



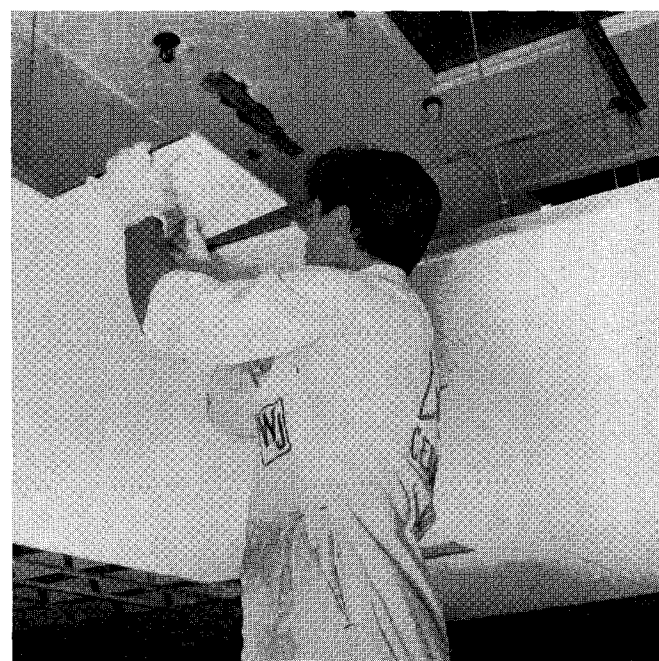
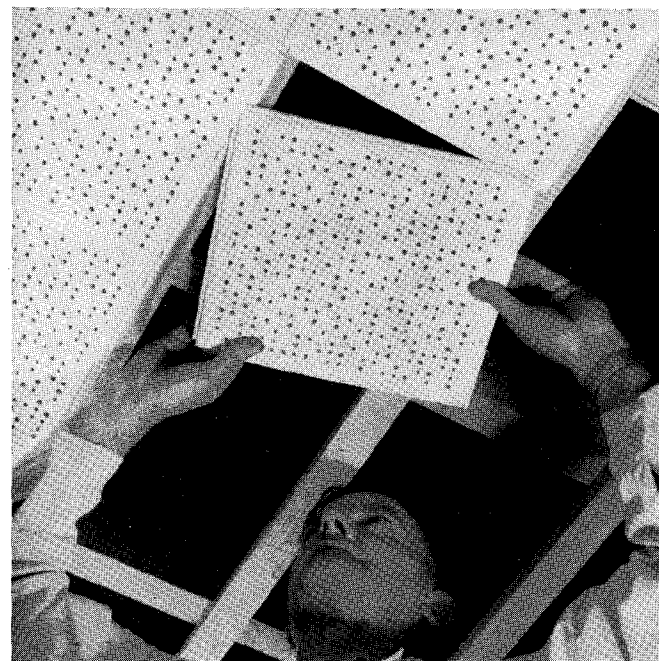
C.S.R. CANE-ITE TILES AND PANELS (Continued)

Open planning and hard wall and floor finishes characteristic of today's domestic interiors can result in an uncomfortably high noise level. The Cane-ite Acousti-tile ceiling, top left, minimises discomfort by absorbing a high proportion of the sound reflected by other surfaces.

Random Pattern Tongue and Grooved Acousti-tiles, below left, can be quickly fixed with staples to battens under joists or concrete or direct to existing ceiling lining of Gyprock, fibrous plaster, Timbrock or timber boards, provided the surface is true and even. Fixing can also be done with a recommended adhesive.

Fissured C.S.R. No-Flame Acousti-tiles are being installed in a mechanical suspended grid system, below right, to form an attractive fire-resistant ceiling that will also reduce transmission of sound over ceiling-height partitions.

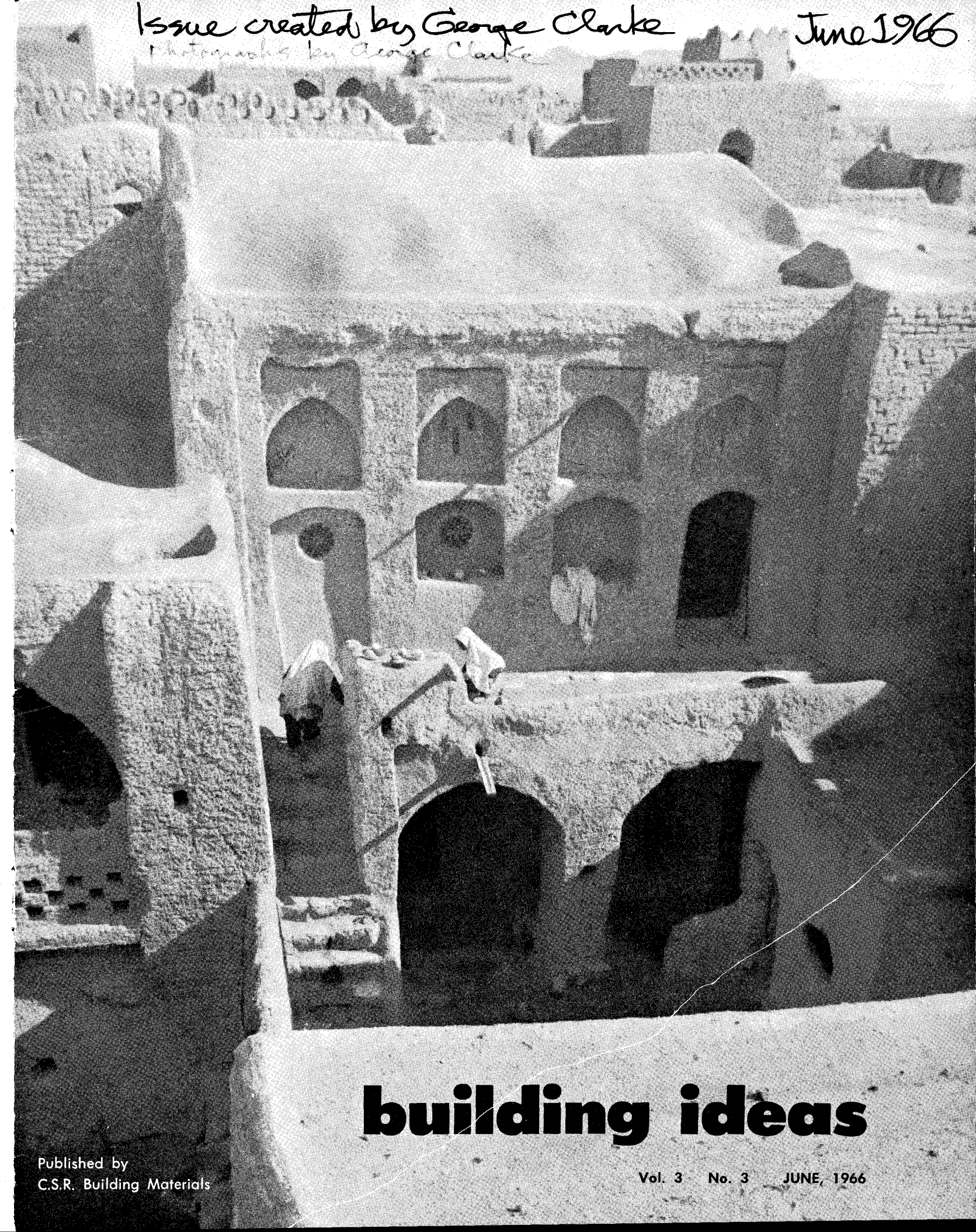
Free technical advisory service on acoustical problems is available from all C.S.R. Building Materials sales offices.



THE THIRTY-NINTH A.N.Z.A.A.S. CONGRESS will be held from the 16th to 20th January, 1967 at the University of Melbourne. Themes tentatively set down for the Architecture and Town Planning Section are: (a) Suburbia examined from various points of view, such as the spread of low-density housing in cities and its socio-economic effects; possible variations in housing density. (b) Environmental design; the effect on building design of climatic, technological, economic and other factors, with case studies from Australia, the Far East, the Pacific and the Antarctic regions.

Enrolment for the Congress will be accepted up to 3rd January, 1967, by the Organising Secretary, 39th A.N.Z.A.A.S. Congress, University of Melbourne, Parkville, N.2, Victoria.

This notice is inserted at the request of the Congress Organising Secretary.



Issue created by George Clarke
photographs by George Clarke

June 1966

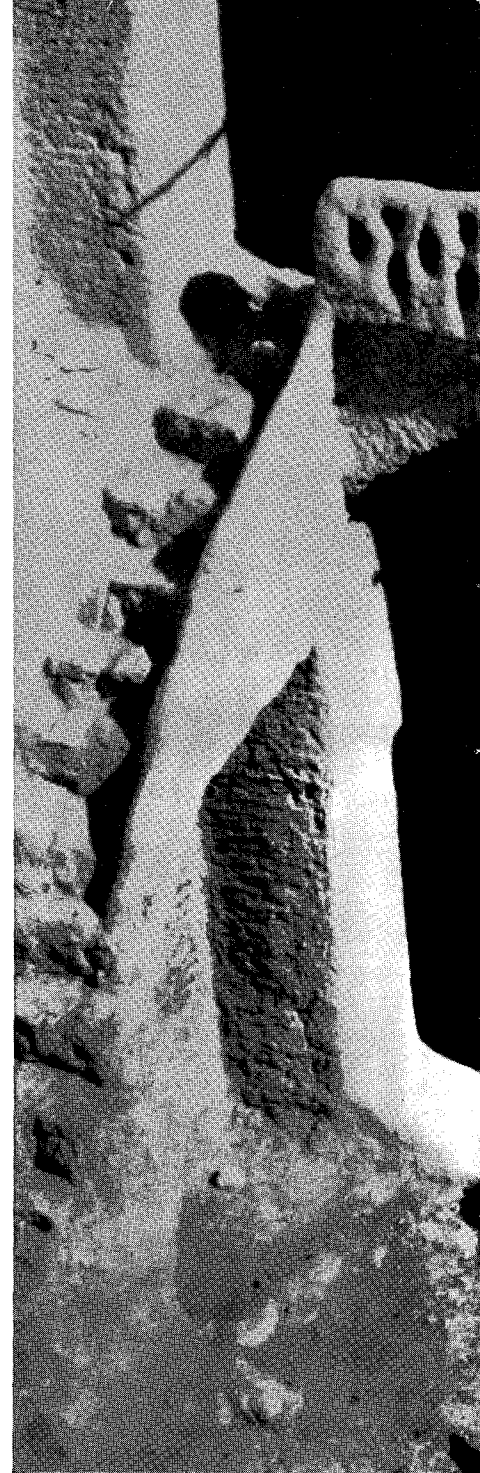
building ideas

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C.S.R. Building Materials

Vol. 3 No. 3 JUNE, 1966

CONCENTRATED HABITATION and the ARTICULATED GROUNDSPACE between

Vocabulary of Forms
Materials and Scale
Living Patterns
Sculptural Quality



building ideas

Vol. 3, No. 3 JUNE, 1966

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Photographs by George Clarke

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Harry Seidler & Associates

C.S.R. Cane-ite Tiles and Panels 15, 16

CONCENTRATED HABITATION calls for ACOUSTICAL CONTROL with C.S.R. CANE-ITE TILES AND PANELS

With high density the keynote in both domestic and commercial occupancies, living patterns in modern cities create a noise problem of a kind the ancient East never knew.

