 8,820 units of four-room flats will be built by the Industrialised System of Construction at a cost of S\$80 million. The contract was awarded to Industrialised Building System Pte Ltd, a joint venture by local and Danish developers. The Larsen & Nielsen System of Construction, widely known in Denmark and Europe, will be used. This system permits the use of large floor and wall concrete panels to be pre-cast at a central factory and assembled to form flats at the building site. Speed in construction, better standard of finishes and low labour content are the main assets of this system of construction. The structure from the foundation to the first floor slab will utilise the conventional cast-in-situ method of construction, but from the first floor slab upwards the whole structure will be prefabricated. The structure is designed to prevent any possible progressive collapse in accordance with the current Code of Practice adopted overseas. The speed of construction by this method for a 16-storey block, for example, is double that by conventional methods of construction.

Initially, some time will be required to establish the factory and plant; the erection of the prefabricated buildings is expected to commence in the later part of 1974.

(b) The contract for 6,072 units of three-room improved flats to be built by the Progressive Strength System of Construction at a cost of S\$45 million was awarded to Progressive Builders Pte Ltd, a joint venture by local and Australian firms. The Progressive Strength System of Construction is based on the progressive gain in strength of concrete whereby each element of structure could develop sufficient strength not only to carry itself but also further load arising from subsequent stages of construction. No wooden props are required to support the formworks for casting beams and slabs as these formworks will be attached to the steel trusses which will in turn be supported by newly cast columns. Under this system con-

EXECUTIVE FLAT

HOUSING FOR CIVIL SERVANTS



SCALE 1:100

METRE 0 1 2 3 4 5

struction work can be carried out concurrently at several levels thereby considerably reducing construction time. Besides, this system saves labour with most of the formworks and reinforcements prefabricated at a central workshop before delivery to the building site.

(c) The contract for building 1,440 units of five-room flats at a total cost of about S\$20 million using the Metal Formwork Method of Building was awarded to a local construction company, Hoe Huat Construction Pte Ltd.

Flats built by these systems are scheduled for completion in progressive stages from 1975 to 1978.

Extension of Activities

In response to Government's decision to provide housing for middle income groups, the Board prepared a series of designs of flats in the executive class to meet this demand. Now under construction on the East Coast reclaimed land near Siglap Road, the housing scheme for Civil Servants can be considered as the first attempt at building Executive Flats in this category. Broadly speaking, the flats take three forms, namely flats in point block and slab block forms, and maisonettes.

Another new sphere of activity is the Board's increasing involvement in the redevelopment of the Central Area. In the past the Division had jointly worked with the Urban Renewal Department on the design and implementation of public housing in the Central Area. In future, however, the Board will undertake most of the public housing projects in the Central Area as well as the development of related shopping and communal facilities, principally for resettlement purposes.

Scope of Activities

Besides implementation of the Board's building programme, the Division also undertakes planning, design, research and plant management.

Planning

The Board has prepared an overall development programme incorporating tentative sites of future new towns and housing estates over the next two decades. The physical location and size of future new towns were based on the following guidelines:

- (a) A long-term projection of households;
- (b) A theoretical study of neighbourhood structure based on a set of criteria on building spacing, open space standards, car parking ratio and requirements for community and commercial facilities; and
- (c) A study of the structure of a new town based on assumed criteria on land use.

Further refinement of the development programme was introduced in 1973/74. For example, in the planning of parking facilities a new concept was introduced to segregate car parks from lorry and bus parking areas, the latter being best located near the neighbourhood centre. The scope of the town centre is now expanded to include office developments and supermarkets thus bringing the new town another step towards self-sufficiency.

In the light of progress in redevelopment schemes and the rapid tempo of industrialisation in the Republic, the provision of industrial lands within new towns is not only a necessity, but also plays a significant role in the re-allocation of industrial establishments. These industrial lands not only accommodate manufacturing plants, but also service industries, industries affected by resettlement, and warehousing. In one or two of the new towns now under planning, the plan was extended to consider even the allocation of agricultural lands. An interesting new concept was formulated during the period to establish rural centres between new towns to provide essential shopping and communal facilities and some public housing.

In the light of such findings the plans of three new satellite towns, namely, Ang Mo Kio New Town to the north of Toa Payoh, and Ayer Rajah and Clementi New Towns, both situated along the western corridor, were consolidated. Construction works have commenced in Ang Mo Kio and Ayer Rajah New Towns. Although conceptual plans have been drawn up for two other new towns, technical investigation needs to be carried out before finalisation of these plans.

During the period further refinement in planning was introduced in the developing new towns. For example, the road system of Bedok New Town was modified while the distribution of community facilities and neighbourhood boundaries were redrafted for Woodlands Stage I development and Telok Blangah New Town. The results of these redraftings have since been

▲ A view within Buona Vista Estate.

▼ New homes at Woodlands New Town.



translated into building plans now under implementation.

Design

The layout plan for prototype flats involved a continuous process of modification and improvement throughout the period under review. This was necessitated by the need for better functional layout, more efficient structural system, and improved construction details including adjustments of the component dimensions in favour of simplicity and modular co-ordination.

The period also saw the first attempt at standardisation of the building block layout plans. This would enable the Board's Architects to devote more attention to the design of non-standard buildings and special development projects. Among the non-standard housing projects being developed in 1973/74 were the housing schemes for Civil Servants near Siglap Road and for officers in the Ministry of Defence at the Normanton Depot in Ayer Rajah New Town.

Other special development projects undertaken by the Board during the period included the completion of the town centre, swimming complex, sports complex, and town garden at Toa Payoh New Town.

Research

During the 15-month period many study reports in subjects ranging from operational procedures to planning and design standards were prepared. Generally, the research findings were intended to serve as design guidelines or feedback on the usage of certain design inputs. Besides the extensive work on metrication and modular co-ordination, other important research works included:

(a) Guidelines for Planning Approvals

To minimise the exercise of individual discretion, a series of studies was made on operational guidelines to assist the Board and other Government Authorities. These included proposed procedures on applications for master plan and development control approvals and guidelines on standards for schools, communal facilities, and traffic design. An in-depth guideline for building spacing was drafted to circumvent all possible situations of the spatial relationship between two or more buildings of any shape.

(b) Feedback on Building Regulations

In the last few years a whole host of new or modified building regulations have been imposed on building projects undertaken by the Board. On many occasions the Board found it necessary to carry out small-scale surveys on the effects of these regulations on the users in order to identify possible areas of adjustments and refinements. In particular, the sanitary requirements for industrial premises, markets and cooked food centres were reviewed periodically by the Division.

(c) Survey on Design of Flats

Before embarking on the design of the new series of flats a small-scale survey on the design of existing flats was conducted, primarily to ascertain the usage of the flats and the residents' views on various features and fittings provided. Data gathered from the survey were analysed and substantial improvements incorporated in the new design.

(d) Woodlands Community Study

At the request of the Division, the Statistics and Research Department undertook a comprehensive research project on the community structure and life style of the existing settlers affected by the first phase of the development of Woodlands New Town. The study was carried out in close liaison with the Architects with the expectation that the findings would be of practical value in the planning and design of future public housing estates.

(e) Other Studies

These included studies on the design of lift wells and motor rooms, lift performance in existing buildings, standard design of children's playgrounds, preferred locations of petrol kiosks and the operation of refuse collection. In conjunction with Applied Research Corporation, a carefully controlled study of the acoustical characteristics of public housing buildings was undertaken.

(f) Research Papers

Five research papers were prepared by the Division during the period, namely:

"The Making of a Viable Public Housing Programme for Singapore" — for the Symposium on Science and Development, 20th to 22nd August 1973, organised by Singapore National Academy of Science and

A children's playground at Kallang Basin Estate.



Australian and New Zealand Association for the Advancement of Science

"The Metrication of Public Housing—A Progress Report"—for the Metrication Seminar, 20th October 1973, organised by Singapore Metrication Board

"The Housing & Development Board and the Building Economy"—for the Seminar on Construction Practice and Economy in Singapore, 30th November and 1st December 1973, organised by Building and Estate Management Society, University of Singapore

"The Application of Modular Co-ordination in Singapore with Special Reference to Public Housing"—for the Workshop on Modular Co-ordination, 5th March 1974, organised by Singapore Metrication Board; and

"Housing as a form of Social Engineering"—for the First ASEAN Seminar on Human Settlement, 27th to 31st March 1974

Plant Management

(a) Brickworks

In its first 15 months of operations the Board's brickworks at Jurong produced 17.6 million bricks for use in Board projects.

Due to the increasing demand for bricks, plans were under way to construct a second kiln to increase the production capacity to 40 million bricks per year.

(b) Piling

During its first four years of operations, the Board's pile manufacturing plant at Mandai produced 580,000 metres of reinforced concrete spun pile sections of various sizes and lengths. The designs of pile sections are under constant review and are used in all types of buildings, including flatted factories, multi-storey flats, shopping centres, community centres, lookout towers and tea kiosks. The experience derived from driving concrete piles under various soil conditions was fed back to the factory for improvements and innovations.

The Board also had three other contracts in operation for the installation of large diameter bored piles and H steel piles. With the availability of different systems of piling, the Board was able to select the most suitable piling system

according to type of building and soil conditions to achieve efficiency, speed and economy. The Board has a total of 40 piling rigs to cope with the demand for piled foundations for 20,000 to 25,000 dwelling units per year.

(c) Granite Quarries

In 1973/74 the Board's granite quarries at Mandai and Pulau Ubin produced an average of 42,500 metric tons of $\frac{3}{4}$ " aggregates per month for use in its building projects.

Plans were under way to increase the capacity of one of the plants at Mandai to produce an additional 15,000 metric tons of aggregates per month by late 1974.

Progress of Works

Progress reports of building works concentrated in six new towns and five housing estates in 1973/74 are given below in reverse chronological order. This is followed by a report on the progress of the East Coast Reclamation Scheme.

NEW TOWNS

Ang Mo Kio New Town

Development of Ang Mo Kio and Ayer Rajah New Towns commenced in 1973. Ang Mo Kio is the seventh new town to be developed by the Board under the Third and Fourth Five-Year Building Programmes (1971-75 and 1976-80).

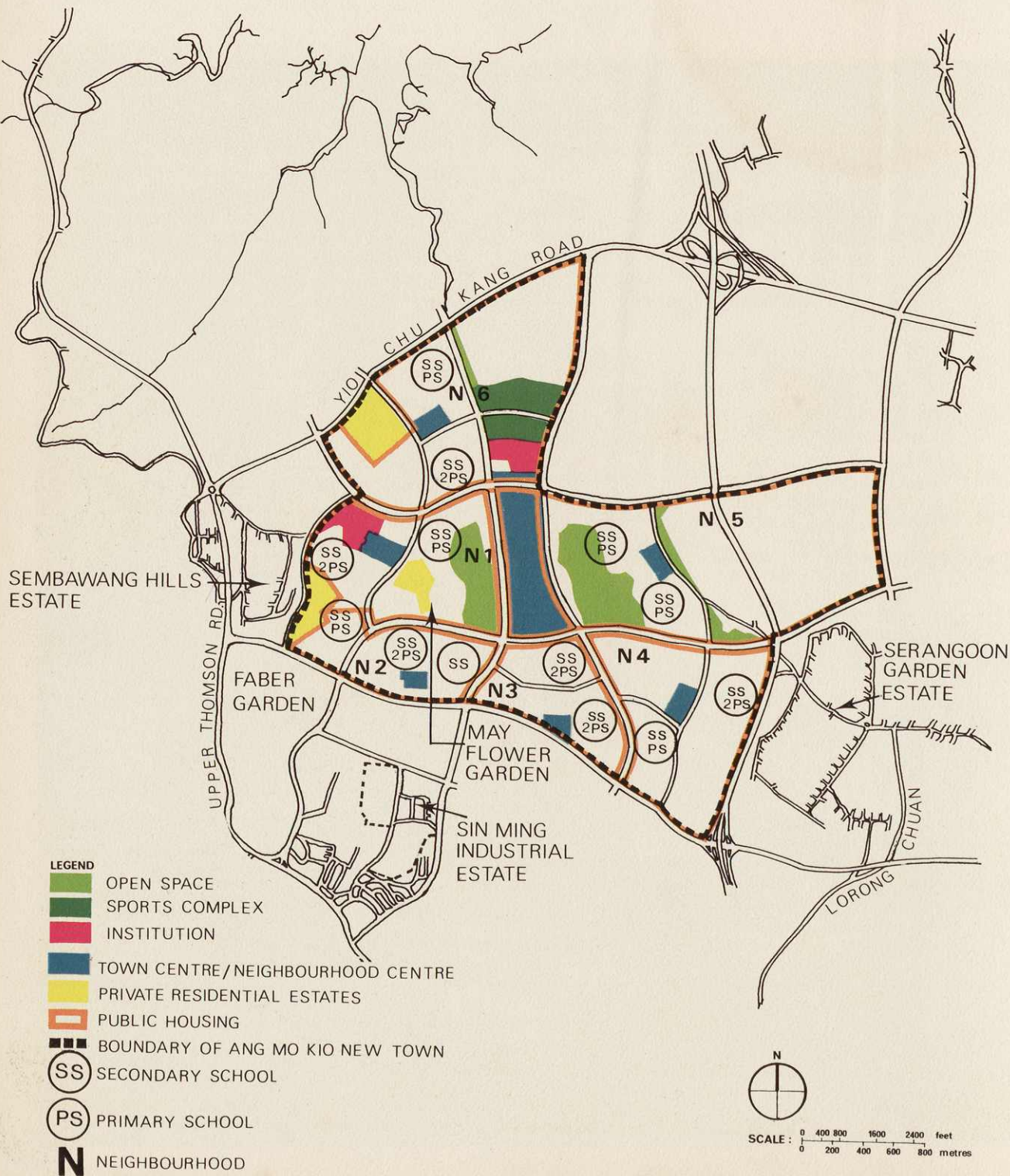
Besides having the distinction of eventually becoming one of the largest new towns in Singapore, Ang Mo Kio will also be

- * the first new town where New Flats, as distinct from the Improved Flats, will be built;
- * the first new town to see the newly developed five-room flats in slab block form, as distinct from the point blocks; and
- * the first new town to be designed in metric dimensions.

This new town, situated north of Toa Payoh, will cover an area of 730 hectares (1,800 acres) of undulating terrain bounded by Lorong Kinchir in the south, Serangoon Garden Estate in the east and Yio Chu Kang Road in the north.

Ang Mo Kio will have a town centre and six neighbourhoods, each with 4,000 to 6,000 housing units. Full use will be made of the undulating terrain to build flats on different ground levels thus creating interesting spatial

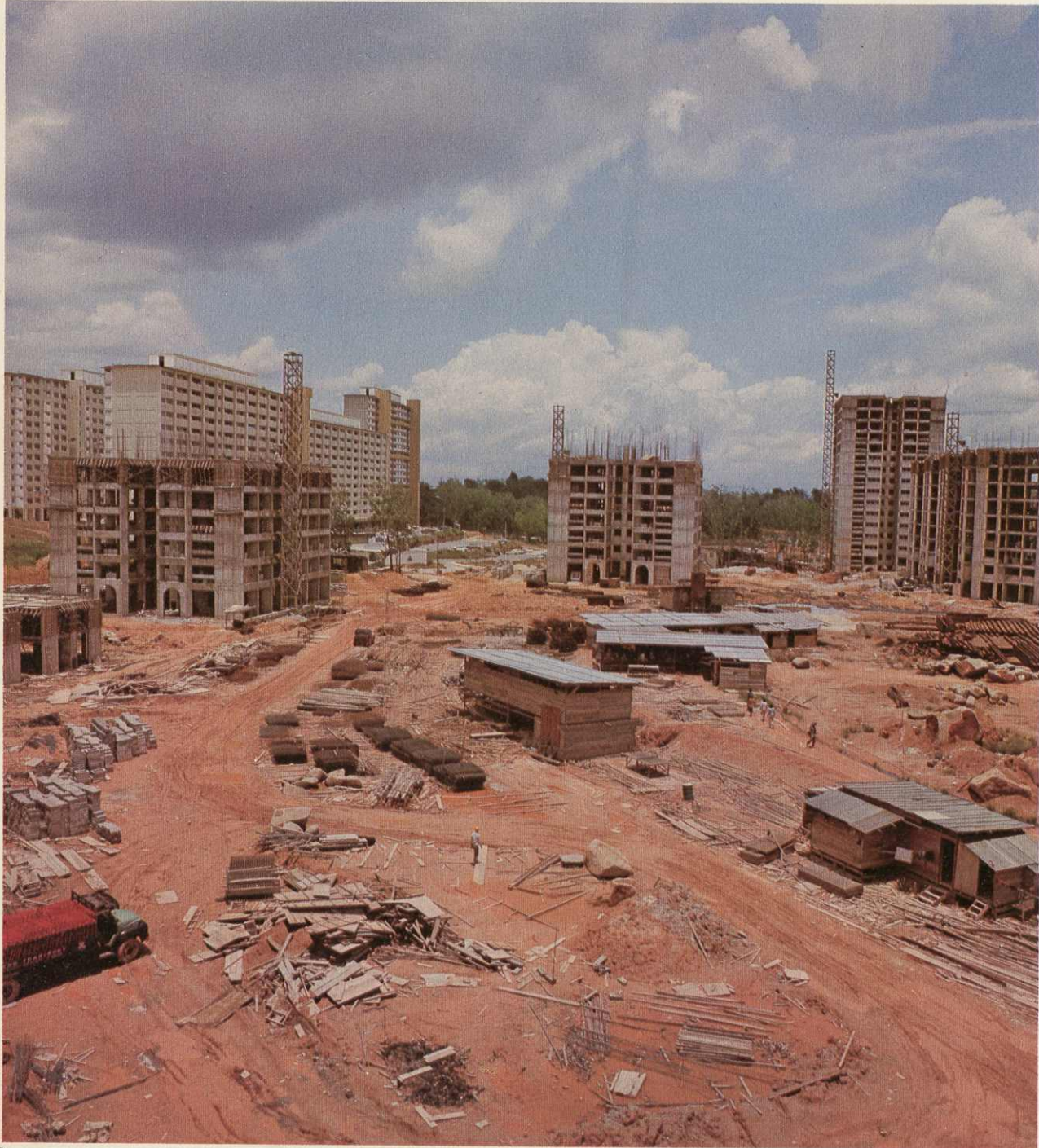
OUTLINE PLAN OF ANG MO KIO NEW TOWN



The first group of blocks of flats under construction at Ang Mo Kio New Town. ▲
A new L-shaped block with three-room Improved flats at Toa Payoh New Town. ▼



More flats under construction at Woodlands New Town.



arrangements. Each neighbourhood will be self-contained with a neighbourhood centre complete with shopping facilities, a market, a hawker centre and other community facilities.

The town centre will be proportionately larger than that at Queenstown or Toa Payoh, and will cover approximately 24 hectares (60 acres) of land in the heart of Ang Mo Kio. Located in an elongated valley, the town centre will provide a wider range of community facilities than the neighbourhood centres. Proposed developments include a post office, creche, Child Health and Maternity Clinic, out-patient dispensary, library, community hall, bus terminus, market, hawker centre, emporium, offices, shops and eating houses. The community facilities will be developed in stages, in keeping with the growth of its population. The hillocks on either side of the town centre will form parklands providing relief and contrast to the man-made landscape in the town centre valley.

Sites have also been earmarked for the development of light industries to provide employment opportunities for residents. Primary and secondary schools will be built in various parts of the new town for the convenience of students in Ang Mo Kio. The new town also has provision for a junior college and a sports complex to the north of the town centre.

Construction is under way on 18 blocks of flats in Neighbourhood II—the first site where squatters have been cleared—for 250 one-room flats, 300 two-room flats, 1,550 three-room flats and 500 four-room flats. Tenders will be called in progressive stages in the second half of 1974 for the construction of another 3,000 units.

Ayer Rajah New Town

Ayer Rajah New Town, covering an area of about 445 hectares (1,100 acres), is the Board's sixth new town. Bounded by Queenstown in the northeast and Kent Ridge and Ridge Park in the southwest, the new town straddles Ayer Rajah Road.

The town is designed for a projected population of approximately 130,000 in five neighbourhoods, each with 3,000 to 6,000 housing units, and a town centre. Each neighbourhood will be self-contained with a neighbourhood centre providing shopping and community facilities. The luxuriant green and hilly terrain as well as some of the existing churches, nursery

schools and low density housing areas will be preserved where possible without affecting balanced development.

Industrial sites have been earmarked to provide employment for the residents. Primary and secondary schools are evenly distributed in all the neighbourhoods so as to be within walking distance from the flats. There will also be a junior college and sports facilities.

Work has begun in Neighbourhood II for the construction of 182 units of two-room flats, 732 three-room flats, 240 four-room flats and 96 five-room flats. The new town will be developed in stages during the Third and Fourth Five-Year Building Programmes.

Bedok New Town

Bedok New Town in the eastern part of Singapore is the Board's fifth new town. It covers approximately 445 hectares (1,100 acres) and will have about 40,000 housing units. The new town is now under some slight adjustment of boundaries and road alignments. Land reserved for industrial use under Phase I has been completely utilised. Work has already begun in Neighbourhood I where 3,510 housing units are currently under construction. Plans for Neighbourhoods II and III comprising 4,900 and 5,600 units respectively have been finalised. Construction work in Neighbourhood II will commence in 1974.

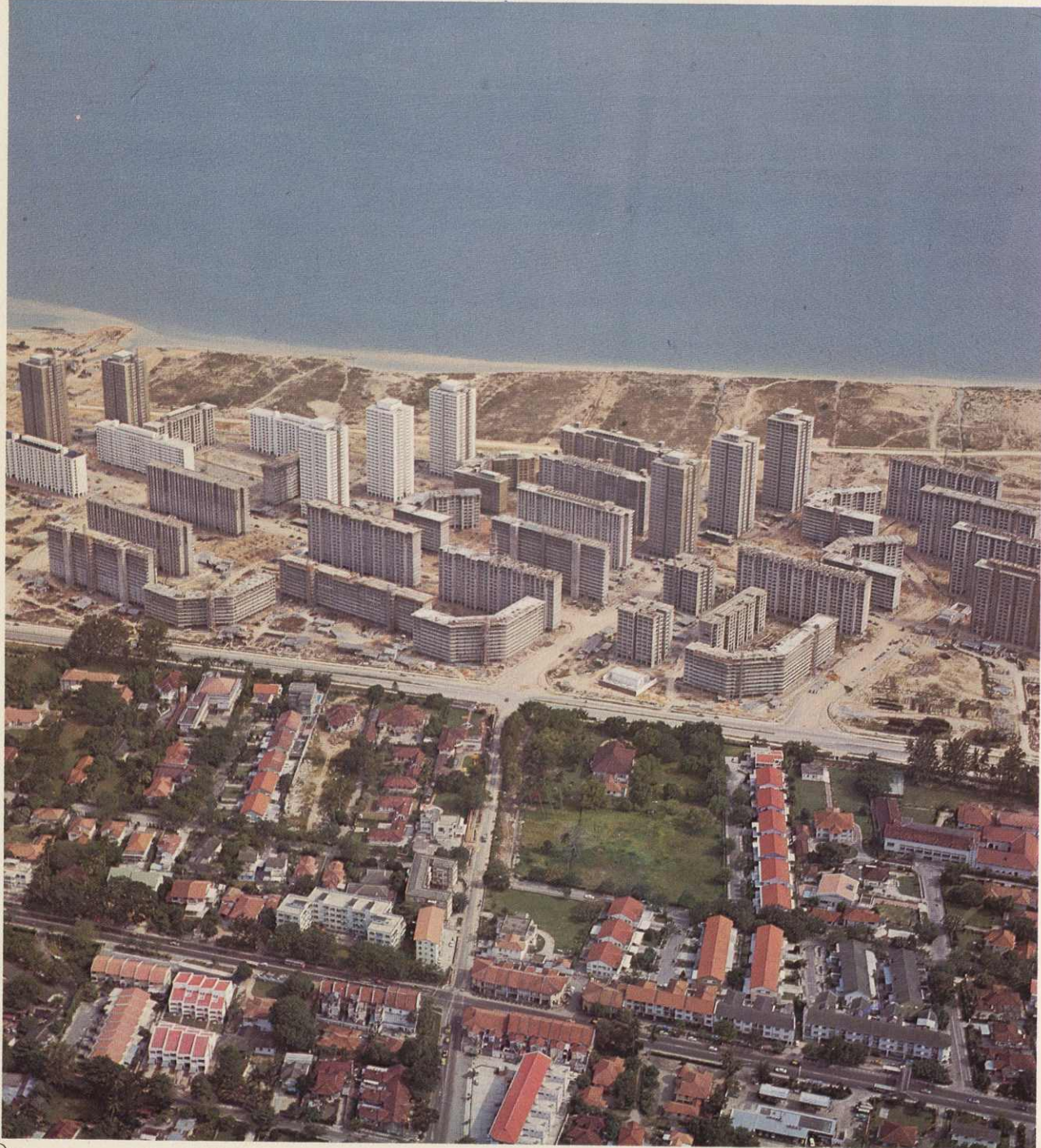
An area of about 3.6 hectares (9 acres) was leased to Industrialised Building System Pte Ltd for establishing a plant to produce materials to be used in the prefabricated blocks of flats. Preparatory work for this is under way.

Woodlands New Town

Woodlands New Town, the Board's fourth new town, will be the largest new town to be developed. Covering approximately 1,000 hectares (2,500 acres), it has provision for a projected population of over a quarter million. The development would spread over a period of 15 to 20 years depending on the demand. During the Third and Fourth Five-Year Building Programmes, attention will be focussed on the Stage I Development area just east of the Woodlands Immigration & Customs Check-point.

By the end of March 1974, 1,396 units of flats in the area were completed with another 1,797 units under construction. A neighbour-

An aerial view of Marine Parade Estate with private houses in the foreground.



hood centre was under construction to provide basic shopping facilities. 151 units of terrace factories of various sizes were being built for light industries in Woodlands.

Telok Blangah New Town

Telok Blangah, the third new town, will form a segment of the Western Corridor proposed in the island-wide Master Plan. It will provide housing within two miles of the Central Business District for a population of about 100,000.

By 31st March 1974 3,636 housing units were completed in Telok Blangah New Town. Of these, 1,506 units mainly for rental were completed in Neighbourhood I. Tenders were called for the construction of another 6,757 units in various neighbourhoods.

Telok Blangah is the first new town in the Republic to be completely served by a closed conduit drainage system which not only gives the environment a neater appearance but also, more significantly, enhances public hygiene.

In addition to the neighbourhood centres which are in varying stages of development, a town centre will serve the new town as well as the public housing estates to its north.

Toa Payoh New Town

Toa Payoh, the second satellite town built by the Board, covers 251 hectares (620 acres) of land. Development commenced in 1965 on virtually virgin land. By early 1973 33,035 units of flats forming the major part of the new town in four neighbourhoods were already completed. By the end of 1973 another 636 units were completed in the new town while 1,096 units including those in Neighbourhood V in the northeastern extension of Toa Payoh were still under construction. Eventually the eastern part of Toa Payoh will be extended to the proposed expressway to link up with Lorong Chuan at the Braddell Road junction. The extension scheme includes 27 hectares (66 acres) of industrial land and the construction of another 1,566 flats. When fully developed Toa Payoh New Town covering 325 hectares (800 acres) will have about 37,000 housing units for 180,000 to 200,000 people.

The Toa Payoh Town Centre, Sports Complex and Swimming Complex were completed on schedule for the staging of the Seventh SEAP Games in Singapore in September 1973. The four point blocks in the town centre consisting

of 384 units of four-room flats were fully furnished and provided with floor finishes in all the rooms. These were built to accommodate participants of the SEAP Games from Burma, Khmer Republic, Laos, Malaysia, Republic of Vietnam, Thailand and Singapore. At the Games Village a four-storey library building built by the Public Works Department was used to house the Secretariat. A two-storey building with shops and a restaurant was converted to serve as dining halls, social function hall, and friendship hall for the SEAP Games participants.

HOUSING ESTATES

Ghim Moh Estate

Ghim Moh Estate covers 32 hectares (79 acres) and is named after the existing village. Situated west of Buona Vista Estate, it will provide 4,028 housing units for a population of 20,000. It will be a self-contained estate with its own market, shopping centre, cooked food stalls, schools, and a community centre.

Six blocks of 15-storey three-room flats in this estate are currently built by the Progressive Strength System of Construction.

Marine Parade Estate

Marine Parade Estate is built on reclaimed land along the East Coast. Covering 44 hectares (110 acres) the estate extends from Siglap Canal to Joo Chiat Road. In the first of its two phases of development the emphasis is on residential development which will yield a total of 5,822 units of flats. Of these 3,096 units were completed in 1973/74. A neighbourhood centre in Phase I is now under construction.

The second phase of the estate will concentrate mainly on commercial and community facilities. By March 1974 2,124 units of flats in this phase were under construction. Work will begin in the third quarter of 1974 on the construction of a large commercial centre forming part of the proposed Joo Chiat Centre.

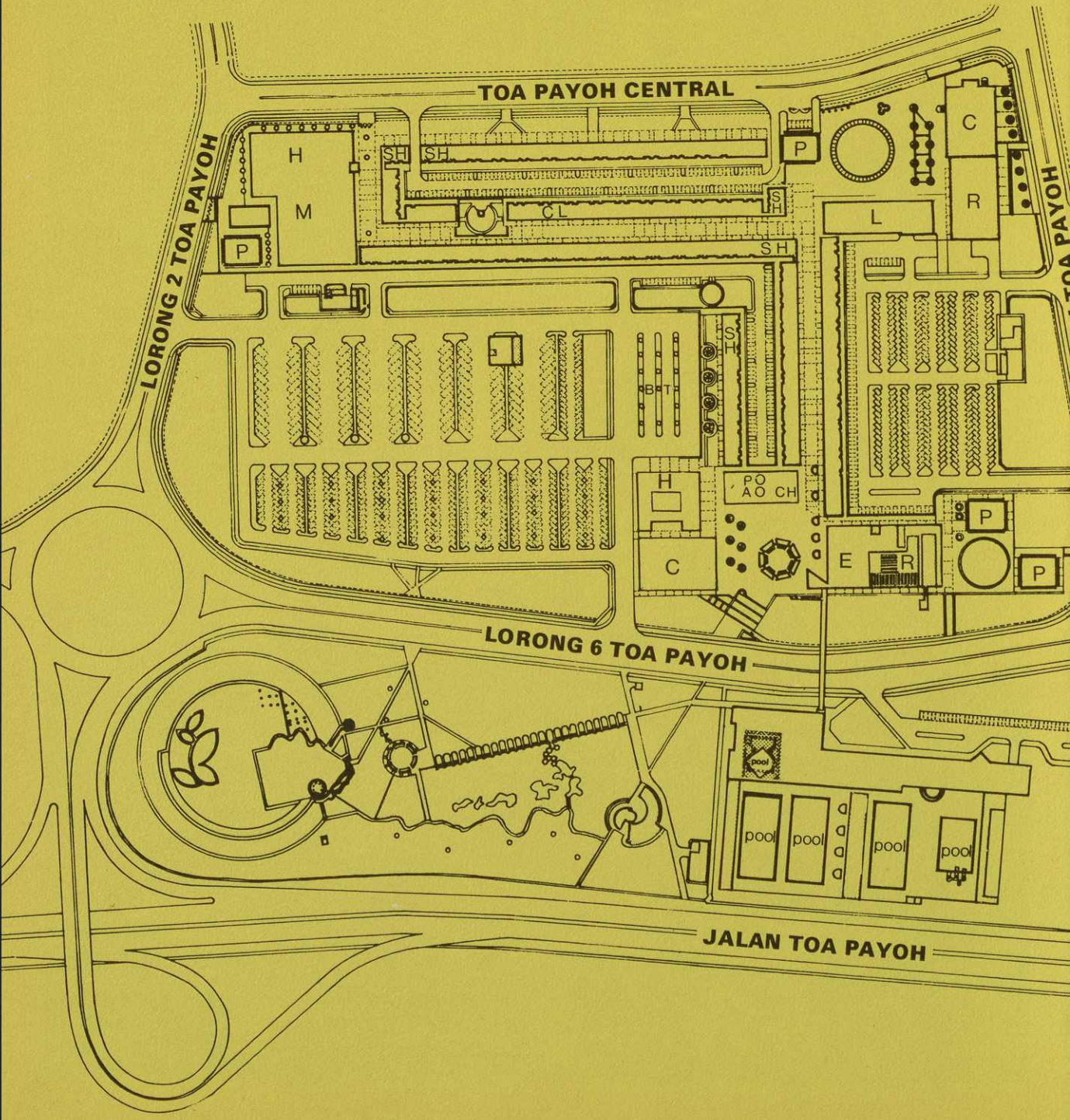
Balestier Estate Redevelopment

The old Balestier Estate covering 25 hectares (64 acres) and consisting of 1,344 units of single-storey artisan quarters was redeveloped to provide 4,929 units, and warehouses and a bus terminus on a 2.8-hectare (7-acre) site.

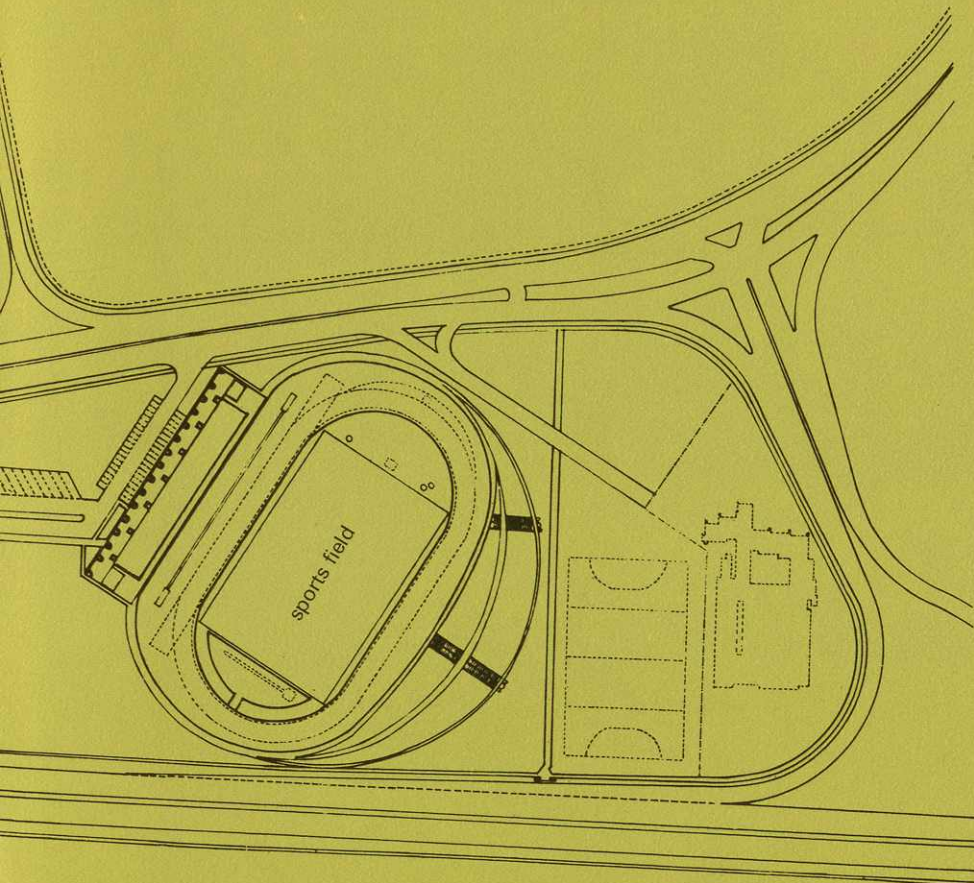
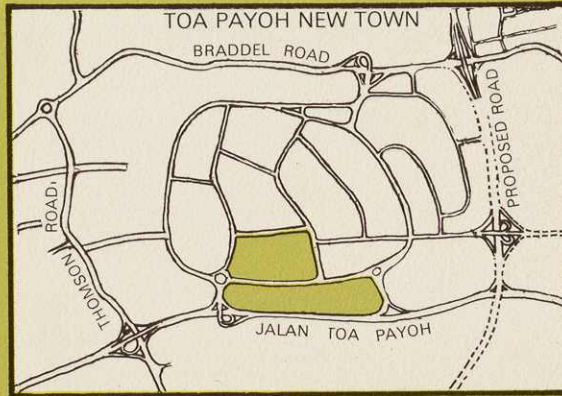
Kallang Basin Estate

Kallang Basin covers 400 hectares (1,000

SITE PLAN OF TOA PAYOH TOWN GARDEN &



TOA PAYOH TOWN CENTRE, SPORTS COMPLEX



KEY

- M** MARKET
- H** HAWKER STALL
- P** POINT BLOCK
- C** CINEMA
- R** RESTAURANT
- L** LIBRARY
- E** EMPORIUM
- CL** CLINIC
- SH** SHOP-HOUSE
- CR** CRECHE
- PO** POST OFFICE
- AO** AREA OFFICE
- CH** COMMUNITY HALL
- BT** BUS TERMINUS



SCALE: 0 40 80 160 240 feet
0 20 40 60 80 metres

- ▲ An aerial view of Toa Payoh New Town with emphasis on the Town Centre, Town Garden, and Sports Complex.
- ▼ The pedestrian mall at Toa Payoh Town Centre. On the right are the HDB Toa Payoh Central Area Office and the Toa Payoh Central Post Office. On the left is a cinema.



Toa Payoh Town Centre by night. ▲
Another view of Toa Payoh Town Centre. ▼



▲ Toa Payoh Swimming Complex is popular with residents.

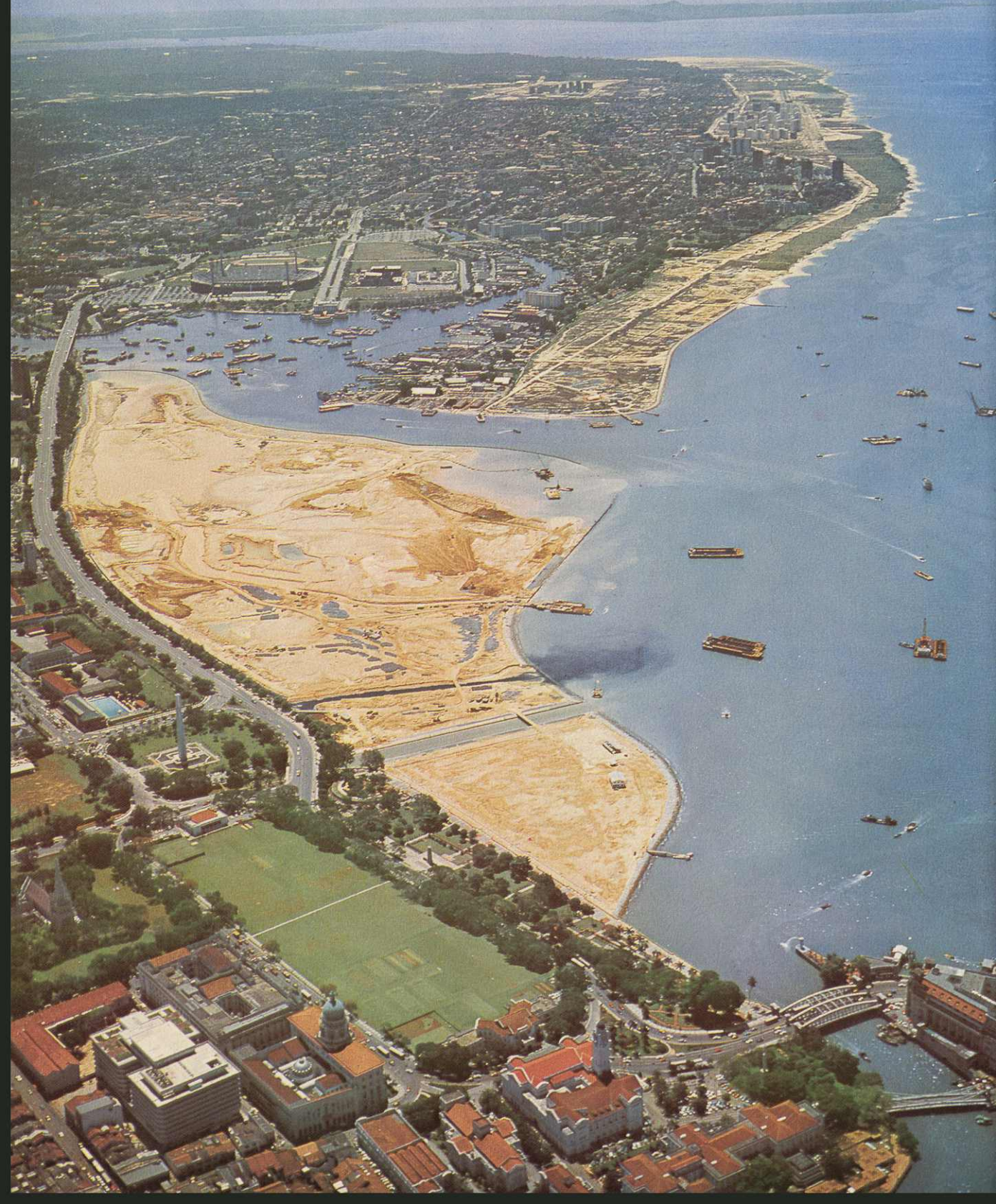
▼ Toa Payoh running tracks and grandstand.



The colourful dragon play equipment at Toa Payoh Town Garden is a favourite with children.



Phase III of the East Coast Reclamation Scheme fronting Nicoll Highway and Elizabeth Walk. Phases I and II of the reclaimed land in the background extend from Tanjong Rhu to Bedok.



acres) of which about 40% is reclaimed land. Nearly 100 hectares (250 acres) of the land were zoned for public housing with a target of 20,000 housing units. By the end of March 1974 13,351 units were completed with another 1,960 units under construction. In the northern part of the estate 184 terrace factories were built for purposes of resettling industries affected by urban renewal schemes.

St Michael's Estate Conversion

861 units of one-room communal flats built during the First Five-Year Building Programme in St Michael's Estate were converted into 360 units of two-room and 60 units of one-room flats, each with self-contained toilet facilities. This was the second conversion project undertaken by the Board, the first being in Bukit Ho Swee Estate.

EAST COAST RECLAMATION SCHEME

(a) Phases I and II Reclamation (Bedok to Tanjong Rhu)

The East Coast Reclamation Scheme is the biggest agency work undertaken by the Board for Government. The Board completed Phase I Reclamation stretching from Bedok to Singapore Swimming Club, and Phase II Reclamation from Singapore Swimming Club to the tip of Tanjong Rhu in 1970 and 1971 respectively, yielding a total of 458 hectares (1,130 acres) of new land for residential, commercial and recreational development and creating a 16-kilometre (10-mile) stretch of sandy beach. The successful completion of these projects led to the continuation of the reclamation covering another three phases.

(b) Phase III Reclamation (Tanjong Rhu to Singapore River)

Phase III Reclamation involves the reclamation of 66.7 hectares (165 acres) of the foreshore fronting Nicoll Highway and Elizabeth Walk. Work began in March 1971 and is expected to be completed in 1974.

Filling material required for Phases III and IV Reclamation was obtained from hills adjacent to the defunct Bedok Reservoir north of Upper Changi Road. This was transported by barges from Bedok waterfront to the fill site and deposited at the dredged basin. Thereafter, a cutter suction dredger pumped the filling

material from the dredged basin to form the reclaimed land.

By the end of March 1974 approximately 54 hectares (134 acres) of land were reclaimed under this phase. Other works completed included 90% of the stone bund for containing the filling material and 65% of the drainage works.

(c) Phase IV Reclamation (Bedok to Tanah Merah Besar)

Phase IV Reclamation involved the reclamation of 485 hectares (1,198 acres) of land from Bedok to Tanah Merah Besar. Work began in June 1971 and is scheduled for completion in 1975/76.

By March 1974 a total of 13.5 million cubic metres of earth were excavated to reclaim 250 hectares (620 acres) of new land. Drainage and shore protection works amounted to 42% and 38% respectively.

(d) Phase V Reclamation (Telok Ayer Basin)

In March 1974 the Board awarded a S\$88.78 million contract for the reclamation of 141 hectares (349 acres) of land.

One part of the reclamation will be the extension of Phase III of the East Coast Reclamation while the other part stretches between the Telok Ayer Basin and beyond the existing Detached Mole, and will take the shape of a pistol. A lagoon of 100 hectares (250 acres) will be formed in the process.

The completion of Phase V Reclamation will enable the construction of the East Coast Parkway connecting Nicoll Drive at Changi running along the first four phases of reclamation and throughout the length of the existing mole (breakwater) to Keppel Road/Shenton Way junction to join with other road systems leading to Jurong. This expressway will enable traffic to flow smoothly into the city centre or to bypass it. The lagoon created will be used for Marina and other recreational purposes.

The Board is acting as agent for the Urban Redevelopment Authority in Phase V Reclamation. Work will commence in mid April 1974 and is expected to be completed in 1977/78.

A newly completed block of three-room Improved flats at Chai Chee Estate.

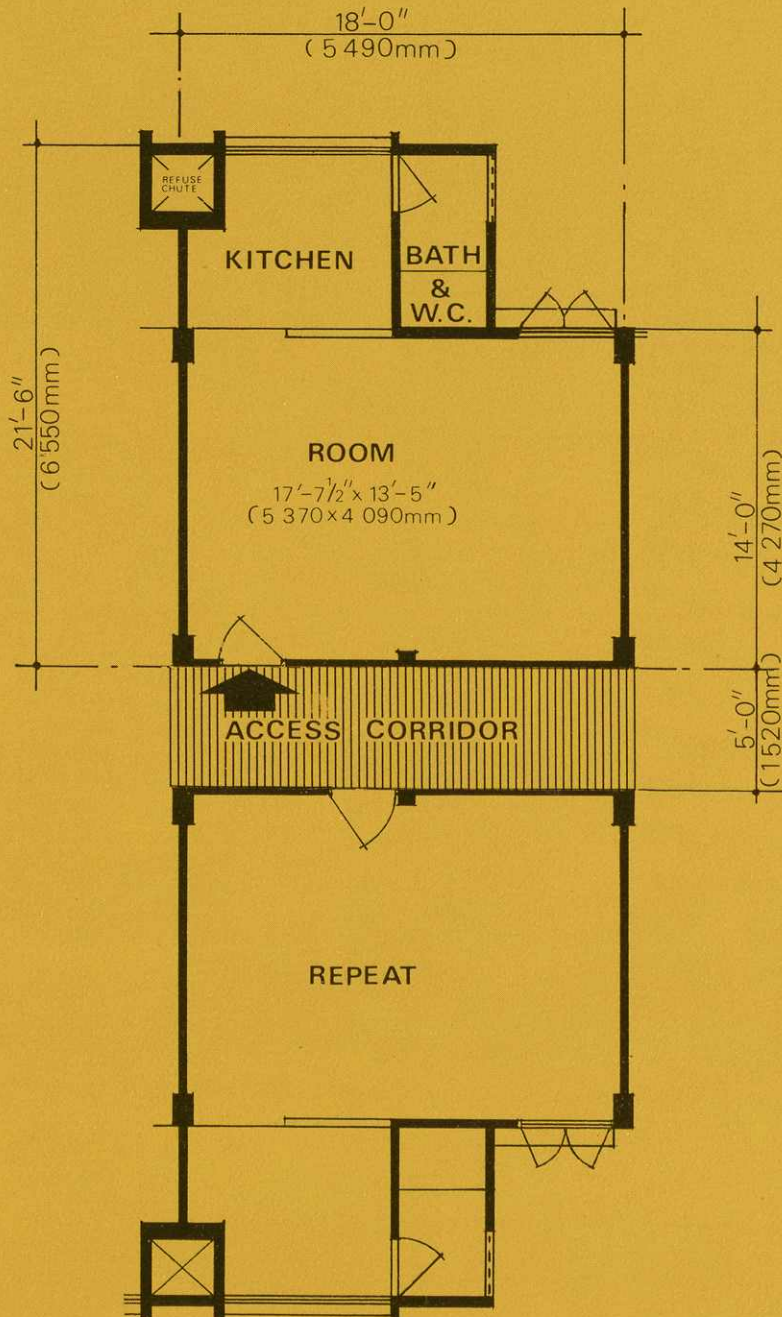


HDB NEW TOWNS

New Town	Construction Commencement Date	Approx. overall Land Area	Projected Dwelling Units	Dwelling Units Completed at 31.3.74	Projected Total Population
Queenstown	Jul 1952	285 ha (700 acres)	28,000	27,468	140,000-150,000
Toa Payoh	Feb 1965	325 ha (800 acres)	37,000	33,671	180,000-200,000
Telok Blangah	Mar 1972	365 ha* (900 acres)	18,000	3,636	90,000-100,000
Woodlands	Oct 1971	1000 ha (2500 acres)	65,000	1,396	250,000-300,000
Bedok	Apr 1973	445 ha (1100 acres)	40,000	Nil	200,000-220,000
Ayer Rajah	Aug 1973	445 ha (1100 acres)	24,000	Nil	120,000-130,000
Ang Mo Kio	Dec 1973	730 ha (1800 acres)	41,000	Nil	200,000-220,000

*Includes 100 hectares (240 acres) of National Park Land.

TYPICAL 1-ROOM IMPROVED FLAT



SCALE 1:100

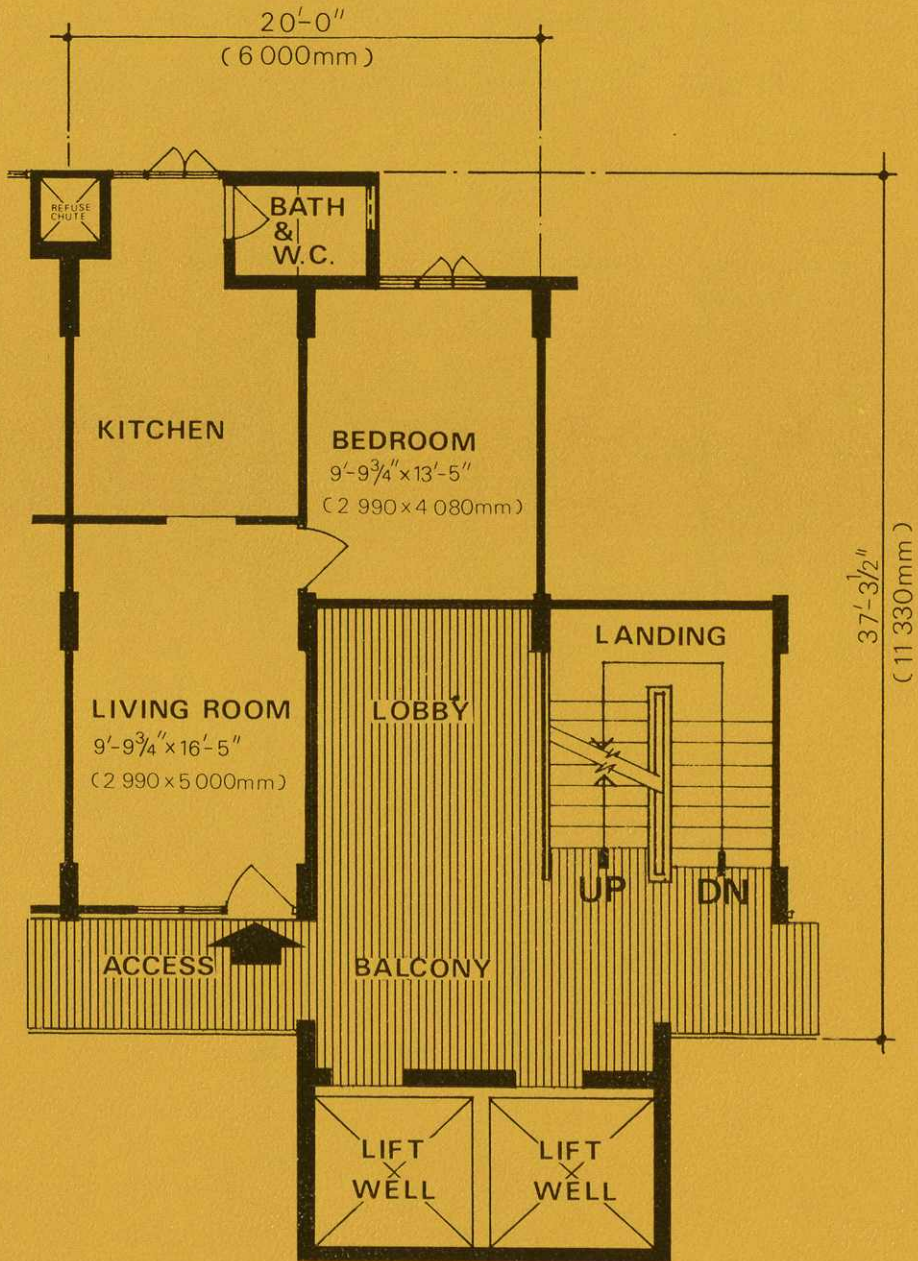
BREAKDOWN COST

Type of unit	1-Room Improved Flat
Internal floor area per flat	348 sq. ft. (32 m ²)
Circulation floor area per flat	101 sq. ft. (9 m ²)
Covered floor area per flat	449 sq. ft. (41 m ²)

Type of work	Contract price per flat
Building	S\$4,136
Sanitary	700
Electrical	200
Lifts	400
Roofing	100
TV antenna	40
Water connections	33
Gas connections	33
Sewers	105
Piling	755
Roads, carparks, culverts and drains	442
Earthworks	31
Supervision	30
Cost per unit	S\$7,005*
Cost per sq. ft. of internal area	S\$20.13 per sq. ft. (S\$218.91 per m ²)
Cost per sq. ft. of covered area	S\$15.60 per sq. ft. (S\$170.85 per m ²)
Rental	S\$30.00 per month
Selling price (New Town)	S\$3,300

*This does not include land cost.

