

CLARKE GAZZARD YEOMANS
ARCHITECTS & URBAN PLANNERS
117 HARRINGTON STREET, SYDNEY, N.S.W. AUSTRALIA
TELEGRAMS CABLES — URBSEARCH, SYDNEY

1961 B?
Entry in
Planning &
Design
COMPETITION
held by NSW
Government

BRIEF PUBLICATION NOTES

THE "ROCKS" REDEVELOPMENT SCHEME

A RESIDENTIAL REDEVELOPMENT

A. LOCATION AND CHARACTER OF SITE

The "Rocks" is an historic site of approximately 19 acres at the Northern end of Sydney's downtown centre, facing East across Sydney Cove. It was the place of the first landing by the colonists of the First Fleet in 1788. Over the 174 years since then, Sydney has grown outwards from the original settlement at Sydney Cove and is now a metropolis of 2,200,000 inhabitants.

The tides of development and redevelopment have swept over and past the old Rocks site during Sydney's growth, and it is now in a thoroughly decayed state, ripe for complete redevelopment. A redevelopment project is now being organised by the New South Wales Government, which owns the greater part of the area.

The Sydney City centre is tightly restricted into a North-South rectangle by both natural and man-made barriers. The waters of Sydney Cove and Sydney Harbour lie to the North, and the Central Railway Terminal blocks off expansion into the industrial areas to the South. To the West is the Bay of Darling Harbour with its Port facilities, lined with great sunken and overhead roadways, effectively blocking expansion in that direction. The Eastern side is bounded by a large Park system and the Woolloomooloo Valley.

The Rocks site itself offers the possibility of expanding the city core Northward to the edge of Sydney Cove and the Harbour. It is directly linked to the transportation focus of Circular Quay at its Southern end, where it is served by the electric railway

system, the bus system and the ferry system. Along its Western side is the approach to Sydney Harbour Bridge.

There was, until recent years, a tendency for the centre of downtown activities to shift gradually Southward. This tendency has, however, been dramatically reversed since the second World War by intensive redevelopment of the Northern section around Circular Quay and Sydney Cove. The shift in relative land values is now Northward, back towards the famous Harbour and the historic Sydney Cove. The sun and the most pleasant breezes come from the North-East across the Harbour, and sites toward the Northern end of downtown are, and will remain, the highest prestige and most sought after sites in the city core.

B. DEMAND FOR GOOD QUALITY APARTMENTS

There has been, in the last few years in Sydney, a major revival in construction of apartments. It is expected that this boom will stabilise itself and that the percentage of apartments to total dwellings will gradually rise over the coming decades. This rise in apartment living will have several causes. One is the necessity to catch up with a backlog of apartments not built during the previous eighteen years of acute housing shortage. The second is the increasing scarcity and value of urban land in a metropolitan area where many new outer suburbs are twenty-five miles from the core and yet poorly served by transport and urban amenities.

During the second half of the thirties, apartment construction was running at between 30% and 40% of all new dwellings completed each year. War and its aftermath caused a virtual cessation of apartment building for eighteen years, between 1941 and 1958, reducing the total stock of apartments in the metropolitan area from 13.6% to only 10.8% of all existing dwellings. The boom has brought the proportion of new apartments to all new dwellings up to 16% during 1959-60, 20% during 1960, and 28% in the first

> quarter of 1961/62. It is expected to rise and to settle at a higher annual proportion over the coming decade. There is still a backlog of about 19,000 new apartments to be built before the pre-War balance of apartments to cottages is regained.

Current research indicates that the rate of new dwelling completions in Sydney metropolitan area will run at an average of 20,000 per annum for the next ten years, when it is expected to rise sharply. It is expected that new apartments will account for an average of approximately 30% or 6,000 of the new dwellings each year. This would involve about 60,000 new apartments over a period of ten years. The Rocks site could provide 1,500 or 2,000 of these new apartments, depending on the finally adopted distribution of residential space and commercial space.

The inner-city harbourside residential areas are the most valued and sought-after of all residential districts in Sydney. The Rocks site offers the opportunity for the creation of a new harbourside residential precinct, developed to a high-density with high-rise apartments.

C. DESIGN OBJECTIVES AND CRITERIA

Before the design process was begun, the objectives and criteria which the ultimate civic design has to achieve were specified.

The objectives were based upon the wishes of the New South Wales Government as outlined in the published brochure and were ranked in the following approximate order of priority. The final design would have to:-

1. Maximise the feeling of "being in a highly desirable urban residential neighbourhood". Good living conditions for the residents should be of first importance.
2. Maximise the number of dwellings to be provided, consistent with the first objective, particularly the percentage of dwellings of the popular and flexible medium sizes and the number of

dwellings should not exceed approximately 1,500 or 60 dwellings per neighbourhood acre, 75 dwellings per project site acre or 100 dwellings per precinctal acre.

3. Include commercial spaces "only in so far as they assist in the creation of a highly desirable residential area". The inclusion of such spaces can directly assist both socially and financially. Hotel, office, retail and other public facilities create the full range of social vitality which people rightly expect in an inner city residential precinct. Furthermore, the higher financial returns from some of these spaces can be offset against lower returns on the dwellings to some extent, thus insuring the long-term economic soundness of the total scheme.
4. Maximise a "continuous feeling of life and movement in the area". This requires a design which maximises pedestrian flows of different kinds along characteristic, clearly imageable paths, sufficiently removed from the majority of flats so as to avoid nuisance during the late evenings.
5. Maximise the visual drama of the total scheme from the Harbour approach and from the other shores of Sydney Cove, while supporting, and serving as an introduction and foil to, the future focal points of development on the central South shore of the Cove. The design should achieve an overall scale in keeping with the grand scale of the Harbour, the Bridge, the Opera House, ships like the "Canberra", and future buildings like, and possibly taller than, the new A. M. P. building.
6. Create memorable and imageable sequences of contrasting urban spaces inside the neighbourhood, at a more intimate scale, avoiding unnecessarily wide spaces that might appear barren. Maximise access for residents and visitors to public Harbourfront promenades and restaurants.
7. Maximise views of Harbour, Port, and City from buildings in the neighbourhood, particularly views and aspects to the North and East.
8. Maximise the segregation of pedestrians and vehicles.