For many years, C.S.R. Building Materials have played a leading role in the study of acoustical problems and the manufacture of new and improved products to overcome them.

C.S.R. Cane-ite Acousti-tiles have long been established on the Australian market as an economical means of sound control in buildings of all types. Capable of absorbing sound by as much as 65%, the tiles also offer high thermal insulation.

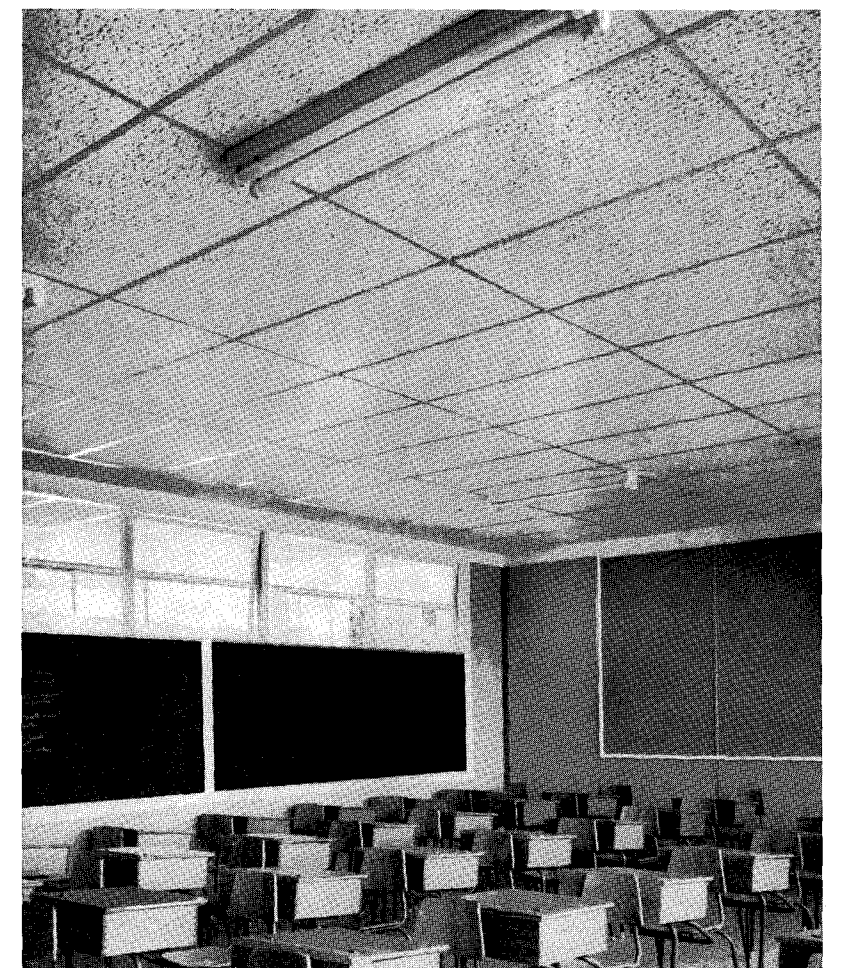
Cane-ite Tongue and Grooved Acousti-tiles are a more recent development. Precision-machined tongue and grooving ensures snugly fitting joints accurately aligned to give a flat, even surface. Tiles are $\frac{1}{2}$ " thick and the visible surface after fixing is 12" x 12". Three patterns of perforations, Standard, Random and Constellation Pattern (different sized perforations in clusters reminiscent of star groups) are all visually interesting as well as offering effective sound absorption (Noise Reduction Coefficient averages .50 to .65). There is also a plain-surfaced type (for use where noise control is not important) and all tiles come ready coated on face and edges with a matt white finish. **As a special service to architects**, tile surfaces can be coloured to meet specific requirements in minimum orders of 1,000 square feet, at small additional cost.

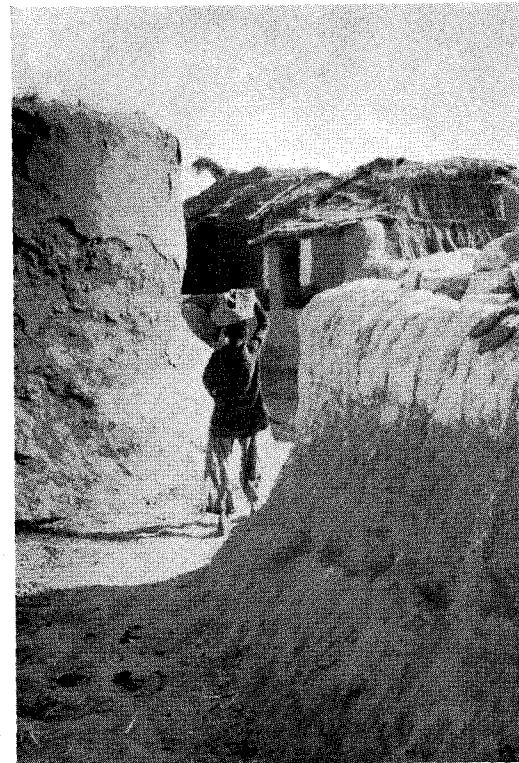
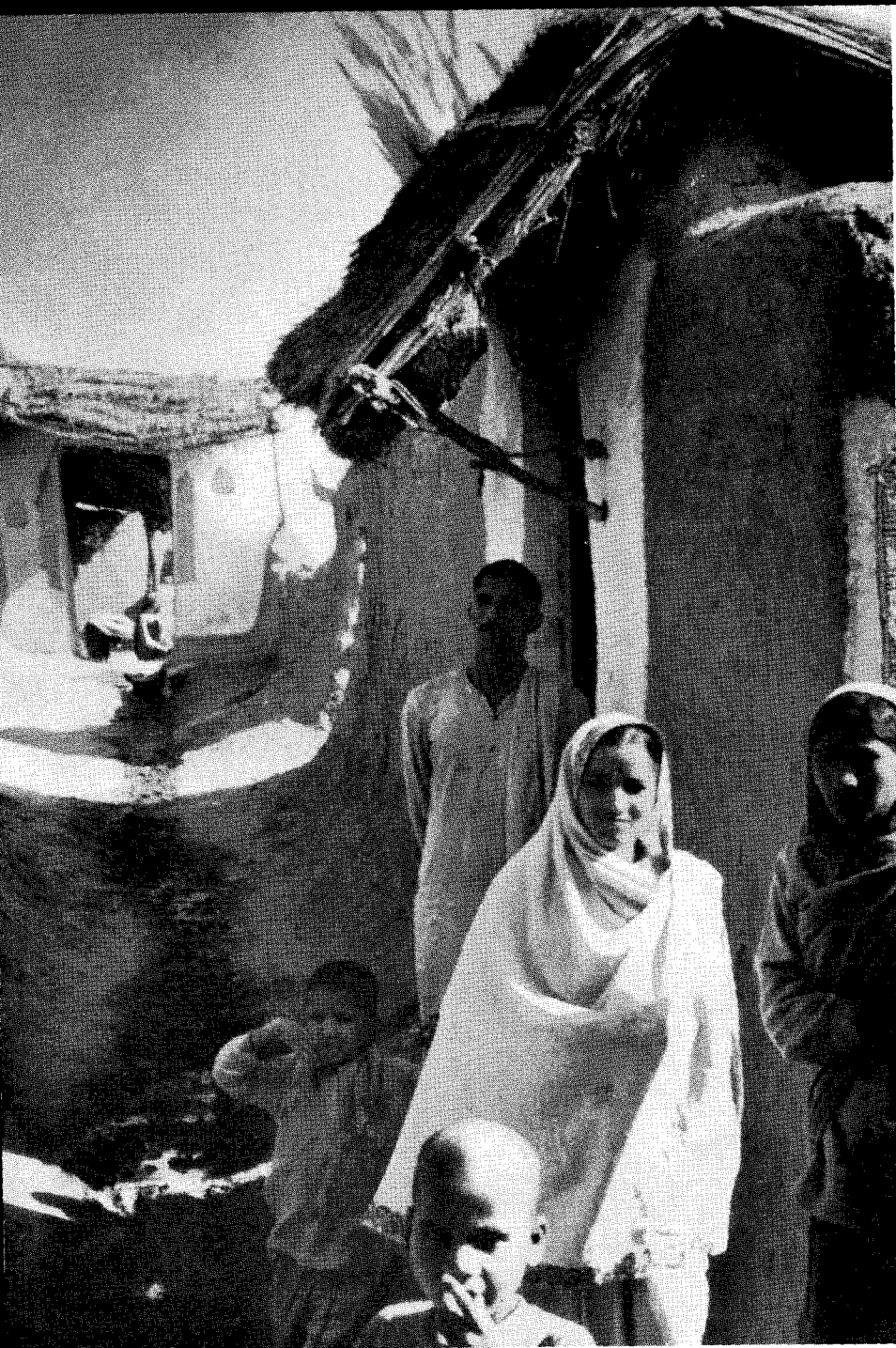
Fire-retardant Tiles and Panels

The ceiling of the Computer Room, Commonwealth Bank, Sydney, top right, is 12" x 12" Constellation Pattern C.S.R. No-Flame Tiles, in a suspended grid ventilating system. Tiles with edges cut back and kerfed can also be used in fully concealed suspension systems. The school room, lower right, shows a ceiling of 4' x 2' Fissured Pattern C.S.R. No-Flame Panels in a fully exposed system. Tiles and Panels come in both patterns and all are surface-finished matt white.