TYPICAL 2-ROOM FLAT



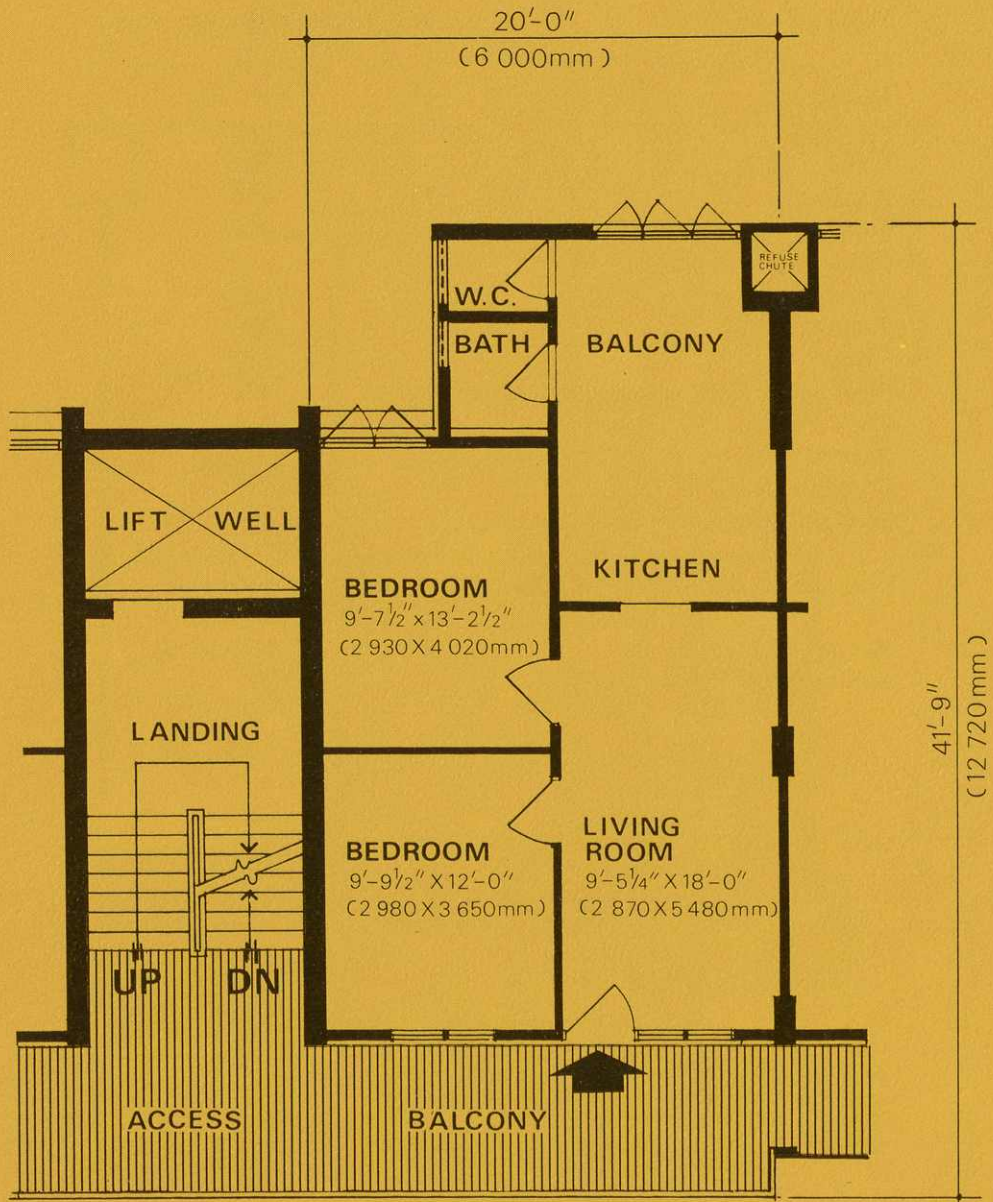
BREAKDOWN COST

Type of unit	2-Room Flat
Internal floor area per flat	471 sq. ft. (44 m ²)
Circulation floor area per flat	218 sq. ft. (20 m ²)
Covered floor area per flat	689 sq. ft. (64 m ²)

Type of work	Contract price per flat
Building	S\$5,770
Sanitary	792
Electrical	250
Lifts	503
Roofing	124
TV antenna	40
Water connections	33
Gas connections	33
Sewers	250
Piling	1,938
Roads, carparks, culverts and drains	436
Earthworks	200
Supervision	50
Cost per unit	S\$10,419*
Cost per sq. ft. of internal area	S\$22.12 per sq. ft. (S\$236.80 per m ²)
Cost per sq. ft. of covered area	S\$15.12 per sq. ft. (S\$162.80 per m ²)
Rental	S\$55.00 per month
Selling price (New Town)	S\$4,900 (up to 31.12.1973) S\$6,900 (from 1.1.1974)

*This does not include land cost.

TYPICAL 3-ROOM IMPROVED FLAT



BREAKDOWN COST

Type of unit	3-Room Improved Flat
Internal floor area per flat	648 sq. ft. (60 m ²)
Circulation floor area per flat	91 sq. ft. (9 m ²)
Covered floor area per flat	739 sq. ft. (69 m ²)

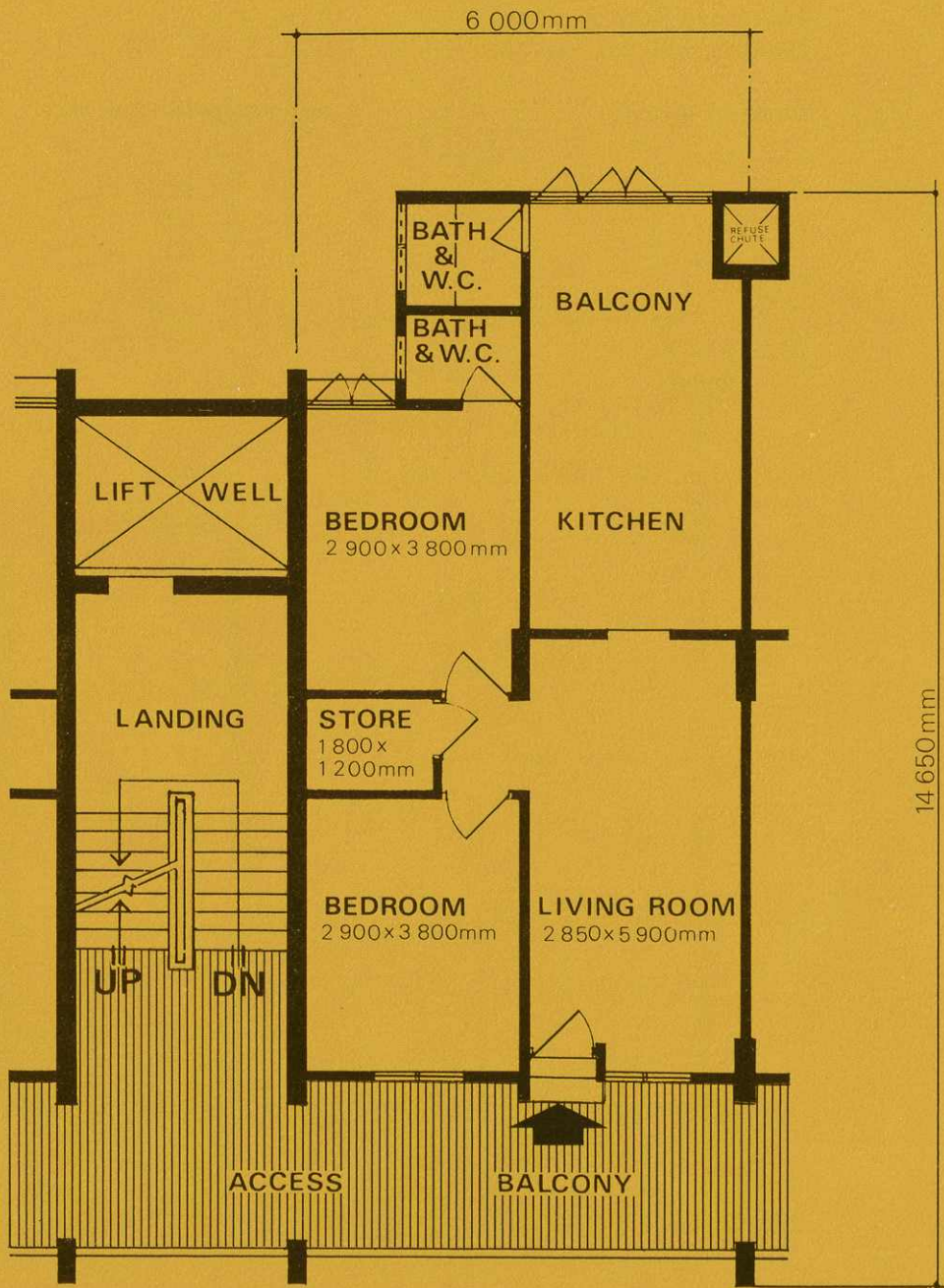
Type of work

Contract price per flat

Building	S\$8,128
Sanitary	960
Electrical	398
Lifts	600
Roofing	200
TV antenna	40
Water connections	33
Gas connections	33
Sewers	365
Piling	1,934
Roads, carpark, culverts and drains	490
Earthworks	595
Supervision	95
Cost per unit	S\$13,871*
Cost per sq. ft. of internal area	S\$21.41 per sq. ft. (S\$231.18 per m ²)
Cost per sq. ft. of covered area	S\$18.77 per sq. ft. (S\$201.03 per m ²)
Rental	S\$81.50
Selling price (New Town)	S\$7,800 (up to 31.12.1973) S\$11,800 (from 1.1.1974)

*This does not include land cost.

TYPICAL 3-ROOM NEW FLAT



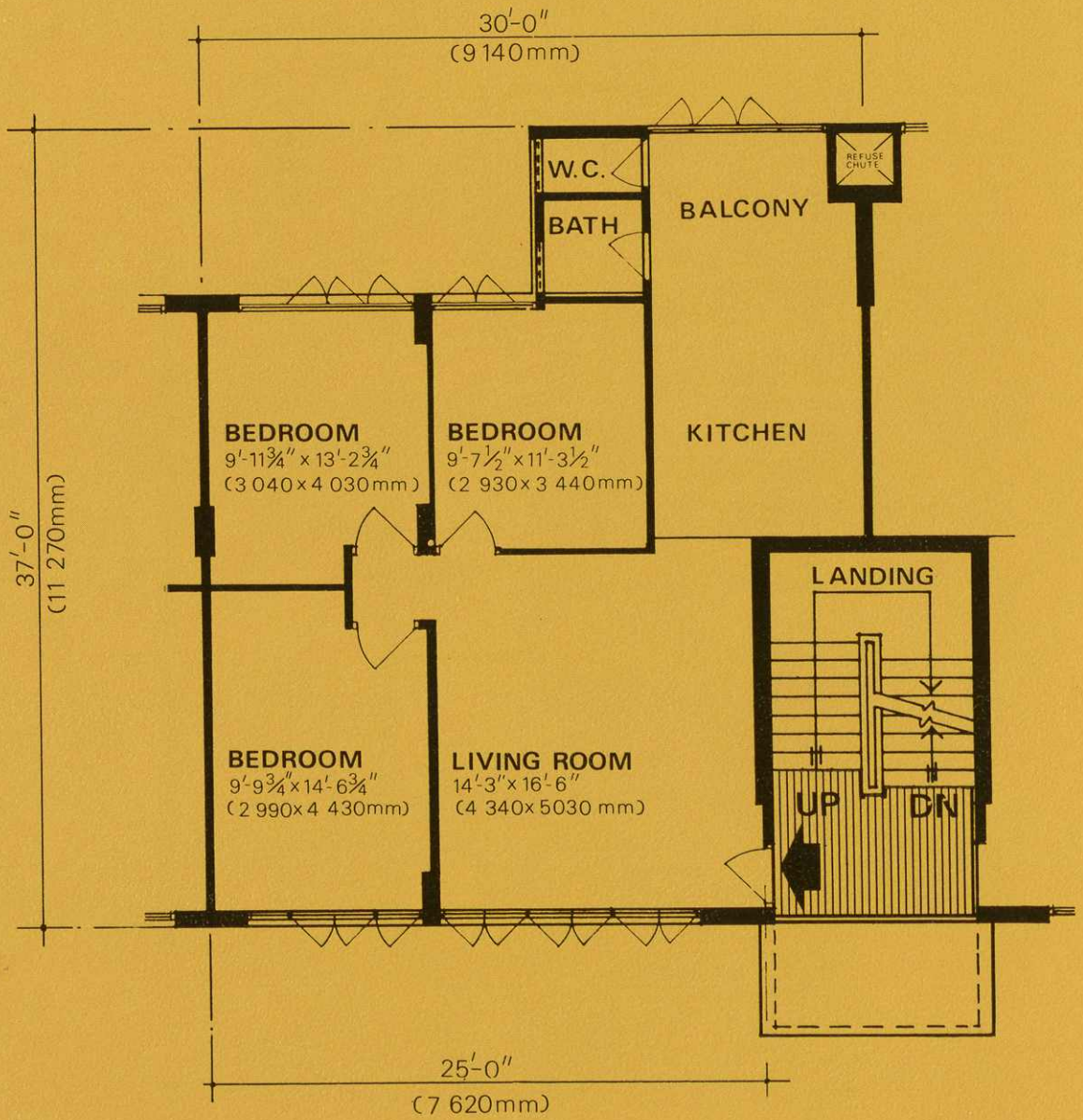
BREAKDOWN COST

Type of unit	3-Room New Flat
Internal floor area per flat	68 m ²
Circulation floor area per flat	20 m ²
Covered floor area per flat	88 m ²

Type of work	Contract price per flat
Building	S\$9,272
Sanitary	1,060
Electrical	420
Lifts	600
Roofing	280
TV antenna	40
Water connections	33
Gas connections	33
Sewers	887
Piling	1,732
Roads, carparks, culverts and drains	924
Earthworks	690
Supervision	95
Cost per unit	S\$16,066*
Cost per sq. m. of internal area	S\$236.26
Cost per sq. m. of covered area	S\$182.57

*This does not include land cost.

TYPICAL 4-ROOM IMPROVED FLAT



BREAKDOWN COST

Type of unit	4-Room Improved Flat
Internal floor area per flat	898 sq. ft. (83 m ²)
Circulation floor area per flat	167 sq. ft. (16 m ²)
Covered floor area per flat	1,065 sq. ft. (99 m ²)

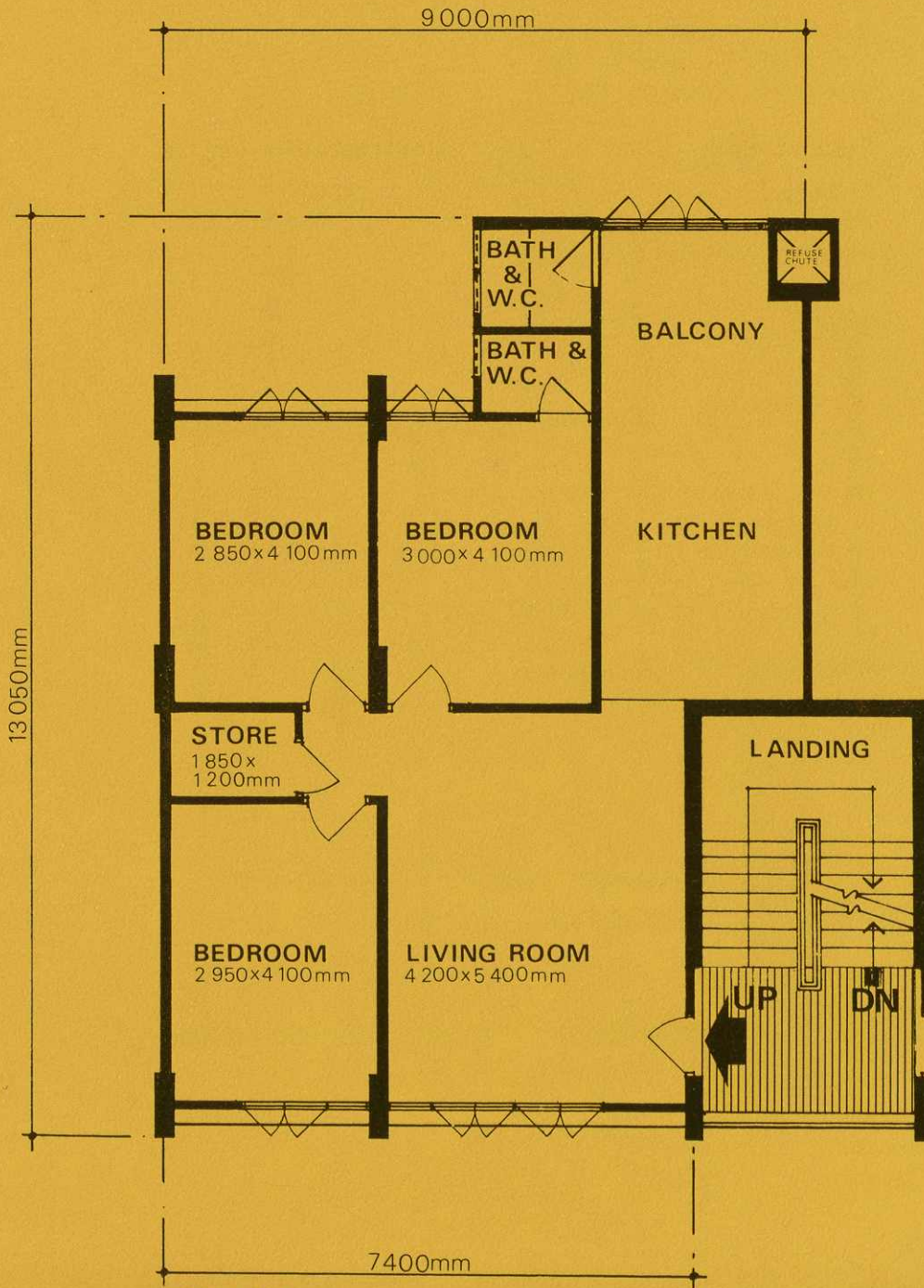
Type of work

Contract price per flat

Building	S\$10,900
Sanitary	1,129
Electrical	478
Lifts	615
Roofing	300
TV antenna	40
Water connections	33
Gas connections	33
Sewers	680
Piling	2,873
Roads, carparks, culverts and drains	781
Earthworks	550
Supervision	120
Cost per unit	S\$18,532*
Cost per sq. ft. of internal area	S\$20.64 per sq. ft. (S\$223.28 per m ²)
Cost per sq. ft. of covered area	S\$17.40 per sq. ft. (S\$187.19 per m ²)
Selling price (New Town)	S\$12,500 (Up to 31.12.1973) S\$18,500 (from 1.1.1974)

*This does not include land cost.

TYPICAL 4-ROOM NEW FLAT



SCALE 1:100

BREAKDOWN COST

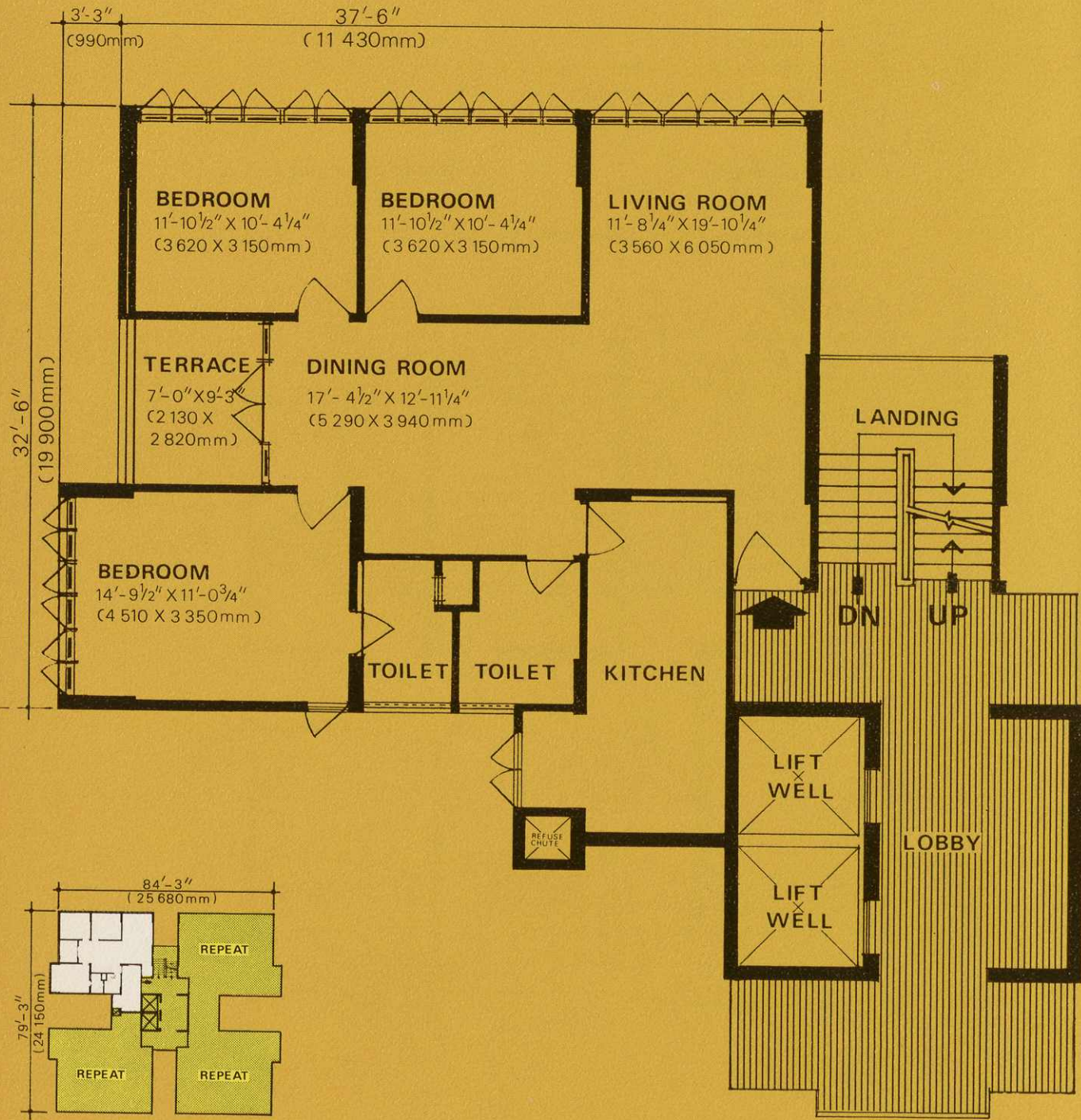
Type of unit	4-Room New Flat
Internal floor area per flat	93 m ²
Circulation floor area per flat	17 m ²
Covered floor area per flat	110 m ²

Type of work

Contract price per flat

Building	S\$12,578
Sanitary	1,200
Electrical	480
Lifts	984
Roofing	317
TV antenna	40
Water connections	33
Gas connections	33
Sewers	1,053
Piling	2,885
Roads, carpark, culverts and drains	1,227
Earthworks	750
Supervision	120
Cost per unit	S\$21,700
Cost per sq. m. of internal area	S\$233.33
Cost per sq. m. of covered area	S\$197.27

TYPICAL 5-ROOM FLAT (POINT BLOCK)



BREAKDOWN COST

Type of unit	5-Room Flat (Point Block)
Internal floor area per flat	1,300 sq. ft. (121 m ²)
Circulation floor area per flat	183 sq. ft. (17 m ²)
Covered floor area per flat	1,483 sq. ft. (138 m ²)

Type of work	Contract price per flat
Building	S\$15,500
Sanitary	1,470
Electrical	799
Lifts	2,328
Roofing	244
TV antenna	66
Water connections	37
Gas connections	37
Sewers	718
Piling	3,728
Roads, carparks, culverts and drains	2,526
Earthworks	597
Supervision	250
Cost per unit	S\$28,300*
Cost per sq. ft. of internal area	S\$21.77 per sq. ft. (S\$233.88 per m ²)
Cost per sq. ft. of covered area	S\$19.08 per sq. ft. (S\$205.07 per m ²)
Selling price (New Town)	S\$22,000 (up to 31.12.1973) S\$30,000 (from 1.1.1974)

*This does not include land cost.

Toa Payoh residents returning to their homes.



ESTATE & LAND MANAGEMENT

The Estates Department is responsible for the management of properties belonging to and vested in the Board. This includes the management of housing and industrial estates, hawker centres, markets, car parks and other ancillary functions pertaining to a housing authority such as the sale or letting of flats and shops, tenancy supervision, the provision of estate services and facilities, conservancy and maintenance of buildings or landscaped and recreational areas, land acquisition and other matters pertaining to land management.

As at 31st March 1974 the Estates Department managed a total of 190,069 units; 29,551 new dwelling units were taken over for management, and 1,304 units were reverted, demolished or converted. 5,747 miscellaneous units and 774 shops also came under management during the period.

Housing Estates Management

Housing estates are managed through a decentralised system of Area Offices which are situated within the various housing estates. Each Area Office manages up to 15,000 housing units. To date there are 14 Area Offices whose work is co-ordinated by the Central Administration Section.

Markets and Hawker Centres

Markets and hawker centres equipped with modern facilities serve residents in the housing estates. By March 1974 the Department managed 48 markets/hawker centres and 15 open pitch sites. A high standard of cleanliness is maintained in the markets and hawker centres by ensuring that the premises are kept clean and that hawkers observe environmental and health laws.

Reducing Electricity Consumption

Estate management policies are constantly under review to coincide with national objectives. During the fuel crisis immediate measures were taken to reduce electricity consumption in housing estates. These measures included reducing the number of lighting points and lighting hours in common corridors, staircases and other public areas thereby

contributing to the national campaign to conserve energy.

Vehicular Parking in Housing Estates

Paid parking for vehicles is being progressively introduced in housing estates to ensure orderly and systematic parking and to improve traffic circulation in areas where congestion and indiscriminate parking prevailed.

As at 31st March 1974 the Department managed a total of 6,280 car parking lots and 2,460 motorcycle parking lots in paid car parks at Outram Park, Chin Swee, Queenstown, Toa Payoh, Syed Alwi Road and Tiong Bahru Estates.

Essential Maintenance Service

The 24-hour Essential Maintenance Service Unit (EMSU) set up in September 1971 is a centralised unit which gives prompt attention to breakdowns in essential services such as lift failures, defective water pumps, sanitary and electrical faults, etc which need urgent repair. Residents' calls received by the Unit in the Head Office are immediately transmitted through a direct telephone system to Area Offices where maintenance crews are stationed for immediate action.

Within the EMSU, the Lift Emergency Unit was established specifically to handle lift breakdowns. Three rescue teams are stationed at MacPherson, Bukit Merah and Chin Swee Area Offices which are capable of releasing people trapped in lifts within 30 minutes from the receipt of a call for assistance at Tel 91-33-33.

During the 15 months under review, a monthly average of 6,200 calls were made by residents to the EMSU. The calls included complaints of lift breakdowns, power failures in lighting of common areas, sewerage defects, etc, all of which were attended to expeditiously.

To further improve the efficiency of the EMSU arrangements have been made to introduce the Very High Frequency (VHF) system whereby tradesmen in mobile vans can maintain direct contact at all times with the EMSU at Head Office. This would enable tradesmen to proceed direct from one destination to another without returning to their offices.

- ▲ Mr E W Barker, Minister for Law and National Development and Member of Parliament for Tanglin, officiating at a balloting ceremony for the sale of flats in his constituency.
- ▼ New homes at Farrer Road Estate. On the left is the first block of 5-room flats built by the Board.



Labour & Welfare

Incentives for Daily-Rated Employees

The shortage of male labour continued during 1973/74 particularly for conservancy and cleansing work in housing estates. This situation is attributed to the competitive wages offered by the private sector for this class of employees. Consequently, incentives were introduced to attract more recruits into the labour force.

Daily-rated employees are now eligible to apply for rental flats after six months' satisfactory service. On being allocated such flats they are required to serve the Board for a minimum period of three years from the date the tenancy commences or up to the retirement age, whichever is the earlier. Daily-rated employees with at least five years' service and a minimum total monthly family income of S\$250 may purchase Board flats on a priority basis. Those with less than ten years' service will be required to serve the Board for five years from the date of the purchase.

Nathan Review Committee

The designations and wage scales of all serving daily-rated employees of the Government, the Public Utilities Board and the Housing & Development Board were revised in accordance with the recommendations of the Nathan Review Committee appointed in April 1970 to undertake a detailed study and review of this category of labour.

Conservancy & Cleansing Contracts

The Department's conservancy and cleansing contracts for 23,208 units in existing housing estates will expire on 31st December 1974. Tenders were invited during the period for conservancy and cleansing works for new estates which will come under management during 1974. The arrangements will cover an additional 10,165 units bringing the total to 33,373 units.

The terms and conditions of conservancy and cleansing contracts were also revised to ensure greater efficiency and better supervision and control of the performance of contract labourers.

Sale of Flats

"Home Ownership" Scheme

From 1st January 1973 to 31st March 1974 a record 18,345 flats were sold under the "Home Ownership" Scheme. These comprised 17,148 new flats and 1,197 existing flats bringing the total number of flats sold since the Scheme began in 1964 to 63,369.

During the 15-month period an unprecedented number of 45,999 new applications were registered for the purchase of flats under the "Home Ownership" Scheme bringing the total to 80,378 applications on the waiting list to purchase Board flats.

New Sale Prices of Flats

Prices of Board flats sold under the "Home Ownership" Scheme were raised from 1st January 1974 by S\$2,000 for a two-room flat, S\$4,000 for a three-room flat, S\$6,000 for a four-room flat, and S\$8,000 for a five-room flat. This was necessitated by rising building costs, higher wages and land values as well as better standards of construction. Details of the new sale prices are given on Page 96.

Zoning of Estates

In January 1974 all existing public housing estates where flats are sold under the "Home Ownership" Scheme were grouped into five zones, namely Central Zone, Telok Blangah/Bukit Timah Zone, Katong/Bedok Zone, Toa Payoh/Ang Mo Kio Zone, and Rural Zone. New estates will be similarly grouped as they arise.

Under the zoning system each applicant is required to select one zone. He will be eligible for a flat in any estate in that zone. Transfers from one zone to another will be allowed provided applicants inform the Board not less than two months before the date of the ballot of the flats. Applicants will retain their priority based on their registration numbers for the same type of flat. However, if the transfer is to a larger flat, either within the same zone or in another zone, a new registration number will be issued and priority will be based on the new registration number. All applications will continue to be considered on the "first come, first served" basis. This scheme assists

Toa Payoh Swimming Complex where swimming events of the Seventh SEAP Games were held.



applicants by reducing the necessity for making formal transfer requests when they prefer a change in estate locality, particularly to estates of close proximity.

Resale of Flats

In view of the heavy demand for public housing and to discourage speculation and profiteering in the resale of Board flats, stricter rules governing the resale of three-, four- and five-room flats sold under the "Home Ownership" Scheme were introduced on 18th Sep 73. Under the new regulations there shall be no resale of a flat by an owner-occupier within the first five years of ownership, except where the flat is sold at the original purchase price (with reimbursements for improvements) to a nominee of the Board on the waiting list according to registration priority. The vendor will not be barred from purchasing another flat provided he has registered to purchase such a flat in accordance with the Board's rules.

After five years of ownership a flat owner may, with the consent of the Board, sell his flat to a purchaser of his choice provided the purchaser is eligible under the "Home Ownership" Scheme rules. After such a sale, he will be barred for a period of one year from registering again for the purchase of another flat.

Flats for Staff in Singapore Police Force, SAF, and Government & Statutory Authorities

To provide effective police vigilance in the Board's housing estates, members of the Singapore Police Force are now eligible for a quota of Board flats sold under the "Home Ownership" Scheme.

Employees of Government and Statutory Authorities and Singapore Armed Forces regulars and reservists are also given priority for the purchase of Board flats based on an approved quota not exceeding 10% of the flats balloted.

Subletting of Flats

From 1st August 1973 tenants and lessees of Board's three-, four- and five-room flats with small family nuclei comprising husband, wife and not more than three children were permitted to sublet rooms in their flats under certain conditions.

Subtenants may be Singapore Citizens or non-citizens who are permanent residents in

Singapore or work permit holders. The prior consent of the Board must be obtained before subletting is permitted and no overcrowding must result from the subletting, as defined by an approved standard.

Letting of Flats

During the 15-month period there were 13,685 new applications to rent Board flats, 7,438 of which were for one-room Improved flats and 4,047 and 2,200 applications for two-room and three-room flats respectively. The following table gives details of the rental register:

No. of applications in the rental register

Outstanding cases brought forward as at 1st January 1973	24,995
New registrations from January 1973 to March 1974	13,685
Reinstatements	435
Total	39,115
Less settled cases (including cancellations)	13,642
Outstanding cases on waiting list as at 31st March 1974	25,473

The average monthly applications for rental flats during the 15-month period numbered 912 as compared with 990 applications per month in 1972. However, there was a tremendous increase in the number of applications to purchase flats under the "Home Ownership" Scheme.

Rehousing & Transfer

172 families made homeless by fire were rehoused in Board estates. Most of the families were from the major fire areas of Jalan Keladi, Queen Street/Middle Road, Jalan Eunus, Sims Avenue, Kampong Amber and Marne Road/Serangoon Road.

275 families from old properties in New Bridge Road, Duchess Estate, Farrer Park Estate and the Haig Road Government Quarters, earmarked for redevelopment, were offered alternative accommodation in new flats at Kallang Basin, Telok Blangah, Henderson Hill, Marine Parade and other estates.

Details of the transfer register are as follows:

- ▲ New three-room Improved flats at Toa Payoh New Town.
- ▼ More new homes at Henderson Hill Estate.



Outstanding cases brought forward as at 1st January 1973		5,789
New registrations up to 31st March 1974 (including reinstatements)		2,117
		<hr/> 7,906
Less cases settled	2,838	
Cancellations	<hr/> 1,545	<hr/> 4,383
Outstanding cases as at 31st March 1974		<hr/> 3,523

Letting of Business Premises

In 1973/74 575 shops were let on a competitive tender system. Tenders are considered not only on the rents offered but also the types of trade submitted to ensure that a variety of services are available within each estate to meet the needs of residents.

To provide additional amenities for residents, 12 shops in various housing estates were made available for social, educational and community use in 1973/74.

Two supermarkets in Toa Payoh and Have-lock Road were let to the National Trades Union Congress Consumers' Co-operative whose primary objective is to help reduce inflationary pressures on consumers particularly with regard to price increases.

A seven-storey flatted factory in Buona Vista Estate was completed towards the end of 1973. This building has 1,858 sq. metres (20,000 sq. ft.) of nett usable area on each floor. Two firms engaged in the manufacture and assembly of consumer electronic products have already taken up part of the factory space. They will generate employment for 1,500 people when in full production.

Landscaping

Landscaping in housing estates is carried out by the Landscaping Unit which consists of the Nursery and Field Divisions.

The 5.4-hectare (13¼-acre) Nursery at Kay Siang Road propagated more than 300,000 plants in 1973/74 to meet the increasing demand for plants and landscaped areas in new housing estates. About 50% of its total stock of over 500,000 plants, inclusive of plants propagated prior to 1973, were supplied

to the estates during the period. 60,000 of these were supplied to new estates in Woodlands, Balestier Redevelopment, Sin Ming, Upper Changi, Kallang, Redhill/Henderson Redevelopment, Covent Garden, Telok Blangah and Buona Vista.

The Field Division undertook planting and landscaping works in housing estates. There was extensive landscaping in Toa Payoh New Town which served as the SEAP Games Village housing participants of the Seventh SEAP Games. Toa Payoh Town Garden to the south of the town centre was also landscaped into a park for residents.

The Nursery also provided plants for various functions such as the opening ceremony of SEAP Games Village, balloting ceremonies, and functions at Penthouse Negara and HDB function rooms.

Legal Matters

The Legal Section dealt with all legal matters of the Estates Department pertaining to tenancies, sale of flats, acquisition problems and appeal cases, industrial leases, littering, and ancillary matters.

Tenancy Matters

Legal action was taken against tenants who persisted in breaching the tenancy. The common breaches were non-payment of rent, unauthorised subletting, assignment, causing nuisance, and change of use without Board's approval.

During the period under review 934 cases were referred to the Legal Section for which 314 District Court Summonses and 14 High Court Writs were issued. 190 District Court Judgements, 9 High Court Judgements and 153 District Court Writs of Possession were obtained. 50 cases were awaiting Court decision and the rest were settled without trial.

Sale of Flats

The Legal Section processed and registered the sale and mortgage of Board flats. During the 15-month period 5,249 leases and 4,562 mortgages were registered. 2,677 loans to purchasers of Board flats were redeemed and the Discharge of Mortgages were processed. 671 Transfer Instruments from purchasers who wanted to resell their flats were also dealt with.

- ▲ A high technology industry in the Board's estate providing employment for residents.
- ▼ A camera assembly line at Rollei at Chai Chee Estate.



Legal action was taken against purchasers who breached the terms of their Agreements of Sale, Leases or Mortgages. Of the 361 cases referred to the Legal Section, 27 High Court Writs were issued, and 16 Judgements and 3 Writs of Possession were obtained.

Acquisition Matters

The Legal Section advised the Board's Acquisition Teams on all the legal aspects of acquisitions.

Industrial & Other Properties

Legal matters arising from the management of these properties of the Board were handled by the Section. These included drafting and vetting Temporary Occupation Licences, building agreements, leases and advising the Board of possible infringements.

Littering

Recently a Prosecution Sub-Unit was set up within the Legal Section to prosecute offenders under the Environmental Public Health Act and its Regulations. During the 15-month period 990 offenders were successfully prosecuted and fined. The majority of these offenders were litterbugs. The Sub-Unit also advised the Hawkers Section on the legal problems encountered by them.

Ancillary Matters

Among other matters, the Legal Section conducted a course for Board officers on their legal powers and duties under the Environmental Public Health Act and its Regulations, the Housing & Development Act and other related laws. 18 lectures for 493 officers were conducted from September to December 1973.

Land Matters

Land Acquisition

During the period under review the Board acquired a total of 217 lots covering 1,062.29 hectares (2,624.98 acres) for public housing and urban renewal.

In addition another 213 lots comprising 561.45 hectares (1,389.70 acres) have been gazetted for compulsory acquisition and action is now in progress to acquire them.

Alienation and Disposal

During the period the Board also acquired 145.48 hectares (360.12 acres) of State lands mainly in Kallang Basin and Woodlands from the Commissioner of Lands to supplement its land requirement. These alienations cost a total of S\$31,124,213.

1.83 hectares (4.53 acres) of Board lands were leased to other Government bodies such as the People's Association and the National Library. The total premium for these sales amounted to S\$895,847.

Industrial Estates

Land in housing estates is leased to industrialists recommended by the Economic Development Board for the establishment of light, clean industries which provide employment for residents including housewives and school-leavers.

The emphasis has been on the establishment of higher technology industries which will improve the technical skills of workers and enhance Singapore's industrial progress.

Management

The Board presently manages 119 industrial and 28 petrol station sites. The management of such sites involved the issue of leases, building agreements, and the endorsement of building plans.

During the period under review the Board leased to private entrepreneurs five industrial sites comprising 13.97 hectares (34.58 acres) at a total premium of S\$6,898,489.50. These were for the establishment of light industrial factories. A seven-storey flatted factory at Buona Vista Estate and a single-storey terrace factory at Kallang Basin were also leased.

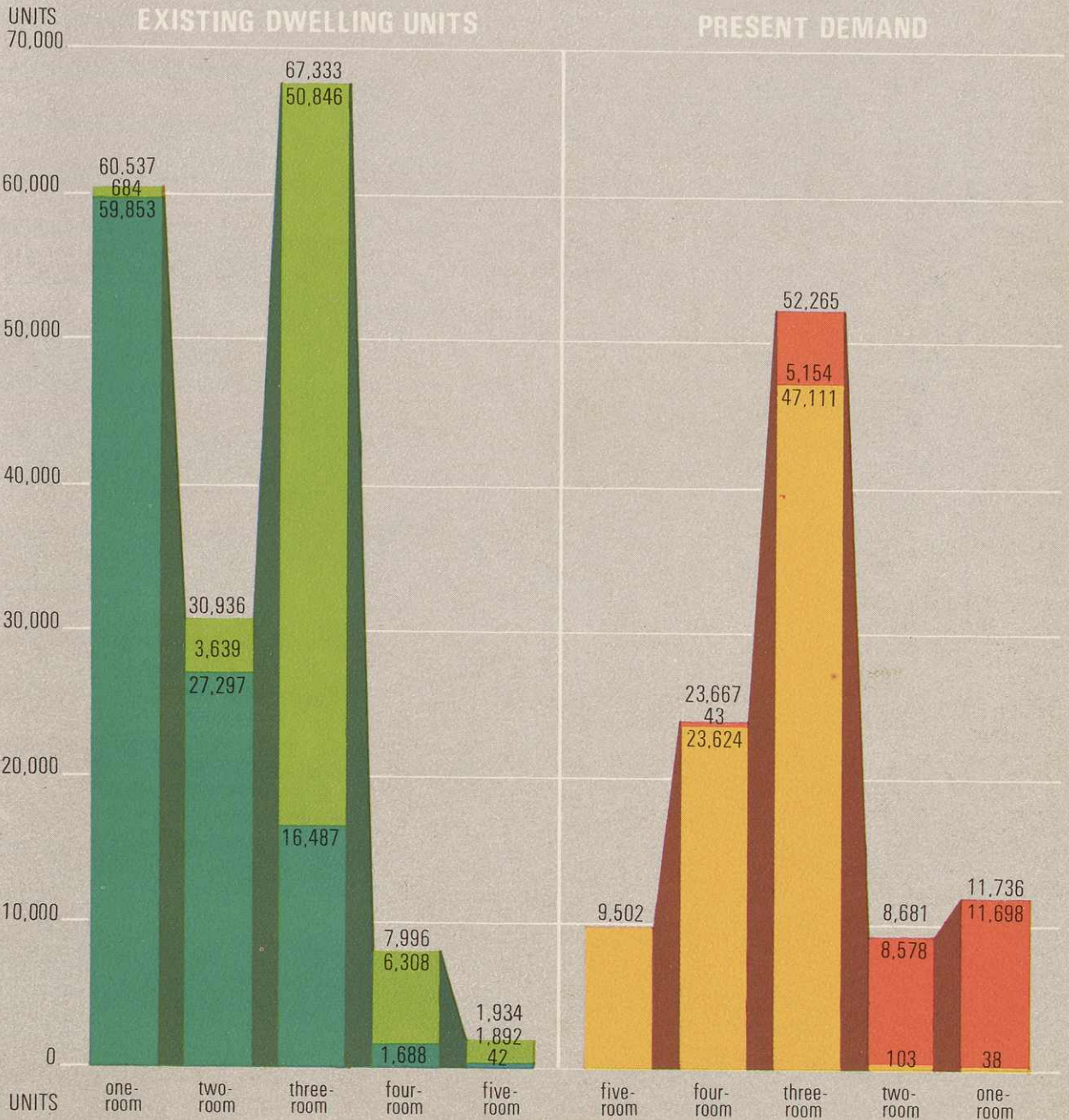
The Land Management Unit which was set up in 1972 continued to manage the Board's alienated and acquired lands. It also carried out enforcement action against trespassers and persons who erected unauthorised structures on Board lands. During the 15-month period the Unit issued Temporary Occupation Licences to 348 cases on Board lands at Jurong, Bah Soon Pah, Upper Changi, Ang Mo Kio and Woodlands pending development of these sites.

The market and cooked food hawker centre at Toa Payoh Town Centre.



HISTOGRAM SHOWING EXISTING DWELLING UNITS & DEMAND FOR HDB FLATS AS AT 31ST MARCH 1974

- NO. OF UNITS RENTED TO THE PUBLIC
- NO. OF UNITS SOLD TO THE PUBLIC
- NO. OF APPLICATIONS ON WAITING LIST TO BUY
- NO. OF APPLICATIONS ON WAITING LIST TO RENT



NEW APPLICATIONS TO RENT & TO PURCHASE HDB FLATS

NEW APPLICATIONS TO RENT H.D.B. FLATS
 APPLICATIONS TO PURCHASE FLATS UNDER THE "HOME OWNERSHIP FOR THE PEOPLE" SCHEME



UNITS UNDER MANAGEMENT DURING 1973/74

Properties	Units as at 31.12.72			Units taken over in 1973/74	Units withdrawn, reverted, or pending demolition	Units as at 31.3.74
	HDB	BECU	Total			
Dwellings						
1-room	50,168	—	50,168	10,521	152	60,537
2-room	31,101	265	31,366	370	106	31,630
3-room	52,853	994	53,847	13,825	187	67,503
4-room	3,860	—	3,860	3,981	13	7,828
5-room	45	2	47	836	—	883
Shops						
Lock-up cum dwellings	4,405	—	4,405	774	46	5,133
Miscellaneous						
Non-housing units	—	11	11	—	—	11
Hawker stalls	4,873	—	4,873	2,348	4	7,217
Hawker pitches	1,409	—	1,409	62	428	1,043
Parking lots	3,344	—	3,344	2,936	—	6,280
Land tenancies	1,173	—	1,173	147	368	952
Bus bays	217	—	217	—	—	217
Others (kiosks, offices, etc)	581	—	581	254	—	835
Total	154,029	1,272	155,301	36,072	1,304	190,069

*Units from conversion—Tiong Bahru Pre-war Estate.