Maximise the unified "precinctal" quality of the neighbourhood, without excessive amounts of bridging over major roads.

9. Maximise the ease of parking and ease of traffic movement in and out of the neighbourhood.

10. Make significant functional and aesthetic use of the cliffs and steep cross falls in the site, while minimising the costs of additional excavation.

11. Maximise the extent, variety of shape, size and character of pedestrian terraces, malls, squares, parks, and promenades.

12. Optimise the units of investment necessary to finance construction in stages. Maximise the variety of sizes of buildings so as to permit participation by investors of widely differing capital sums.

13. Minimise building in the noisiest Northern corner of the site near the exposed steel trusses of the Bridge.

14. Minimise construction costs by economical planning of high rise blocks and by restricting the number and overall height of extremely high towers.

15. Retain and intensify the natural commercial axis of George Street North as an extension of the City and Cove commercial areas. Retain Harrington Street as a main entrance to the neighbourhood.

16. Provide early opportunity for rehousing existing tenants, Bond Stores, and Government offices on the site in new buildings. Avoid the absolute necessity for resumption of the major freehold property in early stages of scheme.

17. Minimise conflicts with existing building regulations.

18. Minimise interference with existing Water and Sewerage Mains and street alignments.

19. Re-erect and re-use as many historic buildings as possible.

D. DESCRIPTION OF SCHEME

A podium, which forms what is virtually a new ground level entirely for pedestrians, covers and interconnects four traffic-free precincts which together occupy more than three-quarters of the 19 acre project site. The new ground level is suspended approximately half way between high York and lower George Streets. Below this new ground level is a series of car parking floors, with a high ceilinged street-level floor given over to circulation, parking, and unloading of trucks, buses and cars. Floors above this are faced with office space, separated from car parking only by the width of an office-building type corridor. This precinct and podium concept solves the parking and traffic problems. It achieves vertical segregation of cars from people, and gives free play to both, each on a separate level.

Above this new ground level is a series of terraced flat dwellings or row houses with "hanging garden" balconies. Out of the top-most garden terrace rises a multi-faceted cluster of residential towers of undulating height and silhouette. These towers have complex, irregular facade patterns of recessed balconies, some two storied, some single height. Separating the residential buildings are strong vertical shadow lines on indented, vertical lift, lobby and stair cores. A view of this sharply chiselled cliff from any direction will give a complex pattern of light and shade, partial glimpses of end walls, with dramatically projecting lift towers, receding and advancing planes of balcony faces and recessed glass walls.

The tallest tower, on the highest land, is only 24 stories, and would not be out of scale with the city centre proper. Yet the towers contain over 1600 dwellings, of 7 different sizes, shapes and types including cross over and scissor maisonettes. Over 80% face the best views to the East and North.

The Shopping Mall atop the podium leads through a series of closing and opening urban spaces to the Square at the foot of the International Office and Hotel tower, and to a public promenade along the line of Quay West on the Harbour front where a Sports Club and Centre is proposed as an additional amenity. The

combined Hotel and Office tower on the South side of the International Square is planned as an International Trade and Tourist Centre, because of its unique location and environment. The whole design has given equally coherent form and character to the sequences of spaces between buildings as to the sequences of buildings themselves.

The Angophora Lanceolata (Sydney Red Gum) is envisaged as the predominant element in the townscape of the central residential park, between the lower garden balcony flats and the low office buildings above the Shopping Mall. Massed informal sweeps of these magnificent Sydney trees relieve and act as an additional architectural element giving additional three dimensional form to the spaces between the buildings.

Implementation is planned in eight stages, allowing for complex process of rehousing and relocation of existing tenants and residents.

E. BRIEF STATISTICAL NOTES

1. <u>Total Site Land Area</u>	19 acres
2. <u>Total Neighbourhood Land Area</u>	26 acres
3. <u>Public Pedestrian Spaces in:</u>	
Square, Malls, Plazas, Terraces, Lawns and promenades	10.34 acres
or 68% of net site area excluding roads.	
4. <u>Site Coverage atop Podia</u>	32%
5. <u>Overall Gross Floor Space by Uses and Overall Gross Floor Space Index</u>	
Residential	1,482,000 sq. ft.
Office and Showrooms	1,070,000 sq. ft.
Retail, Social and Museum facilities	91,000 sq. ft.
Tourist Hotel	92,000 sq. ft.
Bond Stores	300,000 sq. ft.
Car parking, vehicular circulation, unloading, servicing, delivery	1,395,000 sq. ft.

Overall Gross Planned Spaces of all kinds,
including vehicular parking and circulation
inside Precincts

4,430,000 sq. ft.

Overall Project Site Area

or

19 acres

827,640 sq. ft.

Overall Project Space Index

= 5.35

If the Overall Project Space Index were calculated on the
basis of the 15.34 acres of precinctal land alone, excluding
all of Argyle and George Streets and the small park and
access roads on the Southern side, then it would be 6.52.

6. Residential Accommodation

1,590 apartments of 7 different types

18% Efficiency

69.5% Two Bedroom

11% Three Bedroom

1.5% Four Bedroom or Luxury

4,707 Habitable Rooms Total

3,530 Estimated Total Resident Population

7. Car Parking

3,188 car spaces are provided.