C.S.R. No-Flame, made $\frac{5}{8}$ " thick from mineral wool and a special binder, has C.E.B.S. approval for an Early Fire Hazard Index of zero. It is ideal for fire-resistant ceilings which will also control sound in clubs and commercial buildings as well as schools and domestic installations.

Noise Reduction Coefficient range for ceilings fixed in a mechanical suspension system is: Tiles, .70 to .80; Panels, .65 to .75.

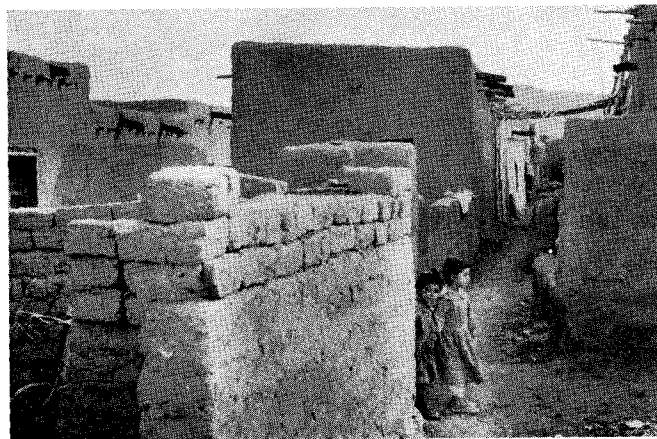




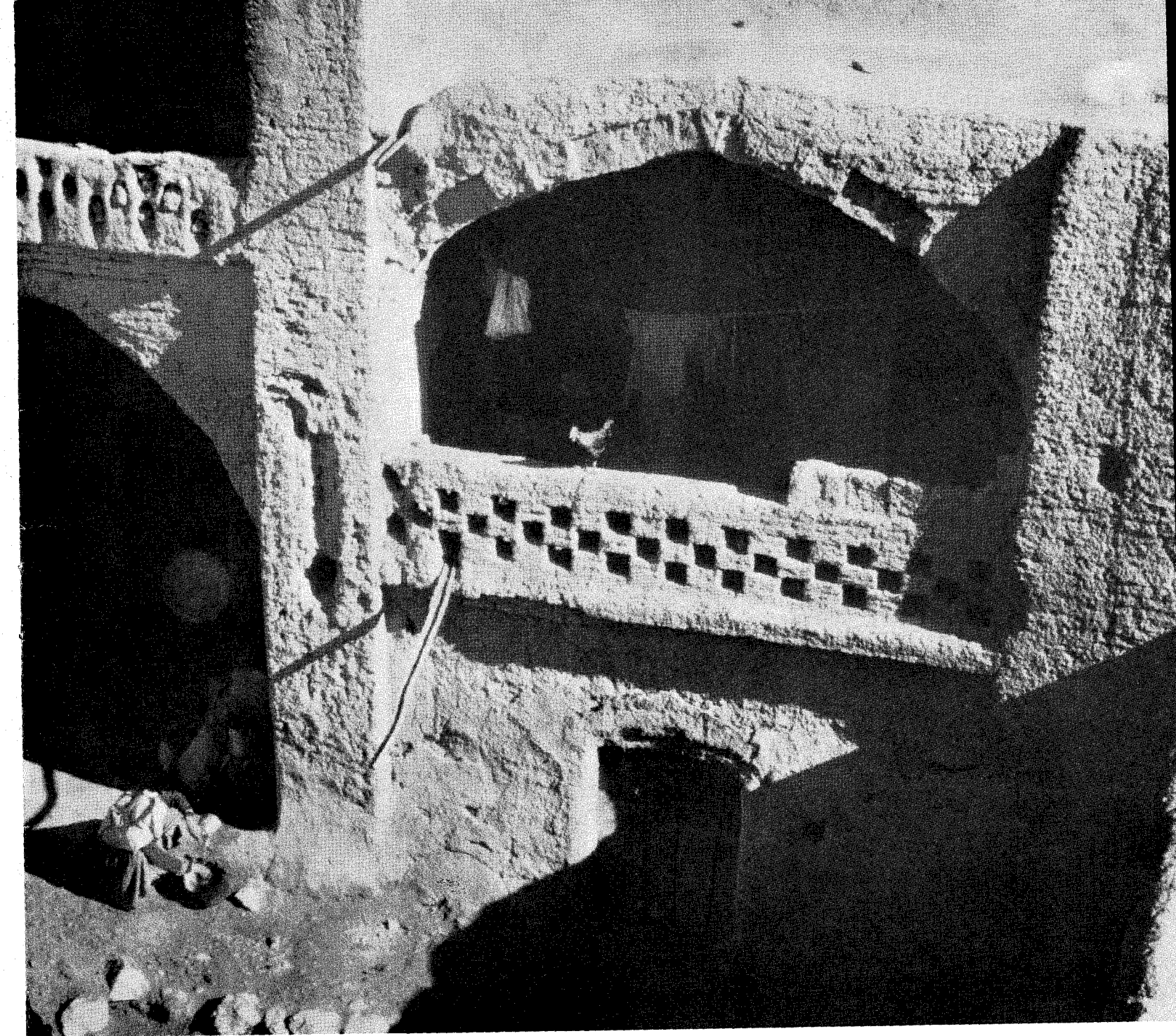
VOCABULARY OF FORMS and the SCULPTURAL QUALITY OF OPEN SPACES

In a mud village near Fatehpur Sikri, in northern India, (top left and right) the walls are battered and the paths wear deeper with use. Despite the narrow streets and primitive drainage there is a charm and sculptural quality about the natural hand-moulded appearance of the forms.

By contrast, in this Syrian mud village about 30 km. outside Damascus (lower left), the spaces between the buildings are miserable. Built only ten years ago for Arab refugees from Palestine, it lacks, perhaps, mainly the qualities of personal involvement, personal creativity and affection.



People need the chance to mould their environment, but today the layman's efforts are naive and incongruous, as shown on the previous page. Design in manufactured components and education in their use are primary ways in which a "vocabulary of forms" may be developed and understood.

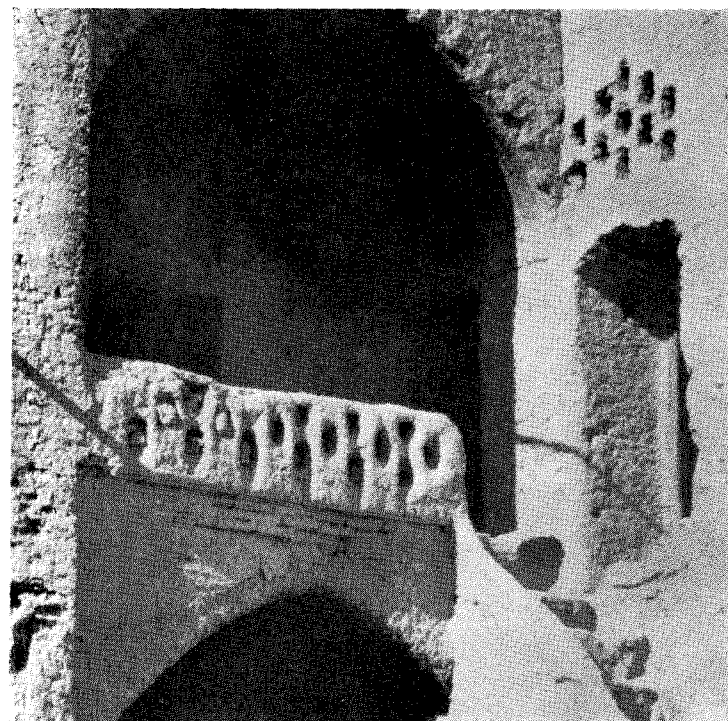
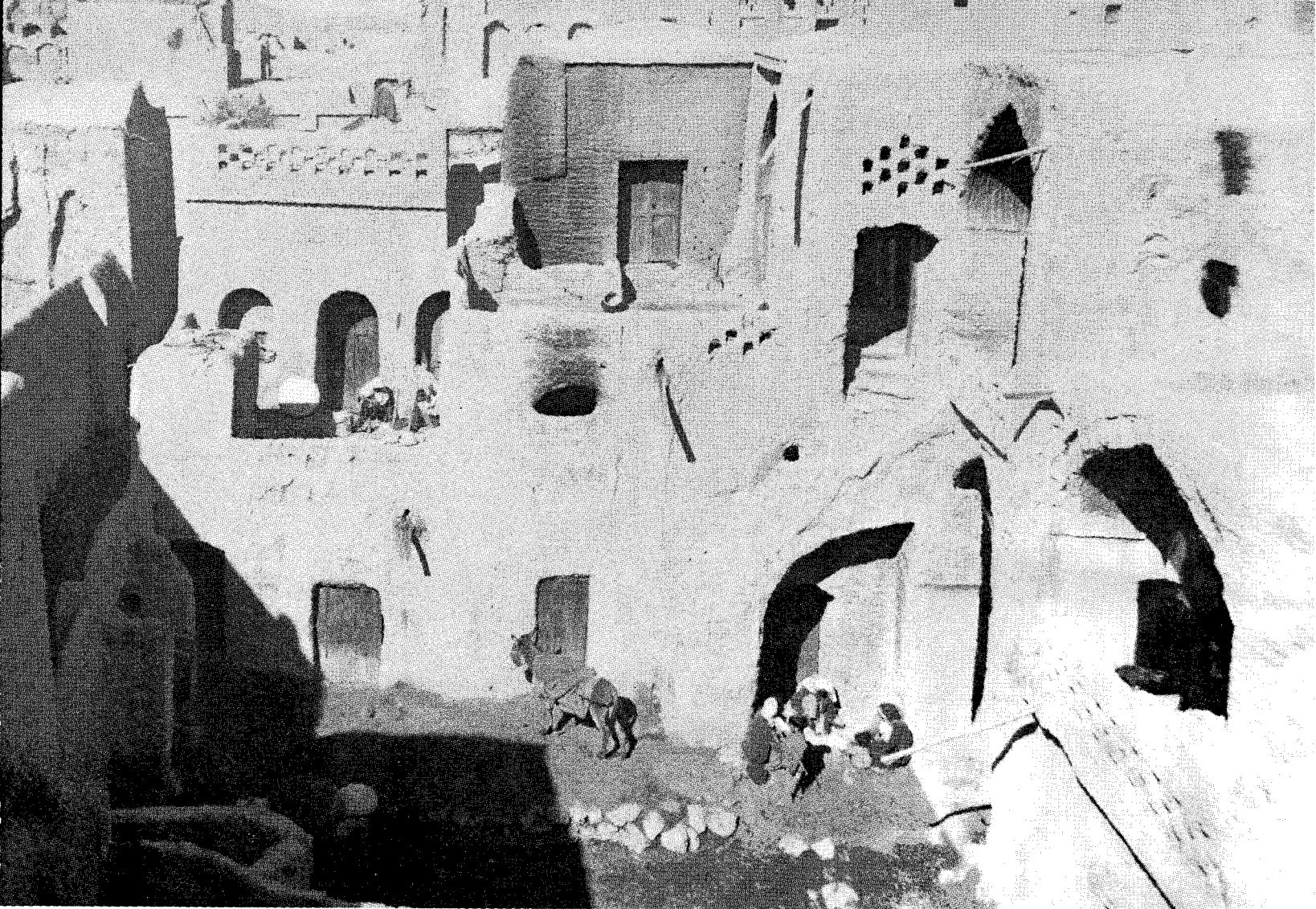