SUMMARY

Period	Dwellings	Shops	Miscellaneous	Total
Units as at 31.12.72	139,288	4,405	11,608	155,301
Units taken over in 1973/74	29,551	774	5,747	36,072
Units withdrawn, reverted, or pending demolition in 1973/74	168,839	5,179	17,355	191,373
	458	46	800	1,304
Units as at 31.3.74	168,381	5,133	16,555	190,069

HAWKER CENTRES UNDER MANAGEMENT IN 1973/74

No.	Hawker Centre	Location	No. of Stalls
1	Bukit Ban Kee Pr S1 C5	Jalan Kukoh, Blk 1	153
2	Bukit Ho Swee Ph3 C9	Havelock Road, Blk 50 (Ground and 1st floors)	81
3	Bukit Ho Swee Ph3 C11	Havelock Road behind Blk 22	38
4	Bukit Merah Redev C7	Redhill Lane, Blk 79	270
5	Bukit Merah Redev C8	Redhill Lane, Blk 85	96
6	Kallang Basin N1 Ph2 C6	Bendemeer Road, Blk 29	288
7	Kallang Basin N1 C4	Petaling Road, Blk 5	228
8	Kallang Basin N2 C1	Bendemeer Road, Blk 42	148
9	Kampong Tiong Bahru (Bal) C2	Jalan Membina	10
10	Kampong Tiong Bahru (Bal) C7	Jalan Bukit Merah, Blk 112	138
11	Kampong Tiong Bahru (Bal) C8	Kim Tian Road, Blk 121	168
12	Kim Tian Road/Tiong Bahru Rd	Tiong Bahru Road	31
13	MacPherson Estate Cooked Food Centre	Circuit Road, Blks 79 & 79A	148
14	MacPherson South Ext C2	MacPherson Lane, Blk 84	168
15	MacPherson South (Bal) C19	Circuit Road, Blks 80 & 89	440
16	Outram Road C1	Outram Park	20
17	Princess Elizabeth Park Estate	Hillview Avenue	52
18	Queenstown N2 Ext C2	Commonwealth Avenue	86
19	Queenstown N3	Commonwealth Crescent, Blks 119-125	92
20	Queenstown N4 Ph2 C3	Commonwealth Drive, Blks 46-4 to 46-9	76
21	Queenstown N6 C10	Mei Ling Street, Blk 159	305
22	Redhill Estate (Bal) C9	Lengkok Bahru	162
23	St Michael's Estate	Jalan Tenteram	156
24	Tanjong Rhu/Mountbatten Road	Jalan Batu, Blk 4	166
25	Tiong Bahru Estate	Lim Liak Street	74
26	Toa Payoh N1 C7	Lorong 7 Toa Payoh, Blks 22A-D	80
27	Toa Payoh N1 C7A	Lorong 7 Toa Payoh, Blk 22	132
28	Toa Payoh N1 C9	Kim Keat Avenue, Blks 64-66	146
29	Toa Payoh N2 C4A	Lorong 5 Toa Payoh, Blk 75	36
30	Toa Payoh N2 C10	Lorong 4 Toa Payoh, Blk 74	192
31	Toa Payoh N3 C2	Lorong 4 Toa Payoh, Blk 93	162
32	Toa Payoh N3 C12	Lorong 6 Toa Payoh, Blk 188	33
33	Toa Payoh N4 C7A	Lorong 1 Toa Payoh, Blks 131-135	64
34	Upper Aljunied Road Redev C3	Upper Aljunied Lane, Blk 9	168
35	Upper Changi Road Estate N2	Chai Chee Road, Blks 12, 14, 15, 16, 17, 18	28
36	Upper Thomson Road 5 ms C1	Upper Thomson Road, Blks 4 & 9	238
	Total		4,873

TAKEN OVER DURING 1973/74

No.	Hawker Centre	Location	No. of Stalls
1	Balestier Estate Redev C4	Whampoa Drive, Blks 91 & 92	288
2	Bukit Ho Swee Ph3 C9	Beo Crescent/Havelock Road	42
3	Covent Garden Redev C3	Zion Road, Blk 86	34
4	Kallang Airport Redev Hawker Centre/Emporium	Old Airport Road, Blk 51	328
5	Kallang Basin N3 C6	Geylang Bahru, Blk 69	236
6	Kallang Basin (Sims Ave) Ph3 C3	Geylang Bahru, Blk 17	236
7	Kampong Tiong Bahru (Bal) C2	Jalan Membina	46
8	Redhill/Henderson Ph2 C3	Bukit Merah View, Blk 115	293
9	Toa Payoh N3 C12	Lorong 2 Toa Payoh, Blk 176	308
10	Toa Payoh N4 C7	Lorong 1 Toa Payoh, Blk 127	219
11	Upper Changi Road Estate N2 C5	Chai Chee Avenue, Blk 29	200
12	Upper Thomson Road 6 ms SC C2	Venus Road, Blk 18	118
	Total		2,348

HAWKER PITCHES UNDER MANAGEMENT IN 1973/74

No.	Estate	Location	No. of Pitches
1	Brickworks Estate	Jalan Bukit Merah, Blk 28	120
2	Bukit Ban Kee Pr S1 C5	Jalan Kukoh Carpark	55
3	Bukit Ho Swee Estate	Beo Crescent concourse	162 (Day) 79 (Night)
4	Clementi Road Estate	Clementi Road	46
5	Commonwealth Avenue	Commonwealth Avenue bus terminus/depot	10
6	Delta Estate	Havelock Road	71
7	Durham Estate	Cambridge Road, backlane & sidelane, Blks 41 & 42	143
8	Kallang Estate	Carpark at Blks 46 & 77	100
9	Kampong Silat Estate	Silat Square	44
10	Queenstown N1 Princess Estate	Strathmore Avenue	37 (Day) 37 (Night)
11	St Michael's Estate	Jalan Tenteram—sweet vending kiosks	23
12	Tanjong Rhu/Mountbatten Road	Jalan Batu market concourse, Blks 3, 4, & 7	154
13	Toa Payoh N2 C10	Lorong 4, Toa Payoh	141
14	Toa Payoh N4 C7	Lorong 1, Toa Payoh	187
	Total		1,409

TAKEN OVER DURING 1973/74

No.	Estate	Location	No. of Pitches
1	Changi Point	Nicoll Drive	62

FLATS SOLD UNDER "HOME OWNERSHIP" SCHEME FROM 1ST JANUARY 1973 TO 31ST MARCH 1974

Estate	2-Room	3-Room	4-Room	5-Room	Total
Albert House	127	—	—	—	127
Balestier	—	1,300	668	—	1,968
Bukit Ho Swee	10	17	—	—	27
Buona Vista	—	3,332	945	384	4,661
Chin Swee Road	—	—	96	—	96
Covent Garden	—	423	110	96	629
Farrer Road	—	238	252	164	654
Geylang Serai	16	1	—	—	17
Kallang Basin	—	2,764	408	384	3,556
Kg Tiong Bahru	—	3	—	—	3
Kreta Ayer	—	252	—	—	252
MacPherson	43	55	—	—	98
Marine Parade	—	462	—	576	1,038
North Bridge Road	—	—	152	96	248
Queenstown	80	147	228	—	455
Redhill/Henderson	—	1,368	322	—	1,690
Rochore House	90	—	—	—	90
Selegie House	2	365	29	—	396
Siglap Fire Site	1	—	—	—	1
Sin Ming Industrial Estate	—	—	198	—	198
St Michael's	—	25	—	—	25
Tiong Bahru	5	94	5	—	104
Toa Payoh	—	280	384	—	664
Upper Changi	—	513	150	192	855
Woodlands	—	391	102	—	493
Total	374	12,030	4,049	1,892	18,345

FLATS SOLD UNDER "HOME OWNERSHIP" SCHEME
AS AT 31ST MARCH 1974

Estate	1-Room	2-Room	3-Room	4-Room	5-Room	Total
Albert House	—	127	—	—	—	127
Alexander Hill	—	—	204	—	—	204
Balestier	—	—	1,720	668	—	2,388
Bukit Ho Swee	452	490	2,471	—	—	3,413
Buona Vista	—	—	3,332	945	384	4,661
Chin Swee Road	—	192	44	96	—	332
Covent Garden	—	—	423	110	96	629
Delta	—	—	160	—	—	160
Farrer Road	—	—	238	252	164	654
Geylang Serai	—	407	105	1	—	513
Henderson Crescent	—	—	276	602	—	878
Kallang Basin	—	—	4,165	454	384	5,003
Kallang/Tanjong Rhu	—	312	1,038	—	—	1,350
Kg Tiong Bahru	—	3	951	40	—	994
Kreta Ayer	—	—	252	—	—	252
MacPherson	—	448	4,703	56	—	5,207
Marine Parade	—	—	462	—	576	1,038
Maude/Kitchener Road	—	—	133	43	—	176
Moulmein Road	—	—	—	76	—	76
North Bridge Road	—	—	—	152	96	248
Outram Road	—	8	5	280	—	293
Prinsep Street	—	—	112	—	—	112
Queenstown	—	1,179	9,646	474	—	11,299
Redhill/Henderson	232	94	2,806	312	—	3,444
Rochore House	—	90	—	—	—	90
Selegie House	—	2	365	29	—	396
Siglap Fire Site	—	84	—	—	—	84
Sin Ming Industrial Est	—	—	584	198	—	782
St Michael's	—	—	914	—	—	914
Tew Chew Street	—	—	—	72	—	72
Tiong Bahru	—	13	448	15	—	476
Toa Payoh	—	190	13,914	1,181	—	15,285
Upper Changi	—	—	984	150	192	1,326
Woodlands	—	—	391	102	—	493
Total	684	3,639	50,846	6,308	1,892	63,369

NUMBER OF APPLICANTS ON WAITING LIST
FOR PURCHASE OF FLATS UNDER "HOME OWNERSHIP"
SCHEME AS AT 31ST MARCH 1974

Zone	1-Room	2-Room	3-Room	4-Room	5-Room	Total
Central	1	8	807	706	139	1,661
Katong/Bedok	—	8	6,297	4,475	3,030	13,810
Bukit Timah/Telok Blangah	37	67	18,113	9,264	3,815	31,296
Toa Payoh/Ang Mo Kio	—	20	19,709	8,021	2,203	29,953
Rural	—	—	2,185	1,158	315	3,658
Total	38	103	47,111	23,624	9,502	80,378

NEW SALE PRICES OF HDB FLATS

(FROM 1 JANUARY 1974)

Type of Flat	New Town Price	Sub-Urban Price	Urban Price
1-Room Improved	S\$ 3,300	—	—
2-Room Standard	S\$ 6,900	S\$ 8,200	S\$ 9,500
2-Room Improved	S\$ 8,000	S\$ 9,500	S\$11,000
3-Room Standard	S\$10,200	S\$11,800	S\$16,500
3-Room Improved	S\$11,800	S\$13,500	S\$17,500
3-Room Improved (Modified Corner)	S\$12,800	S\$15,000	S\$18,500
4-Room Improved	S\$18,500	S\$21,500	S\$26,000
5-Room (Point Block)	S\$30,000	S\$35,500	S\$41,000

ZONING OF PUBLIC HOUSING ESTATES

The five zones of public housing estates where flats are sold under the "Home Ownership" Scheme are as follows:

CENTRAL ZONE

Estates

- 1 Beach Road
- 2 Chin Swee Road
- 3 Maude Road
- 4 Outram Park
- 5 Sago Lane
- 6 Tew Chew Street
- 7 Victoria Street

KATONG/BEDOK ZONE

Estates

- 1 Bedok
- 2 East Coast Road
- 3 Geylang Serai
- 4 Jalan Chai Chee
- 5 Marine Parade
- 6 Opera/Siglap

RURAL ZONE

Estates

- 1 Ponggol
- 2 Woodlands

TELOK BLANGAH/BUKIT TIMAH ZONE

Estates

- 1 Brickworks
- 2 Bukit Ho Swee
- 3 Covent Garden
- 4 Farrer Road
- 5 Queenstown
- 6 Redhill/Henderson
- 7 Telok Blangah

TOA PAYOH/ANG MO KIO ZONE

Estates

- 1 Kallang Basin
- 2 MacPherson
- 3 Moulmein
- 4 Toa Payoh
- 5 Upper Thomson
- 6 Whampoa

LAND ACQUIRED IN 1973/74

No.	Locality	Date of Gazette Notification	No. of lots	Area (sq. ft.)
1	Land at Sembawang (near Naval Base)	25.2.69	26	47,450,063
2	Upper Cross St/ Upper Chin Chew St	26.9.69	1	1,106
3	Club St/Amoy St/Cross St/ Mohd Ali Lane	26.9.69	2	4,513
4	North Bridge Rd/Middle Rd/ Victoria St/Bain St	29.9.69	10	11,227
5	Blanco Court Phase I	29.10.69	4	12,892
6	Keong Siak St/Sago St/ South Bridge Rd	8.12.69	15	19,582
7	Manila St/Queen St/ Middle Rd	20.1.70	3	2,197
8	River Valley Rd/ Tan Tye Place/Tan Tye Alley	11.6.70	25	42,673
9	Blanco Court Phase II	13.6.70	9	10,457
10	Orchard Rd Comprehensive Development	29.6.70	6	28,612
11	Rochore Canal Rd/Ophir Rd/ Queen St	27.7.70	4	8,915
12	Lorong Chuan/Lorong Kinchir/Burghley Drive	11.8.70	30	17,855,234
13	Somerset Rd/Killiney Rd/ Devonshire Rd	18.8.70	5	26,740
14	Perseverance Estate Phase I	2.2.71	6	27,493,708
15	Telok Ayer St/Amoy St/ Boon Tat St	5.4.71	6	6,455
16	Upper Thomson Road	27.7.71	18	7,389,339
17	Perseverance Estate Phase II	20.9.71	7	11,375,084
18	Ann Siang Road	23.12.71	1	1,541
19	North Buona Vista Road	11.8.72	12	2,099,757
20	Kallang Basin	3.10.72	25	495,781
21	Kee Seng St/ Tanjong Pagar Rd	25.9.73	2	8,422
Total			217	114,344,298 sq. ft. or 2,624.98 acres

LAND GAZETTED FOR COMPULSORY ACQUISITION IN 1973/74

No.	Locality	Date of Gazette Notification	Requesting Authority	No. of lots	Area (sq. ft.)
1	Raffles Place Fire Site	17.1.73	UR	1	24,123
2	Fire Site at Weld Road	23.1.73	UR	1	2,817
3	Changi Road/Joo Chiat Road	30.1.73	HDB	5	22,875
4	Tanglin Road/Ellis Road	19.3.73	UR	17	136,324
5	Telok Blangah	24.4.73	HDB	1	54,607
6	Woodlands	21.5.73	HDB	57	57,989,809
7	Ah Hood Road	16.6.73	HDB	22	388,475
8	Balestier Road	2.8.73	HDB	1	34,794
9	South Bridge Road Fire Site	8.8.73	UR	1	1,092
10	Desker Road Fire Site	6.9.73	UR	1	3,960
11	Towner Road	6.9.73	HDB	12	103,718
12	Kee Seng St/Tg Pagar Road	25.9.73	UR	2	8,422
13	Mackenzie Road	11.12.73	UR	1	26,565
14	Land off Hillview Avenue	26.2.74	HDB	1	1,353,899
15	Land at University Road	6.3.74	HDB	2	198,429
16	Anson Constituency	15.3.74	UR	45	85,256
17	Buffalo Road/Serangoon Road	15.3.74	UR	43	100,220
Total				213	60,535,385 sq. ft. or 1,389.70 acres

Public housing in the Chin Swee Road/Havelock Road Redevelopment in the Central Area. The shops on the first three floors are mainly used for resettling shopkeepers affected by urban renewal schemes.



URBAN RENEWAL

The Urban Renewal Department was established in 1966 to undertake slum clearance and comprehensive redevelopment of the Central Area of Singapore. During the past eight years the Department has operated under the provisions of the Housing and Development Act and within the organisational framework of the Housing and Development Board.

With the increase in functions and urgency of urban redevelopment activities in the Central Area, an Urban Renewal Steering Committee was established in 1971 to co-ordinate the Department's functions with other authorities and to prepare for the formation of the Urban Redevelopment Authority (URA).

In accordance with the Urban Redevelopment Authority Act promulgated by Parliament on 28th January 1974, URA will be constituted on 1st April 1974 as an autonomous statutory body to take over the functions of the Urban Renewal Department. The new Authority will be charged with increased planning responsibilities and wider functions of slum clearance and comprehensive redevelopment of the city centre with the ultimate objective of creating a new and gracious city with a better environment for commercial, residential, and social and recreational activities.

This being the last report of the Urban Renewal Department under HDB, it would be appropriate to review briefly the progress of the Urban Renewal Programme since 1966.

Brief Review of Urban Renewal Programme

Urban renewal in Singapore is a joint endeavour between Government and private entrepreneurs. Government plays an important role in detailed planning, acquisition, and clearance of sites earmarked for redevelopment. It also provides social amenities and upgrades existing infrastructure, and provides the initiative, expertise and favourable investment climate for private participation in Urban Renewal projects.

Public Sector Developments

Since the inauguration of the Urban Renewal Programme in 1966 more than 121 hectares (300 acres) of slum and densely squattered areas in the strategic city centre have been cleared and systematically redeveloped. The

strategy in the early part of the programme was to provide residential and business premises on the fringe of the Central Area for relocation of premises in the city centre earmarked for urban renewal.

With the successful relocation of large numbers of families from dilapidated houses in the city to HDB estates, to date approximately 9,000 units of flats and 1,000 units of shops have been built in the Central Area. Besides those rehoused in new public housing estates, another 40,000 persons were reaccommodated within the Central Area itself.

The two pilot Urban Renewal Precincts, namely Precinct South One at Outram Road/Havelock Road and Precinct North One at Crawford Street/ Beach Road, have been substantially redeveloped into modern residential-cum-business complexes with their full complement of social amenities such as markets, hawker centres, car parks, schools, landscaped parks and pedestrian malls. Extremely congested and dilapidated areas in other precincts such as Sago Lane/Banda Street, Victoria Street, Ellenborough Market and North Bridge Road were given a new lease of life through comprehensive redevelopment.

Private Participation in Urban Renewal

Besides public sector developments the Urban Renewal Programme successfully encouraged maximum private participation in the redevelopment of strategic portions of the city. Under the three Sales of Sites in 1967, 1968 and 1969 the private sector has redeveloped 50 sites totalling 26.3 hectares (65 acres). Projects range from hotels, shopping complexes, offices, apartments, and entertainment complexes to tourist attractions. To date, 23 Urban Renewal projects under the three Sales of Sites have been successfully completed and open for business. Another 24 projects are in various stages of construction and these include seven projects partially completed but open for business.

The vigorous Urban Renewal Programme has resulted in the new city skyline now emerging along Shenton Way, Golden Mile, People's Park, and in the Outram and Crawford areas.

The tremendous building activities by both the private and public sectors have contributed to the unprecedented building boom in the Republic.

- ▲ The Cable Car System linking Mount Faber with Sentosa. The Urban Renewal Department acts as an agent for the Singapore Cable Car Co (Pte) Ltd.
- ▼ Empress Place Cooked Food Hawker Centre along the bank of the Singapore River built by the Urban Renewal Department for the Ministry of the Environment.



Development of Tourist Attractions

The Department participated in the development of tourist attractions in the Republic such as the Cable Car System linking Mount Faber with Sentosa, the Merlion at the mouth of the Singapore River, and the Surrender Chamber at City Hall. It also assisted in the planning and development of Sentosa into a tourist resort.

Planning and Urban Design

Besides active implementation, the Department also evolved basic designs, land-use and planned layouts of strategic areas in the Central Area and Orchard Road to meet the dynamic development situation in a rational and comprehensive manner.

The Year's Operation

Marina Centre Project

The Marina Centre Concept was conceived by the Urban Renewal Department following detailed studies into the redevelopment of the Golden Shoe area.

The development of a Marina Centre off Telok Ayer Basin will be by means of a bold and ambitious reclamation scheme which will not only enable the construction of a new coastal expressway to skirt the intensive developments in Shenton Way and Collyer Quay, but also provide sufficient land for the development of parks, and recreational, entertainment and commercial facilities as well as housing. The scheme also provides for an impressive and beautiful Marina Bay for yachting and other aquatic activities.

The development of the Marina Centre will not only help improve traffic flow in the Golden Shoe area but also enable night life to be injected into this strategic portion of the city centre.

The new Urban Redevelopment Authority has been appointed by Government as overall coordinator of the Marina Centre project including comprehensive developments on this phase of the reclaimed land.

The S\$88.78 million contract for the reclamation has been awarded and work will commence in April 1974. The Housing and Development Board is acting as agent to URA in this reclamation which forms the fifth and final phase of the East Coast Reclamation.

Public Housing under Urban Renewal Programme

During the 15-month period several public housing projects at Chin Swee Road/Havelock Road, Pearl's Hill Terrace, Sago Lane/Banda Street, Victoria Street and North Bridge Road were completed. These projects provided 2,261 units of flats and 223 shops for relocating families affected by clearance in the Central Area.

The Chin Swee Road/Havelock Road Redevelopment in Precinct South One incorporates a unique pedestrian network separating pedestrian movement from vehicular traffic. This provides uninterrupted, safe and exciting walkways for pedestrians through shops, department stores, offices, and landscaped areas from Chin Swee Road/Havelock Road to People's Park and thence to the heart of Chinatown.

Other public housing projects in advanced stages of construction included redevelopments at Park Road, French Road, Petain Road, North Bridge Road, Ellenborough Market and New Bridge Road/Cantonment Road. When completed in 1974, they will provide another 2,517 units of flats and shops as well as other social amenities.

Plans have also been drawn up to provide more public housing in the Central Area, particularly in the heavily squattered areas. Actions on land acquisition, clearance and resettlement were initiated during the period to pave the way for redevelopment.

Middle Income Housing

To cater for middle income groups who are not eligible for public housing and yet cannot afford high prices of houses built by private entrepreneurs, the Urban Redevelopment Authority and the Housing and Development Board will undertake a joint venture to build condominium housing for sale to middle income groups. In addition, sites have been earmarked under the Fourth Sale of Sites in 1974 for private developers to undertake the construction of condominium housing for sale to middle income groups.

Provision of Resettlement Facilities under Urban Renewal Programme

Greater emphasis will be given to the development of shops, light industries, warehouses,

Landscaped pedestrian mall at People's Park.



wholesale markets, motor workshops and other business premises for resettlement cases who have to make way for redevelopment. Alternative resettlement facilities will take various forms from temporary transit shops to centralized motor workshops, terrace factories and intensive Resettlement Shopping Centres.

Provision of Social Amenities

(a) Hawker Centres

The Department also undertook the construction of hawker centres on behalf of the Ministry of the Environment.

Hawker centres completed during the period were the Telok Ayer Food Centre, the Empress Place Hawker Centre and the North Bridge Road Market. The Telok Ayer Food Centre is a very popular lunch-time eating place among office workers in Shenton Way and Robinson Road. The Empress Place Hawker Centre on the bank of the Singapore River serves office workers in Fullerton Building, Raffles Place and Empress Place. The North Bridge Road Market was built for relocation of hawkers in Precinct North One.

Another three hawker centres were under construction by March 1974 at Beach Road, Jalan Besar and Boat Quay.

(b) Kampong Glam Community Centre

The Department also completed the construction of Kampong Glam Community Centre at Victoria Street/Rochore Road. The new three-storey air-conditioned community centre was declared open by Prime Minister Lee Kuan Yew on 24th November 1973.

(c) Landscaping

Several landscaping projects were undertaken by the Department during the period in line with Government's policy of keeping Singapore clean and green and improving the living and working environment.

To complement the intensive development projects in People's Park, the former Park Road was transformed into a landscaped pedestrian mall. Amidst the trees and hedges in the brick-paved pedestrian mall are fountains, a clock tower, and street furniture. Pedestrian movement in People's Park area is, therefore, segregated from vehicular traffic.

Along busy Robinson Road opposite the Singapore Airlines Building an attractive city park was built to provide a tranquil resting place for office workers.

Extensive landscaping at the Cable Car Landing Plaza on Sentosa was carried out.

More green areas will be provided in the city with the completion of Phase V Reclamation.

Agency Projects

The Urban Renewal Department undertook several agency projects on behalf of other Statutory Authorities. The work covers planning, architectural design, landscaping, graphics and physical construction. Agency projects included the Cable Car System, the Maritime Services Building, and PSA Container Port Terminal.

The Department acted as agent to Sentosa Development Corporation in developing Sentosa into a major tourist resort. One of the attractions on the island will be the Coralarium, a complex which features decorative displays of corals and shells, live corals and an 18.3-metre (60-foot) Coralon tower. Carlton Hill Cable Car Landing Plaza was extensively landscaped and an existing building was converted into an Information Centre.

The Department assisted the Singapore Tourist Promotion Board in the reconstruction of the Surrender Chamber at City Hall. The Chamber re-enacts with life-like wax figures the scene of the Japanese Surrender in 1945.

Victoria Street/Rochore Road Redevelopment in the Central Area. The flats in the new building will be used mainly for resettling people affected by the next phase of development.



RESETTLEMENT

The Resettlement Department is responsible for the clearance of all State lands required for public development. Sites cleared of squatter encumbrance are released to the requesting authorities for public housing, urban renewal, industrial expansion, port facilities, airport development, roads, reservoirs and other public works. The Department also undertakes exhumation of graves from cemetery lands earmarked for public development.

During the period under review the Resettlement Department embarked on an ambitious clearance programme to meet the increasing demand for development sites.

By 31st March 1974 the Department cleared a record total of 12,067 squatters. Of this total 10,691 squatters were cleared by 31st December 1973, representing an increase of more than 150% over the number of squatters cleared in 1972. During the 15-month period ex-gratia payment amounting to S\$18.5 million was made to bona fide squatters.

The 12,067 squatters cleared comprised 10,281 residential households, 362 commercial establishments, 270 farmers, 94 industries, and 1,060 squatters of other categories. 3,254 squatter structures of all kinds were demolished, and in their stead 60 cleared sites made available for various developments.

At the beginning of 1973 317 sites were listed for clearance. During the 15-month period requests for clearance of another 57 sites were received from development authorities. However, 18 sites on the list were abandoned after feasibility studies, bringing the number of outstanding sites under clearance as at 31st March 1974 to 296.

15 sites earmarked for redevelopment in the Central Area were under vigorous clearance. These sites would be redeveloped into modern residential-cum-business complexes for re-locating premises affected by future urban redevelopment projects in the Central Area.

Under the new Resettlement Policy introduced in July 1971 a squatter family need only pay S\$100 as initial deposit to purchase an HDB flat. A record 3,934 squatter families representing 52% of the total number of families rehoused in HDB flats in 1973/74 opted for the purchase of HDB flats.

Cut-off Date for Resettlement Benefits

On 14th February 1973 the Board introduced a new rule on the cut-off date for eligibility of resettlement benefits to prevent unauthorised persons from trespassing on clearance sites to claim resettlement benefits. Under this rule families or individuals affected by clearance qualify for resettlement benefits, provided:

- (a) they are genuinely in physical occupation of private land prior to the date of Gazette Notification of land acquisition, and
- (b) they remain in physical occupation of land belonging to the State or Statutory Authorities before the first day of census survey by the Resettlement Department.

Exhumation of Graves

In line with Government's policy on the closure of all cemeteries within City Limits for further burials and the call for more cremations to conserve land, the Department shelved its original plan for the reburial of some 4,000 exhumed remains from the Heap Guan San Burial Ground which had to make way for the development of Telok Blangah New Town. However, with the agreement of the cemetery management some of the exhumed remains were subsequently cremated at Mount Vernon Crematoria and the remaining re-interred at Chua Chu Kang Cemetery.

Review of Major Clearance Schemes

Toa Payoh New Town

Clearance of the low-lying area at Potong Pasir was effected to provide an additional 23.1 hectares (57 acres) of land for the extension of Toa Payoh New Town. Of this figure, a 6.9-hectare (17-acre) site fronting Braddell Road was leased to Singapore Bus Service Ltd for setting up a centralised workshop for the maintenance of its fleet of 1,800 buses. The remaining 16.2 hectares (40 acres) will be used for building 1,500 units of flats.

The 590 squatters affected by this clearance scheme comprised 460 residential families, 79 farmers, 17 shopkeepers and 34 under various categories. Most of them were rehoused in Toa Payoh, Kallang Basin and Balestier Estates in the second half of 1973.

- ▲ New flats at Geylang Square. Squatters in the foreground will be rehoused to make way for redevelopment.
- ▼ A cooked food hawker centre at Old Kallang Airport Estate.



Kallang Basin Estate

Two large heavily squattered areas in Kallang Basin had to be cleared for development. One area was Kampong Kuchai, a congested kampong built on stilts in Lorong 3, Geylang, with 403 squatters. The other area located between Lorong 23, Geylang and Aljunied Road involved 605 squatters.

By March 1974 a total of 943 squatter families from these two sites was rehoused in alternative accommodation in Kallang Basin and Balestier Estates.

Reclamation and piling work have already commenced on these cleared sites for the construction of more than 3,000 housing units.

Ang Mo Kio New Town

To facilitate the first phase of the development of 2,600 housing units in Ang Mo Kio New Town, 208 squatter families occupying 13.7 hectares (34 acres) of land bounded by Lorong Kinchir/Lorong Dirus/Lorong Kukri were cleared. This comprised 176 residential families, 28 farmers and four shopkeepers who were rehoused in the nearby Sin Ming Industrial Estate.

Another 220 squatters will be rehoused in this estate in the second quarter of 1974 to make way for the construction of another 3,100 housing units and an arterial road which will eventually link Upper Thomson Road with Lorong Chuan and serve residents of the New Town.

Perseverance Estate

Perseverance Estate bounded by Paya Lebar Road/Changi Road/Jalan Eunos/Airport Road is the largest remaining slum area in Singapore.

In the second half of 1973 a census survey of the southern part of Perseverance Estate indicated that the area was encumbered with 8,672 squatters comprising 7,993 residential families, eight farmers, 350 shops, 129 cottage industries and 192 other establishments.

Towards November 1973 clearance commenced on 20.2 hectares (50 acres) of land fronting Jalan Eunos for the development of 3,000 housing units. This involved clearance of 1,229 families, 33 shops, 10 industries and six other establishments. By March 1974 455 families had moved out of the slum area. The remaining families will be cleared when alterna-

tive accommodation in Marine Parade and Kallang Basin Estates is ready for occupation in the second quarter of 1974.

Changi Village

Following the clearance of three sites at Changi Creek at the end of 1972 for the development of recreational facilities at the Changi Beach, a plan was drawn to redevelop Changi Village into a small housing estate incorporating an esplanade, a landscaped park and a fresh water lake at Changi Creek. Clearance of the village was undertaken in two phases in conjunction with the redevelopment scheme.

The first phase of clearance involving 82 shops, 413 residential families, a market and a school within the area bounded by Upper Changi Road/Changi Creek/Telok Paku Road commenced in April 1973. All the squatters affected were rehoused in alternative accommodation in Chai Chee Estate by March 1974. Site preparation is in progress for the construction of 50 shops and 100 units of flats for the second phase clearance.

Farrer Road Estate Extension

To make way for the extension of Farrer Road Estate an adjoining 10.5-hectare (26-acre) site at Farrer Road/King's Road was cleared. The 277 squatters and seven shops affected by clearance were rehoused in Farrer Road and Buona Vista Estates.

Ghim Moh Village

At the beginning of 1973 591 residents, nine farmers and five shops at Ghim Moh Village, off Holland Road, had to be cleared to make way for the development of Ghim Moh Estate which will have 4,000 housing units.

The squatter families were rehoused in the adjoining Buona Vista Estate by February 1974.

Telok Blangah New Town

Clearance in Telok Blangah New Town was almost completed by March 1974 with the resettlement of 478 families from the remaining Neighbourhoods II and III sites at Radin Mas and Kampong Heap Guan San respectively. About 40 remaining cases will be cleared in mid 1974.

Four-room point block flats in Henderson Hill Estate. The foreground shows the garden along Tiong Bahru Road.



Woodlands New Town

Active clearance on 72.8 hectares (180 acres) of land at Marsiling Road required for the development of Woodlands New Town commenced in the fourth quarter of 1973. 499 squatters comprising 424 families, 33 shops, 14 farmers and 28 other categories were rehoused by March 1974 in the newly completed flats at Woodlands New Town. The site is scheduled for complete clearance by June 1974 for the development of 2,100 housing units.

Urban Renewal Areas

Intensive clearance was under way in urban renewal areas, particularly those with dilapidated old shophouses in Tanjong Pagar, Kreta Ayer, Hong Lim and Havelock areas in the precincts south of the Singapore River; and in Rochore, Stamford, Kampong Kapor and Bras Basah areas in the northern precincts.

These overcrowded slum areas have been earmarked for the immediate development of shopping complexes and public housing for relocating the large number of shopkeepers and residential families affected by urban redevelopment within the Central Area.

In these areas a total of 4,511 cases comprising 3,649 residential families, 417 shops, 89 industries and 356 other categories were scheduled for clearance. The momentum made in the clearance during the period resulted in the displacement of 3,601 families, 69 shops, 38 industries and 191 other categories from these slum areas by the end of March 1974. The remaining cases, mostly shops and industries, would be offered alternative accommodation or cash grants and are expected to be resettled by mid 1974.

Road Projects

During the period under review most of the lands required for major road improvement projects were completely cleared of squatter encumbrance. Road projects included the widening of Upper Thomson Road at 6¼ m.s., the extension of Lower Delta Road to Kampong Bahru, the Pan Island Expressway from Whitley Road to Adam Road, the widening of Sims Avenue, the extension of Zion Road, and the widening of Telok Blangah Road.

In September 1973 clearance was initiated on a few rows of shophouses at the junction of Adam Road/Dunearn Road/Bukit Timah Road for the construction of twin flyovers across Adam Road. 80 residents and 23 shops affected by this project are expected to be cleared by mid 1974.

In the development of Bedok New Town a New Changi Road will be built to replace the existing winding Upper Changi Road. 36 squatters affected by the scheme were cleared by the end of 1973.

Jurong Town Corporation Projects

242.8 hectares (600 acres) of land required by the Jurong Town Corporation for the expansion of industrial estates and the development of public housing, parks and recreational facilities were cleared of squatter encumbrance. A total of 476 squatter families, including 54 farmers, was resettled from the various development sites. Squatter-free lands released to JTC included 8.1 hectares (20 acres) at Kampong Java Teban for the development of a housing estate; 8.1 hectares (20 acres) at Jalan Bahru Utara for parks, a science centre and recreational facilities; 80.8 hectares (200 acres) at Upper Jurong Road for heavy marine engineering and other industrial projects; and 40.4 hectares (100 acres) at Sungei Kadut for a woodworking centre.

Airport Extension Projects

Preparatory work pertaining to clearance of 1,278 squatter families on some 242.8 hectares (600 acres) of land on the fringe of the Paya Lebar International Airport was completed. The displaced families will be relocated to a new housing estate at Tampines Road 6¾ m.s. in mid 1974.

During the 15-month period lands required for the construction of the northern approach lights, a vector-control office and an engine overhaul workshop were cleared of squatters.

Public Utilities Board Project

A census survey was conducted on a 30.5-metre (100-foot) zone surrounding the Kranji Reservoir which will have a sterilised zone to ensure adequate water pollution control for the reservoir. Results of the census survey showed

that 487 squatters will be affected by this project to be undertaken by the Public Utilities Board.

Engineering and Survey

The Survey Teams carried out demarcation, re-pegging and subdivision of lots, siting of self-built houses, and verification of areas occupied by farmers. During the second half of 1973 the Survey Teams supervised the development of 93 farm lots in the 58.2-hectare (144-acre) Resettlement Area 116, Phase II, at Lim Chu Kang Road 18 m.s. for relocating farmers to be cleared

from the nearby area to make way for Ministry of Defence projects. The total cost incurred in earthworks, turfing, road construction, water supply and drainage systems amounted to S\$267,169.

Besides survey work in Resettlement Areas, the Survey Teams also conducted 44 surveys on ponds and land holdings of farmers for assessment of compensation, 39 sitings of self-built houses in Resettlement Areas, and five surveys to establish lot boundaries.

Covent Garden Redevelopment.



CLEARANCE & COMPENSATION STATISTICS

Year	Moved to Resettlement Areas	Rehoused in Board Accommodation	Found Own Accommodation	Total	Compensation Paid
1960	132	45	207	384	S\$ 0.3M
1961	57	77	160	294	0.3M
1962	198	342	277	817	0.9M
1963	307	589	285	1,181	1.7M
1964	150	2,584	909	3,643	3.2M
1965	182	4,570	1,758	6,510	5.5M
1966	266	4,158	1,594	6,018	5.1M
1967	90	4,002	1,892	5,984	4.1M
1968	123	4,063	1,677	5,863	3.1M
1969	416	3,924	2,179	6,519	4.8M
1970	277	3,922	1,926	6,125	4.1M
1971	145	2,263	1,474	3,882	5.5M
1972	235	2,668	1,157	4,060	9.2M
1973/74	91	8,008	3,968	12,067	18.5M
Total	2,669	41,215	19,463	63,347	S \$66.3M

SITES CLEARED IN 1973/74

No.	Locality	Date Cleared
1	Changi Creek—Area "A"	21.1.73
2	Proposed Penjuru Reservoir—Kranji/Pandan Scheme	22.1.73
3	Changi Creek—Area "B"	26.1.73
4	Kallang Basin Reclamation (East)—Phase IIA	15.3.73
5	Rural Abattoir Site at Kim Chuan Road	20.3.73
6	MacPherson South—Stage 1B	31.3.73
7	Toa Payoh—Field Area 25	31.3.73
8	Changi Creek—Area "D"	6.4.73
9	Hill 73—Jurong Town	30.4.73
10	Making Up of Lorong Ong Lye (Part)	30.4.73
11	Port of Singapore Authority Landscaping Site at Telok Blangah	30.4.73
12	Toa Payoh/Braddell Road—Area 29	10.5.73
13	Proposed 54"-Diameter Pipeline for Kranji/Pandan Scheme	19.5.73
14	Kampong Tiong Bahru Fire Site—Phase 7 and Supplementary	31.5.73
15	Public Utilities Board Electricity Sub-Station Site in Toa Payoh	31.5.73
16	Proposed Dam for Kranji Reservoir	13.6.73
17	Proposed 36"-Diameter Pipeline from Jurong Intake to Sungei Tengah	16.6.73
18	Hill 70A—Jurong Town	30.6.73
19	Kampong Tiong Bahru Fire Site—Phase 8	5.7.73
20	East Coast Reclamation Scheme—Contract 2 (Sector E2)	18.7.73
21	Hill 65—Jurong Town	31.7.73
22	Hill 70B—Jurong Town	31.7.73
23	Proposed Site for Septic Tank at Jalan Loyang Besar	31.7.73
24	Garden City Project at Jalan Besar	31.7.73
25	Chestnut Avenue Water Treatment Works	26.8.73
26	Telok Blangah New Town—Phase 1	30.8.73
27	State Reserve at Jalan Sungei Poyan off Chua Chu Kang Rd.	24.9.73
28	Telok Blangah New Town—Neighbourhood II Stage II	26.9.73
29	Proposed Vector Control Office at Kim Chuan Road	29.9.73
30	Toa Payoh—Area East of Lorong 7	30.9.73
31	Hill 71—Jurong Town	30.9.73
32	Airport Extension Scheme—Construction of Northern Approach Light	30.9.73
33	New Tampines Estate—Contract 3	16.10.73
34	HDB Brickworks at Jurong	20.10.73
35	Telok Blangah New Town—Stage VB	27.10.73
36	Paya Lebar Road Widening—Section "A"	31.10.73
37	Proposed Community Centre on State Land at Upper Serangoon Road	17.11.73
38	Proposed Pipelines for Upper Pierce Reservoir Scheme	25.11.73

No.	Locality	Date Cleared
39	Kallang Basin Reclamation (East)—Phase XI	10.12.73
40	Telok Blangah New Town—Stage III (Supplementary)	18.12.73
41	Widening of Telok Blangah Road (from Henderson Road to Alexandra Road)	19.12.73
42	Proposed site for Office Complex at Newton Road	23.12.73
43	Kampong Tiong Bahru Fire Site—Phase IVB	30.12.73
44	Sungei Pandan Reclamation Scheme	30.12.73
45	Kampong Tiong Bahru Fire Site—Phase X	31.12.73
46	Proposed Pipelines for Upper Pierce Reservoir Scheme (Supplementary)	7.1.74
47	East Coast Reclamation Scheme—Contract 2 (Sector F)	12.1.74
48	Telok Blangah New Town—Stage III (Supplementary)	24.1.74
49	Sungei Kadut—Stage I (Part I)	30.1.74
50	Widening of Lavender Street	30.1.74
51	School Site at Henry Park	13.2.74
52	Woodlands New Town—Earth Filling Site	25.2.74
53	Holland Road Widening (Supplementary)	27.2.74
54	Pulau Tekong—Camp Site II	1.3.74
55	Kampong Tiong Bahru Fire Site—Phase IVB	1.3.74
56	Jalan Bukit Merah Extension (Supplementary)	1.3.74
57	Proposed Public Utilities Board Headquarters at Somerset Road	2.3.74
58	Training Area at Pulau Tekong	4.3.74
59	East Coast Reclamation Scheme—Contract 2 (Sector 2B)	5.3.74
60	Areas for Access Roads, Sewers and other Facilitating Reclamation Work—Kallang Basin—Section 'F'	9.3.74

CLEARANCE STATISTICS FOR 1973/74

A. General Commitment:

1.	Number of sites required to be cleared as at 1.1.73	...	...	...	...	317
2.	Number of new requests received in 1973/74	...	...	...	...	57
3.	Number of sites withdrawn or dropped	...	...	...	...	18
4.	Number of sites cleared in 1973/74	...	...	...	...	60
5.	Number of sites under clearance as at 31.3.74	...	...	...	...	296
6.	Total number of structures demolished in 1973/74	...	...	...	...	3,254

B. Performance during 1973/74:

FARMERS	{	Allocated land	...	...	...	...	57	
		Given free flats	...	...	...	...	190	
		Found Own Accommodation with Cash Grant	...	...	...	23	270	
FAMILIES	{	Purchased flats	...	...	...	...	3,934	
		Allocated flats	...	...	...	...	3,585	
		Allocated house lots/terrace houses	...	...	...	...	25	
		Found Own Accommodation	...	...	...	2,737	10,281	
SHOPS	{	Allocated shops	...	...	...	...	266	
		Found Own Accommodation with Cash Grant	...	...	...	...	7	
		Found Own Accommodation without Cash Grant	...	...	...	89	362	
INDUSTRIES	{	Allocated accommodation	...	...	...	...	42	
		Found Own Accommodation with Cash Grant	...	...	...	...	—
		Found Own Accommodation without Cash Grant	...	...	...	52	94	
OTHERS	{	Encroachment	...	...	...	...	318	
		Office/Stall/Association/etc.	...	...	...	...	742	1,060
Total							...	12,067

C. Total Amount of Compensation paid in 1973/74:

S \$18,463,258.70

The colourful Chingay procession passing through Toa Payoh during Chinese New Year. ▲
One of the children's play equipment at Toa Payoh Town Garden. ▼



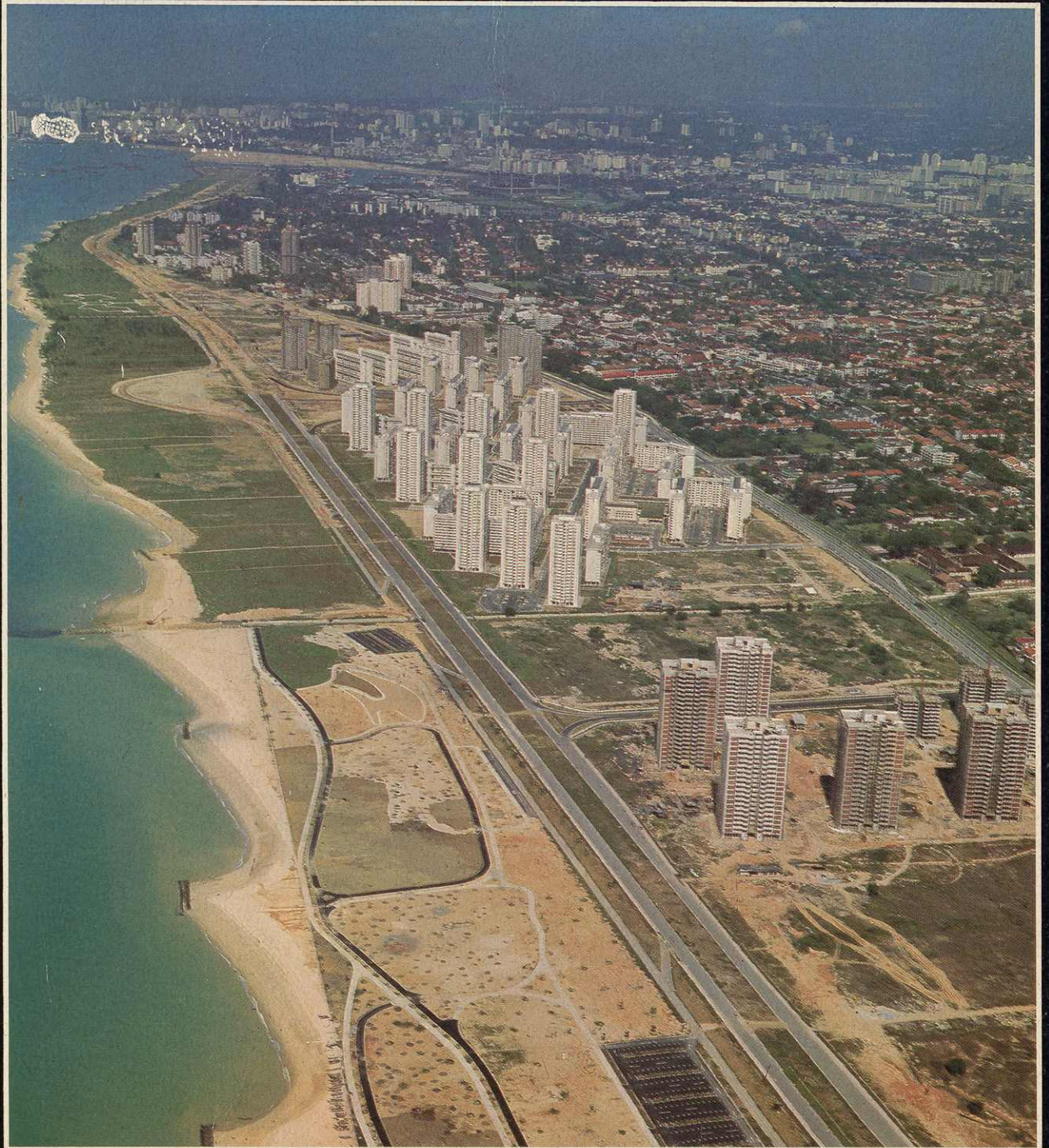
The pedestrian mall at Toa Payoh Town Centre. In the background are an emporium and two towering point blocks of four-room flats.



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ANNUAL REPORT 74/75

HOUSING &
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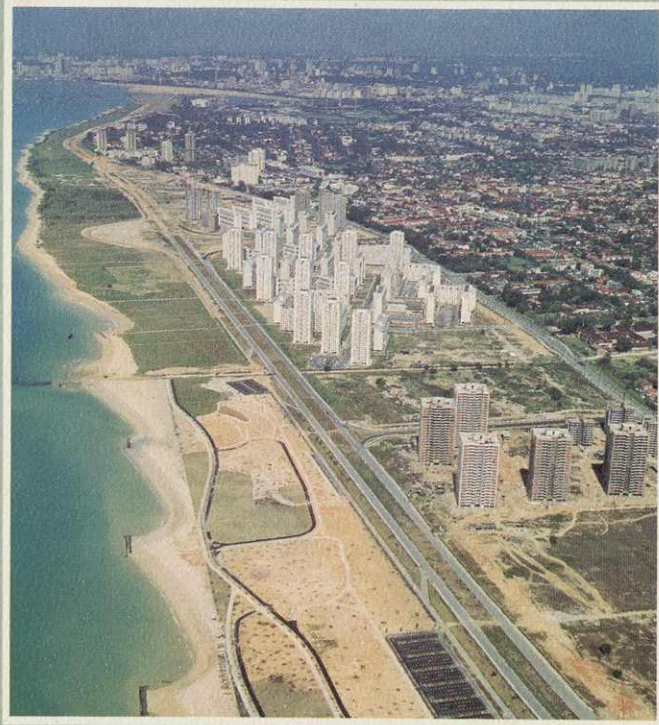




Housing & Development Board
LIBRARY
National Development Building
Maxwell Road,
Singapore 2.



A bird's eyeview of the 4½-hectare (11½-acre) Toa Payoh Town Garden.



Singapore's East Coast Reclamation Scheme, a major development providing new residential, commercial, transport, and recreational facilities. The East Coast Reclamation is the largest agency project being undertaken by the Housing and Development Board for the Government.

The first three phases of the reclamation have been completed, yielding 525 hectares (or nearly 1,300 acres) of land. Phases IV and V are in progress. When the whole East Coast Reclamation Scheme is completed by 1978 the total land area reclaimed stretching from Nicoll Drive at Changi to Prince Edward Road at Telok Ayer Basin will be 1,162 hectares (2,870 acres).

Marine Parade Estate, a public housing estate for 40,000 people, has been built on a parcel of the reclaimed land. Point block flats nearing completion next to Marine Parade Estate constitute housing for civil servants, an agency project undertaken by the Board.

ANNUAL REPORT

74/75

1ST APRIL 74-31ST MARCH 75

**HOUSING & DEVELOPMENT BOARD
REPUBLIC OF SINGAPORE**



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CHAIRMAN'S REVIEW

Financial Year 1974/75

This Annual Report of the Housing & Development Board covers the period 1st April 1974 to 31st March 1975.

Implementation of the Building Programme

During the 12-month period under review the Board completed a record 27,128 units of public housing. Under the Third Five-Year Building Programme (1971—75) the Board built a total of 91,949 units of flats and shops by 31st March 75. Based on current projection the Board should be able to exceed the target of 113,000 units by the end of the Third Five-Year Building Programme in December 75.

The number of applications on the waiting list, for the first time in eight years, declined from 105,851 a year ago to 98,876 at the end of March 75. The shortening of the waiting list can be attributed to the increase by nearly 20% in the number of housing units completed in the current financial year over the previous 12-month period and the large numbers who applied for flats during the economic boom in the last few years, leaving fewer eligible applicants applying for Board flats in 1974/75.

It is envisaged that this trend would continue as the number of flats completed increases yearly to reduce the backlog of applications whilst the number of applications decreases as more and more citizens would have been accommodated in public housing. At the end of the year under review slightly more than one million people or 46.8% of the population were living in housing estates under the management of the Board.

Constraints on the Building Programme

SUPPLY OF BUILDING MATERIALS AND BUILDING COSTS

The worst effects of the oil crisis tapered off beginning from the second quarter

of 1974 and the prices of building materials as a whole were stable during the period under review. This, coupled with the slowing down in the building industry in the private sector, accounted for a minimal rise of about five per cent in building costs for public housing due largely to the wage increase awarded by the National Wages Council from 1st July 74.

SHORTAGE OF PROFESSIONAL TECHNICAL PERSONNEL

Many appointments in the Professional Technical grades remain unfilled despite intensive recruitment exercises mounted to attract suitably qualified persons within and outside the Republic to join the service of the Board. This continued shortage imposes a greater work load on the existing staff especially in view of the accelerated building programme. It is hoped that the situation will improve when more Architects and Engineers of all categories graduate from the University of Singapore, supplemented by the Architects In-Training Scheme introduced by the Ministry of National Development and co-sponsored by the Housing and Development Board, the Urban Redevelopment Authority and the Public Works Department.

SHORTAGE OF BUILDING WORKERS

The scarcity of workers, especially skilled workers, continued throughout the year and no quick solution appears to be in sight as the apprentices require several years of actual site experience to become skilled workers. Throughout the last five years the volume of construction works in the private and public sectors increased manifold but there was no corresponding increase in the supply of skilled workers. The foreign labourers recruited by the contractors for public housing projects were mainly unskilled. With this infusion of large numbers of unskilled workers into the building sites to meet the demand of an accelerated building programme it has been extremely difficult for the technical staff to obtain a completely satisfactory standard of workmanship in the finishes. However, careful measures undertaken by the

Board's technical staff continue to ensure the structural soundness of the buildings.

In an attempt to increase the supply of skilled workmen the Board, in conjunction with the Ministry of Education, introduced an apprenticeship scheme to train primary school leavers to become skilled construction workers. However, the number of applicants who enrolled for such courses has so far been disappointing, as many young Singaporeans are not keen to be trained as skilled construction workers under the prevailing conditions of work.

ACCELERATION OF BUILDING PROGRAMME

At the end of 1974 the Government in order to accelerate economic activities in the Republic directed that the public housing programme be considerably expanded. In response, the Board is mounting an unprecedented building programme to proceed with the construction of between 70,000 and 80,000 units of public housing in the following two financial years commencing 1st April 75. The acceleration of the building programme, together with the various agency projects undertaken such as the East Coast Reclamation Scheme and Middle Income Housing and the Board's maintenance and redecoration contracts covering 30,000 to 40,000 units of properties per annum, imposes a very heavy work load on the Board. It is estimated that the total volume of building works to be carried out will be in the region of S\$700 million in the next financial year, rising to almost S\$850 million in the financial year 1976/77.

SECURING MORE LAND FOR DEVELOPMENT

To meet the demand for land required for the Board's enormous building programme, the Board acquired 837 hectares (2,069 acres) of land during the 12-month period under review. With the vigorous programme of forward planning and land acquisition undertaken by the Board, sufficient land has been acquired for the development of the Fourth Five-Year Building Programme from 1976 to 1980.

New Methods of Construction to Expand the Capacity of the Building Industry

The Board has introduced three new systems of construction to expand the capacity of the building industry.

INDUSTRIALISED METHOD OF CONSTRUCTION

The performance of the Industrialised Building System (Pte) Ltd (IBS), which was awarded a contract to complete 8,820 units of four-room flats at Bedok New Town in the next five years, has proved to be disappointing. On account of the financial problems encountered by IBS which had Danish participation as well as local partners, the company relinquished its contract with the Board in mid February 75. This is a set-back to the Board's second attempt to introduce the industrialised method of construction for public housing. However, on account of the contingency plans prepared in advance and the generous time provided for the IBS project, there would be little or no effect on the building programme as steps are now taken to call for tenders to complete the uncompleted blocks using the traditional method of construction. Furthermore, the Board is unlikely to suffer any financial loss as strict controls were imposed by Management on the release of payments for work done and materials delivered to the work site.

PROGRESSIVE STRENGTH SYSTEM OF CONSTRUCTION

The performance of the contract for the Progressive Strength system of construction has been according to schedule and the project as a whole progressed satisfactorily during the year. It is anticipated that 6,072 units of three-room (Improved) flats under the contract will be completed within the stipulated three-year contract period.

METAL FORMWORK

Of the three systems, the Metal Formwork method of construction has achieved the best results. 1,440 units of five-room flats are expected to be completed earlier than the contracted period. This system has proven that better class finishes can now be achieved without using the normal complement of skilled carpenters and

plasterers. On account of the success of this system, the Board has decided to introduce metal formwork on a larger scale and has approved an order of 14 sets with the supplier of metal formworks so that 3,000 units of flats could be built by this system annually. This number is likely to be increased in future years.

Incentive to Contractors

The merit star scheme introduced in 1973 to retain and encourage reliable contractors to achieve better workmanship has proved to be a success. Under this scheme a good contractor will have better chances of being awarded more contracts by the Board as the evaluation of the tender position takes into account the merit stars to his credit. During the year 22 contractors have been awarded merit stars for their good performance.

Reclamation

The East Coast Reclamation has been progressing well. 458 hectares (1,130 acres) of land were reclaimed under Phases I and II at a total cost of about S\$55 million. By the end of March 75 Phase III involving the reclamation of 67 hectares (165 acres) was almost completed. A total of 407 hectares (1,005 acres) of land had been reclaimed under Phase IV.

Finance

The Board's building programmes are wholly financed by loans from the Government. The interest rates for loans to finance housing for rental and for sale are $7\frac{3}{4}\%$ with a 60-year repayment period and 6% with a 10-year repayment period respectively. During the financial year under review the Board has drawn from the Government loan advances totalling S\$456.8 million.

Capital expenditure on housing including land costs for the period was S\$476 million. The accumulated excess of capital expenditure incurred by the Board over loan advances received amounting to about S\$54 million at 31st March 75 was met by the temporary use of other funds of the Board, such as provision for repairs and renewals and sundry deposits.

Housing Subsidy

For the financial year under review the subsidy by the Government to the Board for revenue expenditure was estimated at S\$26 million, an enormous sum despite the increase in the service and conservancy charges in July 74.

It is most unfortunate that as a result of the oil crisis and the subsequent doubling of the prices of most of the building materials, the increases in the selling prices of the flats were not even sufficient to meet the inflation of the building cost for the six-month period in the last quarter of 1973 and the first quarter of 1974. In 1967/68 the construction cost of a three-room (Improved) flat was between S\$5,000 and S\$6,000 whilst the land and resettlement costs were about S\$2,500 per unit. The selling price of a three-room (Improved) flat then being S\$7,800 in new towns, the subsidy was minimal. Today the construction cost for a three-room (Improved) flat is S\$14,000 and the land and resettlement costs S\$3,000, necessitating a capital subsidy of some S\$5,000 for every unit of three-room (Improved) flat sold at S\$11,800 in the new towns. The almost 200% increase in construction cost in the last eight years is due mainly to inflation but the improved designs and additional finishes of the flats and the better communal amenities provided also add to the costs.

Estates and Lands Management

With slightly more than one million of the population residing in Board estates, the functions of estates management have become highly diversified and complex. Most of these functions are carried out through the 16 Area Offices located at strategic points in the housing estates. During the year the Area Offices participated actively in various campaigns to keep Singapore green and clean and to provide a crime-free and an accident-free environment. These campaigns were undertaken in co-ordination with the relevant Ministries.

The Area Offices deal directly with the residents and also work in close liaison with the Citizens' Consultative Com-

mittees looking into ways and means of improving the living environment of the areas under their management.

During the year the Board expanded the 24-hour Essential Maintenance Service and the Lift Emergency Unit and improved the communication system between Head Office and maintenance crews with the installation of a VHF wireless system in emergency service vans. The result has been a decline in the percentage of justifiable complaints on maintenance and a speedier response to emergency calls of persons trapped in lifts. With these improvements, persons trapped in a malfunctioning lift could be rescued within 15 to 25 minutes after a call has been received and a resident in need of emergency maintenance service after office hours could expect a service call to his flat within half an hour of the call being received.

