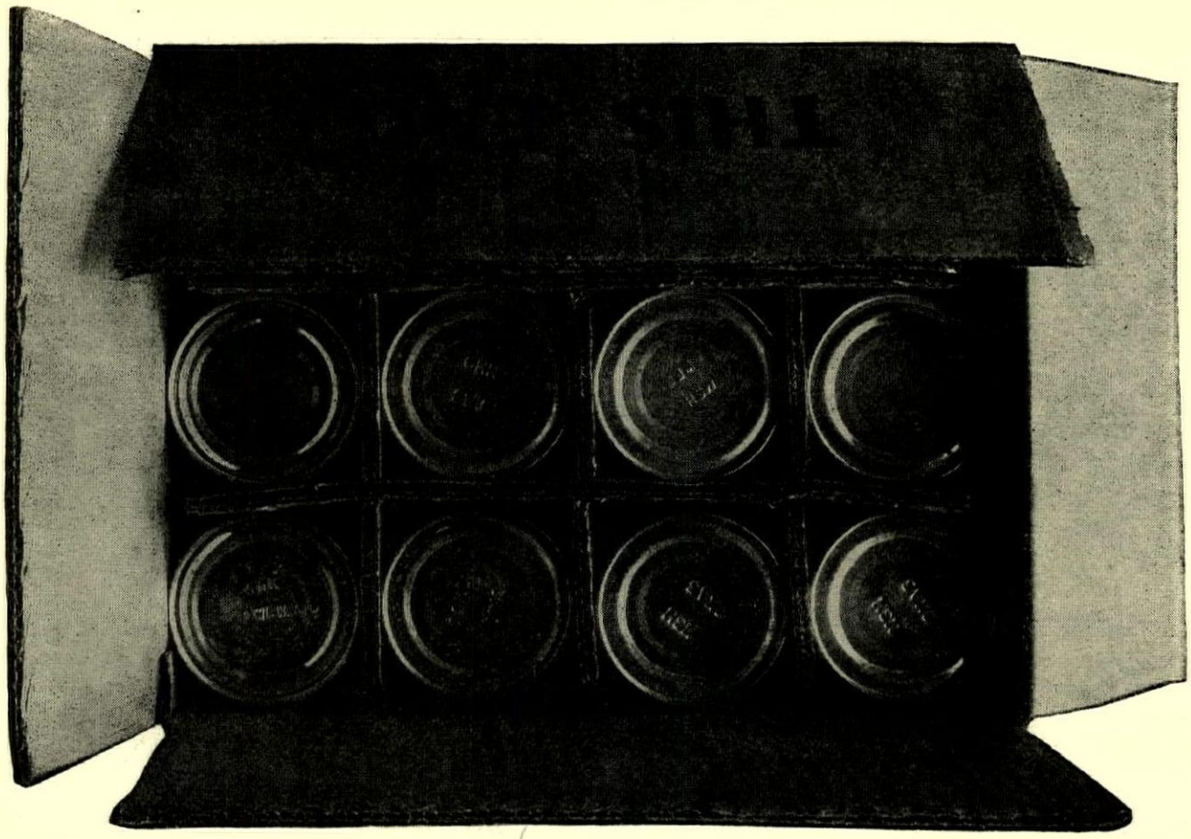
REVIEW

P66

THE ARCHITECTURAL REVIEW VOLUME CXXXIX NUMBER 827 JANUARY 1966 FIVE SHILLINGS



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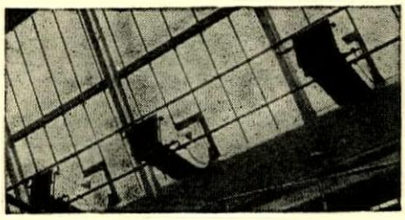

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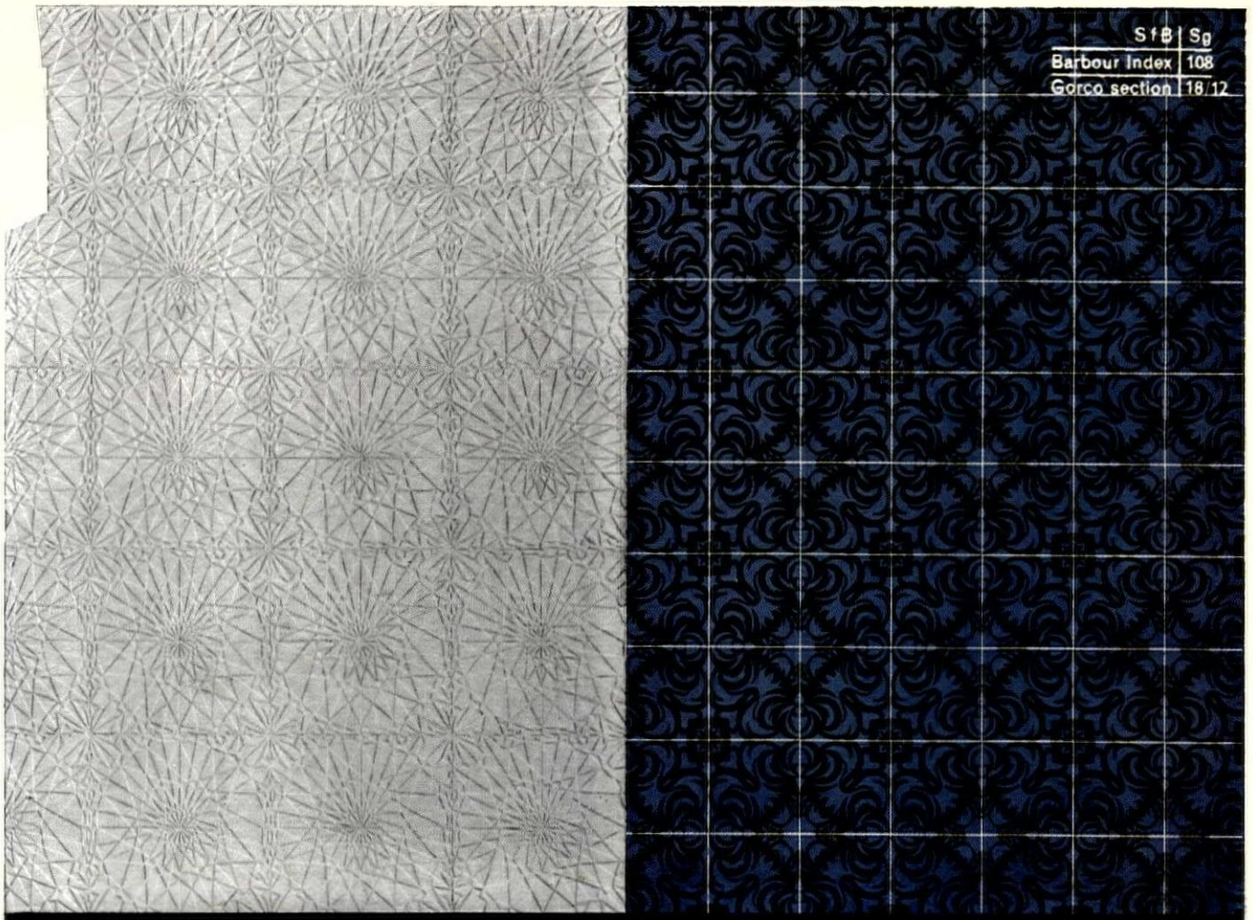

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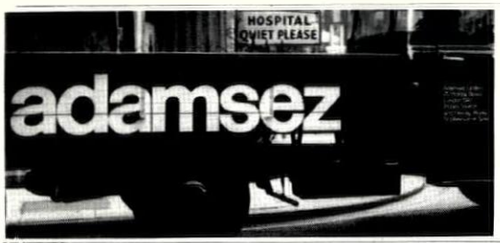

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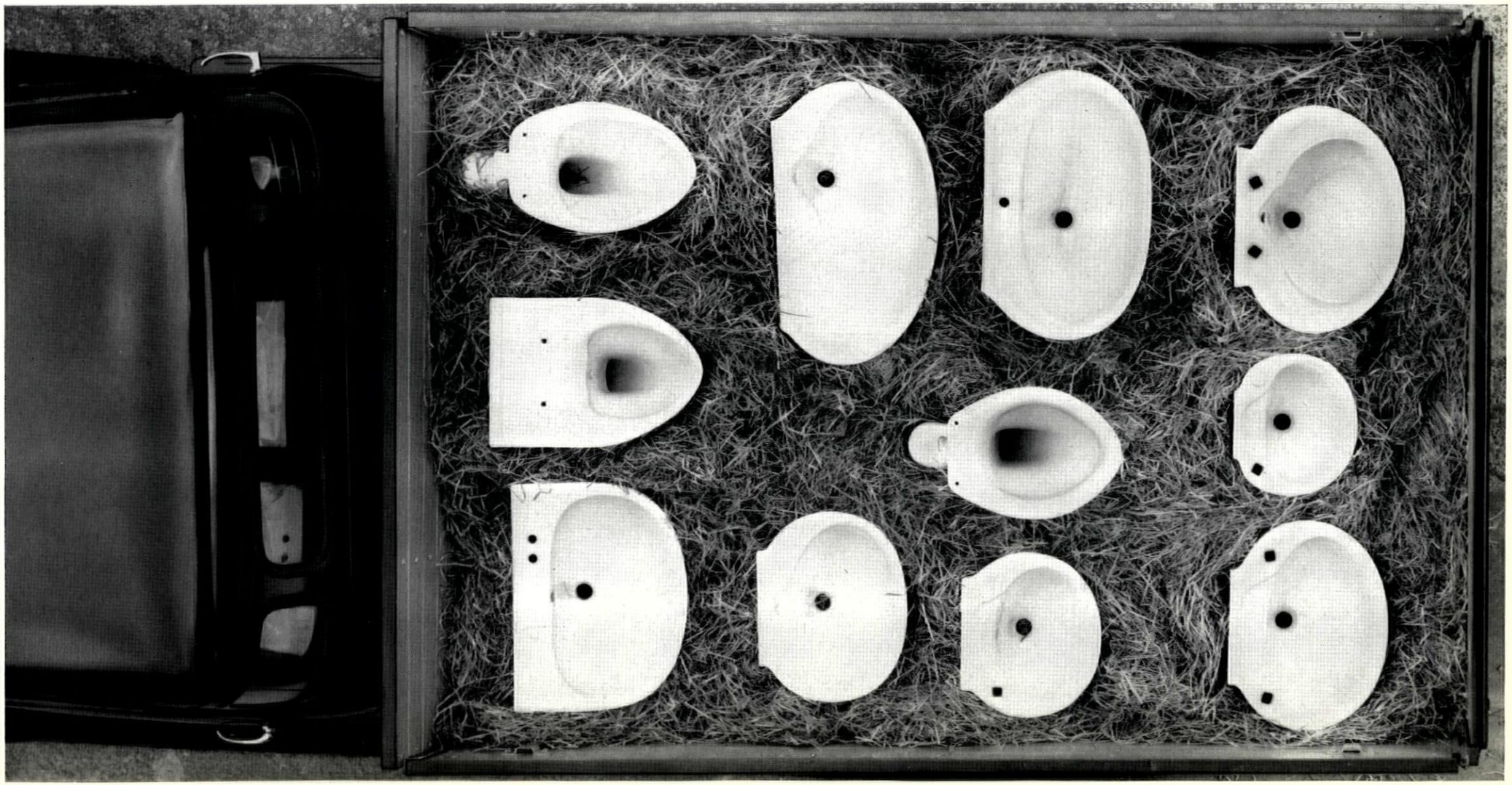

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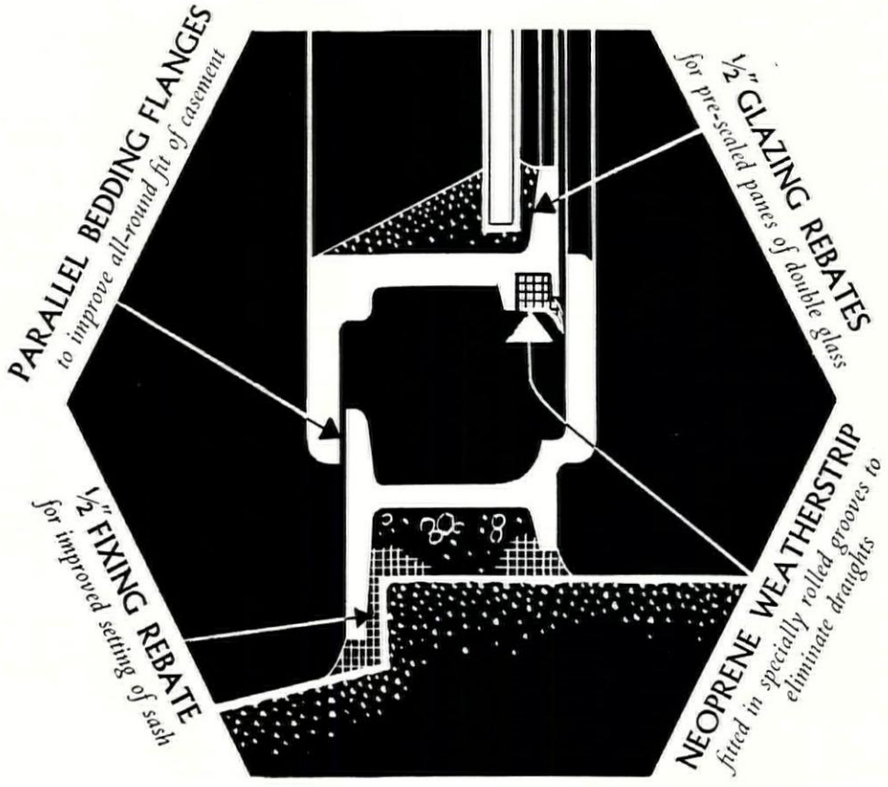

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Clayspan may be designed and used by flooring specialists or included in the design of the main structure by a consulting engineer and erected by the contractor. London Brick Company Limited can provide a structural design service if required.

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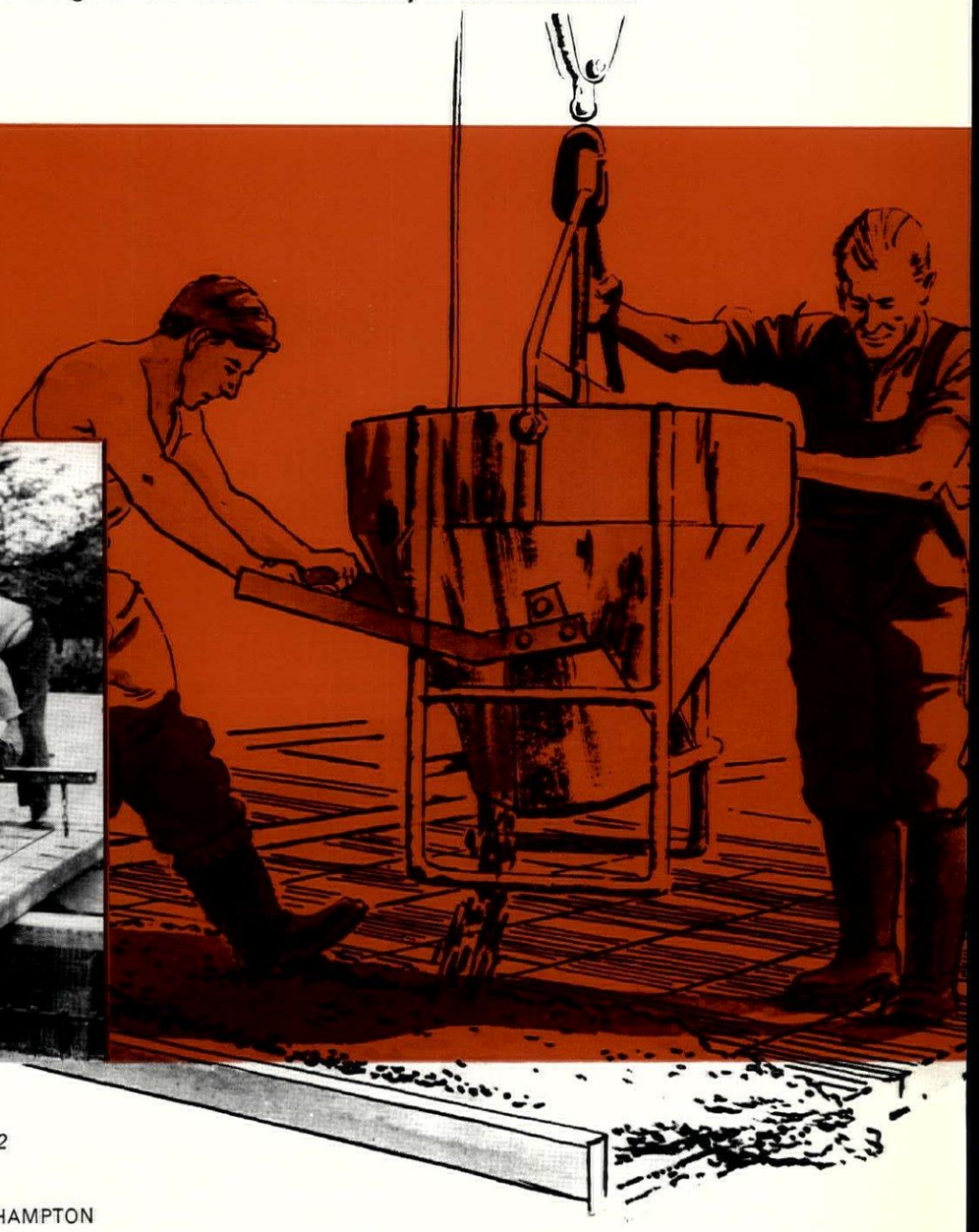
Bottom left: Offloading three Clayspan beams from the vehicle in one lift.

Centre: Clayspan beams are lowered directly into their final position and bedded into the mortar on the cross walls. Note the use of a simple support beam.

Drawing right: A topping of concrete can be placed as soon as the beams are positioned.



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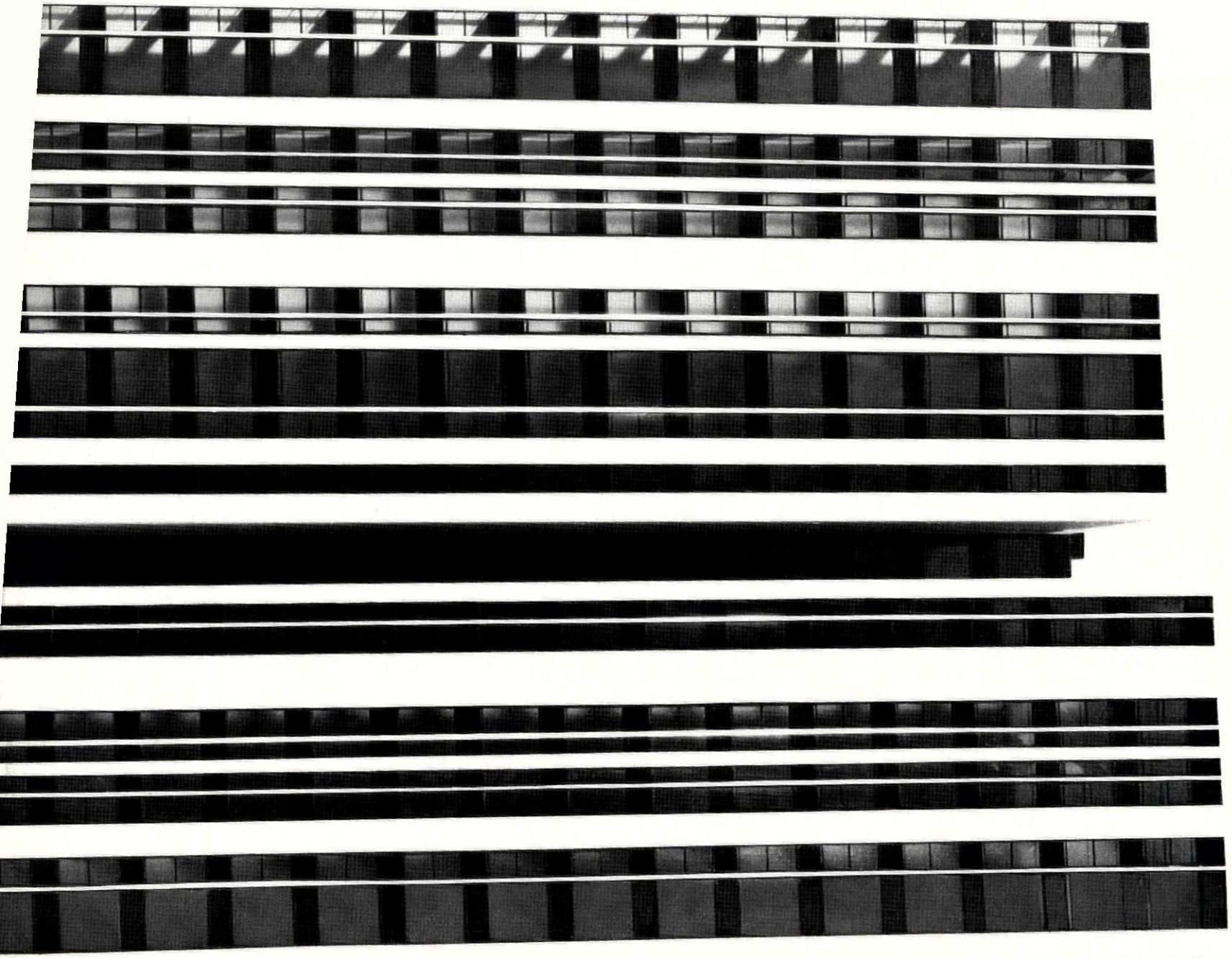

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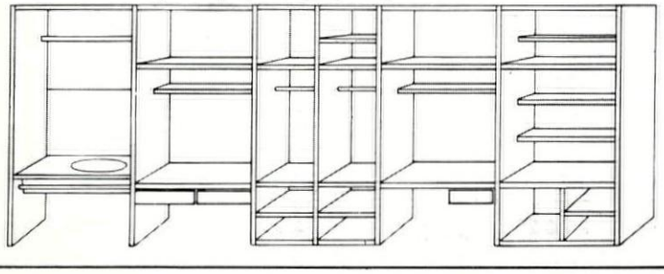
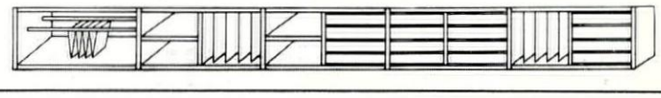
Series 1, which won a Design Centre Award, is suitable for heavy duty contract use in universities, hostels, hotels and offices. Series 2,

Series 1 Heavy Duty (various door arrangements are available with all series)



Series 2 Low Units



3 and 4, designed mainly for domestic use, provide exactly the storage needed for bedrooms, dining-rooms, studies, bedsitters, etc. As a guide to the possibilities of this system, Hille have planned over 250 bay assemblies and, by combining two or more of these, most people will be able to meet the most exacting requirements—although those who wish can plan their own assemblies ad infinitum. In any case, the Hille Interior Design Organisation is at your disposal.

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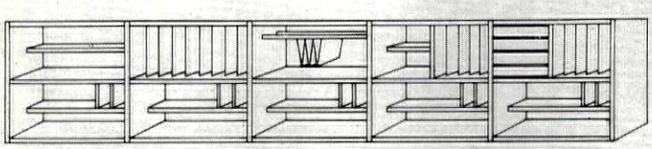
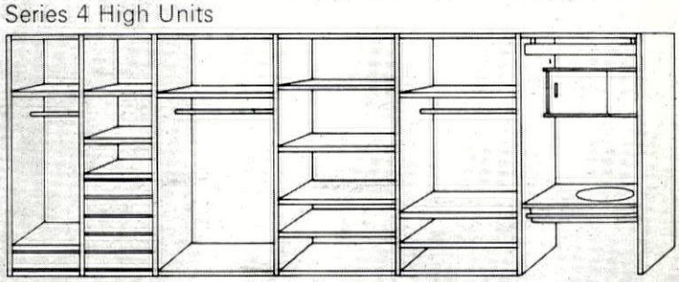
Series 3 Medium Units



Series 4 High Units



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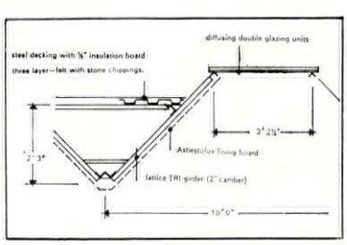
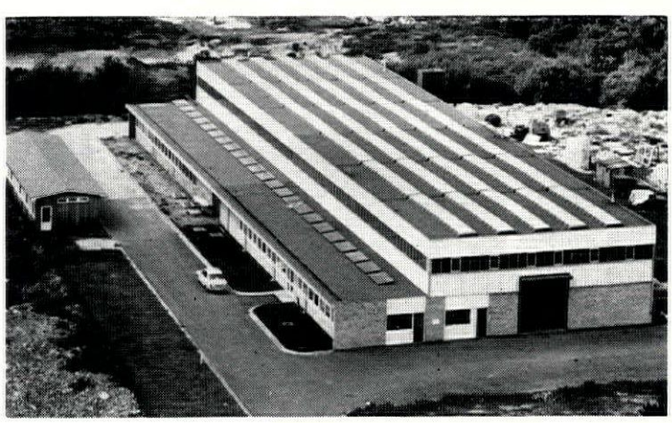
giving abundant, even, glare-free natural light





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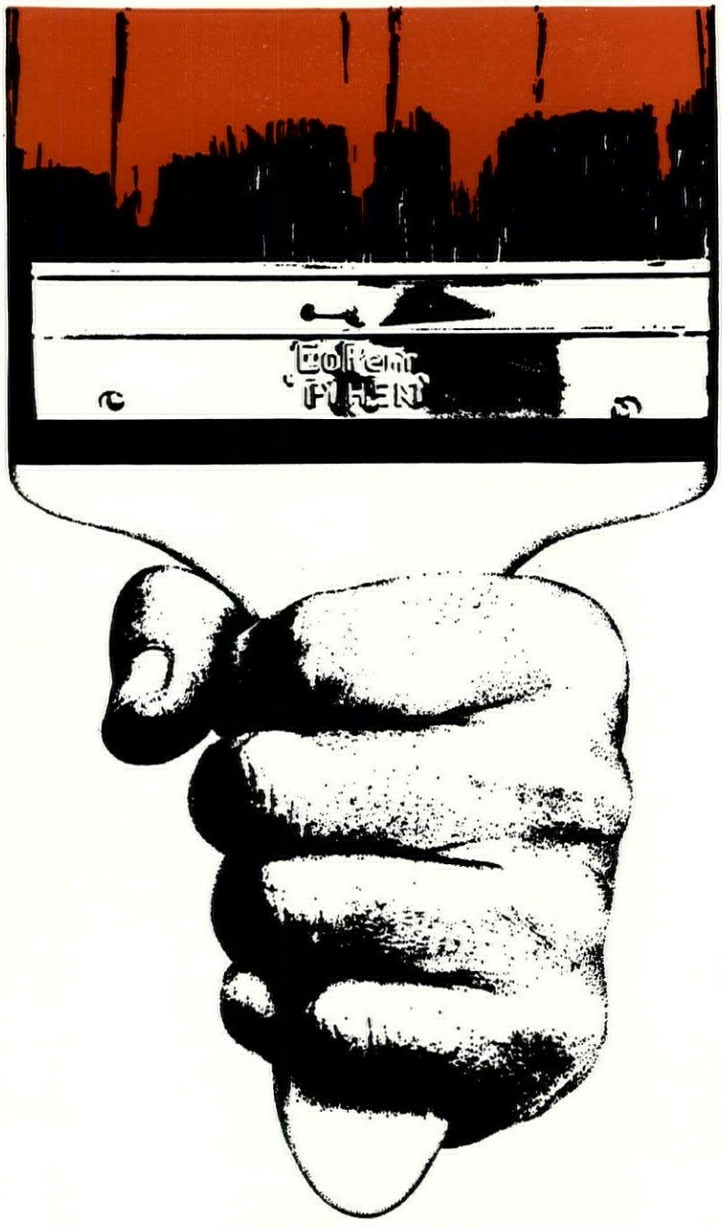

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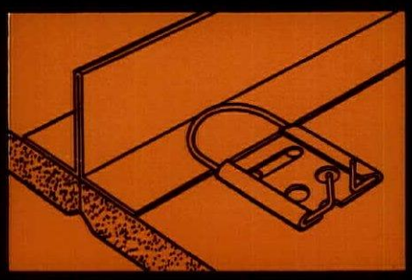

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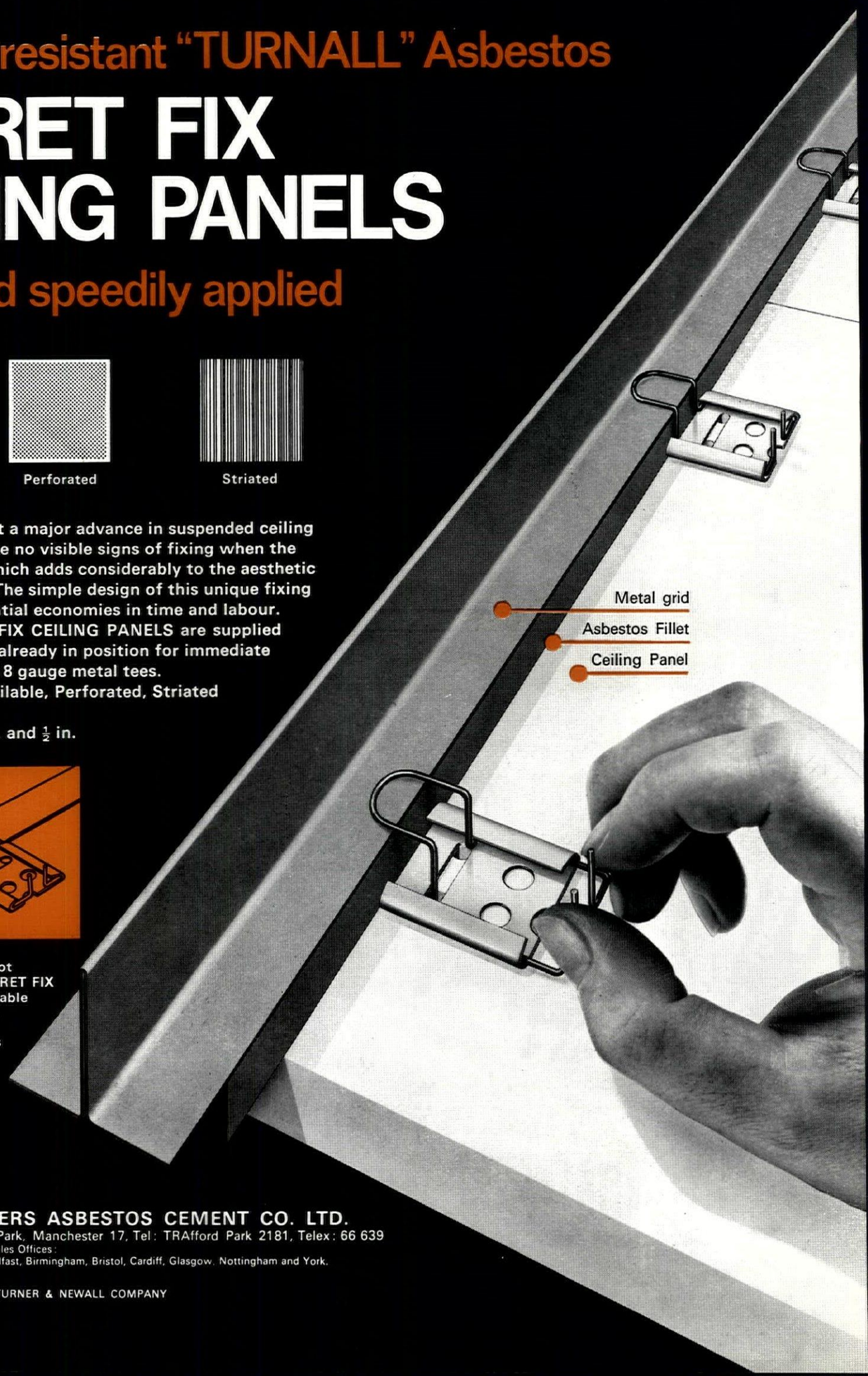

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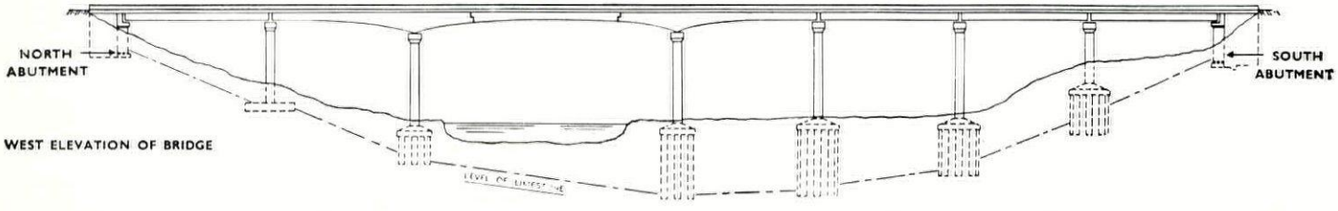

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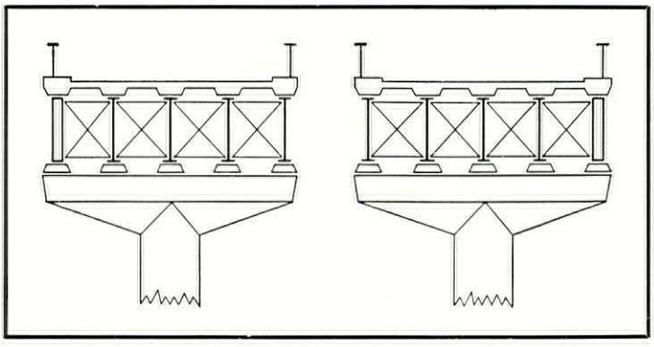

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BOTTOM PICTURE: Ferranti building, Hollinwood, Oldham, Lancs. Architects: Cruickshank & Seward, Manchester. FRIBA. Glaziers: J. Gerrard & Sons Limited, Swinton. (Top section, wooden frames, factory glazed) George Waite & Co. Limited, Manchester. (Bottom section, metal frames, site glazed).

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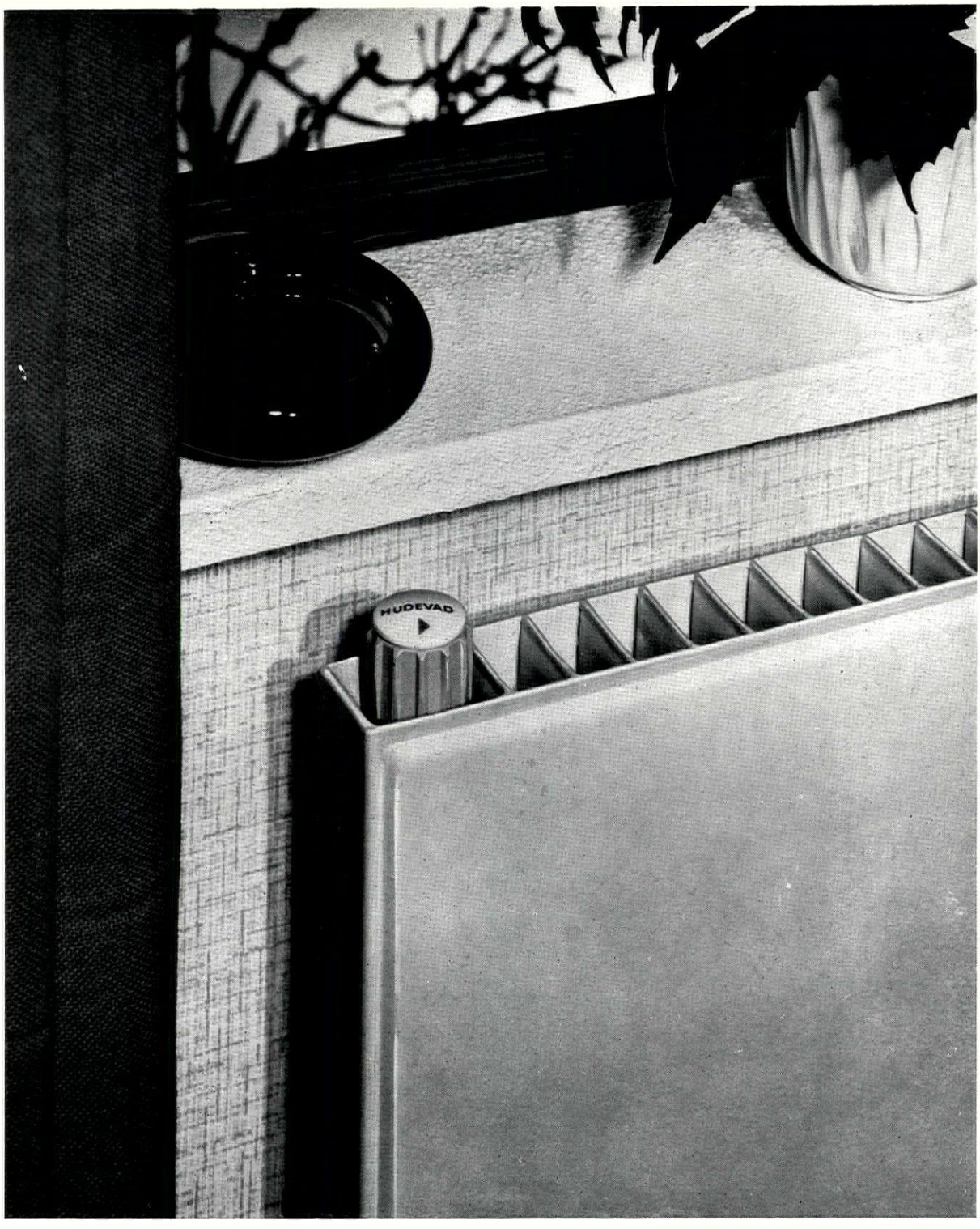

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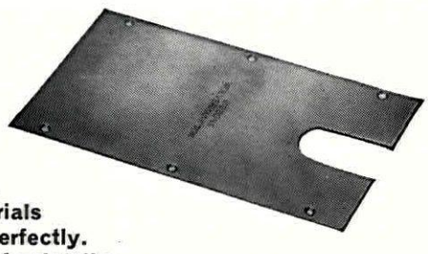

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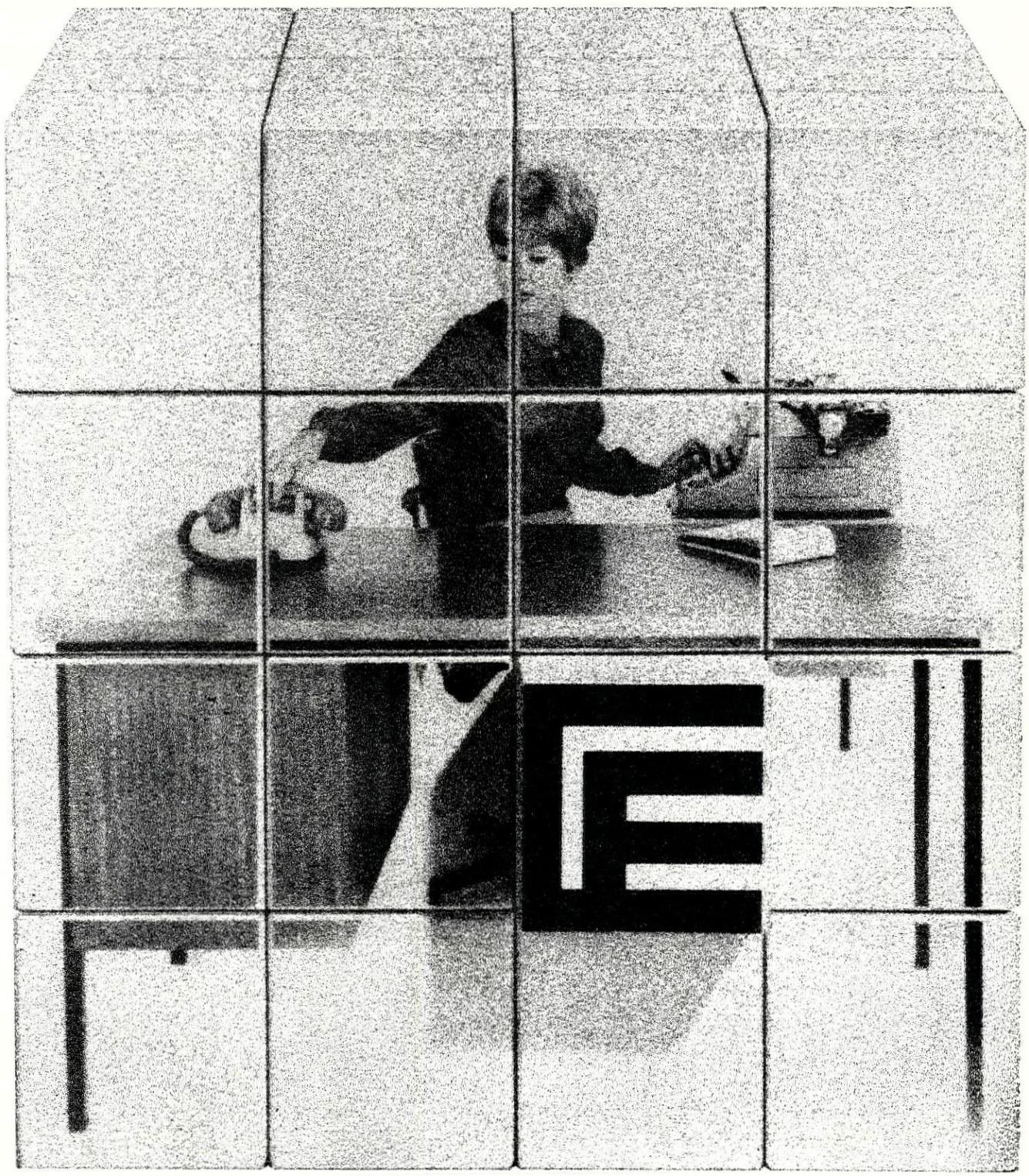

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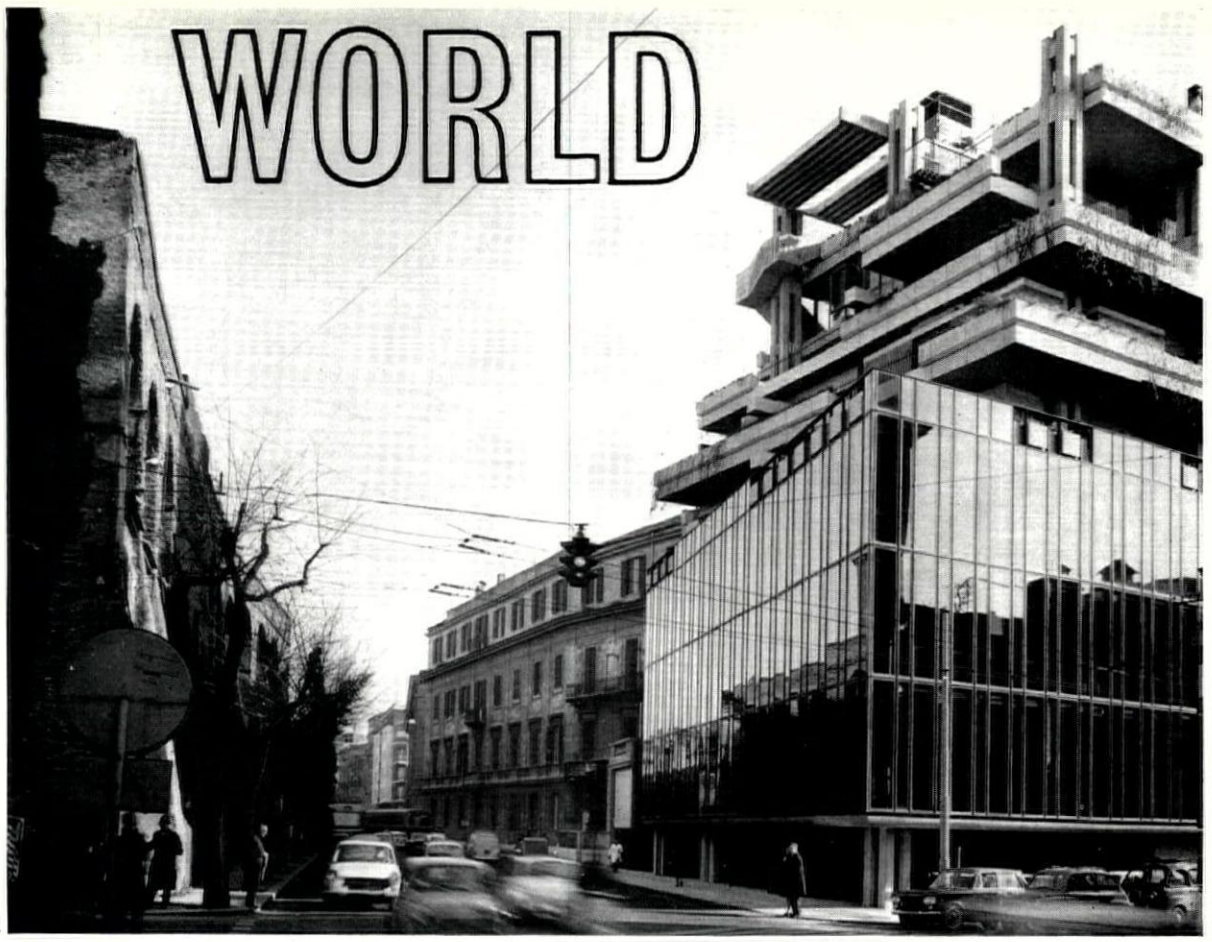

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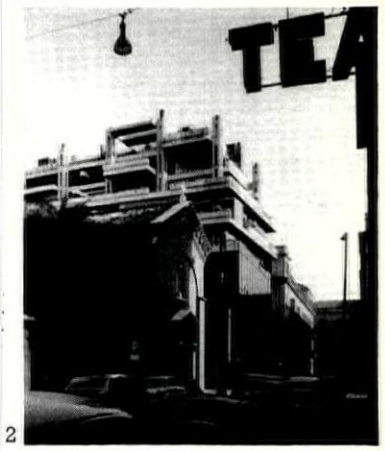
SCHIZO

The split functions of mixed development have rarely, if ever, been expressed in so split-minded a way as in the *casa per uffici e abitazioni* recently completed in the Via Romagna at Rome, 1, designed by the three brothers Passarelli: three floors of parking out of sight below ground, an open ground floor concourse, three office floors of the sleekest curtain walling in black steel following the street lines, and finally four floors of crazily expressed hanging gardens punched askew. Rudolph stands on Mies. The quadruple columns (ducts running centrally between them) stand proud as pilotis, are enveloped in curtaining and are threaded through balconies. The obvious merit of this mixture aesthetically is that it develops the accrued confusion of history: Roman wall, neo-Romanesque church, 2, shuttered palazzos. Like so many Italian schemes, it all seems balanced, even academic, in section, 3. How was it designed? Perhaps the brothers split it: Vincenzo the flats, Luca the offices and Fausto the car park—a new Adelphi.