TWO - STOREY MUD BRICK TERRACE HOUSES WITH INTERIOR COURTYARDS in the ancient Persian town of Moorchehort, 52 km. north of Esfahan, Iran

The cover photograph, taken from the barbican over the entrance to the walled town, looks down into the courtyard of one of the houses. Pilasters between recessed arches of mud brick express the structure of the wall, and assume also a decorative function that has carried over into modern vernacular buildings in the area. Small round windows within the arches are typical of a climate with clear skies and hot sun. The low spherical roof domes are hand-formed of mud, cast on a framework of rough-hewn timber saplings overlaid with straw.

Illustrated above is a close-up view looking into another terrace house courtyard. The mud brick arch spans almost 15 feet and the freely sculptured shape of the roof dome appears above it. Drain spouts of hollowed saplings 2 feet 6 inches in length throw rain water clear of the walls to protect the mud from erosion. This was the form of drain spout rediscovered and much used by Le Corbusier.

The courtyard is a centre of activity. Tea is being prepared on the doorstep below, and a rooster stands on the upper balustrade.



ANCIENT PERSIAN MUD BRICK BUILDINGS

A Vocabulary of Forms
Sculptural Quality

BEERSHEBA, ISRAEL

State housing by D. Havkin within a larger scheme designed by architects Yaski, Alexandroni, Zolotov and Karmi

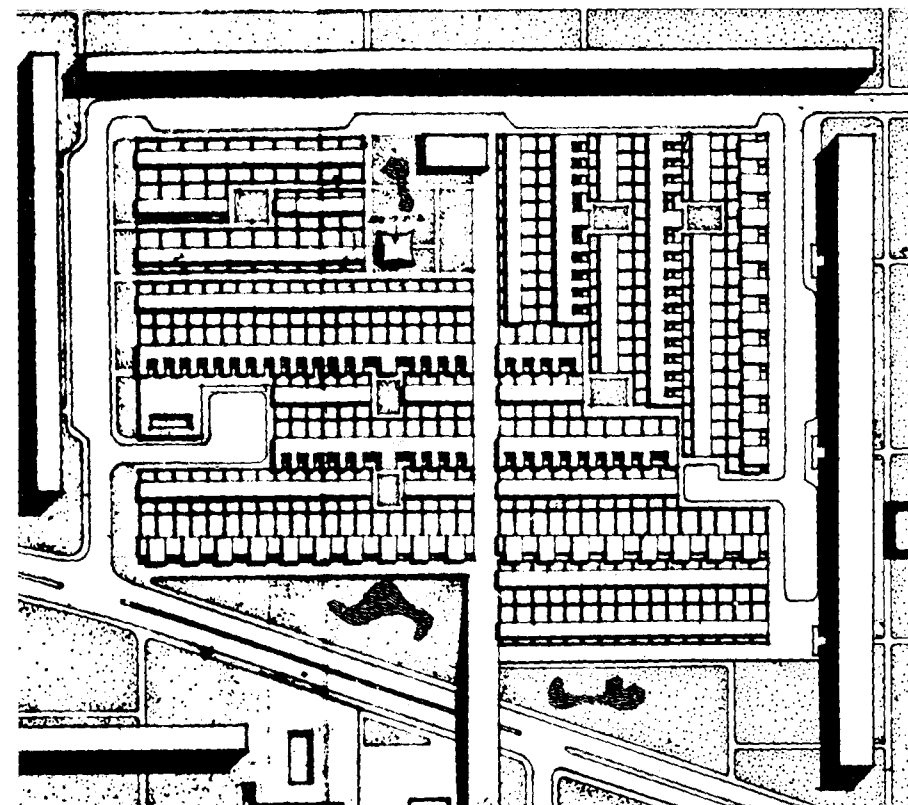
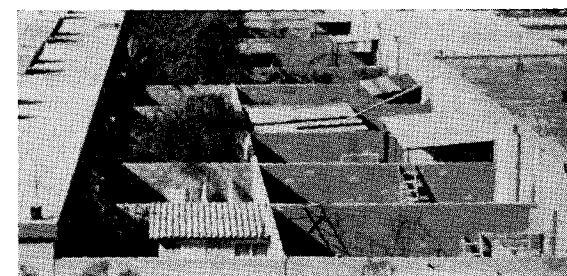
Some of the best younger architects of Israel were freely allowed to experiment in this low-cost housing sector for the poorer immigrants, the Yemeni, Moroccan and Asian Jews.

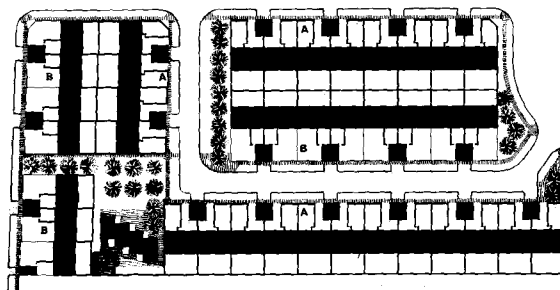
The patio houses illustrated below make up a "carpet" of low, horizontal development planted liberally with Australian eucalypts. There are also two-storey houses with "flying" bedrooms over an access corridor reminiscent of Corbusier's "rue interieure."

Within a national plan for distribution of population, villages and regional centres are laid out at the nodes of a hexagonal grid. Beersheba, once the ancient town of Abraham, is the new market and administration centre of the Negev desert, on the road leading from the Dead Sea salt works. The more recent residential quarters are of a higher density and surround a neighbourhood centre, and the roads linking them with the city and with each other are conceived as traffic arteries only, and not as urban streets organically connected with buildings.

Enclosing and defining the neighbourhood are protective "walls" of flats. In a hot, dry climate subject to sand storms and isolated in the desert, the compact form of development is more popular than the garden city concept tried earlier, as open space must be kept to a minimum and as much shade as possible created.

Additional shade as well as extra accommodation has been sought by the migrants in home-made lean-to's in the courtyards (top right). If the scheme is not to deteriorate into chaos, some guidance is required here, too, in the matter of "optional extras."





RIVERWOOD, N.S.W.

Housing Commission patio houses
Architects: Clarke Gizzard and Partners

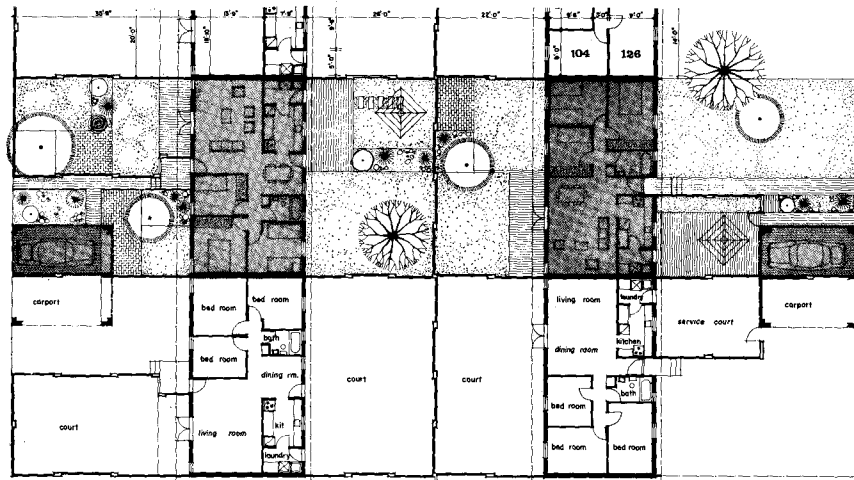
The planning of these houses extends beyond the roofed areas to the boundaries of the site, creating separate walled spaces for outdoor living and for the service courts, and open garden areas alternating with paired carports to give variety of form to the street-scape.

The group lies behind a row of conventional cottages fronting on to Killara Avenue, Riverwood, and achieves a density of more than 10 dwellings per acre, with sites of 40 feet by 85 feet. The three-bedroom, nine-square houses combine the compact development pattern of terrace houses with the privacy and outdoor areas of a bungalow, and the convenience of a home unit with provision for a car.

The architects have supplied sketches of planting treatments to help with the landscaping, and covenants have been sought against enclosure of carports and erection of TV aerials. However, no positive guidance is being given in the selection of trellises, for instance, or planting tubs, unfortunate examples of which are already in evidence.