Resettlement

The Resettlement Department is responsible for the clearance of sites required for development by the public authorities. During the year the demand for clearance of sites continued unabated as the various statutory boards and Ministries accelerated their development programmes. The Department cleared a total of 10,980 cases in 85 different sites involving a total population of about 50,000. Most of the residential cases affected by clearance were accommodated within the Board's housing estates. The industrial cases were relocated in terrace factories in Geylang Bahru, Ponggol, Woodlands and Sin Ming Industrial Estate. During the year the resettlement policy was further reviewed and recommendation was made to the Government to increase the cash grant to shopkeepers so that marginal shop cases could opt for cash grant instead of requesting for alternative shop premises in the Central Area.

Statistics and Research

Surveys for providing feedback information to assist in decision making in the improvement of planning and management of housing estates continued during the year.

The setting up of the Live Register for residents in Board flats and applicants

on the waiting list is almost completed and will soon be put into operation. With this pool of information, the Board will be assisted in its management of housing estates and in the control over applications for flats.

HDB Publications

Our Home, the bi-monthly Board magazine distributed free to the residents, serves as an additional medium of communication between the Board and the residents. Six issues of *Our Home* were published in 1974/75 with the circulation held at 200,000 copies beginning with the January/February 75 issue in view of the rising cost of production.

A revised version of the *Residents' Handbook* was published for distribution from 1st April 75 to provide up-to-date information on Board policies and administrative procedures in estates management and to acquaint the residents with the many services provided by the Board.

In addition to the above, *Public Housing in Singapore: A Multi-Disciplinary Study* will be published in mid 1975. This publication will provide a set of comprehensive documentation of the Board's experience in public housing and related programmes as well as an account of some significant social and economic changes due to the successful public housing programmes in the last decade.

Middle Income Housing

After the formation of the Housing & Urban Development Company (Pte) Ltd by the Board and the Urban Redevelopment Authority to build middle income housing for residents whose family incomes do not exceed S\$4,000 per month, work proceeded immediately with the engineering and piling jobs in Lakeview and Farrer Road Estates.

In March 75 a brochure on middle income housing setting out the terms and conditions of sale, the prices, and the locations and designs of the various flats offered was published.

On 1st April 75 registration would commence for the sale of 1,040 Type 'A' flats, 736 Type 'B' flats, and 36 'Walk-up' flats

at prices ranging between S\$55,000 and S\$100,000 for each flat.

Increase in Home Ownership and Subletting of Flats

During the 12-month period under review the ownership of housing units under the Board's management rose from 63,369 a year ago to 78,225 at the end of March 75 when almost 40% of the residents in the Board's housing estates lived in homes owned by them.

Since the introduction of authorised subletting by small families who have rooms to spare, the Board granted approval to 2,287 cases of subletting for a total of 5,222 subtenants. The subletting not only assists in increasing the income of some of the residents in our housing estates, but also provides comfortable accommodation for families in need of housing at rentals they can afford.

Improvements to Public Housing

Following the Government's policy of progressively improving the standard of housing, the Board has introduced better designs to flats and provided better planning to its housing estates. These amenities have been introduced not only to new estates but also to the older ones. Final touches were given to the first two new towns at Queenstown and Toa Payoh and work proceeded in earnest at Telok Blangah, Woodlands, Bedok, Ayer Rajah and Ang Mo Kio. During the year the Board broke new grounds at Clementi New Town.

To meet the rising expectations of our citizens, the Board builds not only more flats but also larger and better units. At the beginning of the last decade, the average size of the flats built by the Board was 42 s.m. (450 s.f.). Today an average flat is 74 s.m. (800 s.f.). The average number of occupants per flat has also decreased from 6 to 5.5 according to the latest statistics. It is anticipated that at the end of 1975, half the population in Singapore would be living in the Board's housing estates.

Conclusion

The contribution made by the Board to the national economy since its establish-

ment in 1960 is substantial. In its first decade 1960 to 1970 the Board's average capital expenditure (including land) per annum was S\$49 million. This was increased to S\$272 million per annum during the period 1971 to 1974 and for the year ended 31st March 75 capital expenditure exceeded S\$470 million. It is estimated that arising from the operations of the Board, about 21,000 people have been directly employed in the construction, management and maintenance of public housing during the year under review. Many thousands more have been indirectly employed by the work generated by the Board.

With rentals for public housing being kept within 11% to 13% of the family income of the occupants and the price of a three-room flat maintained at about 2 to 2½ times the annual family income of the purchaser, the Board has contributed to improving the standard of life and stabilising the cost of living in the Republic.

The increasing volume of public housing the Board has been called upon to undertake by the Government over the last few years and the further acceleration in the building programme have been a tremendous challenge to the Board. With its present organisational structure, a dedicated management and hardworking staff and the cooperation of all governmental bodies, the Board is poised to discharge its increasing responsibilities.

LEE HEE SENG
CHAIRMAN
HOUSING & DEVELOPMENT
BOARD
31st MARCH 75

Park Road Redevelopment in the Central Area providing residential and commercial facilities. The first, second and third floors of the building form part of the elevated pedestrian network for pedestrian movements between Chin Swee Road/Havelock Road and People's Park.



MEMBERS OF THE BOARD

AS AT 31ST MARCH 75

Chairman **LEE HEE SENG**
Deputy Chairman **M COOMARASWAMY** (UP TO 31ST JANUARY 75)
Members **C A V CHEW**
 MICHAEL FAM
 BAEY LIAN PECK
 CHENG TONG FATT

FROM APRIL 75

Chairman **MICHAEL FAM**
Members **C A V CHEW**
 BAEY LIAN PECK
 CHENG TONG FATT
 C V DEVAN NAIR (FROM 15TH MAY 75)
 ALBERT H K HONG (FROM 15TH MAY 75)

PRINCIPAL OFFICERS

AS AT 31ST MARCH 75

Chief Executive Officer

Teh Cheang Wan B Arch (Sydney), FRIBA, FRAIA, MSIA

FINANCE, ACCOUNTING AND ADMINISTRATION DIVISION

Secretary/Legal Officer

William Chee Tiang Chin BA (Malaya), Barrister-at-Law (Lincoln's Inn)

Secretary (Special Duties)

Lim Koon Poh BA (Malaya)

Chief Financial Officer

R F Scully

Honorary Consultant, Statistics
and Research Department

Prof Stephen H K Yeh AB (San Francisco State College),
AM (New York University),
Ph D (New York University)

ESTATES AND LANDS DIVISION

Manager, Estates and Lands

Tan Tian Boon B Sc (Malaya), FRICS, FIHM

Chief Estates and Lands Officer

Ng Boon Ong FRICS, FIHM

Principal Estates Officer (Estates)

Chong Kim Chang BA (Malaya), ARICS

Principal Estates Officer (Central)

Phang Wong Yew (Ag) FIHM

Principal Estates Officer (Legal)

Mrs Wong Swee Hoon (Ag) LLB (Hons) (Singapore)

BUILDING AND DEVELOPMENT DIVISION

Chief Architect

Liu Thai Ker B Arch (NSW), MCP (Yale),
MSIA, FSIP, RIBA, ARAIA

Senior Principal Architects

Si Hoe Kok Sing B Arch (NZ), RIBA, MSIA

Principal Architects

Victor Chee Teck Chiang B Arch (Melb), FRAIA, RIBA

Mrs Wong Choong Leng (Ag) BA (Melb), RIBA

Robert Tay Siow Hwa (Ag) Dip Arch (Sheffield), RIBA, MSIA

Seet Chay Tuan (Ag) Dip Arch (Hammersmith College, London), RIBA

Heng Fook Seng (Ag) Dip Arch (Birmingham), RIBA

Chief Civil Engineer

Au Eng Kok BE (Tasmania), FICE, FIES

Senior Principal Civil Engineers

Chew Seong Yean MICE, MIES, MASCE

Principal Civil Engineers

Liu Hua An BE (Hons) (Adelaide), DIC, MICE, MIES

Yao Chee Liew BE (Sydney), MIES, MICE, MASCE

Low Siew Aik (Ag) BE (Malaya), MICE, MIES

Tan Kuang Whye (Ag) FRMIT, MICE, MIES, MASCE

Chief Structural Engineer

Tan Tiong Beng F1 Struct E, MIE (M)

Principal Structural Engineers

Chua It Meng M1 Struct E, MIES, MASCE

Ng Suan Chung BE (NSW), MIES, MIE (Aust)

Wong Kwai Wah (Ag) BE (Melb), M Eng Sc (NSW), MIES

Yeo Teck Lee (Ag) FRMIT, MICE, MIES

Senior Principal Contracts Officer

Yeoh Hooi Heng ARICS

Principal Surveyor

Yeoh Joo Pheng B Surv (Queensland), Dip Land Surv (RMIT),
Reg Surveyor (Singapore and Malaysia)

RESETTLEMENT DEPARTMENT

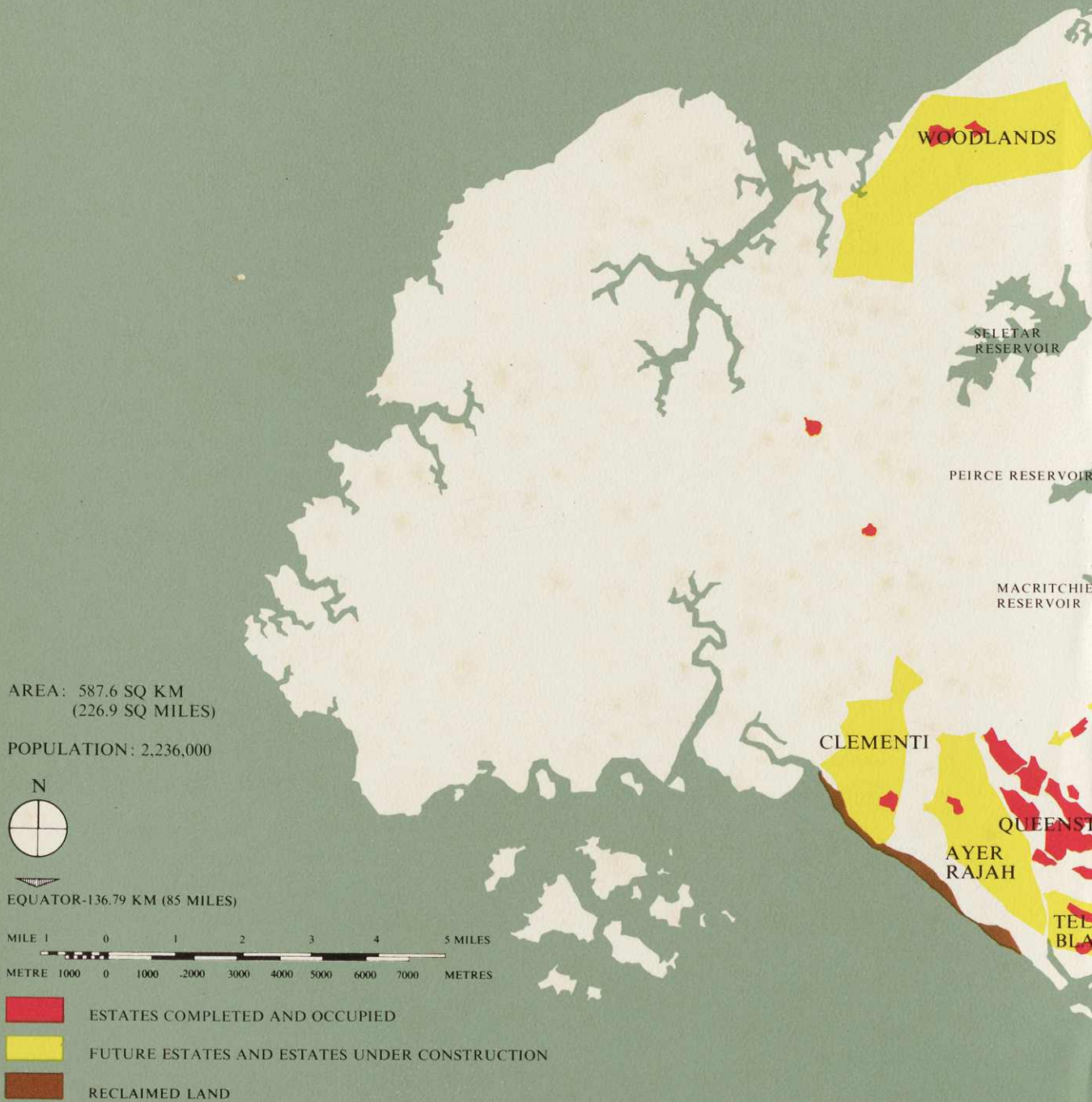
Head, Resettlement Department

Lim Hoon Yong BA (Nanyang)

Principal Resettlement Officer

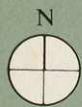
Teo Hee Cher (Ag) ARICS

LOCATION OF PUBLIC HOUSING ESTATES IN SINGAPORE

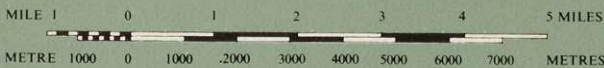


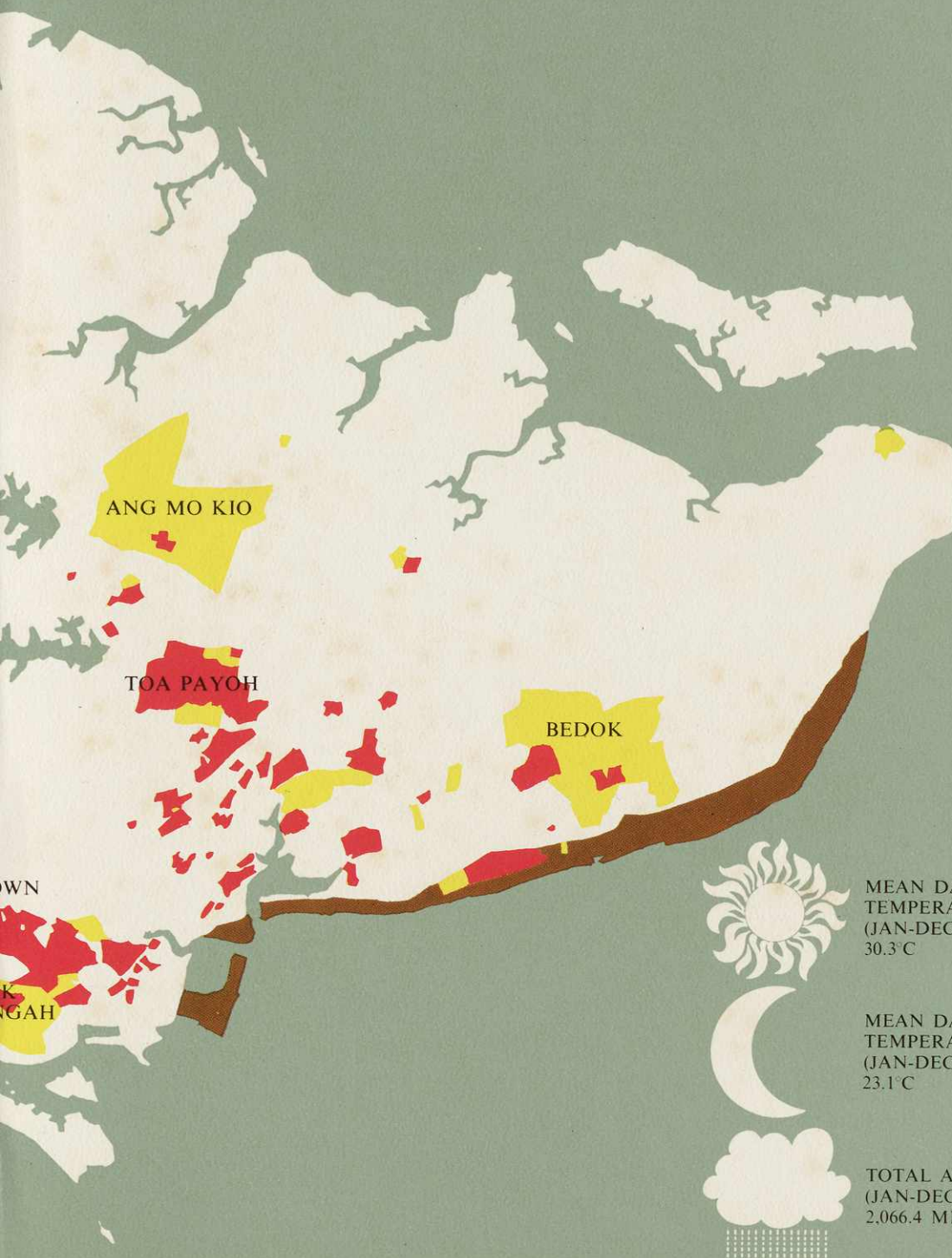
AREA: 587.6 SQ KM
(226.9 SQ MILES)

POPULATION: 2,236,000



EQUATOR-136.79 KM (85 MILES)





ANG MO KIO

TOA PAYOH

BEDOK

TOWN

K
GAH



MEAN DAILY MAXIMUM
TEMPERATURE
(JAN-DEC 1974)
30.3°C

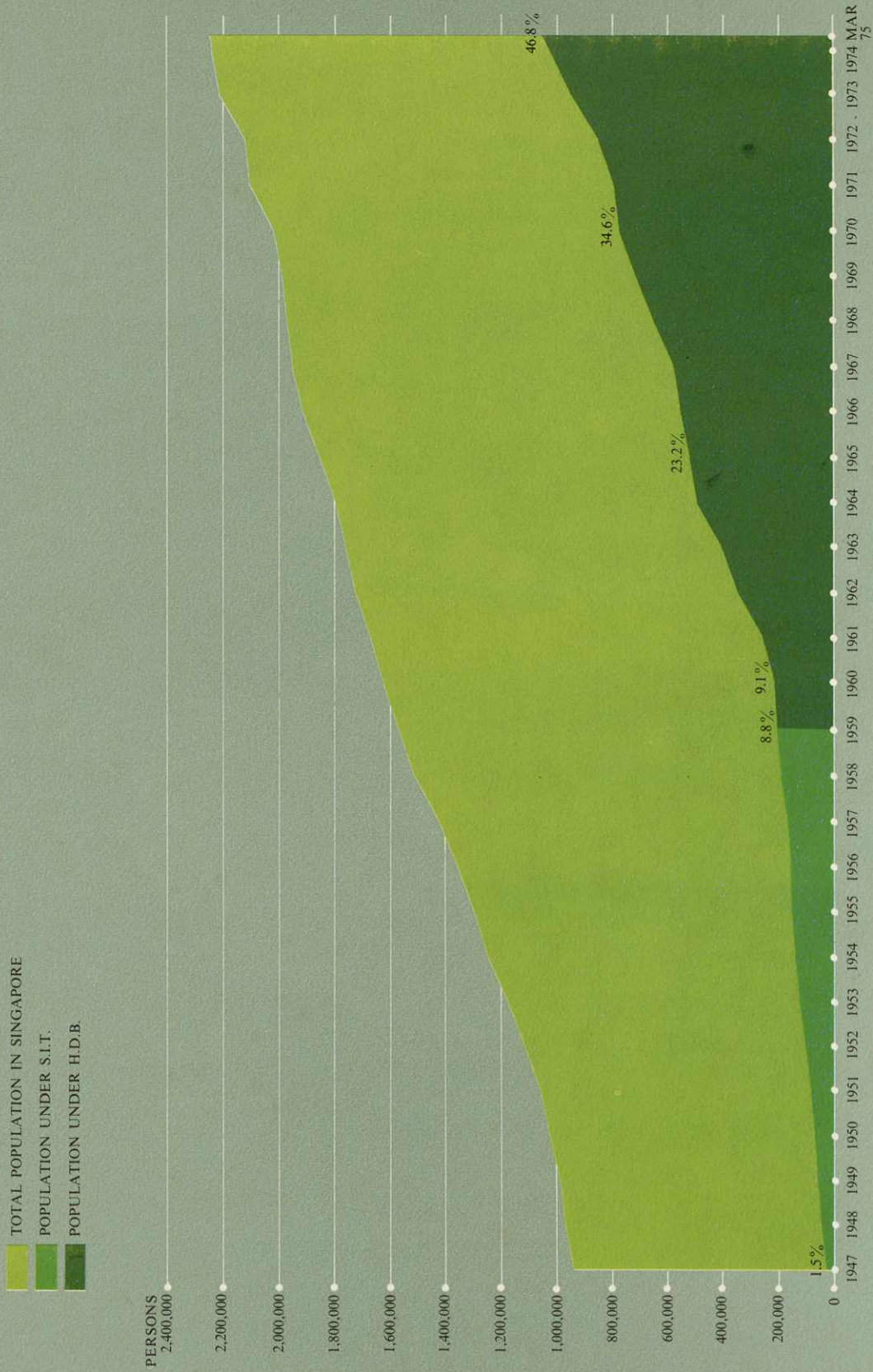


MEAN DAILY MINIMUM
TEMPERATURE
(JAN-DEC 1974)
23.1°C

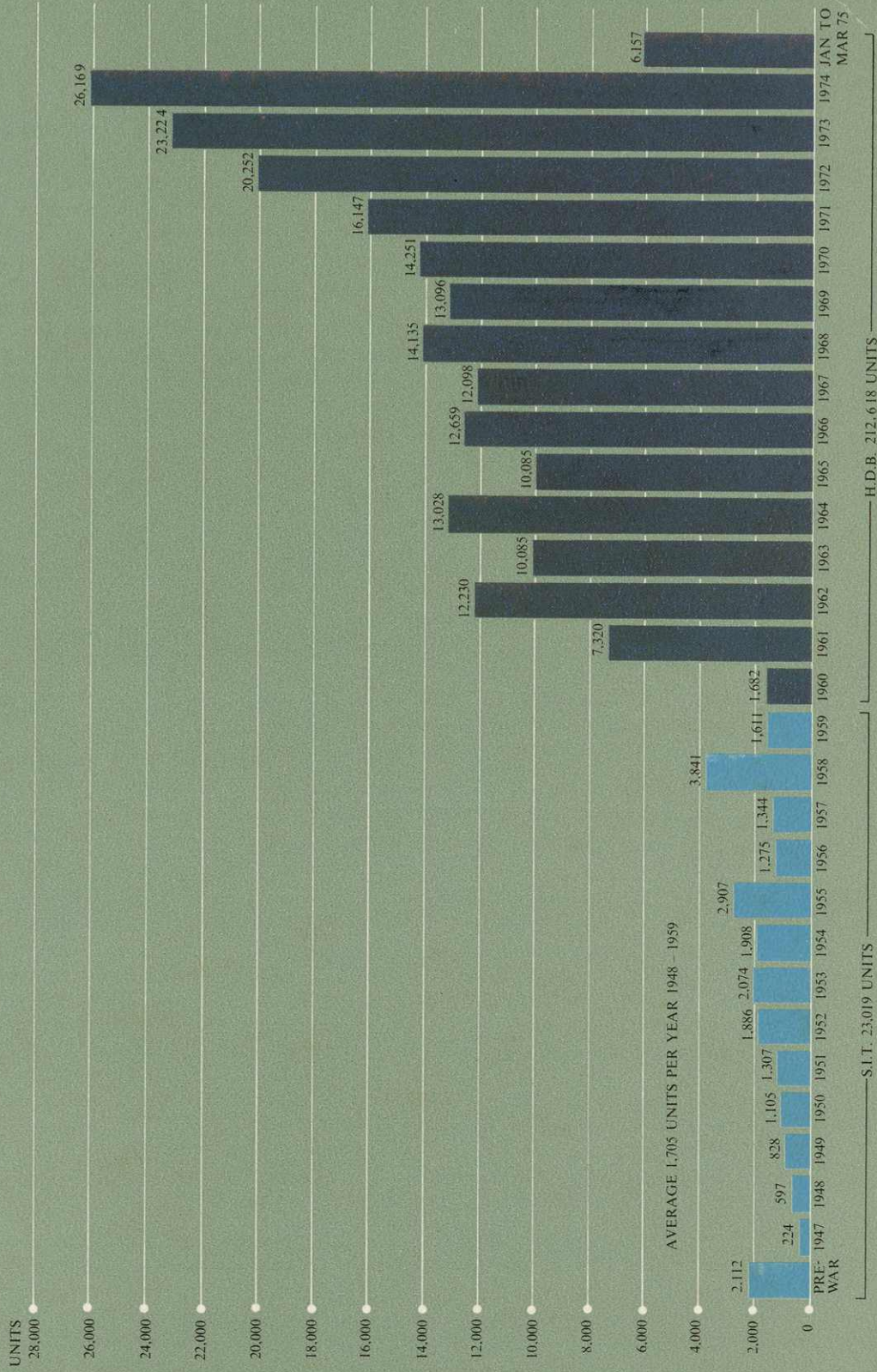


TOTAL ANNUAL RAINFALL
(JAN-DEC 1974)
2,066.4 MM

POPULATION HOUSED IN HOUSING & DEVELOPMENT BOARD FLATS



HOUSING & DEVELOPMENT BOARD BUILDING STATISTICS



ADMINISTRATION

Functions of the Board

The Housing and Development Board, the Republic's public housing authority, was formed on 1st February 1960 by the enactment of the Housing and Development Act, Chapter 271.

The Board is under the portfolio of the Minister for Law and National Development and is vested with the responsibility for the building of homes for the people, clearance of land required for redevelopment, resettlement of families affected by clearance schemes, provision of loans for the purchase of flats, and the management of both rented and sold properties.

In the development of new towns and housing estates the Board also builds shops, flatted factories, markets, hawker centres, and recreational and social facilities including gardens, swimming pools, sports complexes, community halls and creches.

The Board comprises a Chairman, a Deputy Chairman and four members.

The Chairman, Mr Lee Hee Seng, who is the Chief General Manager of the Overseas Union Bank Ltd and a Director of Singapura Building Society Ltd, has been with the Board since 1966 and served as Chairman of the Board for four years (2nd April 71—1st April 75). Mr M Coomaraswamy, a senior partner in a firm of solicitors, served as the Deputy Chairman until 31st January 75. Other members of the Board are Mr Michael Fam, a Company Director, Mr C A V Chew, a senior partner in an architectural firm, Mr Baey Lian Peck, a Company Director, and Mr Cheng Tong Fatt, the Permanent Secretary to the Ministry of National Development.

Mr Michael Fam, a member of the Board since 1st February 69, has been appointed the Chairman of the Housing and Development Board from 2nd April 75.

Organisation of the Board

The Chief Executive Officer is responsible to the Board for the co-ordination and implementation of the functions of the three Divisions of the Board, viz: the Finance, Accounting and Administration Division which comprises the Secretariat, Finance, and Statistics and Research Departments; the Building and Development Division; and the Estates and Lands Division.

The Chief Executive Officer is also in charge of the Resettlement Department which operates out of Government Funds and is responsible for the clearance and resettlement of families affected by public development schemes.

The Secretariat

The Secretariat is responsible for co-ordination and liaison with the various Divisions/Departments of the Board, personnel administration, public relations, systems and methods, and the provision of management services to all Divisions and Departments.

The Secretariat also processes all papers and submissions seeking approval in respect of plans and projects to be implemented and ensures that all decisions of the Board are implemented.

Personnel Administration

A total of 11,716 applications for employment was processed in 1974/75, representing an increase of 40% over the number of applications in 1973/74. During the period under review 60 senior and intermediate professional officers and 1,188 junior and subordinate officers were recruited.

CONFIRMATION OF SUPERSCALE OFFICERS AND PROMOTION OF SENIOR AND JUNIOR OFFICERS

On 1st February 75 the officers acting in the posts of Secretary/Legal Officer, Chief Financial Officer, Chief Architect, Chief Civil Engineer, Chief Structural Engineer, and Chief Estates and Lands Officer were confirmed substantively in their respective appointments.

HOUSING AND DEVELOPMENT BOARD ORGANISATION CHART

AS AT 31ST MARCH 75

CHAIRMAN
AND
BOARD MEMBERS

CHIEF EXECUTIVE OFFICER

ESTATES AND LANDS DIVISION	
64 Sr Officers	
36 Intermediate Professional Officers	
Jr Officers	
291 Technical	
987 Non Technical	
1,006 Subordinate Officers	

MANAGEMENT OF ALL HDB PROPERTIES—housing and industrial estates
LAND ACQUISITION AND ALIENATION
RENTAL AND SALE OF FLATS—registration and allocation
HAWKER CENTRES/MARKETS—allocation of stalls and control of hawkers in estates
CAR PARKS—management and enforcement of paid parking
LABOUR AND WELFARE
24-HOUR ESSENTIAL MAINTENANCE SERVICE AND LIFT EMERGENCY SERVICE
ESTATES AND LANDS LEGAL MATTERS
SECURITY SERVICE

BUILDING AND DEVELOPMENT DIVISION	
170 Sr Officers	
2 Intermediate Professional Officers	
Jr Officers	
1,039 Technical	
140 Non Technical	
43 Subordinate Officers	

LONG AND SHORT TERM BUILDING PROGRAMMING
NEW TOWN PLANNING
DESIGN OF BUILDINGS
CONTRACT DOCUMENTS
SITE PREPARATION
SUPERVISION OF CONSTRUCTION WORKS
EXPERIMENTATION AND RESEARCH WORKS
PLANT MANAGEMENT—Brickworks
Piling
Granite Quarries
RECLAMATION

FINANCE, ACCOUNTING AND ADMINISTRATION DIVISION	
26 Sr Officers	
18 Intermediate Professional Officers	
Jr Officers	
— Technical	
325 Non Technical	
36 Subordinate Officers	

STATISTICS AND RESEARCH
SYSTEMS DESIGN AND DATA PROCESSING
SOCIO ECONOMIC SURVEYS
STATISTICAL ANALYSIS
FEEDBACK REPORTS TO MANAGEMENT

FINANCE/ACCOUNTING
FINANCIAL POLICY
BUDGETARY CONTROL
RECORDS AND ACCOUNTS OF ALL INCOME AND EXPENDITURE
INTERNAL AUDIT

SECRETARIAT
GENERAL ADMINISTRATION
PERSONNEL ADMINISTRATION
staff recruitment
training
conditions of service
union matters
PUBLIC RELATIONS

RESETTLEMENT DEPARTMENT	
8 Sr Officers	
7 Intermediate Professional Officers	
Jr Officers	
4 Technical	
182 Non Technical	
4 Subordinate Officers	

CLEARANCE OF STATE LANDS REQUIRED FOR PUBLIC DEVELOPMENT—public housing, urban renewal, industries, port facilities, airport development, roads, reservoirs and other public works
RELOCATION OF RESIDENTIAL HOUSEHOLDS, SHOPS, FARMERS AND INDUSTRIES
ASSESSMENT OF EXGRATIA COMPENSATION
DEVELOPMENT OF RESETTLEMENT FARMS

STAFF STRENGTH AS AT 31ST MARCH 75

Senior Officers	269
Intermediate Professional Officers	63
Junior Officers	1,334
Technical	1,634
Non Technical	1,089
Subordinate Officers	3,450
Daily-rated Employees	7,839
Total	

In addition, a total of 40 senior and intermediate professional officers and 289 junior and subordinate officers was promoted during the period under review.

RECRUITMENT OF ARCHITECTS AND ENGINEERS

With the acceleration in the Board's building programme, greater emphasis was placed on the recruitment of Architects and Engineers. As a result of sustained effort by way of recruitment exercises, the Board achieved a net gain of four Architects and 11 Engineers during the year under review.

ARCHITECTURAL BURSARIES

In order to encourage more locally trained Architects to join the Board's service, the Board introduced an attractive bursary scheme for architectural undergraduates of the University of Singapore in April 74. Five students were awarded the bursaries and two of them have since graduated and joined the Board's service.

Bursaries will continue to be awarded to promising architectural undergraduates in the financial year 1975/76.

ARCHITECTS IN-SERVICE TRAINING SCHEME

The Architects In-Service Training Scheme planned by the Ministry of National Development with a view to increasing the number of qualified Architects for the Housing and Development Board, the Public Works Department, and the Urban Redevelopment Authority commenced in 1974/75.

The entrance qualifications, course syllabus, and examination standards for this scheme are comparable with those in the School of Architecture in the University of Singapore to ensure a high and consistent academic standard.



A view of Telok Blangah New Town, Neighbourhood I from Mount Faber.



The Ministry has established the Architects Training Centre at premises of the Buona Vista Estate flatted factory utilising the services of professional Architects in the public sector. Classes for the trainees will begin on 1st April 75.

Under the scheme the Board had 13 trainees who were Pre-University school leavers. They embarked on a five-year intensive in-service training course and would be paid a monthly allowance ranging from S\$295 to S\$335 during their first three years of training. On successful completion of their intermediate examinations, they would be appointed as Architectural Assistants at a commencing salary of S\$650 per month in the scale S\$650—S\$1,500. On completing the fifth year of in-service training, they would be eligible for appointment as Architects in the scale S\$850—S\$1,850 per month.

STAFF TRAINING

The year saw a significant increase in the number of training courses in which Board officers participated. 655 officers as compared with 480 officers in 1973/74 participated in induction and job orientation courses, supervisory and in-plant management training courses as well as local conferences and seminars.

In addition, a total of 15 Board officers participated in five overseas conferences, five study tours and four overseas scholarship courses to acquire new techniques and skills and to share their experience with other professionals abroad.

The Board also trained five Colombo Plan Scholars from Iran, Pakistan and Sri Lanka in low-cost housing construction and estates management.

DEPARTMENTAL EXAMINATIONS

In 1974/75 four Departmental Examinations were held for Clerical Assistants, Parking Supervisors and Technicians. 171 officers out of 227 passed the Departmental Examinations.

WAGE ALLOWANCES

The Board implemented the recommendation of the National Wages Council in July 74 to pay a wage supplement of

10% for officers whose salaries are S\$1,000 per month and above and S\$40 plus 6% for officers who are drawing a salary of less than S\$1,000 per month.

As in the previous year, officers of the Board who were in service between 1st January and 31st December 74 were paid an annual allowance equivalent to the officers' monthly salary inclusive of the 1973 and 1974 wage increases recommended by the National Wages Council.

STAFF RELATIONS

The Board continued to maintain good and cordial relations with the two staff unions, the Housing and Development Board Workers' Union and the Public Daily-Rated Housing and Development Board Workers' Union.

LONG SERVICE AWARDS

Ten officers who have served the Board for the past 25 years were awarded the Long Service Certificate and a gold medalion each on 30th January 75 in recognition of their services.

National Day Honours

Mr Michael Fam and Mr Baey Lian Peck, Members of the Board, were each awarded the Bintang Bakti Masharakat (The Public Service Star) on National Day 1974.

National Day Honours were also conferred on the following Board officers:

- Pingat Pentadbiran Awam (The Public Administration Medal—Silver):
Mr Victor Chee Teck Chiang
Senior Principal Architect
Mr Chua It Meng
Principal Structural Engineer
Mr Ng Suan Chung
Principal Structural Engineer
- Pingat Pentadbiran Awam (The Public Administration Medal—Bronze):
Mr Chong Kim Chang
Principal Estates Officer
Mr Robert Tay Siow Hwa
Senior Architect

- Pingat Berkebolehan
(The Efficiency Medal):
Mr Makesan s/o Vaitialingam
Administrative Assistant
- Pingat Bakti Setia
(The Long Service Medal):
Mr Chee Swee Yuen
Senior Technician
Encik Ginan bin J Krama
Land Survey Mandore
Encik Kadimon bin Irotika
Land Survey Mandore
Encik Kariman bin Ahmad Alwi
Land Survey Mandore

Systems and Methods Unit

The Systems and Methods Unit continued its Management Survey of the Board's Departments. It reviewed specific systems and procedures within the Finance Department and undertook assignments from user departments. The Unit also extended its services to the Housing & Urban Development Co (Pte) Ltd, a company jointly owned by the Housing and Development Board and Urban Redevelopment Authority to build middle income housing.

HDB Publications

Public Housing in Singapore: A Multi-Disciplinary Study

The Singapore experience in public housing and planned urbanization has attracted much attention in recent years. *Public Housing in Singapore: A Multi-Disciplinary Study*, edited by Stephen H K Yeh, summarises the Singapore approach in which the Government undertakes a direct and major responsibility in providing not only housing units but entirely new residential communities with a complete range of physical infrastructure and social facilities. Discussion includes administrative, financial and technical inputs for effective programme implementation as well as assessments of the resulting social and economic consequences.

The book will be published by Singapore University Press for the Housing and Development Board in mid 1975.

Our Home

In 1974/75 six issues of *Our Home* were distributed free on a bi-monthly basis to HDB householders to keep them informed of the Board's new developments and policies, and to foster greater civic consciousness among residents.

In view of rising production cost which increased by more than 50% in 1974/75, the circulation of *Our Home* was held at 200,000 copies for free distribution to householders on a "first come, first served" basis.

Residents' Handbook

The *Residents' Handbook* contains information on various types of services and amenities available to residents and guidelines on problems which residents may encounter. A second edition of the *Residents' Handbook* was published in Chinese, English, Malay and Tamil for distribution to all householders from April 75.

Visitors to the Board

1,300 foreign and local visitors were briefed on the Board's activities during the period under review. These included 400 students who visited the Board under the "Getting to know the HDB" scheme.

Among the prominent dignitaries who visited the Board in 1974/75 were His Imperial Majesty The Shahanshah Aryamehr of Iran, and H E U Ne Win, President of The Socialist Republic of The Union of Burma and Chairman of the Council of State. The Board was also honoured by the visit of Heads of Ministerial Delegations and Leaders of Officials' Delegations to the 24th Colombo Plan Consultative Committee Meeting held in Singapore in December 74.

Other distinguished visitors to the Board were (in chronological order):

H E Mr Mohammed Ramzan, Minister for Urban Development, Housing and Social Welfare, Fiji

H E Dr Munyua Waiyaki, Minister of Foreign Affairs, Republic of Kenya

The Right Honourable The Lord Duncan Sandys and Lady Duncan Sandys

H E Mr Juan Ponce Enrile, Secretary for National Defence, Republic of the Philippines, and Madame Christina Enrile





2



3

1. His Imperial Majesty The Shahanshah Aryamehr of Iran being briefed by HDB Chairman, Mr Lee Hee Seng, on the development of Telok Blangah New Town. On the Shah's left are Mr Yong Nyuk Lin, the Minister-in-Attendance; Mr Lim Kim San, the Acting Minister for Law and National Development; and Mr Teh Cheang Wan, the Board's Chief Executive Officer.

2. The Right Honourable The Lord Duncan Sandys and Lady Duncan Sandys viewing the Toa Payoh Town Centre model. On Lady Duncan Sandys' left is the Chairman, Mr Lee Hee Seng, while on The Rt Hon The Lord Duncan Sandys' right are Mr Michael Fam, a Board Member, and Mr Teh Cheang Wan, Chief Executive Officer of the Board.

3. H E Dr Munyua Waiyaki, Minister of Foreign Affairs, Republic of Kenya, having a bird's eye view of Toa Payoh New Town. On his left is Mr Teh Cheang Wan, the Board's Chief Executive Officer.

SAF Units adopted by the Board

The Board continued to maintain close relations with two adopted Singapore Armed Forces Units, namely the 2nd Singapore Infantry Regiment and Singapore Armed Forces Training Institute. During the year Board officers participated in the Swimming Carnival, Festival of Games, Rifle Meets, Passing Out Parades and film shows organised by 2SIR and SAFTI. Regular briefings on Board activities and on career opportunities in the Board were given to SAF officers to encourage suitably qualified officers to join the Board's service on completion of their National Service.

Christmas/New Year Carnival

In conjunction with Club HDB the Christmas/New Year Carnival 1974 was organised for Board staff and their families at the Wonderland Amusement Park.

Bottom:

H E Mr Juan Ponce Enrile, Secretary for National Defence, Republic of the Philippines, signing the Visitors' Book. On his right is Mr Lee Hee Seng, Chairman of the Board.

Right:

Publications for HDB residents to foster better communication between the Board and its residents.





OUR RUMAH KITA • 我们的家
Our Home 家

OUR RUMAH KITA
Our Home 家

Our Home 家

OUR RUMAH KITA • 我们的家
Our Home 家

OUR RUMAH KITA • 我们的家
Our Home 家

OUR RUMAH KITA
Our Home 家

OUR RUMAH KITA • 我们的家
Our Home 家

RESIDENTS' HANDBOOK

BUKU PANDUAN PENGHUNI

தமிழ்நடுவாரிசு கையடுக்கம்

FINANCE

Functions

The Finance Department carries out the Board's financial policy which covers provision of funds, budgetary control, payments and collections, keeping proper records and accounts, compiling annual budgets and accounts, and conducting internal audit on Board activities.

Head Office management covers budgetary control, accounting and internal audit and general administration, whilst for the convenience of residents the financial management of completed housing units is administered through 16 sub-offices (called Area Offices) situated in the various major housing estates. For the outlying estates, where no Area Office has been set up, a mobile cash collection unit visits the estates a few days each month.

Financing

Loans to the Board are voted by Parliament each year and included in the Republic's Development Estimates to finance the Board's building programmes.

Two types of loans are available—one for constructing properties for sale which is at 6% interest per annum repayable over 10 years, and the other at $7\frac{3}{4}$ % interest per annum repayable over 60 years is to cover the cost of building properties for rental. Repayment is on the Annuity Method.

The Board's annual operating expenditure exceeds income as rental of public housing is fixed, with the Government's approval, at sub-economic levels. Notwithstanding this, the Board has to meet rates and bear costs at the same levels as any private developer or landlord. The resultant annual revenue deficits are subsidised by the Government in the following year, after the accounts are audited, by provisions approved by Parliament in the Republic's Main Estimates.

Sale of Flats

During the financial year the proceeds of sale of flats amounted to S\$249.30 million and outstanding mortgage loans as at the end of the financial year totalled S\$387.70 million. During this period interest and principal repayments (including initial/lump sum repayments) received from purchasers were S\$28.15 million and S\$131.39 million respectively.

Under the Home Ownership For The People Scheme launched in 1964 Singapore Citizens eligible to purchase Board flats may be granted mortgage loans if they are unable to meet the costs from their own resources. These loans which are at $6\frac{1}{4}$ % interest per annum can be repaid over periods of 5, 10, 15 or 20 years and purchasers may choose to utilise their Central Provident Fund credits to meet the repayment of these loans and interest.

Purchasers who had elected to use their Central Provident Fund credits to meet the cost of flats purchased utilised S\$92.09 million during the period under review. These monies which were paid to the Accountant-General by the Central Provident Fund Board were utilised to reduce Government loans during the year for the construction of properties for sale.

Capital Expenditure

Initially S\$494.16 million were provided for capital expenditure on public housing and related projects and application for this amount was made for provision of loans in the Republic's Development Estimates.

Provisions for capital spendings in 1974/75, ie in the Board's annual budget, were varied to meet acceleration in the building programme and the original provision was increased from S\$494.16 million to S\$515.64 million.

Broken china rice bowls were used in the making of this dragon at Balestier Redevelopment. The dragon is mounted in the centre of a fountain bowl in the playground.



The actual provision of loans in the Republic's Development Estimates for 1974/75 was S\$506.00 million; as at the end of the financial year loans actually drawn totalled S\$456.85 million. Capital expenditure on work in progress, completed projects, and land and resettlement costs totalled S\$476.18 million.

During the financial year building contracts awarded amounted to S\$331.06 million.

Capital expenditure exceeds loans drawn from the Government; as at 31st March 75 this excess stood at S\$54.74 million which was met by temporary use of other funds such as contractors' and purchasers' deposits, and provisions.

Revenue Income and Expenditure

209,918 accounts were under financial management as at 31st March 75, covering 78,225 flats sold under the Home Ownership Scheme; 120,332 flats and shops for rental; 9,006 hawker stalls and pitches; 1,087 land tenancies; and 1,268 kiosks, offices, and non-housing items.

Revenue income and expenditure account for 1974/75 (subject to finalising) is expected to sustain a revenue deficit of S\$25.74 million. This brings accumulated deficit since 1960 to S\$130.18 million against which a total of S\$100.98 million has been received from the Government by way of subsidy.

Total revenue income for the year was S\$146.79 million, consisting of: rent S\$73.52 million; recovery of service and conservancy charges S\$29.86 million; interest receivable S\$33.44 million; and other income S\$9.97 million.

Total revenue expenditure for the same period was S\$172.53 million consisting of: repayment of interest and principal on Government loans S\$90.28 million; property tax S\$27.27 million; administration of the Board, including costs of service and conservancy charges, S\$41.65 million; and maintenance of property S\$13.33 million.

Agency and Related Functions

During the financial year the Board continued to undertake agency work on

behalf of its subsidiary companies, the Government and other Statutory Authorities. The total cost of all agency work for the financial year was S\$95.26 million. The main items were: Board's subsidiary companies — Housing & Urban Development Co (Pte) Ltd, Middle Income Housing S\$12.10 million; Development & Construction Co (Pte) Ltd, Executive Staff Housing S\$1.88 million; Government—East Coast Reclamation S\$27.74 million, Housing Scheme for Government Officers S\$17.66 million, Resettlement Department S\$7.59 million; other Statutory Authorities—Jurong Town Corporation S\$13.01 million, Port of Singapore Authority S\$8.16 million, and Urban Redevelopment Authority S\$1.95 million.

Mechanisation of Accounts

The Board is using a third generation computer to maintain the rental and sale of flats accounts as well as for processing of payrolls.

It was proposed to replace the existing card punch machines with peripherals capable of speedier direct encoding on to tape. On a preliminary run, it was found that one of the major components was incompatible with the system as a whole and the proposal had to be abandoned. Input is still by means of punch cards.

The main accounts are still being maintained on keyboard accounting machines.

Internal Audit

The Internal Audit Section, which operates independently, continued to carry out continuous checks on all Board activities, complementary to the Statutory Auditor's functions.

DISPOSITION OF INCOME

APRIL 74-MARCH 75



- Loan charges do not include principal repayment of Government loan for constructing flats for sale.
- Property tax relates only to rented properties. Property tax for sold properties is payable by the purchasers.
- Principal repayments on mortgage loan are not included in Income.
- Interest receivable covers interest from Home Ownership Mortgage and other loans, banks and investments.

STATISTICS & RESEARCH

The Statistics and Research Department serves as the data bank of the Board by providing Management with statistical feedback and analyses to aid policy formulation, evaluation and implementation. The Department also renders assistance to other Departments of the Board on computer system designs and implementation. Summaries of major projects carried out by the Department are given below.

Live Register for Applicants and Occupants

The Department embarked on a large-scale survey during the year to set up a 'live' register for applicants and occupiers of Board flats. Information on socio-economic characteristics of households such as household type, household size and household income, as well as personal characteristics of individual household members such as age, sex, marital status and economic activities were collected. Such information would enable Management to exercise more efficient supervision over the management of estates as well as the control and effective allocation of flats to applicants on the waiting list for flats. The initial set up of this 'live' register is scheduled for completion in early half of 1975 and a continuous process of up-dating will be carried out thereafter.

Survey of Motor Workshops

A survey of motor workshops which covered mainly those in Sin Ming Industrial Estate was carried out in February 1975. The study was designed to collect as much information as possible regarding

Four-room Improved and five-room flats at Chai Chee Estate. In the centre is a multi-purpose court serving as a basket-ball court and children's playground.





the motor workshops in Sin Ming Industrial Estate to provide our Architects with a deeper understanding of the users of these workshops. The survey revealed that the business in this area initially was not too good but improved as time went on. The main reasons cited for poor business in the initial stage of operation were change in location and distance from

the city centre. The most favourable ratings for workshops in Sin Ming Industrial Estate ranged from facilities provided for workshop operation, nearness to eating house and availability of food for lunch. On the negative side, the most dissatisfied areas were ventilation, toilet siting, wash area and the bus service to the estate.

SATISFACTION WITH WORKSHOPS AND SURROUNDING FACILITIES IN SIN MING INDUSTRIAL ESTATE

Items	No response	Satisfactory	Acceptable	Unsatisfactory	Total
Location of workshop	—	22.5	62.5	15.0	100.0
Nearness to bus service	12.5	30.0	22.5	35.0	100.0
Nearness to eating house/ coffee shop	—	75.0	17.5	7.5	100.0
Availability of cooked food	15.0	55.0	20.0	10.0	100.0
Availability of spare-parts	32.5	40.0	17.5	10.0	100.0
Layout of workshop	—	22.5	45.0	32.5	100.0
Toilet facilities	—	45.0	32.5	22.5	100.0
Wash area	32.5	17.5	25.0	25.0	100.0
Facilities for workshop operation like electricity mains, etc.	5.0	75.0	17.5	2.5	100.0
Ventilation of workshop	—	20.0	30.0	50.0	100.0
Natural lighting	—	52.5	30.0	17.5	100.0
Height of workshop ceiling	—	52.5	30.0	17.5	100.0

Quarterly Statistical Reports

The Department continued to publish quarterly statistical reports based on data collected from lessees and applicants on

the waiting list to purchase and to rent Board flats. Some of the important findings are given below.

ECONOMIC AND HOUSEHOLD CHARACTERISTICS OF APPLICANTS FOR PURCHASE AND RENTAL OF FLATS AS AT 31ST MARCH 75

Economic and household characteristics	Applications to purchase flats				Applications to rent flats			
	2-Room	3-Room	4-Room	5-Room	1-Room	2-Room	3-Room	4-Room
Proportion of nuclear family	83.3	78.2	71.3	70.1	93.0	87.3	85.7	61.5
Average household size	3.7	4.6	5.0	4.3	3.2	3.6	5.1	7.3
Average monthly household income	S\$363	S\$428	S\$637	S\$1,006	S\$259	S\$390	S\$430	S\$491
Average number of income earners per household	1.4	1.6	1.9	1.8	1.2	1.5	1.8	1.6



Three-room Improved flats at Brickworks Redevelopment. The estate is redeveloped from the defective 2-storey buildings built by former Singapore Improvement Trust.





An aerial view of Telok Blangah New Town, Neighbourhoods I and II. In the background is the port area and on the left are light industries.

BUILDING

Building and Development Division

The Building and Development Division consists of the Architectural (including Design and Research), Civil Engineering, Structural Engineering, Contracts, Survey and Electrical Engineering Sections. During the period from April 74 to March 75 the staff in the Division, particularly the Architectural and Engineering Sections, was increased to meet the challenge of a more ambitious building programme than the previous year.

The main functions of the Division are to formulate and co-ordinate the building programme, prepare master plans of large development areas and site plans of individual housing estates, design of buildings, prepare all contract documents and supervise construction works. In addition, the Division carries out design experimentation and research works, and operates plants for manufacturing essential building materials. Building contracts are awarded to private contractors on the basis of the open tender system. The Division's scope encompasses all public housing in Singapore and related facilities such as communal, commercial, industrial and recreational developments, and agency projects for the Government and other Statutory Authorities such as the East Coast Reclamation Scheme, executive flats, swimming pools, sports complexes, community centres, other institutional buildings and, most recently, the middle income housing on behalf of the Housing & Urban Development Co (Pte) Ltd.

The works of the Division are reported in five sections—*The Building Programme*, *The Construction Industry*, *New Directions*, *Scope of Activities*, and *Progress of Works*.

The Building Programme

Two Five-Year Building Programmes have already been successfully imple-

mented since the inception of the Board in 1960. Over 50,000 units of flats were provided during the First Five-Year Building Programme (1960–65) at a cost of S\$194 million. During the Second Five-Year Building Programme (1966–70) over 60,000 units were built at a cost of S\$305 million.