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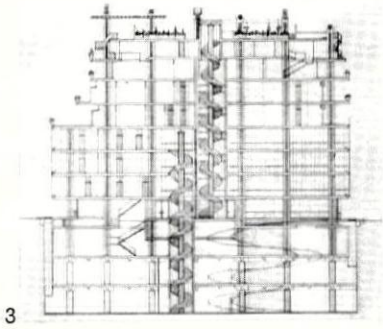

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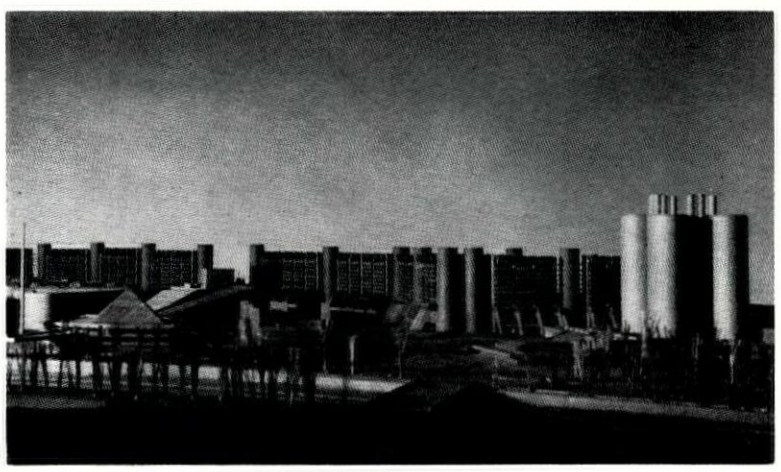

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SKOPJE

Kenzo Tange's recent victory in the international competition for rebuilding the earthquake-shattered city of Skopje, in Jugoslavia, brings one step nearer the fulfilment of the linear vertebrate planning he first proposed in his Tokyo plan in 1960. The city centre, or 'city gates,' in the foreground of 5, has Tange's familiar scheme of interlocking circles, the upper pedestrian deck leading directly, and very formally, to the dome and tower block of the regional parliament building. Beyond that, on the riverside, is the university, seen in elevation in 4, with the serried ranks of housing blocks behind. Near the parliament building a second axis leads across the river, where broad areas of green parkland are traversed by long lines of similar housing slabs, which join up with the remains of the old Turkish city and walls, right in 6. The city is expected to increase from 230,000 to 350,000 people by 1981.

What will the detailed character of Skopje be? Close views of the model, 7, suggest that circulation and services have here been made the dominating *ordonnance* of the urban environment, not in a romantic Louis Kahn-San Gimignano evocation, but as a

5

acknowledgments

WORLD, pages 1–4: 1, 2, Ludovico Canali; 4–7, *Kokusai-Kentiku;* 8, 9, *Domus;* 10, *Japan Architect;* 11–13, *Edilizia Moderna;* 14–21, *Progressive Architecture;* 22–24, 28–32, *Techniques & Architecture;* 25, *l'Architecture d'Aujourd'hui;* 26, Laurent Pinsard; 27, *Paris Construit*. VIEWS AND REVIEWS, pages 5–8: 3, Henk Snoek. PREVIEW: page 13, Studio Brett; page 17 (top and bottom), Harry Sowden; page 18 (top), Sydney W. Newbery; (bottom), Alfred Cracknell; page 22 (bottom), Galwey Arphot; page 24 (bottom), John Laing & Son; page 25 (bottom), Oriel Studios; page 26 (top), Galwey Arphot; page 28, Henk Snoek; page 30, Henk Snoek; page 31, GLC; page 38 (top), John Maltby; page 39, John Maltby; page 40 (bottom), Henk Snoek; page 46, Galwey Arphot; page 47 (top), A. L. Hunter; page 53, Henk Snoek; page 56 (bottom), Galwey Arphot; page 58 (bottom), Henk Snoek; page 59 (top), Galwey Arphot; page 65, Henk Snoek; page 66, Henk Snoek; page 67 (top), Galwey Arphot; page 69, Stewart L. Galloway; page 70, Bellwood Photography; page 71 (top), Mann Brothers; (bottom), Stewart L. Galloway; page 72, Sydney W. Newbery; page 74 (top), Henk Snoek; (bottom), Mead Photography; page 75, John Donat; page 76 (bottom), Elsam, Mann and Cooper; page 82 (bottom), John A. Rose; page 84 (bottom), BTC; page 86, Larkin Bros. STOP PRESS, pages 87–88: 5–11, Nairn Arphot.

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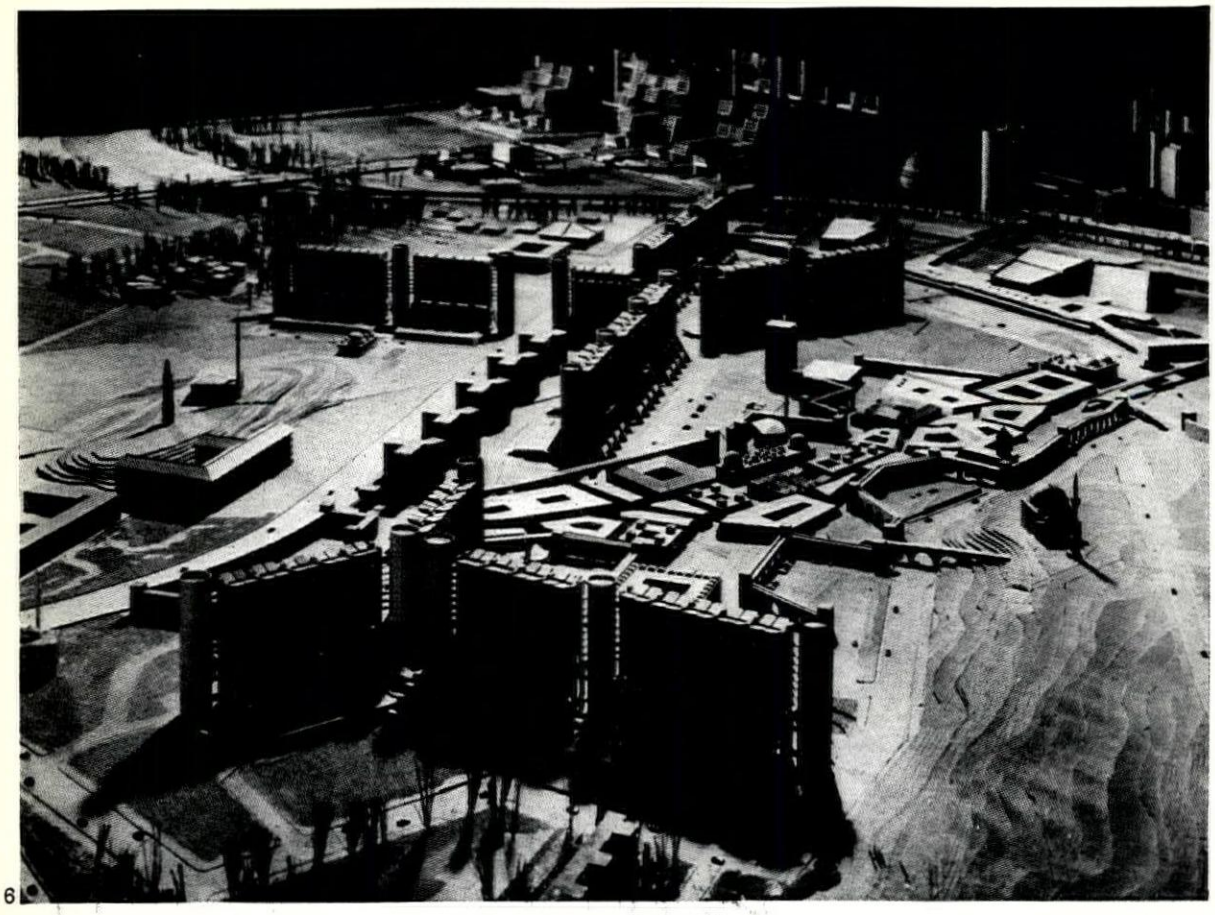

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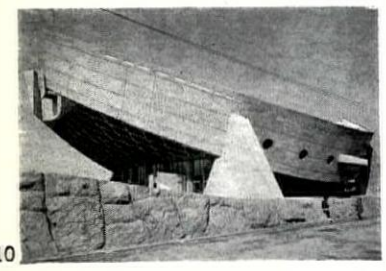

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STORIA

The Italian lino-sponsored quarterly *Edilizia Moderna* is providing under the editorship of Vittorio Gregotti issues of lasting value on particular subjects. No. 86 is on historical research and concentrates on the chapters of genesis, where Pevsner's 'Pioneers' was the pioneer. Authors include Ezio Bonfanti, Tschudi Madsen, Jurgen Joedicke, and H. Allen Brooks on the Prairie School—an excellently illustrated piece including William Drummond's Brookfield kindergarten of 1911, 11, a superb example of Wright's early Japanese manner. Particularly interesting to English eyes is Julius Posener's article, 'Functionalism begins in England.' He illustrates the two versions of *Das Englische Haus* designed by Muthesius himself on his return to Berlin: the von Seefeld house of 1905, 12, with its Voyseyish interior, 13, and the de Burlet house of 1911.

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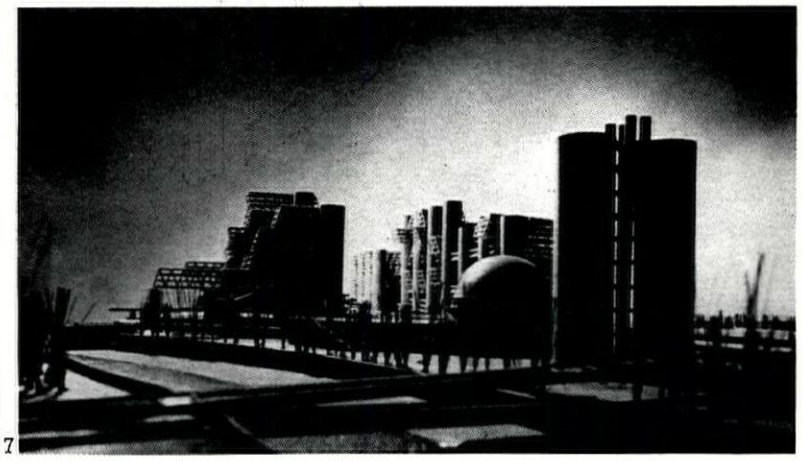

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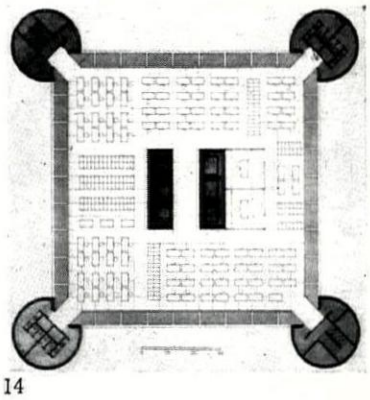

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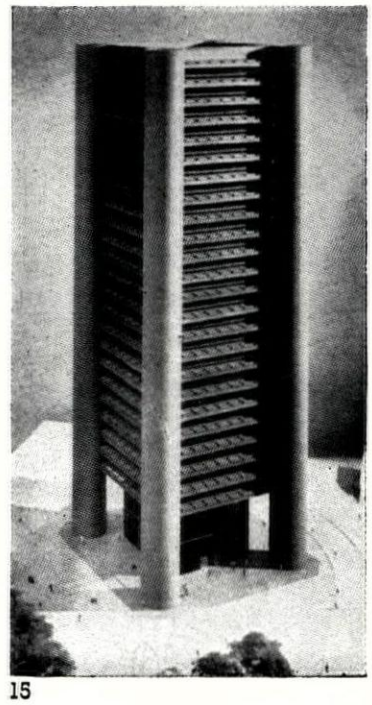
ROCHE

Saarinen's risky search for the 'style for the job'—a different style for every job—is being pursued by his successor firm under Kevin Roche. Since the soaring 700 ft. span of the Air Force Museum (AR World, May, 1965), Roche has produced a Tange-style office tower for the Knights of



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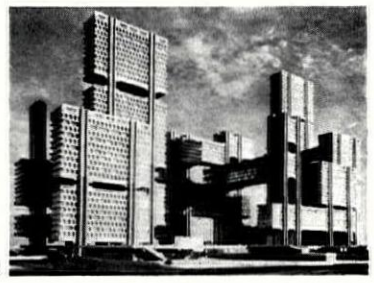
SKOPJE PLAN

stabilizing core to the free-following ziggurats of housing. Similar ideas can be seen in the two main Tange projects now under construction in Tokyo, the Dentsu building in the Tsukiji area, 8, and the Yamanashi Broadcasting Centre, 9. A sign of his increasing control of the foreground of his grand ideas is provided by the small, provincial gymnasium, 10, for Kagawa prefecture.

Unfortunately, the Skopje jury, which included Arthur Ling, gave only 60 per cent of the prize money to Tange and the other 30 per cent to the Zagreb Town Planning Institute. 'No one entry,' they said, 'should be the single basis for implementation.' Tange was criticized for his traffic plan, his underground railway suggestions, his siting of the university and for 'some unnecessarily large, out-of-scale structures' (the jury proposed a mixture of high and low rise housing). The jury may be right that Tange should phase his scheme more skilfully (as Zagreb did), but what other compromises can be made without destroying it?



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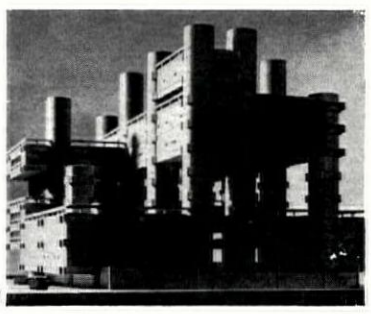

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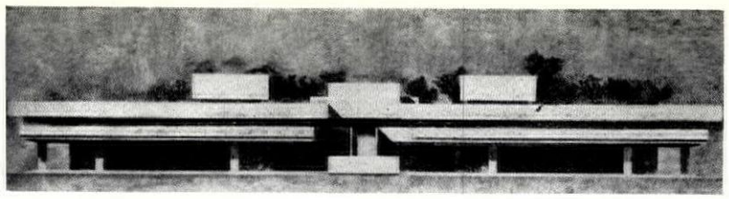

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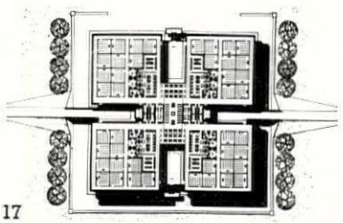

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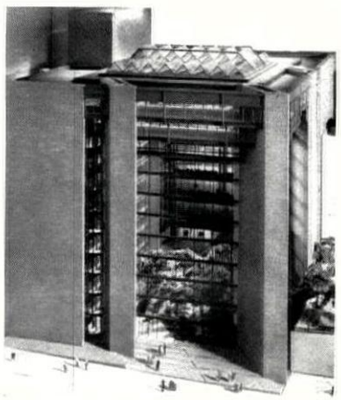

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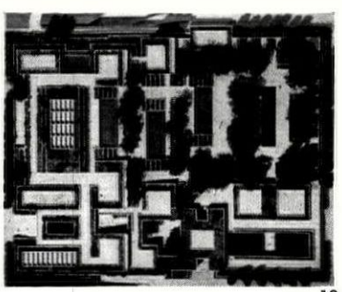
KEVIN ROCHE

Columbus organization at New Haven, Connecticut, 15, which will stand across the road from a new block of flats by Mies. Lavatories and ducts as well as stairs in the corner towers means that the central core is kept small, 14. 80 ft. exposed girders of Cor-Ten steel will bridge between them. The Knights will practise here the historic chivalry of life insurance.

Roche's diverse output includes the monumental High School, also at New Haven, 16, with its symmetrical grouping of four separate schools around common spaces, 17; the vast conservatory-court of the Ford Foundation headquarters in New York, 18, less brutal now that it has been redesigned in steel; the Oakland Museum, California, providing a superb series of formal terraces and gardens, 19, over the top of the single-storey galleries; and two university projects, each of them a gateway to its campus. The complex at Rochester Institute of Technology is hacked out of massive brickwork, 20, while the fine arts centre for the University of Massachusetts is literally a gateway, 21, the doubly skylit studios being carried over giant steps.



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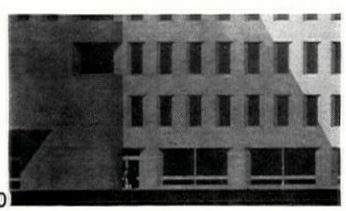

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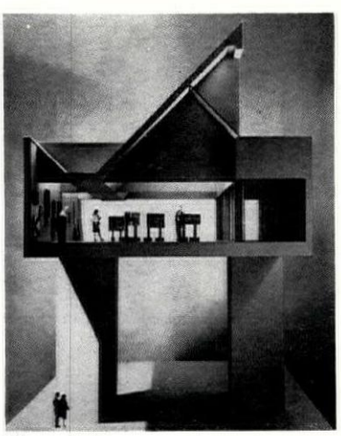

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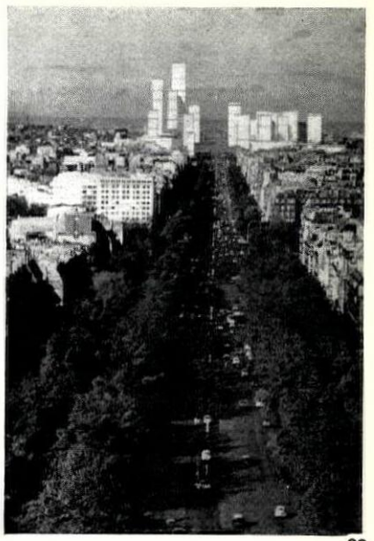
PARIS: PLANS

France, as political commentators have told us more than once recently, is in a contradictory state. The contrast between *le plan* and *la grandeur* is repeated by that between the brilliant linear plan for the Paris region, 25, and the intolerably barren architecture of the new housing and commercial areas. The regional authority proposes a linear development of Greater Paris from its present 8 million to 14 million by the year 2000, in new communities of about half a million people each (the British idea of having many more and much smaller new towns was specifically examined and rejected). The lines of development along the Seine will be linked with Rouen and Le Havre as part of a continuous 'city belt.' A vast new airport to the north has its approaches already safeguarded.

Meanwhile, in the next five years, bold interim measures to decentralize Paris are being carried out. It is amazing for a Londoner to see how few new office blocks there are in the centre of Paris; but the aesthetic gain must be paralleled by functional chaos. This reprieve has, however, given the authorities time to control rigidly where new development should go—rather as though Croydon had been developed with a complete ban on the West End. Three principal areas have been designated: the Maine-Montparnasse railway stations and yards to the south, the 15th Arrondissement area on the bank of the Seine beyond the Eiffel Tower, and the Rond-Point de la Défense (by far the most ambitious) planned to close the westward axis from the Arc de Triomphe, 22. The serried towers of Zone A on a complete deck system, so impressive in the model, 23, are now rapidly going up. Beside the Rond-Point itself, 24, the famous CNIT exhibition hall by Camelot, de Mailly, Zehrfuss and Nervi stands in isolation, with only the Gréber brothers' Esso slab near it, although it will soon be the centrepiece. Camelot, de Mailly and Zehrfuss are overall architect-planners, with Robert Auzelle as consultant.

The quality of the new architecture, compared with the aspiring plans, is so far desperately low. What can one make of the two ghastly slabs, 26, so far completed at Maine-Montparnasse? Yet the leader of that architectural team is Eugène Beaudouin, of the prewar Cité de la Muette. As the original (since much altered) model shows, 27, there will soon be a high tower as well—the first and, one hopes, the last of its size so close to the centre (the only comparable blot so far is the eighteen-storey Centre



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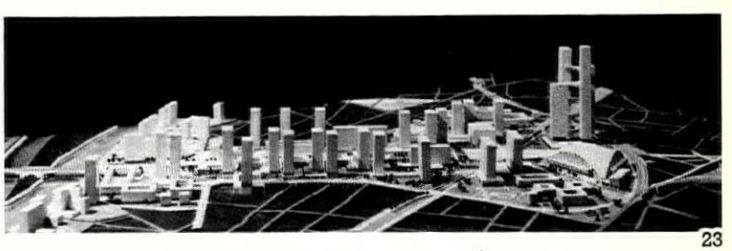

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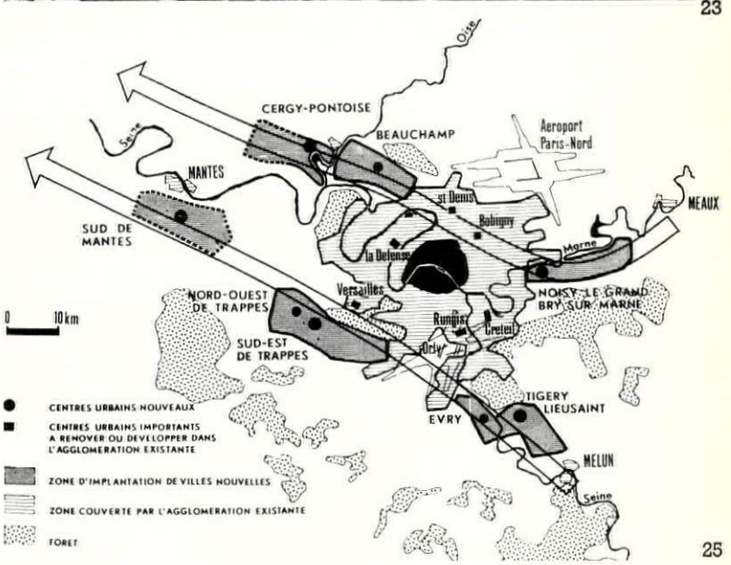

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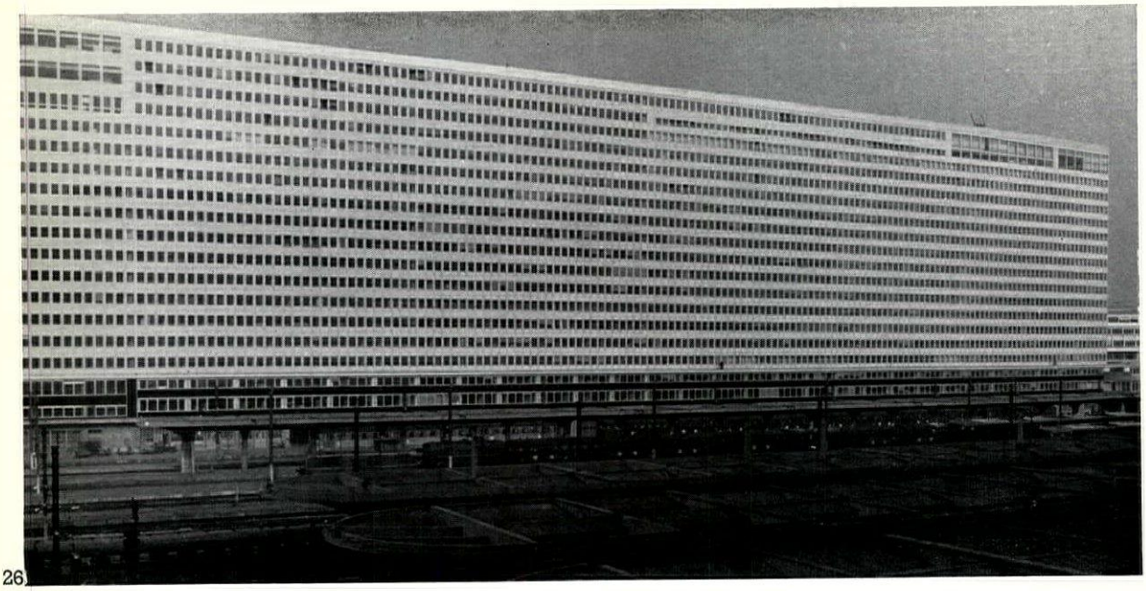

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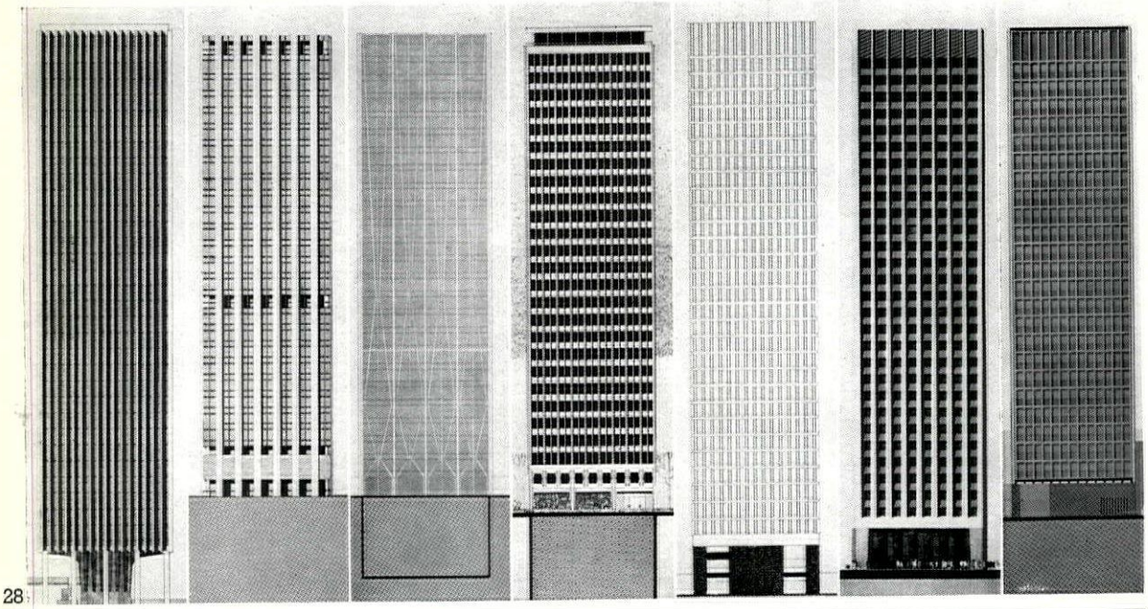
PARIS: ARCHITECTURE?



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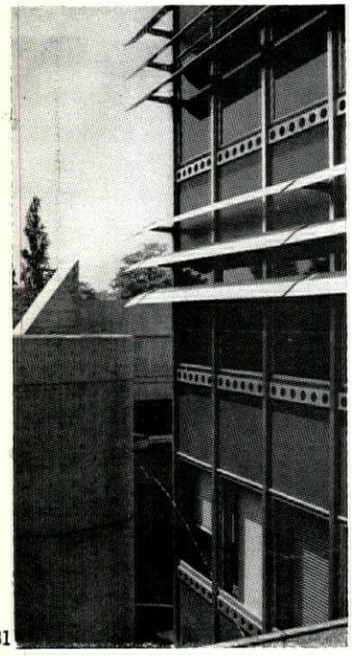

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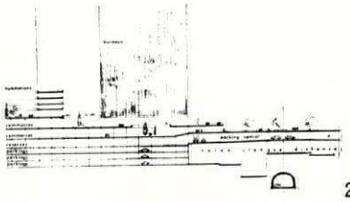
Morland close to the Gare de Lyon, looking curiously like our own Shell Building, which was itself the ultimate product of a Beaux Arts training).

At the Défense itself, the designs for the first seven tower blocks have recently been released and one of them, close to the Pont de Neuilly, is now being clad. They are all core structures, mostly with steel-mullioned cladding, and seem a mediocre lot, 28: the architects, from left to right, are J. R. Delb, Arsène-Henry and Schoeller, Anger, Heymann and Puccinelli, A. Bataille, P. Dufau, Camelot and Escande, and P. Dufau again. In spite of the overall plan, there is a different architect for each commercial interest. All this banality contrasts with the well-organized section, 29 (Pierre-Louis Filippi is the traffic engineer). Only Anger, Heymann and Puccinelli's exposed steel lacework, 30, promises to be worth a detailed visit.



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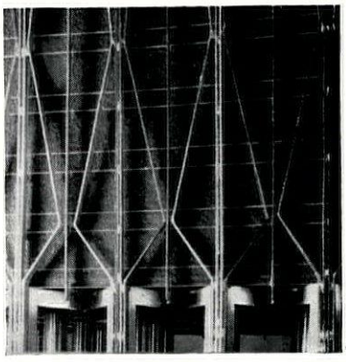

30

EPAD'S OWN

Curiously there *is* one excellent building already completed at the Défense, 31. It is the headquarters of EPAD, *L'Etablissement Public pour l'Aménagement de la Région de la Défense*, the organization set up in 1958 by the Government to carry out the whole scheme. Designed by EPAD's own staff, under Claude-Hugues Boistière, its excellent detailing in steel and shuttered concrete, and its attractive layout round a wild garden court, 32, has just the kind of *chic* which the other buildings lack. It stands in Nanterre, beyond the part now under construction, and forms part of the much larger Zone B, which will include the new University at Nanterre and Le Corbusier's and Jean Dubuisson's Museum of Modern Art and School of Architecture.

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VIEWS AND REVIEWS

marginalia

HARVARD'S TRIBUTE TO LE CORBUSIER

A crowded meeting was recently held at Harvard University as a memorial tribute to Le Corbusier. The auditorium of the Fogg Art Museum was full an hour before Walter Gropius and Jose Luis Sert were due to speak, and what had evidently started as a local event had, not unexpectedly, found infinitely wider appeal. Professor Walter Gropius referred to Le Corbusier as a 'phenomenon of nature' and recalled their first meeting at the time of *L'Esprit Nouveau* exhibition in Paris when they had both found themselves fascinated with the idea of standardization and prefabrication in building.

This friendship was interrupted by the war, but when they met on the jury for the Unesco project—again in Paris—Gropius found that the intervening years had done much to strengthen his admiration for Le Corbusier's achievements. Referring to the problems created by total commitment to his philosophies, he soon realized that one could 'only accept or reject his total personality' and this is what many people failed to understand. Walter Gropius's tribute was generous and warm and his final reference to Le Corbusier as a 'great prophet, blessed and blessing' clearly echoed the sentiments of a large number present.

Dean Sert's recollections went back even further to one day in 1926 when, a student in Spain, he stood waiting for Le Corbusier on the railway station after he and his colleagues had invited him to come and speak at the School of Architecture. By 1929, having qualified, he went to work for him and then began a lifelong friendship; they had last met only six weeks before he died.

It was about five years ago that Dean Sert persuaded the Harvard authorities to commission Le Corbusier to design the Carpenter Center for the Visual Arts*—a building which Corbusier was to describe as 'a meeting place for hand and mind.' It was, therefore, most fitting that the evening should end with a walk across to the Carpenter Center itself where, in artificial light, among crickets still chirping in the warm evening, a beautifully staged exhibition of Le Corbusier's work, as painter, writer and architect, was formally opened. It showed above all, a remarkable freshness entirely consistent with Dean Sert's closing tribute —'he was, perhaps, the youngest of us all.' J. A. WELLS-THORPE

* Illustrated and discussed, AR, December, 1963.

RHONDDA REPORT

Choked by dirt and dereliction but potentially splendid as scenery, the coal-mining valleys of the Rhondda deserve better things. A report* just published by the Civic Trust gives hope of them. Not a planning report in the usual sense, it is concerned essentially with environment and shows proposals for transforming it. As the Trust says, 'Unless the physical environment of the valleys can be re-created, maintenance of economic revival itself may in the long run be in jeopardy.'

The Trust was invited in April, 1963, to carry out a survey by the Rhondda Borough Council who were considering the renovation of shopping centres in the valleys and wanted to link any improvements with possible redevelopment elsewhere. The report stresses better living conditions as the most urgent need. At the same time it emphasizes the importance of any new housing maintaining the typical stratified terrace character. It shows awful examples of where the wrong sort of housing—i.e. gap-toothed and multi-storey—has already been carried out. Detailed suggestions are given for improving the urban and landscape setting generally, with a warning on the blanketing effect of indiscriminate forestry on the hills and the need to safeguard rights of way to the moors.

The most ambitious of the Trust's proposals is for a new multi-level civic centre for the Rhondda at Porth, where the two valleys converge. The site suggested is that of the old Cymmer colliery, not inappropriately the very spot where the industrialization of the Rhondda began in 1849.

SCOTTISH HOUSES IN DANGER

Two unusually fine Georgian mansions, one only nine miles west of the centre of Glasgow, are in danger of demolition. This one is Capelrig House, 1, in the district of Newton Mearns, Renfrewshire, dating from 1769. Though its architect is not known, it is one of the best of its type in Scotland and has been given an A rating by the Ministry of Works. The ironical fact is that the threat to the house comes from the Renfrewshire county council's own education committee.

The committee bought the house and its surrounding land in order to build a school on the latter, which is now complete. The committee now wish to demolish the house although it makes a most agreeable and unusual group with the new school buildings, and they appear to have made no efforts to put it to practical use although there are many obvious possibilities. The committee's plans for demolition have been halted by the Secretary of State for Scotland, but the county council is appealing against this decision. The Georgian Society has taken up the case but has not yet succeeded in influencing the council or indeed in arousing much interest among the ratepayers.

The other threatened mansion is Jerviston House, designed by Robert Adam in 1782—the drawings are in the Soane Museum. Its loss would be particularly serious because one of the few other authenticated Scottish houses by Adam, Balburchie House, West Lothian, was partly demolished some years ago.

* *The Rhondda Valleys.* A report by the Civic Trust, issued at the same time as a conference and exhibition at Porth, October 6, 1965.

1, *Capelrig House, Renfrewshire, which is threatened with demolition.*

LEDOUX AND COMPANY

A small exhibition of visionary architectural projects called 'Exploration du Futur' was held last summer and autumn in one of the buildings of Claude-Nicholas Ledoux's eighteenth-century salt-works, some twenty miles south of Besancon at Arc et Senans.

Ledoux's salt-works scheme, which was to include an ideal town, was in its age quite as fantastic as some of the projects in the exhibition it housed. It was never finished, but about a dozen large buildings remain, impressive in their huge weed-grown precinct. They were to have formed the core of the radial town Ledoux planned. Like the schemes exhibited inside, it possessed a kind of extravagant madness, which suggests that Ledoux had lost sight of practical considerations and was not so much, as the exhibition programme note by Paul Virilio claims, inventing 'L'ésthetique industrielle,' as unfolding some gigantic allegory or ideal abstract of the world in which he found himself.

2, *the salt tax building at Arc et Senans, by Ledoux.*

Among the exhibits were Peter Cook's Plug-in-City, first illustrated in *Archigram*, and schemes from France, Italy and Japan, all having about them the same quality of allegories about life in the city, real and ideal.

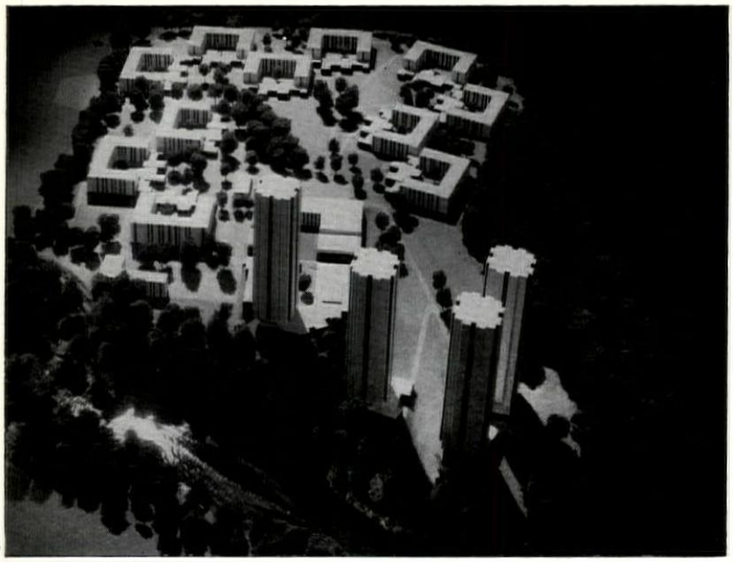
Unlike the exhibitors, Ledoux had the good—or bad—fortune to have his project pushed into reality by the enthusiastic intriguing of his patroness Madame Dubarry. Mounting costs brought him into disgrace. The exhibition was accompanied by continuous tape-recorded jazz of the kind known as Cool which proved strangely sympathetic to the architectural remains of Ledoux's monstrous project.

D. HOLBROOK SMITH

IRISH DRAWINGS DISPLAYED

The exhibition of Irish architectural drawings which Mr. John Betjeman opened at the RIBA on January 4 was partly the product of his own 'Irish period' during the war, when he served at the British Embassy in Dublin, and helped in the early work of the Irish Architectural Records Association, whose silver jubilee the exhibition marks. Excellently arranged and catalogued by Dr. Maurice Craig and the Knight of Glin, the drawings show how far the association has succeeded in tracking down the original designs of Ireland's golden age of country house and public architecture between 1730 and 1840. The important names are still surprisingly little known outside Ireland: Sir Edward Lovett Pearce, Richard Castle, Thomas Cooley, Thomas Ivory, the Pain brothers, Francis Johnston and Sir Richard Morrison were all designers of far more than local quality.

Good architects were not always so good with pen or brush, but fortunately Ireland's greatest architect, Chambers's pupil James Gandon, who designed the Custom House, the Four Courts and the King's Inns at Dublin, comes over splendidly at the RIBA through his freehand wash technique, both in his grand classical compositions and in the extremely Piperish portrayal of his suggested grottoes and stairways at Slane Castle. The great gap in the exhibition is anything later than 1840, apart from Sancton Wood's Kingsbridge Station and William Burn's 'gamekeeper's tower' at Clandeboye. Something of William Burges's St. Fin Barre's Cathedral at Cork could surely have been included. No doubt the Association is directing its attention now to this later period.



3

Four towers[looming dramatically over the gorge of the River Don, each tower housing 250 students, will form the most prominent feature of the Hillhead of Seaton 'village' for 3,000, designed by Robin Dunn, of George, Trew and Dunn, for Aberdeen University, 3. The first phase, on which work starts in the spring, consists, by contrast, of eleven U-shaped courtyard blocks of only four storeys, for 164 students each. The fourth side of each court has a single-storey range of common-rooms. At the northern end of the site, towards the towers, is the main communal block, with the refectory at a lower level on the slope. All the residential buildings will have a white spar aggregate finish similar to the local tradition of harling, while the single-storey common-rooms will form a 'wall' of Rubislaw granite-faced blocks round the site's central space, which is reserved for future 'public' buildings.

obituary

RINO LEVI: 1901-1965

Rino Levi, who died in September, was for many years one of the leading architects in Sao Paulo and was one of the comparatively small group who built up the great reputation achieved by Brazilian architecture with dramatic suddenness during the 1940's. He made a serious contribution to the design of hospitals in particular and his work had a solidity which contrasted with the greater flamboyance of that of his colleagues in Rio de Janeiro.

Rino Levi was born in Sao Paulo in 1901 and studied in Rome, where he took his degree in 1926. His principal buildings, which were all in Sao Paulo, include the maternity hospital of the University of Sao Paulo (1946), the headquarters building of the Sao Paulo chapter of the Institute of Architects of Brazil (1948)—designed in collaboration with several other architects—a theatre for the Sociedade de Cultura Artistica (1949), the Prudencia apartment building (1950), the students' residential sector of the University of Sao Paulo (1953) and the Central Cancer Institute (1954).

In recent years he had been working in partnership with Roberto Cerqueira Cesar and Carvalho Franco who intend to carry on the practice.

correspondence

BAT YAM

To the Editors.

SIRS: Your reviewer ('A Yiddish Grid,' page 160 of your September, 1965, issue) has failed completely to establish the real significance of the buildings of Heker, Sharon and Neumann. The work of these architects is seen by us as a searching and consistent attempt to question the present basis of Israel architecture. The term 'Yiddish Grid' is offensive, and moreover quite without meaning (was the roof of Stirling and Gowan's Leicester building also Yiddish?), though it is a fitting title for an article which prefers to rely on the emotive force of flash journalism, rather than on detailed consideration.

To describe the Bat Yam project for instance, we are given 'teenage Tange,' 'violence,' 'tortuousness,' 'intrigue' and 'distaste' but never objectivity. Serious buildings surely deserve serious criticism.

Yours, etc.,

I. CHASHMAN B. SCHEIN
C. REJWAN G. ROHNEN
D. G. ROBSON Z. BERAHA
D. TAVOR

Tel-Aviv.

The author of the article referred to writes: Only the first two sentences of the article attempted comment, the rest was factual. Nothing offensive was intended by the title; the word 'Yiddish' is like the word 'English' or the word 'Sanskrit'—it is the name of a language. Just as Yiddish is the traditional vernacular of the Jewish people, so it was meant to be inferred that these three architects, Heker, Sharon and Neumann, were attempting to create a similarly forceful architectural language to express the Israeli national spirit today. If it shocks us, this is perhaps because we are more accustomed to the acclimatized Jewish culture of the dispersion than to that of the new nation.

NO FUTURE IN THE TOWN HALL

To the Editors.

SIRS: The title of the leading article in your October, 1965, issue, 'No Future in the Town Hall' made depressing reading and one wonders if it should not have been a question rather than a statement. It may be that the article was written before the economic 'squeeze,' which has already begun to have effect in reversing the drift away from public authorities.

While much of what you say is fact, especially as regards pay, we agree that this could be better still, and the Association of Official Architects is striving to achieve this. Frustrations do come quite often in local authority work. Equally so do they come from the company board-room or the individual private client, but in the very nature of things these frustrations do not become public knowledge. The work passed over to the small private architect from the public authority is often unspectacular; but who are the big-name architects doing public authority work who complain of weariness? Generally they will judge the local authority to be a better client than a private one.

Another point is that, with regard to the movement of senior staff, it is easier for them to go from public to private offices than the reverse because of the familiarization with procedures, of which a knowledge has to be gained with the former and which is not needed in the latter. It should also be remembered that when many top names now in private practice made their mark in local authority work, this was almost the only field open, due to the restrictions of the early post-war era. It may well be that the present era of limitation may accentuate a return flow to the town hall.

Yours, etc.,

G. C. M. HILLS
for Area Representative,
Association of Official Architects

Stanmore,
Middlesex.

SURPRISE IN ISLAM

To the Editors.

SIRS: Elisabeth Beazley's article under the above title (AR, September, 1965) could have given even further surprises to the reader had the author stressed the reasons for the alcoves and niches, etc., of the small upper rooms of the Ali Qapu, because these rooms were the music rooms of Shah Abbas. The brilliance of these 'sculptured' walls, delicately painted, with each shape carefully continued to create perfect acoustics, is worth an article in itself.

The two storeys, as seen from the front, in the Maiden Shah, may be seen to be *six* storeys from within the little welled courtyard at the rear. The rooms are small, and to keep out the heat *and* the cold, one may see fireplaces in some of the little rooms.

Isphahan is an exquisite city and one never forgets its sights and smells: the Yehudi of the Bible.

Yours, etc.,

PAULINE B. SARGENT

Cardiff.

GOODHART-RENDEL'S ROLL-CALL

To the Editors.

SIRS: As a retired architectural journalist—perhaps the oldest, since I was 87 last July—I was much interested in your article 'Goodhart-Rendel's Roll-Call' in the October ARCHITECTURAL REVIEW, and especially interested in the account of the early years. I never met Morgan, though I had some vague notion of his existence, but I remember Abram quite well. I believe he was a Yorkshire Jew. He was a fiery little man, but I got on very well with him. Among other ventures, he started a medical paper called *The Doctor*, which was a failure.