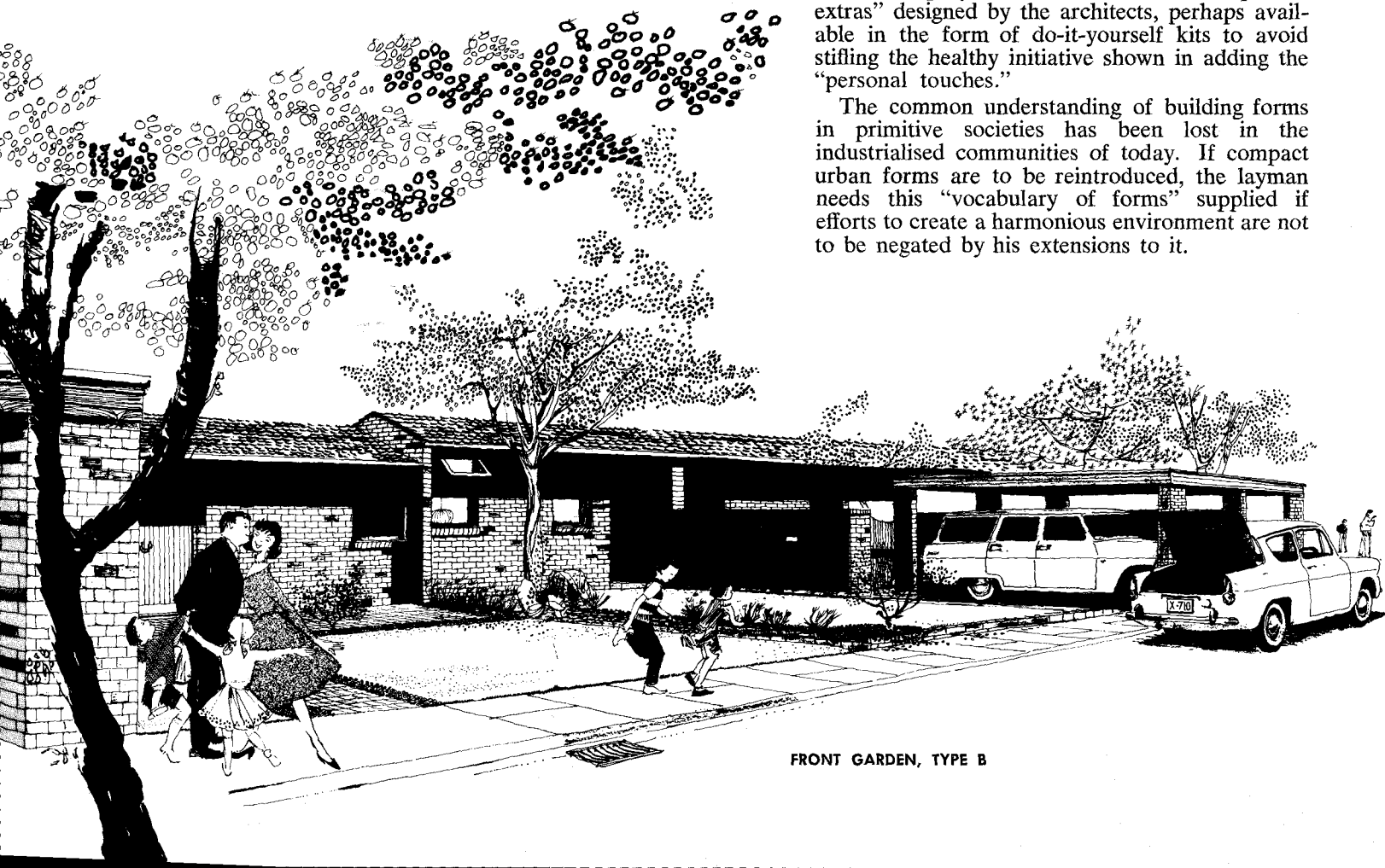
In such projects there is a need for "optional extras" designed by the architects, perhaps available in the form of do-it-yourself kits to avoid stifling the healthy initiative shown in adding the "personal touches."

The common understanding of building forms in primitive societies has been lost in the industrialised communities of today. If compact urban forms are to be reintroduced, the layman needs this "vocabulary of forms" supplied if efforts to create a harmonious environment are not to be negated by his extensions to it.



PLAN TYPE A

PLAN TYPE B



FRONT GARDEN, TYPE B

These terrace houses of ancient Moorchehort, top left and right, show a pattern of agglomerated development over several hundred years. As more families crowded within the perimeter of the walls, a second and third storey were often added to a basic dwelling, forming an irregular pattern of houses and roofs, with courtyards on several levels, sometimes two storeys deep, sometimes three, providing a wonderful sculptural complexity.

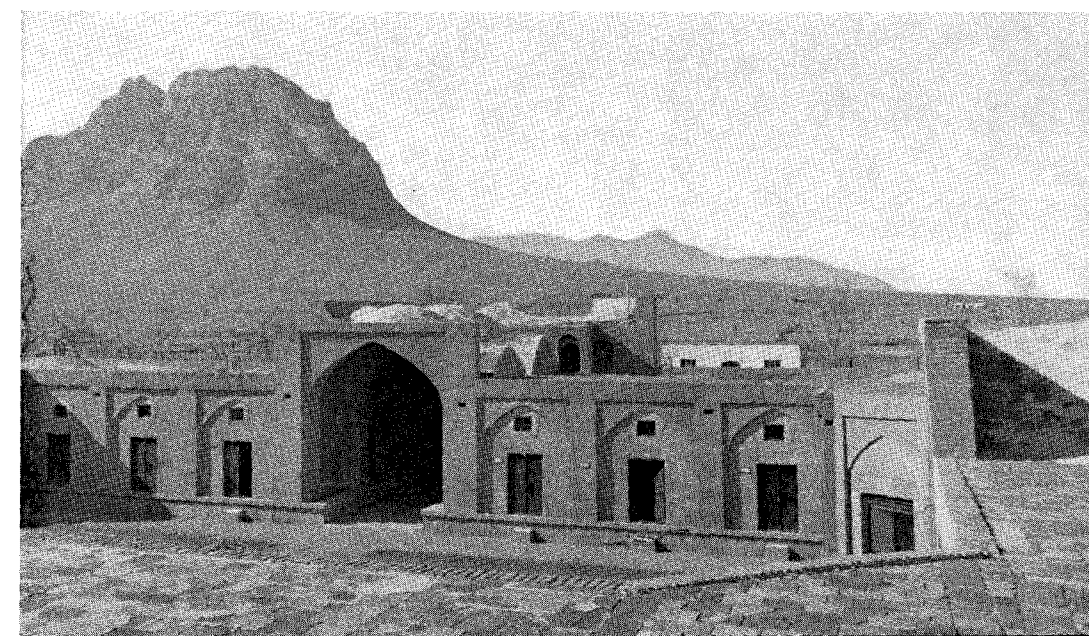
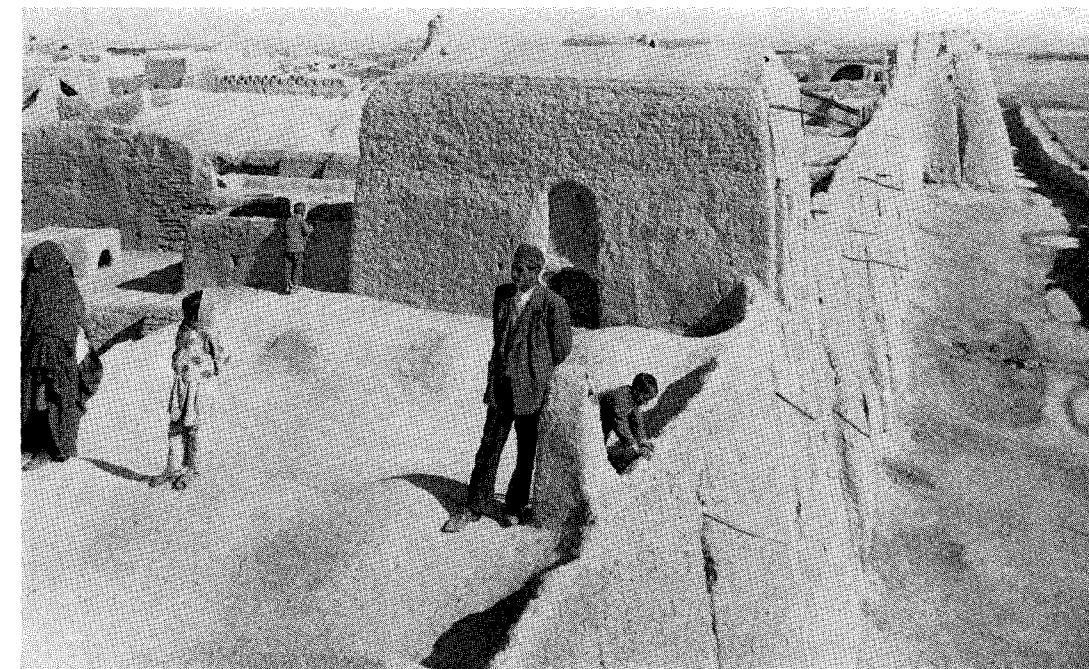
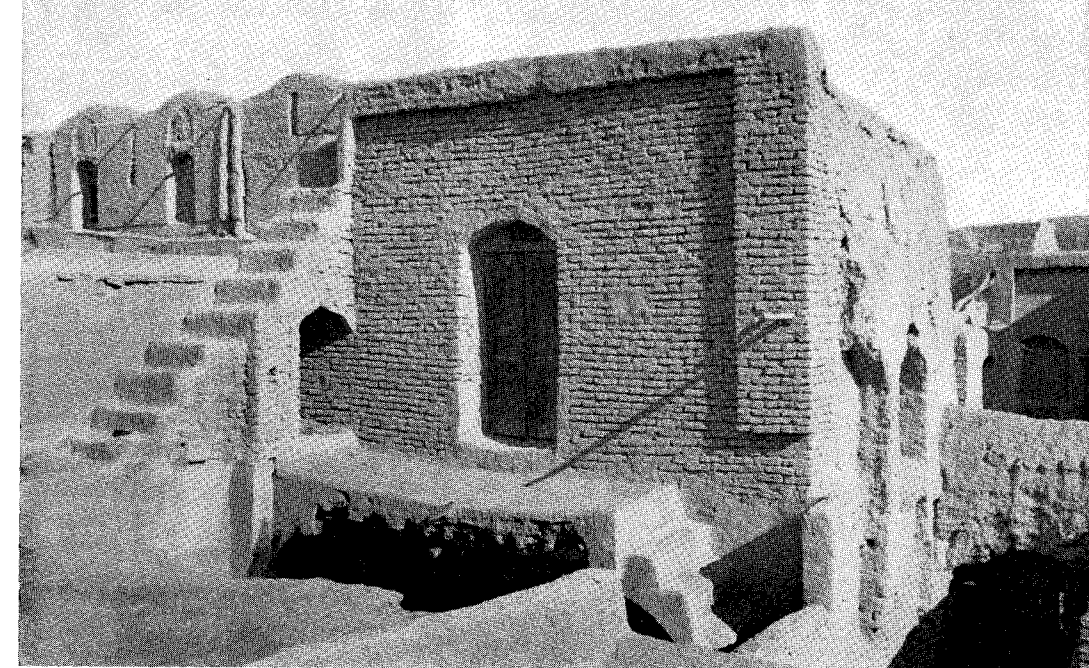
The remarkable homogeneity of the final group is due to the basic use and common understanding of a vocabulary of forms, so that nothing added was discordant with the original.