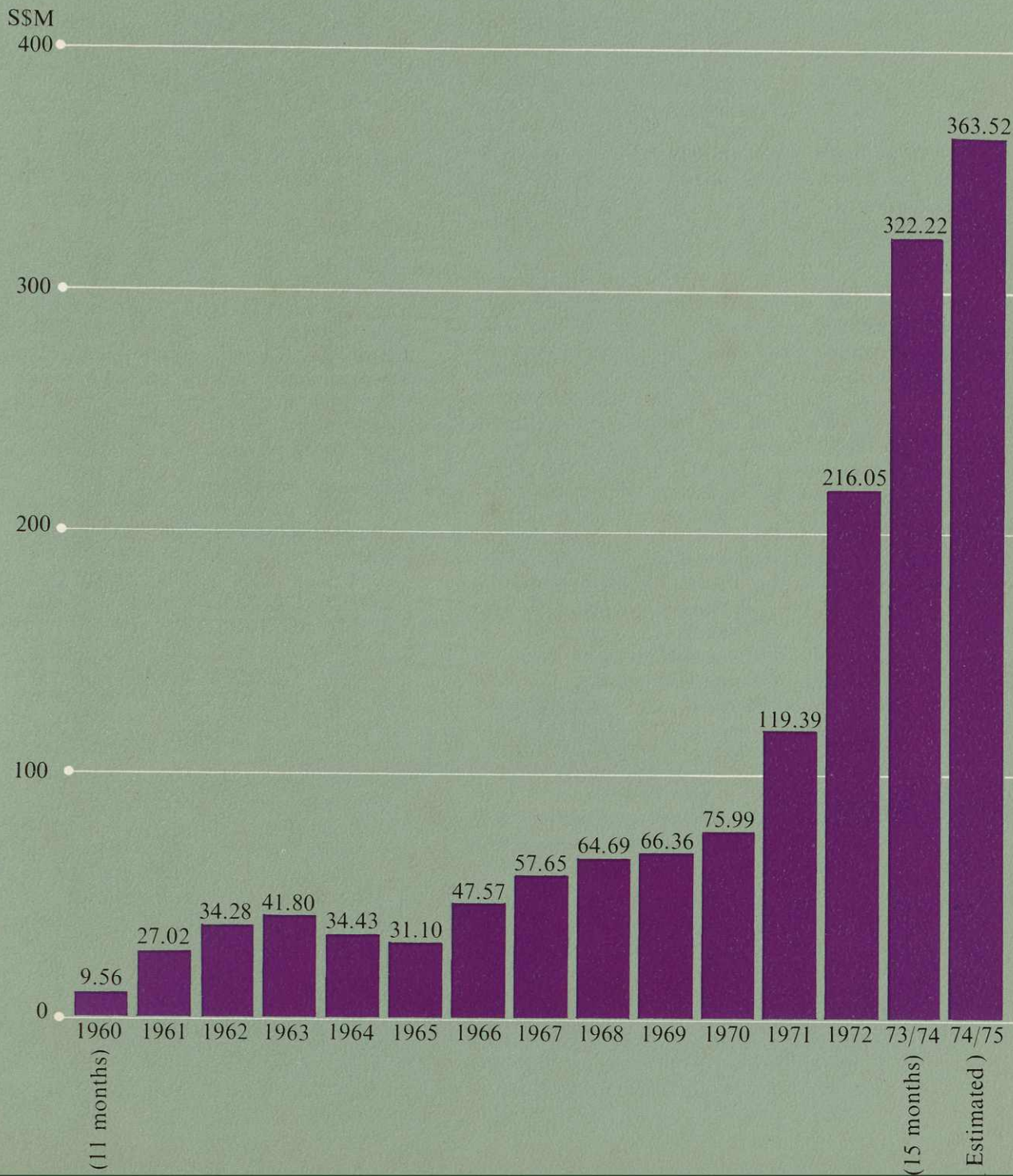
The target under the Third Five-Year Building Programme (1971–75) was increased from 100,000 to 125,000 units. Of the 25,000 additional units, 13,000 units are scheduled for completion within the programmed period by 1975 while the remaining 12,000 units are expected to be completed in 1976.

1974 was the fourth year of the Board's Third Five-Year Building Programme. In the calendar year 1974, besides the many incidental structures built in the housing estates, 25,547 units of flats and 622 shops were completed. For the 12-month period under review from April 74 to March 75 26,620 units of flats and 508 shops were completed, bringing the total number of units of flats and shops built by the Board under the public housing programme and for other Authorities since 1960 to 212,618. Also, during the 12-month period tenders were called for 35,331 units of flats and 804 shops. By March 75 36,122 units of flats and 759 shops were under construction.

Besides continuing with the development of existing housing estates, the Board broke new grounds in Clementi New Town, Jalan Eunus, Haig Road, Changi Village and several Central Area sites. The tempo was definitely quicker than that of the previous year.

One cannot over-emphasize the importance of programming as an essential function of this Division. The building programme requires initiation and co-ordination internally within the Board of the land acquisition actions, resettlement actions, civil engineering and building works. Externally, it requires close co-operation with most services departments such as sewerage, drainage, and the electricity, water and gas branches of the Public Utilities Board. The intricate dovetailing of these activities and continual subsequent adjustments for several

NET CAPITAL EXPENDITURE (EXCLUDING LAND COST AND COMPENSATION)



hundred contracts under construction simultaneously are both taxing and time consuming on the staff of this Division.

The Construction Industry

Though the construction activities in the private sector declined in 1974, the building industry was still busy as many projects under implementation were still in progress. The labour position was still tight though the supply of the principal building materials had improved. The limited skilled workers in the construction industry are mainly Singaporeans whilst the majority of the labour force consists of unskilled foreign workers. Due to the high proportion of unskilled foreign labour, the standard of finishes in the flats has suffered.

To counter-balance this downward trend in the private sector, the Government decided to introduce later in the year counter-recessionary measures by stepping up public construction activities. Therefore, despite and in fact on account of the difficulties experienced in the private sector, the Board had better response from contractors to tender for the public housing schemes during the period under review than in the previous year. There was an upsurge of new contractors and a swing of contractors traditionally undertaking works for the private sector to tender for the Board's projects. This enhanced attraction to contractors is not only due to the slowing down of activities in the private sector, but also to the Board's ability to gauge the needs and operational characteristics of the local construction industry. The Board's 'open door' policy towards new contractors and prompt progress and final payments certainly are significant factors in providing a haven to the contractors in difficult times.

During the year the coverage of fluctuation clauses, originally introduced in June 73, was extended from 5 to 16 items giving protection to materials from 50% to almost 70% of the tendered sums. Perhaps by far the most significant measures adopted to alleviate the tight money situation during the year were the modifications of the following contractual conditions:

- 1 the performance bond was reduced from 50% to 15% of the tendered sum;
- 2 the security deposit was reduced from 5% to 2½% during the maintenance period for those contractors who were simultaneously engaged in more than one building contract with the Board. Contractors with merit stars were permitted a further reduction of ½% for every merit star, subject to a minimum of 1% in security deposits for each contract.

Meanwhile, the Board continues with the practice of maintaining a purchasing policy, material stockpiling, monitoring of materials supply and provision of mechanical aids.

1 Purchasing Policy

To ensure that contractors get their regular supplies of building materials, the Board purchases or supplies in bulk the essential items such as cement, sand, bricks and aggregates to contractors direct. Building works can, therefore, be expected to progress without undue loss of time.

2 Material Stockpiling

To ward off any temporary shortage in material supply, the Board stockpiles a whole host of materials such as bricks, aggregates, white glazed wall tiles, hollow blocks, galvanised iron pipes, salt glazed stone ware pipes, squat pans and more recently, cement. By virtue of the programmed stockpiling, the Board was able to ride over the temporary cement shortage problem towards the end of 1974.

3 Monitoring of material supply

This is necessary to provide the Board with advanced information on the material supply situation and to give adequate time for the Board to seek alternatives. Equally important is the role played by the Board in stabilising the prices of construction materials.

Three blocks of 25-storey five-room flats at Marine Parade Estate.



In certain cases this was instrumental in averting undue inflation of the prices of materials. To underline the importance of such monitors, a close rapport is maintained between the Board and the suppliers.

- 4 Provision of Mechanical Aids
Mixers, dumpers, hoists, steel-bar bending and cutting machines are provided to the contractors by means of having these items included as part of the building contracts. These mechanical aids enable contractors to achieve greater efficiency and smoother implementation of the building works.

Meanwhile, the Board continues with the contractual practices revised in 1972 that the cash retentions of contracts are on the basis of the normal 10% of the progress payments subject to a maximum of 5% of the tendered sums. There is no cash retention on completion of the project since the 12-month defects liability period is covered by a 5% security deposit in the form of a banker's guarantee or insurance bond. The Board also continues to enjoy the lower premium offered by the Insurance Corporation of Singapore for the Master Policy on workmen compensation insurance.

In summary, during the year the Board fortunately did not experience any severe shortage of materials. The labour supply situation also seemed to have improved substantially as compared with the previous years, although our contractors were known to still depend heavily on workers from neighbouring countries. The increase of the building cost of a typical dwelling unit could thus be contained from approximately S\$190 per s.m. (approx S\$18 per s.f.) to approximately S\$200 per s.m. (approx S\$19 per s.f.) for all built-up floor space and including land cost. This represented a rise of about 5%, as compared with nearly 35% in the preceding 15-month period.

The underlying objectives of the Board to create the various incentives to the contractors are primarily to ensure smooth implementation of the building programme

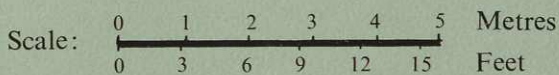
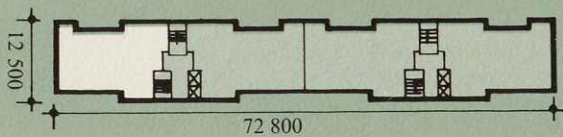
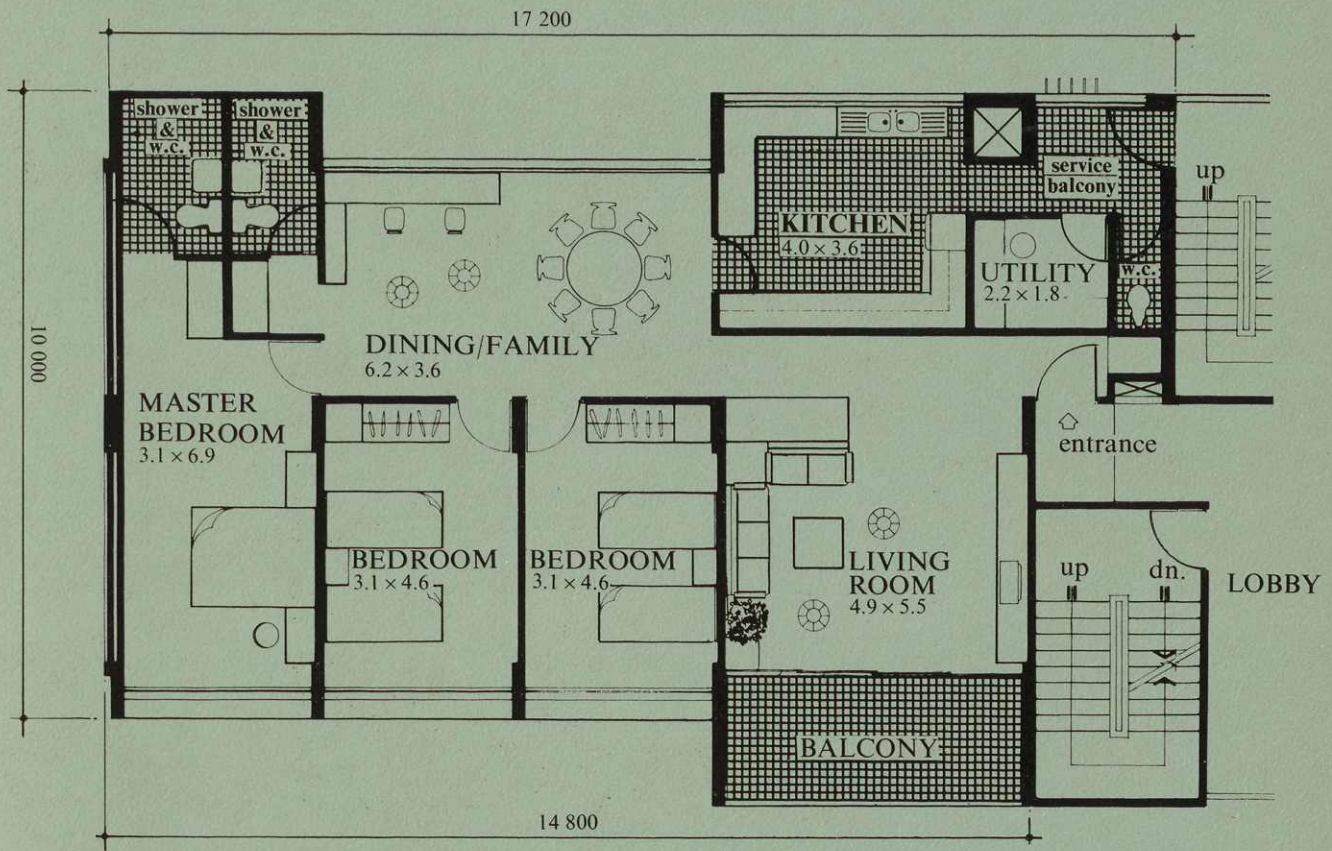
so that the target of housing output can be met and applicants on the waiting list for public housing can be allocated flats as soon as possible. In the process, however, the construction industry has been stretched to its limits, particularly in the supply of labour. Workers had to be recruited from anybody willing to work on construction sites regardless of aptitude, experience or skill. Mediocre and poor workmanship cannot be totally avoided under these circumstances. There is no ready solution to totally eliminate poor workmanship as long as the shortage of skilled workers persists. Contractors are normally called up to make good the defects; the Architects, Engineers, and Clerks-of-Works of this Division urged to try their utmost to detect defective workmanship in the course of their site supervision. The structural soundness of the buildings is in no way impaired.

New Directions

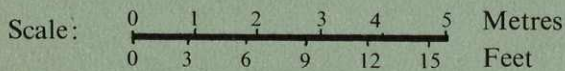
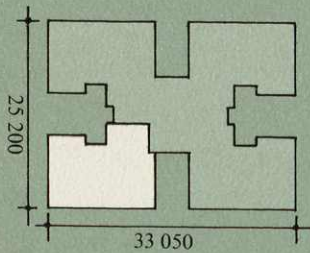
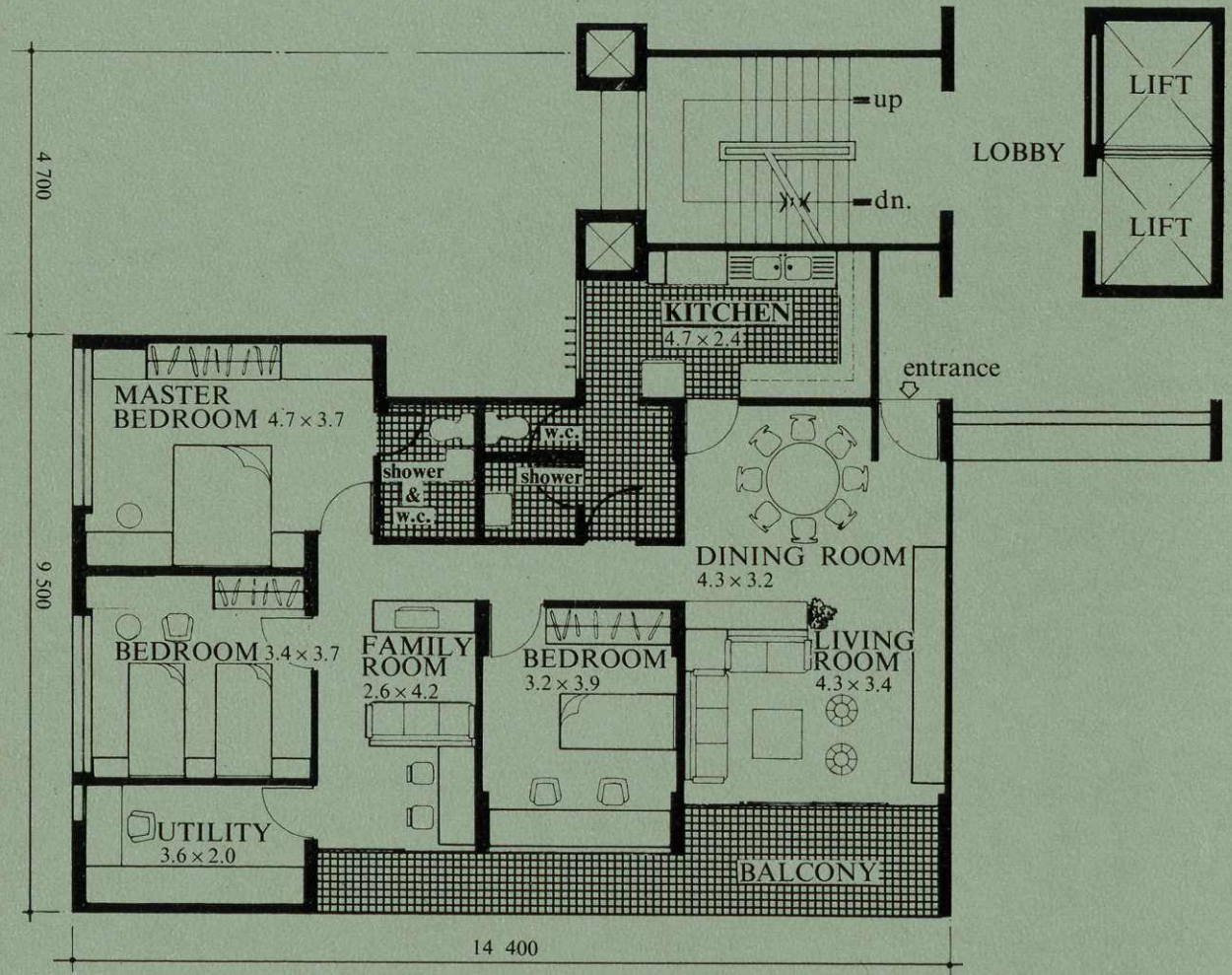
MIDDLE INCOME HOUSING

In the field of housing perhaps the single most important event of the year, to the Board and to Singapore as a whole, was the introduction of the middle income housing through the Housing & Urban Development Co (Pte) Ltd (HUDC). As HUDC is jointly owned by the Urban Redevelopment Authority and the Board, this Division was involved with the conceptualisation of the design of this new group of housing from the very beginning. The main objective of HUDC is to fill in an existing gap in the housing market by constructing quality flats in relatively good residential areas for sale to middle income citizens and certain categories of permanent residents whose total family incomes do not exceed S\$4,000 per month. The middle income housing estates follow generally the condominium concept in both its legal and architectural contexts. At densities between 80 and 100 dwelling units per hectare, most of the flats are housed in either 10- to 12-storey slab blocks or 25-storey point blocks, or as a few incidental walk-up flats. Communal amenities such as child-

EXAMPLE OF TYPE A FLAT MIDDLE INCOME HOUSING



EXAMPLE OF TYPE B FLAT MIDDLE INCOME HOUSING





A block of one-room Improved flats at Petan Road Redevelopment.

ren's playgrounds, outdoor ball courts and indoor commercial spaces will be provided.

Two categories of flats were introduced for the middle income group. The type A flats or maisonettes have floor areas of approximately 158 s.m. (1,700 s.f.). Each unit has one living room with balcony, one dining room, one master bedroom with attached bathroom, two bedrooms, one common bathroom, one kitchen, one utility room, and a third bathroom. The selling prices of these flats range from S\$80,000 to S\$100,000. The maisonettes, as the name suggested, were to be in two levels. The lower level was principally living, dining and kitchen spaces, and on the upper level, connected by an internal staircase, were the bedrooms. The type B flats have the same number of rooms except with smaller floor areas which totalled around 139 s.m. (1,500 s.f.) per unit. Found mostly in the point blocks they were to be sold in the vicinity of S\$55,000 to S\$65,000 per unit. These two types of flats were larger in area than the five-room flats for public housing measuring about 120 s.m. (1,300 s.f.) per unit.

Through the combined efforts of the Urban Redevelopment Authority and the Board, construction works for five middle income housing estates at Lakeview, Farrer, Amber, Braddell Rise and East Coast Estates have started. These middle income housing estates will yield a total of around 2,500 units of flats when fully developed. Registration for these flats was scheduled to commence on 1st April 75.

PUBLIC HOUSING IN THE CENTRAL AREA
The provision of public housing in the Central Area is not new. There are several existing examples such as the Outram Park in the south and the Crawford Street Development in the north. In the past the plans for the public housing projects in the Central Area used to be prepared by the then Urban Renewal Department of the Board, whilst the preparation of contract documents and supervision were carried out by this Division. With the establishment of the Urban Redevelopment Authority as an





independent Authority on 1st April 74, all responsibilities for the development of public housing in the Central Area, together with the complementary facilities such as shops, markets and hawker centres, and car parks, were henceforth vested with the Board.

The objectives of public housing within the Central Area remain the same, viz. to provide decent public housing in order to keep the population in the city centre as well as to accommodate re-settlement cases affected by slum clearance.

Development of public housing in the Central Area entails special problems due to the restrictive sites in small parcels and the exacting requirements for each site. Residential density is generally high. The housing blocks normally sit on top of two- to four-storey commercial podiums.

During the year the Division embarked on the planning and design of a number of projects. Two of them have already broken grounds, viz. the Tanjong Pagar and the Rochor developments.

The Tanjong Pagar Redevelopment is situated on a 2.8-hectare (7-acre) site bounded by Tanjong Pagar Road, Narcis Street, Yan Kit Swimming Pool, and Kee Seng Street. The main facilities planned for this residential-cum-commercial redevelopment consist of 924 units of three-room Improved flats, 133 units of retail shops, 2 junior departmental stores, 1 cafeteria, and 1 block of two-storey market-cum-hawker centre. To achieve the density, the five residential blocks range from 18 to 22 storeys. The centre of interest in the two-storey podium is a continuous internal courtyard stretching the full length of the shopping mall and embellished with an ornamental pool and rock gardens.

Three-room Improved flats at Dover Road in Ayer Rajah New Town. Wherever possible, existing trees are preserved in the development of new towns.





The Rochor Redevelopment is situated on a 2.6-hectare (6.5-acre) flat site bounded by Rochor Canal Road, Queen Street, Ophir Road, and Rochor Road. The main facilities consist of 572 units of three- and four-room flats, 212 units of retail shops, 2 cafeterias, and 1 eating house. Somewhat irregular in shape and thus awkward to plan, this project occupies one of the most strategic locations in the Central Area—at one of the gateways to the City from Bukit Timah Road. Thus, the four residential blocks above the podium are kept low in order not to overwhelm the approaching cars and passers-by. A large semi-basement car park will be built so that the ground floor can be fully utilised as commercial spaces and need not be carved out for garages.

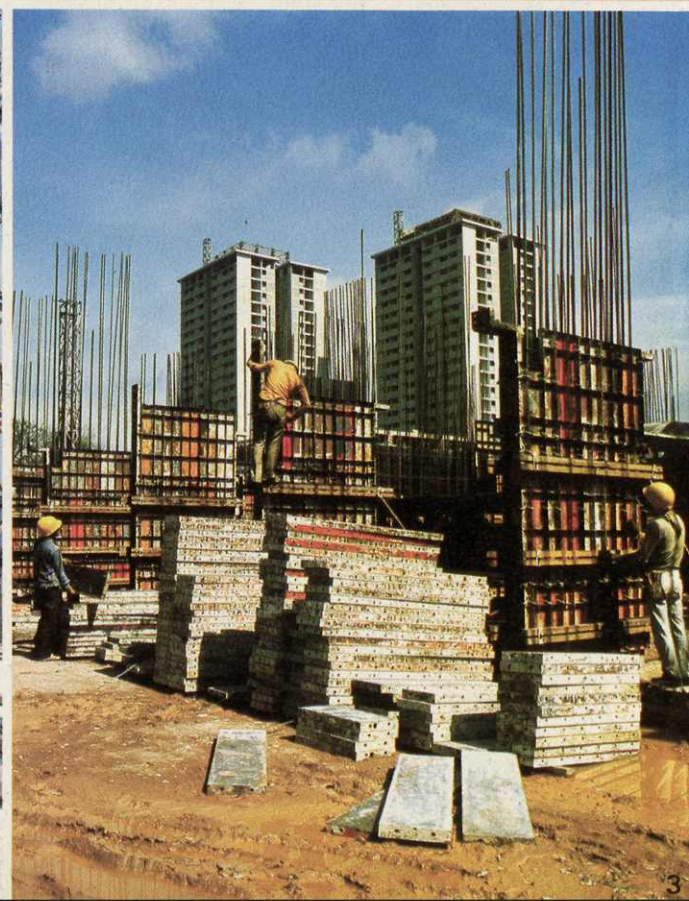
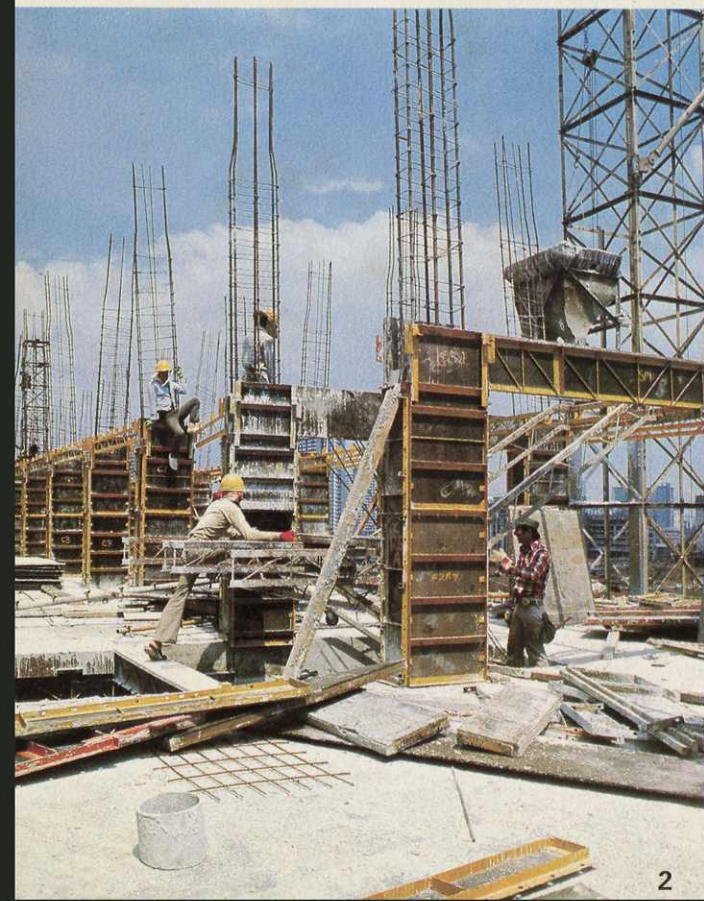
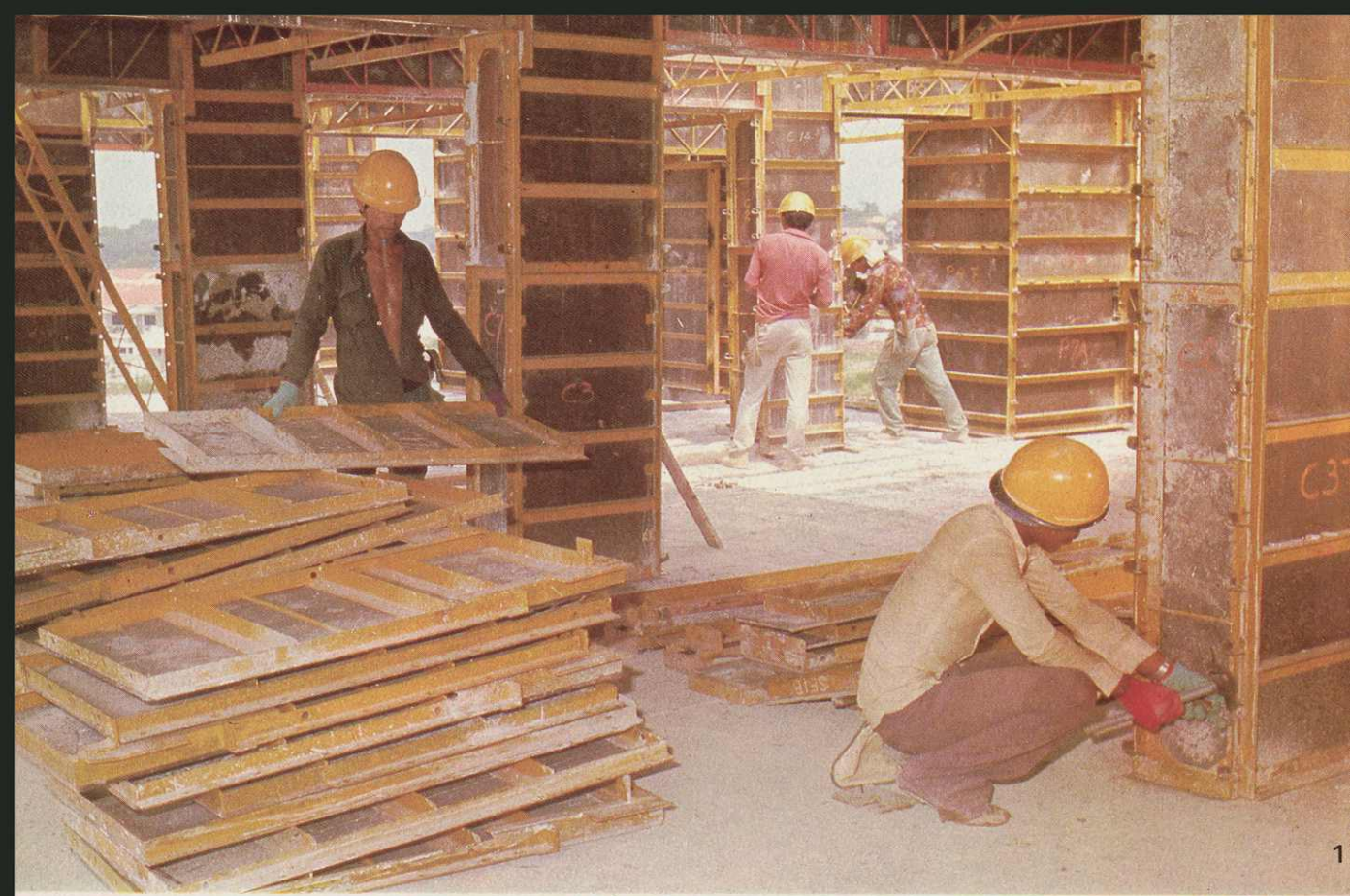
SYSTEMS BUILDING

1973 was an active year for experimentation of new methods of construction. 1974 saw these new methods in operation, and offered the opportunities for evaluation.

The largest of these contracts unfortunately had to be terminated in February 75. This was for 8,820 units of four-room flats in 16-storey blocks at Bedok New Town to be assembled by prefabricated components using the Larsen & Nielson System of Construction. The contractor, Industrialised Building System (Pte) Ltd, was unable to continue due to financial difficulty. At the time of termination, the construction work had reached the stage where sample panels were being cast and the tower cranes erected and ready for assembling.

The Progressive Strength System, using a semi-industrialised method of construction, appears to require less skilled labour on site and promises cleaner and more efficient construction operations. Around 1,350 units of three-room Improved flats would soon be completed in Contract 1 of Ghim Moh Estate. Other worksites

Three- and four-room Improved flats at Marine Parade Estate.





SYSTEMS BUILDING

1. Formwork assembly by the Progressive Strength method of construction at Ghim Moh Estate.
2. A view of the Progressive Strength method of construction at Ghim Moh Estate.
3. Metal formwork construction at Spottiswoode Park. The blocks of flats in the background were constructed using metal formwork.
4. A close-up view of the metal formwork assembly of columns and walls at Spottiswoode Park.



either awarded or to be awarded to Progressive Builders Pte Ltd are Haig Road Estate, Jalan Eunus Estate, and various neighbourhoods in Bedok New Town. By and large this system seems to have held its own well against the traditional method of construction.

The use of Metal Formwork in lieu of timber formwork was tried out in a contract awarded in December 73 to

Hoe Huat Construction Pte Ltd for 1,440 units of five-room flats. The first phase of this contract consisted of 480 units of five-room flats in five 25-storey point blocks at Spottiswoode Park Development Contract 2. The buildings have reached the roof and the construction progressed according to schedule. It was observed that given two months, the workers could become adept with this method of construction. Thus, carpenters, often in short supply, could be replaced



by unskilled workers. As surface finishes and alignment of structural members are of a high standard, plasterers, also in short supply, can be dispensed with. These factors should result in saving of time and cost.

Following the success of this pilot project, 14 sets of metal formwork from Japan were purchased at a cost of about S\$5 million in December 74 for building three-room flats in slab blocks of 12

or 14 units per floor. These 14 sets of metal formwork arrived in March/April 75 and were on hire to contractors at S\$0.50 per s.f. per month for the construction of housing projects in Bedok, Ang Mo Kio, and Clementi New Towns.

A view of public housing estates extending from Telok Blangah to the City. In the background on the left are luxury apartments and hotels in the Orchard Road area.

Given proper servicing, the metal formwork can be expected to last more than five years. A service workshop will be set up in the latter part of 1975.

LIFT MAINTENANCE UNIT

When the backlog of housing demand is satisfied in the foreseeable future, there should be a slight tapering off of the annual output of flats, with a corresponding stabilisation of the professional and technical staff establishment within this Division. The only exception will appear to be the Electrical Engineering Section, which is most likely to increase continuously in size. This is due mainly to the fact that it is responsible not only for the installation of electrical wirings and fittings, CATV systems and new lifts, but also for the technical advice to the maintenance and repairs of all these items particularly the lifts. To comply with the Building and Common Property Rules 5(2) 1972 (Maintenance and Management) for the annual recurring testing which consists of yearly no-loading testing and five-yearly full-loading testing of the lifts, a Lift Maintenance Unit was set up, manned initially by one Engineer, two Technical Assistants and six Mechanics.

ARCHITECTS IN-TRAINING SCHEME

For the past two years the shortage of technical staff, especially in the Architectural Section, was not helped by the fact that the number of architectural graduates from the School of Architecture, University of Singapore, was and would be for some time insufficient to meet the demand. This situation was aggravated by the fact that the private architectural firms, experiencing a boom until several months ago, were competing for the same limited supply of Architects. The Ministry of National Development decided to help the Board, the Public Works Department, and the Urban Redevelopment Authority alleviate this situation by proposing to establish an Architects In-Training Scheme to train only one batch of candidates to become competent Architects. In order to maintain the same academic standard as that in the School of Architecture of the University of Singapore, it was felt that

the length of study for the scheme could not be materially reduced.

It was decided that, as far as possible, the entrance qualifications of the students, the course syllabus, and the nature of examination papers should be identical to those of the School of Architecture. University lecturers were encouraged to give courses and be responsible for the marking of the examination papers. The director of the scheme was himself a lecturer seconded from the University. These were some of the measures designed to keep the academic standard high. Within this concept, however, the scheme arrangement and time table could be modified.

As it turned out, the entire scheme consisted of two portions. The first three years of training would be intensive. Students would be required to work during the vacations, except for two weeks of annual leave. By the end of the third year, they would be engaged as Architectural Assistants, while continuing with part-time studies for two more years to complete the entire syllabus before becoming qualified Architects.

32 candidates out of several hundreds were selected. Of these, 13 each were to be attached to the Board and the Public Works Department and 6 to the Urban Redevelopment Authority. The candidates were to be considered as employees of these various agencies concerned, drawing monthly salaries through the scheme and under some bonds. The scheme was scheduled to start on 1st April 75 at the Centre for Architectural Studies, Ministry of National Development. The Centre occupied half a floor of a flatted factory in Buona Vista Estate.

Scope of Activities

Besides the physical implementation of the Board's building programme on construction sites, the scope of activities of this Division may be broadly categorised under planning, design, drawing office practice, research and plant management. In view of the large quantity of work produced and high degree of repetition of projects in our housing estates, it may be possible to single out one basic

guiding philosophy which steers our actions in all our works. This is the desire for consistency in the planning and design standards based on existing knowledge and feedbacks. This consistency should be visualised not as a static but changing and ever improving set of guidelines.

PLANNING

This Division continued to refine the long-term development programme and firm up more of the sites for the future new towns and housing estates over the next two decades. During the year the master plan of Clementi New Town was finalised and adopted by the appropriate authorities. Conceptual plans for several other new towns were initiated. Further refinements were introduced in some of the existing new towns such as the road systems and land use patterns of the Ayer Rajah and Bedok New Towns.

One important development appears to be that more and more institutional organisations look towards these new towns for land with the objective of being integrated with other uses and the future population. These would inevitably push the future new towns further along the path of greater self-sufficiency. Looking from another angle, the future new towns also appear to be important receptacles of new facilities continuously cropping up to meet the challenges of the society and of facilities affected by resettlement actions in various parts of the Island especially the Central Area. In this light the land use patterns of these new towns have to be adjusted further as manifested for instance in the fact that the neighbourhood centre, traditionally 2.5 to 3 hectares (6 to 7 acres) in size, are now almost 4 to 5 hectares (10 to 12 acres). Much of the increased land is reserved for future expansions. The new facilities which find their ways into the new towns include technical institutes, bus terminals, driving test centres, fire stations, religious institutions, polyclinics and dental clinics. These are in addition to sports complexes, swimming complexes, schools, library, police stations, community centres, post offices, HDB offices, social function halls, and various utility structures. As far

as possible, lands for the middle income housing are incorporated into the new towns to achieve greater diversity of socio-economic groups. The industrial lands in the new towns also acquire more distinctive and definite roles. Besides lands for lease to industries, they also cater for motor workshops, spare-parts and wholesale shops, as well as the various light and general industries. These workshops and terrace factories in the new towns are often required for resettlement purposes.

DESIGN

The Division continued with the effort to standardise the floor layout plans for the proto-type flats and refinements of the design and construction details. There was no new flat type introduced. Working drawing details became standardised. Changes could be made only through collective efforts based on new findings or feedbacks. Our citizens could, therefore, look forward to better designed as well as better built flats in the future.

The block layout plans also became standardised, though a number of changes were introduced in the course of the year. Access balconies wherever possible were segmented into shorter, more intimate lengths, each serving 6 to 8 families only. Lifts were grouped together for more efficient service, improved security, reduced vandalism, and hopefully lower rates of mechanical breakdowns.

This approach of standardisation and of improvements by collective efforts was extended to the design of other recurrent building types developed by the Board, such as the flatted factories, terrace factories, markets and hawker centres.

The same idea of consistency of application was practised on site development such as the provision of children's play areas, common sports facilities and tree planting. For instance, a new range of proto-type play equipment was developed during the year. Playgrounds designed as a package with an assortment of play equipment, seatings, shelters and planting were developed for implementation in the new housing estates. Together with

simple ball courts, multi-purpose concrete courts, and systematic tree-planting, perhaps an even more congenial residential environment would emerge to enhance our national objective of gracious living.

DRAWING OFFICE PRACTICE

By now virtually all the contract documents are expressed in metric measurements. Metric paper sizes are adopted. Newly surveyed topographic contours are in metric dimensions. This Division continues to participate in modular co-ordination. Some of the proposals made in the previous year were discussed in a committee of the Metrication Board and amendments made. For instance, the standard brick sizes were decided to be $200 \times 100 \times 100$ mm, $200 \times 100 \times 65$ mm and $300 \times 100 \times 100$ mm; the concrete block sizes remained at $400 \times 100 \times 200$, $200 \times 100 \times 100$, and $450 \times 100 \times 150$ mm. Window and door heights also underwent minor changes to tie them in with the vertical module of 200 mm. Hence, the window and door heads were to be 2,200 mm from the floor rather than 2,100 mm as proposed earlier. The sill height of the window remained unchanged, at either 800 or 1,000 mm.

Besides standardisation of working drawing details, the location of service pipes and utility supply lines were co-ordinated and also standardised after consultation with the relevant authorities. This effort should help minimise conflicts and unhappy compromises during the installation of these supply lines. When installed, the appearance of the flat should also be more tidy.

The dimensions of the lift cores and the required tolerance were also studied and standardised.

During the year the lift car itself also underwent some design improvements, namely:

Extensive tree-planting at Buona Vista Estate.





- 1 A DC fan and DC lighting were incorporated in the lifts for emergency ventilation and lighting in the event of a power failure. For this, a heavy duty rechargeable battery was installed in the lift motor room which also supplied power to the alarm system;
- 2 A 4-inch alarm bell with aluminium vent cover was provided at every landing;
- 3 Entrance columns, landing sills, lift car door sills, car operation boards and push buttons plates were to be in stainless steel;
- 4 Call-button and push button were to be flushed and solid-moulded type;
- 5 To improve appearance and discourage vandalism, the ceiling lights were recessed and the exhaust fan concealed.

Just like other large institutions, the Board continued to look for labour-saving mechanical devices. A desk-top mini-computer was purchased by the Structural Engineering Section. Several programmes have already been developed by the newly set-up Programme Development Unit. One or two more are expected to be purchased in the other sections as well. The Architectural Section found its newly acquired photo-equipment very useful for metric conversion and other planning and drafting works.

RESEARCH

The year saw an increase of small-scale research studies to serve as design guidelines. The works are grouped and described as follows:

GUIDELINES FOR PLANNING APPROVAL

The school site standards and building spacing standards were finalised with refinements. The parking ratio standards were made more comprehensive to cover a wider variety of building types in the housing estates and updated based on field surveys. In particular feedback from survey data enabled the Division to gain greater insights on the parking needs of industrial buildings and cinemas.

BUILDING REGULATIONS

This Division held discussions with the relevant authorities and made references to the codes and research findings of other countries on building regulations, for the purpose of drafting some supplementary design guidelines for the middle income housing. In conjunction with other relevant authorities, the Division also managed to review standards and regulations concerning capacity requirements of roof water tanks, the sizes of sanitary piping, sanitary regulations for hawker centres and markets, design of eating houses according to the requirements of the Ministry of the Environment, design and location of dustbin compounds and others.

SMALL SAMPLE SURVEYS

Small sample surveys carried out during the year to provide feedback to our Architects and Engineers are presented below. No formal reports were compiled for these surveys. In cases where data obtained was not sufficiently comprehensive, the surveys were enlarged in scope and carried out by the Statistics and Research Department.

- 1 nature of operations in markets and hawker centres and their viability in relation to the neighbourhood concept
- 2 utilisation of facilities at Queenstown and Toa Payoh Swimming Complexes
- 3 preference for location of sanitary fittings
- 4 preference for lifts located separately or grouped together
- 5 comparison of heat and ventilation in hawker centres with different roof designs
- 6 investigation on the effects of heat and ventilation in a jackroof structure
- 7 customers' reactions to heat and ventilation in a hawker centre with metal roofing
- 8 patronage of eating houses in Toa Payoh

- 9 characteristics of flatted factories such as type of trade, floor area, loading and unloading facilities, number of parking lots, and number of employees
- 10 parking needs of warehouses and terrace workshops in Geylang Square
- 11 parking needs of cinemas in Queens-town and Toa Payoh
- 12 parking needs of terrace factories and workshops at Kallang Basin and Kam-pong Ampat

SURVEYS BY STATISTICS AND RESEARCH DEPARTMENT

At the request of the Division, the Statistics and Research Department carried out the following surveys:

- 1 Lift Traffic Survey
This survey was to identify the lift traffic volumes and average waiting time for lifts in HDB estates. The average waiting time for lifts was found to be 32.9 seconds. The average number of persons per lift trip was 2.05 persons in the morning, 2.43 in the afternoon and 2.78 in the evening. Peak periods were between 7.00 a.m. and 9.00 a.m., 1.30 p.m. and 2.00 p.m., and 6.00 p.m. and 8.00 p.m.
- 2 Survey of noise generated from access corridor above the flat
The survey data showed that the majority of households with bedrooms below the access corridors found that the level of noise was satisfactory. Only 3.1 per cent expressed dissatisfaction. The specific causes of greatest annoyance as given by the respondents were children playing between 12.00 noon and 8.00 p.m. and footsteps along the access corridors above the flats between 11.00 p.m. and 2.00 a.m.
- 3 Motor Workshop Survey
This survey was to investigate, among other things, the needs for parking spaces at the existing workshops in order to establish a standard for parking space provision to be used in the design of future motor workshop centres.

NOISE TRANSMISSION STUDY IN HDB FLATS

The objectives of this study were to investigate the acoustical qualities of HDB flats and to draw up practical recommendations of acoustical improvements. Data were collected partly from laboratory tests and partly from measurements at nine selected three-room flats at the Marine Parade Estate. The study was undertaken by the Applied Research Corporation.

The sound reduction qualities of three materials, viz. solid concrete blocks, hollow concrete blocks, and foamed concrete blocks were tested in the laboratory. Field test consisted of measurements of

- 1 impact noise transmission from one dwelling unit to another
- 2 airborne noise transmission from one flat to another via the party wall
- 3 franking transmission through adjacent door and window openings under various conditions

Considering the need of the residents to keep doors and windows open at all times, franking sound transmission is a dominant factor in air-borne sound interference between dwelling units. Therefore, special acoustical treatment to HDB flats will not be effective and is unnecessary.

MANUALS AND GUIDELINES

- 1 Planning and Design Manual
The Manual, prepared for the use of Architects and Planners, is a collection of updated information on standards, procedures and other requirements to serve as guidelines in the planning and design of HDB estates and buildings. It consists of nine volumes: Office Regulations, Planning and Design Procedures, Planning Standards, Site Planning Standards, Building Design Standards, Building Details, Building Materials, Survey and Research Data, and Specifications.
- 2 Landscape Guidelines
Landscape Guidelines, prepared for the use of Architects and Engineers, provide general information concerning planting design, choice of plant

materials in relation to visual and functional considerations, planting techniques, visual characteristics of plant materials, and a list of commonly grown trees. These trees are classified according to shape, form and habit, texture, colour and size. In this respect, the Guidelines are compiled to help the designers to select trees in relation to their overall design concepts.

RESEARCH PAPERS

The following papers were prepared during the year:

- 1 *Design for Better Living Conditions* for the Southeast Asian Low Cost Housing Conference, 15th-19th April 74, sponsored by the International Development Research Corporation.
- 2 *Low Cost Housing for the People —The Singapore Experience*, and
- 3 *Fire Safety Measures in Public Housing in Singapore* for the Seminar on Low Cost Housing and Fire Research, 3rd-4th March 75, at the India International Centre, New Delhi, sponsored by the Association for Science Cooperation in Asia (ASCA).

PLANT MANAGEMENT GRANITE QUARRIES

Despite escalating costs in other building materials the prices of concreting aggregates remained stable in the past years. The steady and adequate supply of this product by the Board's granite quarries at Mandai and Pulau Ubin played a key role in stabilising prices.

In anticipation of the increased demand of concreting aggregates, an extension to the Crushing Plants at Mandai Quarry was carried out and completed in December 74. The combined output from the plants in Mandai and Pulau Ubin increased to 55,000 metric tons per month and the total production for the 12-month period reached 490,000 metric tons. The stockpile of aggregates amounted to 35,000 metric tons at the end of the year.

PILING PLANT

The pile manufacturing plant at Mandai produced 118,000 metres of reinforced concrete precast piles during the year. The lengths and sizes of piles were further standardised to streamline production. Since the end of 1969 approximately 700 kilometres of reinforced concrete spun piles have been produced in this factory.

Piling activity was kept at a high level throughout the year with an average of 40 to 50 piling machines in operation under three main systems of piling, viz. H steel piles, large diameter bored piles, and reinforced concrete precast piles. Compared with 1972 the costs of piled foundations have gone up tremendously, due mainly to rising material costs. The cost of steel piles has risen by 90%. Bored piles and reinforced concrete precast piles were similarly affected by the increase in cement prices and labour wages.

BRICKWORKS

To meet the demand for bricks in our housing programme, the Board's brickworks at Jurong produced a total of 20 million pieces of bricks during the 12-month period. The plant is now working at the designed capacity. In anticipation of the accelerated building programme and the large quantities of bricks required for the middle income housing, a second kiln of similar size was constructed and completed in late 1974. This promised to boost the production capacity of bricks in the brickworks to 40 million pieces annually in the coming years.

Progress of Works

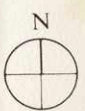
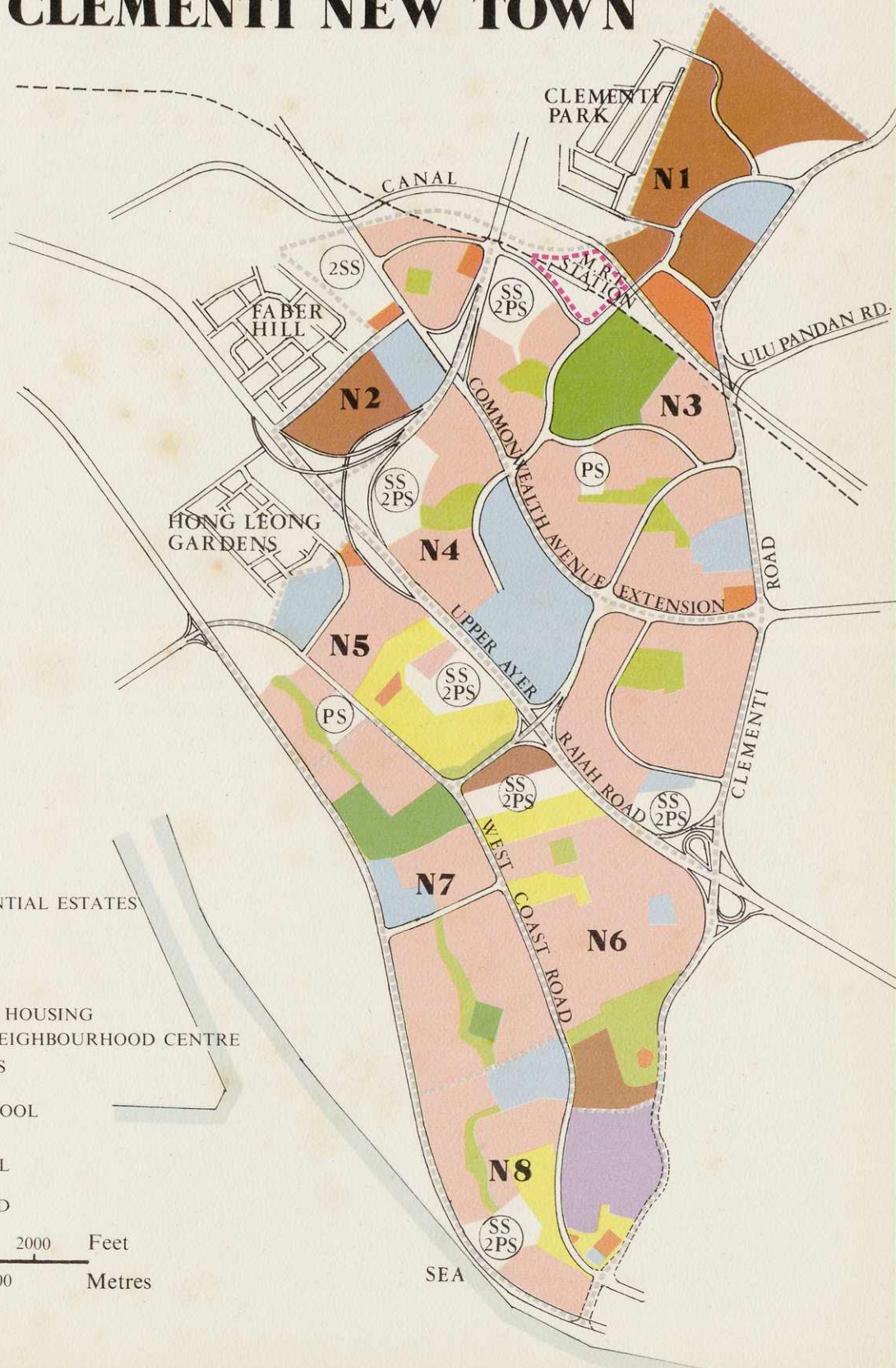
Progress of construction works covering seven new towns, more than a dozen housing estates, and five reclamation schemes are reported in this section. The new towns are dealt with in reverse chronological order. A summary of essential data of these new towns appears on page 78.

NEW TOWNS

CLEMENTI NEW TOWN

Planned for a population of about 150,000, Clementi New Town is the eighth new

LAND USE PLAN OF CLEMENTI NEW TOWN



LEGEND

- OPEN SPACE
- RECREATION
- PRIVATE RESIDENTIAL ESTATES
- WAREHOUSING
- INSTITUTIONS
- PUBLIC HOUSING
- MIDDLE INCOME HOUSING
- TOWN CENTRE/NEIGHBOURHOOD CENTRE
- BOUNDARY LINES

SS SECONDARY SCHOOL

PS PRIMARY SCHOOL

N NEIGHBOURHOOD

Scale: 0 200 1000 2000 Feet
 0 200 500 Metres

town to be developed by the Board. Together with the Ayer Rajah and Telok Blangah New Towns, they link the city with the Jurong Industrial Town to become what is known in the Island-wide Concept Plan as the Western Corridor with an aggregate population of nearly one million.

Clementi New Town, approximately 425 hectares (1,050 acres) in size and elongated in shape, adjoins private housing estates to the west, a proposed Jurong Town Corporation industrial estate to the south, and the new University of Singapore Campus and open spaces to the east. It is bisected by the Ayer Rajah Expressway into almost two equal halves, imposing some constraints in the vehicular and pedestrian circulation between the two portions. Within the boundaries the land encompasses some existing and proposed private housing developments, the Clementi Housing Estate, Port of Singapore Authority Warehousing, existing schools and a prominently sited mosque in a park-like setting.

Like the other new towns, it is planned on the neighbourhood principle, with neighbourhood centres within easy walking distance. A town centre is located somewhere in the geographic centre of gravity. Being 10 to 12 km away from the city centre, it is hoped that the town centre may be reasonably self-sufficient and would accommodate an adequate range of regional facilities and services. School sites, community facilities, sports complexes and open spaces are provided. Industrial employment opportunities will be available when the factories on the southern foreshore reclaimed land are developed.