I remember most of the men in the Roll-Call. Reilly, Dawber and Adshead were my sponsors when the RIBA Council elected me an HON. A.R.I.B.A. more than forty years ago, and I was in touch with MacColl, Macartney, Newton, Lethaby and others—including Goodhart-Rendel. Actually Elder-Duncan and I went in a cab with MacColl and his wife—a French lady—as witnesses to his civil marriage at the French Consul's in Finsbury Square. I also remember Wilson, but think someone else preceded him as first editor of the REVIEW—possibly Morgan.

For a number of years before the first World War I edited the REVIEW and took most of the principal photographs, though my name never appeared in the paper, nor is there any reference to me in the postscript to the Roll-Call. I was general editor of Technical Journals Ltd., when I went into the Army in 1917. As a sapper in the RE's I passed my test as a photographer ('skilled'), which gave me 1s. 4d. a day plus 1s. 2d. as a soldier, so that I was a halfcrown-a-day man; but though I was sent to France as a photographer I never had a camera and never took a photograph!

Yours, etc.,

R. RANDAL PHILLIPS

CURING THE CITY

To the Editors.

SIRS: I think that you will be interested in correcting one factual mistake in Mr. Paul Ritter's review (AR, October, 1965) of my book *The Heart of Our Cities*. It occurs in the second paragraph, where Mr. Ritter credits me with the Northgate Center in Seattle. The project to which Mr. Ritter undoubtedly wished to refer is the Northland Center, near Detroit, Michigan. The Northgate Centre in Seattle was designed by John Graham, architect.

With regard to the fourth paragraph of the review, which deals with my own schematic drawing of the cellular metropolis of tomorrow, Mr. Ritter describes it as naive, static and idealistic; yet I must point out that this is basically a pattern which I haven't invented but which is clearly expressed in those metropolitan regions for which thoughtful planning has been effective. It is expressed in the satellite cities around London. It is expressed in the satellite cities around Stockholm. And it basically exists, though in a dormant fashion, in the pattern of regional growth in every large city in the United States, including Los Angeles. When I speak of a dormant fashion, I mean to say that this type of cellular growth has happened without the benefit of planning, in an anarchistic and disorderly fashion; yet by applying the planning principles which I have suggested, it would be possible to give it the shape and form which would make the natural, unintentional growth pattern one of urbanistic shape and logic.

I have a little the feeling that I

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stepped on Mr. Ritter's toes when I criticized Dr. Doxiadis, whom he obviously admires. There are many planning thoughts on which I find myself in full agreement with Dr. Doxiadis—for instance, his attitude about the current man-motor mixture, which he calls 'immoral.' My description of Dr. Doxiadis's growth concept of 'Dynapolis' is certainly not unfair. It repeats exactly what Dr. Doxiadis himself states. I just happen not to agree with this corridor type of growth pattern and, by expressing disagreement, I didn't have the slightest intention to be grossly unfair to Ekistics and Dr. Doxiadis.

Yours, etc.,

VICTOR GRUEN

Beverly Hills, California.

book reviews

LOUVRE STORY

TROPHY OF CONQUEST: *The Musée Napoléon and the creation of the Louvre. By Cecil Gould. Faber and Faber.* 28*s.*

Like Frankenstein's monster museums have taken over from the patrons and, until very recently, have proved far more tyrannical to the artist than the most exigent prince or bishop. That their twin aims of permanence and catholicity would set up irksome standards was anticipated by some percipient painters almost from the first. Thus in 1822 John Constable wrote that 'should there be a National Gallery (which is talked of) there will be an end of the art in poor old England, and she will become, in all that relates to painting, as much a nonentity as every other country that has one. The reason is plain; the manufacturers of pictures are then made the criterions of perfection, instead of nature.' And three years later a sarcastic French visitor pointed out that Constable was not the only one to object to the National Gallery and that more discreditable motives were at work: 'Croirait-on que l'Académie de peinture de Londres eut cependant un jour le sentiment de sa médiocrité, et se ligua secrétement contre le projet d'établir un Muséum comme celui du Louvre, composé d'ouvrages choisis parmi ceux des plus célèbres étrangers. . . . La menace d'une galerie où l'on apprendrait à apprécier l'École italienne, les fit trembler sur les paisibles fauteuils; la simplicité, la noblesse, l'énergie et la vérité des modèles allaient dévoiler la mesquinerie des compositions de l'École anglaise: selon les académiciens, c'était détruire le germe de l'art, détourner l'enthusiasme national, attaquer des réputations méritées, ravir le gagne-pain des peintres anglais!'

Whatever the truth of these specific allegations, there is no doubt that the relationship between creators and the final destination to which, perforce, they have had to aspire has always been an uneasy one. There is pathos, as well as the more readily understood artistic programme, in Cézanne's ambition 'to make of Impressionism something durable, something fit for the museums' at a time when both he and the Impressionists were so ferociously excluded from them. And the Futurists were not the only painters to have as one of their objects the burning down of the Louvre.

Yet when the idea of the public gallery first began to attract attention during the eighteenth century it was designed, in theory at least, as much to help the living as to commemorate the dead. Modern writers on aesthetics have reinforced the long held view that it is art, rather than Nature, that act as the principal stimulus to further creation, and when the Louvre was first turned into a museum in 1793, on seven out of ten days it was open only to artists and other special applicants.

However, it was also under the auspices of the Enlightenment that another idea of the museum's functions was developed: that of historical instruction. It was only by examining the crude and primitive origins of art that the sublime genius of Raphael could be appreciated, and in any case these stumbling pioneers could help to throw light on the Middle Ages. Many private collectors and historians had begun to put this theory into practice during the eighteenth century, but when it was taken up by large public institutions it raised a problem that was not resolved for many years. For art as a guide to historical instruction was often in direct conflict with art as a guide to promising painters. The young Ingres, for instance, was scornfully attacked as 'Gothic' at the very time that the Louvre was acquiring some of its Gothic masterpieces; and it is perhaps just worth speculating for a moment whether the noble denunciation, made in 1796 by David and Quatremère de Quincy, of the proposed spoliation of Italy, may not have been prompted in part (and perhaps subconsciously) by the fact that the pictures hitherto acquired from Belgium had been mostly by the potentially subversive Rubens.

Some of the fascination in reading Mr. Gould's compressed, but very well written, valuable and informative, history of the Musée Napoléon comes from watching the development of these two ideas of the nature of museums. By 1815 it seems clear that in France, but apparently only in France, the historical function of the museum had almost superseded the older theory of its purpose as a glorified art school, for when the question of restitution arose, the Court of Tuscany was prepared to waive its undoubted claim to major works by Giotto, Fra Angelico, Filippo Lippi and others.

The outlines of these two different functions are naturally blurred and are, in any case, often obscured by far more primitive notions. Mr. Gould interestingly suggests that Napoleon's own motives in plundering Italy may even 'have been actuated by a process akin to magic. By removing the greatest treasures from his ancestral country to his adopted one he might make the fusion more complete for himself.' Nearer at hand there was the example of the Roman troops in ancient Athens—and all too many instances since then. And pictures were often seized purely because they were famous, irrespective of any other appeal. This was obviously the reason why Van Eyck's Ghent altarpiece was taken during the Belgian campaign of 1794. But despite all these distractions it is possible to discern in the short-lived career of the Musée Napoléon those fundamental changes which brought about our modern conception of the museum.

The changes were due above all to Vivant-Denon, and it is in discussing him that the limitations of space that Mr. Gould has imposed on himself are most painfully felt. For Denon is obviously the hero of the book, and the author makes full use of his own experience as a museum official to illustrate the problems which faced his great predecessor from the choosing of pictures to the provision of staff latrines. But though we are told a good deal about their practical fruition, the emergence of his ideas is scarcely investigated. In fact, it seems likely that it was in Italy, where Denon had spent some time etching and dealing and quarrelling before the Revolution, that he conceived the notion of a more broadly based gallery than had hitherto been put into practice. Venice, above all, had attracted him (it is significant that though he did not think Tiepolo worth looting, he owned works by him in his private collection), and there and elsewhere he had been in close touch with the world of scholarly dealers who in default of means had had to make their own *musées* largely *imaginaires*. But for a few astonishing years he was able to turn fantasy into reality and assemble many of the world's masterpieces under one roof.

Then came Waterloo and reality reasserted itself. The pictures returned to their various homes—or some of them did, for Mr. Gould is able to show how many remained permanently in France. It is all the more curious that, when speculating about the importance of the looting for French art in the nineteenth century, he fails to underline the significance of one masterpiece that did in fact stay in the Louvre—Veronese's *Marriage at Cana*. It can be argued that as far as later painters were concerned this was the single most influential item acquired by French arms. Echoes of it can be traced again and again, and it was surely to this picture that Renoir was referring when he said that Veronese could be seen more easily in Paris than in Venice. Ironically enough, for all the changes in the status of museums brought about by the Revolution, this was a picture that Louis XIV had hoped to acquire more than a hundred years earlier.

FRANCIS HASKELL

PIEDMONTESE BAROQUE

MOSTRA DEL BAROCCA PIEMONTESE (exhibition catalogue). *By Vittorio Viale and others, 2nd edition, Turin,* 1963. *Lire* 10,000.

Piedmontese architecture and interior design have long been held to be equal to that achieved anywhere in the late seventeenth and eighteenth centuries. The exhibition held in 1963 in Turin confirmed this assessment. Over 2,000 entries with more than 1,200 illustrations (57 in colour), bibliographies, and introductory essays make its catalogue the most comprehensive survey of seventeenth and eighteenth-century Piedmontese art and architecture available. The three volumes, under the general editorship of Vittorio Viale, are divided according to subject matter: Vol. I, architecture and set design; Vol. II, painting, sculpture and tapestry; Vol. III, furniture, textiles and embroidery, pottery, porcelain, silver, books and binding, coins and medals.

Prof. Andreina Griseri was responsible for the section in Vol. II on painting and drawing arranged by artists in rough chronological order. Each entry included a critical summary incorporating unpublished comments and a bibliography. The section contains 217 plates including 36 drawings and engravings. Of prime importance at the beginning of this section is a new description of the decoration of the rooms of the Palazzo Reale that both corrects and enlarges Clemente Rovere's indispensable standard work (*Descrizione del Reale Palazzo di Torino*, Turin, 1858).

Piedmontese sculpture has not received adequate attention. Luigi Mallé's excellent short introduction to the sculpture section is a balanced assessment that opens many avenues for future research, but the accompanying illustrations are too few to indicate the range and variety of sculpture in the Piedmont. The section on tapestry as well as those on specialized topics in the third volume are already standard initial reference works.

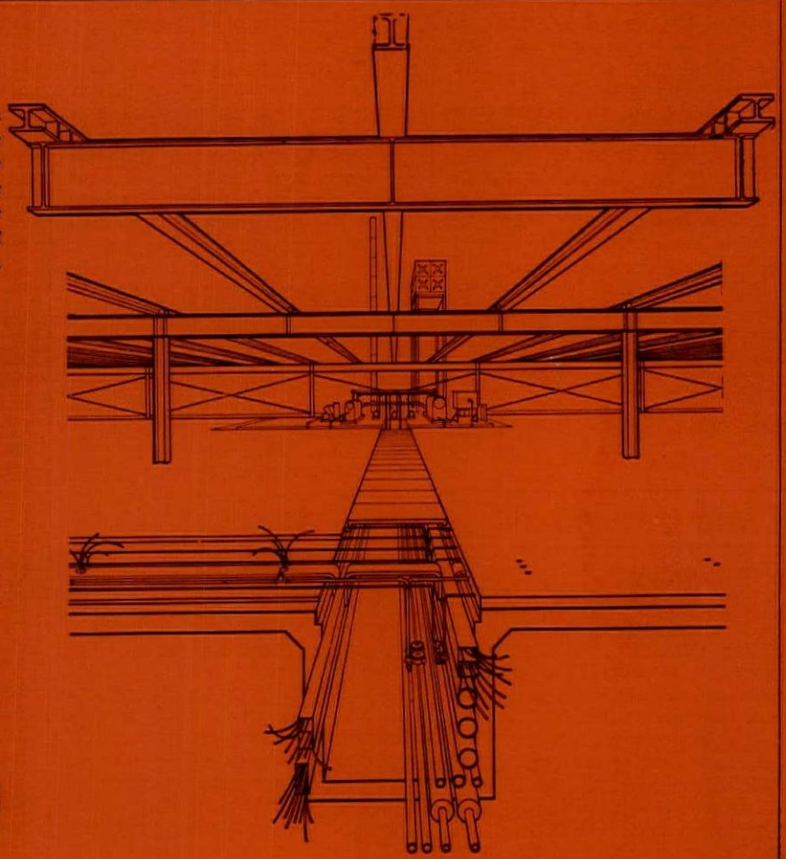
It is architecture that has brought most notice and acclaim to the Piedmont. The extensive architecture section in the exhibit was assembled by Prof. Nino Carboneri who wrote the well-documented catalogue entries. In Vol. I preceding Carboneri's architecture section, Dr. Marziano Bernardi, one of the most prolific writers and experienced connoisseurs of Piedmontese art and architecture, has written an essay on design, construction, and history of the three palaces (Madama, Reale, and Stupinigi) that housed the exhibition. Bernardi's essay summarizes his own noteworthy contributions (*Il Palazzo Reale di Torino*, Turin, 1959; *La Palazzina di Caccia di Stupinigi*, Turin, 1958) and adds the result of recent research to Telluccini's monograph (*Il Palazzo Madama di Torino*, Turin, 1928).

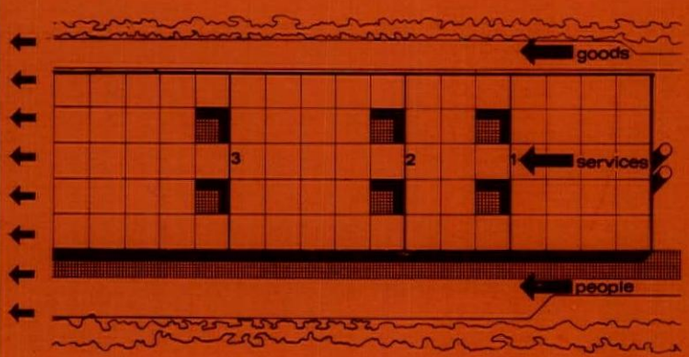
An extensive bibliography compiled by Carboneri, revised and brought up to date for the second edition, is appended to his disappointingly short introduction. The entries are arranged chronologically by architects and contain biographical references as well as critical summations and bibliographical citations. The entries vary in quality but many include the results of Carboneri's research and reveal information and opinions not found elsewhere. The 307 photographs hardly give more than a glimpse of the exhibition, which included drawings, engravings, models, and photographs. The architecture must be seen *in situ*.

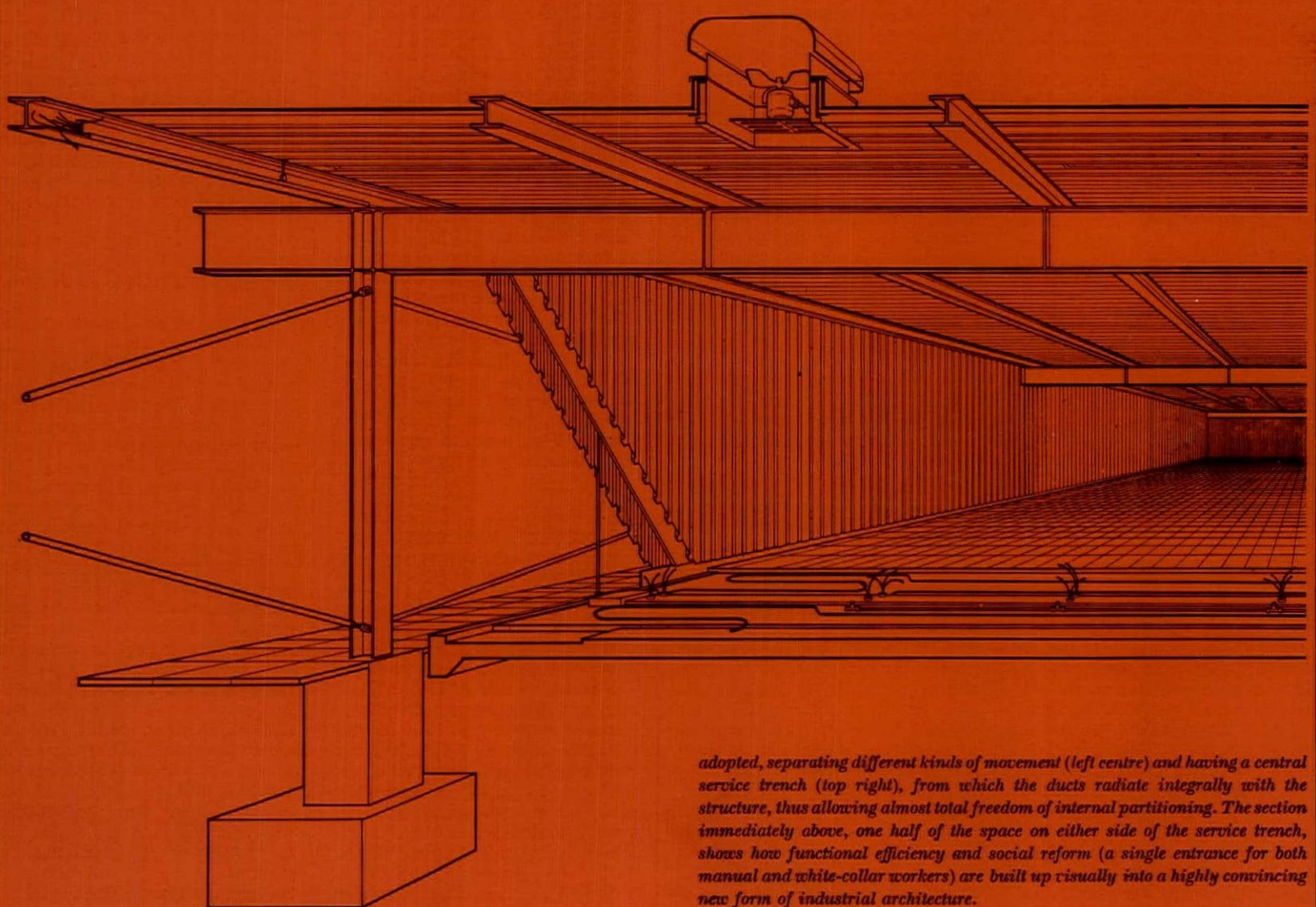
While the high quality of much of the architecture is acknowledged to be of importance outside Italy (Guarini, Juvarra, Alfieri, Vittone), the environment in which these masters worked as well as the professional activity of their assistants and followers is little known and needs further study. An exhibition such as this, with the catalogue, facilitates a more synoptic view of architecture in the Piedmont than heretofore possible.

HENRY MILLON

Plans for growth and change are increasingly, and none too soon, becoming a central concern for architects. One of the most interesting designs in this year's 'Preview' (see also page 60) is the electronics factory for Reliance Controls Ltd. at Swindon, the steel-framed elevation of which is shown below. The architects are Team 4, with Anthony Hunt as consulting engineer. The production line will have to quadruple in size within five years on a small budget without interrupting output. A linear pattern has therefore been







adopted, separating different kinds of movement (left centre) and having a central service trench (top right), from which the ducts radiate integrally with the structure, thus allowing almost total freedom of internal partitioning. The section immediately above, one half of the space on either side of the service trench, shows how functional efficiency and social reform (a single entrance for both manual and white-collar workers) are built up visually into a highly convincing new form of industrial architecture.

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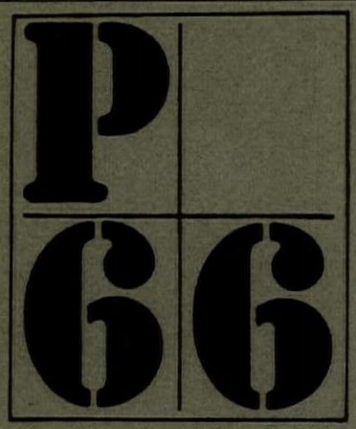
INTRODUCTION

PREVIEW 1966

Each year the special Preview issue of the AR attempts to fix a certain moment in English architecture by presenting a general conspectus of the drawing boards. It cannot, of course, pose for a complete picture of current design—the recent improvement of architecture in the more distant regions, for example, tends to remain underexposed. But equally the narrowly didactic presentation of a few favourites is avoided. 'Let a hundred flowers bloom, let a hundred schools of thought contend' is the editorial theme, and there are at the moment virtually as many 'schools of thought' as there are projects. Architects now have an overwhelming diversity of knowledge compared with the days when the Orders were sufficient for any emergency. They know about the exploitation of sloping sites, about structural techniques, about maintenance-free finishes, and above all they have their 'imaginary museums' of the styles, past and present, English and foreign, monumental and vernacular. Does this Preview then merely show a loose editorial indifferentism? In fact, 'style' is no longer the point. Whether it is brutalist modern or functionalist modern, it is rapidly losing its importance in a world where only *change* is constant. The rotation of stylistic crops is so rapid and so different in character from place to place and from person to person that neither the architect nor his client can set his bearings by it, and



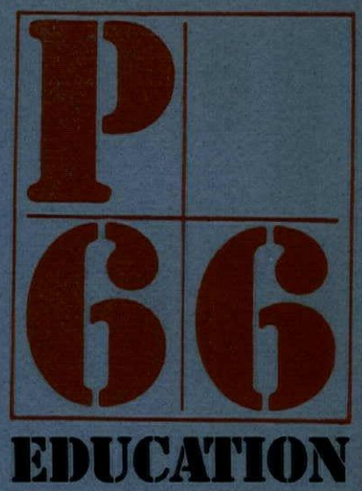
functional requirements change still more quickly. The word 'obsolescence' conjures up for us the image of the mass housing and welfare institutions of the nineteenth century; but how much more quickly will those built since the war prove as great an embarrassment. In spite of Park Hill and the Hook plan and Northwick Park's indeterminacy and the Fun Palace project, patterns for growth and change have been long in coming.

The unifying scale of architecture will continue to be based on the human body. Just as it was when framed in the doors and windows of traditional cottages, so it will be within the linear fluctuations of ducts and decks. But 'style' will be subordinated to these overall predictions. So long as a pattern of services and a list of dimensions are established, detailing can then be set free more completely than before. The triple grid—planning, detailing, services—of Arup Associates' Loughborough University development plan (last month's AR) gives a foretaste of the possibilities. Suggestions of linear planning and organic growth are given in several of the more important schemes in this Preview: Bath University, the Pimlico Secondary School, North Peckham, Team 4's housing at Coulsdon, Wearden's spinal plan for North Kensington, Luder's endless offices at Bromley Common, Spence and Bonnington's Sunderland Civic Centre.

Team 4's factory for Reliance Controls at Swindon, (frontispiece, page 8) is particularly symptomatic of these trends. It is not just an instrument of productivity, with its four quick phases of expansion along its central service trench; for the linear pattern so established has gone on to break down the traditional division between one entrance for manual workers and another for those with white collars. So the pattern of change here is ultimately one of social change, of behaviour between one man and another. This is equally true of the linear University of Bath with its central parade of combined staff and student facilities, or of the polygonal courts open to the public at the Sunderland Civic Centre, or of the deck housing schemes in the Park Hill tradition with their priceless freedom of movement.

Team 4 have straightforwardly expressed the machine environment in their factory in a welded steel frame and plastic cladding. This is unusual enough as a contrast to the present fashions for the picturesque. What is exceptional is simply the fact that it is a factory. It is the only one in the issue, selected from only six made available for consideration. The revival of architecture in the regions has not yet linked up with the introduction of new growth industries. A tour of trading estates like that in which Reliance Controls is set is a dispiriting experience. Far from alleviating depopulation they add to the blight that causes it.

Given Lewis Womersley's proviso of 'Productivity for What?' mass production is still the key to our better or worse future. Industrialists naturally prefer the package-dealer and planning authorities are usually so glad to be getting any new employment out of the metropolis that they do not care to put barriers of quality in its way. The Ministry of Housing and the Ministry of Education take considerable trouble to set standards of environment for the home and the school. Yet as much of the average man's waking life, even in the 40-hour week, is spent at the bench or the desk. In these days of National Plans and 25 per cent growth rates and talk of the 'Dunkirk spirit', there should be a Board of Trade development group setting new standards of linear planning in the place where it all started, the modern assembly line. It was not Le Corbusier or any other Master Builder who invented the characteristic form of truly modern architecture; it was Henry Ford. A glance at Dagenham today will show how little architects have done to clothe his vision.



13	Hull Univesity	*Gillespie, Kidd and Coia*
14	University of Bath	*Robert Matthew, Johnson-Marshall and Partners*
16	Hall of Residence, Warwick University	*Yorke, Rosenberg, Mardall*
17	Arts and Commerce Building, Birmingham University	*Arup Associates*
	Laboratories, New Museums Site, Cambridge	*Arup Associates*
18	Residential Building, Newnham College, Cambridge	*Lyster and Grillet*
	Residential Building, Sidney Sussex College, Cambridge	*Howell, Killick, Partridge and Amis*
19	Picture Gallery, Christ Church, Oxford	*Powell and Moya*
20	Mathematics Building, Manchester University	*Scherrer and Hicks*
	Department of Geography, Sheffield University	*William Whitfield*
21	Physics Building, Royal Holloway College, Egham, Surrey	*Michael Brawne*
22	Central Hall, York University	*Robert Matthew, Johnson-Marshall and Partners*
	Lecture Halls, Essex University	*H. T. Cadbury-Brown and Partners*
23	Library, Hull University	*Castle, Park, Dean, Hook*
24	Student Flats, Queens College, Dundee	*Napper, Errington, Lee, Collerton, Barnett, Allott*
	Hall of Residence, Battersea College of Technology	*The Austin-Smith/Salmon/Lord Partnership*
25	Halls of Residence, Newcastle University	*Williamson, Faulkner Brown and Partners*
	Halls of Residence, Newcastle University	*Douglass Wise & Partners*
26	College of Art and Design, Coventry	*Terence Gregory, City Architect and Planning Officer*
	School of Art, Farnham, Surrey	*Raymond Ash, County Architect*
27	Branch College of Building, Leeds University	*Building Design Partnership*
	College Chapel and Convent, Bearsden, Scotland	*Gillespie, Kidd and Coia*
28	Laboratories, Military College, Shrivenham, Wilts.	*Gollins, Melvin, Ward and Partners*
29	Development Plan, Royal Military Academy, Sandhurst, Berks.	*Gollins, Melvin, Ward and Partners*
30	College of Domestic Science, Edinburgh	*Andrew Renton and Associates*
31	Secondary School, Pimlico, London	*Hubert Bennett, Architect to the GLC*
32	Approved School, Portslade, Sussex	*Richard Sheppard, Robson and Partners*
	Secondary School, Ilfracombe, Devon	*Stillman and Eastwick-Field*
33	Model Village for the Handicapped, Symington, Ayrshire, Scotland	*Michael Laird*
34	Spastics Hospital School, Thanet, Kent	*Hartry, Grover and Halter*
	Primary School, Lambeth, London	*Andrew Renton and Associates*

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English architects are at the moment in love with universities; and even if their love is often unrequited, the pace of university growth has become so fast in the last three years that they are given the jobs all the same. The results are mixed. It has become smart to commission big names. The pervading literary culture and the fragmentation of faculties have alike encouraged the tendency to collect architects like postage stamps. Even campuses under the co-ordinating control of architect-planners are tending to resemble permanent exhibition grounds, with each faculty as a separate 'national pavilion'. The Griswold regime at Yale set the pace. Examples abound in this Preview of potentially distinguished buildings thrown into doubtful relationships with their neighbours.

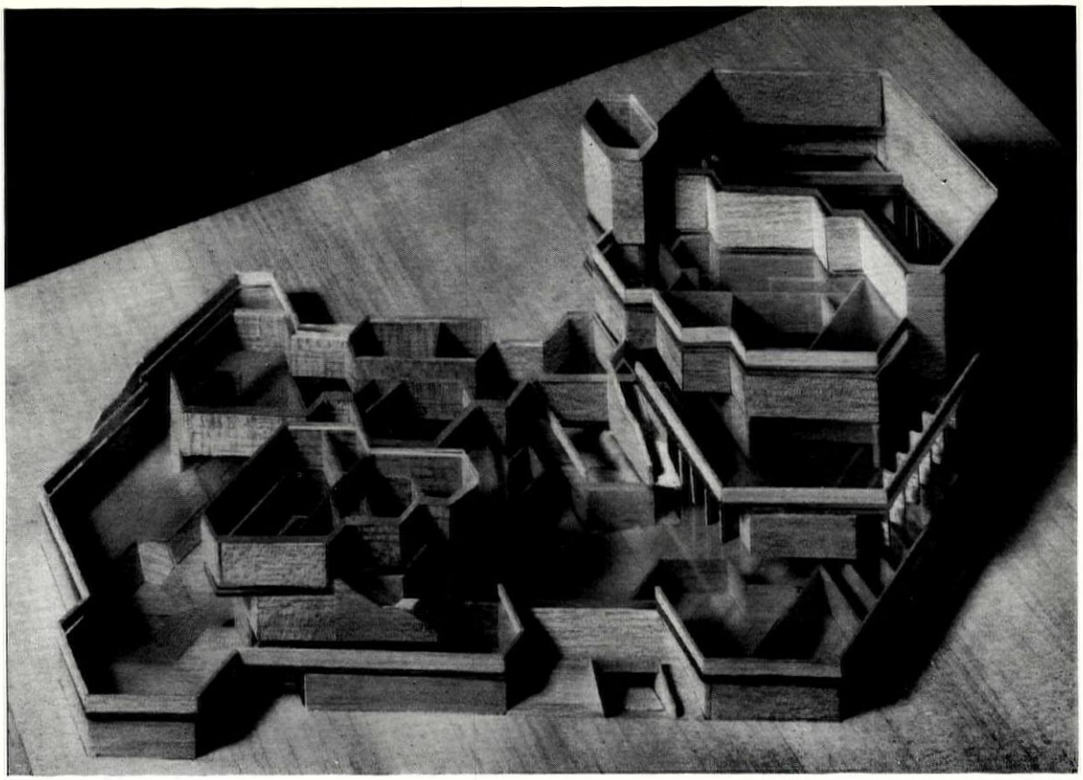
The concrete lattice of Arup Associates' Arts and Commerce building will bridge the ring road of Sir Hugh Casson's precinct at Birmingham University, the original lucidity of which is nearly lost already in the assertive character of the buildings so far finished (by Howell, Chamberlin, etc.). It will become one more of the little faculties clambering round the foothills of Sir Aston Webb's Edwardian massif. Arup Associates' Cambridge building, even though it is the first stage of redeveloping the central science area, fits into no plan at all, as the Lasdun layout was rejected and there has not been time to think up a new one—meanwhile, building goes ahead. The library at Hull has had to be more than doubled in size on an almost impossible site by Castle, Park, Dean, Hook; it seems crazy that this young and able firm should have to spend such disproportionate man-hours manipulating a building finished only five years ago (it was the last neo-Georgian commission before Sir Leslie Martin's appointment as architect-planner). Meanwhile at Leicester, famed throughout the world for at least one building, Sir Leslie Martin has resigned and the main building going up now in his science precinct is by a firm of industrial package-dealers (*not* in this Preview issue). Restlessness has even hit the pioneer of comprehensive university designs, Sheffield, where Gollins, Melvin and Ward's elegant curtain walling is to be invaded by William Whitfield's Geography building, in itself an extremely clever design but in its visual context a piece of academic self-indulgence.

The fact is that the older universities remain generally bad as clients; and in their maintenance of faculty empire-building in its more obvious forms, they are incidentally committing academic hara-kiri in the face of the manifestly popular interdisciplinary structure of the seven new universities. At York the colleges and labs form an intentionally subfusc, prefabricated background to daily life, while the special one-off effects are unleashed exactly where appropriate—in the library and in the central hall, which are hierarchically appropriate as an antidote to the 'blandness' criticized by Michael Brawne in last month's AR. The linear platforms of Bath University, also by Robert Matthew, Johnson-Marshall and Partners, should equally achieve a balanced hierarchy of forms within a much more concentrated development. But if York and Bath are dismissed by some as non-architecture (a matter of taste, this), then perhaps the real lessons for higher education in this Preview can be taken, ironically, from the majestically linear comprehensive school for Pimlico designed by the GLC Architect's Department (group leader, John Bancroft). In the clarity of its section—a central first-floor street linking together all the diverse volumes of a versatile education—and the bold discipline of its cladding and glazing, it suggests the kind of visual elan by which planning for growth can naturally be personified (the original block model of York had this, too). And if the Farnham School of Art can manage a plan for growth, why not Cambridge or Bristol Universities?

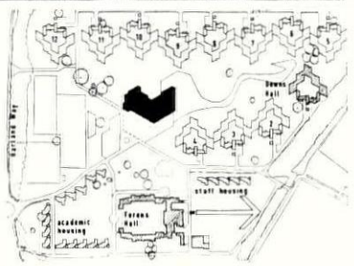
STUDENT AMENITY CENTRE, HULL UNIVERSITY

Gillespie, Kidd and Coia

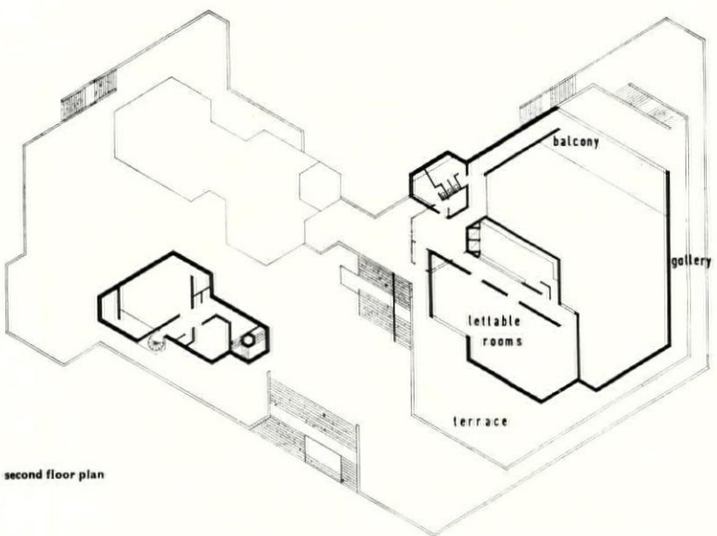
CLIENT : University of Hull.
SITE: Central position in 55-acre parkland, fairly flat, close to existing Ferens Hall and flanked on east and west by same architects' halls of residence (see AR Preview, 1963).
ACCOMMODATION: Refectory, senior and junior common rooms, library, lecture rooms, music rooms, space for activities for community of up to 2,000 students including 1,620 in adjacent halls. 3 separate blocks of podium, with access at ground, 1st and 2nd floors.
STRUCTURE AND FINISHES: In situ r.c. columns and triangulated coffered floor slabs, laminated timber roof beams, facing brick with timber windows and copper fascias. Internally, facing brick or tiled walls, quarry tile or hardwood floors, exposed concrete ceilings.
SERVICES: Oil-fired heating in embedded floor coils, radiators and fan assisted convectors.
COST: £300,000.
BUILDING PERIOD: September 1965–spring 1968.
Assistants-in-charge, A. MacMillan and I. Metzstein. Assistants, C. MacCallum, F. Heissner, D. Etherton and W. Hodge. Quantity surveyor, Mackintosh and Robertson. Structural consultant, Ove Arup and Partners. Mechanical consultant, Andrews Weatherfoil. Electrical consultant, Powell Duffryn. Catering consultant, J. Lyons & Co.



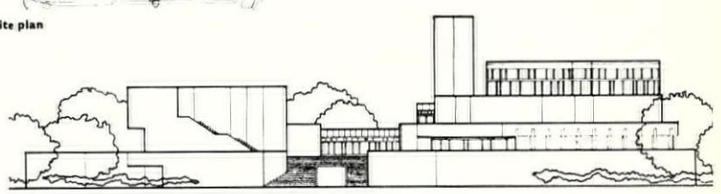
view into model from east



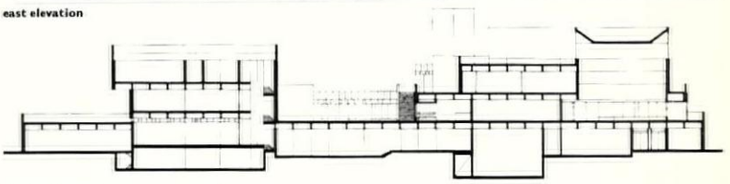
site plan



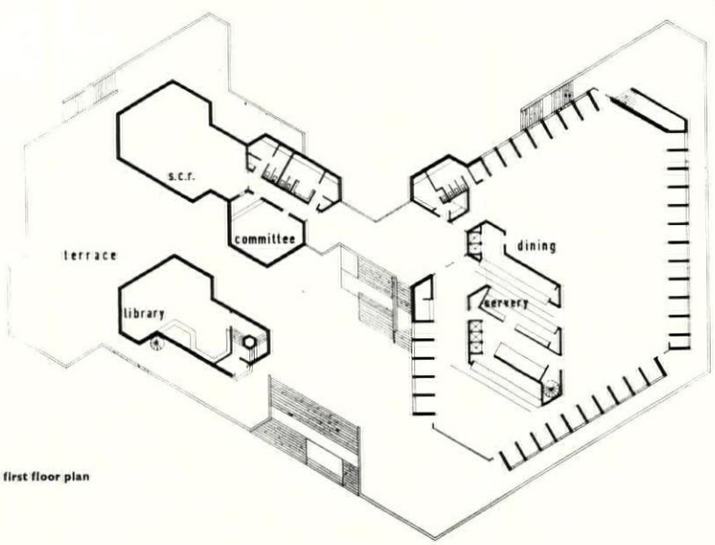
second floor plan



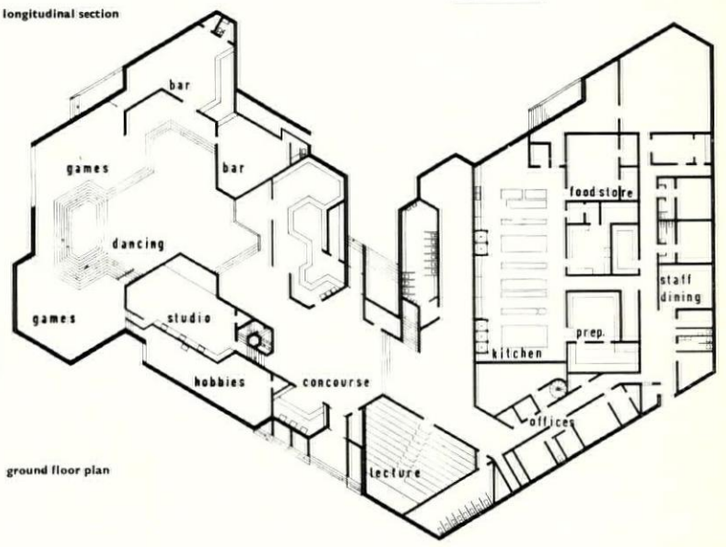
east elevation



longitudinal section



first floor plan

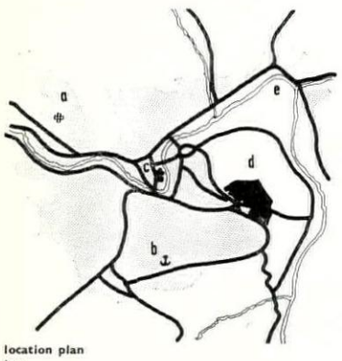


ground floor plan

UNIVERSITY OF BATH

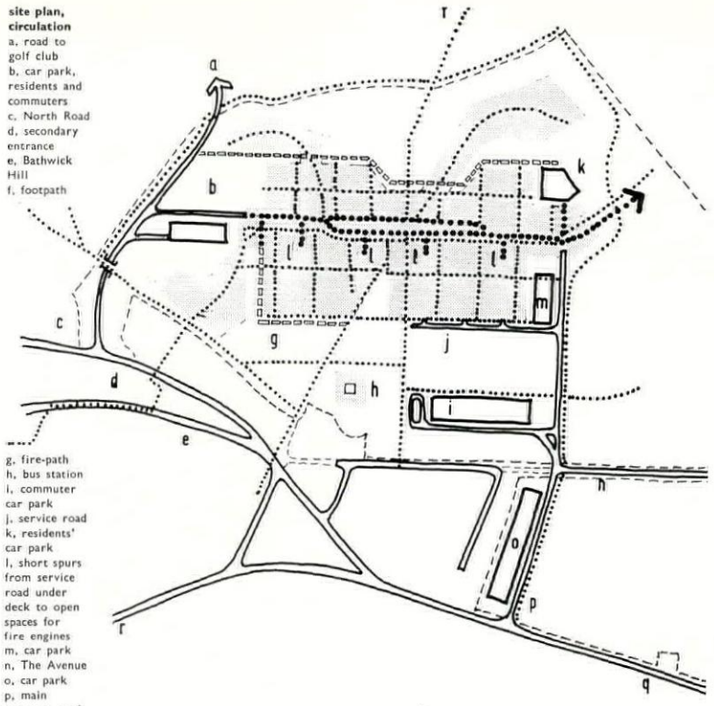
Robert Matthew, Johnson-Marshall and Partners

CLIENT: Bristol College of Science and Technology, to be given charter in first half of 1966.
SITE: 190 acres, in 2 parts of 140 and 50, at Norwood playing fields, gently sloping downland on spur overlooking city, with some fine trees on boundary including 18th-century beech avenue.
ACCOMMODATION: 5,000 students by 1980, 1,200 students at present in Bristol and Bath. Residence for two-thirds. Major landscaping and tree planting as part of plan. Phase 1, for 2,000 students (300 still at Bristol), forming cross-section of central linear Parade, besides preliminary building (biology). Teaching buildings for chemistry, physics, pharmacy and maths, aeronautical, electrical and chemical engineering and materials, humanities and social sciences. Library, temporarily containing administration and students' union. Senior common room, 2 restaurants, central boiler house. Residential accommodation for about 500 in 2 tall slab blocks spanning Parade.
STRUCTURE AND FINISHES: Dry systems for speed and cleanness in highly concentrated development. Most teaching buildings based on development of CLASP Mk. 4. Heavy steel frame with precast floor slabs, cladding panels and paving.
SERVICES: Linear pattern of large ducts providing room for later additions and alternatives. Central service road east-west under Parade, north-south main ducts to individual buildings, rising vertically and then horizontally within 4 ft. deep ceilings. Oil-fired central heating, with boiler house close to Parade. Plenum system in science blocks.
COST: Phase 1, £1,100,000. Total for 5,000 students, £22,000,000.
BUILDING PERIOD: Preliminary building, opened October 1965. Phase 1, 1966–September 1967. Rest by 1980.
Partners-in-charge, Peter Newnham and Hugh Morris. Job architects, Francis Baden-Powell, Ken Dean, Stephanie Morland, Max Nasatyr, John Hunter, Chris Musson and Peter de Brant. Quantity surveyor, James Nisbet and Partners. Structural consultant, Harris and Sutherland. Mechanical and electrical consultant, Parsons, Brown and Partners. Traffic consultant, Colin Buchanan and Partners.