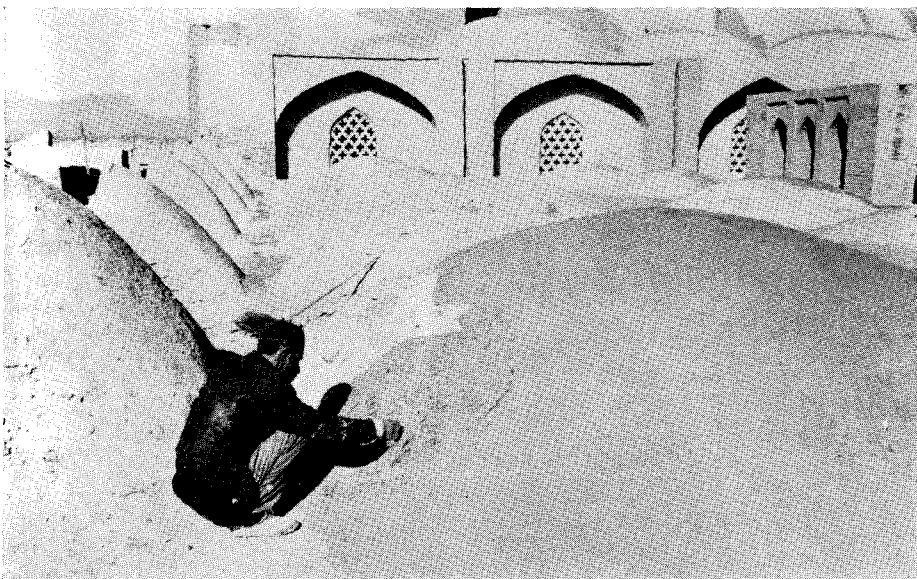
The effects of lack of maintenance on the mud walls are shown where the individual bricks are exposed (lower left) and the open grille work of the balcony, designed to let air through, has been washed away into a soft rounded form.

For hundreds of years this completely walled city stood by the trade route and was successively built and rebuilt as the mud has worn away. The city was square in plan and the heavy mud brick wall was surrounded originally by a moat (centre right). The main gate is on the far side of the entrance bar-bican, making it harder to storm than if it were exposed in the front.

Part of the "vocabulary of forms," recessed brick arches and domed roofs, is shown here carried on in one of the 999 caravanserais built by Shar Abas in the early 17th century. The forerunner of the motel, built by the roadside out in the middle of the country, it is now only a few hundred yards north of the modern agricultural village of Anushirvan, 16 km. north of Esfahan.

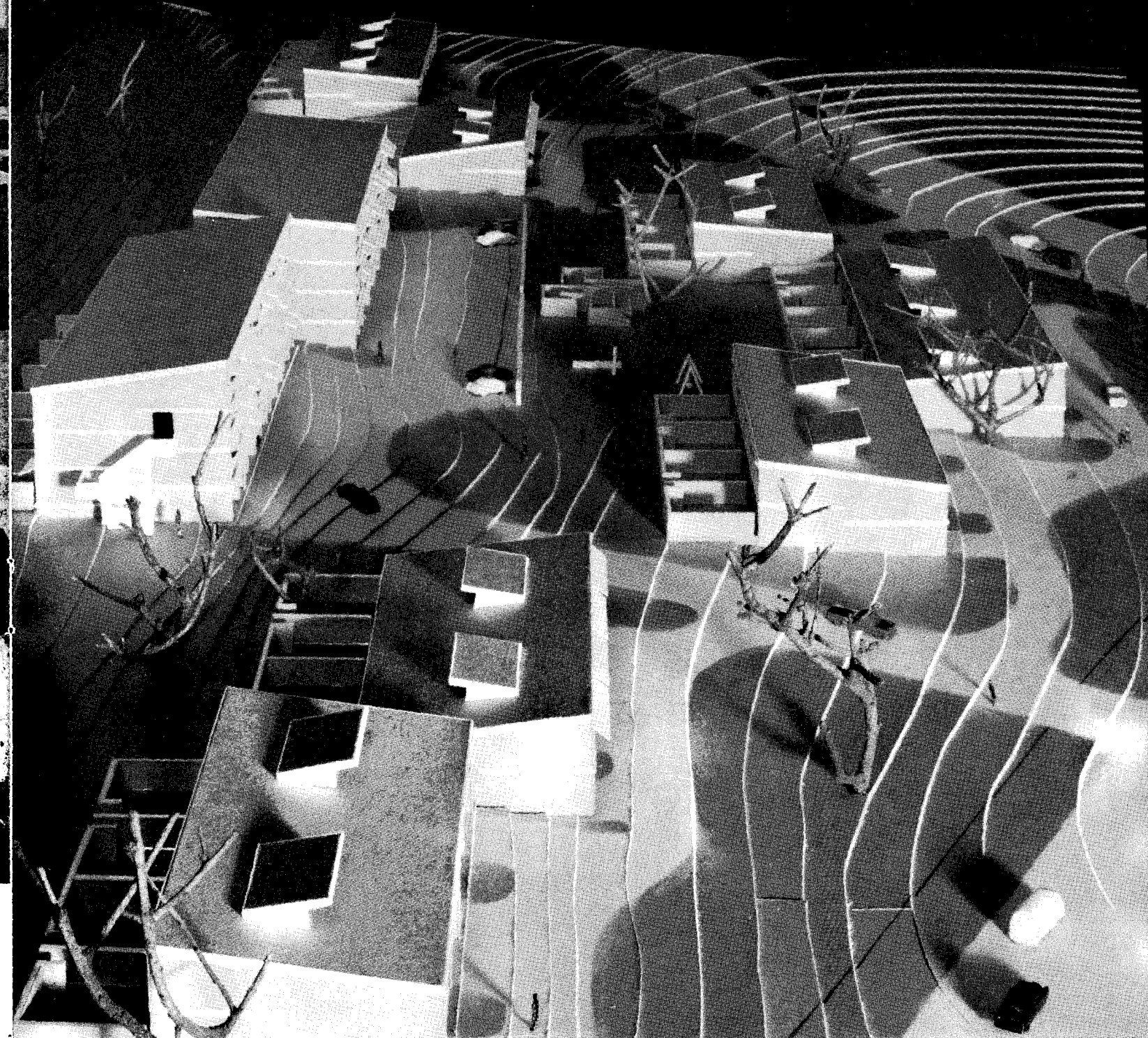
As a public building it was built of kiln-burnt bricks, and the domes and flat parts of the roof were covered with kiln-burnt brick tiles, seen in the foreground.





ANCIENT PERSIAN MUD BRICK BUILDINGS

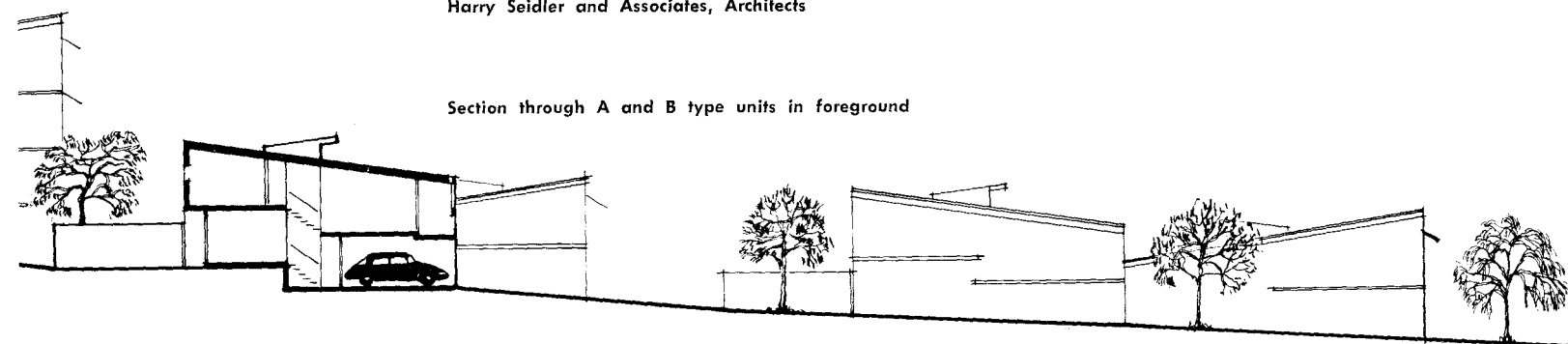
**Materials and
Living Patterns**



NATIONAL CAPITAL DEVELOPMENT COMMISSION GROUP HOUSING SCHEME BLOCK 15 SECTION 9 Blamey Crescent, Campbell, A.C.T.

Harry Seidler and Associates, Architects

Section through A and B type units in foreground



CANBERRA GROUP HOUSING SCHEME

Architects: Harry Seidler and Associates

The scheme attempts to answer the problems of housing by avoiding the usual monotonously repetitive housing character. This is achieved by a variation in types, the staggering of different length blocks and the creation of spatial relationships between them. Any feeling of confinement is avoided in favour of channelled space. Adjacent house units are separated by narrow pedestrian walkways, thereby adding to the spatial effects from narrow and tall to broad and open sequences.

Opposing roof slopes of the different blocks, the outcome of varied accommodation in their planning, and the contrasting slopes of their skylights form scintillating patterns across the slope of the land.