A special feature of the new town is the network of open spaces, linked with the aid of overhead bridges and underpasses throughout the neighbourhoods, where pedestrian walks and bicycle paths are segregated from vehicular traffic.

Part of the south-western portion of the new town falls within the low-lying swampy area and foreshore land off West Coast Road. For this area reclamation was in progress between the two

previous reclamation schemes, one side completed by the Port of Singapore Authority and the other by the Jurong Town Corporation. When completed, it will yield around 89 hectares (220 acres) of good land. The required filling material was obtained from the many hills in the northern part of the town where an extensive earth-moving operation was in progress. Since work began in late 1974 about 260,000 cu metres of earth per month were moved from the hills to the sea. The area reclaimed by March 75 reached 19 hectares (47 acres).

The building development programme is expected to spread over a period between 1975 and 1979. The first areas to be developed are Neighbourhoods III and V. Plans are in an advanced stage for about 10,000 units of public housing flats and over 200 units of middle income housing.

ANG MO KIO NEW TOWN

Ang Mo Kio New Town, the seventh new town being developed by the Board, covers an area of about 730 hectares (1,800 acres) for a projected 42,000 units of flats and is situated 10 to 13 km north of the City. A description of the development concept of the town may be found in the 1973/74 Annual Report.

The first group of flats in Neighbourhood II was nearing completion. By March 75 over 10,000 units of flats were under construction. Another 6,000 units would be tendered out in the coming year. Virtually all of these building works take place in Neighbourhoods I, II and III along the southern edge of the town.

AYER RAJAH NEW TOWN

Ayer Rajah New Town, covering an area of about 445 hectares (1,100 acres) for a projected 24,000 units of flats and situated 7 to 9 km west of the City, is the sixth new town to be developed by the Board. Bounded by Queenstown in the northeast and Kent Ridge Park in the southwest, the new town straddles Ayer Rajah Road.

Top: The birth of a new town at Ang Mo Kio.

Bottom: Three- and four-room Improved flats at Marsiling Drive in Woodlands New Town.







Mixed development of private and public housing in the Holland Road/Ayer Rajah areas. The new Buona Vista Estate has nearly 7,000 units while the adjoining Gohm Moh Estate under construction will have 4,000 units. In the background is the beginning of Ayer Rajah New Town.



During the year the road system around the proposed town centre was modified and its physical configuration adjusted to take greater advantage of the topographical features. Apart from these changes, the land use pattern remained almost the same.

Because of the difficulty of obtaining building sites in the immediate future, most of the construction activities were

confined to Neighbourhood II. By March 75 nearly 400 units of flats have been completed, with another 800 under construction.

BEDOK NEW TOWN

Bedok New Town, covering approximately 445 hectares (1,100 acres) for a projected 40,000 units of flats and situated 11 to 13 km east of the City, is the fifth



new town. By now all lands reserved for private industrial development have been virtually utilised. Fortunately, in the revised plan, more industrial areas are designated for future developments. To date, about 3,500 units of flats have been completed, with another 3,000 under construction. In the coming year, the pace of construction is most likely to step up further. Most of these works are carried out in Neighbourhoods I, II

and III.

WOODLANDS NEW TOWN

The fourth and probably the largest town to be developed by the Board is Woodlands New Town in the north. This new town covers approximately 1,000 hectares (2,500 acres) for a projected 55,000 units of flats and is situated 24 to 26 km north

Stage I Development of Woodlands New Town. The Causeway links Singapore with West Malaysia in the background.



of the City. Attention will be focussed initially on the Stage 1 Development Plan, located just east of the Woodlands Immigration and Customs Checkpoint. The Stage 1 Development Plan covers approximately 210 hectares (525 acres) for a projected 16,000 units of flats. When fully developed, it will be complete with amenities, a town centre and industrial estates. By March 75 nearly 3,200 units of flats had been completed, with another 2,100 units under

construction. The pace of development may have to ease off slightly for a year or so in order to tie in with the next phase of sewage treatment plant.

TELOK BLANGAH NEW TOWN

Telok Blangah, covering 365 hectares (900 acres) for a projected 18,000 units of flats and situated 5 to 7 km west of the City, is the third new town to be developed by the Board. A town centre is being planned on the northern edge



of the new town to serve the population of Telok Blangah as well as the housing estates to its north. By March 75 over 8,300 units of flats were completed, with another 2,600 under construction and 2,500 to be tendered out in the coming year. When these units are completed in two years' time, the town shall be largely completed except for pockets of land in Neighbourhoods III and V which are not available to the Board for the time being.

TOA PAYOH NEW TOWN

Toa Payoh, covering 325 hectares (800 acres) of land for a projected 37,000 units of flats and situated 6 to 7 km north of the City, is the second new town built by the Board. Development commenced in 1965 on virtually virgin land.

An aerial view of Toa Payoh New Town which has 34,000 units and a population of about 170,000. In the south of Toa Payoh is its Town Centre and its lung, comprising the Town Garden, Swimming and Sports Complexes.

By March 75 34,000 units of the flats were completed with another 2,600 under construction in Neighbourhoods I and V. These contracts will bring the residential development effort of the town almost to a close. Industrial development, however, may carry on for some years.

QUEENSTOWN

Queenstown, covering about 285 hectares (700 acres) of land for a projected 28,000 units of flats and situated 5 to 8 km west of the city centre, is the first new town developed by the Board. With the recent completion of Buona Vista Estate and some minor extensions, the town is virtually fully developed. During the year a proposal was made to extend the size and improve the facilities of the town centre by redeveloping a parcel of the adjoining low-rise residential land. This extension will be carried out soon and will be the second major extension of the town centre, providing concrete evidence of the need for more generous allocation of lands in future town centres.

HOUSING ESTATES

MARINE PARADE ESTATE

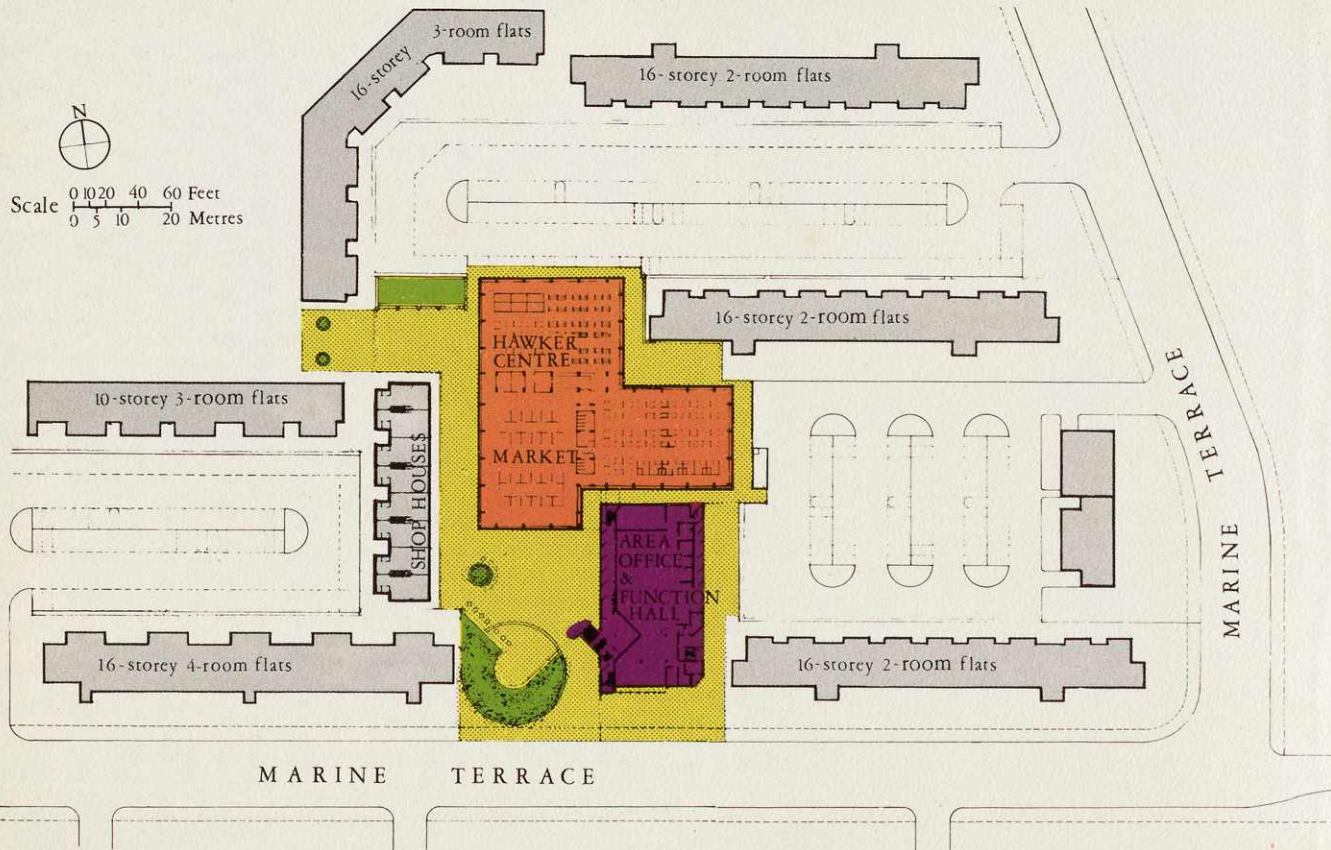
Marine Parade Estate is built on the East Coast reclaimed land covering 50 hectares (125 acres) for an estimated 8,000 units of flats and situated 6 to 8 km east of the City. By March 75 over 7,000 units of flats have been completed. Besides elaborate tree planting, five play areas are located in the estate. Each play area will have a combination of play facilities such as basketball and volley ball courts, slides, merry-go-rounds, dragon play sculptures and roller skating rings to cater for all age groups. Pedestrian underpasses are being planned by the Public Works Department across the East Coast Parkway to facilitate access from the estate to the shore-front Regional Park. A neighbourhood centre in the Phase 1 development area was completed recently to provide shophouses, a market-cum-hawker centre, an HDB area office and a social function hall grouped around a landscaped plaza.

Another view of Buona Vista Estate. On the left is its neighbourhood centre.





SITE PLAN OF AREA OFFICE IN MARINE PARADE ESTATE



Bottom: Marine Parade Area Office.





Flats facing the sea at Marine Parade Estate.



A new commercial centre, known as Marine Parade Centre, will be developed on a 5.2-hectare (13-acre) reclaimed land adjoining the Marine Parade Estate and directly adjacent to the existing Joo Chiat commercial district. The site is bounded by Marine Parade Road, East Coast Parkway and Joo Chiat Road Extension. When fully developed, it will merge with the existing commercial facilities along East Coast Road to form a major commercial nucleus for residents in the eastern part of Singapore.

The Centre is designed to provide a range of shopping, entertainment, and social facilities. It is designed as a pedestrianised centre by means of grouping rows of shophouses facing one another to create 12-metre (40-foot) wide malls. These malls are interlinked to give continuity. Other facilities include a supermarket of 1,400 s.m. (15,000 s.f.) in size, a large market-cum-hawker centre, an emporium with a floor area of 1,860 s.m. (20,000 s.f.), a 14-storey office building, and a multi-storey car



park for 500 cars incorporating a restaurant facing the sea. Though the Marine Parade Centre will be commercial in nature, public amenities will also be developed such as the clinic, the post office and a branch library. Two cinema sites are earmarked for lease to private developers by open tenders.

The Centre would be completed by mid 1976, except for the office building which would be completed later.

KALLANG BASIN ESTATE

Kallang Basin situated 3 to 5 km east of the city centre covers 400 hectares (1,000 acres) of land of which about 40% is reclaimed land. Nearly 100 hectares (250 acres) of the land are zoned for industry, and another same amount for

A curved block of four-room Improved flats mixed with blocks of one- and three-room Improved flats at Kallang Basin Estate.

public housing for a projected 20,000 units of flats. There are six neighbourhoods. Four neighbourhoods have been completed with the fifth to be completed by the end of 1975. The last neighbourhood designed for a total of 4,000 units of flats is only half built and would be completed in 1976. To supplement the needs of the population, building tenders for an emporium-cum-supermarket and restaurant project were called recently. A cinema site adjacent to the above project was tendered out for private development. In addition to the one already completed in Neighbourhood III, another area office has been designed in Neighbourhood IV.

KAMPONG SILAT ESTATE

Kampong Silat Estate, 16 hectares (40 acres) in land area, is situated within 3 km from the city centre and just south of Tiong Bahru Estate. 1,600 units of flats were completed in 1974 out of a planned total of 2,000. Included in the plan are shopping facilities, of which 27 units have been completed. By March 75 the remaining 400 units of flats and an area office-cum-social function hall were under construction.

PONGGOL ESTATE

Situated at about 10 km east of the City, Ponggol Estate covering 18 hectares (45 acres) is planned for over 3,000 units of flats and about 60 terrace factory premises on an industrial site. Also to be provided are shops, a market and a community centre. The terrace factories and the first phase of the residential project for around 1,700 units of flats were completed. The second and final phase is expected to commence in the latter part of 1975 for another 1,500 units of flats.

GHIM MOH ESTATE

To the west of Buona Vista Estate 7 km from the city centre is Ghim Moh Estate, a sizeable estate of about 4,000 units of flats on a 32-hectare (79-acre) site. It includes shops, a market-cum-hawker centre, an Area Office, a com-

The first phase of Ponggol Estate providing over 1,600 flats and 60 industrial shops.





munity centre, and school sites. The Progressive Strength System was used for the building of six blocks of 15-storey three-room flats. The entire estate would be ready by mid 1976.

JALAN EUNOS ESTATE

Jalan Eunus Estate is located at about 7 km east of the City. Covering an area of 20 hectares (50 acres) it is planned for a total of over 3,000 units of flats. Three contracts were in progress, to be followed by two more in late 1975. A site for a community centre is reserved. A market-cum-cooked food centre would be tendered out for construction in the coming year.

FARRER ROAD ESTATE

Farrer Road Estate, located about 6 km north of the City, has been developed since 1972. The final phase, comprising one 14-storey block with 200 units of three-room flats was nearing completion. Also expected to be ready soon is a centre with over 150 market and cooked food stalls. When completed the development will have a total of almost 900 units of flats with about 30 shops.

OTHER DEVELOPMENT SITES

During the year the Board also carried out works on the following seven miscellaneous project sites.

Development at St. George's Road, south of St. Michael Estate, for almost 1,000 units of flats was nearing completion. Geylang East Estate, situated south of MacPherson Estate, is planned for about 2,600 units of flats, 650 of which have been completed. Also planned within the site is a large commercial and communal centre. The construction of a swimming complex will be carried out in the coming year. 200 units of flats and shops have been completed at Seletar Hills, opposite Jalan Kayu, 14 km from the City.

Other areas still under construction were: Haig Road, 6 km from the City for about 1,400 units of flats; Changi Village at Changi Point for about 500 units of

A L-shaped block of three-room Improved flats and a block of two-room Improved flats at Paya Lebar Way in Geylang East Estate.





three-room flats, a commercial centre with shopping and market facilities; Kampong Java for the redevelopment of flats built by the former Singapore Improvement Trust around Farrer Park to yield over 500 units of flats; Sin Ming Industrial Estate, off 9 km Upper Thomson Road, for 150 units of industrial workshops in addition to a total of over 1,500 units of flats and workshops already completed.

AGENCY PROJECTS

On behalf of the Jurong Town Corporation, this Division implemented over 5,000 units of three-room flats in Jurong Neighbourhood II (Part) during the year. Almost 4,000 dwelling units were completed by March 75. The remaining 1,300 units of flats would be ready in mid 1975. The Jurong Town Corporation will develop a neighbourhood centre with cinemas, community centres and other institutions.

For the Ministry of Defence the Division is currently building about 500 units of flats at Normanton Depot within the Ayer Rajah New Town. The development includes a clubhouse-cum-swimming pool.

In Spottiswoode Park almost 700 units of five-room point block flats were under construction for the Port of Singapore Authority in addition to the 150 units already completed.

On behalf of the Singapore Polytechnic, this Division undertook the building of 100 units of five-room point block flats near its new campus off Clementi Road.

Also under construction at Siglap, east of Marine Parade Estate, were 750 flats for civil servants.

The middle income housing estates being developed by this Division for the Housing & Urban Development Co (Pte) Ltd are located at Lakeview (240 units) and Farrer Road (600 units).

EAST COAST RECLAMATION SCHEME

PHASES I AND II RECLAMATION

(BEDOK TO TANJONG RHU)

The biggest agency work undertaken by the Board for the Government is the East Coast Reclamation Scheme. Started in 1966 Phase I Reclamation from Bedok

to Singapore Swimming Club was completed in 1970 and Phase II from Singapore Swimming Club to the tip of Tanjong Rhu in 1971, yielding a total of 458 hectares (1,130 acres) of new land as well as a 9-kilometre stretch of stable sandy beaches. Besides a major park development on 200 hectares (500 acres) of the reclaimed land, various housing estates such as the Marine Parade Estate, Siglap Civil Servants Housing, and the Middle Income Housing have found their ways on different parcels of the reclaimed land.

PHASE III RECLAMATION

(TANJONG RHU TO SINGAPORE RIVER)

Phase III involving the reclamation of 67 hectares (165 acres) of foreshore land fronting Nicoll Highway and Elizabeth Walk which began in March 71 was substantially completed by March 75.

PHASE IV RECLAMATION

(BEDOK TO TANAH MERAH BESAR)

Phase IV involves the reclamation of 485 hectares (1,200 acres) of land from Bedok to Tanah Merah Besar. Work began in June 1971 and would be completed in 1975/76 with reclamation work progressing at the rate of 1 hectare every 2½ days. In this phase about half of the drainage and shore protection measures has been completed.

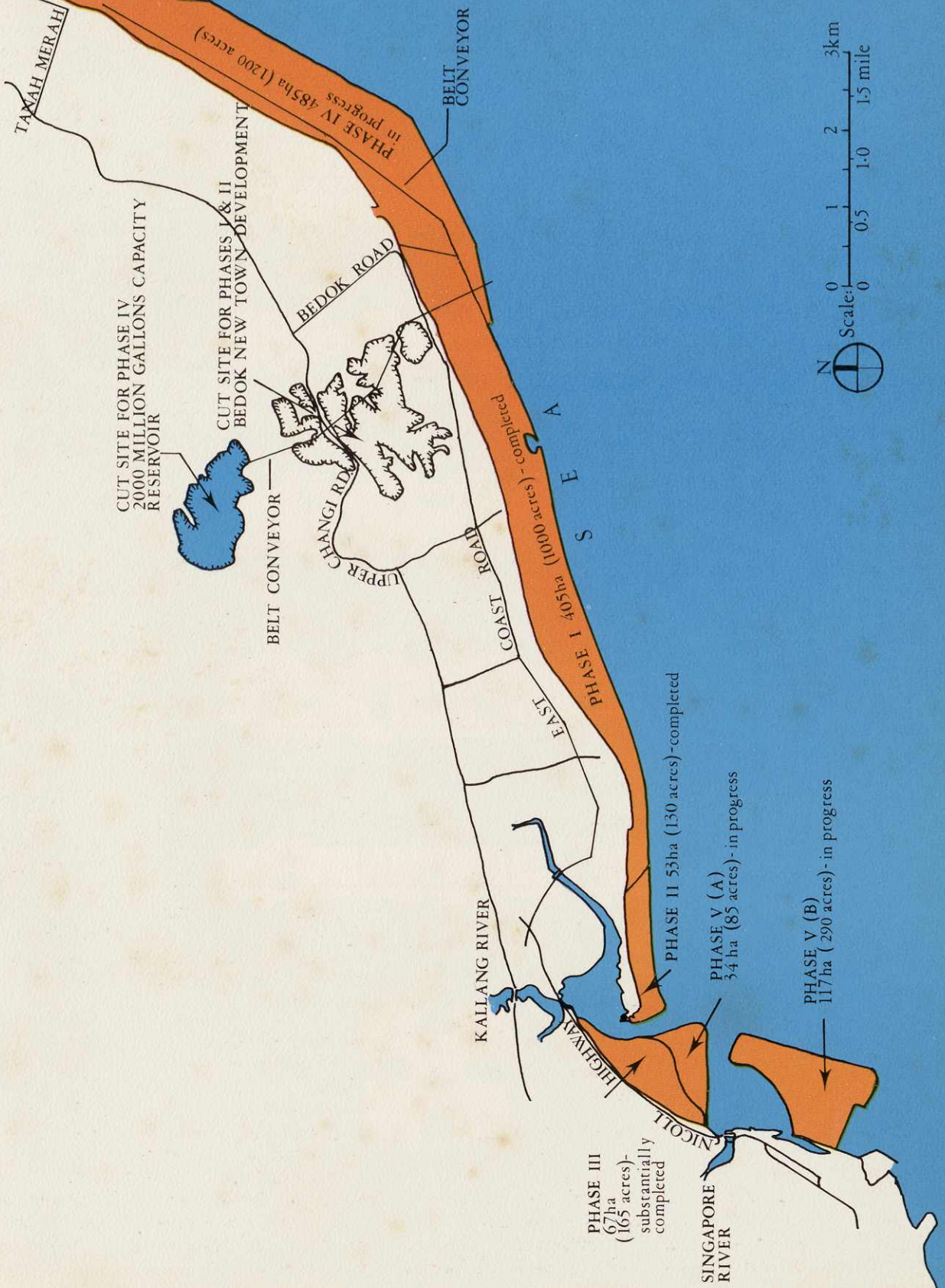
The fill material for Phase IV Reclamation is being obtained from hills adjacent to the defunct Bedok Reservoir and is conveyed by a series of belt conveyors. A 9,000-million litre capacity reservoir will be created as a result of the excavation. By March 75 a total of 19 million cubic metres of earth had been excavated to reclaim 407 hectares (1,005 acres) of new land.

PHASE V RECLAMATION AT

TELOK AYER BASIN

Phase V, 152 hectares (375 acres) in area, adjoins the heart of the city and is therefore most valuable in terms of development potentials. Works commenced in April 74. By March 75 some 75% of the seabed stabilisation work and 20% of stone bund work were completed. Reclamation work would commence in mid 75.

EAST COAST RECLAMATION SCHEME



HDB NEW TOWNS

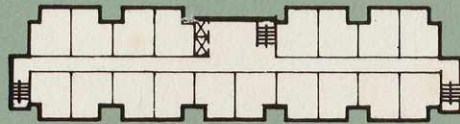
New town	Construction commencement date	Approx. overall land area	Projected dwelling units	Dwelling units completed at 31.3.75	Projected total population	Distance from city centre
Queens-town ¹	Jul 1952	285 ha (700 ac)	28,000	27,955	140,000-150,000	5-8 km
Toa Payoh	Feb 1965	325 ha (800 ac)	37,000	34,491	180,000-200,000	6-7 km
Telok Blangah ²	Mar 1972	365 ha (900 ac)	18,000	8,385	90,000-100,000	5-7 km
Woodlands ³	Oct 1971	1,000 ha (2,500 ac)	55,000	3,200	250,000-300,000	24-26 km
Bedok	Apr 1973	445 ha (1,100 ac)	40,000	3,510	200,000-220,000	11-13 km
Ayer Rajah	Aug 1973	445 ha (1,100 ac)	24,000	396	120,000-130,000	7-9 km
Ang Mo Kio	Dec 1973	730 ha (1,800 ac)	42,000	576	200,000-220,000	10-13 km
Clementi	End 1974	425 ha (1,050 ac)	32,700	Nil	125,000-150,000	10-12 km

¹including Buona Vista Estate

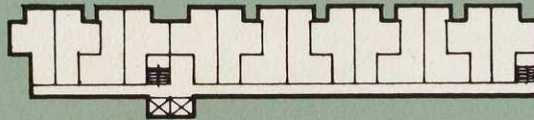
²including 100 hectares (240 acres) of National Park Land

³of these, 16,000 dwelling units are for Stage 1 Development

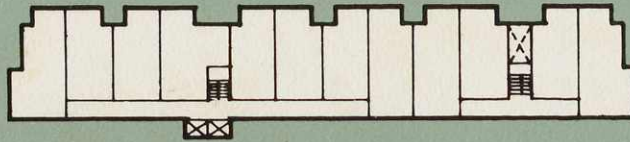
TYPICAL BUILDING BLOCK PLANS



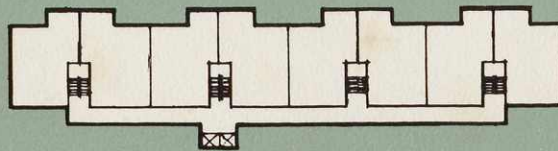
1-ROOM IMPROVED FLAT



2-ROOM IMPROVED FLAT



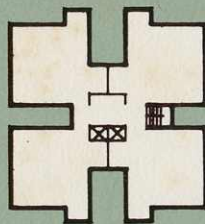
3-ROOM NEW FLAT



4-ROOM NEW FLAT



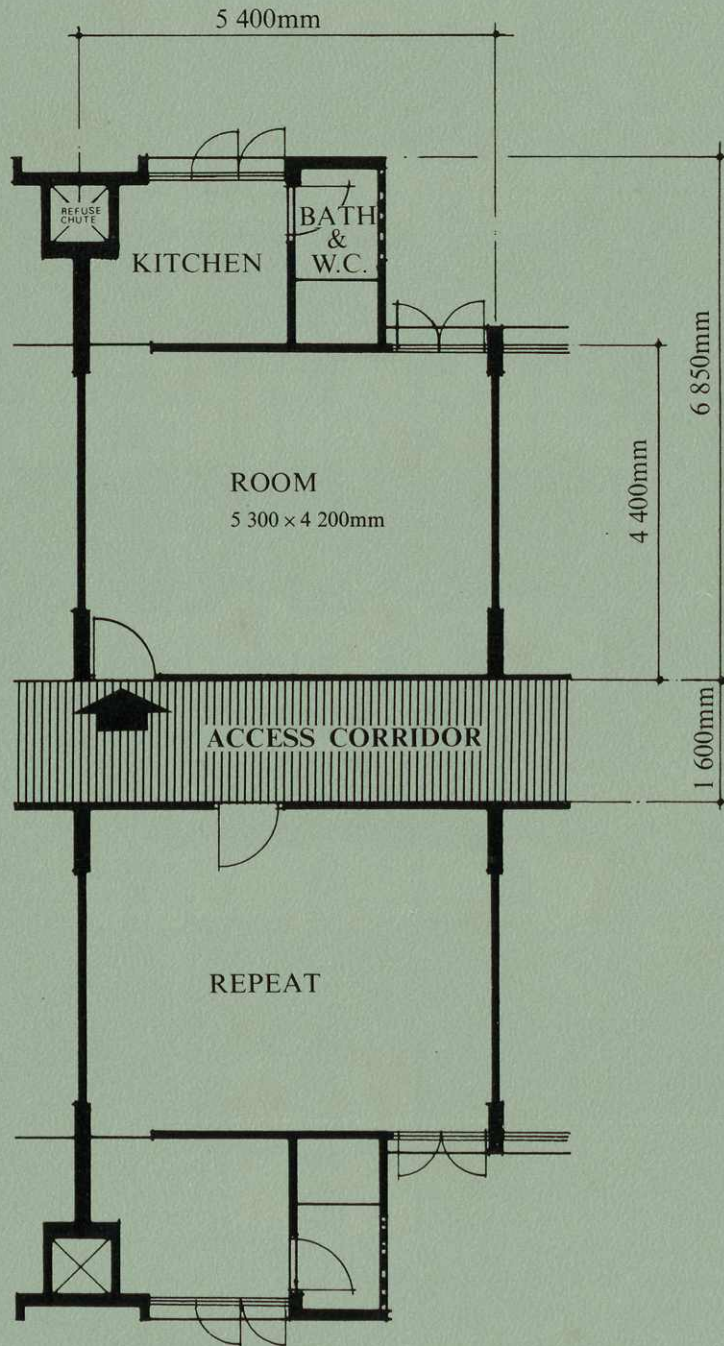
4/5-ROOM FLAT



5-ROOM FLAT
(POINT BLOCK)

Scale: 0 20 40 80 120 Feet
0 10 20 30 40 Metres

TYPICAL 1-ROOM IMPROVED FLAT



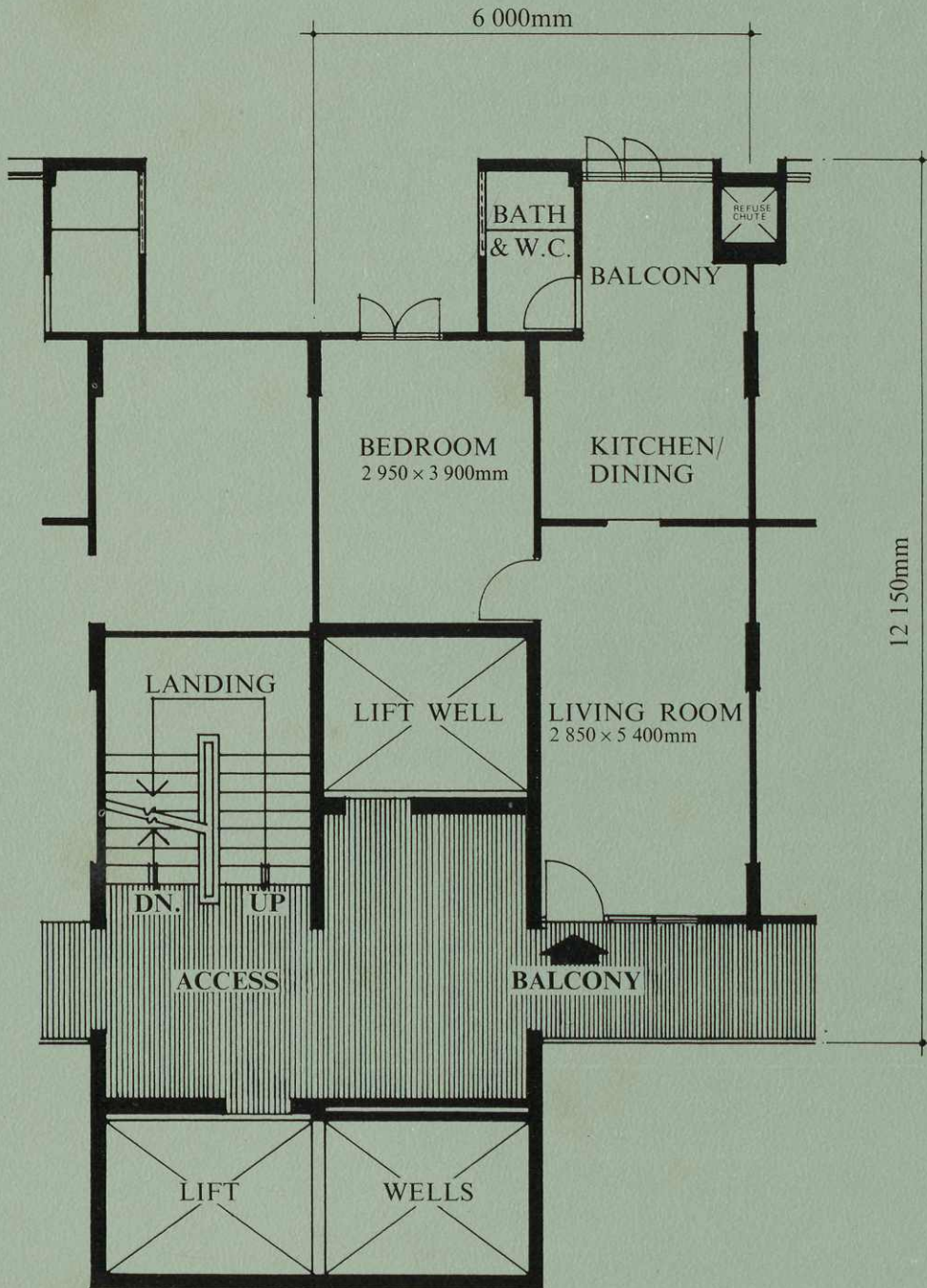
SCALE 1:100

BREAKDOWN COST

Type of unit	1-Room Improved Flat
Internal floor area per flat	32 s.m.
Circulation floor area per flat	9 s.m.
Covered floor area per flat	41 s.m.
Type of work	Contract price per flat
Building	S\$ 4,319
Sanitary	735
Electrical	210
Lifts	420
Roofing	105
TV antenna	42
Water connections	40
Gas connections	50
Sewers	110
Piling	793
Roads, carparks, culverts and drains	464
Earthworks	33
Supervision	32
Cost per unit	S\$ 7,353*
Cost per s.m. of internal area	S\$ 229.78
Cost per s.m. of covered area	S\$ 179.34
Rental (Urban)	S\$ 36.50 per month
(New Town)	S\$ 30.00 per month

*This does not include land cost.

TYPICAL 2-ROOM IMPROVED FLAT



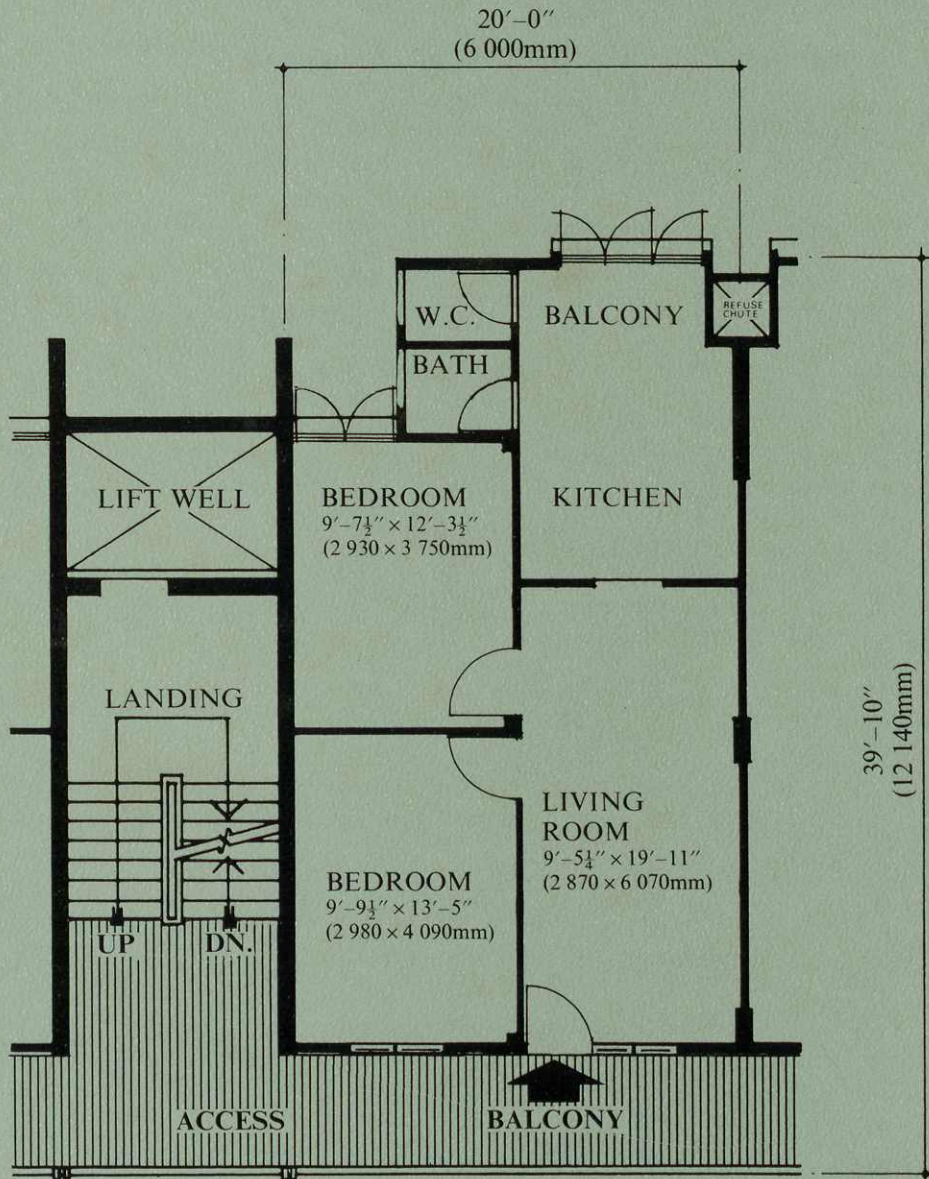
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BREAKDOWN COST

Type of unit	2-Room Improved Flat
Internal floor area per flat	44 s.m.
Circulation floor area per flat	20 s.m.
Covered floor area per flat	64 s.m.
Type of work	Contract price per flat
Building	S\$ 6,025
Sanitary	832
Electrical	263
Lifts	528
Roofing	130
TV antenna	42
Water connections	50
Gas connections	50
Sewers	263
Piling	2,035
Roads, carparks, culverts and drains	458
Earthworks	210
Supervision	53
Cost per unit	S\$10,939*
Cost per s.m. of internal area	S\$ 248.61
Cost per s.m. of covered area	S\$ 170.92
Rental	S\$ 55.00 per month
Selling price (New Town)	S\$ 6,900

*This does not include land cost.

TYPICAL 3-ROOM IMPROVED FLAT



SCALE 1:100

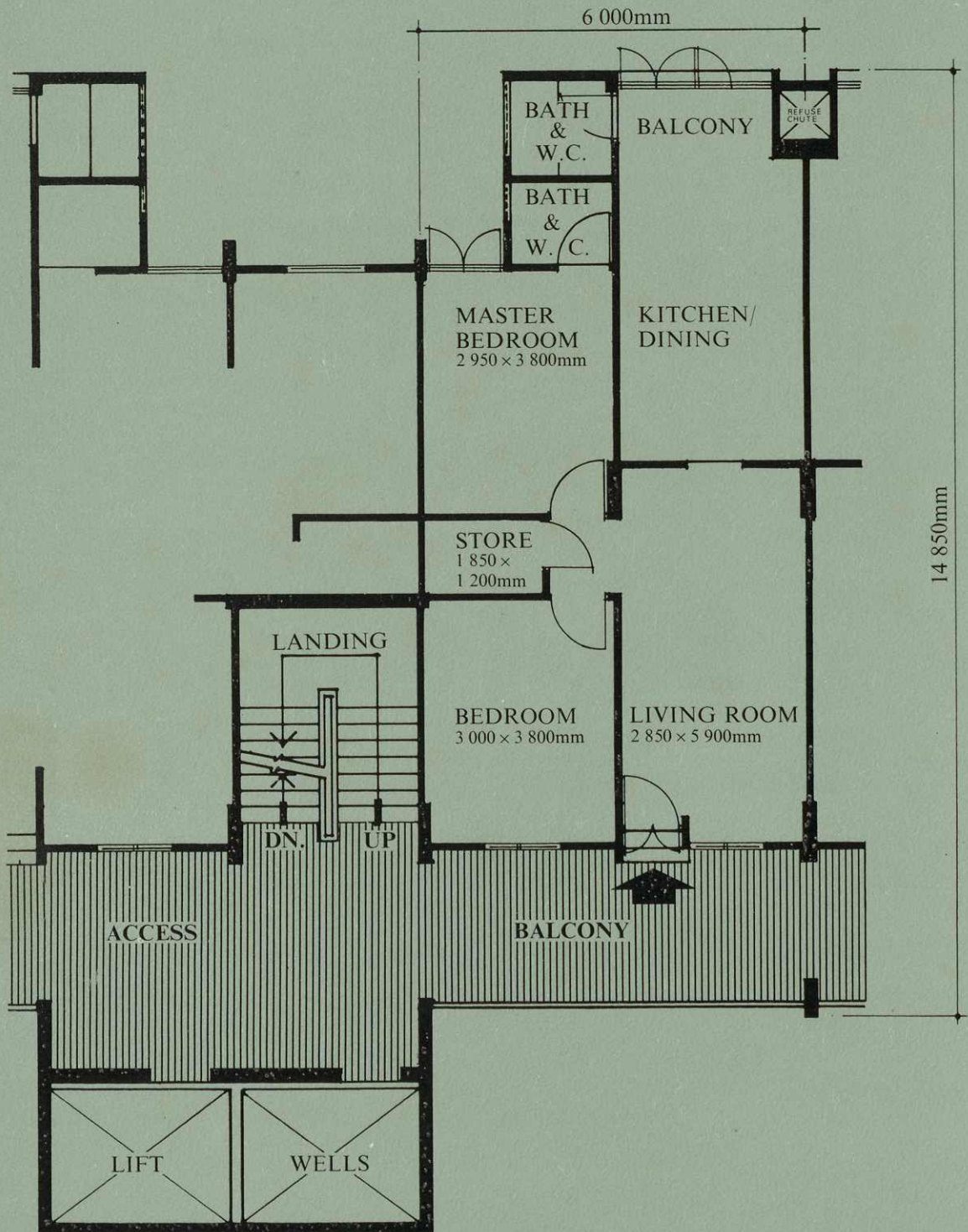
BREAKDOWN COST

Type of unit	3-Room Improved Flat
Internal floor area per flat	648 s.f. (60 s.m.)
Circulation floor area per flat	91 s.f. (9 s.m.)
Covered floor area per flat	739 s.f. (69 s.m.)

Type of work	Contract price per flat
Building	S\$ 8,300
Sanitary	992
Electrical	428
Lifts	609
Roofing	201
TV antenna	42
Water connections	50
Gas connections	50
Sewers	383
Piling	1,940
Roads, carparks, culverts and drains	12,005 598
Earthworks	607
Supervision	100
Cost per unit	S\$14,300*
Cost per s.f. of internal area	S\$ 22.07 per s.f.
	(S\$ 238.33 per s.m.)
Cost per s.f. of covered area	S\$ 19.35 per s.f.
	(S\$ 207.25 per s.m.)
Selling price (New Town)	S\$11,800

*This does not include land cost.

TYPICAL 3-ROOM NEW FLAT



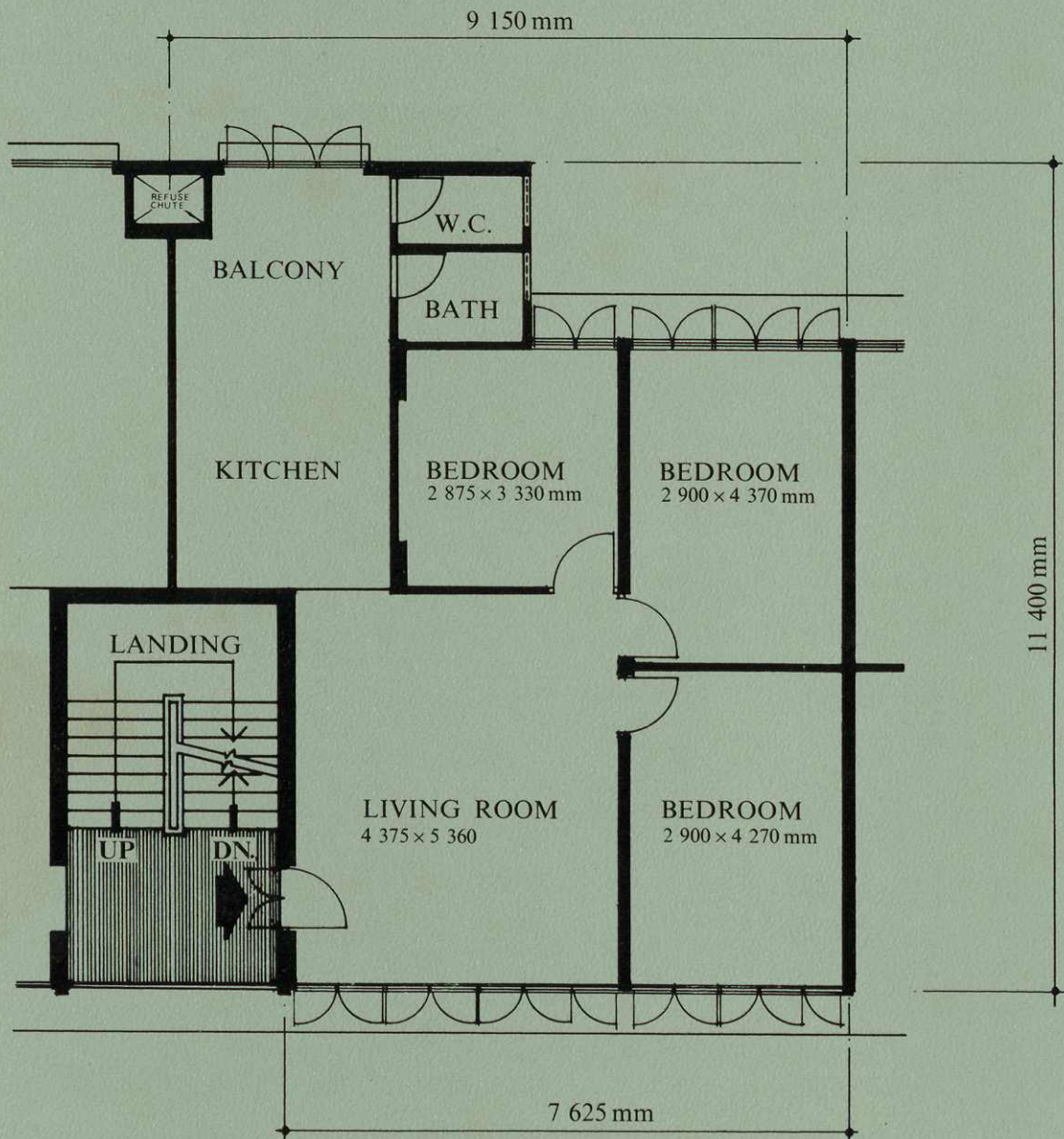
SCALE 1:100

BREAKDOWN COST

Type of unit	3-Room New Flat
Internal floor area per flat	68 s.m.
Circulation floor area per flat	20 s.m.
Covered floor area per flat	88 s.m.
Type of work	Contract Price per flat
Building	S\$ 9,702
Sanitary	1,113
Electrical	441
Lifts	630
Roofing	294
TV antenna	42
Water connections	50
Gas connections	50
Sewers	931
Piling	1,819
Roads, carparks, culverts and drains	15,810
Earthworks	725
Supervision	100
Cost per unit	S\$16,867*
Cost per s.m. of internal area	S\$ 248.04
Cost per s.m. of covered area	S\$ 191.67
Selling price	To be determined later

*This does not include land cost.

TYPICAL 4-ROOM IMPROVED FLAT



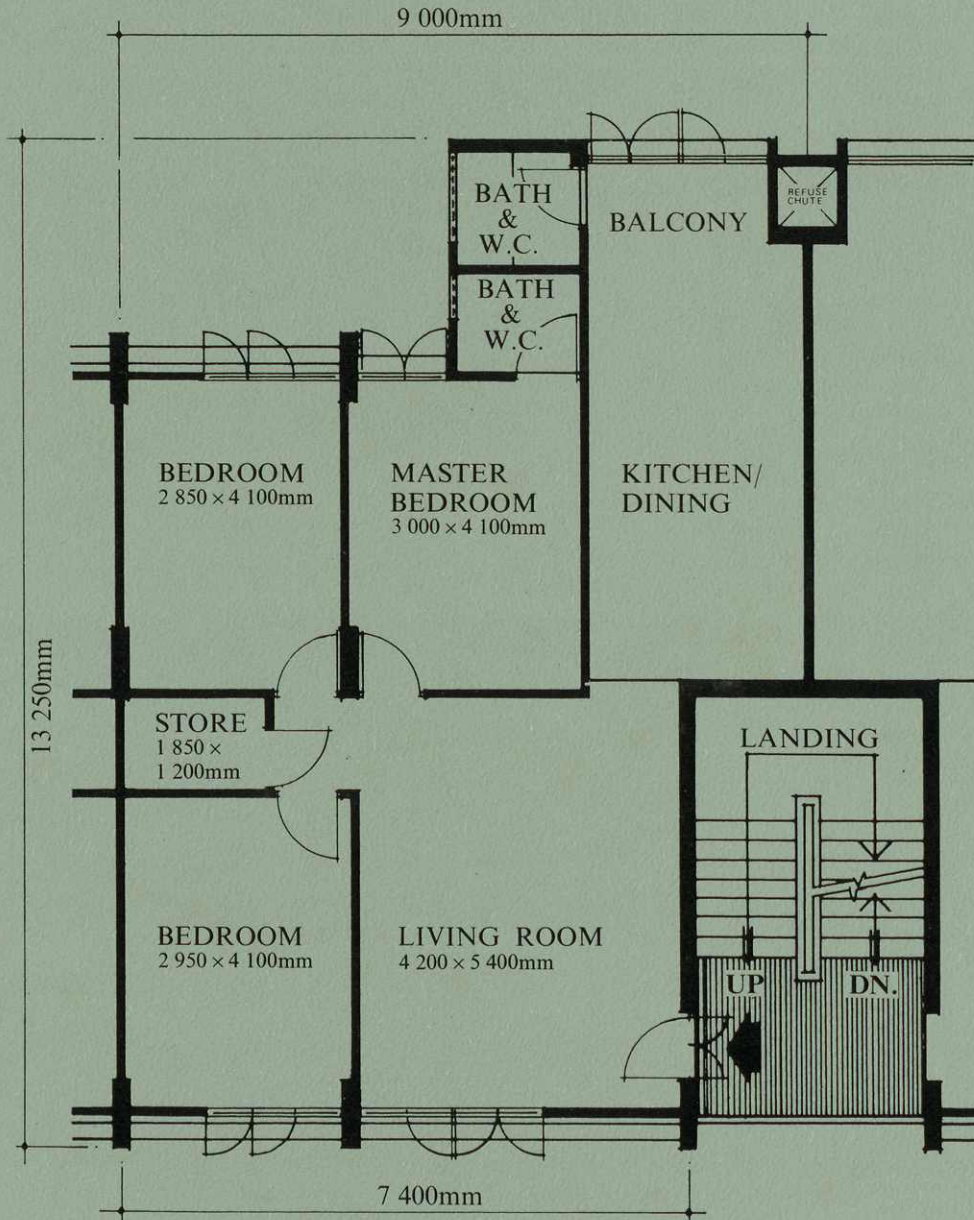
SCALE 1:100

BREAKDOWN COST

Type of unit	4-Room Improved Flat
Internal floor area per flat	898 s.f. (83 s.m.)
Circulation floor area per flat	167 s.f. (16 s.m.)
Covered floor area per flat	1,065 s.f. (99 s.m.)
Type of work	Contract price per flat
Building	S\$11,411
Sanitary	1,185
Electrical	502
Lifts	646
Roofing	315
TV antenna	42
Water connections	50
Gas connections	50
Sewers	714
Piling	3,017
Roads, carparks, culverts and drains	820
Earthworks	578
Supervision	126
Cost per unit	S\$19,456*
Cost per s.f. of internal area	S\$ 21.67 per s.f. (S\$ 234.41 per s.f.)
Cost per s.f. of covered area	S\$ 18.27 per s.f. (S\$ 196.53 per s.m.)
Selling price (New Town)	S\$18,500

*This does not include land cost.