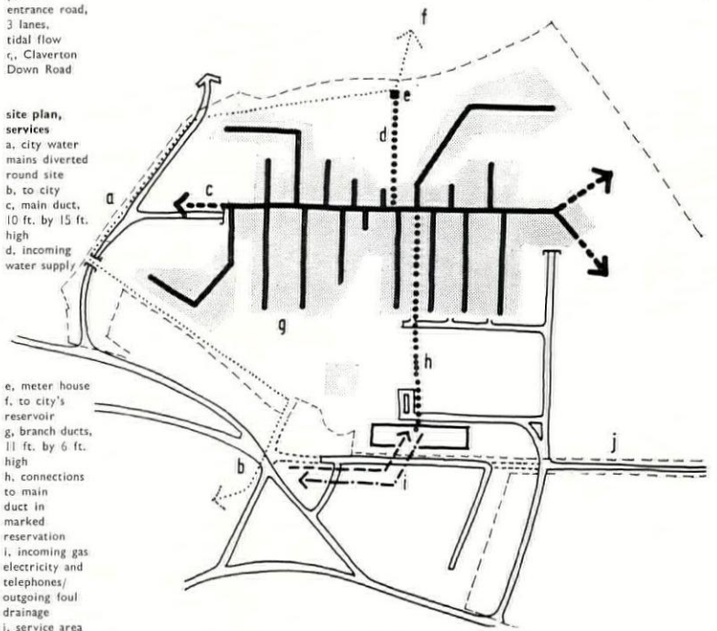


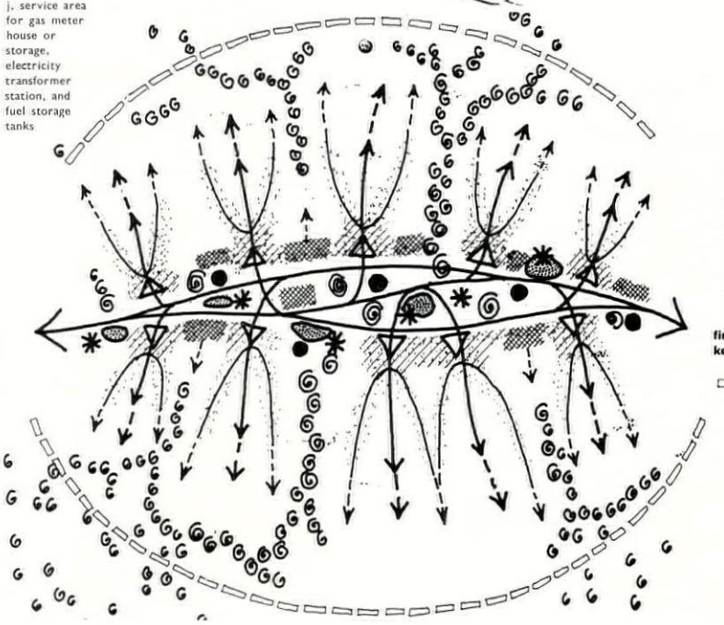
location plan
key
a, hospital
b, Admiralty buildings
c, Abbey and city centre
d, Bathampton Down site
e, River Avon

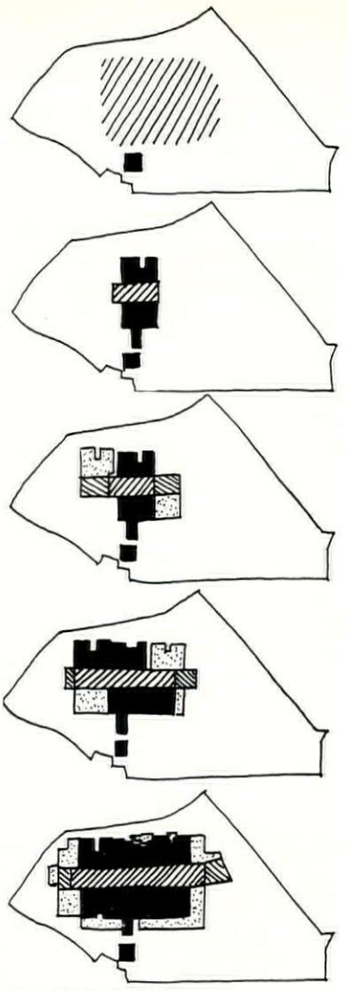
site plan, circulation
a, road to golf club
b, car park, residents and commuters
c, North Road
d, secondary entrance
e, Bathwick Hill
f, footpath
g, fire-path
h, bus station
i, commuter car park
j, service road
k, residents' car park
l, short spurs from service road under deck to open spaces for fire engines
m, car park
n, The Avenue
o, car park
p, main entrance road, 3 lanes, tidal flow
q, Claverton Down Road



site plan, services
a, city water mains diverted round site
b, to city
c, main duct, 10 ft. by 15 ft. high
d, incoming water supply
e, meter house
f, to city's reservoir
g, branch ducts, 11 ft. by 6 ft. high
h, connections to main duct in marked reservation
i, incoming gas electricity and telephones/ outgoing foul drainage
j, service area for gas meter house or storage, electricity transformer station, and fuel storage tanks







phases of the development plan
from top, Phase 1 1967-1969; Phase 2 1969-1972; Phase 3 1972-1975; Phase 4 1975-1980

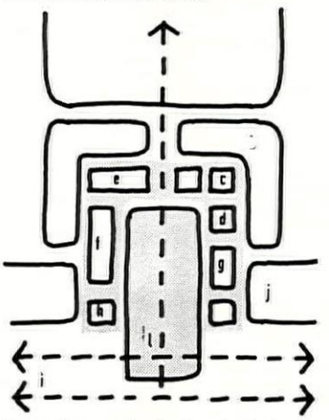
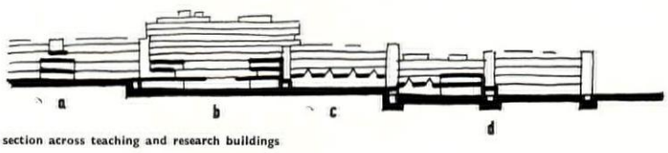


diagram of communal nucleus for each school
a, specialized teaching space, including laboratories
b, general teaching space, lecture and seminar rooms available for societies
c, seminar and meeting room
d, committee room
e, staff common room
f, secretarial and administrative offices
g, reading room, including study bases for non-residents
h, office for head of school
i, main circulation routes linking schools
j, general teaching space, merging with adjacent school
l, general area for meetings, refreshments, notices, exhibitions

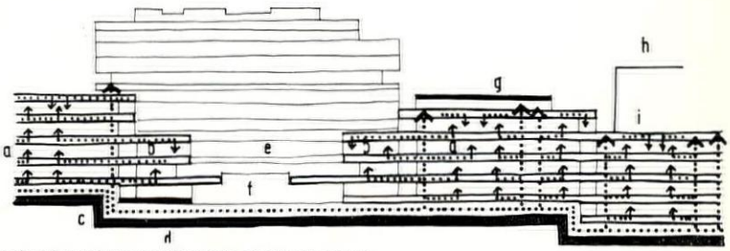
first diagram of the university
key
half-mile diameter, 10 minutes walking
residential
group centres: SCR, students' union, etc.
central facilities
restaurant bases
school nuclei
general teaching space, within schools
general teaching space, inter-school
lines of expansion
circulation routes

general view of university from south-west, with administration tower in centre



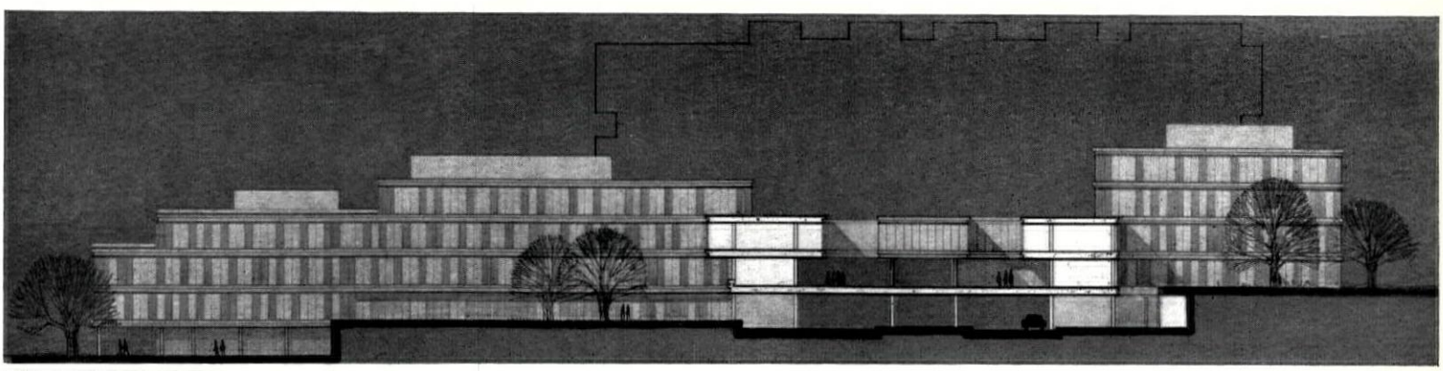
section across teaching and research buildings

a, general teaching blocks
b, The Parade, residential block over communal facilities
c, bench-type laboratories over
d, heavy laboratories below

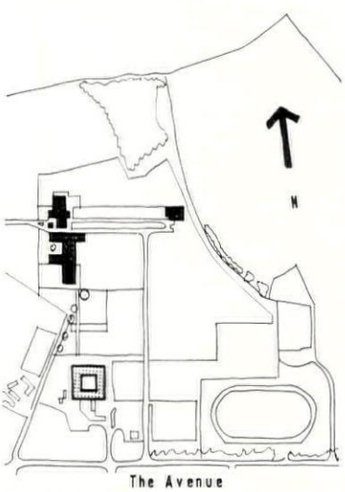


section of central area and laboratories, showing service runs

a, laboratory block
b, nucleus block
c, main duct
d, branch duct
e, Parade
f, motor houses and switch rooms alongside service road
g, plant-room on roof
h, distribution in 4 ft. floor depth
i, 9 ft. by 9 ft. vertical ducts each serving 36 ft. length of laboratories



Phase 1 : 1, section and elevation



Phase 1 : 1, site plan

central Parade spanned by residential block

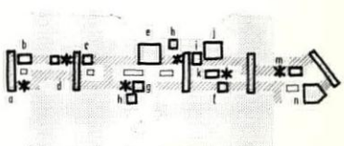
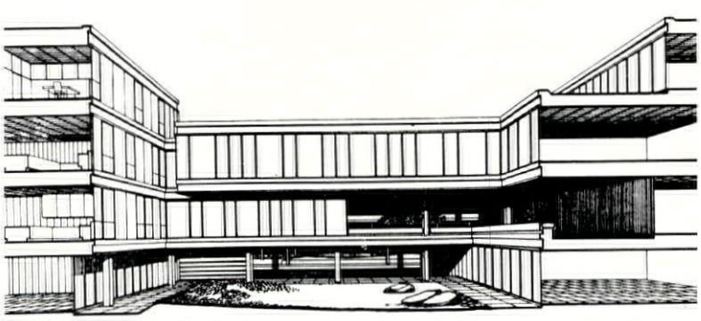
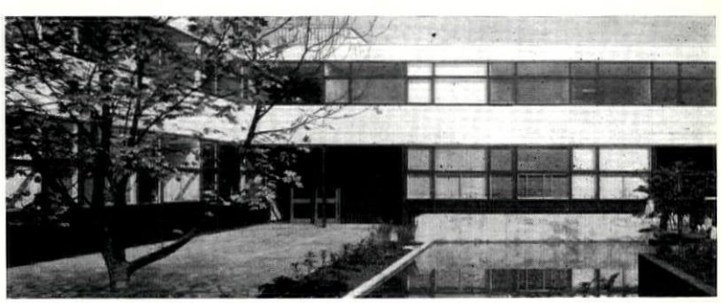


diagram of central area

a, residential block spanning Parade
b, shops, banks and post office
c, non-academic staff centre
d, continuous nucleus buildings, containing lecture and society rooms
e, library
f, main entrance
g, senior common room
h, small hall (nucleus in Phase 1)
i, students' union
j, main hall
k, theatre
l, conference centre
m, restaurants
n, indoor sports centre



Phase 1 : 1, sectional perspective of senior common room and nucleus building

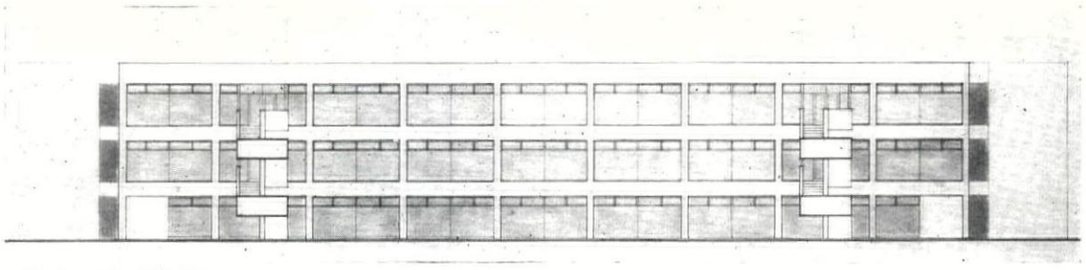


courtyard of preliminary building (eventually biology)

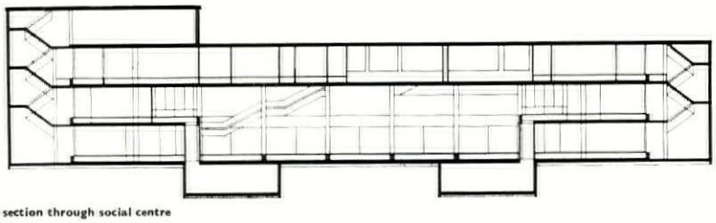
HALL OF RESIDENCE, UNIVERSITY OF WARWICK

Yorke, Rosenberg, Mardall

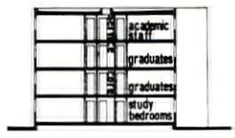
CLIENT: University of Warwick.
SITE: 8 acres of 400-acre university area, at Gibbet Hill Road, 3 miles south of Coventry.
ACCOMMODATION: 3 separate parts. Social centre for both resident and non-resident students, with service areas on ground floor (shop, coffee bar, launderette, games rooms, admin, kitchen) and informal dining and public areas on first floor (cafeteria for 400, lounges, snack bar, pub, staff dining and common rooms), which can be used for dances and film shows. Single study-bedrooms for 442 students with 10 dons' flats in 2 blocks staggered to fit contours of site; groups of 16 rooms round central service core separated from each other by staircase and small lounge. Staff housing: warden's house, porter's house, 3 bursars' flats.
STRUCTURE AND FINISHES: Social centre, r.c. frame clad with white glazed tiles; floor to ceiling glazing in box section painted steel frames, set back 10 ft. on ground floor to form covered walkway; internally, sprayed rough textured rendering on walls, p.v.c. floors, exposed smooth concrete columns and beams. Residential blocks, solid concrete block crosswalls with in situ r.c. floor slabs, painted timber windows horizontally pivoted, flank and spandrel walls clad in white glazed tiles; internally, floors p.v.c. tile, walls plaster painted, ceilings concrete painted, no built-in furniture apart from wardrobe. Staff housing, loadbearing brick and block walls, timber roof, white glazed tile cladding.
SERVICES: Mechanical ventilation to kitchen, internal lavatories and cafeteria in social centre, and to bathrooms and service cores in residential blocks. Heating: social centre, continuous hot water handrail heaters on periphery, warm air to cafeteria; residential blocks, hot water radiators in rooms, handrail heaters in lounges. No fixed lighting in students' rooms, three electric points provided. Staff housing, gas-fired central heating, hot water radiators to rooms.
COST: £1,000,000.
Quantity surveyor, Northcroft, Neighbour and Nicholson. Structural consultant, Felix J. Samuely and Partners. Civil engineering, Sir Frederick Snow and Partners.



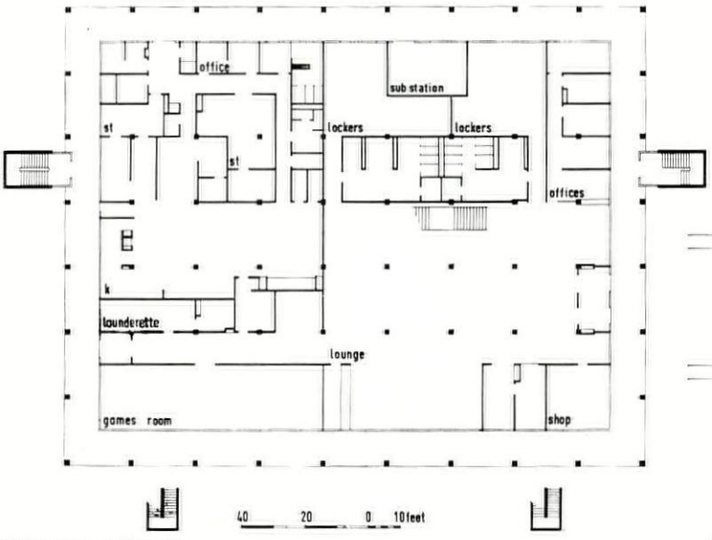
social centre, south-west elevation



section through social centre

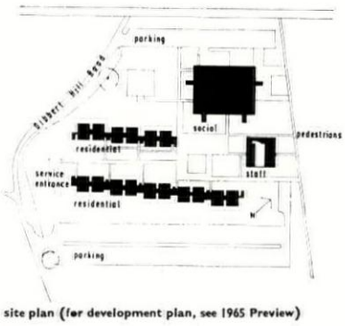


section through residential block

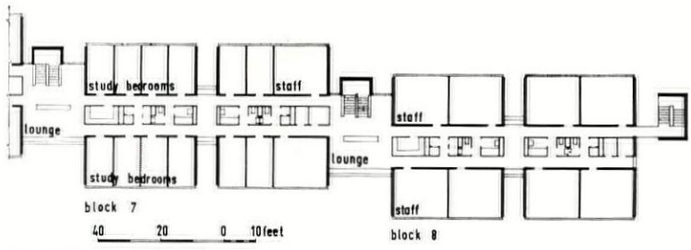


social centre, ground floor plan

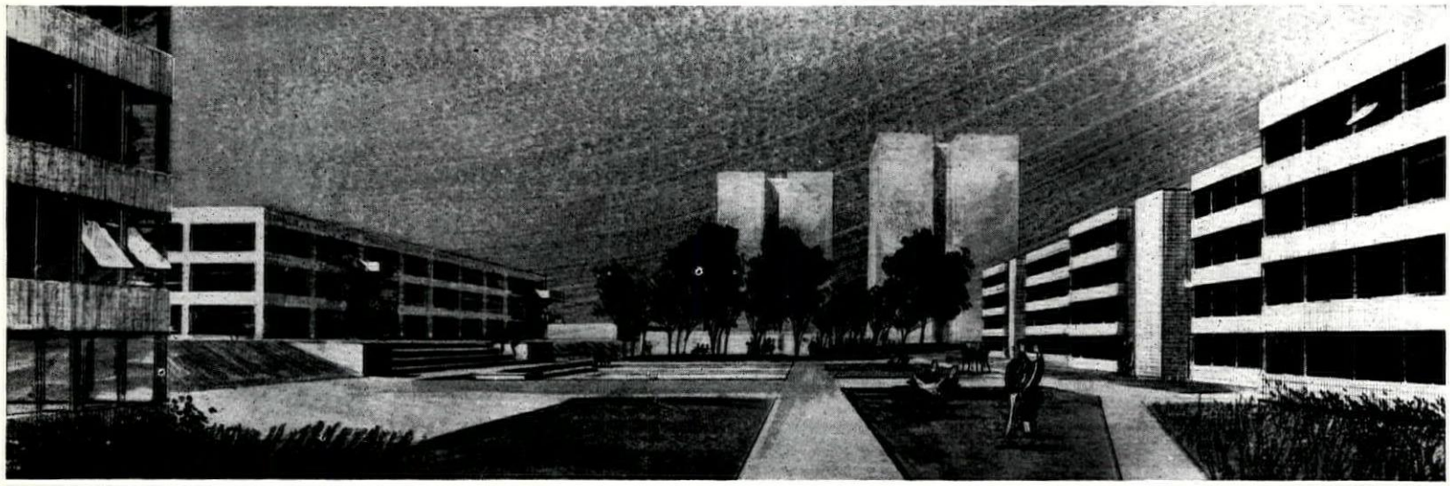
staff housing, typical floor plan



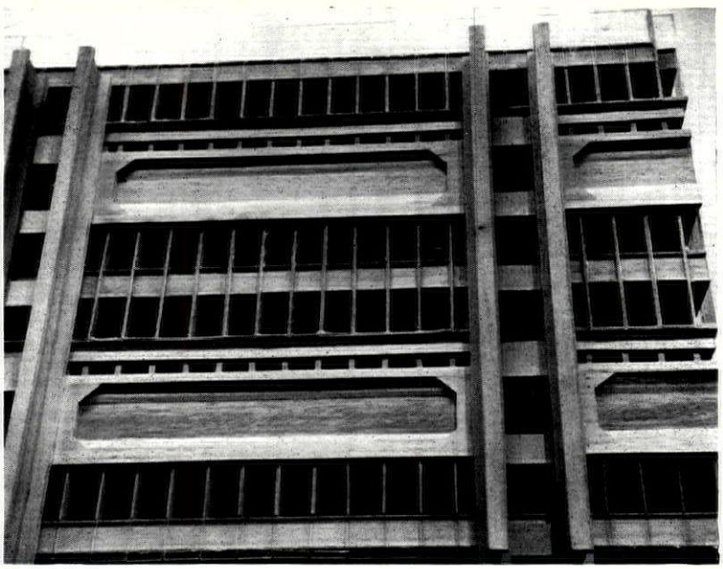
site plan (for development plan, see 1965 Preview)



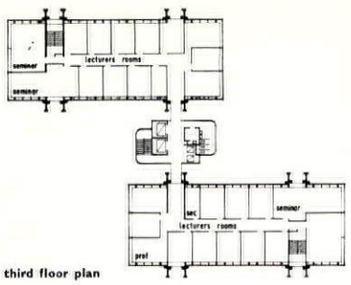
residential blocks, typical floor plan



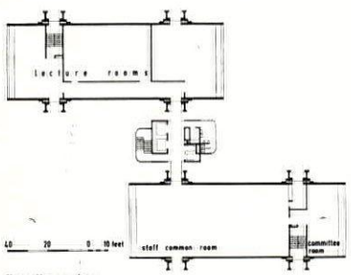
general view from south-west, with social centre on left



detail of elevation



third floor plan

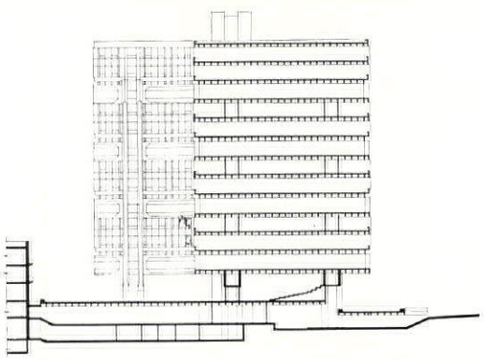


first floor plan

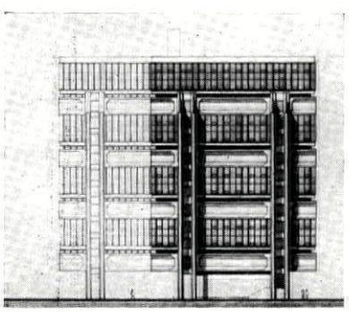
ARTS AND COMMERCE BUILDING, BIRMINGHAM UNIVERSITY

Arup Associates, Architects and Engineers
Estate architects, Casson, Conder and Partners

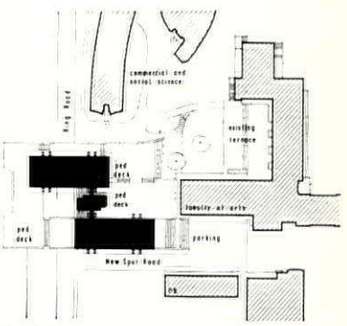
CLIENT: University of Birmingham.
SITE: 148 ft. × 380 ft., slightly sloping, divided by university ring road.
ACCOMMODATION: For 1,400 graduates and post-graduates, covered parking for 50 cars, usable academic area 64,000 sq. ft.
STRUCTURE AND FINISHES: Exposed in situ r.c. frame, fair-faced brick walls.
SERVICES: Plumbing, heating and ventilation, electrical.
BUILDING PERIOD: March 1966–June 1968.



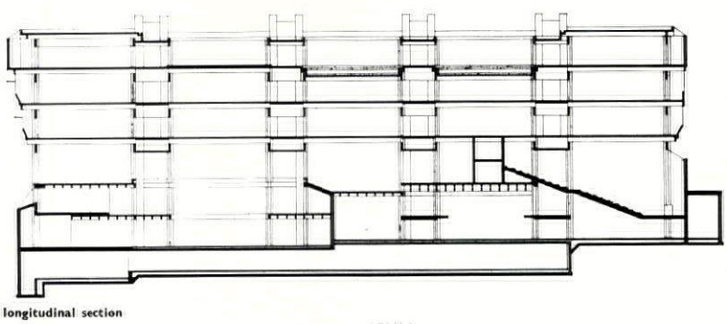
cross-section



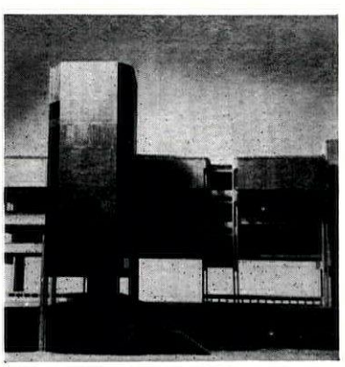
west elevation



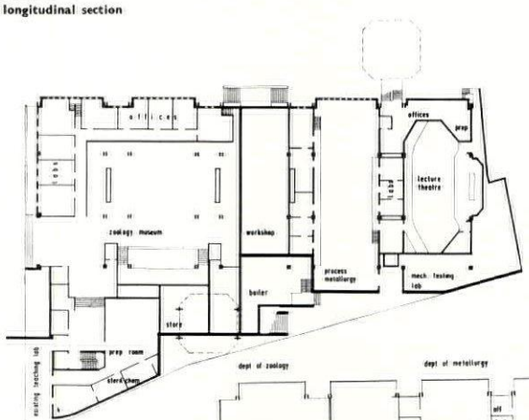
site plan



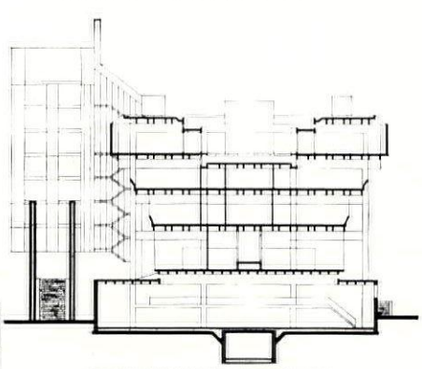
longitudinal section



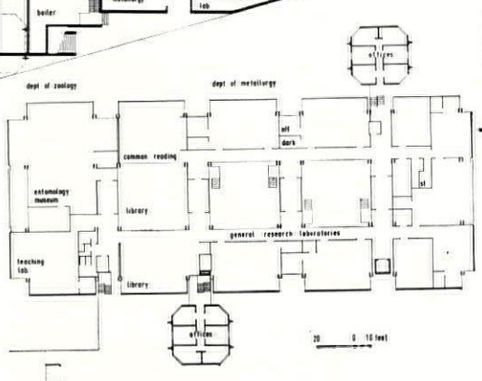
detail of elevation, with tower of offices



mezzanine level, between ground and future deck



cross-section, showing future deck level

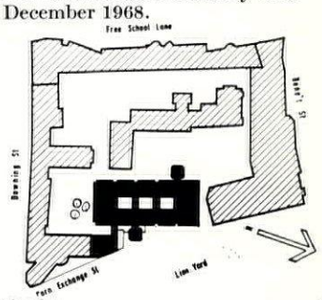


third floor plan

LABORATORIES, NEW MUSEUMS SITE, CAMBRIDGE

Arup Associates, Architects and Engineers

CLIENT: University of Cambridge.
SITE: 0.5 acre, replacing obsolete buildings in central science area, adjacent to proposed Lion Yard precinct (AR, September, 1965).
ACCOMMODATION: Zoology museum, lecture theatre, labs: 95,000 sq. ft. total.
STRUCTURE AND FINISHES: Precast concrete fair-faced, with smooth precast spandrel panels. Internally, hardwood strip floors, painted plywood wall panels with pressed steel sections supporting all benches and service rails, ceilings of removable asbestolux panels giving access to main service runs.
SERVICES: Hot water, perimeter convector heating, compressed air, recirculating cooling water. Mechanical ventilation and air conditioning. Lab wastes.
COST: £1,500,000.
BUILDING PERIOD: January 1966–December 1968.

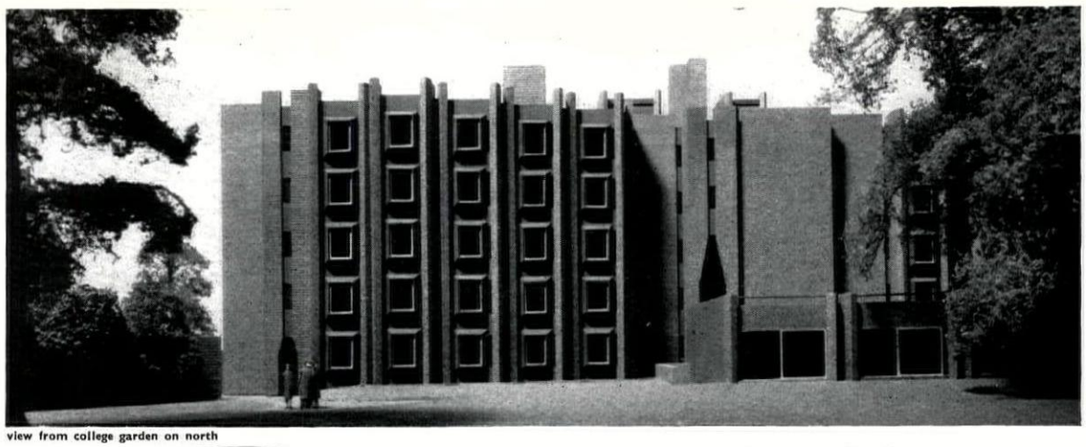


site plan

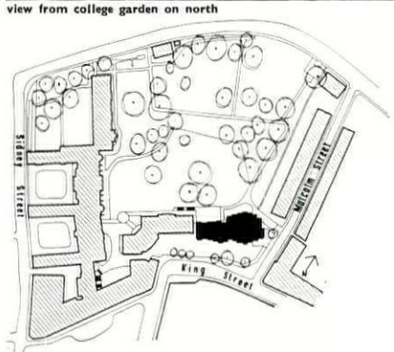
RESIDENTIAL BUILDING, SIDNEY SUSSEX COLLEGE, CAMBRIDGE

Howell, Killick, Partridge and Amis

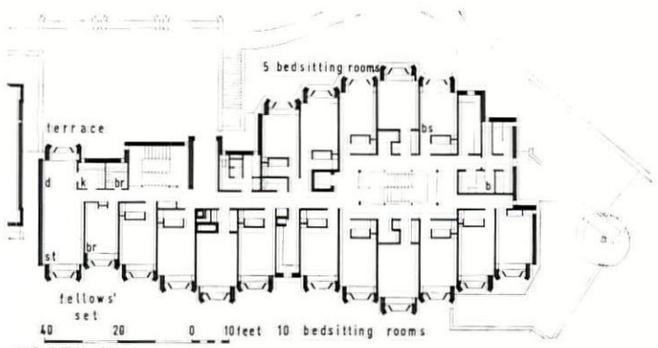
CLIENT: Master and Fellows of Sidney Sussex College.
SITE: 6 acres next to existing college, replacing garages and converted cottages, facing extensive garden.
ACCOMMODATION: 65 bed-sitters for students, slightly varying in size. 4 Fellows' sets. Common room divisible into 3. 9 garages, 1 flat.
STRUCTURE AND FINISHES: Loadbearing 6 in. brick-on-edge crosswalls, fair-faced and painted internally, external facings similar to neighbouring building of 1923.
SERVICES: Oil-fired central heating from new boiler house in basement.
COST: £235,000.
Structural, mechanical and electrical consultant, Associated Architects and Consultants.



view from college garden on north



site plan



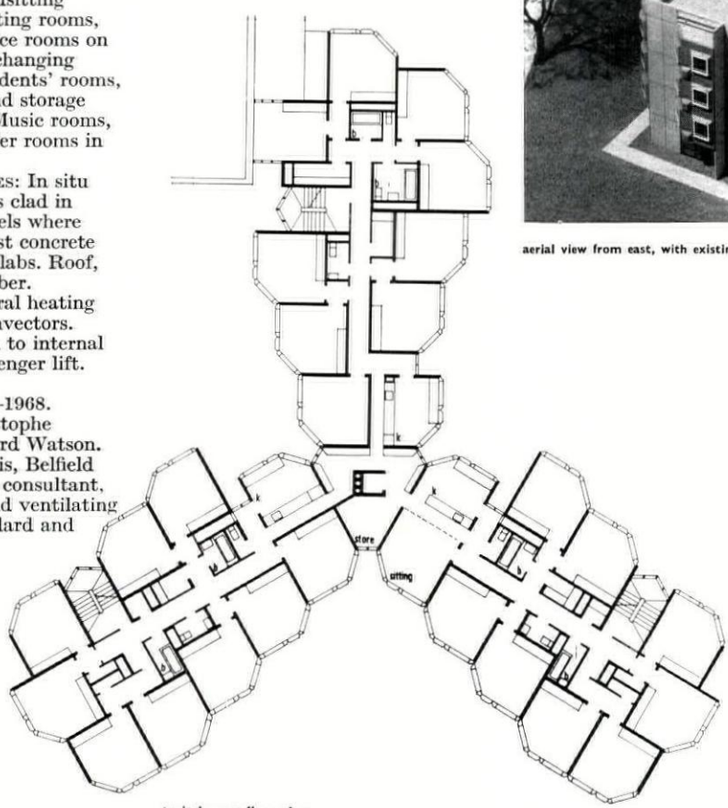
typical floor plan

RESIDENTIAL BUILDING, NEWNHAM COLLEGE, CAMBRIDGE

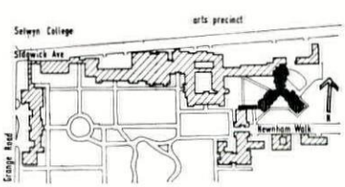
Lyster and Grillet

CLIENT: Principal and Fellows of Newnham College.
SITE: Flat garden with old trees between Principal's lodge and porter's lodge, which stands in Sidgwick Avenue opposite new Arts Faculties' precinct.
ACCOMMODATION: 70 bedsitting rooms, 9 kitchens, 3 sitting rooms, 2 fellows' sets and service rooms on upper 3 floors. Offices, changing rooms, non-resident students' rooms, staff accommodation and storage space on ground floor. Music rooms, cellar, archives and boiler rooms in basement.
STRUCTURE AND FINISHES: In situ r.c. crosswalls and floors clad in lead-faced plywood panels where exposed, external precast concrete panels faced with clay slabs. Roof, lead on asphalte on timber.
SERVICES: Oil-fired central heating mainly with natural convectors. Heating and ventilation to internal bathrooms. 600 lb. passenger lift.
COST: £250,000.
BUILDING PERIOD: 1966–1968.
Partner-in-charge, Christophe Grillet. Assistant, Richard Watson. Quantity surveyor, Davis, Belfield and Everest. Structural consultant, Peter Dann. Heating and ventilating consultant, Henry Goddard and Partners.

aerial view from east, with existing college buildings in background



typical upper floor plan

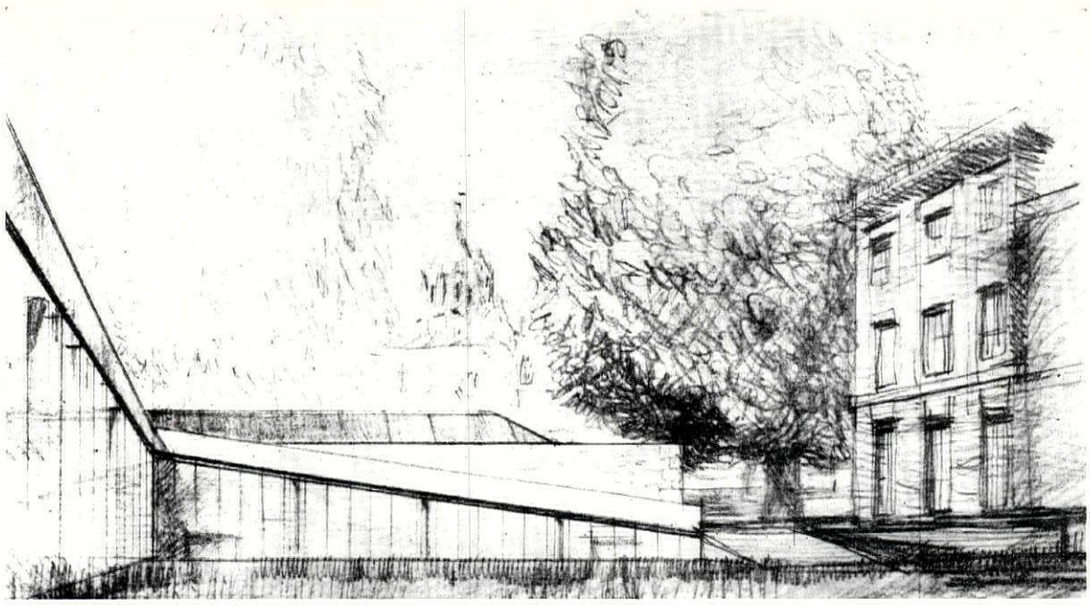


site plan

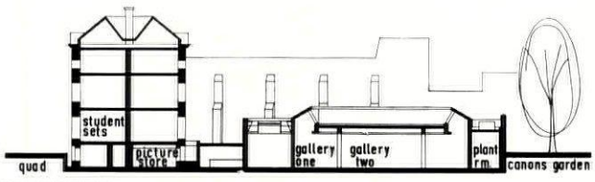
PICTURE GALLERY, CHRIST CHURCH, OXFORD

Powell and Moya

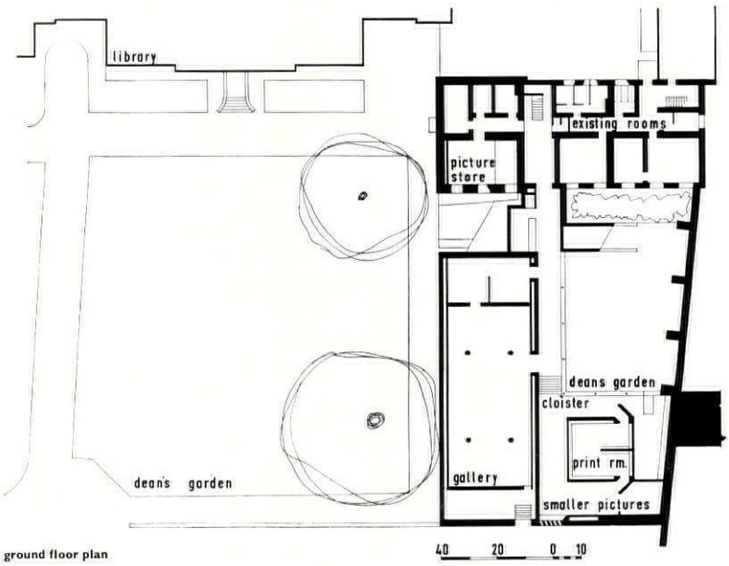
CLIENT: Christ Church.
SITE: East end of Dean's garden between south face of Canterbury and boundary with Corpus Christi College.
ACCOMMODATION: Exhibition galleries for 25 Primitives, 28 larger paintings, 23 small paintings, 10 Moderns, 38 prints. Storage for 126 paintings, 88 print solanders.
STRUCTURE AND FINISHES: In situ concrete poured against wall of uncoursed local secondhand rubble. R.c. roofs, beams and columns. Cut Portland stone quoins, copings, dressings and sloping roof covering. Bronze frames to windows of cloister. Internally, fair-faced concrete soffits, beams and columns; plastered wall surfaces with cut stone quoins.
SERVICES: Full air conditioning with temperature and humidity control, fed from a gas-fired boiler and from packaged condenser, filter and refrigerating units, to supply and extract through ducts in all rooms. Burglar alarm system. Statically balanced fluorescent lighting in main galleries with tungsten spots for special effects. Tungsten spots only in print rooms to avoid damage by high ultra-violet content of fluorescent fittings.
COST: £84,464.
BUILDING PERIOD: November 1965–August 1967.
Quantity surveyor, G. D. Walford and Partners. Structural consultant, Charles Weiss and Partners. Mechanical consultant, David Kut and Partners. Electrical consultant, Peter Jay and Partners.



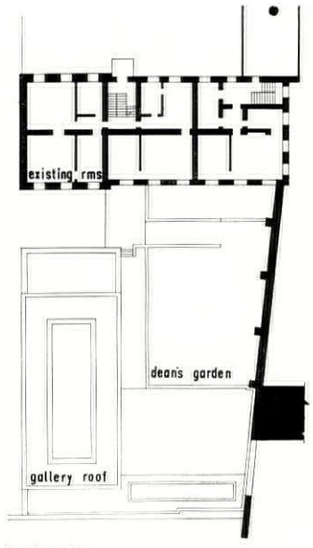
general view from dean's garden, with existing rooms on right and Tom Tower in distance



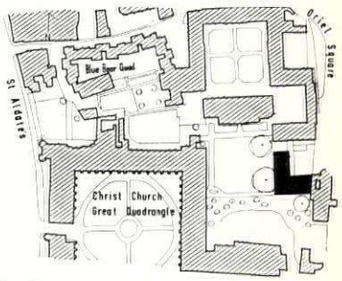
north-south section



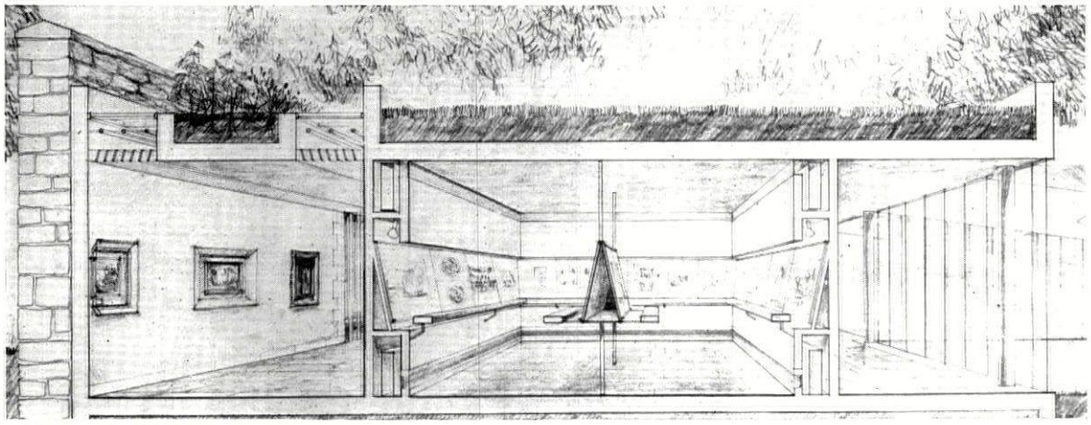
ground floor plan



first floor plan



site plan

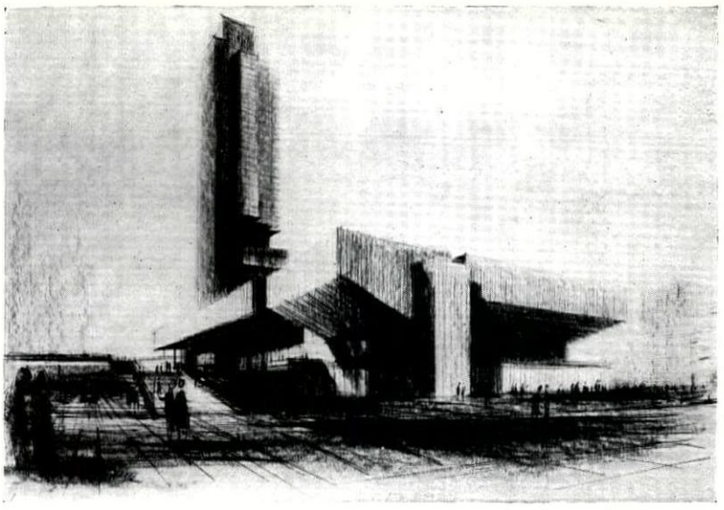


sectional perspective of print room

MATHEMATICS BUILDING, MANCHESTER UNIVERSITY

Scherrer and Hicks. Hugh Wilson and Lewis Womersley, Consultants for Education Precinct plan

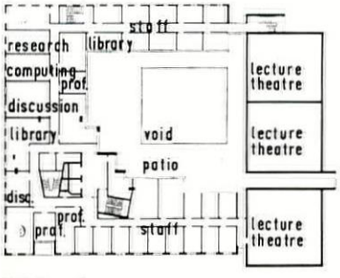
CLIENT: University of Manchester.
SITE: On north side of main university site close to central Manchester, to be linked at 2nd floor level in the future.
ACCOMMODATION: 100,000 sq. ft. teaching space for 460 students, 154 post-graduates and 75 staff. Lower 3 floors will be used by students outside department as well. Post-graduates in tower.
STRUCTURE AND FINISHES: R.c. frame with in situ wind-bracing wall, lower floors brick-faced, tower and 3rd floor clad with exposed aggregate panels. Aluminium glazed cladding with continuous mullions to tower, full height aluminium window frames elsewhere. Double-glazing south and west of tower. 1st floor entrance hall related to future deck system.
SERVICES: Radiator heating, boiler room oversized to allow for future expansion. Air-conditioning to lecture theatres, plenum system to 6th floor conference room.
COST: £730,000.
BUILDING PERIOD: Autumn 1966–autumn 1968.
Partner-in-charge, E. C. Scherrer. Associate-in-charge, R. G. R. Clark. Design associate, E. C. Percey. Job architect, E. Kenyon. Assistant, A. Wild. Quantity surveyor, Rider, Hunt and Partners. Structural consultant, W. V. Zinn and Associates. Mechanical and electrical consultant, Oscar Faber and Partners.