The long facades are deeply moulded, with recessed terraces and projecting sunshades resulting in the contrast of light and shade. There is also strong visual contrast between white, light-weight infill walling, offset by the solid facebrick end walls. The scale of the blank end walls is maintained by the expression of the floor edges of the staggered split-levels.

The escape end stairs of the flats consist of independent concrete structures with a central supporting spine wall and cantilevered flights. Visual, as well as structural, contrast exists between these sculptural tensioned stair structures and the earthbound supporting end walls of the building.

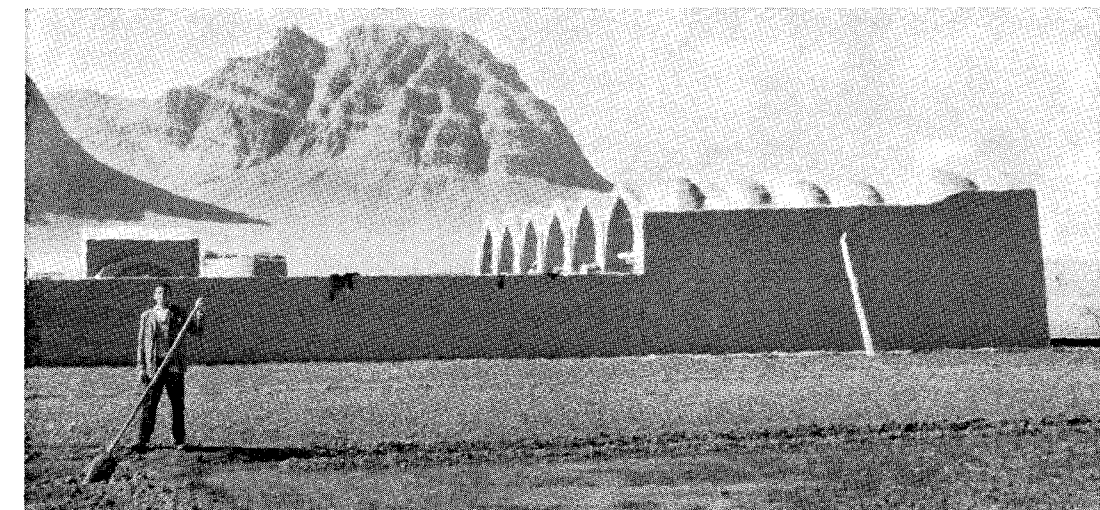
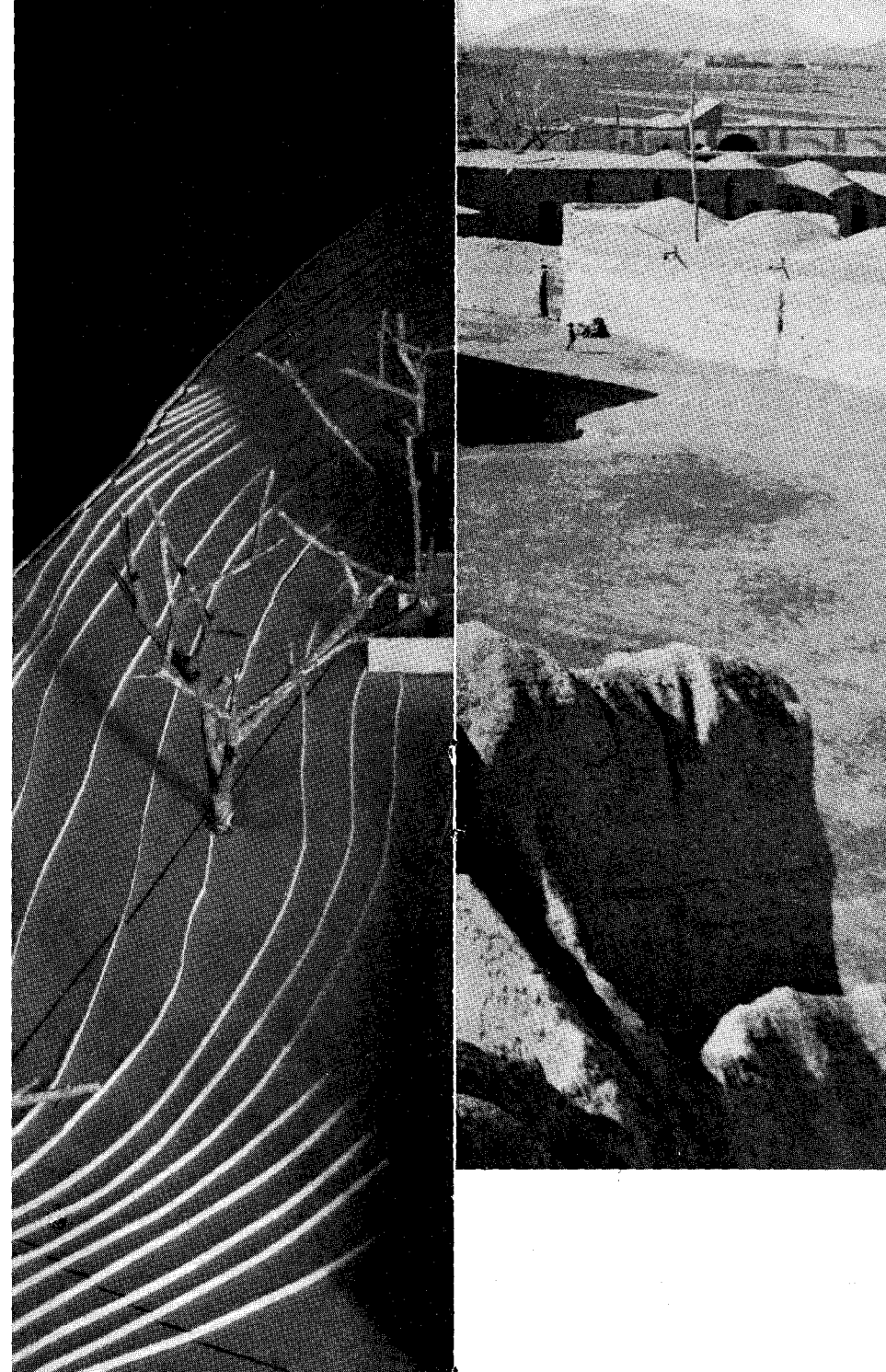
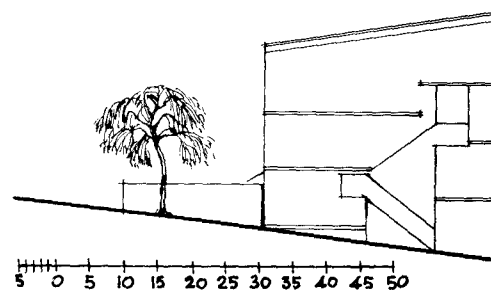
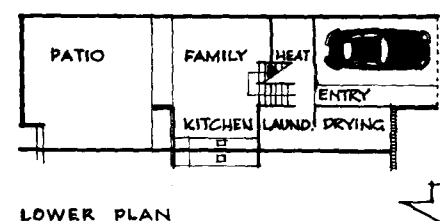
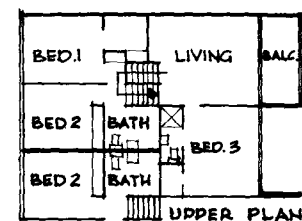
The essence of the plan arrangement for the houses is to provide living terraces raised above street level for privacy on the view side, as well as access to the ground on to rear private patio gardens. This allows for a choice of outdoor living exposures, the view side terraces on the west with afternoon sun and the patios on the east with morning sun. The latter form safe children's play enclosures and make possible private gardens as distinct from communal landscaped areas.

The 32 attached houses are designed for families with children. The split-level design provides a car space within each house on its lowest level, together with a covered, screened laundry drying area and an enclosure for heating equipment. The accommodation in the different types varies as does the exposure of the main living area. All units are 20-feet wide and are arranged in groups of four or six, paired to facilitate plumbing and other services.

All living areas have full-height glass walls deeply recessed for sun protection. Those on the west are provided with exterior vertical roll-down blinds at the front edge of each terrace. In all cases where orientation and size of glass area require sun protection, they are provided with fixed sloping external awnings.

Centrally located bathrooms and stairs have clerestory skylights for light and ventilation.

Plan types A and B illustrated are the largest units, arranged in pairs, with either three bedrooms (type A with a separate parents' bedroom and private bath) or two bedrooms (type B).