TYPICAL 4-ROOM NEW FLAT



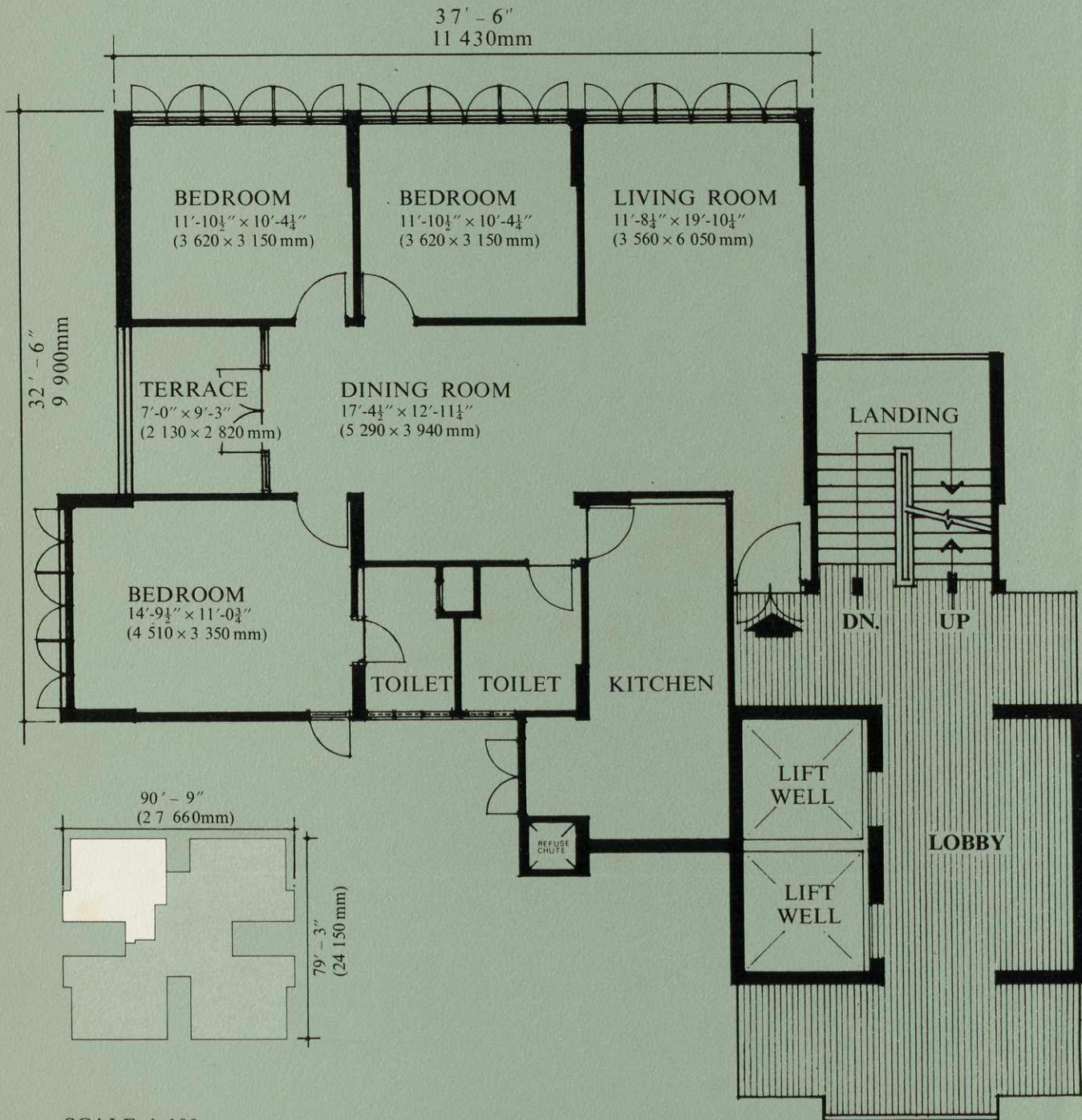
SCALE 1:100

BREAKDOWN COST

Type of unit	4-Room New Flat
Internal floor area per flat	93 s.m.
Circulation floor area per flat	17 s.m.
Covered floor area per flat	110 s.m.
Type of work	Contract price per flat
Building	S\$13,391
Sanitary	1,260
Electrical	504
Lifts	1,033
Roofing	333
TV antenna	42
Water connections	50
Gas connections	50
Sewers	1,106
Piling	3,029
Roads, carparks, culverts and drains	20,605 1,288
Earthworks	788
Supervision	126
Cost per unit	S\$23,000*
Cost per s.m. of internal area	S\$ 247.31
Cost per s.m. of covered area	S\$ 209.09
Selling price	To be determined later

*This does not include land cost.

TYPICAL 5-ROOM FLAT



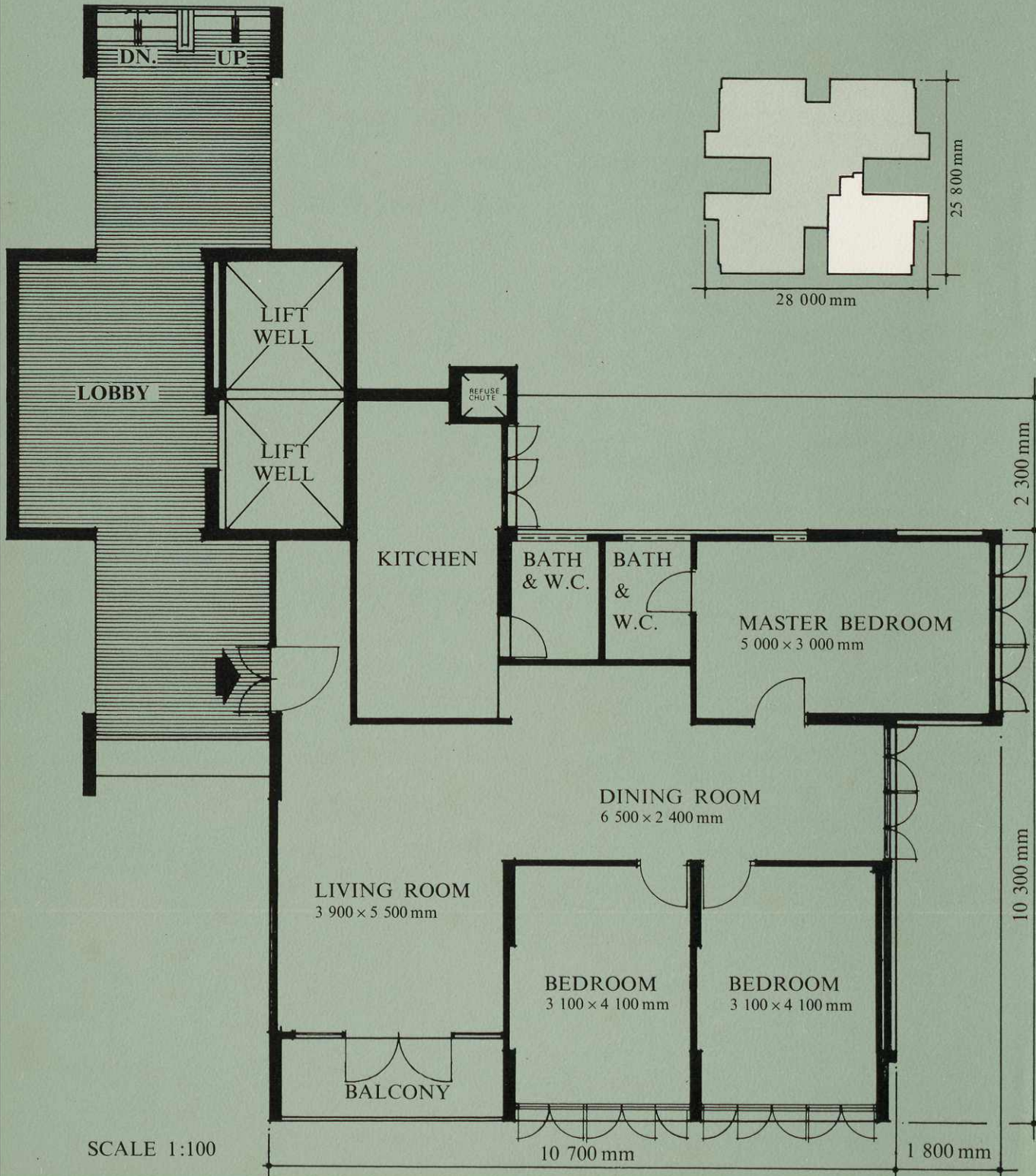
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BREAKDOWN COST

Type of unit	5-Room Flat
Internal floor area per flat	1,280 s.f. (119 s.m.)
Circulation floor area per flat	183 s.f. (17 s.m.)
Covered floor area per flat	1,463 s.f. (136 s.m.)
Type of work	Contract price per flat
Building	S\$15,530
Sanitary	1,570
Electrical	799
Lifts	1,928
Roofing	344
TV antenna	166
Water connections	50
Gas connections	50
Sewers	718
Piling	4,272
Roads, carparks, culverts and drains	26137 2,526
Earthworks	597
Supervision	250
Cost per unit	S\$28,800*
Cost per s.f. of internal area	S\$ 22.50 per s.f. (S\$ 242.02 per s.m.)
Cost per s.f. of covered area	S\$ 19.69 per s.f. (S\$ 211.76 per s.m.)
Selling price (New Town)	S\$30,000

*This does not include land cost.

TYPICAL 5-ROOM FLAT



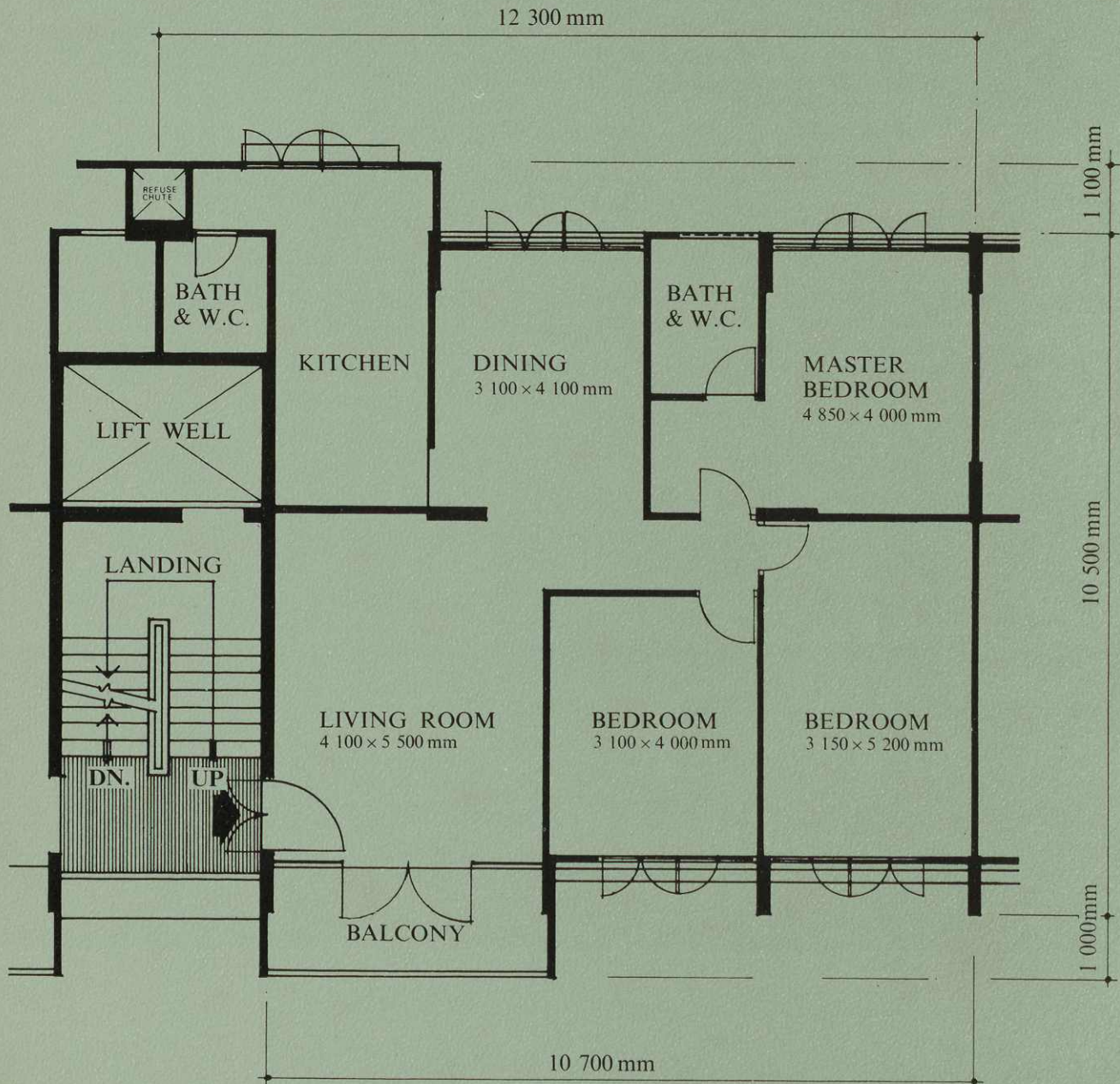
SCALE 1:100

BREAKDOWN COST

Type of unit	5-Room Flat
Internal floor area per flat	119 s.m.
Circulation floor area per flat	17 s.m.
Covered floor area per flat	136 s.m.
Type of work	Contract price per flat
Building	SS15,084
Sanitary	1,712
Electrical	598
Lifts	1,661
Roofing	592
TV antenna	226
Water connections	50
Gas connections	50
Sewers	799
Piling	4,700
Roads, carparks, culverts and drains	2,117
Earthworks	996
Supervision	295
Cost per unit	SS28,880*
Cost per s.m. of internal area	SS 242.69
Cost per s.m. of covered area	SS 212.35
Selling price	To be determined later

*This does not include land cost.

TYPICAL 5-ROOM FLAT



SCALE 1:100

BREAKDOWN COST

Type of unit	5-Room Flat
Internal floor area per flat	118 s.m.
Circulation floor area per flat	17 s.m.
Covered floor area per flat	135 s.m.
Type of work	Contract price per flat
Building	S\$15,578
Sanitary	1,600
Electrical	650
Lifts	1,230
Roofing	369
TV antenna	62
Water connections	50
Gas connections	50
Sewers	660
Piling	5,410
Roads, carparks, culverts and drains	2,141
Earthworks	638
Supervision	62
Cost per unit	S\$28,500*
Cost per s.m. of internal area	S\$ 241.53
Cost per s.m. of covered area	S\$ 211.11
Selling price	To be determined later

*This does not include land cost.

ESTATES & LANDS MANAGEMENT

Estates and Lands Division

1974/75 saw an increase in the scope of management functions undertaken by the Estates and Lands Division. Not only is the Division responsible for the Board's properties such as housing and industrial estates; tenancy control; conservancy and maintenance of buildings and open spaces; sale and letting of flats; letting of shops; land acquisition; but also for the provision and promotion of services/facilities to residents aimed at creating a more stable and cohesive community within housing estates. These facilities include hawker centres/markets, car parks, recreational amenities and landscaping of various sites, the provision of which has led the Division to assume other related functions which have been previously undertaken by other Ministries, such as control and licensing of car parking and hawkers.

At the end of the year under review the Division managed a total of 245,049 units of properties including 25,094 new flats and shops taken over during 1974/75. 368 units were either withdrawn or demolished for redevelopment to keep in trend with the need for better land use. Details of these are shown on page 123.

Housing Estates Management

The management functions are carried out through a decentralised system of Area Offices situated within the various estates throughout the island. The Central Administration supervises and co-ordinates the work of these Offices. To cope with the increase in the number of units under management, two new Area Offices at Buona Vista and Marine Parade were opened, bringing the number of Area Offices to 16. Each Area Office manages approximately 12,000 to 15,000 units.

Campaigns

The Board annually conducts various campaigns within housing estates to instil a greater awareness of the living environment among residents. A month-long Anti-Vandalism Campaign, coinciding with the Government's "Keep Singapore Crime Free" Campaign, was launched in June 74. Directed at fostering a greater awareness of the deleterious results of acts of vandalism, posters highlighting the penalties for such acts were prominently displayed in the estates and community centres. House-to-house visits, distribution of pamphlets, talks, and film shows were also organised in liaison with the civic organisations in the estates.

In October 74 the Board participated in the "Keep Singapore Accident Free" Campaign organised by the Ministry of Home Affairs. It stressed the importance of road safety and discipline particularly in large open areas and multi-storey car parks.

The Annual Tree Planting Day on 3rd November 74 was well supported by residents and other civic organisations in all the housing estates. At Marine Parade, one of our newest housing estates, the Campaign drew enthusiastic support and more than 150 trees were planted on that day. These trees will provide greenery and shade for the benefit of the residents in years to come.

Hawker Centres

Hawker centres are provided for the convenience of residents. As at 31st March 75, a total of 51 hawker centres/markets with 8,236 stalls was under the management of the Division. In addition, there were 8 open sites providing 816 open pitches. Details of the hawker centres and pitches are shown on pages 124-126.

Some of the older hawker centres were enlarged to provide better accommodation and bigger stalls with larger circulation areas and other modern facilities to meet the increasingly sophisticated needs of our hawkers.

Effective control and proper management of hawker centres have become necessary as the number increases. To ensure that

the hawkers observe basic principles of food hygiene and conform to the Environmental Public Health (Food Handlers) Regulations 1973 as laid down by the Ministry of the Environment, Hawkers Liaison Officers are deployed through Area Offices on a two-shift system. Delegated with powers of enforcement, their daily inspection of stalls and pitches ensures that stallholders comply with the regulations and abide by the code of practice.

The Division has also to ensure that stalls are allocated on the basis of one per family and that a suitable variety of goods is available in these centres. It has also been the practice, in line with the Government policy, not to allocate stalls to applicants below the age of 40 with the exception of those who are handicapped or in receipt of social welfare assistance. Close liaison is kept with other licensing authorities such as the Hawkers Branch of the Ministry of the Environment, the Port of Singapore Authority and the Jurong Town Corporation.

Essential Maintenance Service

The Division provides a 24-hour service which gives prompt attention to breakdowns in essential services such as lift failures, defective and leaking water pumps, sanitary and other electrical faults which need urgent repairs. In addition, the Lift Emergency Unit which is responsible for the rescue of persons trapped in lifts is incorporated into the main centre. During the year a third switchboard was installed to cope with the increase in the number of calls while the Lift Emergency Unit was expanded from 3 centres to 16 centres. These operate from each of the 16 Area Offices working on a 24-hour shift. Following the expansion of this Unit, rescue of persons trapped in lifts can now be performed within 15 to 25 minutes on receipt of a complaint as compared with about 45 minutes to one hour previously.

On an average, the centre receives 260 calls per day or approximately 7,800 calls per month.

The split-level Buona Vista Estate Market-cum-Hawker Centre with 217 stalls. Cooked food stalls are on the lower floor while market stalls are on the mezzanine floor.







Paid Parking Scheme in Housing Estates

The Division has extended the implementation of the paid parking scheme in the various housing estates. This was done to discourage congestion in car parks through indiscriminate and inconsiderate parking. Resident car owners have the choice of using these parking facilities on an hourly basis or purchasing season tickets on a monthly, quarterly, or half-yearly basis. Control of these car parks is either by Parking Attendants

or parking sticks. In large car parks where centralised control is more feasible, clocking machines have been introduced for speedier and more efficient management.

The implementation of this paid parking scheme was accelerated towards the end of the year and the beginning of 1975. As at 31st March 75 a total of 24,638

One of the 16 Area Offices in our housing estates. Each Area Office manages about 12,000 to 15,000 housing units.

car parking lots and 10,276 motorcycle lots were under management. Arrangements have also been finalised to implement the second stage of this paid parking scheme which would include all car parks previously under the control of the Public Works Department. It is anticipated that this second stage would be completed by September 75. Under this second stage implementation, a total of 20,215 car parking lots and 2,986 motorcycle lots will come under the Division's management.

The Division, working in conjunction with the Road Transport Action Committee, has also finalised plans for the implementation of the Park-and-Ride Scheme to be introduced on 2 June 75. 560 parking lots in three of our multi-storey car parks within the Central Area have been set aside for use in this Scheme. The Division's parking staff will also assist in the sale of Daily Licence Discs for vehicles entering the restricted zone.

In anticipation of problems which may arise following the full implementation of the paid parking scheme in all our estates and with the recent delegation of full authority to the Car Parks Section, plans have been made to form an Enforcement Unit/Mobile Squad to assume the delegated powers necessary for orderly parking in all Board's car parks. The Squad will be provided with scooters to patrol all Board's car parks, paying particular attention to car parks where the incidence of unauthorised parking has been fairly high.

To strengthen this Mobile Squad, a mini van equipped with two-way radio system will be purchased for more effective deployment, control and management of car parks especially in outlying districts.

Landscaping and Tree Planting Projects

Whilst the Building and Development Division concerns itself with satisfying the physical aspects of the new estates, the Landscaping Unit of our Division is responsible for the aesthetic aspects. With the planting of more trees and shrubs and the provision of landscaped sites, the Board strives to soften the impact of a sudden shift from a rural way of life

to an urban one and to provide more greenery in the housing estates.

As more estates come under the management of the Estates and Lands Division, the ecology of the environment will no doubt be affected and disturbed. The balance of plant, animal and insect life is destroyed, and as an attempt to restore the balance we are now planting fruit trees in our estates to attract birds and other small harmless insects. This will only succeed if wanton and unnecessary destruction of plants in our estates is avoided. When this project bears "fruits" in five to ten years' time, it is hoped that it will be able to attract some form of birdlife back into the estates. This will therefore go a long way towards offsetting and softening the hardness of the concrete structures of our high-rise blocks.

During the year our Nursery has concentrated on propagating trees instead of shrubs. As a consequence of this change in policy as well as with the implementation of the fruit tree project, more than 8,000 trees were propagated. Trees supplied during the same period rose by 4,000. Details of our stock in the Nursery are as follows:

	Trees	Shrubs, foliage annuals, hedges, creepers and others	Total
Balance as at 31st March 74	32,051	221,958	254,009
Total number of plants propagated in 1974/75	*18,159	**153,296	171,455
Total plants in stock	50,210	375,254	425,464
Total number of plants supplied in 1974/75	14,005	148,026	162,031
Balance as at 31st March 75	36,205	227,228	263,433
* Of these, 8,000 are fruit trees			
**Of these, 12,000 are ivy ficus			

Recreational Facilities

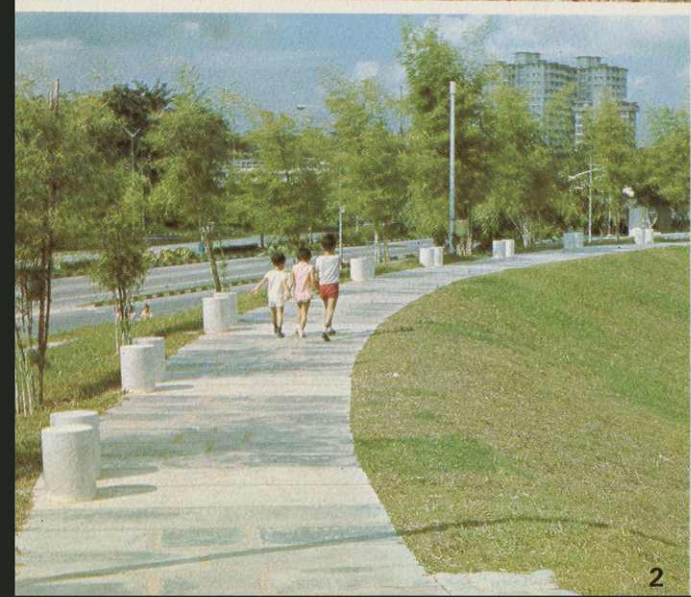
A typical example of the additional facilities provided and managed by the Estates and Lands Division is that of the Toa Payoh Town Garden situated next to the Toa Payoh Swimming Complex. In the past, the provision and management





KAY SIANG ROAD NURSERY

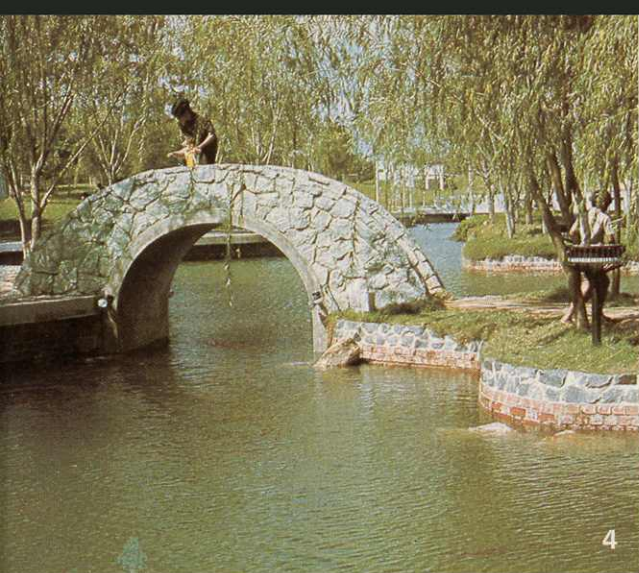
1. The Board's 5.4-hectare (13¼-acre) Kay Siang Road Nursery which supplied 14,000 trees and 150,000 shrubs during the year for landscaping in housing estates.
2. Watering and pruning of plants
3. Propagation of trees for our housing estates.



2



3



of such facilities were undertaken by the Public Works Department. The Town Garden covers an area of approximately 4.7 hectares (11.6 acres). It contains a children's playground, a large pond covering 0.8 hectare (2.2 acres) with water lilies, a miniature waterfall, a tea kiosk and a look-out tower. It is furnished with terrazzoed tables and chairs with appropriate shelters. These have proved popular with school children who have been seen using them for their studies. The popularity of the Town Garden can be gauged by the crowds during the evenings and weekends. Visitors to this Garden comprise not only residents from Toa Payoh but also from other estates as well as non HDB residents.

Another example is the multi-purpose paved area at Kallang Basin designed to cater to the needs of the sporting interests of our young. This is in the form of a concrete area complete with facilities for badminton, sepak raga, and roller skating, which is the latest craze of both teenagers and younger children. In a way this has reduced to a certain extent complaints of nuisance as a result of younger children skating along common corridors and five-foot ways. In the light of the limited available open spaces in the area, this experiment has proved workable, providing a more varied use of land.

TOA PAYOH TOWN GARDEN

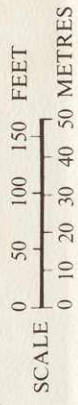
1. The semi-circular buildings overlooking the pond serve as a tea kiosk and rest place.
2. A path lined with clusters of bamboos and terrazzoed stools.
3. A miniature waterfall.
4. A granite bridge across the pond.
5. Lookout tower rising 27-metre (89-foot) high.

TOA PAYOH TOWN GARDEN



LEGEND

- | | | | |
|----|-----------------------|----|-------------------------------------|
| 1 | CHILDREN PLAYGROUND | 13 | TEA KIOSK |
| 2 | BIRD CAGE | 14 | DUSTBIN COMPOUND |
| 3 | R. C. WATERFALL | 15 | GAUGING STATION |
| 4 | LOOKOUT TOWER | 16 | ELECTRICAL SUB STATION |
| 5 | CONTROL HOUSE (B) | ☘ | TEMBUSU (fagraea fragrans) |
| 6 | LILY POOL | ⊙ | FLAME OF THE FOREST (delonix regia) |
| 7 | CONCOURSE | ⊙ | ANGSANA (pterocarpus indicus) |
| 8 | R. C. SHELTER | ⊙ | WILLOW TREE (salix sp.) |
| 9 | HEXAGONAL BRIDGE | * | BAMBOO TREE (bambusa nana) |
| 10 | ISLAND | | |
| 11 | ARCHED GRANITE BRIDGE | | |
| 12 | CONTROL HOUSE (A) | | |



Renovation Works by Flat Owners

A large number of lifts in new HDB estates has been damaged frequently through misuse by flat owners' renovation contractors. In some instances, the damage caused to lifts was extensive and required major repairs. To overcome and eradicate this problem of frequent lift breakdowns, the Estates and Lands Division introduced a pilot scheme whereby building materials for renovation works could be delivered to the flats and debris removed by contractors engaged by the Board.

Under this scheme the Haulage and Debris Removal Contractors transport the building materials from lift entrances on the ground floor up to the level of the owner's flat on specified days during stipulated hours. Renovation works may only be carried out within the first three months following completion of the flats. Flat owners are required to obtain prior approval in writing from the Area Offices before undertaking any renovation works. They are required to pay a specified fee for this service. The fees vary, depending on the type of flats. Since this scheme was introduced in July 74, it has helped to reduce the number of lift breakdowns through overloading and misuse in new estates and afford greater convenience to our residents.

Labour and Welfare Section

1974/75 has been a successful year for the Labour and Welfare Section in its recruitment exercises as the Estates and Lands Division has been able to fill most of the vacancies in Area Offices. This has been due to the minor recession in the Republic and many manufacturers in the private sector have retrenched their staff.

Since there is less difficulty in recruiting cleansing workmen for deployment to Area Offices, the Estates and Lands Division is more selective when engaging new workmen. Only the able-bodied and physically fit within the age range of 18 and 40 years and with a clear police record will be employed.

Labour Incentive Scheme for Workmen

Previously, priority was given to daily-rated employees with at least five years' satisfactory service and a minimum total family income of S\$250 per month to purchase Board's flats. Those with less than ten years' service were required to serve the Board for five years from the date of purchase of the flat. To provide greater incentive, this scheme has been revised to enable daily-rated employees with three years' satisfactory service to purchase flats. Daily-rated employees are eligible to apply for rental flats after six months' satisfactory service.

Loans for the purchase of scooters/motorcycles have been extended to Senior Leading Hands (Special) (Senior Mandores) whose duties require them to travel around the estates to supervise their workmen. To compensate them for the use of their vehicles for official duties, they are paid a transport allowance of S\$25 per month following the report of the Nathan Review Committee.

Sales Section

The demand for flats under the Home Ownership Scheme which began in 1964 continued throughout the year under review. During this period 16,588 new applications were registered. As at 31st March 75, the total number of applicants on the waiting list for the purchase of flats was 79,922. On an average, no less than 300 applicants call at the Sales Section daily either to submit their applications or to make enquiries regarding their applications. New applications registered for each of the 12 months are shown on page 127.

During the same period under review 14,856 units were sold under the Home Ownership Scheme. Page 128 shows the details of the units sold in the various housing estates. This brings the total number of flats sold since the inception of this Scheme in 1964 to 78,225 units as shown on pages 129-130.

A considerable number of requests for cancellation/withdrawal of applications was received due to various reasons. Since 1st April 74 no less than 2,100

registered applicants either cancelled or withdrew their applications due to the following reasons:

- 1 Applicants were unable to make up the difference for the required initial deposit where Central Provident Fund credits were utilised;
- 2 Applicants or members of the family listed in the applications became owners of private properties;
- 3 Multiple applications from members of the same family nucleus.

Priority for the purchase of flats under the Home Ownership Scheme was extended to officers from the Singapore

Fire Brigade while the priority scheme for the Police personnel has been extended to regular staff of the Vigilante Corps.

Applications and Lettings Section

There is still an unabated demand for rental flats despite the large increase in the number of applications to purchase Board's flats. During the year under review 10,480 applications were received. Up to 31st March 75 18,954 applications were on the waiting list. Details are shown on page 131. This is because the rental flats still satisfy an urgent need of those who cannot yet afford to buy their own homes.

MONTHLY HOUSEHOLD INCOME AND HOUSING EXPENDITURE OF HDB TENANTS

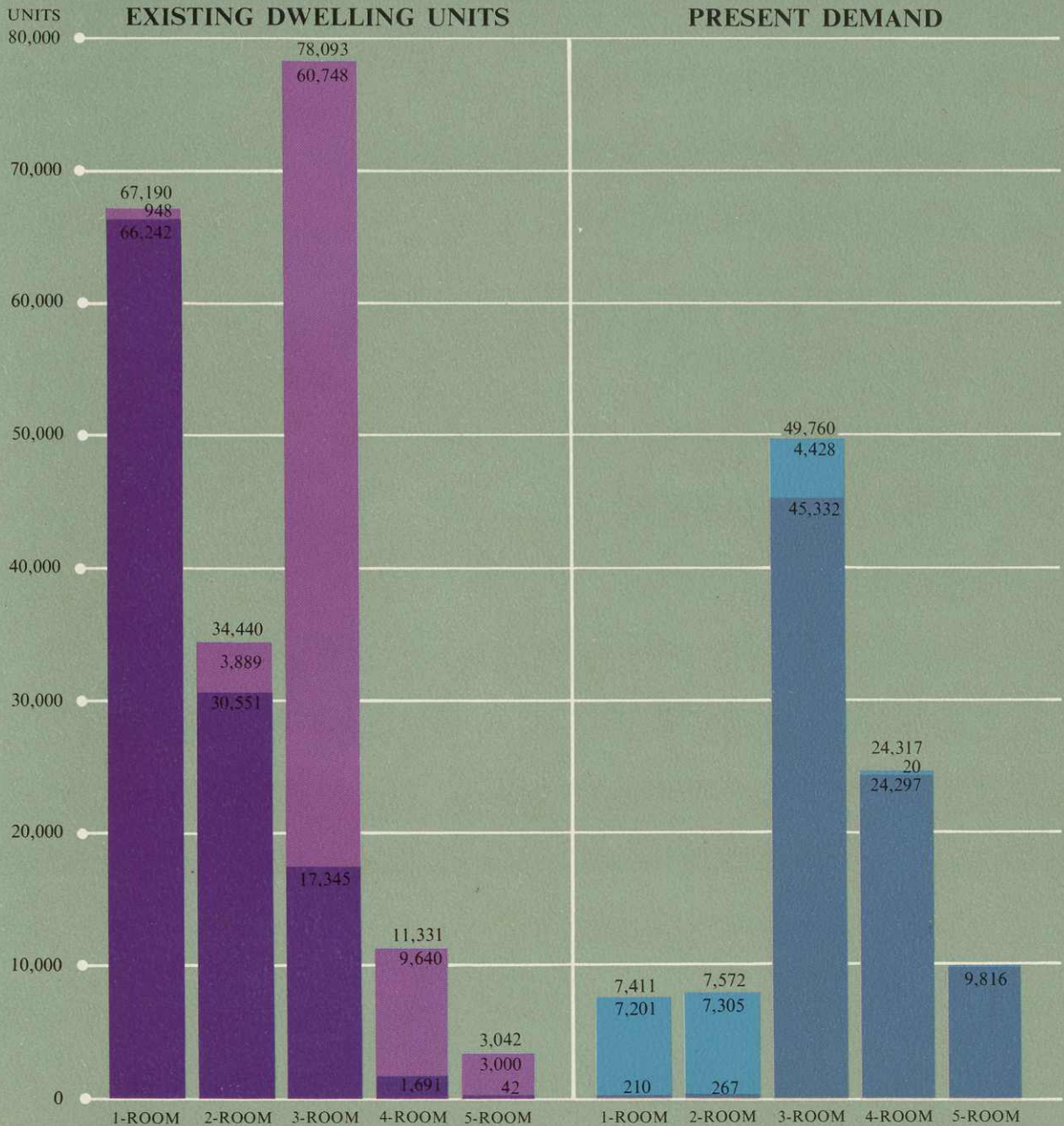
Monthly household income & housing expenditure	Type of flat			
	1-Room (Standard)	2-Room (Standard)	3-Room (Standard)	4-Room (Standard)
1 Monthly household income	S\$267	S\$404	S\$617	S\$900
2 Rental	S\$20.00	S\$40.00	S\$60.00	S\$80.00
3 Service and conservancy charges	S\$9.00	S\$13.00	S\$15.00	S\$17.00
4 (2+3)/(1)	10.9%	13.1%	12.2%	10.8%

SELLING PRICES OF HDB FLATS AND MONTHLY HOUSEHOLD INCOME OF APPLICANTS ON WAITING LIST TO PURCHASE FLATS

Monthly household income & selling prices of flats	1-Room Improved	2-Room Standard	3-Room Improved	4-Room Improved	5-Room
Monthly household income	S\$326	S\$363	S\$428	S\$637	S\$1,006
Selling price of flat at new town	S\$3,300	S\$6,900	S\$11,800	S\$18,500	S\$30,000
Equivalent of selling price to monthly income	10.1 months	19.0 months	27.6 months	29.0 months	29.8 months

HISTOGRAM SHOWING EXISTING DWELLING UNITS AND DEMAND FOR HDB FLATS AS AT 31ST MARCH 75

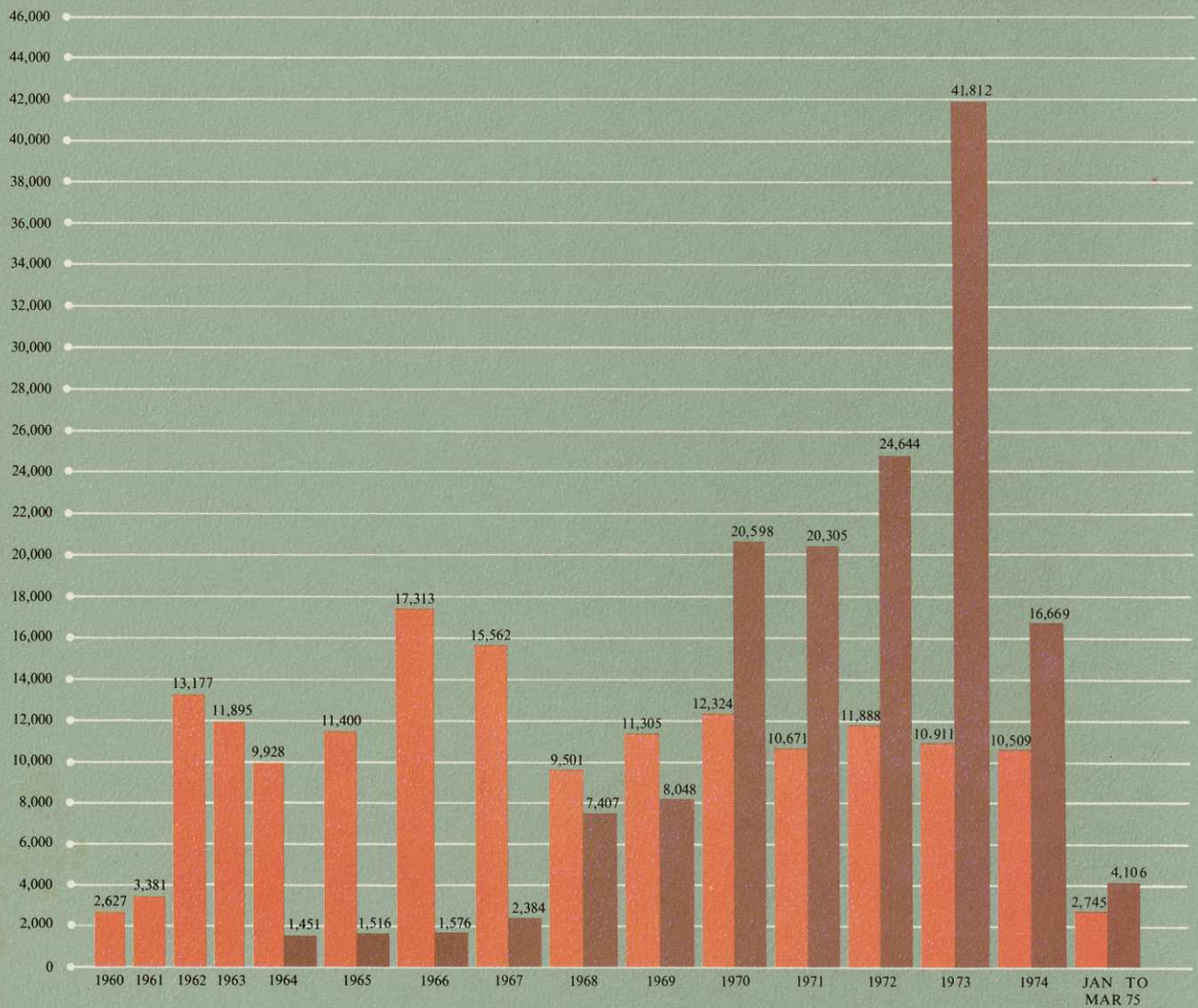
- NO. OF UNITS RENTED TO THE PUBLIC
- NO. OF UNITS SOLD TO THE PUBLIC
- NO. OF APPLICATIONS ON WAITING LIST TO BUY
- NO. OF APPLICATIONS ON WAITING LIST TO RENT



NEW APPLICATIONS TO RENT & TO PURCHASE HDB FLATS

■ NEW APPLICATIONS TO RENT HDB FLATS
■ APPLICATIONS TO PURCHASE FLATS UNDER THE HOME OWNERSHIP FOR THE PEOPLE SCHEME

APPLICATIONS



Rehousing

A total of 158 families was rehoused in Board's estates following the outbreak of a few fires in various parts of the island. All fire victims were given housing accommodation within 24 hours. Page 132 shows the details of the various fires and the fire victims rehoused.

In some of the older estates such as Kreta Ayer and Banda Street where the accommodation density was low, clearance for redevelopment took place with the view to obtaining better land use and higher density development. The families affected in these estates were given alternative accommodation of their choice, mostly in close proximity to their existing estates. Altogether, a total of 203 dwelling units and 28 shops was affected.

Transfer of Accommodation

The Division recognises the importance and necessity of a sound transfer policy both from the management point of view as well as in the residents' interests in establishing a happy and contented community. Transfers may be initiated by tenants themselves and some typical reasons given are to be nearer to place of work, to be nearer to parents or relatives, or overcrowding in the existing flat. They may also be justified by housing gain, eg where the present accommodation is under-occupied, it should be allocated to a larger family, or where differences between neighbours or domestic quarrels have become irremediable, a separation of such families becomes a management necessity.

Statistically, the Transfers Section handled the following cases during the year:

Outstanding cases brought forward as at 1st April 74	3,523
New registrations up to 31st March 75 (including reinstatements)	<u>2,223</u>
Total	5,746
Less cases settled	1,919
cancellations	872
	<u>2,791</u>
Outstanding cases as at 31st March 75	<u>2,955</u>

Business/Light Industrial Premises

All the Board's industrial and business premises are allocated by public tender. Within the various housing estates, shops are allocated to provide various trades according to the needs of the residents. Most of the shops have been allocated to small-scale traders. However, large departmental stores operating as emporiums and other shopping complexes have also been considered. Examples of these are at Toa Payoh Town Centre and Queenstown Town Centre. The trend in commercial enterprises seems to be scaling down to specialisation of services as larger companies participate in the public tenders of our shops. Some of these are banks, textiles emporiums, manufacturers of electronic equipment and motor workshops.

The Sin Ming Industrial Estate has been developed into a centralised area for motor workshops providing a host of automobile services such as car repairs, spray painting and other allied services. This is the first of its kind under management by the Division. The policy of setting up light and clean industries within housing estates provides residents, particularly housewives and young school leavers, with employment opportunities in close proximity to their homes. It is hoped that such developments will upgrade the various levels of technical achievements amongst our residents working in factories and other production lines.

During the year 664 business premises and 300 light industrial premises were let. These were allocated by tenders and also to resettle shopkeepers/workshop operators affected by various clearance schemes. In addition to letting out shop premises for trading business purposes, the Division also lets out shop premises at low rentals to non-profit making organisations which provide community services. Four kindergartens, one community centre, and three post offices were let during the year under review. To help fight against inflation and rising cost of living, the Division has also let out several units to consumers' associations for the sale of basic household necessities.

Legal Section

Legal matters of the Estates and Lands Division dealt with by the Legal Section relate to breach of tenancy covenants, sale of flats under the Home Ownership Scheme, problems in connection with land acquisition and appeal cases, industrial leases, littering offences and prosecution of offenders in Court and Warrant to Dispossess and other ancillary matters.

Where a Board's tenant misuses the flat or commits any breach of covenants or conditions of his tenancy agreement, the Area Office terminates his tenancy by way of a Notice to Quit. If the tenant does not voluntarily give up the flat, legal action will be initiated by the Legal Section. The common breaches are non-payment of rent, unauthorised assigning or subletting and change of the use of the premises without Board's approval. In most cases, especially rent arrears, every attempt will be made to persuade the tenant to rectify this breach without legal action. However, if the tenant is a recalcitrant or if the breach is of a serious nature, legal action to recover the rent will be taken against him either in the District Court or High Court.

For the year under review 795 such cases were handled, 246 District Court Summonses and 24 High Court Writs were issued, 102 District Court and 7 High Court Judgements were obtained. Only 67 District Court and 4 High Court Writs of Possession were taken out because either the tenant voluntarily gave up the Board flat after legal action had commenced or the Board discontinued action on compassionate grounds following rectification of the breach by the tenant.

The Legal Section processed and registered 5,206 leases and 4,636 mortgages of Board flats sold. 2,653 loans to lessees were redeemed during the period and the total discharge of mortgage instruments was processed by the Section for registration. The Section also processed 759 transfer instruments of Board's lessees who sold their flats purchased under the Home Ownership Scheme.

Legal action against Board's lessees who

breached the covenants in the lease or mortgage was also initiated. Minor breaches were resolved without legal action. For those of a more serious nature, such as false declaration in lessee's application, the Estates and Lands Division will take action to repossess the flat. Five such cases were discovered, three of whom declared that neither they nor members of the families were property owners at the time of application. For the first time, the Board found it necessary to exercise its power under Section 45 of the Housing and Development Act to compulsorily purchase back the flat from a sole beneficiary of the deceased lessee as the beneficiary was not eligible to own a flat under the Home Ownership Scheme.

During the year the Prosecution Unit was entrusted with the additional function of prosecuting trespassers and persons who erected unauthorised structures on land managed by the Board under the State Land Encroachment Act. This involves an application to the Court for Warrant to Dispossess the trespassers and to remove the illegal structures. In the past this Unit has only been responsible for the prosecution of offences committed in Board's estates under the Environmental Public Health Act and its various Regulations. A total of 1,167 offenders, the majority of whom either had violated Regulations governing hawkers or litterbugs, was successfully prosecuted. Page 133 shows the number of cases dealt with by the Legal Section.

In addition to the above, the Legal Section advised the Division on various legal matters encountered in the course of management of Board's estates. During the year this Section worked on amendments to the Housing & Development Act to resolve certain major problems which have arisen due to the large increase in the home ownership of the Board's flats.

The amendments would include:

- 1 amendment to Section 41 which provides that no person can buy a HDB flat if he or any occupier named had at any time within 30 months prior to the date of submitting an application to purchase a HDB flat sold his own property.

- 2 amendment to Section 45 which permits the Board to re-purchase a flat on the death of the owner to prevent any person who is not eligible to own a HDB flat from acquiring a flat by inheritance.
- 3 amendment to Section 48A and related Sections 48B, 48C and 48D which empower the Board to speedily re-possess a flat by compulsory acquisition in instances when the owner/lessee commits a breach which, inter alia, include non-occupation of the flat, acquisition of an interest in property, misuse of the flat, ceasing to be a Singapore citizen, etc.
- 4 amendment to Sections 48E and 48F which makes it a criminal offence to give false information in an application form for purchase of a flat or to assign or to sublet the flat without the consent of the Board.

Land Acquisition

To activate public developments, the tempo of the Board's accelerated Building Programme was further increased. Sufficient lands therefore have to be acquired in time for development. To achieve this, the Land Acquisition force was strengthened and efforts were intensified to acquire more development sites. A total of 321 lots covering 837.58 hectares (2,069.71 acres) was acquired. The acquired sites included substantial tracts of lands at Woodlands, Ang Mo Kio and Bedok where some of the Board's biggest new towns are being developed. The total compensation paid to the land owners amounted to S\$47,914,565.71. Details of these acquisitions are shown on pages 134-135.

The Section also acquired 12.95 hectares (32 acres) of State Land at Alexandra Road, Changi Village and Katong (reclaimed land) to supplement the private lands acquired for redevelopment.

To speed up clearance of city slums, the Board has launched a second-pronged Housing Programme for the Urban Areas. For its implementation, a number of sites in the Urban Areas has been earmarked for acquisition.

Industrial Sites

Many sites in housing estates were leased to industrialists for the establishment of light and clean industries which will promote technical skills for workers and residents in Board's estates. This policy is aimed at developing eventually a ready source of skilled manpower for local based industries. During the year under review four new sites, one in Woodlands and three in Bedok, have been added to the 121 industrial sites, bringing the total number of industrial sites under management to 125 spread over a total area of 88.63 hectares (219 acres).

Cinema Sites

Cinema sites have also been set aside in town centres of housing estates to provide entertainment for the residents living in the estates. Two sites situated at Queenstown Town Centre and Marine Parade Centre were leased. The leasing was by competitive public tender and the highest tenders received and accepted were:

<u>Cinema Site</u>	<u>Area</u>	<u>Amount</u>
Queenstown Town Centre	2,263.1 s.m.	S\$1,242,360
Marine Parade Centre	1,485.9 s.m.	S\$ 815,643

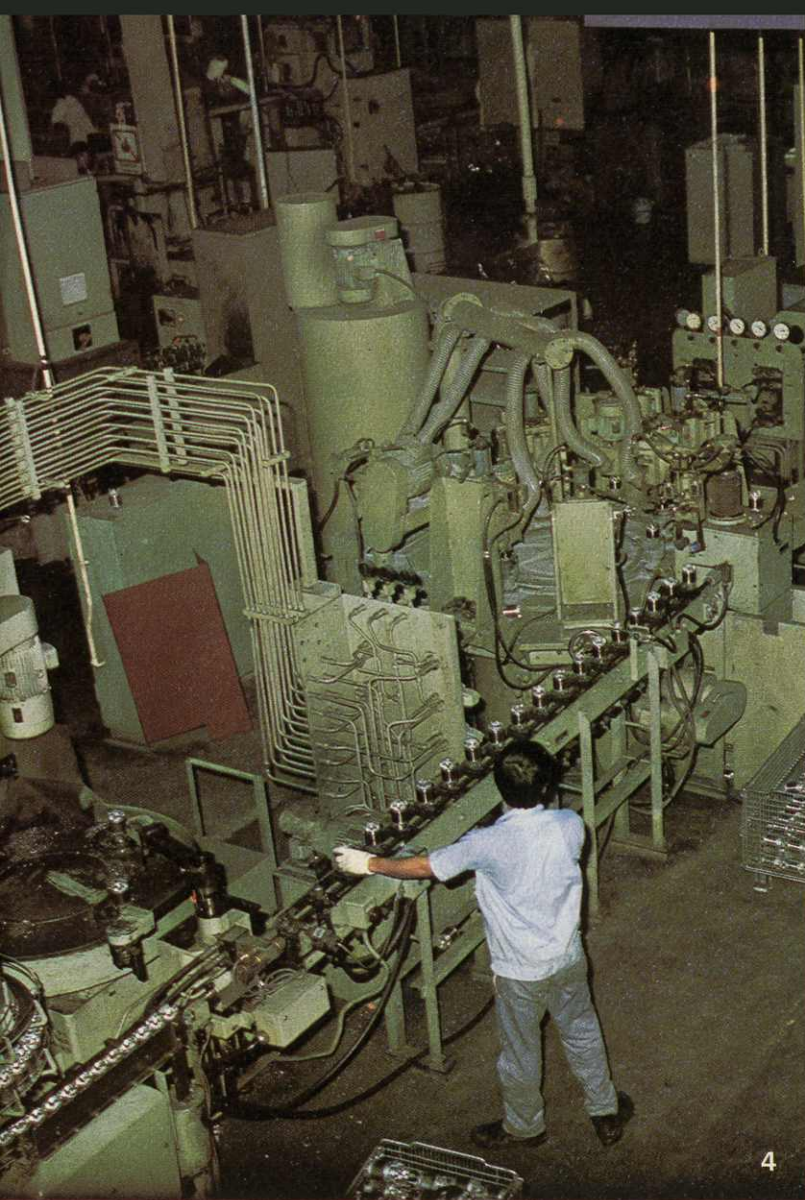
Lands Management

During this period a total of 132 Temporary Occupation Licences was issued to the existing occupiers to regularise the occupation of Board lands at Woodlands, Sembawang, Ang Mo Kio and other areas pending development. As these lands acquired by the Board are earmarked for development and in order to prevent the increase of the clearance problem, no permission will be given to the applications for reconstruction, extension, subletting and change of use. However, minor repairs to the existing structures may be allowed in cases of necessity. For this period, 24 applications for repairs on Board lands were approved by the Board and 50 unauthorised structures were demolished.

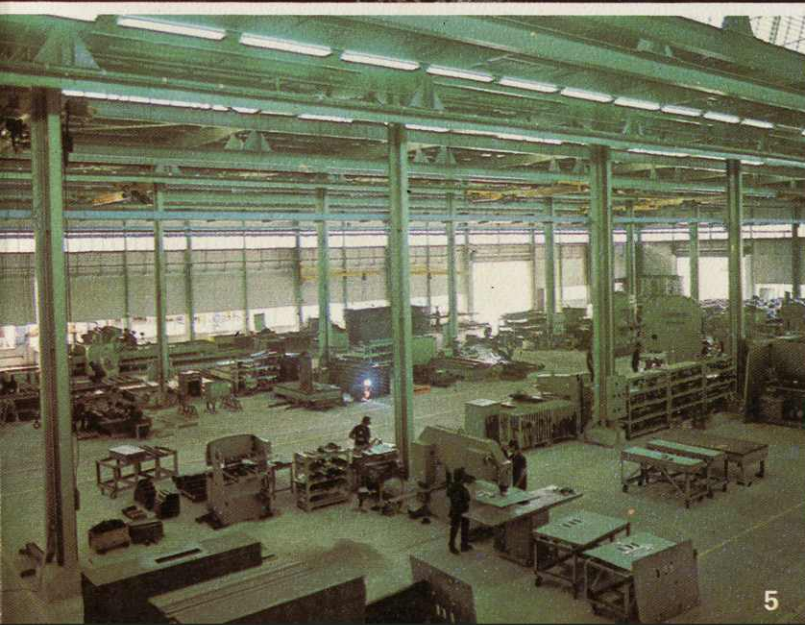
Staff and Staff Training Scheme

The training scheme for Trainee Estates Officers/Valuers introduced in 1966 continues to prove its usefulness. During the year 17 candidates sat for the First





4



5

HIGHER TECHNOLOGY INDUSTRIES AT BEDOK NEW TOWN

1. Oberg, a high precision engineering industry, produces ultra-precision stampings for the electronics industries.
2. Hitachi Chemical (S) Pte Ltd manufactures printed circuit boards.
3. A production line engaged in the manufacture of black-and-white TV sets at Hitachi Consumer Products (S) Pte Ltd. The air-conditioned factory also manufactures colour TV sets, tape recorders and electronic components.
4. Components of refrigerator compressors are machined from casting into precision mechanical parts with fully automatic machinery at Matsushita Electric of Singapore (Pte) Ltd.
5. Manufacture of lifts and related components at Singapore Fuji Elevator Corporation Ltd.