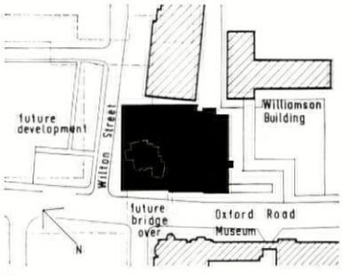
view from south

ninth floor plan

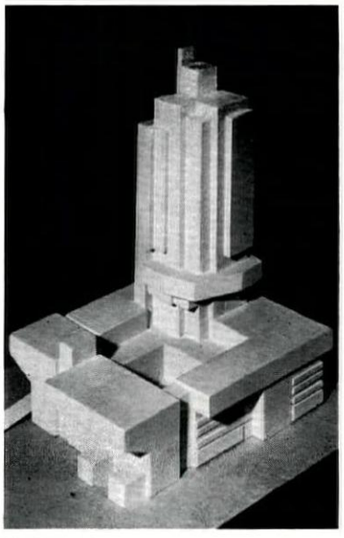
seventh floor plan



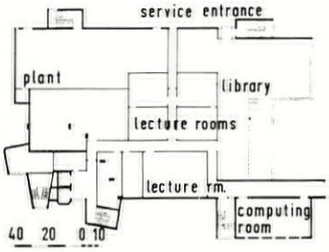
third floor plan



site plan



view from east

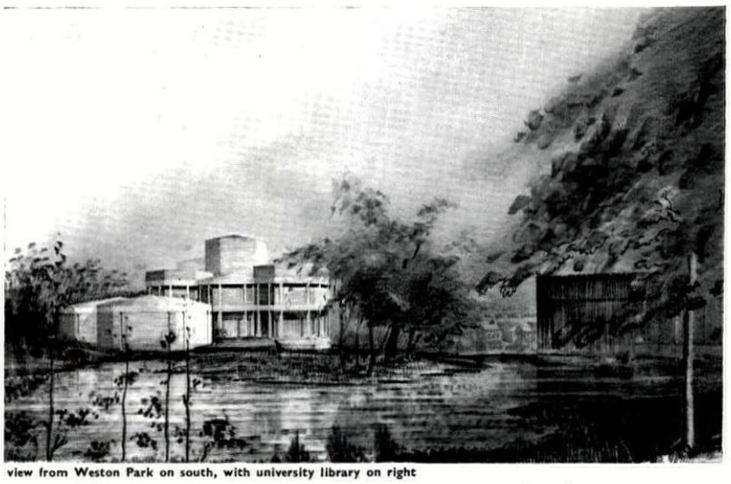


ground floor plan

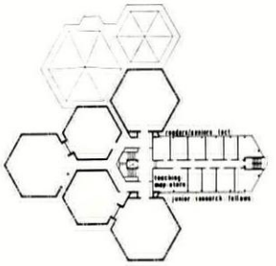
DEPARTMENT OF GEOGRAPHY, SHEFFIELD UNIVERSITY

William Whitfield

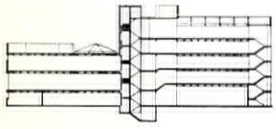
CLIENT: University of Sheffield.
SITE: Next to Gollins, Melvin and Ward's university library, inlet into public park, very steep diagonal slope.
ACCOMMODATION: Teaching and lecture space for 400 maximum.
STRUCTURE AND FINISHES: R.c. frame, brick infill panels.
SERVICES: Mechanical ventilation in lecture theatre. Heating from university's central boiler house.
COST: £300,000.
BUILDING PERIOD: Mid 1966–mid 1968, subject to UGC funds.
Associate-in-charge, David Lyle. Assistants, Nigel Roberts and John Gosling. Quantity surveyor, Reynolds and Young. Structural consultant, Lowe and Rodin. Mechanical consultant, G. H. Buckle and Partners.



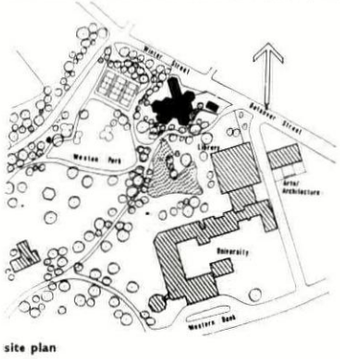
view from Weston Park on south, with university library on right



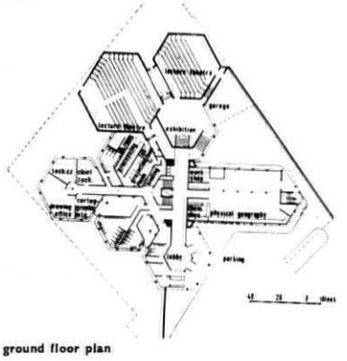
second floor plan (cartographic drawing offices and laboratories)



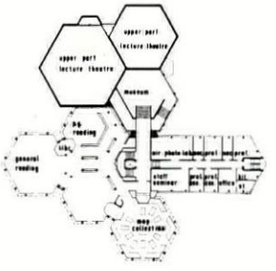
longitudinal section



site plan



ground floor plan



first floor plan

PHYSICS BUILDING, ROYAL HOLLOWAY COLLEGE, EGHAM, SURREY

Michael Brawne. Sir Leslie Martin, consultant for master plan

CLIENT: Royal Holloway College, University of London.

SITE: Sloping ground in park of existing spectacular college building of 1879–87 by W. H. Crossland. Mature trees.

ACCOMMODATION: Peripheral zone of small spaces, research laboratories, offices and seminar rooms. Central zone of toplit or artificially lit teaching labs, special labs and lecture theatres. Optical experiments require darkness and vibration-free floors. Library and common rooms. Circulation space to full height in each zone. Future expansion in 3 directions with separate entrances.

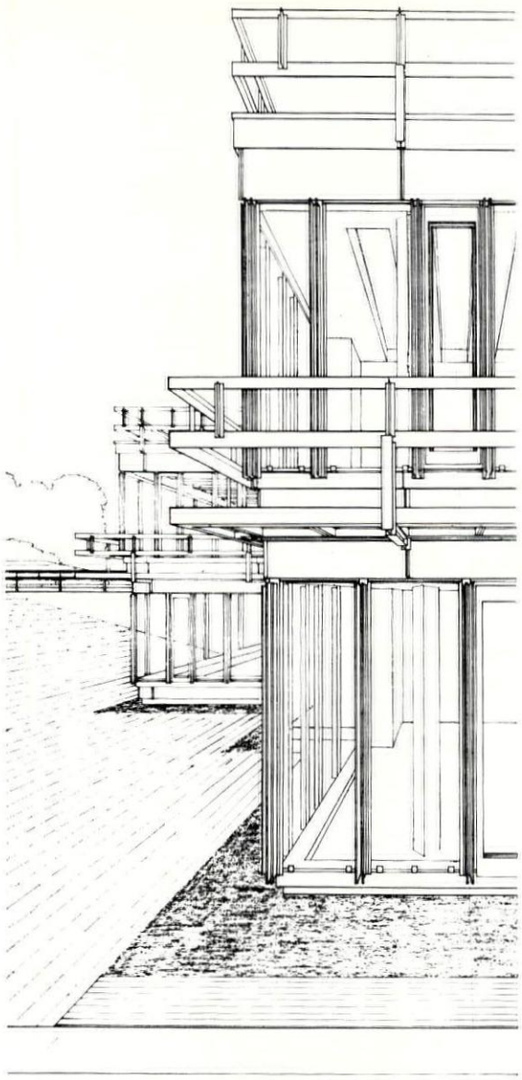
STRUCTURE AND FINISHES: R.c. frame with precast trough unit floors. External walls and balconies, Cor-Ten steel oxidizing to a dark brown colour, as sheet and as hot rolled section, with glass in neoprene structural gaskets. Windows galvanized and painted. Internal partitions of blockwork, situated anywhere on periphery except opposite columns, external mullions sliding in grooves to coincide with partitions.

SERVICES: Mechanical ventilation throughout, air-conditioning in internal labs. Specialized laboratory services connected to ring duct for each of 2 zones, runs at ceiling level feeding between trough units.

COST: £612,000.

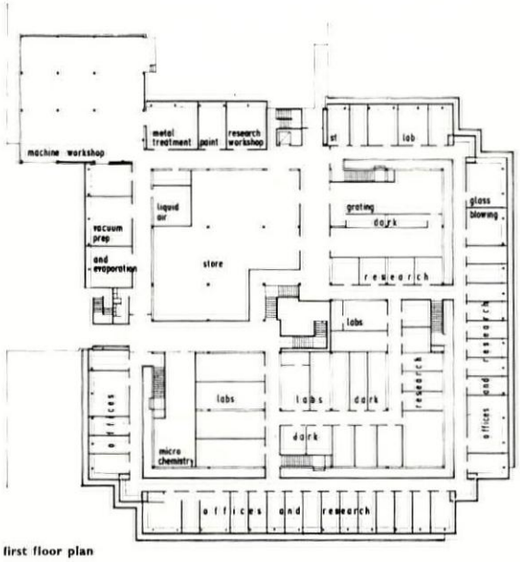
BUILDING PERIOD: September 1965–September 1967.

Assistants, Paul Simpson and Michael Gold. Quantity surveyor, Monk and Dunstone. Structural consultant, Felix J. Samuely and Partners. Mechanical consultant, Ewbank and Partners. Acoustical consultant, Associated Architects and Consultants.

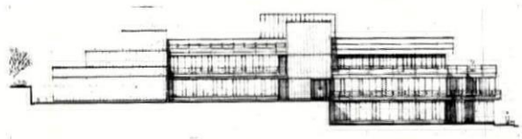


view of southern corner

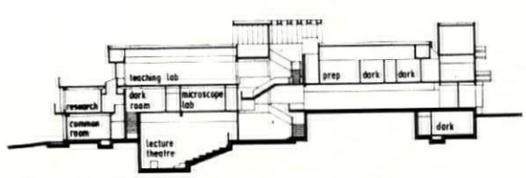
second floor plan



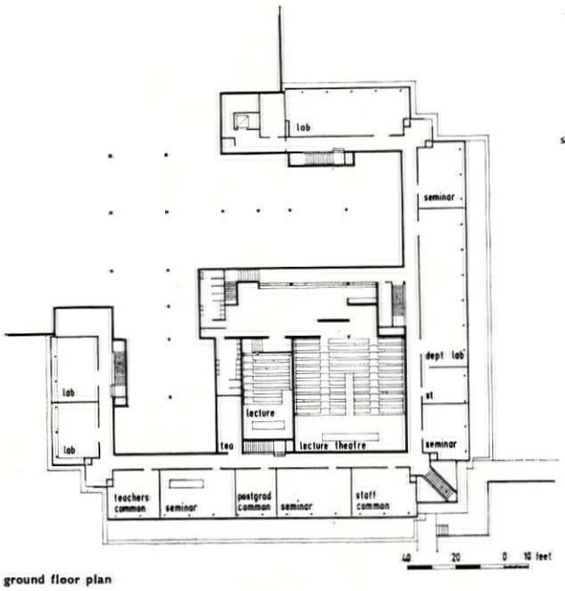
first floor plan



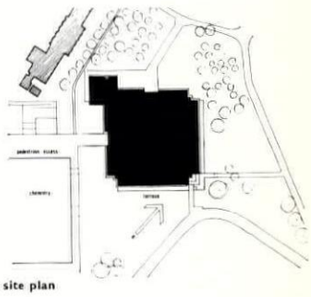
south-west elevation



section, south-east to north-west



ground floor plan

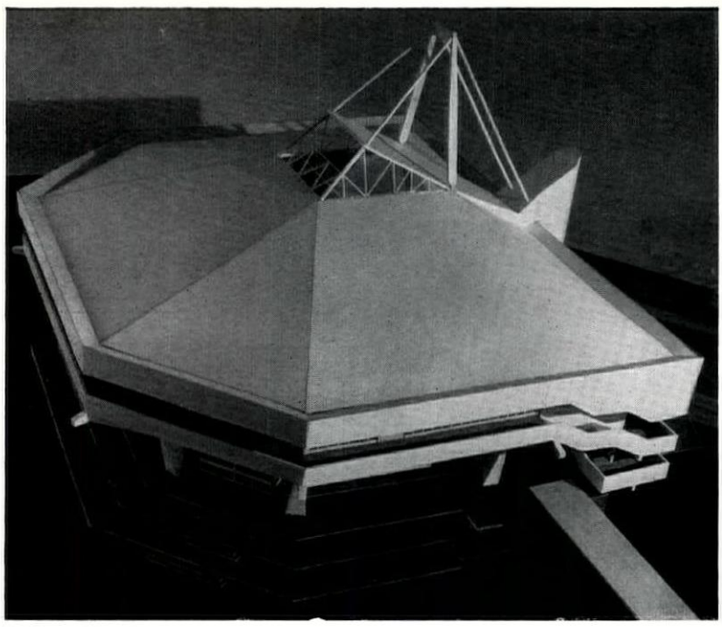


site plan

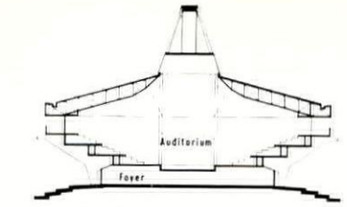
CENTRAL HALL, YORK UNIVERSITY

Robert Matthew, Johnson-Marshall and Partners

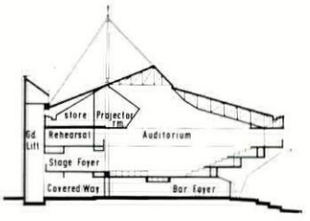
CLIENT: University of York.
SITE: Close to centre of campus, grouping with College V around piazza and lake extension.
ACCOMMODATION: 1,250-seat multipurpose auditorium of 9,671 sq. ft. with ancillary rooms making total floor area of 23,720 sq. ft. Part of Phase 3 of development plan. Special features include seating integral with tiered staging which can be pushed back to leave large flat area terraced on 3 sides, variable size of stage, orchestra pit for simply staged opera, 3-way back projection for lecture audience on 3 sides, moveable catwalks for access to exposed roof structure.
STRUCTURE AND FINISHES: In situ r.c., with suspended mild steel tubular roof, aluminium-sheathed.
SERVICES: Mechanical ventilation, sound reinforcement, assisted resonance, stage lighting, film projection, broadcasting, closed circuit TV, simultaneous translation.
COST: £265,072.
BUILDING PERIOD: April 1966–January 1968.
Partners-in-charge, Stirrat Johnson-Marshall and Andrew Derbyshire. Job architect, John Speight. Assistant, Michael Gibbs. Structural engineer, Robert Owston. Quantity surveyor, Franklin and Andrews. Mechanical consultant, L. J. Fowler. Electrical consultant, Pinto and Partners. Acoustical consultant, Henry R. Humphreys.



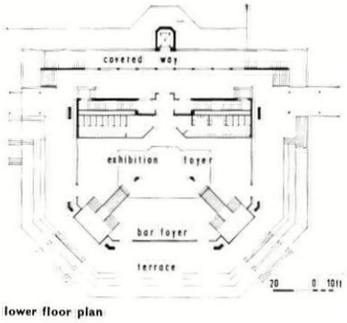
view from south-west



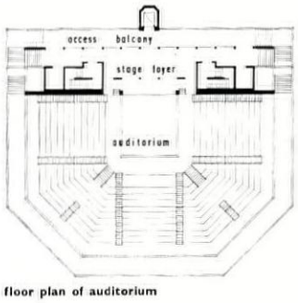
section, north-south



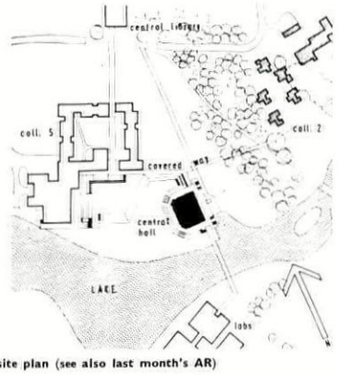
section, east-west



lower floor plan



floor plan of auditorium

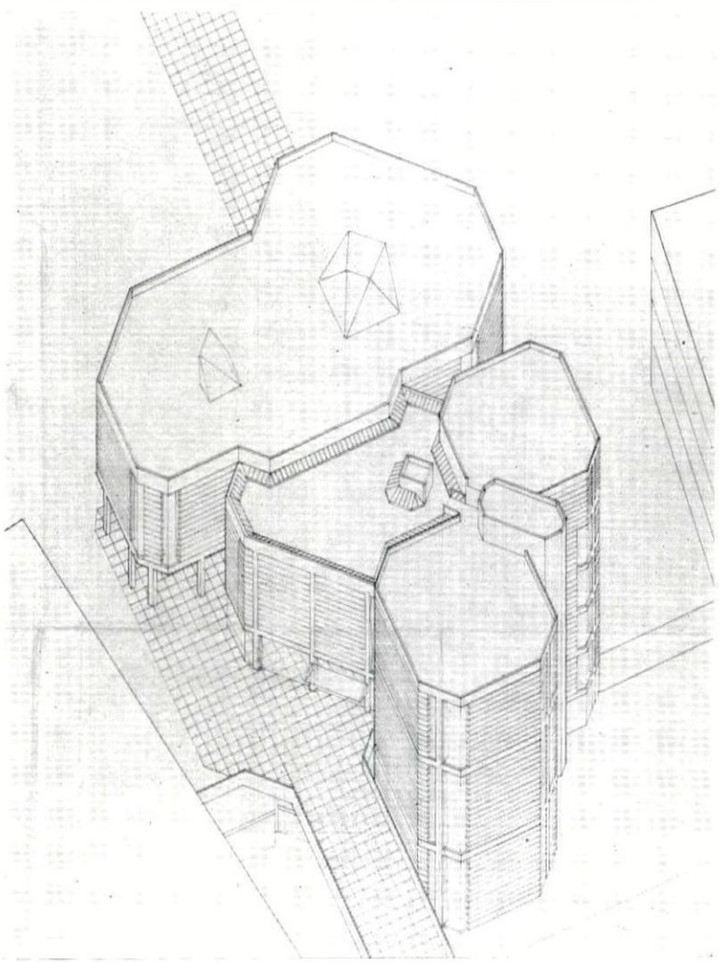


site plan (see also last month's AR)

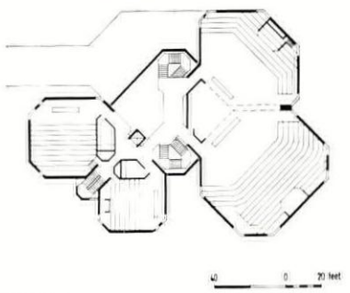
LECTURE HALLS, ESSEX UNIVERSITY, COLCHESTER

H. T. Cadbury-Brown and Partners

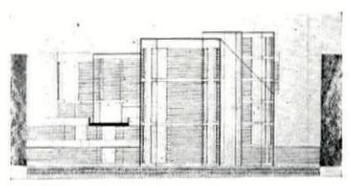
CLIENT: University of Essex.
SITE: In centre of university campus planned by Architects' Co-Partnership (see AR, Preview, 1965).
ACCOMMODATION: 8 lecture halls: 4 seating 100, 2 seating 160, 1 seating 300, 1 seating 450.
STRUCTURE AND FINISHES: R.c. frame and waffle plate floors, external cavity walls of lightweight concrete blocks with pink stone aggregate facing. Internally, fair-faced and painted. Floors, quarry tile, vinyl sheet and wood block.
SERVICES: All halls artificially heated and ventilated with ducted air.
BUILDING PERIOD: Early 1966–1967, 18-month contract.
Assistant, Sung Pei Lee. Quantity surveyor, G. A. Hanscomb Partnership. Structural consultant, Clarke, Nicholls and Marcel. Mechanical and electrical consultant, Barlow, Leslie and Partners.



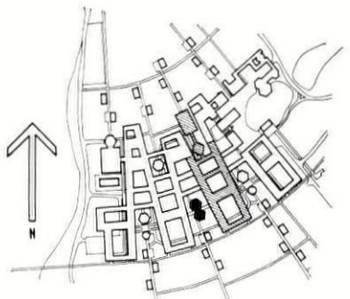
axonometric from north-east



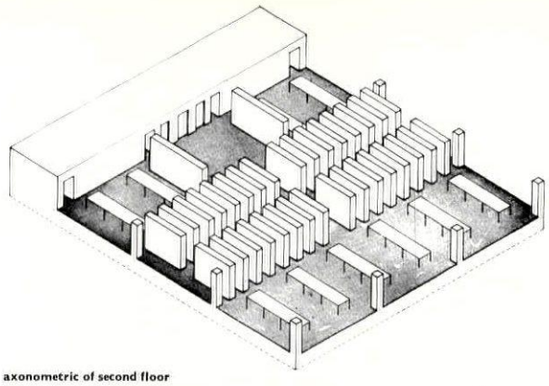
floor plan



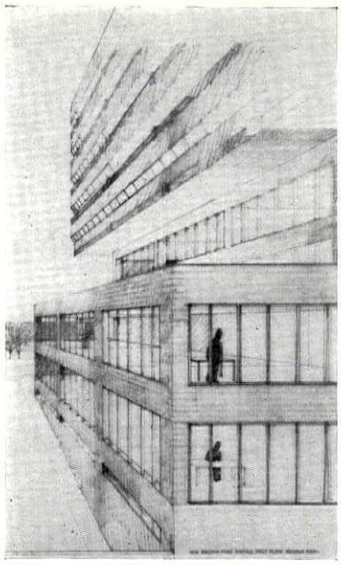
north-west elevation



site plan, showing buildings under construction (last year's 'Preview')



axonometric of second floor

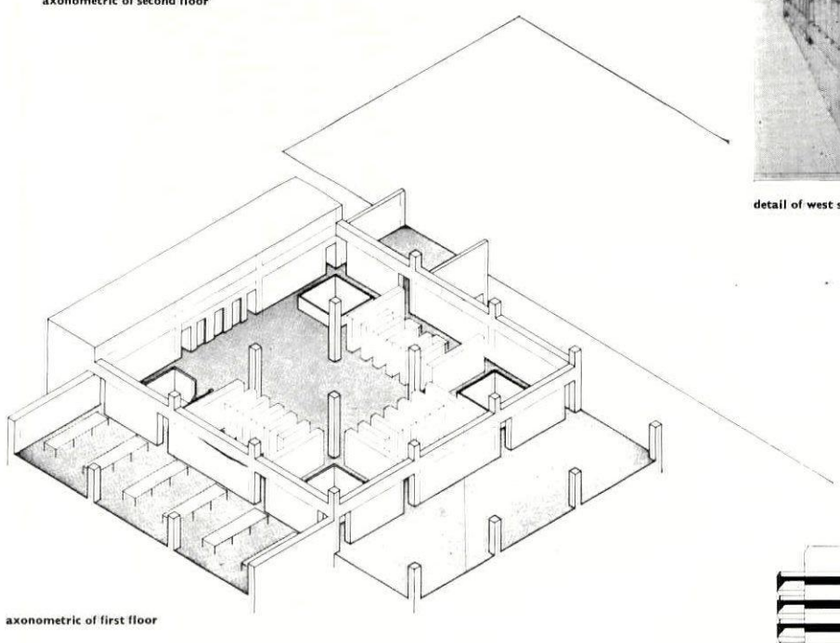


detail of west side

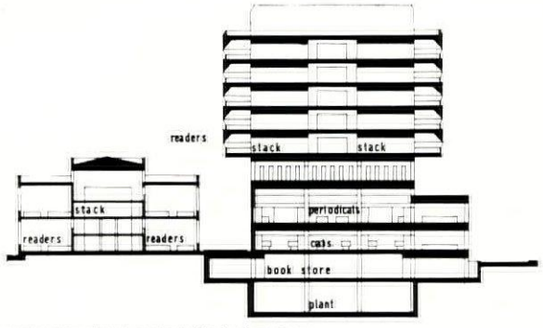
LIBRARY, HULL UNIVERSITY

Castle, Park, Dean, Hook

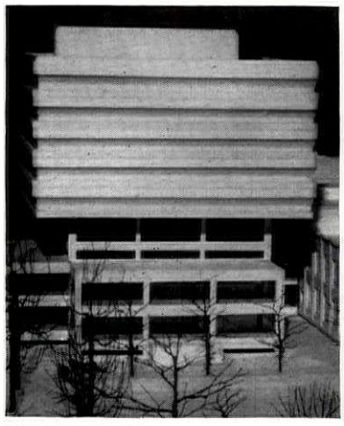
CLIENT: University of Hull.
SITE: Existing library completed 1960 in main campus on Cottingham Road to be extended north and west in very restricted area, abutting upon flank wall of 4-storey laboratory to north and perimeter road to west.
ACCOMMODATION: North extension, communal facilities with 250-seat 'after-hours' reading room with separate access. West extension: basement, plant; lower ground, store for 230,000 books with loading bay and work rooms; ground, catalogue, reference and work rooms; 1st floor, periodicals store and reading room, senior reading room, administration; 2nd floor, law library for 75 readers, Government publications; 3rd to 7th floors, main open access stack with perimeter carrels. Existing library to be converted into undergraduate library for 600 readers with 195,000 books in open access. Total library, 1,950 readers and 1,000,000 books.
STRUCTURE AND FINISHES: R.c. columns and walls with 1 ft. 6 in. deep, 4 ft. 6 in. square coffers. Vitrified clay tile cladding on structure, double-glazed aluminium windows to lower floors with tinted glass and internal blinds. Porcelain enamelled lightweight panels and double glazing on stack floors. Internally, plastered structure, demountable metal partitions, metal fittings. Floors, vinyl tiles with cork-backed p.v.c. in reading areas and stack.
SERVICES: West extension, full air-conditioning. North extension, plenum from existing plant. West, extension, 3 300 ft. per minute passenger lifts, two-way book conveyor to all floors.
COST: West extension, £972,500; north extension, £172,000. Fittings included.
BUILDING PERIOD: Autumn 1965–autumn 1968.
Quantity surveyor, Monk and Dunstone. Structural consultant, Ove Arup and Partners. Mechanical and electrical consultant, E. A. Pearce and Partners.



axonometric of first floor

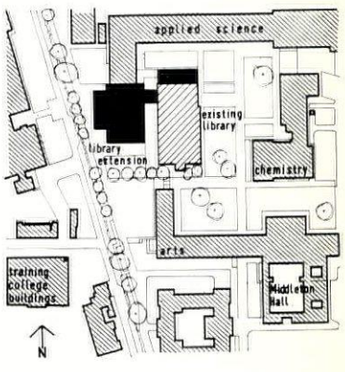


section through existing library (left) and extension

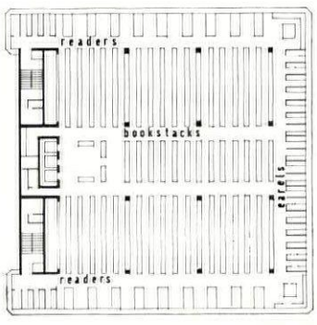


general view from south

ground floor plan



site plan

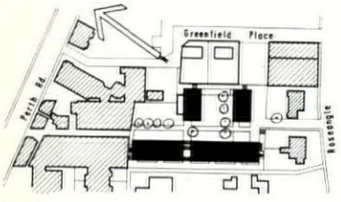


plan, third to seventh floors

STUDENT FLATS, QUEEN'S COLLEGE, DUNDEE

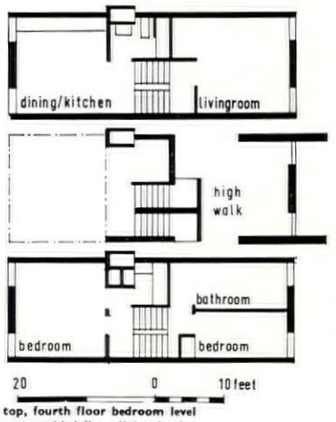
Napper, Errington, Lee, Collerton, Barnett, Allott

CLIENT: Queen's College, Dundee, University of St. Andrews.
SITE: Sloping site of 1 acre at Roseangle, formerly tramshed.
ACCOMMODATION: Peterson Hall, 200 students in flats for 6, 4 and 2 people, generally split-level maisonettes. Laundry and garages.
STRUCTURE AND FINISHES: Loadbearing brick crosswalls at 13 ft. 4 in. and 19 ft. 7 in. centres, blue facings with black tooled joints. Concrete floors and roof. Aluminium sliding sash windows. Internally, hardwood and plaster.
SERVICES: Oil-fired central heating, with artificial vent to service rooms.
COST: £240,000.
BUILDING PERIOD: January 1966–July 1967.
Partners-in-charge, Alec Collerton and John Errington. Job architect, James Collier. Assistants, Dan Elliott and William Hall. Quantity surveyor, W. J. R. Christie and Partners. Structural consultant, L. N. Henderson and Associates.

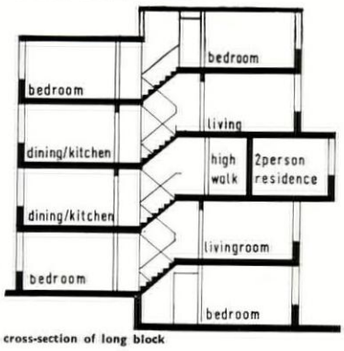


site plan

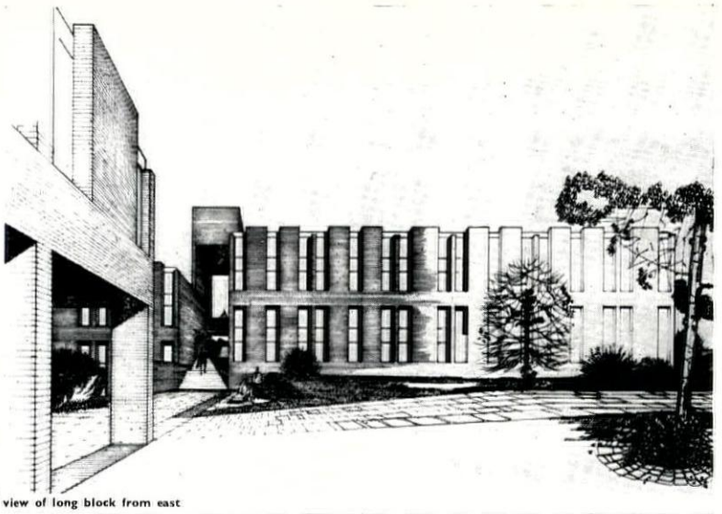

west elevation of long block

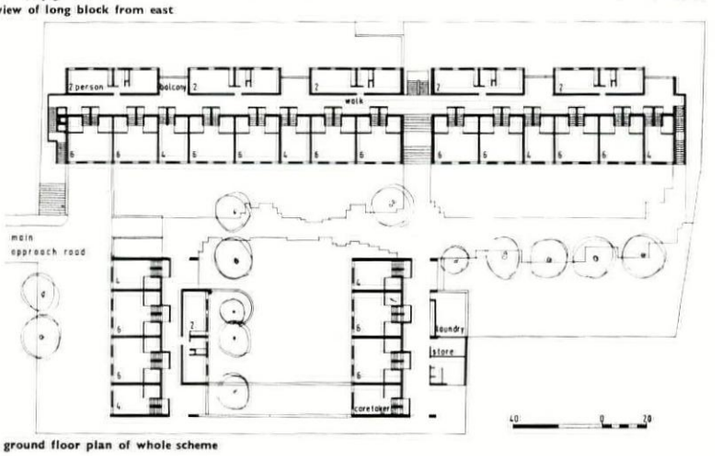


top, fourth floor bedroom level
centre, third floor living level
bottom, second floor access level



cross-section of long block


view of long block from east



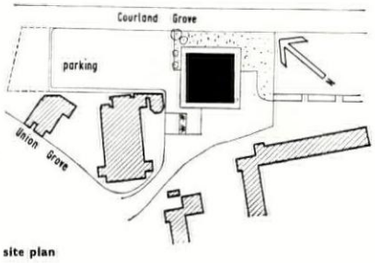
ground floor plan of whole scheme

HALL OF RESIDENCE, BATTERSEA COLLEGE OF TECHNOLOGY

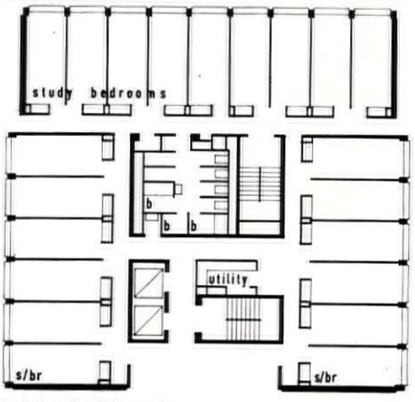
The Austin-Smith/Salmon/ Lord Partnership

CLIENT: Battersea College of Technology (University of Surrey).
SITE: 1 acre in Courland Grove, east of Wandsworth Road, between Stockwell and Clapham. L-shaped area alongside church with future public open space to north.
ACCOMMODATION: 189 study-bedrooms (147 male and 42 female) on 4th–12th floors, post-graduate flats on top floor, flats for caretaker, warden, bursar and other staff with service rooms on 2nd and 3rd floors. Common room and kitchen on lower 2 floors.
STRUCTURE AND FINISHES: In situ r.c. with lightweight aggregate, cast and exposed from unthicknessed boarded formwork. Precast infill panels with Cornish granite aggregate, metal windows in cedar frames. Internally, exposed concrete with painted lignacite partitions.
SERVICES: Oil-fired central heating and convectors.
COST: £387,500.
BUILDING PERIOD: January 1965–September 1966.
Partner-in-charge, Mrs. I. L. E. Austin-Smith. Associate-in-charge, J. Newton. Assistants, J. Bailey, P. S. Binns, N. A. Cornwell and I. B. Kennaway. Quantity surveyor, Nigel Rose and Partners. Structural consultant, Andrews, Kent and Stone. Mechanical and electrical consultant, J. Roger Preston and Partners.

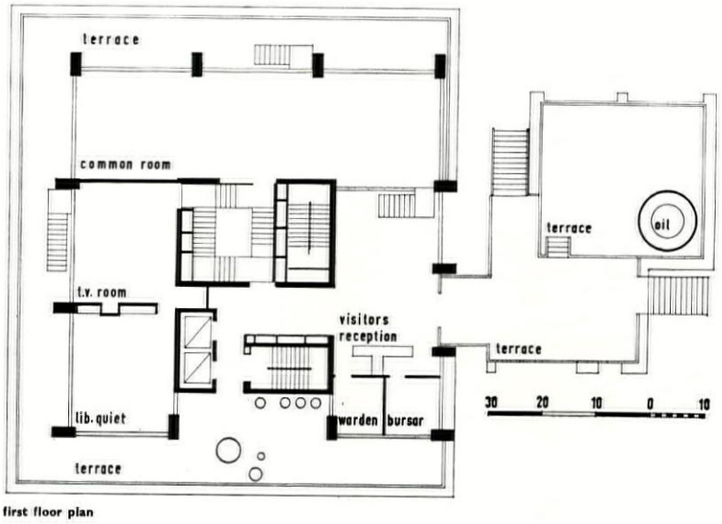

view from east



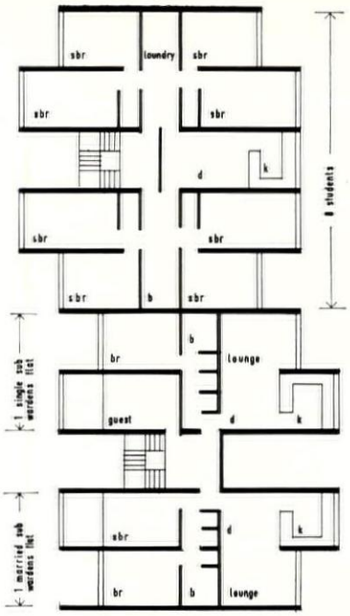
site plan



typical residential floor plan



first floor plan



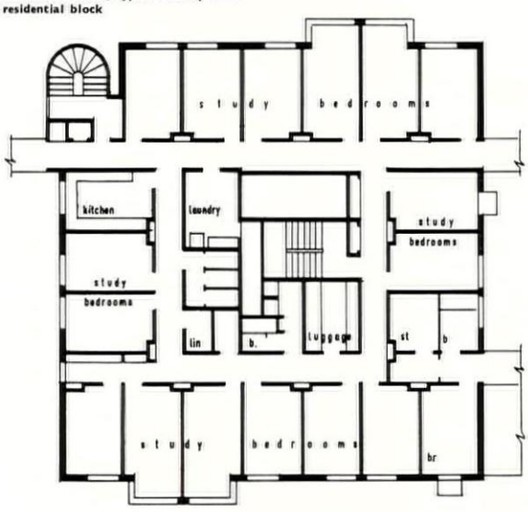
Richardson Road, typical floor plan of residential block

Richardson Road, amenity block from south, residential block on left

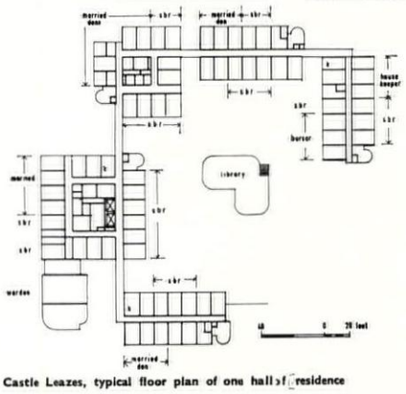
HALLS OF RESIDENCE, NEWCASTLE UNIVERSITY

Williamson, Faulkner Brown and Partners

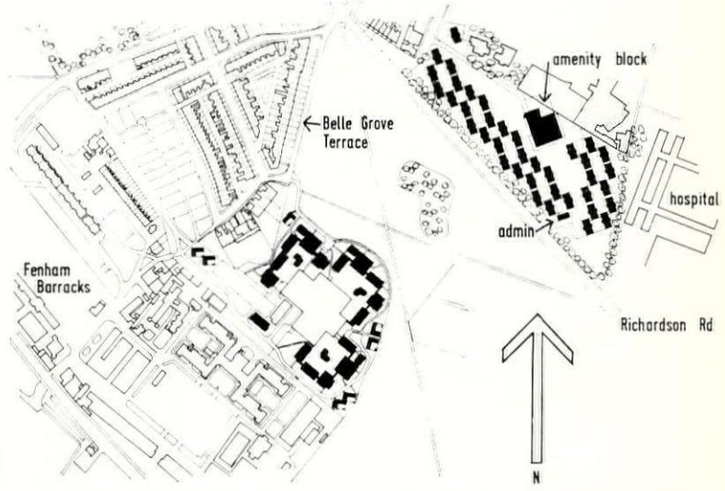
CLIENT: University of Newcastle upon Tyne.
SITE: 6.4 acres along Richardson Road, previously allotments, close to Castle Leazes Halls of Residence (see below), with Town Moor to north and new Victoria Infirmary (see AR, June 1965) to south-east.
ACCOMMODATION: 6 'quarters,' each housing 156 students in 6 3-storey houses, each floor housing 8 students around living-kitchen and 4 shower rooms. Central amenity block with boiler house, 350-seat cafeteria and kitchen, common rooms.
STRUCTURE AND FINISHES: Residences, loadbearing brickwork. Central block, steel and concrete frame with brick facings.
SERVICES: Oil-fired district heating.
COST: £1,350,000.
Partner-in-charge, H. Faulkner Brown. Associate-in-charge, W. F. Stonor. Assistants, D. H. Jones and D. Lawson.



Castle Leazes, typical floor plan of residential tower



Castle Leazes, typical floor plan of one hall of residence



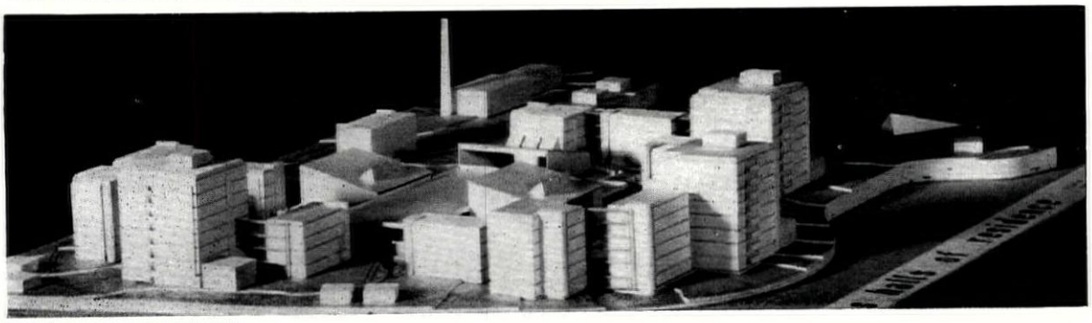
site plan, Castle Leazes on left, Richardson Road on right

Castle Leazes, view from near Richardson Road to north-east

HALLS OF RESIDENCE, NEWCASTLE UNIVERSITY

Douglass Wise and Partners

CLIENT: University of Newcastle upon Tyne.
SITE: 7 acres of Town Moor exchanged for other land with City.
ACCOMMODATION: Castle Leazes, 3 halls for 1,012 men students. 7 porters' houses, 3 wardens' houses. Flats for 36 domestic staff and 27 dons within blocks.
STRUCTURE AND FINISHES: Residential blocks, calculated brickwork with in situ r.c. staircases and floors, generally plastered walls and ceilings. Central communal area, selected common bricks painted as wall finishes, loadbearing brick on ground floor, columns above.
SERVICES: Heating, high pressure hot water from shared boiler house on Richardson Road site (see above).
COST: Phase 1, £1,046,000. Phase 2, £554,000.
BUILDING PERIOD: Whole scheme, March 1966–October 1968.
Partners-in-charge, Douglass Wise, Yvonne Wise and F. Alan Moody. Assistants, G. Hagon, I. Cook, I. Finlay, D. Owen, A. Tickell, D. Eckelmann, J. Bland and D. Turner.

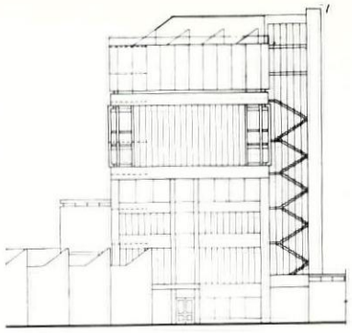


Castle Leazes, eastern corner of model

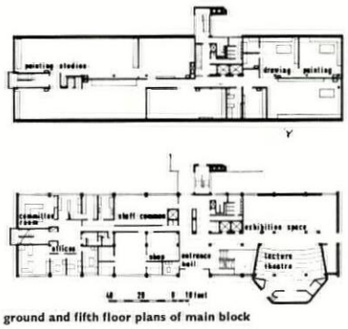
COLLEGE OF ART AND DESIGN, COVENTRY

Terence Gregory, City Architect and Planning Officer

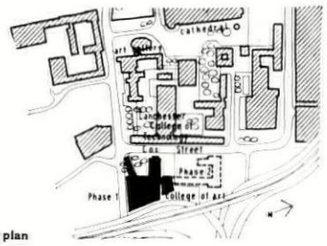
CLIENT: Coventry City Council.
SITE: Phase 1, 1.85 acres east of Cathedral and Lanchester College, close to elevated section of ring road. Phase 2 adjoining.
ACCOMMODATION: Phase 1, 700 full-time students, 1,500 part-time, total floor area 100,700 sq. ft. Departments of fine art, graphic design, sculpture, 3-dimensional design, printing, industrial design and photography, together with lecture theatre, library, communal and dining facilities. Car parking under elevated ring road.
STRUCTURE AND FINISHES: 7-storey block, in situ r.c. columns and beams, precast floors. Workshops, light tubular steelwork. Fair-faced concrete frame, infill of precast concrete and dark brown engineering bricks. Internally, fair-faced sandlime brick walls, floors of p.v.c. tiles, quarries and paving slabs.
SERVICES: Heating, low pressure hot water radiators at cill level, radiant panel heaters in north lights. Mechanical ventilation to lecture theatre, library and photographic department. Partial humidity control in printing department.
COST: £635,000.
BUILDING PERIOD: 20-month negotiated contract, September 1965 start delayed by Government. Principal architect, schools division, F. J. Barnett. Assistant principal, John S. Smith. Assistants, B. E. Claypole and Janet Cotton.



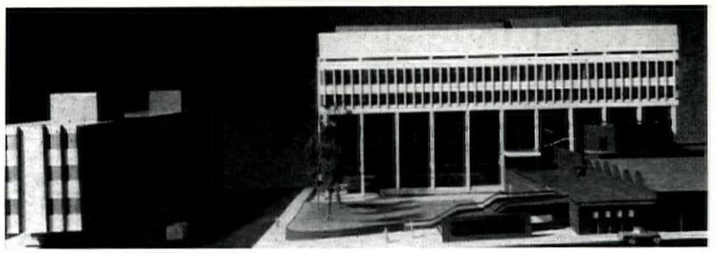
east elevation



ground and fifth floor plans of main block



site plan



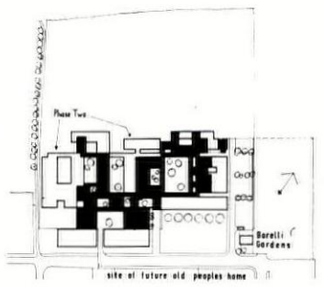
general view from south, with workshops on right

floor plan of workshops

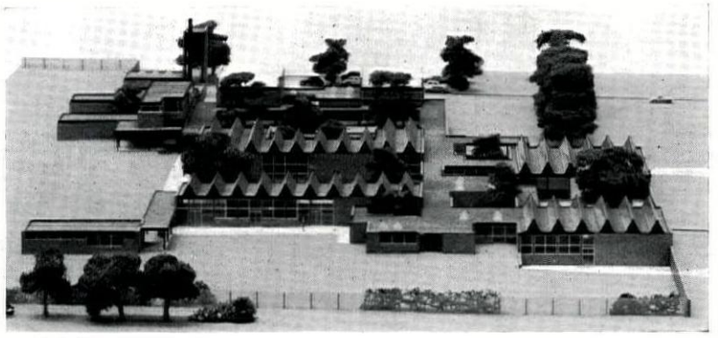
SCHOOL OF ART, FARNHAM, SURREY

Raymond Ash, County Architect

CLIENT: Surrey County Council.
SITE: The Hart, an open field of 10 acres (5 for building) sloping upwards 14 ft. away from town to south. Overlooking Farnham Castle and open land.
ACCOMMODATION: Phase 1, for 244 students, 34,150 sq. ft. Exhibition hall, library and lecture rooms, dining and common rooms grouped round cloister with future admin. Entrance hall at junction of cloister and wide display gallery, off which open teaching departments in inter-related groups, painting, sculpture, pottery, textiles and (in Phase 2) furniture—all capable of individual expansion in Phase 2.
STRUCTURE AND FINISHES: Exposed steel frame, painted, with infill red brick in local tradition, deeply raked joints. Roofs to studios and workshops of long span triangular steel trusses with north lights. Box columns independent of walls, allowing unobstructed floor space, flexibility in partitioning and removal of external walls for expansion without disturbing roof.
SERVICES: Oil-fired low pressure central heating with unit heaters in studios, cill radiators elsewhere.
COST: Phase 1: £220,000.
BUILDING PERIOD: 18-month contract, delayed by Government. Deputy county architect, E. A. W. Ixer. Assistant county architect, J. M. Kidall. Principal group architect, D. A. Callaghan. Job architect, Rodney Stone.