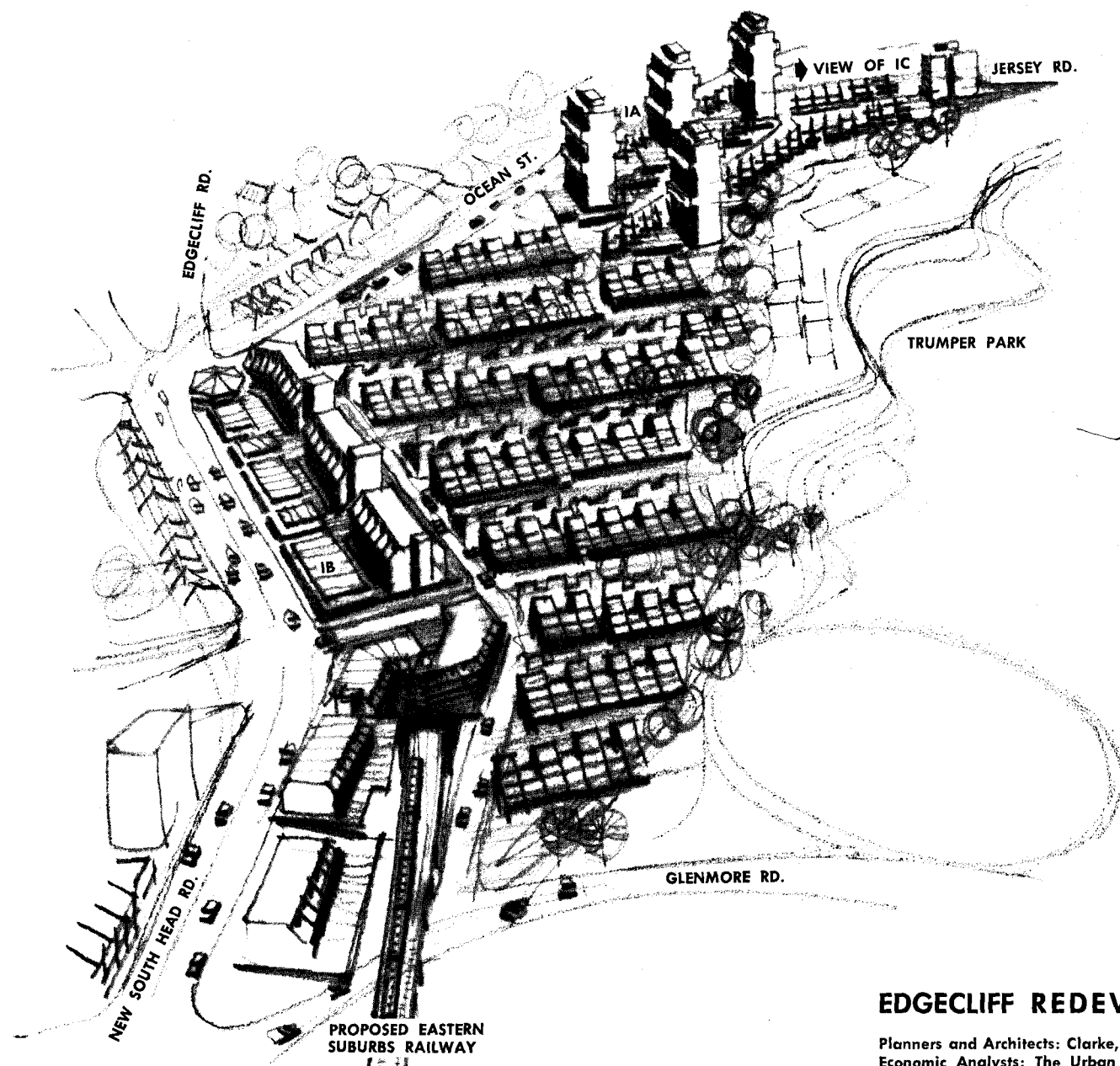


Students of urban form will not have many more years to see ancient Moorchehort before it is all washed away. The ruins of neglected mud houses (top left) make a dramatic composition in the low-angled winter sun, silhouetted against some new single-storey patio house compounds in the background. The decline of the town as a defence and trading centre has caused it to lose its population to Tehran and Esfahan, and decay has set in.

Annual replastering with a mixture of mud, straw and manure is necessary (bottom left) though here only the roof is of mud, the vaults underneath being of kiln-burnt brick. This is the roof of the Masjid-i-Jami, the Friday Mosque, in Esfahan, and on the left are "light scoops," a form also used later by Le Corbusier.

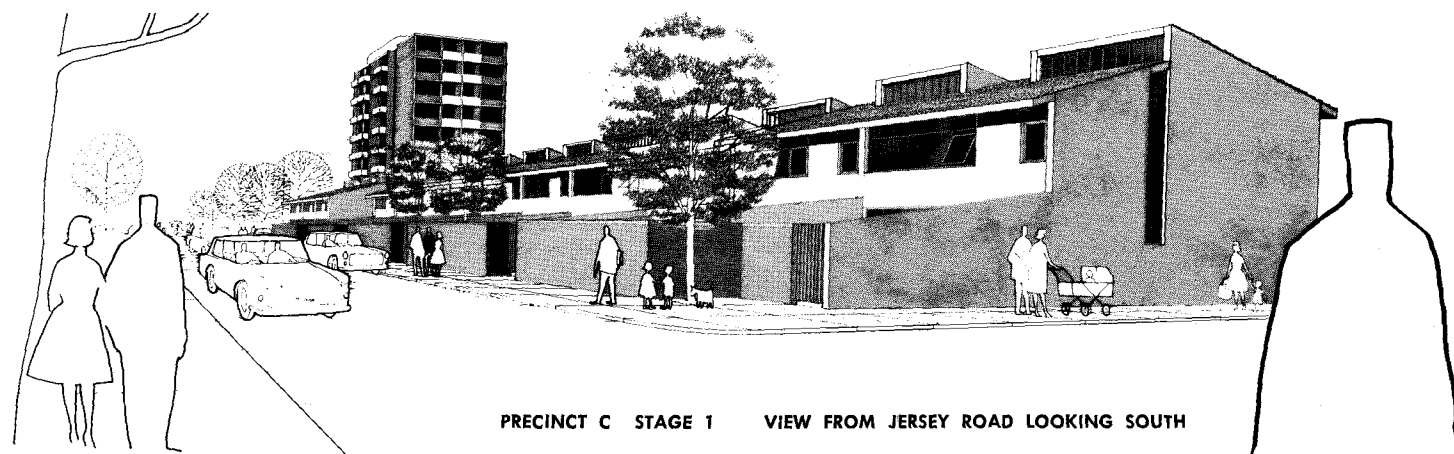
A typical house at Anushirvan (above), where farmers live in the town and work outside it. This walled compound contains a 30-bay house, six arches wide and five domes deep. A ceremonial street gate leads to a courtyard with a well in the middle, a family bakery and a pit latrine. These are relatively new, being of the 20th century, but the units are all occupied traditionally by extended family groups.

A two-arched patio house (top), where a more modern man lives with only his immediate family. Weaving and spinning are done on the terrace, and a Persian rug is set out for the ceremony of tea. A young Australian gum is growing in the garden.

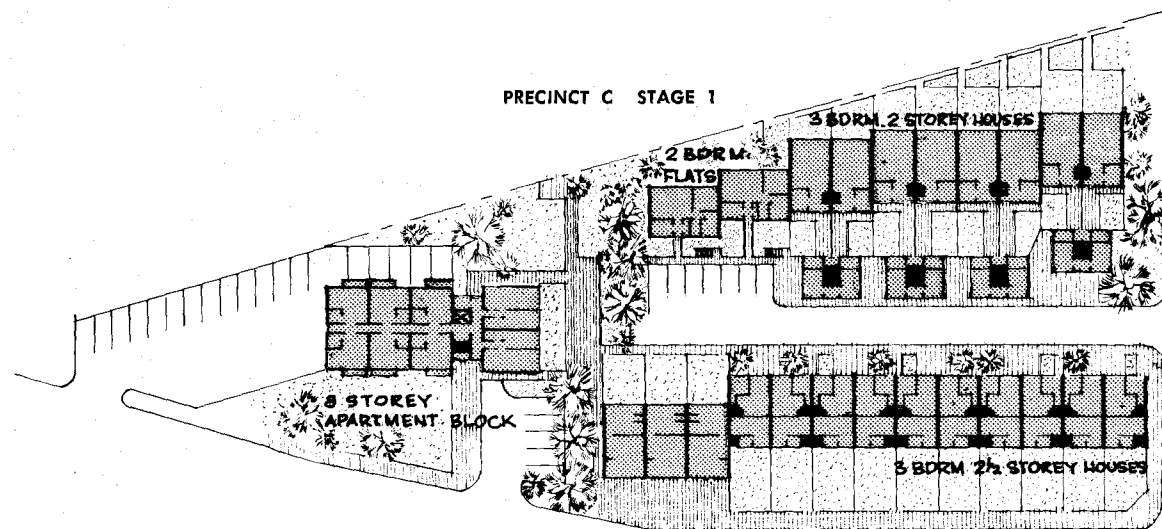


EDGECLIFF REDEVELOPMENT SCHEME

Planners and Architects: Clarke, Gazzard and Partners
 Economic Analysts: The Urban Research and Planning Centre
 Engineering Consultants: Rankine and Hill
 Quantity Surveyors: Thompson and Wark
 Land Surveyors: Hardy, Busby and Tyson



PRECINCT C STAGE 1 VIEW FROM JERSEY ROAD LOOKING SOUTH



ST. JAMES GLEBE EDGECLIFF, N.S.W.

URBAN REDEVELOPMENT SCHEME
 FOR THE ADMINISTRATION BOARD
 OF THE DIOCESE OF SYDNEY
 CHURCH OF ENGLAND IN AUSTRALIA

"... the lessons of the rise, fall and recovery of the Sydney terraces should be learned and understood. For the world at large they are a model object lesson of the pendulum of architectural taste; men creating a close urban pattern as a relief from the pioneer emptiness of their continent; then creating a wide open suburbia as a relief from the high density of the town; and now returning to close packed urbanity as a relief from a sprawling suburbia..." RAYNER BANHAM.

The return to medium and high-density urban living in this area of Edgecliff will take the form of complete rebuilding, unlike individual rehabilitation of terrace houses in neighbouring Paddington. A gradual comprehensive renewal will be based on a long-term plan incorporating provision for main road widening and rail development. It will proceed in small stages beginning on areas of vacant land or areas causing minimum disturbance of occupants.

Although extending over a period up to 20 years, a total initial concept is made feasible by the leasehold nature of the original development. The existing 325 buildings reverted to the ownership of the Church of England, Sydney Diocese, at the end of 1964. This holding of 28.7 acres, known as St. James Glebe, is in one of Sydney's highest valued inner areas, and could be subdivided and sold. Instead, it has been consolidated as each lease ran out, the occupants staying on as direct tenants until alternative accommodation can be arranged and the plan implemented.

The main framework of the long-term concept divides the area into three major pedestrian precincts.

Precinct A will extend along the top of the Ocean Street ridge, with four 15-storey, 150' high-rise apartment buildings, twenty-seven town houses, a sunken car park, and pedestrian malls.

Precinct B will follow the alignment of the main road and future railway, and provide a local shopping and office area.

Precinct C will comprise medium-density terrace houses and walk-up apartments. Hillside units will be staggered horizontally and vertically to create an intimate and interesting residential character, related to Trumper Park by pedestrian greenways on the Radburn principle of cul-de-sacs for car access.

Stage One will provide a mixed development of terrace houses and high-rise apartments in part of 1C and 1A, with a minor shopping and office cluster of buildings at 1B in the commercial sub-precinct. This first stage will require the demolition of houses now tenanted by 52 people, but will replace them by 230 new dwelling units housing 350 to 400 people. It will also provide for the first stages of major widening of New South Head Road and Ocean Street by 25 ft. and for the economical protection of the first section of the Eastern Suburbs Railway, saving future resumption costs of some \$700,000.