Three- and four-room Improved flats built on elevated plane at Buona Vista Estate.

Examination, 11 candidates for the Intermediate and 11 candidates for the Final Examinations of the Royal Institution of Chartered Surveyors. Of these, 10, 2 and 5 were successful in the respective Examinations. This group of Trainee Officers continues to provide the core of suitably qualified officers for the Division in the fields of housing estates and lands management connected with the accelerated programme of low-cost housing.

The number of resignations at Senior Officers' and Intermediate Officers' level has been reduced as a result of incentives offered by the Board. This is in accordance with the Board's and the Public Service Commission's decision that suitable officers within the Timescale should be promoted based on the merits of the individual officers especially those who are efficient and capable of shouldering additional responsibilities.

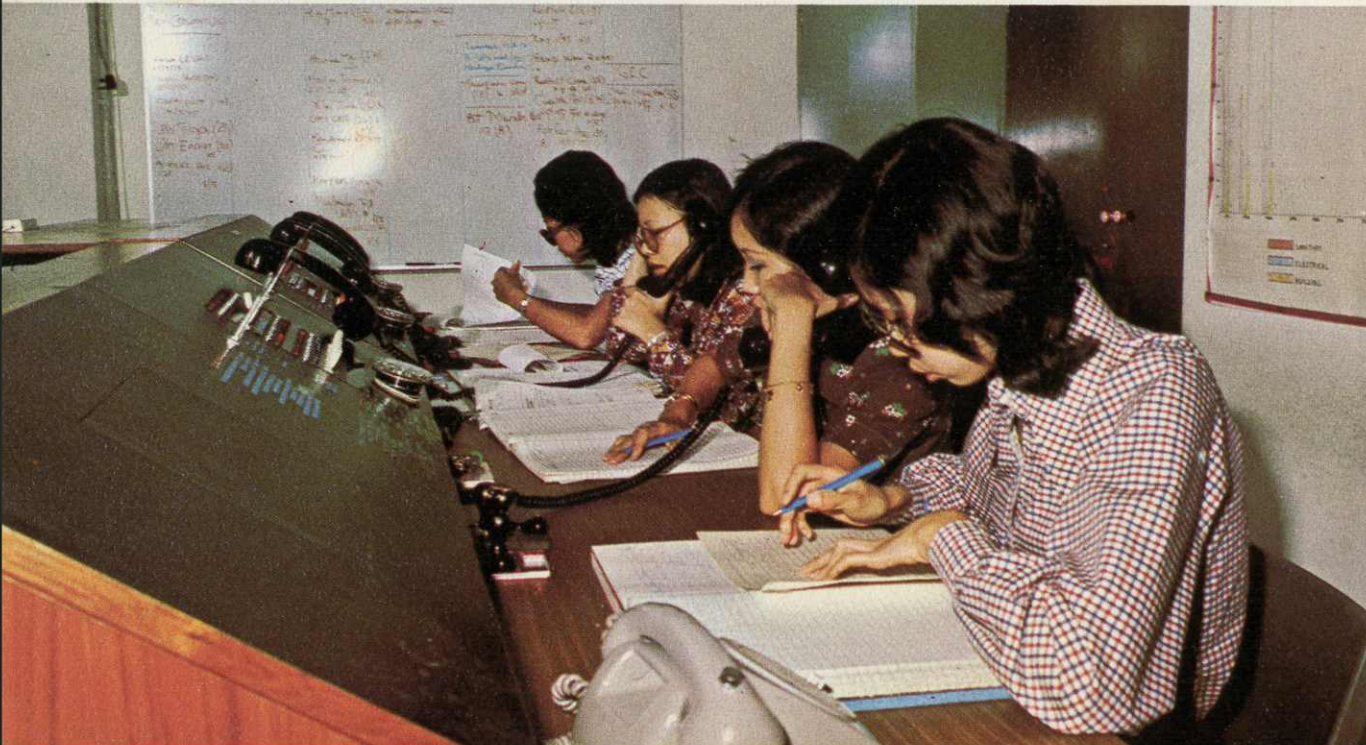
Training Facilities under the Colombo Plan
Since 1965 the Division has been providing practical training in various aspects of

housing and estates management under the Colombo Plan Technical Co-operative Scheme. During the year four Colombo Plan Trainees were attached to the Division to gain an insight into the Board's system of housing and estates management in the Republic. The details, viz, are as follows:

Country	Name	Period of Attachment	Type of Award
Sri Lanka	Mr Nawalage Buddha-dasa Cooray	21 Jan – 21 May 74	Junior Fellowship
	Mr Mahmood-ul-haq Siddiqi	18 Jun – 17 Sep 74	Junior Fellowship
Pakistan	Mr Hazoor-ul-haq Chaudhry	18 Jun – 17 Sep 74	Junior Fellowship
Burma	Mr U Ohn Myint	18 Feb – 16 Aug 75	Senior Fellowship

Right: On the average 1,600 people go to the Toa Payoh Swimming Complex on a weekday. During a typical weekend (Saturday and Sunday) about 11,000 people make use of this swimming complex.

Bottom: Emergency telephone calls being received and acted upon immediately at the nerve centre of the Essential Maintenance Service Unit which functions round the clock.







UNITS UNDER MANAGEMENT DURING 74/75

Properties	Units as at 31.3.74			Units taken over in April 74/ March 75	Units withdrawn/ demolished	Units as at 31.3.75
	HDB	BECD*	Total			
Dwellings						
1-room	60,537	—	60,537	6,653	—	67,190
2-room	31,365	265	31,630	3,254	51	34,833
3-room	66,509	994	67,503	9,674	—	77,177
4-room	7,828	—	7,828	3,351	—	11,179
5-room	881	2	883	1,632	—	2,515
Shops						
Lock-up cum Dwelling	5,133	—	5,133	530	—	5,663
Miscellaneous						
Non-housing unit	—	11	11	—	—	11
Hawker stall	7,217	—	7,217	1,019	—	8,236
Hawker pitch	1,043	—	1,043	—	273	770
Parking lots: car	6,280	—	6,280	18,358	—	24,638
motorcycle	2,460	—	2,460	7,816	—	10,276
Land tenancies	952	—	952	179	44	1,087
Bus bays	217	—	217	—	—	217
Others (kiosk, office, etc)	835	—	835	422	—	1,257
Total	191,257	1,272	192,529	52,888	368	245,049

*Bases Economic Conversion Department

SUMMARY

Period	Dwellings	Shops	Miscellaneous	Total
Units as at 31.3.74	168,381	5,133	19,015	192,529
Units taken over in April 74/March 75	24,564	530	27,794	52,888
	192,945	5,663	46,809	245,417
Units withdrawn/ demolished	51	—	317	368
Units as at 31.3.75	192,894	5,663	46,492	245,049

Three-room Improved flats along Marine Parade Road. The point block behind has five-room flats.

HAWKER CENTRES UNDER MANAGEMENT IN 74/75

No.	Hawker centre	Location	No. of stalls
1	Balestier Est Redev C4	Whampoa Drive Blks 91 & 92	288
2	Bukit Ban Kee Pr Sl C5	Jalan Kukoh Blk 1	153
3	Bukit Ho Swee Ph3 C9	Havelock Road Blk 50	123
4	Bukit Ho Swee Ph3 C11	Havelock Road behind Blk 22	38
5	Bukit Merah Redev C7	Redhill Lane Blk 79	270
6	Bukit Merah Redev C8	Redhill Lane Blk 85	96
7	Covent Garden Redev C3	Zion Road Blk 86	34
8	Kallang Airport Redev Hawker Centre/Emporium	Old Airport Road Blk 51	328
9	Kallang Basin N1 Ph2 C6	Bendemeer Road Blk 29	288
10	Kallang Basin N1 C4	Petaling Road Blk 5	228
11	Kallang Basin N2 C1	Bendemeer Road Blk 42	148
12	Kallang Basin N3 C6	Geylang Bahru Blk 69	236
13	Kallang Basin (Sims Ave) Ph3 C3	Geylang Bahru Blk 17	236
14	Kg Tiong Bahru Bal C2	Jalan Membina	56
15	Kg Tiong Bahru Bal C7	Jalan Bukit Merah Blk 112	138
16	Kg Tiong Bahru Bal C8	Kim Tian Road Blk 121	164
17	Kim Tian Road/Tg Bahru Road	Tiong Bahru Road	31
18	MacPherson (S) Bal C15	Circuit Road Blks 79 & 79A	148
19	MacPherson (S) Ext C2	MacPherson Lane Blk 84	168
20	MacPherson (S) Bal C19	Circuit Road Blks 80 & 89	440
21	Outram Park Pr S C1	Outram Park	20
22	Princess Elizabeth Park Est	Hillview Avenue	52
23	Queenstown N2 Ext C2	C'wealth Avenue	86
24	Queenstown N3 C7A	C'wealth Crescent Blks 119/125	92
25	Queenstown N4 Ph2 C3	C'wealth Drive Blks 46-4 to 46-9	76
26	Queenstown N6 C10	Mei Ling Street Blk 159	305
27	Redhill Est Bal C9	Lengkok Bahru fronting Blk 55	162
28	Redhill/Henderson Ph2 C3	Bukit Merah View Blk 115	293
29	St Michael's Estate	Jalan Tenteram	156
30	Tg Rhu/Mountbatten Road	Jalan Batu Blks 3, 4 & 7	166
31	Tiong Bahru Pre-War Est	Lim Liak Street	74
32	Toa Payoh N1 C7	Lor 7 Toa Payoh Blks 22A/D	80
33	Toa Payoh N1 C7A	Lor 7 Toa Payoh Blk 22	132
34	Toa Payoh N1 C9	Kim Keat Avenue Blks 64/66	146
35	Toa Payoh N2 C4A	Lor 5 Toa Payoh Blk 75	36
36	Toa Payoh N2 C10	Lor 4 Toa Payoh Blk 74	192
37	Toa Payoh N3 C2	Lor 4 Toa Payoh Blk 93	162
38	Toa Payoh N3 C12	Lor 6 Toa Payoh Blk 188	33
39	Toa Payoh N3 C12	Lor 2 Toa Payoh Blk 176	308
40	Toa Payoh N4 C7	Lor 1 Toa Payoh Blk 127	219
41	Toa Payoh N4 C7A	Lor 1 Toa Payoh Blks 131/135	64
42	Upp Aljunied Road Redev C3	Upper Aljunied Lane Blk 9	168
43	Upp Changi Road Est N2	Jalan Chai Chee Blks 12, 14-18	28
44	Upp Changi Road Est N2 C5	Chai Chee Avenue Blk 29	200
45	Upp Thomson Road 6 km SCC1	Upp Thomson Road Blks 4 & 9	238
46	Upp Thomson Road 8 km SCC2	Venus Road Blk 18	118
Total			7,217

HAWKER CENTRES TAKEN OVER DURING 74/75

No.	Hawker centre	Location	No. of stalls
1	Brickworks Est Redev	Jalan Bukit Merah	182
2	Buona Vista Est C4	Holland Drive Blk 44	217
3	Marine Parade Est C9	Marine Terrace Blk 70	143
4	Telok Blangah N1 C4	Telok Blangah Crescent Blk 11	223
5	Toa Payoh N5 C1	Lor 8 Toa Payoh Blk 210	254
Total			1,019

HAWKER PITCHES UNDER MANAGEMENT IN 74/75

No.	Estate	Location	No. of pitches
1	Bukit Ban Kee Pr S1 C5	Jalan Kukoh car park	55
2	Bukit Ho Swee Estate	Beo Crescent concourse	162 (day) 79 (night)
3	Durham Estate	Blk 41/42 Cambridge Road, backlane and sidelane	143
4	Delta Estate—Kim Seng hawker pitches	Havelock Road	71
5	Kg Silat Estate	Silat Square	44
6	Tg Rhu/Mountbatten Road	Jalan Batu Market concourse Blks 3, 4 & 7	154
7	Clementi Road Est	Clementi Road	46
8	Changi Point open hawker pitches	Nicoll Drive	62
Total			816

HOME OWNERSHIP FOR THE PEOPLE SCHEME

NEW APPLICANTS REGISTERED TO PURCHASE FLATS FROM 1ST APRIL 74 TO 31ST MARCH 75

Period	1-Room	2-Room	3-Room	4-Room	5-Room	Total
April 74	26	21	736	338	119	1,240
May 74	54	73	672	359	127	1,285
June 74	57	68	970	473	156	1,724
July 74	39	30	762	388	154	1,373
August 74	22	21	857	369	149	1,418
September 74	7	15	713	334	120	1,189
October 74	5	19	794	377	138	1,333
November 74	1	11	924	414	110	1,460
December 74	3	9	914	391	143	1,460
January 75	—	11	792	382	140	1,325
February 75	1	9	513	237	122	882
March 75	—	14	1,149	566	170	1,899
Total	215	301	9,796	4,628	1,648	16,588

HOME OWNERSHIP FOR THE PEOPLE SCHEME

FLATS SOLD (NEW & EXISTING FLATS) BETWEEN 1ST APRIL 74 & 31ST MARCH 75

Estate	1-Room	2-Room	3-Room	4-Room	5-Room	Total
Albert House	—	63	—	—	—	63
Ayer Rajah	—	—	396	—	—	396
Bedok	—	—	416	—	—	416
Brickworks	—	—	241	—	—	241
Bukit Ho Swee	—	18	17	—	—	35
Buona Vista	—	—	141	—	—	141
Geylang East	—	—	502	—	—	502
Geylang Serai	—	1	—	—	—	1
Kallang Basin	—	—	428	360	—	788
Kim Tian/ Kampong Silat	—	—	531	120	—	651
MacPherson	—	22	16	—	—	38
Marine Parade	—	—	1,934	1,486	480	3,900
Park Road	—	—	320	—	—	320
Ponggol	—	—	517	180	76	773
Queenstown	—	79	379	—	—	458
Redhill/Henderson	—	—	374	168	—	542
Rochore House	—	33	—	—	—	33
Selegie House	—	20	26	2	—	48
Seletar Hill/ Jalan Kayu	—	—	186	—	—	186
St Michael's	—	—	5	—	—	5
Telok Blangah	264	—	2,681	436	192	3,573
Tiong Bahru	—	14	60	—	—	74
Toa Payoh	—	—	10	340	192	542
Woodlands	—	—	722	240	168	1,130
Total	264	250	9,902	3,332	1,108	14,856

HOME OWNERSHIP FOR THE PEOPLE SCHEME

TOTAL NUMBER OF FLATS SOLD AS AT 31ST MARCH 75

Estate	1-Room	2-Room	3-Room	4-Room	5-Room	Total
Albert House	—	190	—	—	—	190
Alexandra Hill	—	—	204	—	—	204
Ayer Rajah	—	—	396	—	—	396
Balestier	—	—	1,720	668	—	2,388
Bedok	—	—	416	—	—	416
Brickworks	—	—	241	—	—	241
Bukit Ho Swee	452	508	2,488	—	—	3,448
Buona Vista	—	—	3,473	945	384	4,802
Chin Swee Road	—	192	44	96	—	332
Covent Garden	—	—	423	110	96	629
Delta	—	—	160	—	—	160
Farrer Road	—	—	238	252	164	654
Geylang East	—	—	502	—	—	502
Geylang Serai	—	408	105	1	—	514
Henderson Crescent	—	—	276	602	—	878
Kallang Basin	—	—	4,593	814	384	5,791
Kallang/Tg Rhu	—	312	1,038	—	—	1,350
Kg Tiong Bahru	—	3	951	40	—	994
Kim Tian/Kg Silat	—	—	531	120	—	651
Kreta Ayer	—	—	252	—	—	252
MacPherson	—	470	4,719	56	—	5,245
Marine Parade	—	—	2,396	1,486	1,056	4,938
Maude Rd/ Kitchener Rd	—	—	133	43	—	176
Moulmein Rd	—	—	—	76	—	76
North Bridge Rd	—	—	—	152	96	248
Outram Rd	—	8	5	280	—	293
Park Rd	—	—	320	—	—	320
Ponggol	—	—	517	180	76	773
Prinsep Street	—	—	112	—	—	112
Queenstown	—	1,258	10,025	474	—	11,757

(Cont'd on Page 130)

HOME OWNERSHIP FOR THE PEOPLE SCHEME

TOTAL NUMBER OF FLATS SOLD AS AT 31ST MARCH 75

(cont'd.)

Estate	1-Room	2-Room	3-Room	4-Room	5-Room	Total
Redhill/Henderson	232	94	3,180	480	–	3,986
Rochore House	–	123	–	–	–	123
Selegie House	–	22	391	31	–	444
Seletar Hill/ Jalan Kayu	–	–	186	–	–	186
Siglap Fire Site	–	84	–	–	–	84
Sin Ming Industrial Estate	–	–	584	198	–	782
St Michael's	–	–	919	–	–	919
Telok Blangah	264	–	2,681	436	192	3,573
Tew Chew Street	–	–	–	72	–	72
Tiong Bahru	–	27	508	15	–	550
Toa Payoh	–	190	13,924	1,521	192	15,827
Upper Changi	–	–	984	150	192	1,326
Woodlands	–	–	1,113	342	168	1,623
Total	948	3,889	60,748	9,640	3,000	78,225

NUMBER OF APPLICANTS ON WAITING LIST TO RENT HDB FLATS AS AT 31ST MARCH 75

Estate	1-Room	2-Room	3-Room	4-Room	Total
Balestier Road	286	193	214	—	693
Beach Road	525	397	204	1	1,127
Bedok	280	122	90	—	492
Bukit Ho Swee	129	22	7	—	158
Bukit Merah	504	1,005	434	—	1,943
Cantonment Road	204	46	18	—	268
Jln Chai Chee	559	254	298	—	1,111
Kallang	70	148	114	—	332
Kg Tiong Bahru	293	179	105	—	577
Kreta Ayer	—	—	—	—	—
Lavender Street	1,312	900	817	—	3,029
MacPherson	363	453	212	4	1,032
Marine Parade	60	607	170	—	837
Maude Road	170	25	7	—	202
Old Popular Properties	4	30	28	—	62
Outram Park	35	69	43	14	161
Ponggol	283	71	89	—	443
Princess Elizabeth	14	35	21	—	70
Queenstown	77	575	421	—	1,073
Selegie House	—	4	3	—	7
St Michael's	37	136	13	—	186
Tanjong Rhu	—	55	8	—	63
Telok Blangah	424	271	288	1	984
Toa Payoh	869	1,244	476	—	2,589
Upper Thomson	120	104	67	—	291
Woodlands	112	100	94	—	306
York Hill	471	260	187	—	918
Total	7,201	7,305	4,428	20	18,954

LIST OF FIRES THAT OCCURRED BETWEEN 1ST APRIL 74 & 31ST MARCH 75

No.	Date	Name of fire site	Cases affected		Total no. of persons	Cases rehoused		Units used
			Families	Single persons		Families	Single persons	
1	3 Apr 74	Clementi Road	3	—	18	3	—	3
2	17 May 74	75D Happy Ave West	9	1	50	6	—	6
3	26 May 74	Chander Rd/Belilios Rd	62	15	329	36	4	38
4	8 Jun 74	Jalan Paya	5	2	30	5	—	5
5	6 Jun 74	Trengganu St	13	16	65	9	11	12
6	14 Aug 74	Syed Alwi Road	19	19	97	16	7	18
7	10 Sep 74	Lorong Tanggam/Lor Ranting	11	3	80	9	—	9
8	27 Sep 74	Aljunied Rd/Lor 25 Geylang	13	—	57	10	—	10
9	27 Oct 74	Ah Hood Road	36	—	204	26	—	26
10	1 Nov 74	Arab Street	8	24	59	3	14	6
11	3 Nov 74	Pasar Lane	6	3	31	5	2	6
12	8 Dec 74	Albert Street	13	12	66	10	—	10
13	6 Jan 75	50L Lorong Landasan	1	—	2	1	—	1
14	11 Feb 75	Jalan Tan Tock Seng	5	—	18	3	—	3
15	10 Mar 75	39D & 43 Kg San Teng	2	—	11	1	—	1
16	22 Mar 75	3, 7 & 11 Jalan Lobak	3	3	28	3	—	3
17	28 Mar 75	81 Killiney Road	2	—	6	1	—	1
Total			211	98	1,151	147	38	158

LEGAL SECTION (STATISTICS AS AT 31ST MARCH 75)

Breach of Tenancy Cases

- 795 cases referred
- 246 District Court Summonses issued
- 24 High Court Writs issued
- 102 District Court Judgments obtained
- 7 High Court Judgments obtained
- 67 District Court Writs of Possession taken
- 4 High Court Writs of Possession taken

Legal Action in Sold Property Cases

- 327 cases referred
- 34 High Court Writs issued
- 21 Judgments entered
- 6 Writs of Possession obtained
- 5 cases of False Declaration pending Court decision
- 1 case of Compulsory Purchase from a Sole Beneficiary of a Deceased Lessee
- 1 case of Unauthorised Assignment of Premises pending Court decision

Sale of Flats

- 5,206 leases processed and registered
- 4,636 mortgages processed and registered
- 2,653 Board loans to lessees redeemed
- 759 Transfer Instruments processed

Offences under the Environmental Public Health Act & Rules

- 1,167 offences under the Environmental Public Health Act, mainly littering and various Regulations governing hawkers.

LAND ACQUIRED & POSSESSION TAKEN FOR THE YEAR ENDING 31ST MARCH 75

Locality	No. of lots	Area in s.m. (s.f.)	Amount of compensation
Telok Blangah New Town	3	356.7 (3,840 s.f.)	S\$ 3.00
Land off Sembawang Rd	5	1,230,687.7 (13,247,012 s.f.)	1,531,000.00
Cross St/Mohd Ali Lane/ Club St/Amoy St/Gemmil Lane	26	3,363.6 (36,205 s.f.)	720,401.00
Bain St/Holloway Lane	1	100.7 (1,084 s.f.)	32,300.00
River Valley Rd/Ord Rd/ Tan Tye Alley	5	723.2 (7,784 s.f.)	84,500.00
Lor 37 Geylang	6	2,224.3 (23,942 s.f.)	101,602.00
Land at Paya Lebar	5	36,292.4 (390,648 s.f.)	1,218,000.00
Lorong Chuan	5	225,890.4 (2,431,464 s.f.)	495,385.00
Airport Rd/Paya Lebar Rd	5	27,847.3 (299,746 s.f.)	38,200.00
Chua Chu Kang Road	6	202,890.3 (2,183,893 s.f.)	940,000.00
Tampines Rd/Upper Serangoon Road	1	152,718.3 (1,643,846 s.f.)	2,442,000.00
Tg Katong/Haig Road Fire Site	4	15,573.5 (167,632 s.f.)	539,000.00
MacPherson Estate/Sims Avenue	106	190,444.9 (2,049,932 s.f.)	3,047,742.00
Upper Changi Road 9 km to 10 km	20	894,329.8 (9,626,490 s.f.)	2,536,798.00
Ang Mo Kio	60	2,372,354.9 (25,535,827 s.f.)	16,038,473.71
Changi Road/Joo Chiat Rd	5	2,125.2 (22,875 s.f.)	232,800.00

LAND ACQUIRED & POSSESSION TAKEN FOR THE YEAR ENDING 31ST MARCH 75

(cont'd.)

Locality	No. of lots	Area in s.m.	Amount of compensation
Woodlands New Town	39	2,875,470.3 (30,951,305 s.f.)	15,677,900.00
Ah Hood Road	8	13,941.5 (150,065 s.f.)	702,000.00
Towner Road/Bajera Lane	10	2,720.2 (29,280 s.f.)	36,461.00
Hillview Avenue	1	125,781.3 (1,353,899 s.f.)	1,500,000.00
Total	321	8,375,836.5 (90,156,769 s.f.) or 837.58 hectares (2,069.71 acres)	S\$47,914,565.71





Three 25-storey blocks of five-room flats and blocks of three- and one-room Improved flats at Kallang Basin Estate.

RESETTLEMENT

The Resettlement Department is responsible for land clearance and resettlement of occupants in areas required for development by the Government and statutory authorities. In addition, the Department develops resettlement farms to provide farm lands for bona fide farmers and also undertakes exhumation of graves in cemeteries earmarked for development.

During the 12-month period under review the Department cleared 10,980 squatter cases and demolished 3,654 buildings of different structures, making available to the various authorities a total of 85 cleared sites for development. However, due to the great demand for unencumbered sites to cope with the rapid pace of development in the Republic, a further 122 new sites were placed under clearance. 2 sites were abandoned after feasibility studies, bringing the total number of sites under clearance to 331 as at 31st March 75 as compared with 296 sites at the beginning of the financial year.

Of the 10,980 squatters cleared, 8,104 were residential households, 229 farmers, 568 shops, 175 industrial establishments, and 1,904 squatters of other categories. The ex-gratia payment incurred during the period amounted to S\$20.8 million.

Among the 8,104 residential households, a total of 6,417 households was rehoused in Board flats with the majority of 4,198 households (66%) purchasing the flats under the Home Ownership Scheme.

Resettlement of Shops and Industries

During the year the resettlement of shops and industries, particularly those in the Central Area, was expedited with the completion of a large number of HDB shops and workshops for allocation to such cases. Besides the supply of new shops in housing estates, a total of 370 new shop units in shopping complexes in the Central Area was made available

for shopkeepers affected by clearance. The new shop premises included those at Chin Swee Road, Upper Cross Street, Sago Lane, Outram Park, Victoria Street, Beach Road/North Bridge Road, and Jalan Sultan. Industrial cases were offered alternative accommodation in 184 units of single-storey terrace workshops on a 7-hectare (17-acre) industrial site in Kallang Basin bounded by Jalan Kolam Ayer / Kallang Bahru / Geylang Bahru. Further, 60 units of motor workshops in Sin Ming Industrial Estate were completed for rehousing motor garages affected by clearance.

Out of a record of 568 shops and 175 industries cleared during the period under review, 347 shops and 95 industries were given alternative Board accommodation. These included 200 shops and 53 industries resettled from the various sites required for urban redevelopment schemes in the Central Area. 81 shops and 9 industries in the Central Area opted for payment of Cash Grant ranging from S\$5,000 to S\$15,000 in lieu of offer of alternative accommodation.

Development of Pig Farm in Ponggol

The vast rural areas in Jurong, Chua Chu Kang and Lim Chu Kang will form a major catchment area with the development of the new Kranji and Pandan Reservoirs by the Public Utilities Board in the western part of the Republic. Owing to the need for strict water pollution control for the reservoirs, the existing pig farmers scattered in the catchment area have to be relocated to a designated agricultural area. An alternative site covering 1,032 hectares (2,550 acres) at Ponggol and South Seletar has been selected for development into a resettlement farm to be used exclusively for intensive pig farming.

Development of the first phase of the pig farm which covers an area of 254 hectares (628 acres) at Ponggol Road 15 km began in late 1974. 387 squatters affected by the development were offered alternative accommodation in Ponggol and Seletar Hills Estates.

Engineering and land subdivision work on 106 hectares (262 acres) of farm lands began in March 75. Approximately 6 km (3.7 miles) of crusher-run roads with proper drainage system were also under construction. The first 20 hectares (50 acres) of farm plots are expected to be ready for allocation in May 75.

Development will commence soon on the second phase of the pig farm covering 100 hectares (248 acres) at South Seletar. A census survey was being conducted in this area in March 75.

Exhumation of Graves

The Department exhumed 898 graves of British Military Service Personnel in the Pasir Panjang Military Cemetery at Dover Road in October 74. The cemetery was affected by public housing projects in Ayer Rajah New Town, Neighbourhood II. 618 exhumed remains were subsequently reburied in a reinterment site adjoining the Kranji War Cemetery provided by the British War Graves Commission. The other 280 remains were cremated at Mount Vernon Crematoria. Through arrangements made by the British Ministry of the Environment, some remains after cremation were flown to England for transmission to the claimants in other Commonwealth countries.

Review of Major Clearance Schemes

ANG MO KIO NEW TOWN

The development of Ang Mo Kio New Town was fast taking shape with the handing over of 81 hectares (200 acres) of cleared land off Lorong Kinchir. 330 squatters comprising 221 residential families, 75 farmers, 2 shops, 1 industry and 31 other categories were cleared by March 75. Most of the squatters were rehoused in HDB flats in Sin Ming Estate and Toa Payoh New Town.

Since the commencement of the development of Ang Mo Kio New Town in late 1973, a total of 95 hectares (234 acres) of land has been released for various building contracts. This includes the whole of Neighbourhood II and the major part of Neighbourhood III. In the Neighbourhood II site 56 blocks comprising 7,800 units of flats, a market

and a hawker centre were under various stages of construction. Another 5,700 units were also under construction in Neighbourhood III. In addition, the site for a telephone exchange station was handed over to the Telecommunication Authority of Singapore. 2 school sites with a total area of 7 hectares (17 acres) were made available to the Ministry of Education for the construction of 2 secondary schools and 2 primary schools.

Towards the end of 1974 clearance action began on another 16 hectares (39 acres) of land next to Mayflower Estate for the development of 2,580 public housing units in Neighbourhood I. This involved relocation of 7 farmers, 23 residential families and 2 other categories. The site would be cleared by mid 75.

PERSEVERANCE ESTATE

The heavily encumbered and flood-prone area of Perseverance Estate bounded by Paya Lebar Road/Sims Avenue/Jalan Eunos/Paya Lebar Way was earmarked for priority development.

By March 75 a total of 2,778 squatters were resettled to make way for redevelopment. Of these 1,988 were residential families, 40 shops, 12 industries and 738 other categories. The squatter families and shops were rehoused in Kallang Basin and Marine Parade Estates.

The first phase development to transform the slum area into a modern housing estate called Jalan Eunos Estate began when a 21-hectare (52-acre) site at the junction of Jalan Eunos/Sims Avenue was cleared. This housing estate will have some 3,000 housing units to accommodate 15,000 people when completed in 1976. A shopping centre with 48 shop units in double-storey buildings and a market-cum-hawker centre will also be built in the estate to cater for the needs of the residents.

BEDOK NEW TOWN

A census survey was conducted at Peng Ghee Village and its surrounding squatter areas covering some 89 hectares (220 acres) of land. The village had been earmarked for three major neighbourhoods of Bedok New Town currently

being developed on the cut-site adjoining the Chai Chee Estate at Upper Changi Road 11 km.

The result of the survey, completed in January 75, showed that 1,388 squatters comprising 60 farmers, 1,000 residential families, 59 shops, 16 industries, 1 school and 252 other categories would be affected.

Active clearance has already been initiated on 370 squatters to make way for immediate public housing projects. Most of the affected squatters opted for HDB flats in Bedok New Town.

PONGGOL ESTATE EXTENSION

To make way for the extension of Ponggol Estate, the adjoining 7-hectare (17-acre) site bounded by St Joseph Lane/Upper Serangoon Road/Lorong Low Koon was required for the development of 1,484 flats. 210 squatters affected by the clearance were offered HDB flats mainly in Ponggol Estate.

KAMPONG ALEXANDRA

Kampong Alexandra adjoining Redhill Industrial Estate is the last remaining

pocket with a sizeable concentration of squatters on the western periphery of the city from Outram Park to Queens-town. During the year active clearance was initiated at Kampong Alexandra which has been earmarked for commercial and industrial development. 593 residential squatters and 24 shops were rehoused in the nearby Brickworks Estate and Telok Blangah New Town. The clearance was beset with some difficulty in the early stage because of a few hundred trespassers on the site. However, the problem was eventually overcome.

A site of 1 hectare (3 acres) required for a Health Depot was completely cleared and handed over to the Ministry of the Environment.

BUKIT BATOK ESTATE EXTENSION

Bukit Batok Estate will be extended to provide an additional 1,100 housing units.

An aerial view with focus on Bedok New Town, Neighbourhood I which has 4,000 housing units. Adjoining the neighbourhood are light and higher technology industries. In the background is Chai Chee Estate.



A 13-hectare (32-acre) site adjoining the estate was scheduled for clearance in two stages. Clearance for the first stage involving 85 families, 1 shop, 1 industry and 17 other categories on 8 hectares (20 acres) of land was in progress. The site will be cleared by mid 1975 for development. Another 119 squatters will be resettled under the second stage.

CLEMENTI NEW TOWN

405 hectares (1,000 acres) of land west of Clementi Road stretching from Jurong Railway Line in the north to Pasir Panjang Road in the south have been earmarked for the development of Clementi New Town, the eighth new town in the Republic. To make way for the first stage of the earthwork operations in late 1974, a total of 814 squatters had to be resettled. By the end of March 75, 434 squatters were rehoused in HDB estates especially at the nearby Buona Vista and Dover Road Estates.

CENTRAL AREA CLEARANCE

Since 1973 clearance in the Central Area has been intensified to facilitate the im-

plementation of redevelopment schemes in the dilapidated areas. Active clearance action continued in the 12-month period under review. By 31st March 75 2,640 cases were cleared from the various sites in the Central Area. This figure comprised 1,949 residential families, 339 shops, 91 industries and 261 other categories. Seven major sites free of squatter encumbrance were handed over to the requesting authorities for immediate development projects.

Among the sites cleared was a 3-hectare (7-acre) site bounded by Tanjong Pagar Road, Narcis Street, Yan Kit Swimming Complex and Kee Seng Street. The site was handed over in December 74 to the Board's Building and Development Division for building a modern residential-cum-business complex under the first major redevelopment scheme for Tanjong Pagar in the heart of the Central Area. A total of 47 shopkeepers and 1,090 families

Neighbourhood centre at Kallang Basin/Sims Avenue.







The design and brickfacings of buildings at the Buona Vista Estate neighbourhood centre enhance the centre's role as a focal point of orientation in the estate.

occupying the dilapidated pre-war shophouses was cleared from the site. The families affected were mostly rehoused in housing estates in Covent Garden, Chin Swee Road, Outram Park, Bukit Merah and Telok Blangah. The new complex, scheduled for completion by 1976, will provide 924 units of three-room flats in five towering blocks and 133 shops in a two-storey podium.

Another site released for development was at Rochore Road/Queen Street covering an area of 2 hectares (5 acres). There were originally 705 cases on this site comprising 594 families, 50 shops, 29 industries and 32 other categories. The majority of the cases was relocated in Kallang Basin, North Bridge Road, Beach Road and Balestier Estates. The site will be developed to provide 598 units of three-and four-room flats, 209 shops on a three-storey podium, and a semi-base-ment car park with 400 parking lots.

At Kelantan Lane eight blocks of old Government quarters were cleared of encumbrance and handed over for demolition to make way for the construction of 300 housing units. 104 daily-rated employees of the Ministry of the Environment living in the quarters were rehoused in various HDB estates.

Two parcels of land at Middle Road and Selegie Road were completely cleared and released to the Urban Redevelopment Authority. The lands were demarcated into six development plots and sold to private developers under the Fourth Sale of Urban Redevelopment Sites launched by the Urban Redevelopment Authority on 1st April 74.

At Tanglin Circus a 2-hectare (5-acre) site adjacent to the Singapore Tourist Promotion Board's Tudor Court Office was urgently required for building a Handicraft Centre and a Cultural Theatre. The 59 residential families, 12 shops and 5 other categories affected by the scheme were completely rehoused by December 74. The Urban Redevelopment Authority is acting as agent for the construction of the Handicraft Centre to provide 26 shops for the promotion of the sales of local handicrafts.

The site required for the building of the multi-million dollar Communications Centre at Tiverton Lane was also cleared and handed over to the Telecommunication Authority of Singapore for construction.

FRINGE CAR PARKS

Under the 'Park-and-Ride Scheme' which will be introduced in June 75 in conjunction with the Area Licensing for the Central Business District to facilitate the smooth flow of vehicles in the CBD, more than 10 car parks had to be constructed immediately on the fringe areas to provide 10,000 parking lots. The Department was requested to initiate urgent clearance in mid 1974 for the development of four fringe car parks at Serangoon Road, New Bridge Road, Whitley Road and Chancery Lane. 216 residents affected by these projects were rehoused in Kallang Basin, Telok Blangah and Toa Payoh, and the sites were handed over to the requesting authority for construction in October 74.

ROAD PROJECTS

Progress was made in the clearance of lands required for several major road projects in the Republic.

In the development of Ang Mo Kio New Town an east-west arterial road extending for 4.3 km (2.7 miles) will be constructed from Upper Thomson Road 10 km to Lorong Chuan to serve the new town. In the development of the first 2.2 km (1.3 miles) of the arterial road from Upper Thomson Road to the new town, 3 farmers, 38 residential families, 2 shops and 38 other categories affected were relocated. Clearance of another 66 squatters is now in progress for the construction of the rest of the east-west arterial road.

Twin flyovers at the Bukit Timah Road/Adam Road/Dunearn Road junction have been planned to cope with the heavy traffic along the trunk roads which link Singapore with Johore in West Malaysia. Construction work on the first flyover alongside Dunearn Road commenced in mid 74 after 3 shops and 28 residents in a row of old shophouses at Adam Place were relocated. 20 shops and 52 residents

at Bukit Timah Road affected by the construction of the second flyover were rehoused by January 75.

Commonwealth Avenue will be extended from North Buona Vista Road to Clementi Road to provide a main thoroughfare for Ghim Moh Estate and Ayer Rajah New Town. 21 squatters comprising 18 residential cases, 1 farmer and 2 other categories affected by the scheme were cleared by January 75.

Lands released for other important road projects during the period under review included areas required for the widening of Sims Avenue, diversion of Tampines Road 13 km to 14 km, widening of Mandai Road, and the widening of Sin Ming Road.

DEVELOPMENT OF SENTOSA

Active clearance was initiated in Sentosa, a 289-hectare (714-acre) island just south of mainland Singapore. The island is being developed into a tourist resort by the Sentosa Development Corporation. A total of 172 families, 2 shops and 35 other categories was cleared from Sentosa during the year to make way for a reclamation project and the setting up of a Maritime Museum. The majority of the affected families was rehoused in Telok Blangah New Town.

JURONG TOWN CORPORATION PROJECTS

To make way for the various industrial developments and public housing projects by the Jurong Town Corporation, 117 hectares (290 acres) of lands at Upper Jurong Area, Kampong Java Teban and Sungei Kadut were completely cleared of squatter encumbrance during the period under review. In addition, an area of 8 hectares (20 acres) east of Jurong Lake was released for the development of recreational facilities. A total of 333 squatters comprising 24 farmers, 251 residential families, 2 shops and 56 other categories was cleared.

AIRPORT EXTENSION PROJECTS

Vigorous clearance action was followed up at the end of 1974 on 913 remaining squatters who were required to make way for the Airport Extension Projects in

the Tampines and Paya Lebar areas adjoining the existing International Airport. As the squatters preferred to be rehoused in HDB flats in the nearby Ponggol Estate at Tampines Road 11 km, offer of alternative accommodation in Ponggol Estate was made to them in November 74 when the flats were completed. By the end of March 75 a total of 709 squatters was cleared; these comprised 35 farmers, 567 residential families, 27 shops, 7 industries and 73 other categories. The remaining squatters will be resettled by mid 1975 and the encumbrance-free lands handed over for development.

CLEARANCE & COMPENSATION STATISTICS

Year	Moved to Resettlement Areas	Rehoused in Board Accommodation	Found Own Accommodation	Total	Compensation Paid
1960	132	45	207	384	S\$ 0.3M
1961	57	77	160	294	0.3M
1962	198	342	277	817	0.9M
1963	307	589	285	1,181	1.7M
1964	150	2,584	909	3,643	3.2M
1965	182	4,570	1,758	6,510	5.5M
1966	266	4,158	1,594	6,018	5.1M
1967	90	4,002	1,892	5,984	4.1M
1968	123	4,063	1,677	5,863	3.1M
1969	416	3,924	2,179	6,519	4.8M
1970	277	3,922	1,926	6,125	4.1M
1971	145	2,263	1,474	3,882	5.5M
1972	235	2,668	1,157	4,060	9.2M
1973/74	91	8,008	3,968	12,067	18.5M
1974/75	16	7,062	3,902	10,980	20.8M
Total	2,685	48,277	23,365	74,327	S\$87.1M

SITES CLEARED IN 74/75

No.	Locality	Date Cleared
1	SAFTI Phase IV—Stage I	29.4.74
2	Proposed market/hawker centre at Lim Chu Kang/ Ama Keng Road	11.5.74
3	Proposed swimming pool site for Raffles Institution at Kay Poh Road	15.5.74
4	Woodlands New Town—Industrial Area I	16.5.74
5	Land at Khatib for Commercial Farming	17.5.74
6	Dover Road Estate	18.5.74
7	Woodlands New Town—Phase IB(I)	28.5.74
8	Woodlands New Town—Road Project	30.5.74
9	Woodlands New Town—Phase II	31.5.74
10	Hill 72 at Jurong Town	31.5.74
11	Hwa Chong Junior College at Bukit Timah Road	5.6.74
12	Woodlands New Town—Phase IB	11.6.74
13	Bedok/Upper Changi Road Coastal Reclamation Scheme —Phase 12B	21.6.74
14	Changi Village—Area C	26.6.74
15	Proposed school site in Toa Payoh Neighbourhood I	29.6.74
16	Proposed pipeline from Kranji Intake II to Mandai Road Basin (Kranji/Pandan Scheme)	3.7.74
17	Land at King George's Avenue/Horne Road/Kitchener Road/Jellicoe Road	4.7.74
18	South Precinct III—Stage IV (Part)	21.7.74
19	Queenstown Neighbourhood 8B	3.8.74
20	Land off Hillview Avenue	10.8.74
21	Widening and improvement of Claymore Avenue	23.8.74
22	Proposed refuse tipping site at Chua Chu Kang Road, 26 km—Phase II Supplementary	26.8.74
23	Proposed pumping station site at Jalan Tauge	26.8.74
24	Land at Bedok for Reformative Training Centre	28.8.74
25	Areas for access roads, sewers, and others to facilitate reclamation work in Kallang Basin— Section G	29.8.74
26	Pulau Ubin Quarry Site	30.8.74
27	Ang Mo Kio New Town—Stage I	31.8.74
28	Havelock Road/Carey Road Fire Site Phase I	6.9.74
29	Fringe Car Park at Serangoon Road	18.9.74
30	Diversion of Upper Changi Road from 11 km to Bedok Road	20.9.74
31	Telok Paku Sewage Treatment Plant (Extension)	28.9.74
32	Ang Mo Kio New Town—Stage II	29.9.74
33	Telok Blangah New Town—Neighbourhood II Stage II (Extension)	4.10.74
34	Proposed Jurong Water Tank and Booster Station	10.10.74
35	Telok Blangah New Town—Neighbourhood III (Balance)	15.10.74
36	Telok Blangah New Town—Neighbourhood II Stage II (Supplementary)	15.10.74
37	Land at Jalan Tebing Terjun	23.10.74
38	Kallang Basin Reclamation (East)—Phase IX (Extension)	30.10.74
39	Pulau Ubin	30.10.74

SITES CLEARED IN 74/75

(cont'd.)

No.	Locality	Date Cleared
40	Fringe Car Park at New Bridge Road	31.10.74
41	Extension of Hillview Avenue (Supplementary)	31.10.74
42	Woodlands New Town—Industrial Area II	31.10.74
43	New Polytechnic Campus site at Dover Road	31.10.74
44	Pan Island Expressway—Whitley Road to Bukit Timah Road/Jurong Road Phase II (Supplementary)	1.11.74
45	Widening of Mandai Road—from Woodlands Road 20 km to Mandai Lake Road	4.11.74
46	Widening and improvement of Dunearn Road/Adam Road junction	15.11.74
47	Fringe Car Park at Chancery Lane	20.11.74
48	Kampong Kuchai at Lorong 3 Geylang—Section A	23.11.74
49	East/West Arterial Road for Ang Mo Kio New Town	12.11.74
50	South Precinct V (Tanjong Pagar Area)—Stage I (Phase I)	11.11.74
51	South Precinct V (Tanjong Pagar Area)—Stage I (Phase III)	29.11.74
52	South Precinct V (Tanjong Pagar Area)—Stage I (Phase II)	3.12.74
53	Proposed Handicraft Centre at Tanglin Road	16.12.74
54	Pulau Tekong Camp I (Extension)	23.12.74
55	North Precinct V (Part)—land bounded by Manila Street/Queen Street/Middle Road/Victoria Street	27.12.74
56	Widening and improvement of Bukit Timah Road (Acquired Land)	30.12.74
57	South Precinct V (Tanjong Pagar Area)—Stage II	30.12.74
58	Clearance of Woodlands New Town—Neighbourhood IIC	30.12.74
59	Proposed site for Telephone Exchange at Ang Mo Kio	30.12.74
60	Widening of Sims Avenue—from Lorong 3 to Paya Lebar Road	1.1.75
61	Clearance of land at Bukit Gombak	6.1.75
62	Proposed Communications Centre Site at Tiverton Lane	22.1.75
63	Kallang Basin Reclamation (East)—Neighbourhood IV (Section B)	28.1.75
64	Extension of Commonwealth Avenue—from North Buona Vista Road to Clementi Road	30.1.75
65	Resettlement of Sentosa population—proposed Maritime Museum Site	30.1.75
66	Widening of Paya Lebar Road—Section B	31.1.75
67	Clearance of squatters within the compound of Outram Road General Hospital	31.1.75
68	Telok Blangah New Town—Neighbourhood III (Extension)	31.1.75
69	Project D682, Selarang Barracks Changi	2.2.75
70	Areas for access roads, sewers and other facilitating reclamation works in Kallang Basin—Section C	2.2.75
71	Development of Outram Road General Hospital	14.2.75
72	Area east of northern access road in Toa Payoh	25.2.75

SITES CLEARED IN 74/75

(cont'd.)

No.	Locality	Date Cleared
73	Diversion of Tampines Road from 13 to 15 km	26.2.75
74	Perseverance Estate—Section A	27.2.75
75	Refuse Tipping Ground at Tampines Road	28.2.75
76	Pan Island Expressway—Whitley Road to Bukit Timah Road/Jurong Road (Phase I)	1.3.75
77	Proposed market/hawker centre at Upper Bukit Timah Road/Jalan Jurong Kechil	2.3.75
78	Kampong Kuchai at Lorong 3, Geylang—Section B	4.3.75
79	Government Quarters at Kelantan Lane	15.3.75
80	Fringe Car Park at Serangoon Road (Supplementary)	17.3.75
81	Ang Mo Kio New Town—Stage V	17.3.75
82	Diversion of Bukit Timah Canal at Lorong Terigu	18.3.75
83	Fringe Car Park at Whitley Road/Dunearn Road	18.3.75
84	Widening of Sin Ming Road from Upper Thomson Road to Jalan Todak	20.3.75
85	Proposed site for catchment area well at Pulau Tekong Camp II	21.3.75

CLEARANCE STATISTICS FOR 74/75

General commitment:

1	Number of sites required to be cleared as at 1.4.74 ...	...	...	...	296
2	Number of new requests received in 74/75 ...	...	...	...	122
3	Number of sites withdrawn or dropped ...	...	...	...	2
4	Number of sites cleared in 74/75 ...	...	...	...	85
5	Number of sites under clearance as at 31.3.75 ...	...	...	...	331
6	Total number of structures demolished in 74/75 ...	...	...	...	3,654

Performance during 74/75:

FARMERS	Allocated land	...	...	...	12	
	Given free flats	...	...	...	205	
	Found own accommodation with Cash Grant	...	...	...	12	229
FAMILIES	Purchased flats	...	...	...	4,198	
	Allocated flats	...	...	...	2,219	
	Allocated house lots/terrace houses	...	...	...	2	
	Found own accommodation	...	...	...	1,685	8,104
SHOPS	Allocated alternative accommodation	...	...	...	347	
	Found own accommodation with Cash Grant	...	...	...	87	
	Found own accommodation without Cash Grant	...	...	...	134	568
INDUSTRIES	Allocated alternative accommodation	...	...	...	95	
	Found own accommodation with Cash Grant	...	...	...	11	
	Found own accommodation without Cash Grant	...	...	...	69	175
OTHER CATEGORIES	Offices	...	...	...	41	
	Warehouses/stores	...	...	...	75	
	Association/community organisations	...	...	...	28	
	Religious and other institutions	...	...	...	43	
	Encroachments/absentee owners/stalls etc	...	...	...	1,717	1,904
	Total	...	...	...	...	10,980

Total amount of compensation paid in 74/75:

S\$20,845,389,45

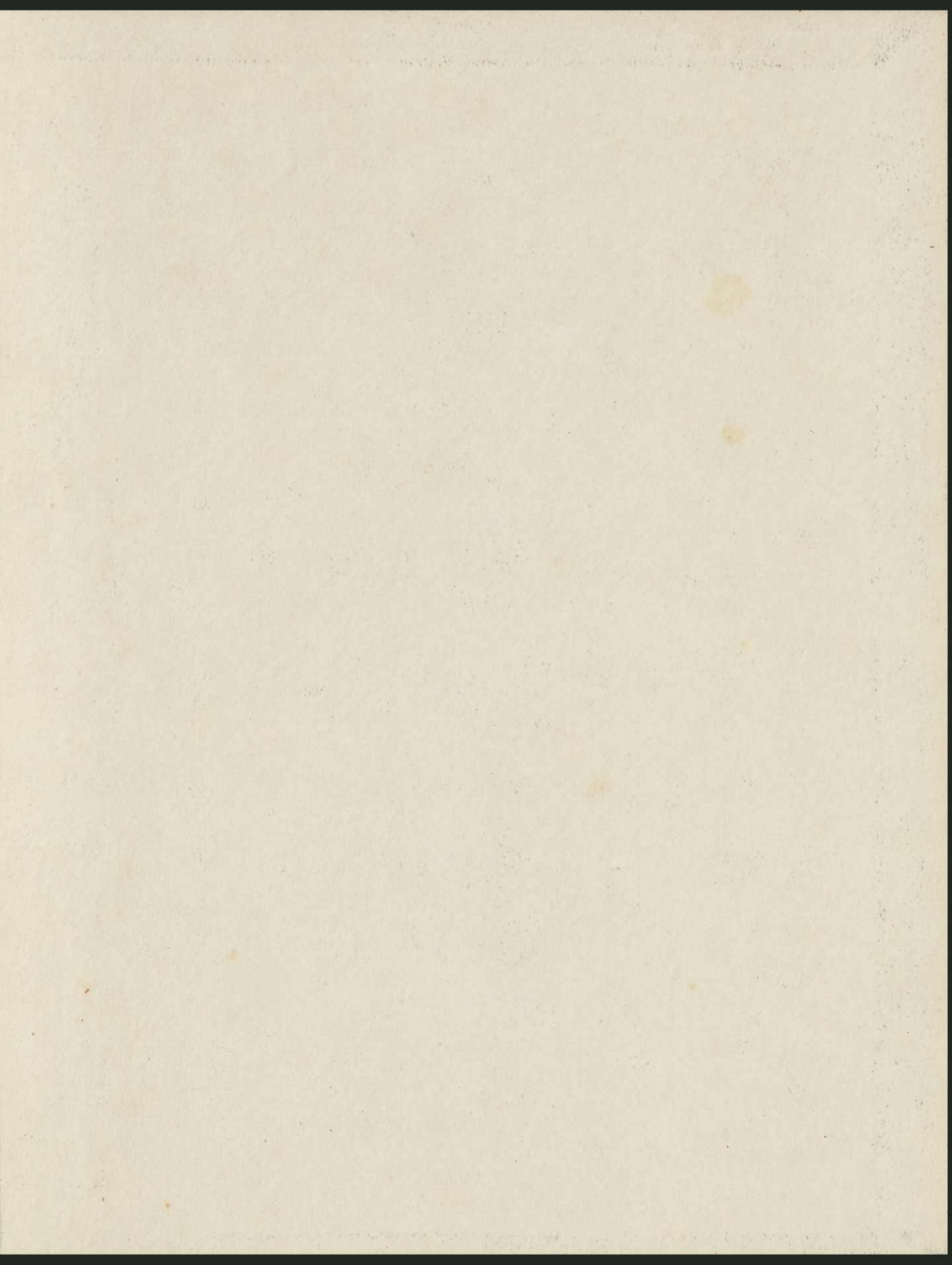
An exciting contrast between the new block of one-room Improved flats at Ellenborough Redevelopment and the surrounding pre-war shophouses along the Singapore River.





Singapore City along the waterfront.
In the background are public housing estates.





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