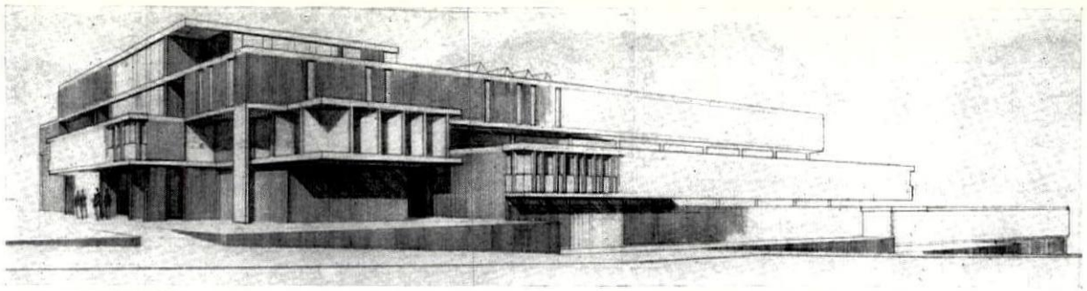


site plan



general view from west

ground floor plan

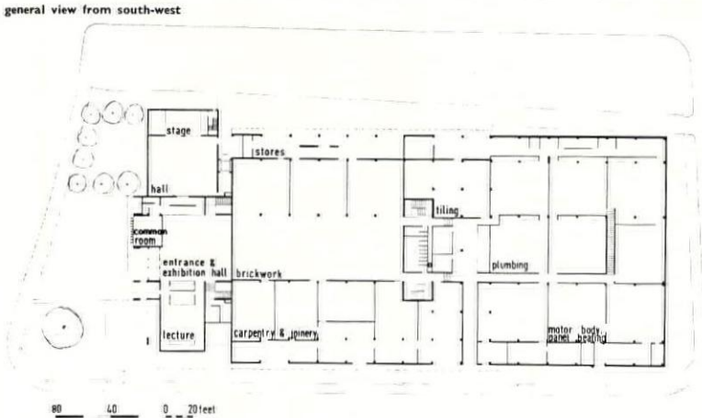


general view from south-west

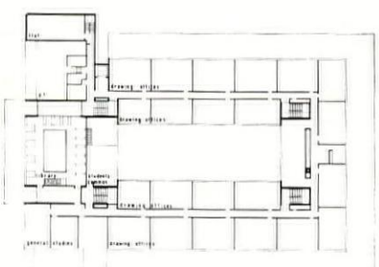
BRANCH COLLEGE OF BUILDING, LEEDS, YORKS

Building Design Partnership in association with E. Weston Stanley, City Architect

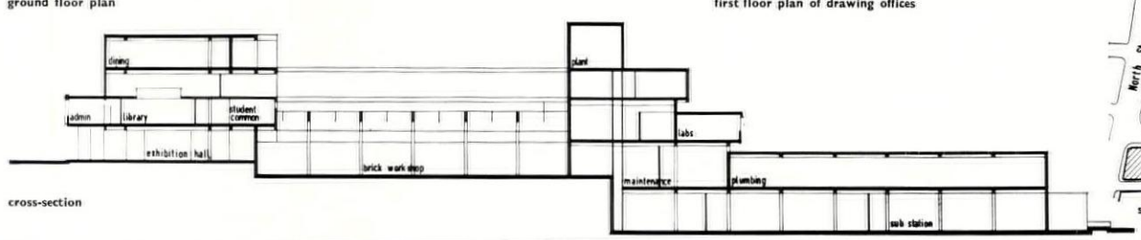
CLIENT: Leeds City Council.
SITE: 2.15 acres half-mile north of city centre, sloping 1 in 20.
ACCOMMODATION: Teaching space for 2,500 part-time, 150 full-time students. Parking bays for 26 cars.
STRUCTURE AND FINISHES: In situ r.c. frame and floors, roof of steel beams and woodwool slabs. Facing brick externally with concrete mullions and glazed panels to classroom floors.
SERVICES: Oil-fired heating by convectors, radiant panels and warm air.
COST: £657,910.
Partners-in-charge, W. White and G. L. C. Rossant. Job architects, D. A. Millard and E. M. Bailie. Assistant, J. Townsend.



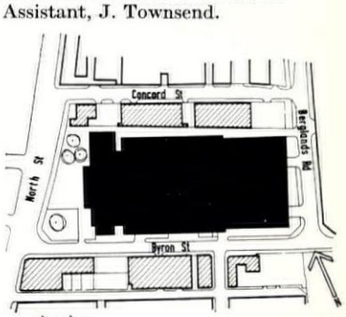
ground floor plan



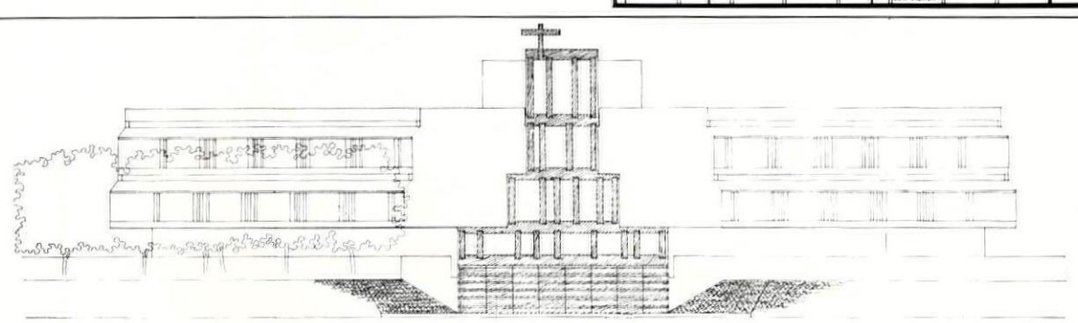
first floor plan of drawing offices



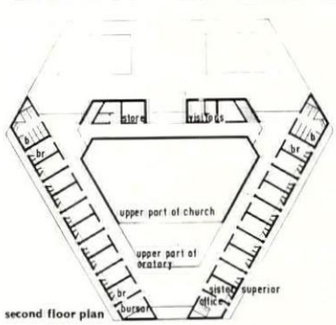
cross-section



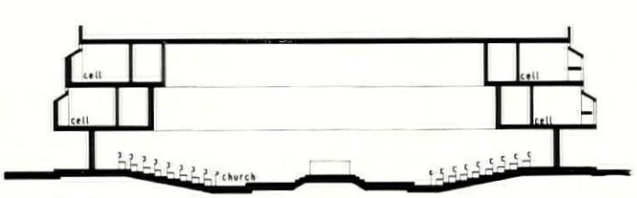
site plan



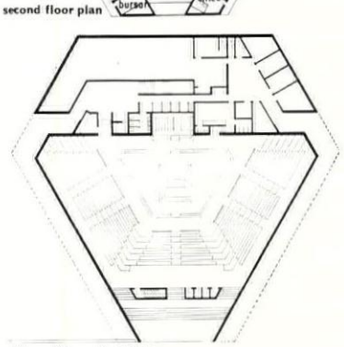
south elevation



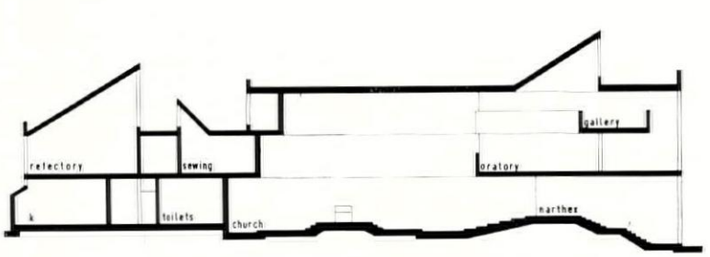
second floor plan



cross-section



ground floor plan

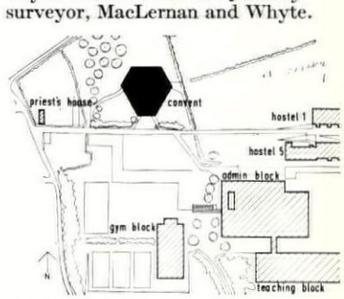


longitudinal section

COLLEGE CHAPEL AND CONVENT, BEARSDEN, SCOTLAND

Gillespie, Kidd and Coia

CLIENT: Sisters of Notre-Dame-de-Namur.
SITE: 3 acres next to Notre Dame College of Education, triangular plot on 1 : 11 south-west slope.
ACCOMMODATION: Convent for 40 nun teachers at college in self-contained building with chapel for 600 college students.
STRUCTURE AND FINISHES: Combination of r.c. frame and loadbearing crosswalls, with rendered finish, copper cladding and shuttered concrete. Internally, cement plastered, quarry tile and hardwood floors, and softwood furnishings.
SERVICES: Electrical floor heating and convectors.
COST: £120,000.
BUILDING PERIOD: Autumn 1965–spring 1967.
Assistants-in-charge, A. MacMillan and I. Metzstein. Assistants, J. Taylor and G. Barrett. Quantity surveyor, MacLernan and Whyte.

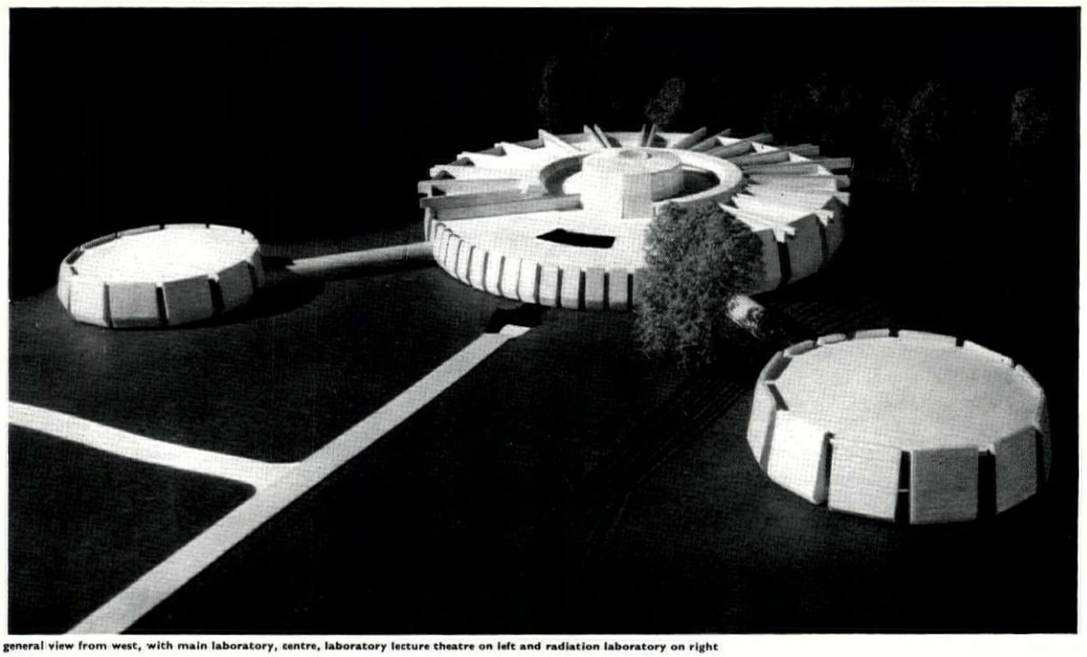


site plan

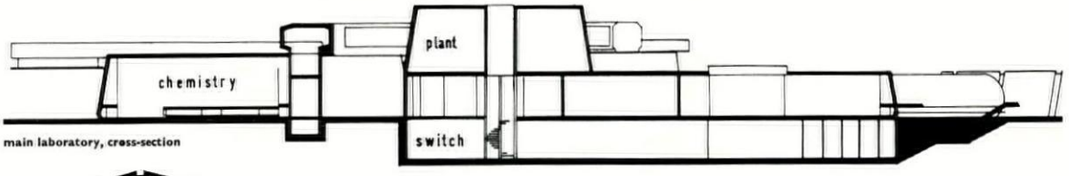
LABORATORIES, MILITARY COLLEGE, SHRIVENHAM, WILTS

Gollins, Melvin, Ward and Partners

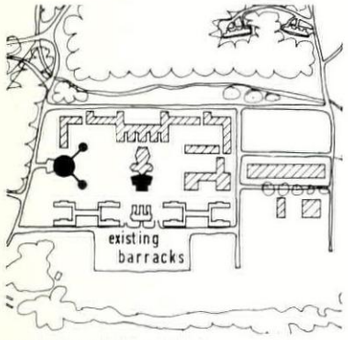
CLIENT: Ministry of Public Building and Works.
SITE: Royal Military Collage of Science, 8 miles from Swindon, flat and grassed, with fine trees, next to existing cavalry barracks of 1936.
ACCOMMODATION: Rutherford Laboratories for teaching and research in nuclear science for 50 to 60 students, including special lecture theatre. General 250-seat lecture theatre as separate building.
STRUCTURE AND FINISHES: single-storey, r.c. with battered walls and only nominal glazing. Internally, specially sprayed plastic finish in laboratories for ease of cleaning possibly contaminated surfaces.
SERVICES: Specially designed ventilation system to keep air free from contamination and special drainage for radio-active waste.
COST: £440,000.
BUILDING STARTS: March 1966
Assistant, P. A. Bailey, Quantity surveyor, Gardiner and Theobald. Structural consultant, Ministry of Public Building and Works (C. & S.). Mechanical and electrical consultant, C. W. Glover and Partners.



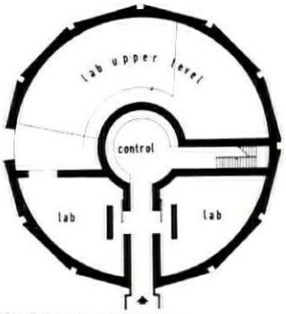
general view from west, with main laboratory, centre, laboratory lecture theatre on left and radiation laboratory on right



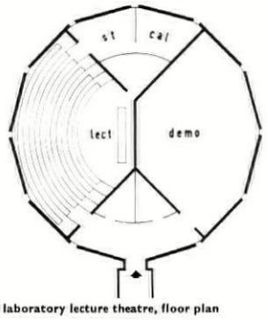
main laboratory, cross-section



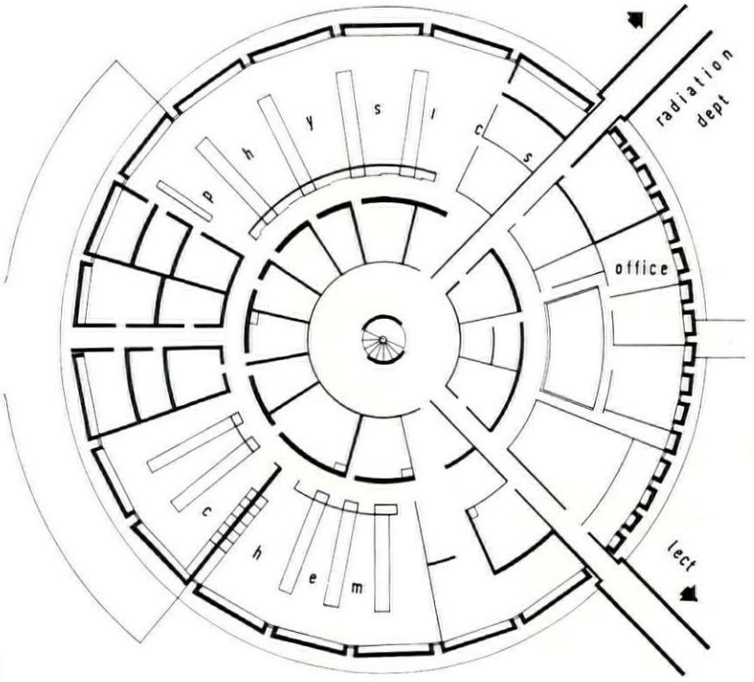
site plan, future buildings hatched



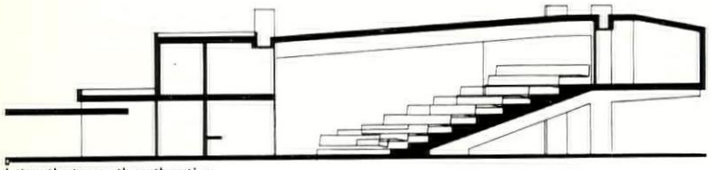
radiation laboratory, floor plan



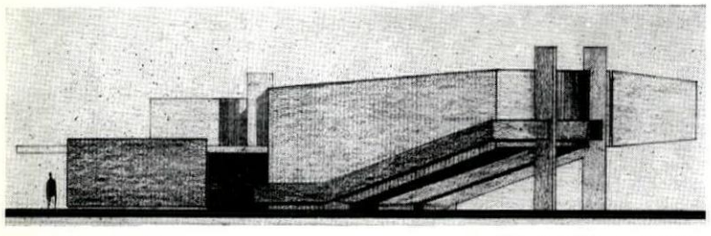
laboratory lecture theatre, floor plan



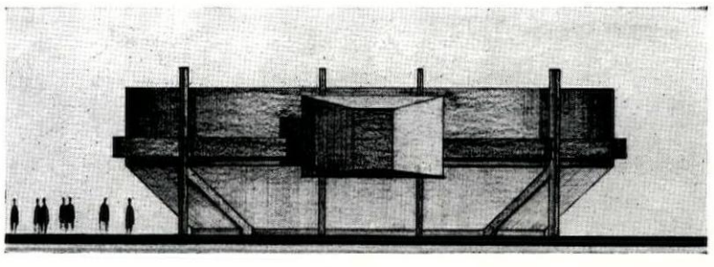
main laboratory, floor plan



lecture theatre, north-south section



lecture theatre, east elevation



right, lecture theatre, north elevation

DEVELOPMENT PLAN, ROYAL MILITARY ACADEMY, SANDHURST, BERKS

Gollins, Melvin, Ward and Partners. Sir Hugh Casson, consultant on master plan

CLIENT: Ministry of Public Building and Works.

SITE: ½ mile from Camberley on A30, next to existing Regency and Edwardian buildings, heavily wooded with well-established lawns and playing fields.

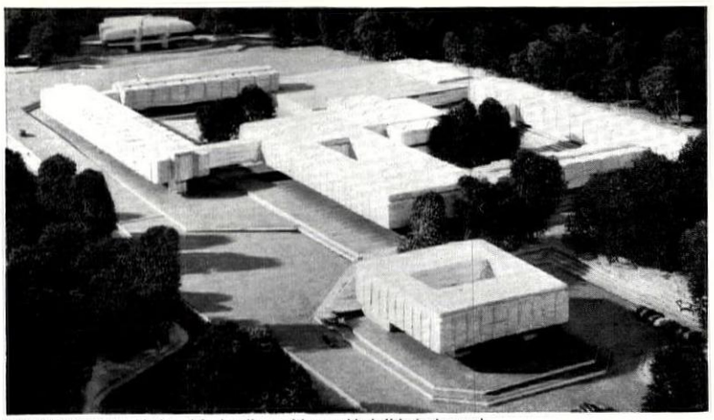
ACCOMMODATION: Phase 1, cadet college with residential and instructional accommodation for 330 cadets, 100,000 sq. ft. Administration building, 22,000 sq. ft. Assembly hall with 1,200 seats, 17,000 sq. ft. Future phases include hospital, teaching buildings, stores, housing, new dining halls for Old and New Colleges.

STRUCTURE AND FINISHES: College and administration building, structural precast concrete frame with in situ waffle slab floors and sandlime brick partitions. Study bedroom blocks, loadbearing sandlime brick crosswalls with in situ flat slab floors. Assembly hall, steel frame above first floor level with tubular steel spacegrid roof. External cladding, exposed aggregate precast concrete units with windows and door frames in bronze anodized aluminium.

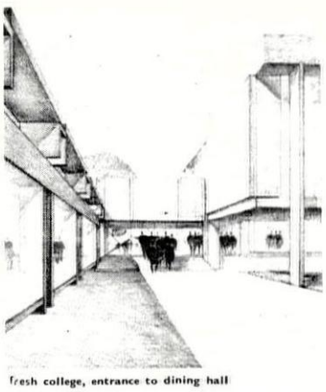
SERVICES: Heating generally by radiators below windows, served with low temperature hot water from central calorifier chamber. Fan-assisted convectors in dining room. Plenum ventilation system in assembly hall and college model rooms. Mechanical ventilation in some service rooms.

COST: Phase 1, £1,534,000. Total cost of project, £3,770,000.

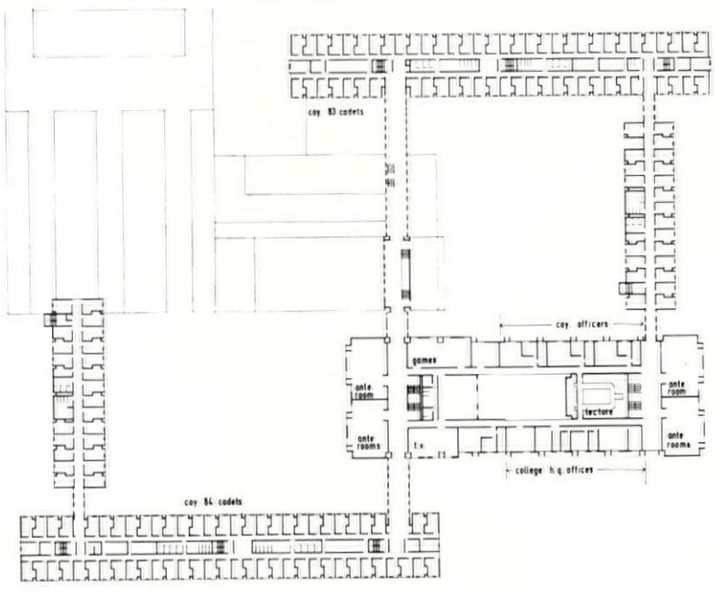
BUILDING STARTS: March 1966. Assistants, M. A. Bignell and M. J. Litchfield. Quantity surveyor, Langdon and Every. Structural consultant, Scott and Wilson, Kirkpatrick and Partners. Mechanical and electrical consultant, W. S. Atkins and Partners. Acoustical consultant, H. Humphreys. Special consultant, Army Kinema Corporation.



view of headquarters block and fresh college, with assembly hall in background

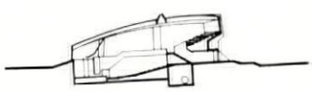


fresh college, entrance to dining hall

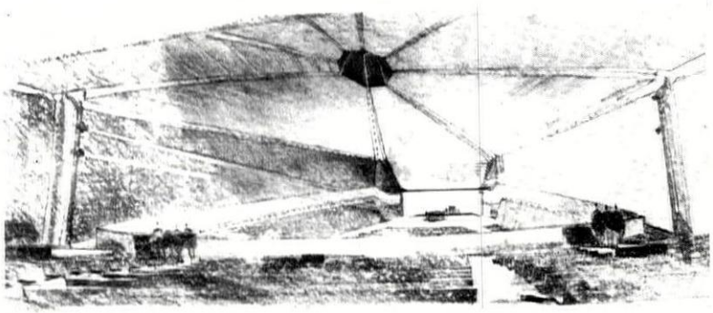


fresh college, first floor plan

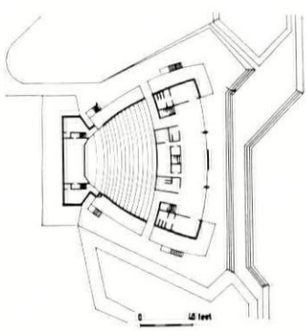
headquarters, second floor plan



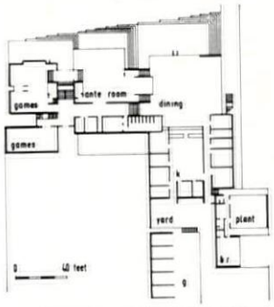
assembly hall, section



interior of assembly hall

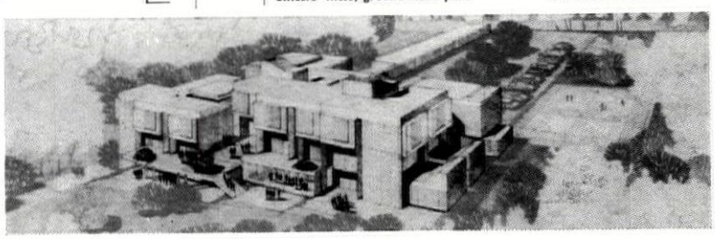


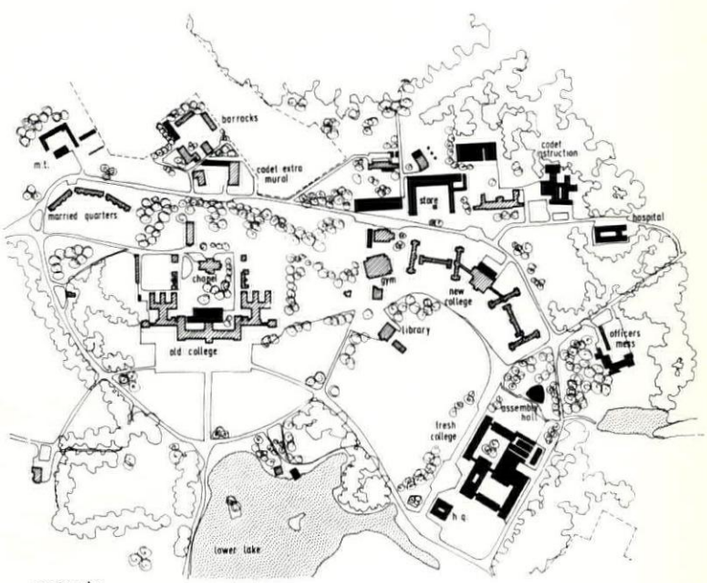
assembly hall, floor plan



officers' mess, ground floor plan

view from south-east



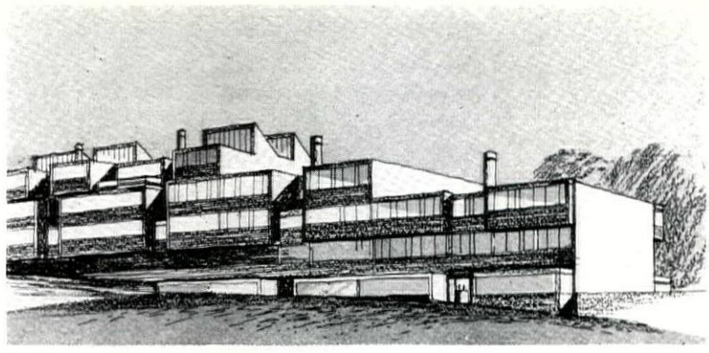


master plan

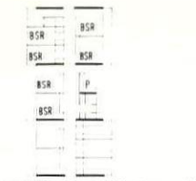
COLLEGE OF DOMESTIC SCIENCE, EDINBURGH

Andrew Renton and Associates

CLIENT: Edinburgh College of Domestic Science.
SITE: 22 acres at Clermiston, gently sloping east-west, with mature trees across lower end, in residential area.
ACCOMMODATION: Teaching space for 900 students, in institutional management, domestic cookery, science, art and needlecraft, with library and communal accommodation including assembly hall, administration, lecture theatre, gymnasium, refectories and students' union. 3 halls of residence for 450 students.
STRUCTURE AND FINISHES: Calculated loadbearing brick crosswalls with in situ r.c. floor and roof slabs. Externally, loadbearing cavity walls with rough textured off-white rendering in Scottish harling tradition, contrasting spandrel walls of blue-black asbestos slates. Internal walls generally plastered and painted with some tiling, pin boards in study bedrooms, tiled floors.
SERVICES: Oil-fired boilers serving low pressure hot water system, individual electric heating units in study-bedrooms with background heating elsewhere in residential blocks. Ventilation, localized for kitchens, supplementary for communal areas.
COST: £1,500,000.
BUILDING PERIOD: Early 1967–June 1969.
Principal, Andrew Renton. Associate-in-charge, Humphrey Wood. Assistants, Kenneth Morrice and John Andrews. Quantity surveyor, Gleeds (London). Structural consultant, Ove Arup and Partners. Mechanical and electrical consultant, J. Roger Preston and Partners.



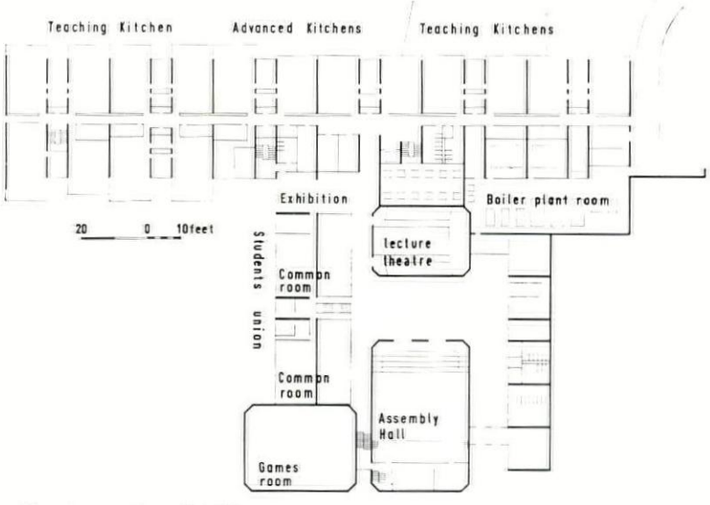
view of teaching block from north-west



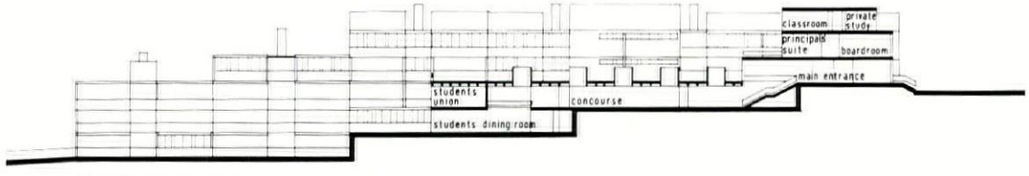
part of residential block, type A

part of residential block, type B

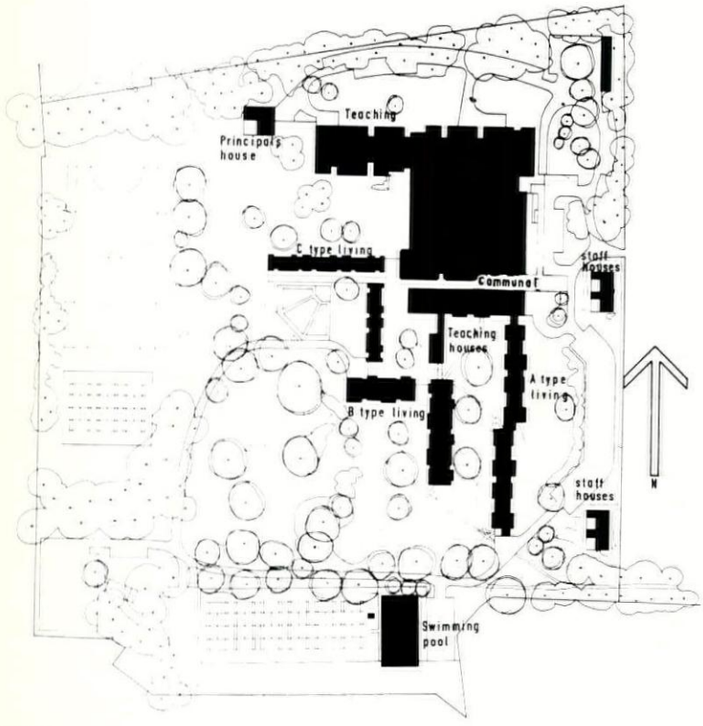
part of residential block, type C



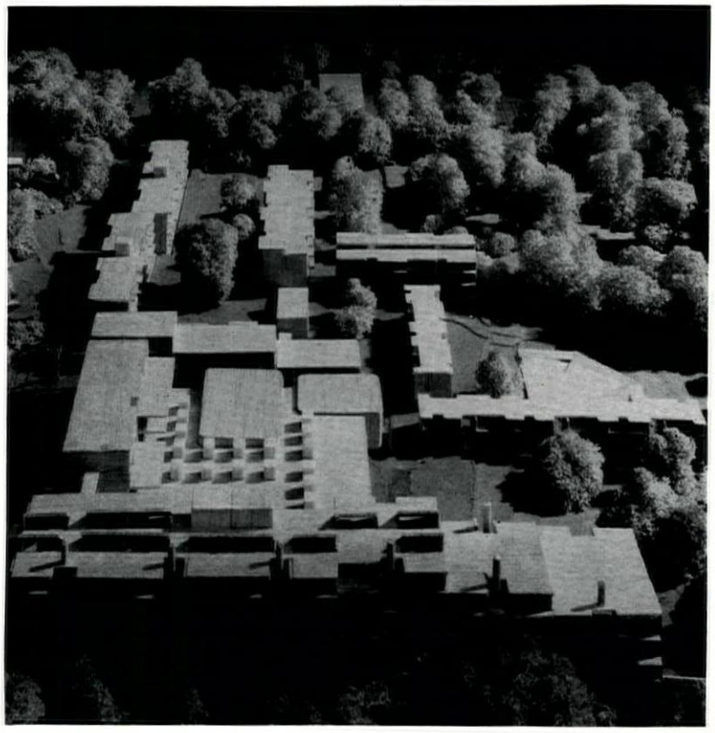
teaching and communal areas, floor plan



east-west section through communal area



site plan



general view from north

SECONDARY SCHOOL, PIMLICO, LONDON

Hubert Bennett, Architect to the GLC and Inner London Education Authority

CLIENT: Inner London Education Authority.

SITE: Building to be based on garden-basement level, 9 ft. below perimeter roads, of existing terraces of 1850, on 4½-acre rectangle adjoining St. George's Square. 3 intermediate streets to be cleared.

ACCOMMODATION: Classrooms and specialist teaching rooms for 1,725 children, including 225 in Sixth Form. Science, housecraft, needlework, workshops, music rooms, 2 gymnasia, swimming pool, assembly hall, 8 houserooms, geography, history and commerce, language and maths laboratories, library and pottery rooms. Self-contained sixth form with small teaching rooms, 2 common rooms, lecture rooms and individual study cubicles. Schoolkeeper's house.

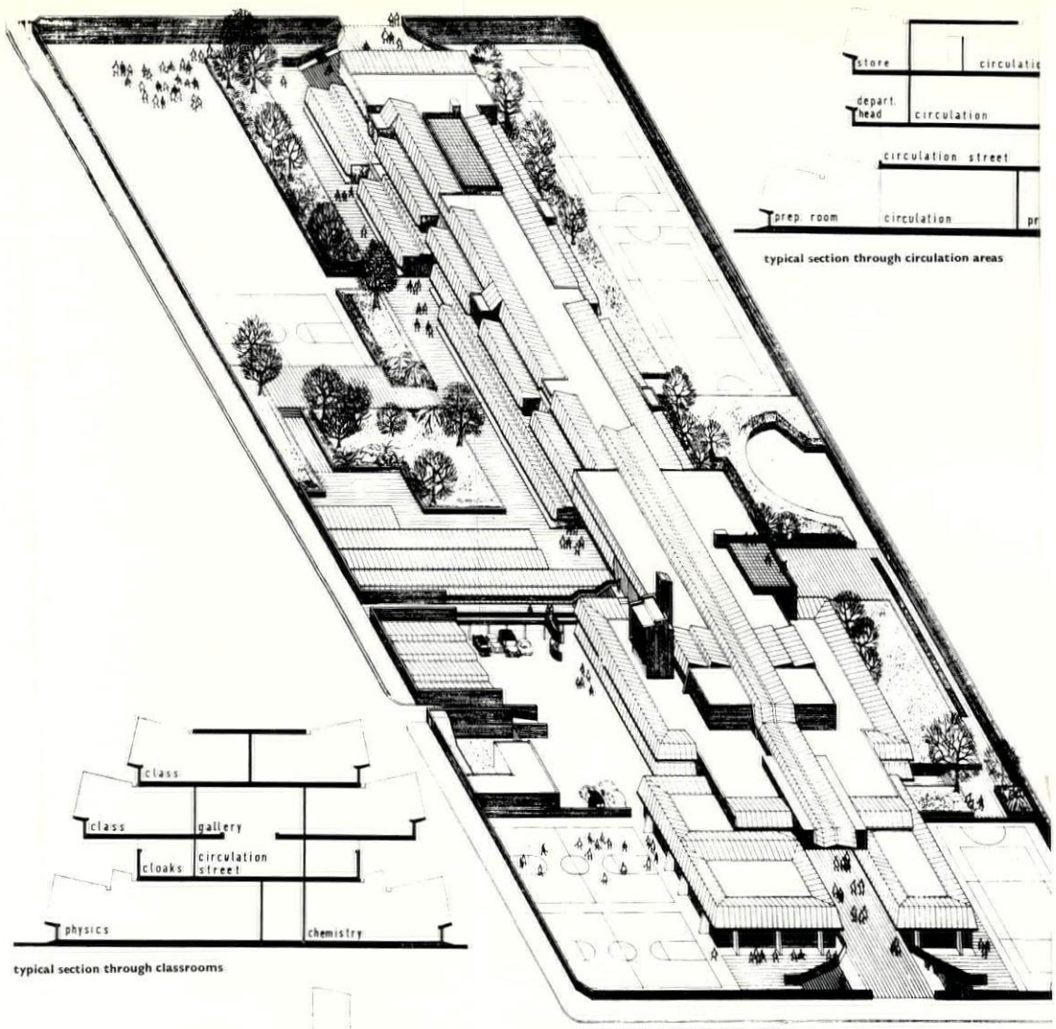
STRUCTURE AND FINISHES: In situ r.c. lightweight aggregate frame, floor and roof slabs, external walls and crosswalls. External walls profiled with horizontal or vertical grooves. Internal walls and slab soffits shuttered smooth and decorated direct. Storey height internal partition slabs decorated direct. Variety of wood, tile and slab floors. Acoustic timber panelling to assembly hall. Double and single glazed aluminium patent glazing, internal blinds. Roof glazing mostly sandwich construction for solar heat control.

SERVICES: Low pressure hot water heating from oil-fired boilers to radiators and forced air convectors. Mechanical ventilation to internal lavatories and changing rooms.

COST: £650,000, excluding siteworks.

BUILDING PERIOD: April 1967–July 1969.

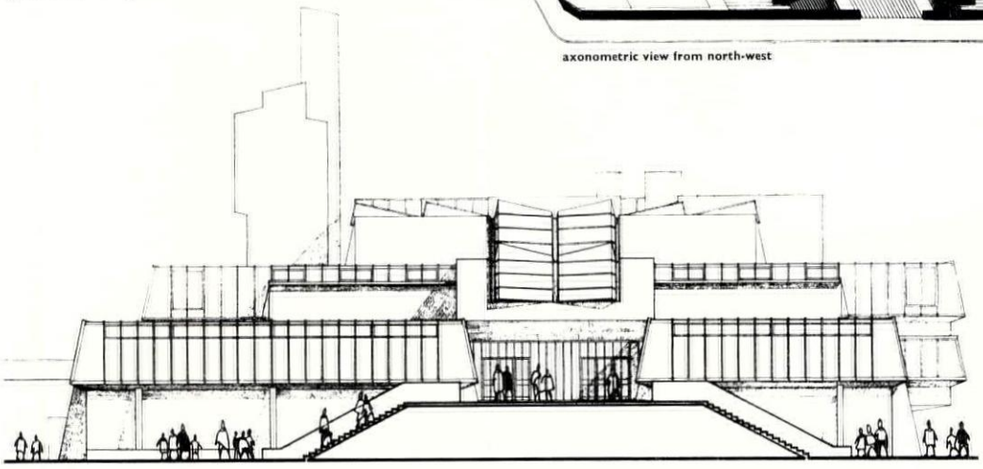
Education architect, Michael Powell. Schools architect, Cedric Hartland. Assistant schools architect, Ronald W. Robson-Smith. Group leader and job architect, John Bancroft. Quantity surveyor, M. F. Rice. Structural engineer, J. H. Humphreys. Electrical consultant, C. A. Belcher. Mechanical consultant, Zisman, Bowyer and Partners.



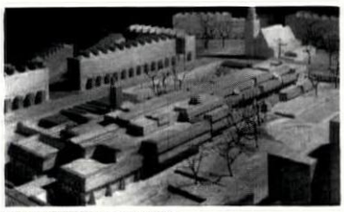
typical section through circulation areas

typical section through classrooms

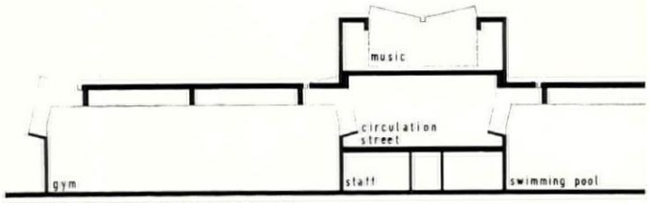
axonometric view from north-west



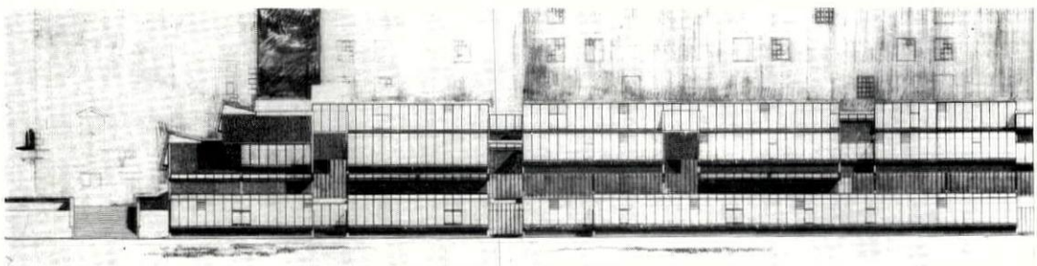
west elevation



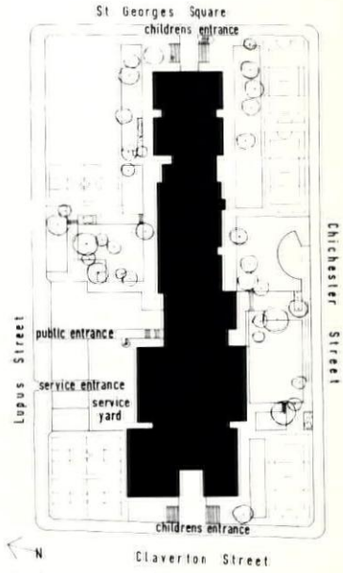
general view from south-west



section through gymnasium and swimming pool



north elevation to Lupus Street

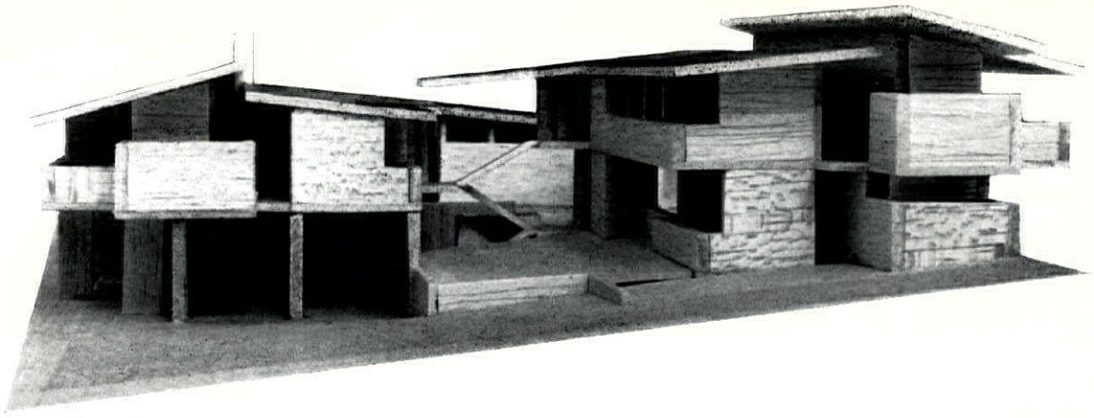


site plan

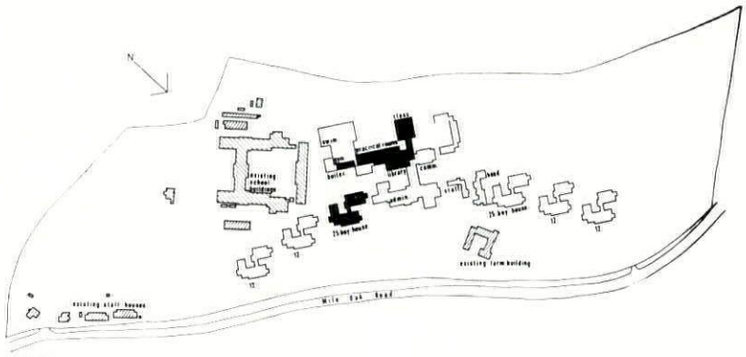
APPROVED SCHOOL, PORTSLADE, SUSSEX

Richard Sheppard, Robson and Partners, in association with J. Catchpole, East Sussex County Architect

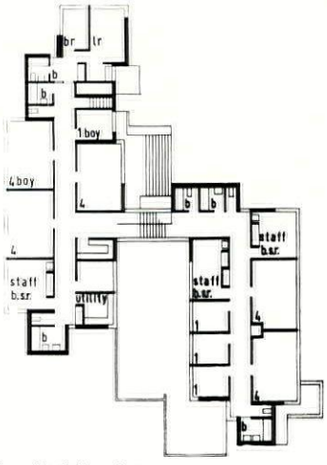
CLIENT: East Sussex County Council, in succession to LCC.
SITE: Mile Oak Road, grassed ridge of South Downs, 5 miles north-west of Brighton, next to former Industrial School of 1903.
ACCOMMODATION: Phase 1: House block with 4- and single-bedroom units for 25 boys, quiet room, common room, dining room, kitchen, utility rooms; 3-bedroom flat for housemaster, 1-bedroom flat for housemother, 3 single-bed staff units. Teaching block with 2 classrooms for 22 boys, 2 for 15, practical rooms, library, admin.
STRUCTURE AND FINISHES: Loadbearing light-red facing brickwork, r.c. first floor slab, timber monopitch roofs clad in copper. All timber treated with dark brown preservative.
SERVICES: Oil-fired boilers, radiators and convectors.
COST: Phase 1, £105,000. Whole scheme, £500,000.
BUILDING PERIOD: September 1965–March 1967.
Partner-in-charge, W. F. Mullins, Assistant, I. S. Stevenson. Quantity surveyor, Mercer and Miller. Structural consultant, Clarke, Nicholls and Marcel. Mechanical consultant, Greatorex and Partners. Electrical consultant, Brown and Hooker.



view of typical house block



site plan



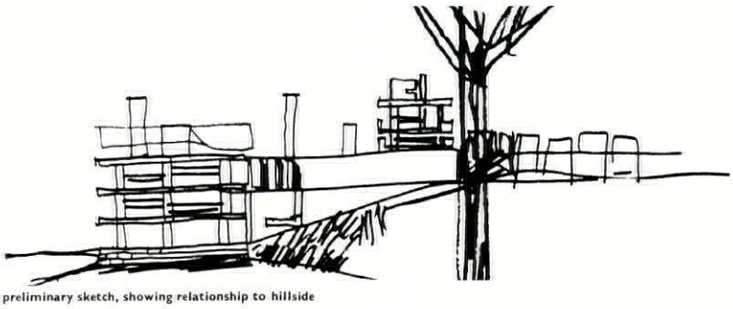
house block, floor plan

SECONDARY SCHOOL, ILFRACOMBE, DEVON

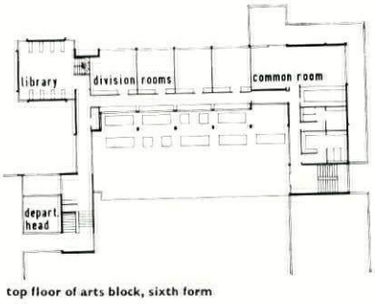
Stillman and Eastwick-Field in association with R. N. Guy, County Architect

CLIENT: Devon County Council.
SITE: 10 acres of steeply sloping high ground, no trees, overlooking seaside town with wide views.
ACCOMMODATION: For 990 pupils on house room system, with junior school as separate block. 4-storey block of classrooms and houserooms used for dining. Practical rooms round courtyard. 6th form on highest level. Drama hall, gymnasium and sports hall in separate block down slope reached by bridge. Parking for 17 cars and school buses.
STRUCTURE AND FINISHES: In situ r.c. frame board marked, with concrete block infill. Contrasting sports block, steel frame with asbestos infill panels.
SERVICES: Oil-fired low pressure hot water serving convectors and radiators.
COST: £430,000.
BUILDING STARTS: March 1966.
Assistant, Robert Bridges, Quantity surveyor, Harry Trinick and Partners. Structural consultant, Charles Weiss and Partners. Mechanical consultant, David Kut and Partners. Electrical consultant, Peter Jay and Partners.

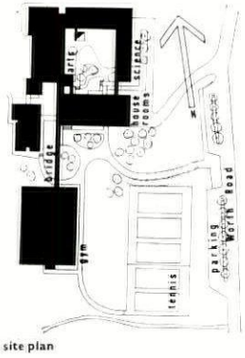
general view, showing contrast in forms between teaching areas and sports block (left)



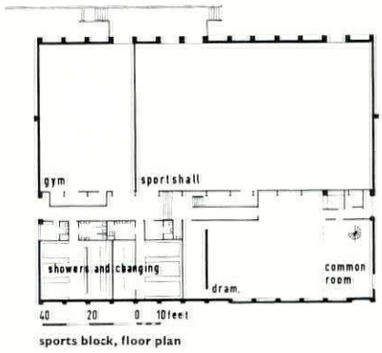
preliminary sketch, showing relationship to hillside



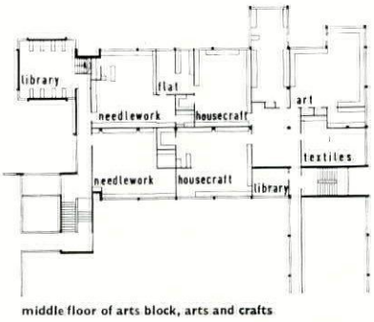
top floor of arts block, sixth form



site plan



sports block, floor plan



middle floor of arts block, arts and crafts

MODEL VILLAGE FOR THE HANDICAPPED, SYMINGTON, AYRSHIRE, SCOTLAND

Michael Laird

CLIENT: Scottish Hansel Village Circle.

SITE: 25 acres including playing fields around existing country house, moderately wooded, gently sloping.

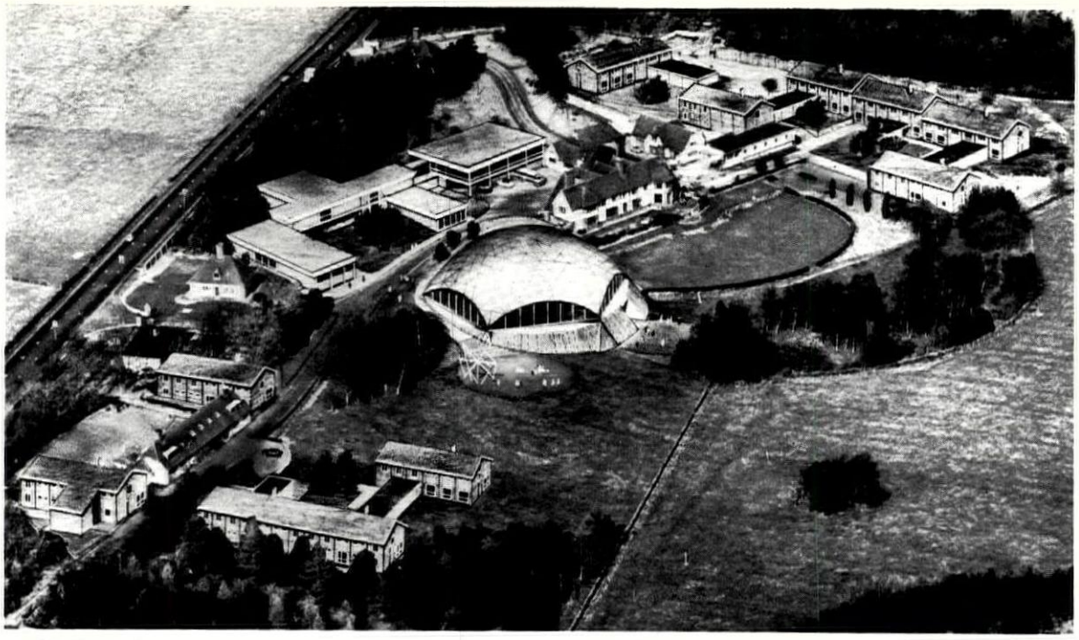
ACCOMMODATION: Dormitory/living units for 300 trainees, each holding 20–30 trainees and foster parents, and sanatorium for 30. Dome of 20,000 sq. ft., enclosing gymnasium, exhibition space, small pool and auditorium seating 400. Open-plan sheltered workshop areas combined with shop, canteen and stores. Trainees progress from general education in dome to craftwork, and to industrial and agricultural production as normal employees.

STRUCTURE AND FINISHES: Residential, turf-roofed log frame. Dome, prefabricated aluminium geodesic stressed skin dome with mill-finish aluminium panels externally and sprayed limpet asbestos finish internally. Workshops, prefabricated steel space frame and main structure.

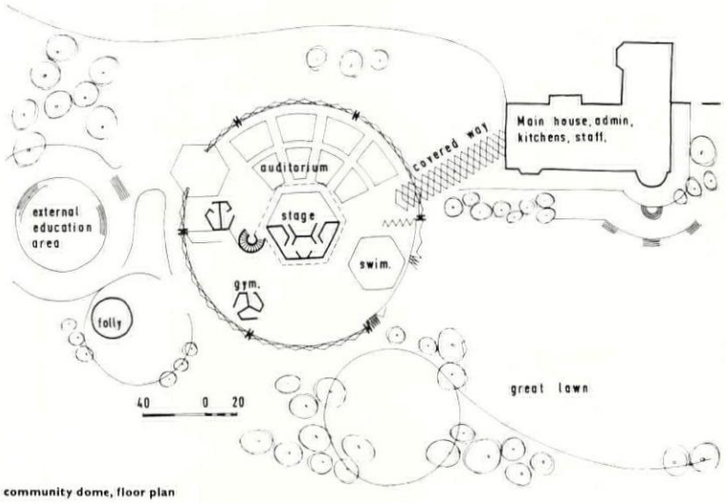
SERVICES: Electric unit heaters to dome, low pressure hot water.

COST: Residential blocks, £3 8s. 9d. per sq. ft., including double glazing and import duties.

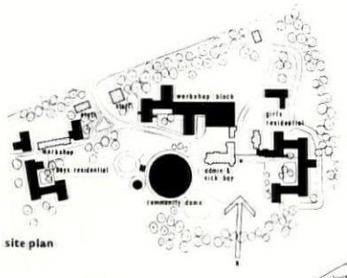
BUILDING PERIOD: First dormitories, September 1965–January 1966. Dome, September–December 1966. Assistant, Peter Speakman.



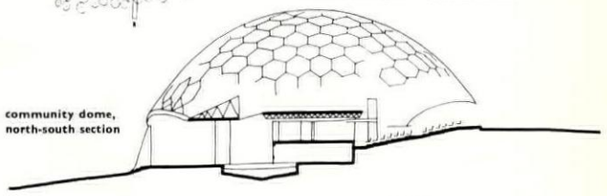
general view from south-west



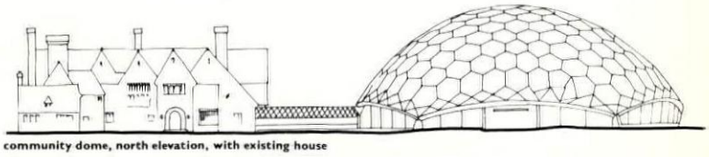
community dome, floor plan



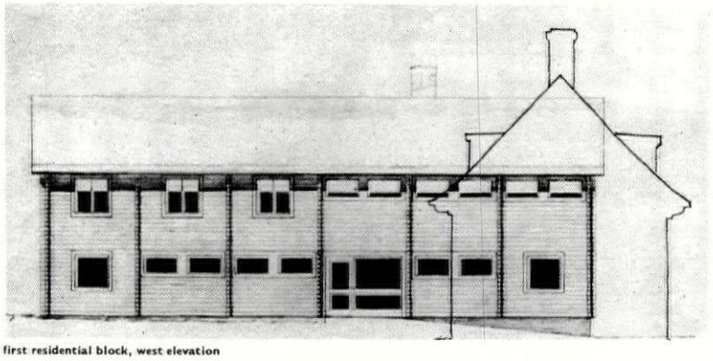
site plan



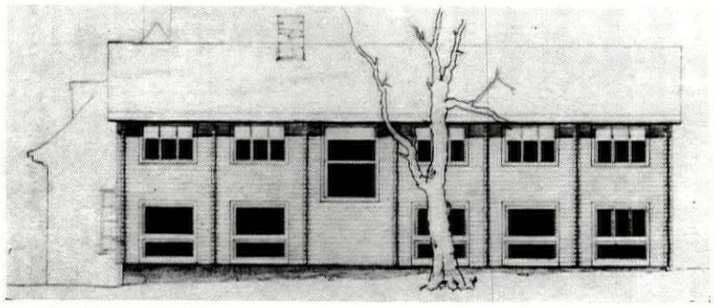
community dome, north-south section



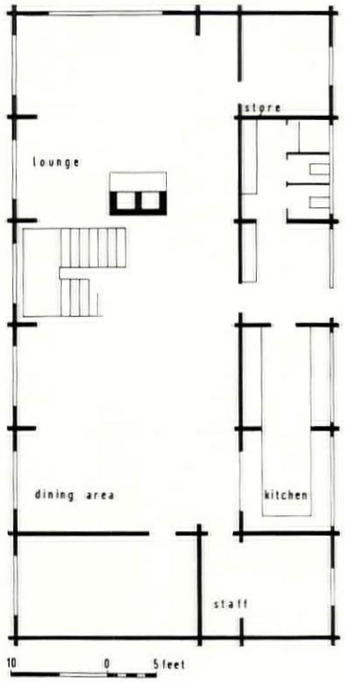
community dome, north elevation, with existing house

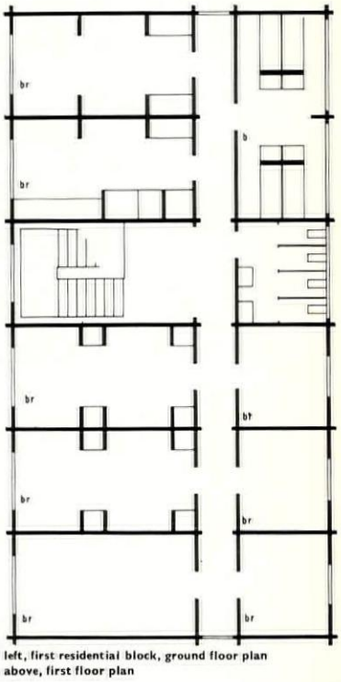


first residential block, west elevation



first residential block, east elevation



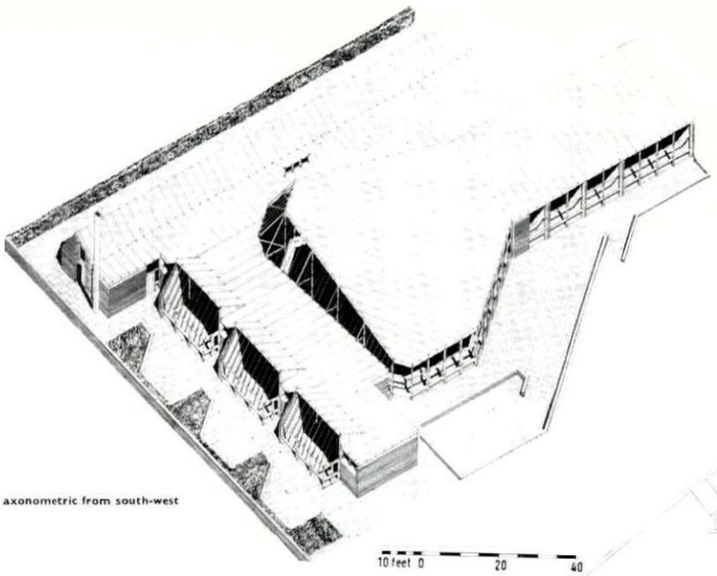


left, first residential block, ground floor plan
above, first floor plan

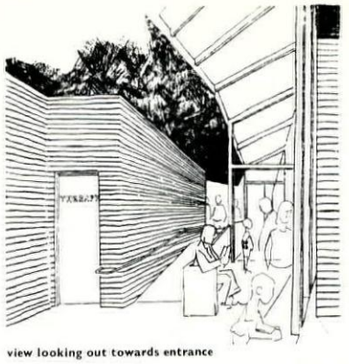
SPASTICS HOSPITAL SCHOOL, THANET, KENT

Hartry, Grover and Halter, in association with Derek Lancaster-Gaye and Colin Smart

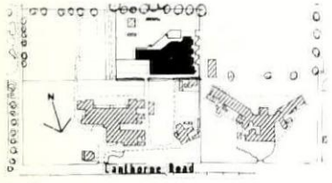
CLIENT: The Spastics Society.
SITE: 1.22 acres in grounds of Lanthorne Convalescent Home, with large trees on south and west and hedges to north and east.
ACCOMMODATION: School and hospital combined, for teaching and treatment of 30 pupils.
STRUCTURE AND FINISHES: Loadbearing brickwork, red facings. Timber roof structure with tongue-and-groove boards, insulation boarding and zinc sheeting. Floors of 4 in. concrete laid on polythene d.p.c. sheet on 2 in. sand blinding on 4 in. hardcore.
SERVICES: Oil-fired central heating.
COST: £65,000.
BUILDING PERIOD: November 1965–September 1966.
Assistants, Peter Cardew and Martin Mason. Quantity surveyor, D. A. Degerdon and Partners. Structural consultant, Simon Woolf. Mechanical and electrical consultant, C. E. Forryan and Partners.



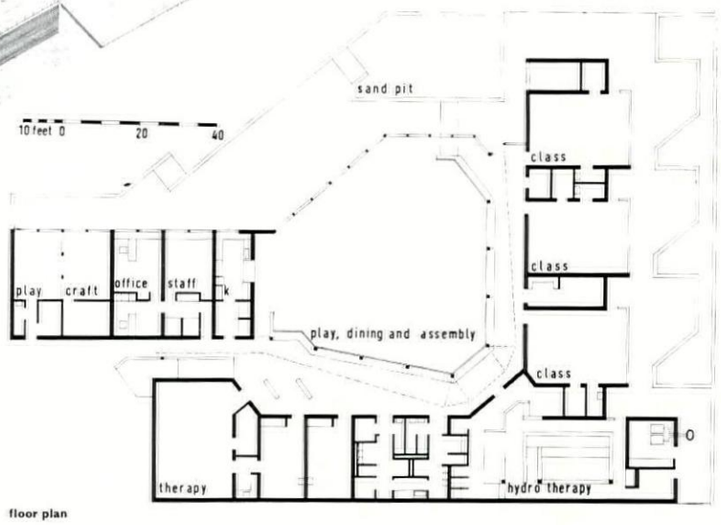
axonometric from south-west



view looking out towards entrance



site plan

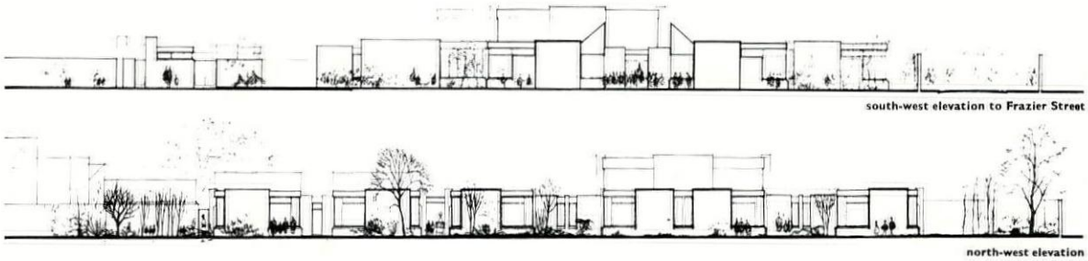


floor plan

PRIMARY SCHOOL, LAMBETH, LONDON

Andrew Renton and Associates

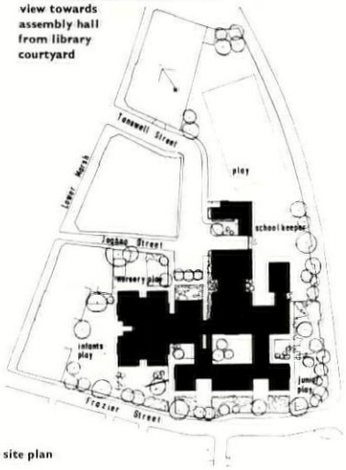
CLIENT: Inner London Education Authority.
SITE: 1.7 acres replacing existing school, between Waterloo Station and Baylis Road, with heavy goods traffic noise problems.
ACCOMMODATION: 1-form entry, infants and junior school for 280 children, with part-time nursery class and play centre. Schoolkeeper's house. Learner pool.
STRUCTURE AND FINISHES: Loadbearing brickwork. U-form walls carrying steel beams as required and timber joists. Concrete floor slab on r.c. ring beams, brick pier foundations with concrete bases. Internally, facing brick and open joisted ceilings in communal areas, pinboard wall lining and painted brick in classrooms, with plasterboard ceilings. Painted softwood windows with louvres.
SERVICES: Oil-fired boiler feeding low pressure hot water radiators, cill line heating in nursery, fan convectors in assembly hall.
COST: £130,000.
BUILDING PERIOD: January 1966–September 1967.
Principal, Andrew Renton. Associate-in-charge, Peter Howard. Assistant, Nicholas Thompson. Quantity surveyor, Gleeds (London). Structural consultant, Ove Arup and Partners. Mechanical consultant, Wingfield, Bowles and Partners. Electrical consultant, C. A. Belcher, GLC.



south-west elevation to Frazier Street

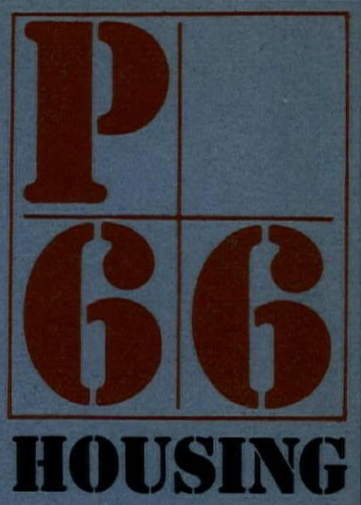
north-west elevation

view towards assembly hall from library courtyard



site plan

floor plan

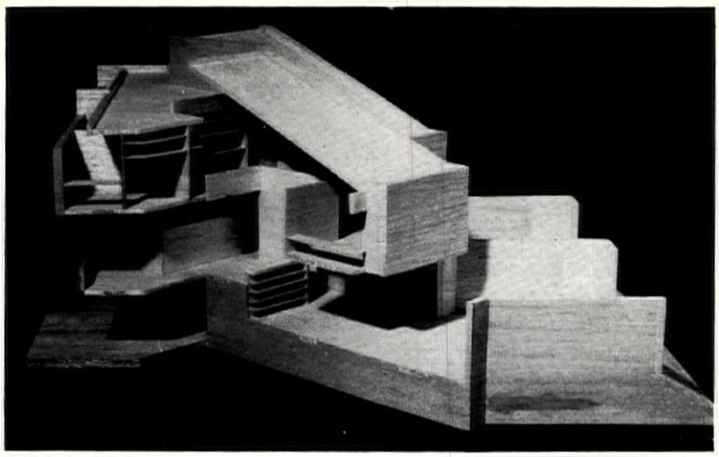


37	Broadclyst Village, Exeter, Devon	*Eldred Evans, Denis Gailey and David Shalev*
38	Binfield Road, Lambeth, London	*Edward Hollamby, Borough Architect*
	Clipstone Street, Westminster, London	*Frederick MacManus and Partners*
39	Pentagon Blocks, Lambeth, London	*Edward Hollamby, Borough Architect*
40	Holly Lodge, Highgate, Camden, London	*S. A. G. Cook, Borough Architect*
	Chalcots Estate, Hampstead, London	*Dennis Lennon and Partners*
41	North Peckham, Southwark, London	*F. O. Hayes, Borough Architect and Planner*
42	Ringlestone Estate, Maidstone, Kent	*John Voelcker*
	Linden Grove, Camberwell, London	*Michael Neylan with William Ungless*
43	Wates Housing, Coulsdon, Surrey	*Team 4*
44	Luxury Flats, Hampstead, London	*Paul Manousso*
	Park Row, Bristol	*Moxley, Jenner and Partners*
45	Kildare Road, Nottingham	*David Jenkin, City Architect*
	Gregory Street, Nottingham	*David Jenkin, City Architect*
46	Bar Hill Village, Cambridgeshire	*Covell, Matthews and Partners*
47	Seafield Village, West Lothian, Scotland	*Alison and Hutchison and Partners*
	Houston Village, Renfrewshire, Scotland	*Shaw Stewart, Baikie and Perry*
48	Abronhill South, Cumbernauld, Scotland	*D. R. Leaker, Chief Architect and Planning Officer*
49	Laindon 4 and 5, Basildon, Essex	*D. Galloway, Chief Architect/ Planner*
50	Core Road, Hackney, London	*John Spence and Partners*
	Dunstan Road, Old Headington, Oxford	*Ahrends, Burton and Koralek*

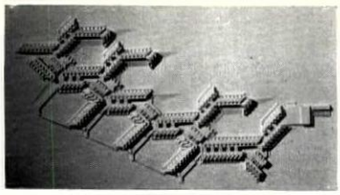
P/66

The replacement of the traditional point block versus cottage struggle in the centre of towns by a sane solution of high density low rise housing, linked by decks and penetrated by covered service roads, needs one commodity above all: land. Last year must have been a lucky one, as the housing section of Preview had several such schemes. They cannot be done on half an acre, whereas the trad point block can. This year the only large deck scheme comes from the remarkable borough architect's department of Southwark (late Camberwell). At North Peckham they have developed their earlier ideas at Acorn Place (AR November, 1963) and Bonamy Street (last year's Preview) into a complete system covering almost 40 acres, linking blocks with a great variety of floor plans and sectional detail. 50 shops are arranged in three sub-centres, which relate to future development next door, in a sophisticated sandwich arrangement of the precincts between upper and lower parking areas. Nottingham's Kildare Road deck housing is a neat conversion of the site of a suburban railway station on a steep hillside. Team 4 have managed a complete linear scheme on a small scale at Coulsdon, an aesthete's colony within a vast Wates estate. Until land *is* available, hole-in-the-corner methods will have to suffice, particularly in the London boroughs. Lambeth, which aims ultimately to make a huge 'housing gain' on the leafy slopes of Norwood before slum-clearing Brixton, has developed a whole series of point blocks for awkward stopgap sites, some in the Wates system, others in a standard 'pentagon block' evolved from the Allbetong system. Narrow spits of undeveloped land left over from previous council schemes have sufficed for John Voelcker in Maidstone and Michael Neylan in Peckham; John Spence and Partners are plugging a gap in a Victorian Terrace in Hackney for the Crown Commissioners; and Paul Manousso (son of Stirling and Gowan's Ham Common client) is about to bring off a do-it-yourself tower block on a key site at the end of Church Row next to Hampstead parish church.

Real freedom of design lies this year, as romantics would wish it, in country villages—and in the months after Eric Lyons's permission to build one in the Kent Green Belt at New Ash Green, it seems that more architects are designing them. The new towns have, of course, always been federations of villages rather than real towns—even Cumbernauld, where the variety of dwelling types at such a village as Abronhill South has to fight hard against monotony of height and materials in such numbers. At Basildon's Laindon 4 and 5 there will be greater enclosure in the elaborate double-courtyard system, but this again looks rather terrifying when repeated endlessly on the overall model. Seafield and Houston, public and private enterprise extensions of genuine Scottish villages, by Alison and Hutchison and Partners and by Shaw Stewart, Baikie and Perry respectively, share the same vernacular as Cumbernauld. Bar Hill, near Cambridge, by contrast adopts the warmer Home Counties language of Lyons. This scheme of Covell, Matthews and Partners is a test case for the commercial building of self-contained 'new villages'; the county has encouraged it as part of the Holford plan for stabilizing the population of Cambridge. At Oxford's old village suburb of Headington, Ahrends, Burton and Koralek have shown their usual skill in infilling, using standard forms but always varying them slightly (the essence of the Georgian street scene). The most important of these 'new villages' is the National Trust's Broadclyst in Devon won in competition by Eldred Evans and Denis Gailey (of Lincoln Civic Centre fame). Not only is this an important positive move in the Trust's preservation of the countryside, but Evans and Gailey are also attempting to bring the motorcar into village growth, clustering dwellings sufficiently tightly to justify covered access, on a similar principle to Reston new town in the USA.



detailed view of typical house

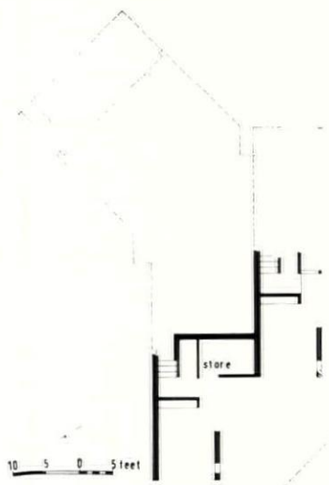


aerial view of model

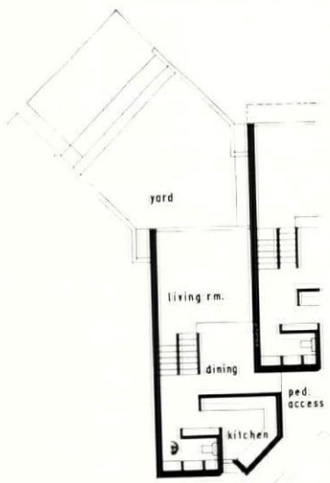
BROADCLYST VILLAGE, EXETER, DEVON

Eldred Evans, Denis Gailey and David Shalev.
H. Werner Rosenthal, consulting architect

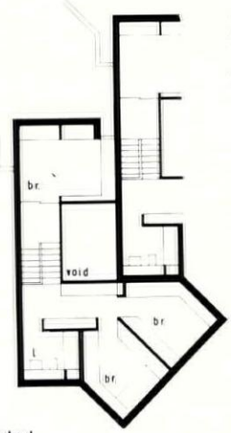
CLIENT: The National Trust, with Richard Berry and First Avenue Construction Co. Ltd. Winner of 1965 competition. Design illustrated is an amended version yet to be considered by the National Trust.
SITE: 28 acres on gentle slope rising from old village to Black Dog, with view back to church.
ACCOMMODATION: 280 houses in 3 phases, including 24 old people's houses with warden and 15 council houses. Remainder mainly 3-bedroom, but some 1-, 2- and 4-bedroom.
STRUCTURE AND FINISHES: Loadbearing crosswalls, in situ r.c. floors and roofs. Windows standard section aluminium. Walls plastered, floors felt-backed p.v.c. sheet.
SERVICES: Gas-fired warm air heating and domestic hot water.
COST: 3 phases, each about £330,000.
BUILDING PERIOD: Mid 1966–1972.



typical house, parking level

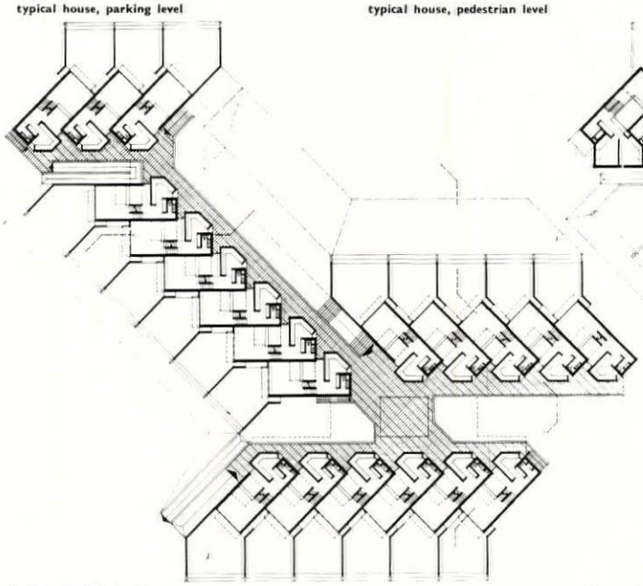


typical house, pedestrian level

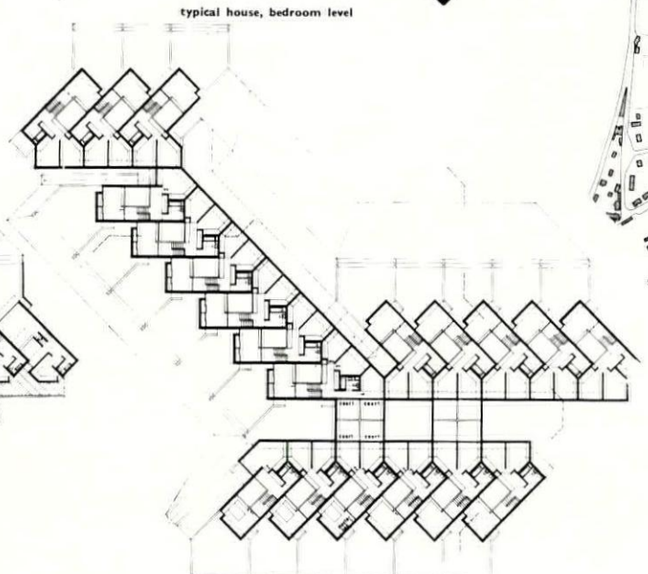


typical house, bedroom level

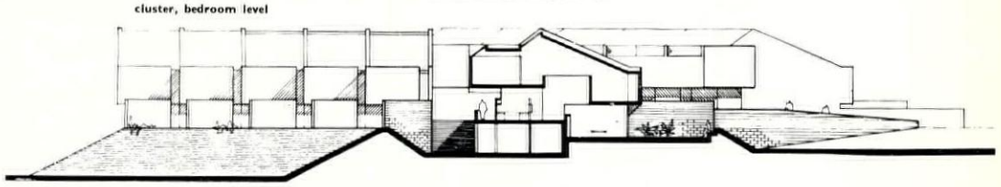
site plan



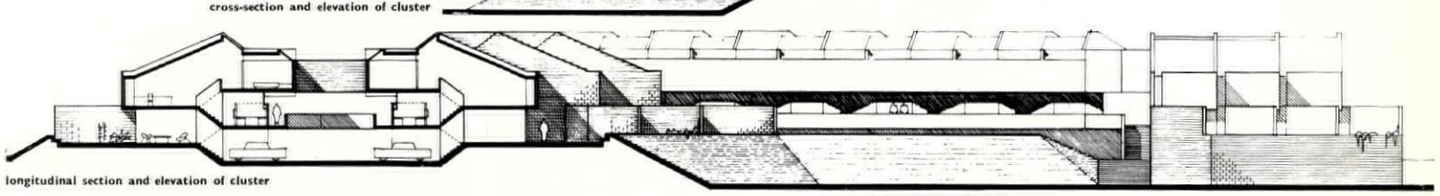
cluster pedestrian level



cluster, bedroom level



cross-section and elevation of cluster



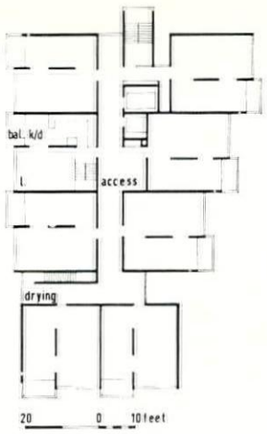
longitudinal section and elevation of cluster

BINFIELD ROAD, LAMBETH, LONDON

Edward Hollamby, Borough Architect

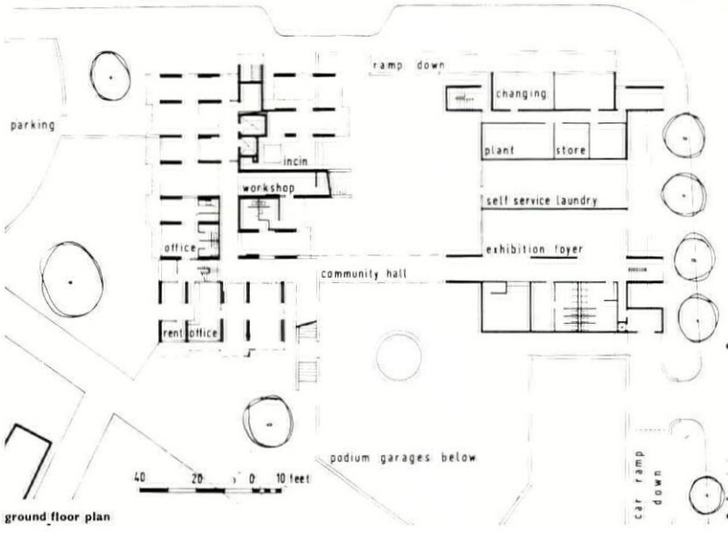
CLIENT: London Borough of Lambeth.
SITE: 1.28-acre triangle.
ACCOMMODATION: 80 maisonettes at 139 p.p.a. 8 2-person, 71 4-person, 1 5-person. 53 garages, 16 open parking spaces, shed for 19 motor cycles. Community hall 2,247 sq. ft.
STRUCTURE AND FINISHES: Point block second of series of 8 in the Wates system on different sites. Exposed aggregate externally, aluminium windows. Hall, podium and garages, in situ r.c. with precast panels. Space frame roof to hall.
SERVICES: Gas-fired hot water and warm air heating, boiler on roof. Prefabricated plastic soil stack.
COST: Maisonettes and garages, £491,267. Community hall and other uses, £67,132.
Group leader, George Finch. Job architect, Alan Hughes. Assistants, John Kelsey, Joyce Lowman, Derek John, Beryl Wood and John Gillies. Quantity surveyor, Peter Davies. Structural consultant (for Wates), Ove Arup and Partners.

site plan

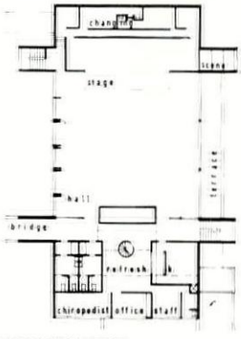


tower block, typical upper floor plan

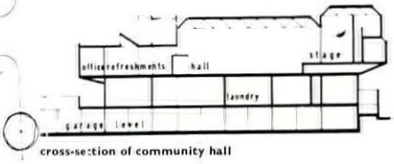

view from south



ground floor plan



community hall, first floor plan

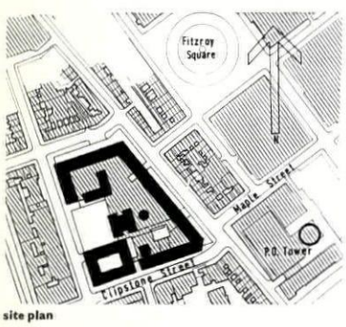


cross-section of community hall

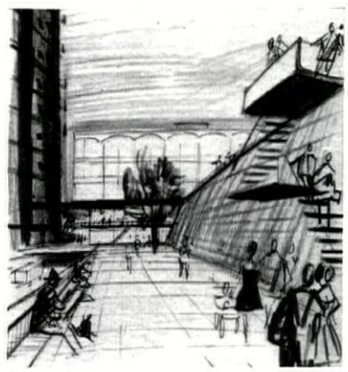
CLIPSTONE STREET, WESTMINSTER, LONDON

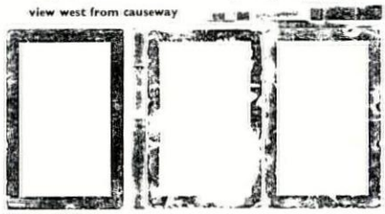
Frederick MacManus and Partners

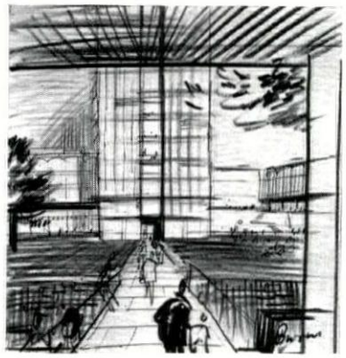
CLIENT: Westminster City Council (formerly St. Marylebone).
SITE: 3.74 acres in busy urban area of mixed uses close to P.O. tower.
ACCOMMODATION: 246 flats at 200 p.p.a. in 4-storey perimeter block and 26-storey tower block. 50 1-person, 62 2-person, 74 3-person, 50 4-person, 10 5-person. 43,500 sq. ft. workshops in 3-storey block. 17 shops and 1 pub at street level in podium with public garage for 190 cars. Basement servicing and parking for 246 tenants' cars.
SERVICES: Oil-fired hot water and warm air space heating, central boiler.
COST: £1,700,500.
BUILDING PERIOD: 1967–1970.
Partner-in-charge, Brian Smith. Quantity surveyor, William C. Inman and Partners.

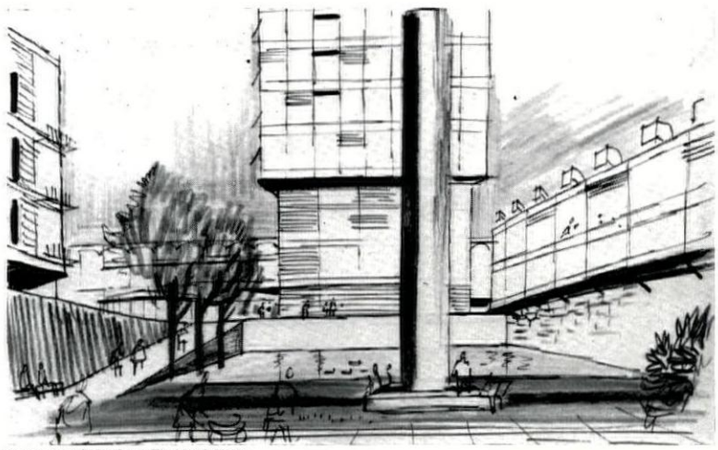


site plan


view west from causeway




approach from Clipstone Street

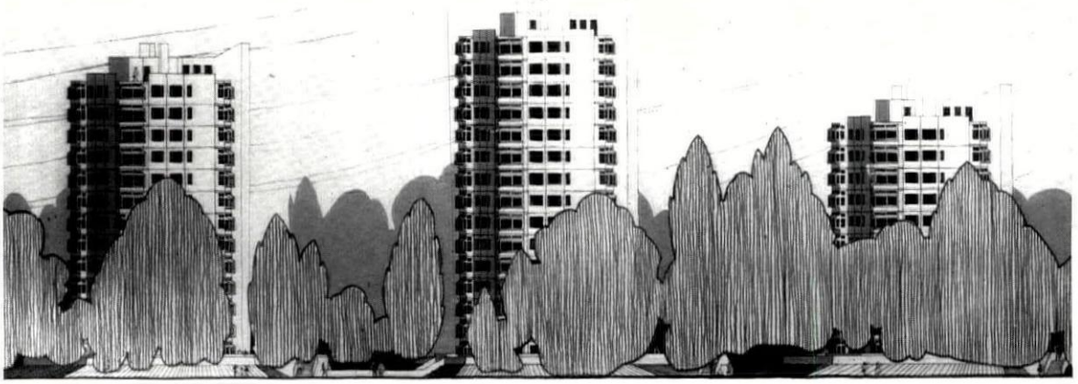

looking east from Great Titchfield Street

view from Grafton Way

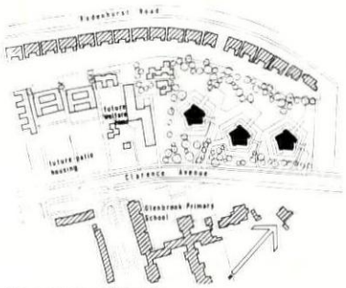
PENTAGON BLOCKS, LAMBETH, LONDON

Edward Hollamby, Borough Architect

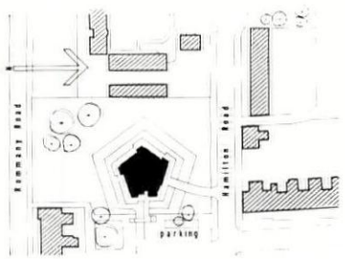
CLIENT: Lambeth Borough Council.
SITE: Three irregular plots. Solon New Road, 0.96 acre next to existing council estate and 2-storey Victorian terraces. Clarence Avenue, 3.5 acres with many mature trees. Hamilton Road, 1.2 acres next to 2-storey Victorian terraces and almshouses. Mature trees to be planted at Solon New Road and Hamilton Road.
ACCOMMODATION: Solon New Road, 52 flats at 91 p.p.a. net in 1 14-storey block, with garages and car spaces, 12 3-room, 39 2-room and 1 bed-sitter. Clarence Avenue, 156 flats at 98.6 p.p.a. net (eventually 76 p.p.a. net) in 1 12-storey, 1 14-storey and 1 16-storey block, with garages and car spaces, 36 3-room, 117 2-room and 3 bed-sitters. Hamilton Road, as Solon New Road but 92.6 p.p.a. net. Pedestrian access bridges over 'moat' of lower ground floor car access. Service rooms on lower ground floor and roof, communal hobbies room on ground floor.
STRUCTURE AND FINISHES: Allbetong system of in situ concrete box frame construction with raft foundations. Precast external wall panels with exposed aggregate.
SERVICES: Fully prefabricated duct units containing all vertical services. Oil-fired fan-assisted warm air heating and water heating.
COST: £1,000,000 for five blocks. Negotiated contract.
BUILDING PERIOD: Solon New Road, March 1966–May 1967. Clarence Avenue, January 1966–July 1967. Hamilton Road, January 1966–March 1967.
Deputy borough architect, William Kretchmer. Assistant borough architect (development), A. Stanley West. Group leader, William Jacoby. Job architect, P. J. Crawley. Assistants, Clarence McDonald and David Meek. Quantity surveyor, Peter Davies. Structural consultant, Charles Weiss and Partners. Mechanical engineer, J. Burt. Electrical engineer, Donald Roberts.



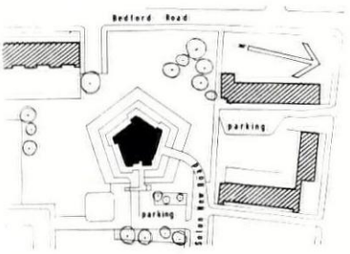
Clarence Avenue site, seen from south-east



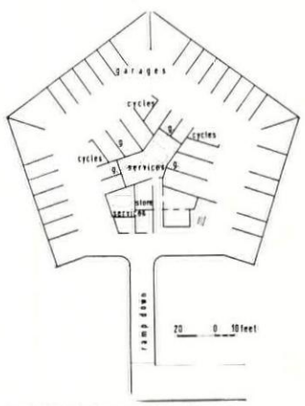
Clarence Avenue, site plan



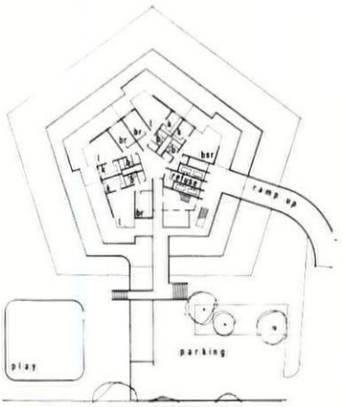
Hamilton Road, site plan



Solon New Road, site plan

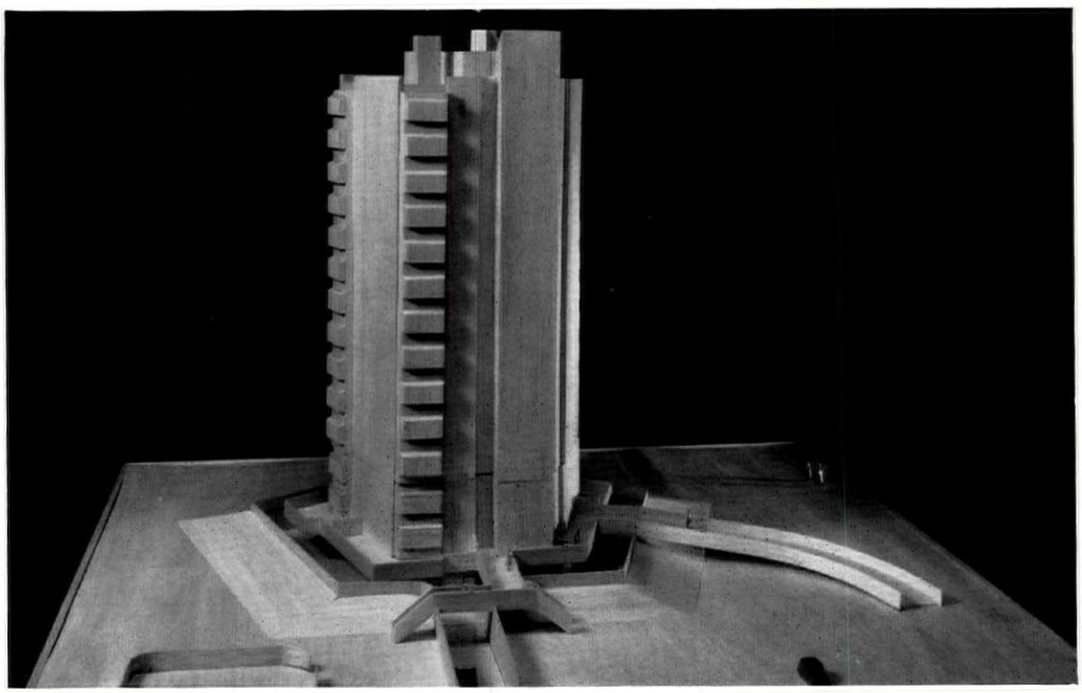


typical block, basement floor plan

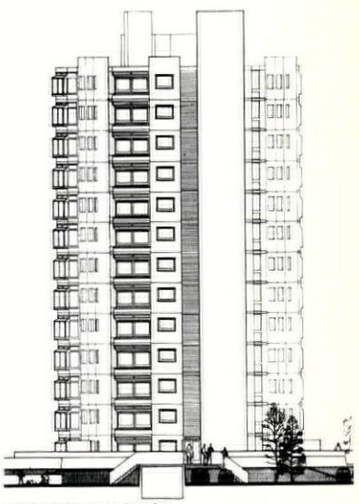


typical block, ground floor plan

typical block, upper floor plan



typical block, general view



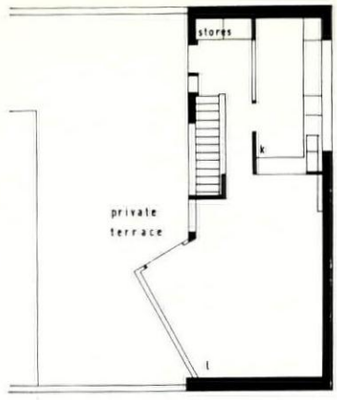
typical block, east elevation

HOLLY LODGE, HIGHGATE, CAMDEN, LONDON

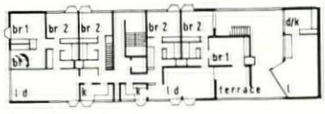
S. A. G. Cook, Borough Architect

CLIENT: London Borough of Camden.
SITE: 0.88-acre site of restaurant within existing 10-acre Holly Lodge model village of 1865. Natural slope of 1 in 6.
ACCOMMODATION: 19 dwellings: 14 2-bedroom maisonettes, 2 2-bedroom flats, 1 3-bedroom flat, 2 3-bedroom maisonettes. 35 covered car spaces, playground, washing and drying room, paper sack dust store.
STRUCTURE AND FINISHES: Crosswall construction with precast concrete bay windows, dark floor bands and dark preservative on wood.
SERVICES: Existing hot water boiler. Mechanical extract ventilation.
COST: £125,000.
BUILDING PERIOD: 1966–1968.
Group leader, K. W. Mark.
Assistant, D. Hyde-Harrison.
Engineer-in-charge, C. F. Hart.

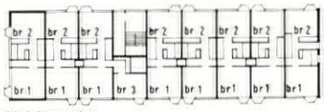
view to west down Makepeace Avenue, showing Victorian Gothic model estate on left and right



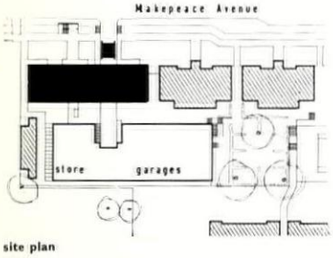
end maisonette on fourth floor, lower level



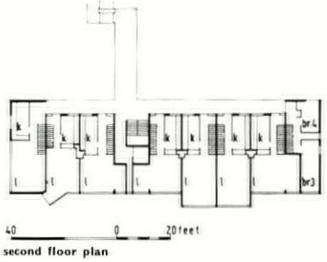
fourth floor plan



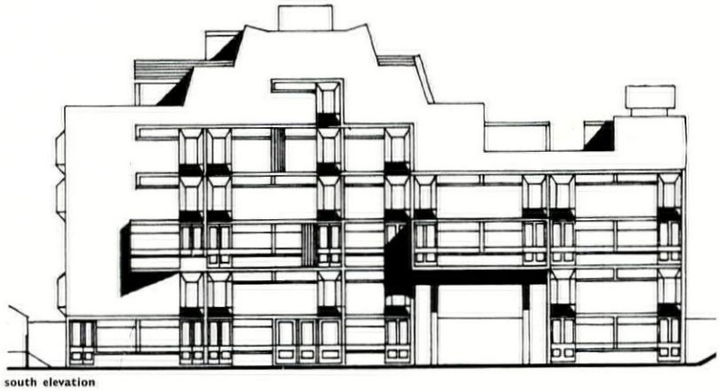
third floor plan



site plan



second floor plan



south elevation

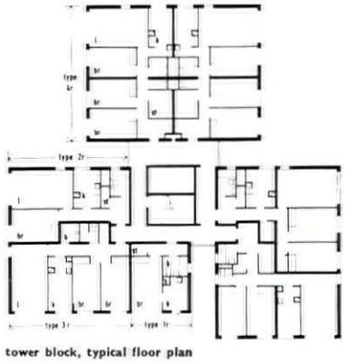
CHALCOTS ESTATE, HAMPSTEAD, LONDON

Dennis Lennon and Partners

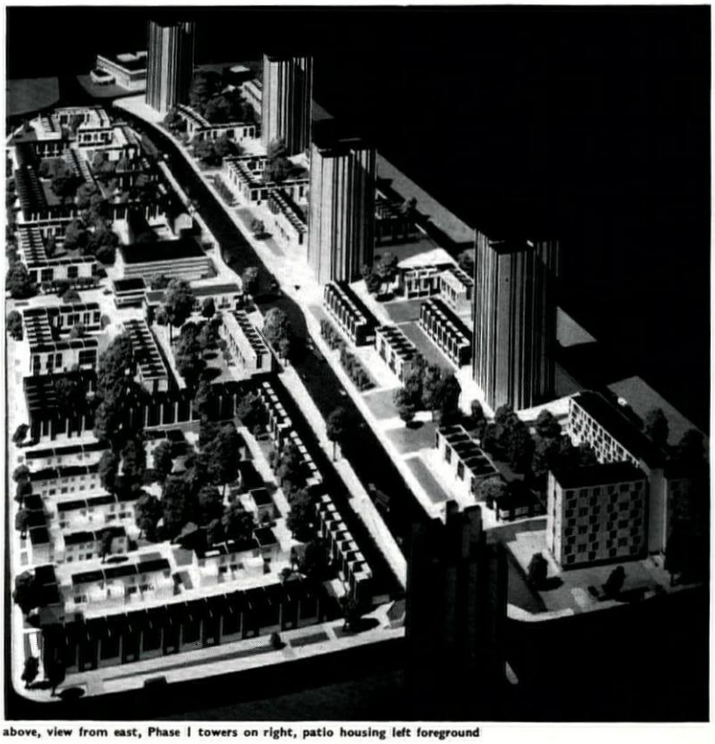
CLIENT: Tower blocks, London Borough of Camden. Houses and shops, Chalcots Developments Ltd.
SITE: 34.5 acres, well treed Eton College estate of 1860.
ACCOMMODATION: 635 flats in tower blocks and 388 houses at 107 p.p.a. 91 bed-sitters, 91 2-person, 273 3-person, 273 4-person, 180 6-person. Houses generally 3- or 4-bedroom. Total population 3,680. 23-storey towers on cluster principle without any living rooms or bedrooms facing north. Children's home in ground floor of first tower, coin-operated laundries, playgrounds next to each tower with closed circuit television cameras. Covered parking for 541 cars, open parking for 176, 414 garages to houses. Phase 1, includes first 2 tower blocks.
STRUCTURE AND FINISHES: Towers, in situ r.c. crosswalls and floors, external walls in tinted concrete with ribbed surface cast against fibreglass shutters, aluminium windows with stainless steel mullions. Houses, loadbearing brick crosswalls with precast floors, aluminium windows.
SERVICES: Heating, individual gas warm air ducted units. Hot water by electric immersion heaters.
COST: Phase 1, £2,000,000.
BUILDING PERIOD: September 1965–1970, in phases.
Partners, Dennis Lennon and Bernard Wiehahn. Assistants, Brian Beardsmore, George Gibbon, Peter Harman and Derek Messling.

section through patio housing

patio house, ground and first floor plans



tower block, typical floor plan

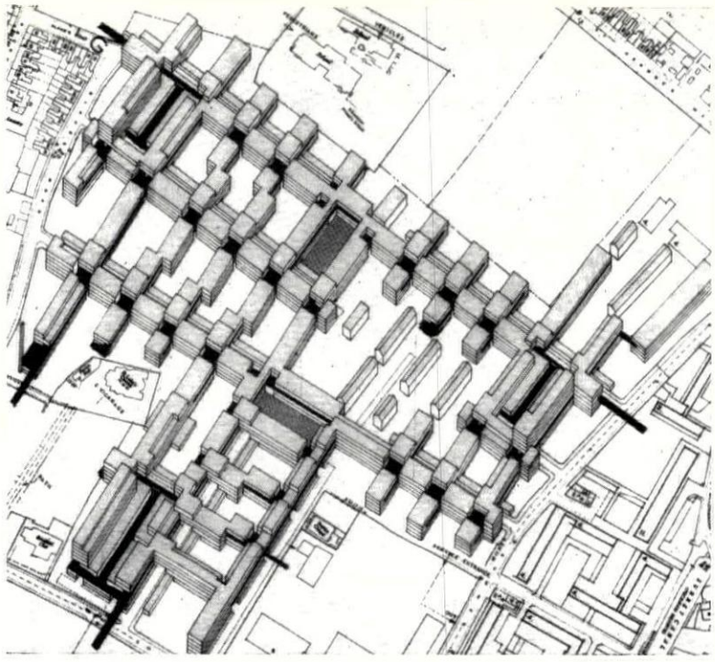


above, view from east, Phase I towers on right, patio housing left foreground

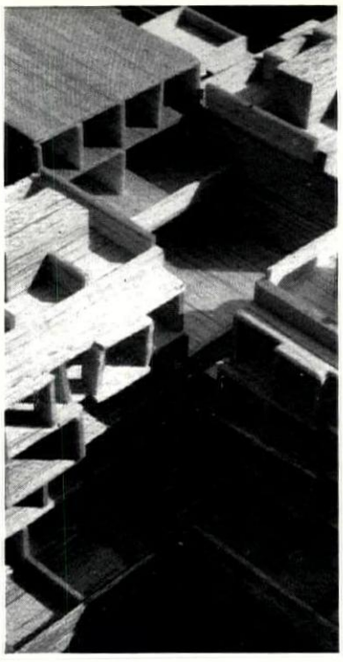
NORTH PECKHAM, SOUTHWARK, LONDON

F. O. Hayes, Borough Architect and Planner

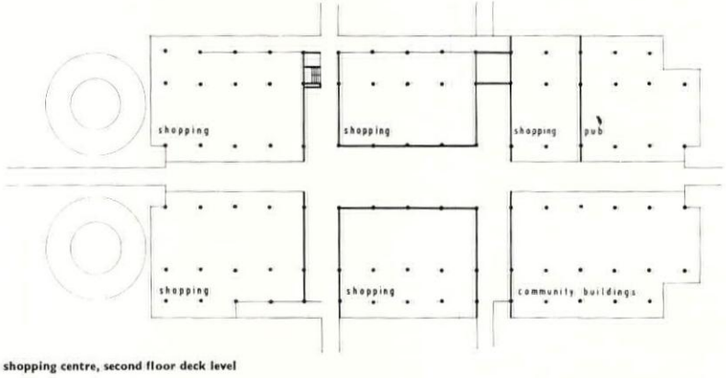
CLIENT: Southwark Borough Council. SITE: 40-acre clearance area, with GLC's North Camberwell Open Space of 120 acres immediately to the north. New LCC Sumner Road estate to east and Peckham Manor School to south-east. Further 19 acres to south and south-west (the Camden site) will form 2nd phase. 30 acres to north-west to be redeveloped by GLC. Existing factory and church to west. ACCOMMODATION: 1,467 new dwellings at Parker Morris standards plus 119 postwar flats retained, at 136 p.p.a. total. Mainly 4/5-storey split-level blocks, served by loop road system. 440 1-bedroom (including 2 groups of 25 old people's flats), 365 2-bedroom, 485 3-bedroom, 147 4-bedroom, 30 5-bedroom. Total population 5,440 (4,939 new). Communal facilities and play spaces all at 2nd floor pedestrian deck level linking whole development. Old people's home for 60 with married staff. Day centre for old people. Home for 30 severely handicapped, with 6 'linked' flats. Home for 10 children with housemother and assistant. Total of 50 shops in 3 centralized precincts with covered parking on two levels beneath pedestrian deck. 3 doctors' surgeries, 5 public houses, 10 communal laundries, church hall, tenants' meeting hall and 2 meeting rooms, rent office, electricity sub-stations. 6 units of light industry of 1,500 sq. ft. each. STRUCTURE AND FINISHES: Rationalized traditional, brick crosswalls, concrete floor slabs. SERVICES: Heating and hot water from central boiler house along roof level ducts. Electricity at pedestrian deck level, only drainage below ground. Refuse collection in sacks by trolleys at deck level. COST: Total scheme, £8,350,000. Deputy borough architect and planner, H. P. Trenton. Group leader, N. Clarke. Assistants, M. Stocker, R. Goodyear and L. Neyman. Quantity surveyor, Oswald E. Parratt and Partners. Structural consultant, W. V. Zinn and Associates. Mechanical consultant, J. Roger Preston and Partners. Electrical consultant, W. S. Lovely.



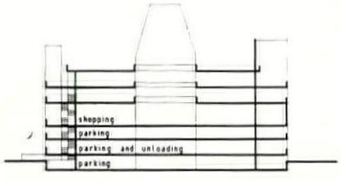
axonometric view from south-east



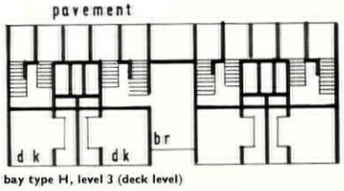
detailed view of junction between blocks



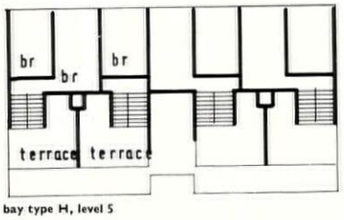
shopping centre, second floor deck level



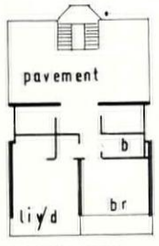
shopping centre, cross-section



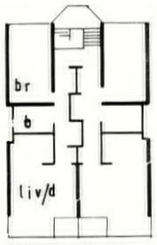
bay type H, level 3 (deck level)



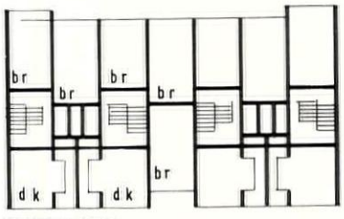
bay type H, level 5



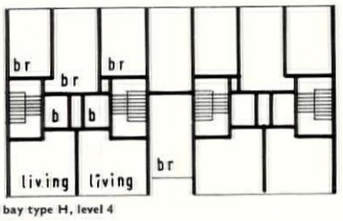
block type E, level 3 (deck level)



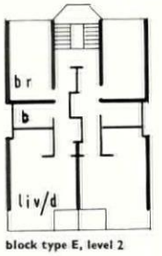
block type E, level 5



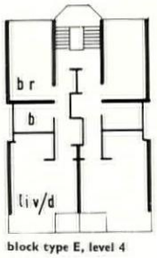
bay type H, level 2



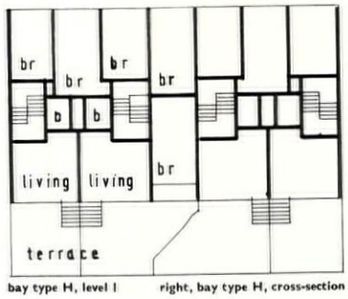
bay type H, level 4



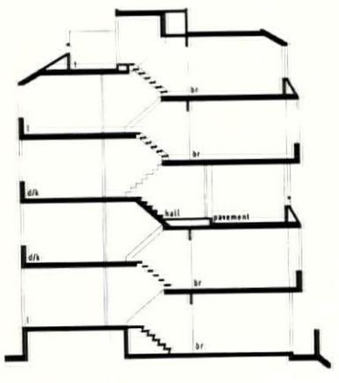
block type E, level 2



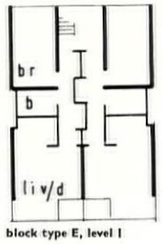
block type E, level 4



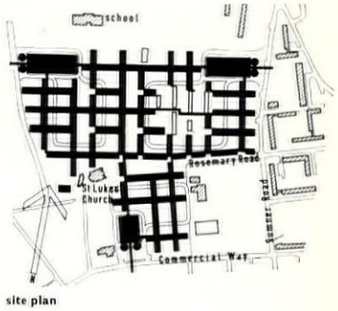
bay type H, level 1



right, bay type H, cross-section



block type E, level 1

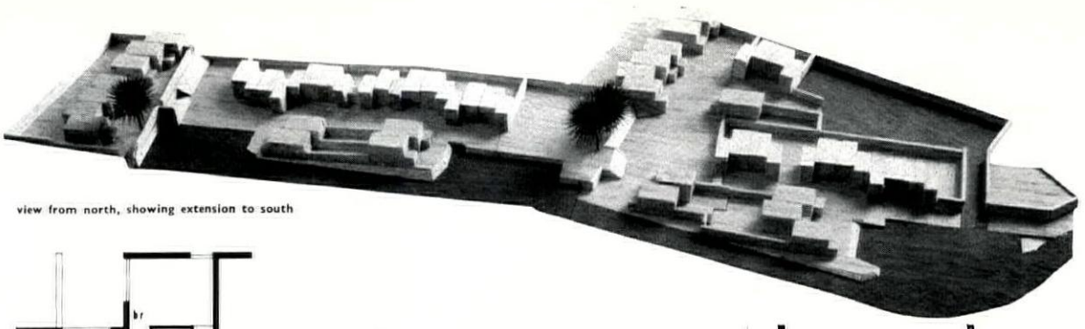


site plan

RINGLESTONE ESTATE, MAIDSTONE, KENT

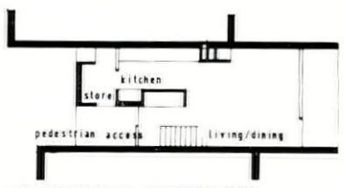
John Voelcker, in association with R. Orrell, Borough Engineer

CLIENT: Maidstone Borough Council.
SITE: 2.8 acres of disused allotments surrounded by housing, next to existing Ringlestone estate, on northern outskirts of town.
ACCOMMODATION: 40 dwellings at 60 p.p.a. to Parker Morris standards in 2 types of 2-storey 4-person house, facing south and facing east-west. Grouped parking spaces for 69 cars. Children's playground next to pedestrian way through site.
STRUCTURE AND FINISHES: Loadbearing brick on concrete base, timber floors and roofs. Composite asbestos-faced infill panels, internally board and plaster.
SERVICES: Gas-fired hot water and warm air space heating.
COST: £92,000.
BUILDING PERIOD: Spring 1966–spring 1967.
Assistant, Jeffrey Cuthbert.
Quantity surveyor, Dearle and Henderson.

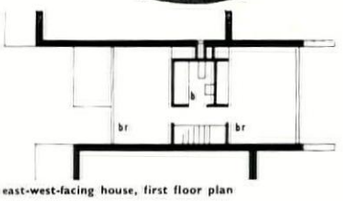


view from north, showing extension to south

south-facing house, first floor plan

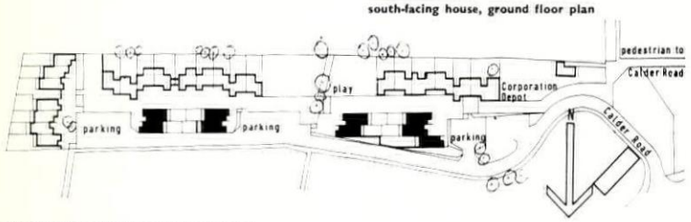


east-west-facing house, ground floor plan



east-west-facing house, first floor plan

south-facing house, ground floor plan



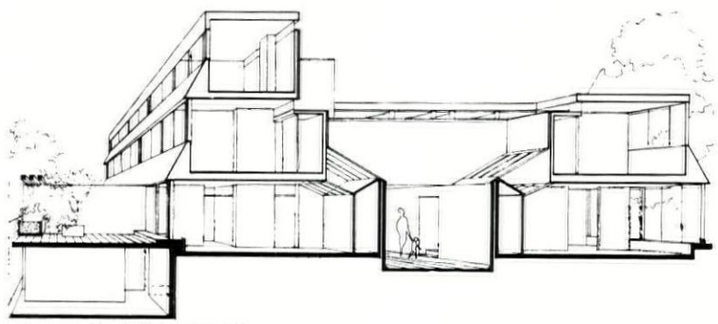
site plan, not including southern extension

view of eastern parking bay and surrounding houses

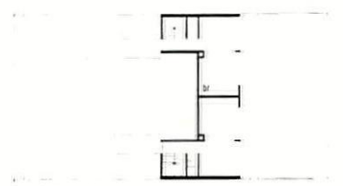
LINDEN GROVE, PECKHAM, LONDON

Michael Neylan with William Ungless

CLIENT: London Borough of Southwark.
SITE: 2.5 acres, long, narrow and irregular with access at one end only, surrounded by 2-storey houses with tall slab nearby, trees at edge.
ACCOMMODATION: 62 houses at 88 p.p.a., 5 4-bedroom, 18 3-bedroom, 16 2-bedroom, 3 1-bedroom, 10 single old people's flats, 10 double old people's flats. 1 : 1 garaging for houses only.
STRUCTURE AND FINISHES: Loadbearing brick, brick facings to ground floor, slate-hanging above, horizontal sliding aluminium windows, glazed lay-lights. Houses, crosswalls supporting timber floors and roofs. Old people's flats, r.c. floors and roofs. Brick paving to central walk.
SERVICES: Heating, gas-fired warm air for houses; oil-fired hot water for old people's flats.
BUILDING PERIOD: April 1966–November 1967.
Assistant, R. C. Kornweibel.
Quantity surveyor, Davis, Belfield and Everest. Structural consultant, Flint and Neill.

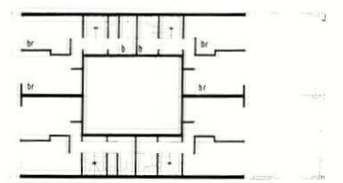


section across 3- and 2-bedroom houses

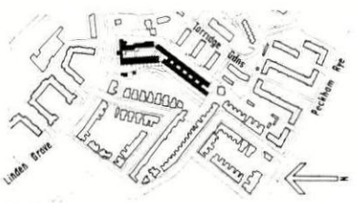


second floor plan

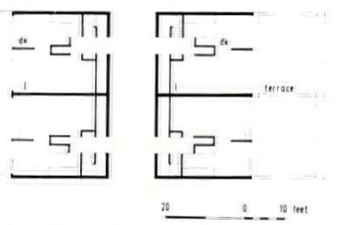
view down central pedestrian way, between old people's flats



first floor plan



site plan

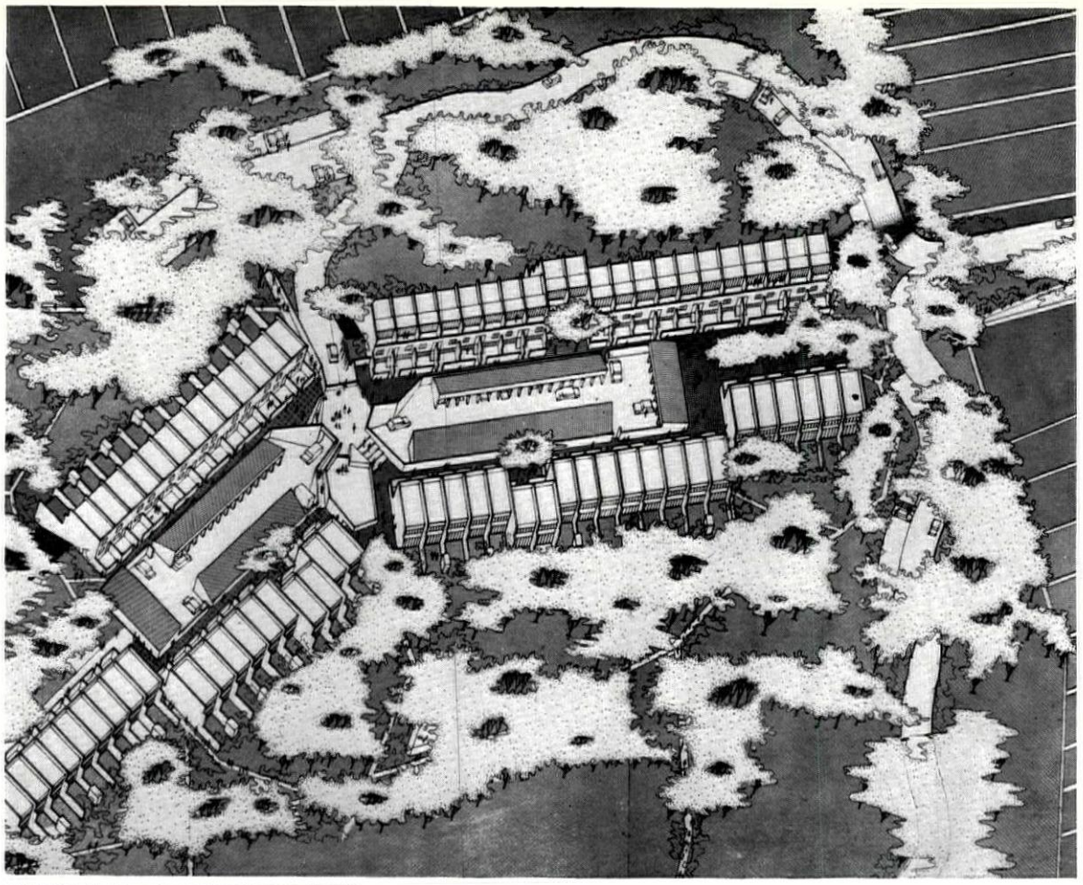


3- and 2-bedroom houses, ground floor plan

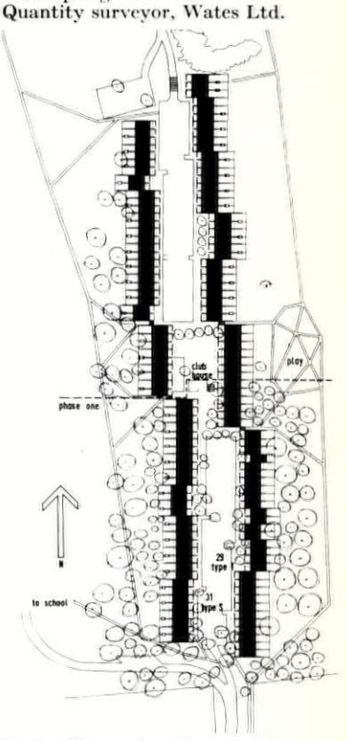
WATES HOUSING, COULSDON, SURREY

Team 4

CLIENT: Wates Built Homes Ltd.
SITE: 11.38-acre section of 69-acre site otherwise being designed by Wates' own architects. Close to railway station, bordered on 2 sides by prewar suburbia and including part of dense ridge of trees. Bank across site with maximum 12 ft. drop.
ACCOMMODATION: 140 houses at 45 p.p.a. Half 2-storey 3-bedroom, half 3-storey 4-bedroom. Parking for 1.4 cars per house. To be built in 2 phases.
STRUCTURE AND FINISHES: Loadbearing cavity wall, brickwork externally, plastered concrete blockwork internally. Timber joist floors and roofs.
SERVICES: Ducted warm air heating.
COST: £900,000.
BUILDING PERIOD: Phase 1, spring 1966–spring 1967.
Quantity surveyor, Wates Ltd.

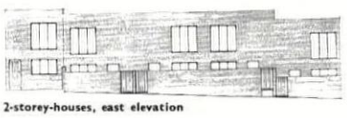


general view, showing earlier version with access in centre

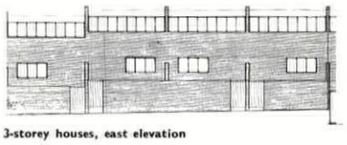


site plan of latest version, with completely linear traffic pattern

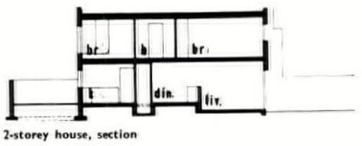
view of vehicular and pedestrian access levels



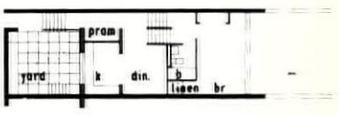
2-storey-houses, east elevation



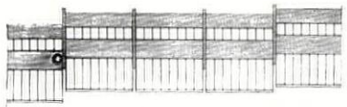
3-storey houses, east elevation



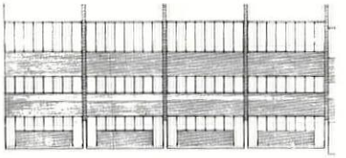
2-storey house, section



3-storey house, ground floor plan

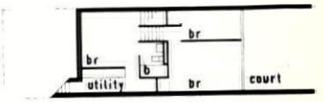


2-storey houses, west elevation

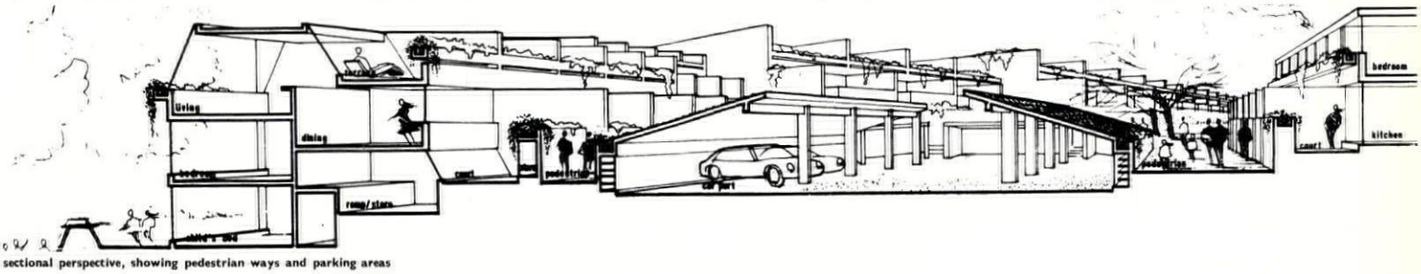


3-storey houses, west elevation

3-storey house, section



3-storey house, first floor plan

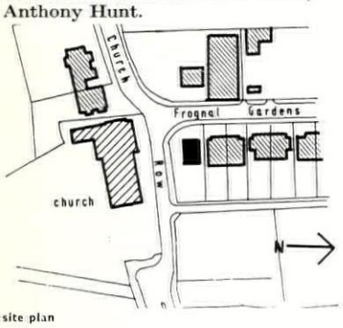


sectional perspective, showing pedestrian ways and parking areas

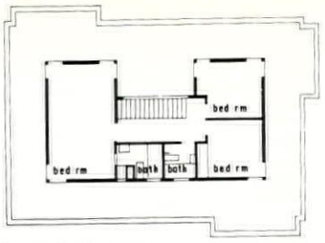
LUXURY FLATS, HAMPSTEAD, LONDON

Paul Manousso

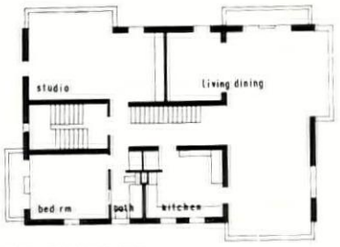
CLIENT: Paul Manousso.
SITE: 7,128 sq. ft. at corner of Church Row and Frognal Gardens, overlooking Georgian parish church and houses.
ACCOMMODATION: 3 4-bedroom flats of 1,250 sq. ft., with living-dining room, hall, 2 bathrooms. 1 4-bedroom maisonette of 1,824 sq. ft., with living-dining room, morning room, library-study, 2 bathrooms, large roof terrace.
STRUCTURE AND FINISHES: Loadbearing 11 in. cavity and 9 in. solid brickwork, concrete floors, plastered walls and ceilings, ceramic tiles in living-dining room and hall, softwood windows.
SERVICES: Gas-fired central heating.
COST: £38,000.
BUILDING PERIOD: October 1966–October 1967.
Assistants, Peter Britton and Alan Seymour. Quantity surveyor, Cook and Butler. Structural consultant, Anthony Hunt.



site plan

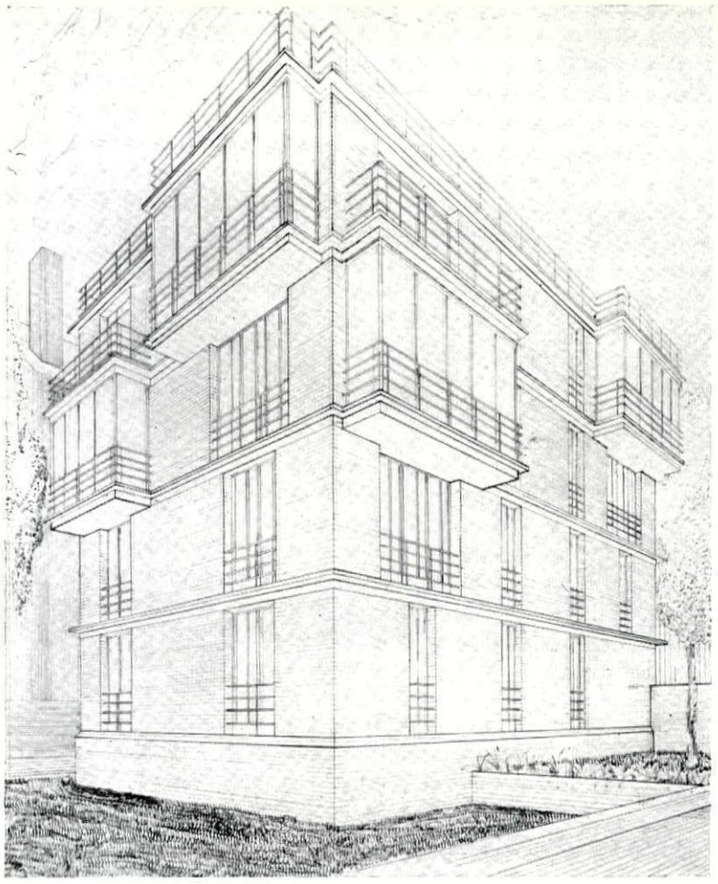


maisonette, fourth floor plan



maisonette, third floor plan

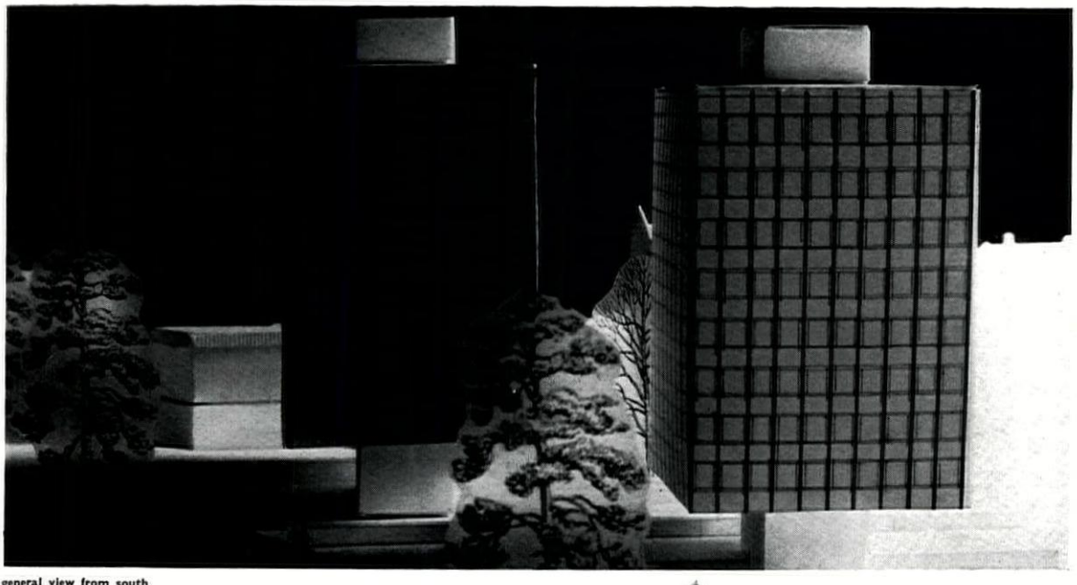
flats, first floor plan

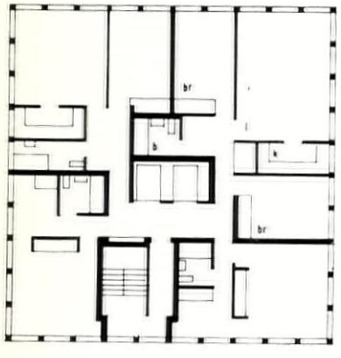

south-west view from corner of Frognal Gardens and Church Row

PARK ROW, BRISTOL

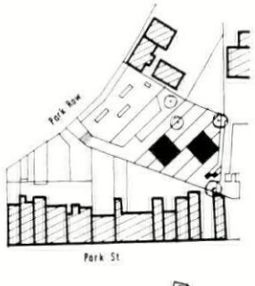
Moxley, Jenner and Partners

CLIENT: Bristol Housing Association.
SITE: 0.5 acre excluding service station and forecourt, sloping southwards and allowing open outlook over city.
ACCOMMODATION: 70 cost-rent 1- and 2-person flats at Parker Morris standards. 4 shops with rear windows backing on to precinct. Kiosks in precinct. Petrol filling station.
STRUCTURE AND FINISHES: R.C. structural core with cantilevered floors, because of foundation difficulties. External walls in Building Research Station battery cast system.
COST: £224,865.
Quantity surveyor, Gleeds. Structural consultant, Clarke, Nicholls and Marcel.


general view from south

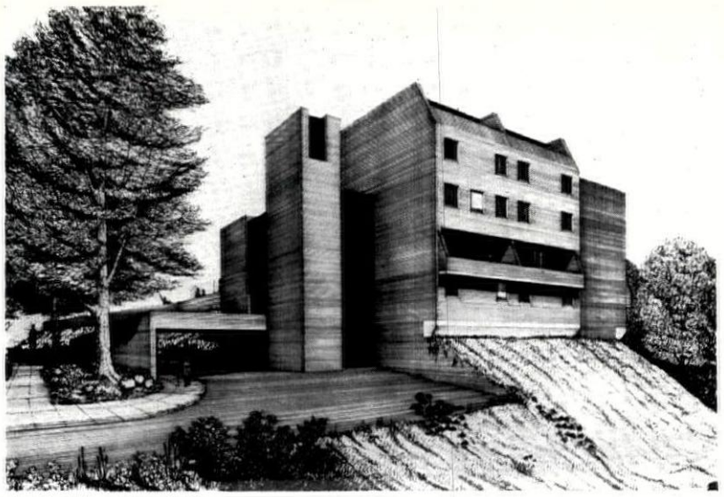


tower block, typical floor plan



site plan


aerial view from north



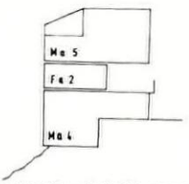
view of southern entrance to site

view from north back towards southern entrance

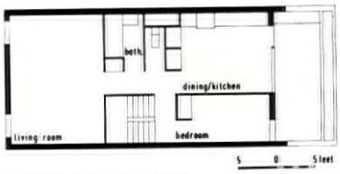
KILDARE ROAD, NOTTINGHAM

David Jenkin, City Architect

CLIENT: Nottingham City Council.
SITE: 7 acres on former suburban railway station, well treed with steep banks falling away from level platform.
ACCOMMODATION: 202 dwellings at 106 p.p.a. 79 5-person maisonettes, 51 4-person maisonettes, 72 2-person flats. 100 per cent garaging. Flexible family units, bedroom for each child, grandparents next door, wide access decks served by 2 lifts from first floor.
STRUCTURE AND FINISHES: 9 in. brick cross walls, in situ r.c. slabs, brick facing, timber windows.
SERVICES: Electric underfloor heating.
COST: £682,900.
BUILDING PERIOD: July 1966–October 1967.
Assistant city architect (housing), Gordon T. Stobbs. Job architect, A. E. Colston. Quantity surveyors, A. W. L. Hall and D. Rhodes. Structural consultant, Bylander and Waddell and Partners.

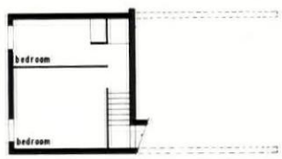


diagrammatic section through dwelling types



ground floor plan, type Ma 4

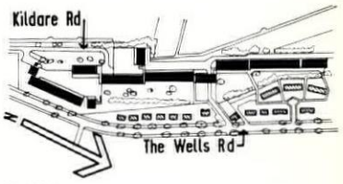
fourth floor plan, type Ma 5



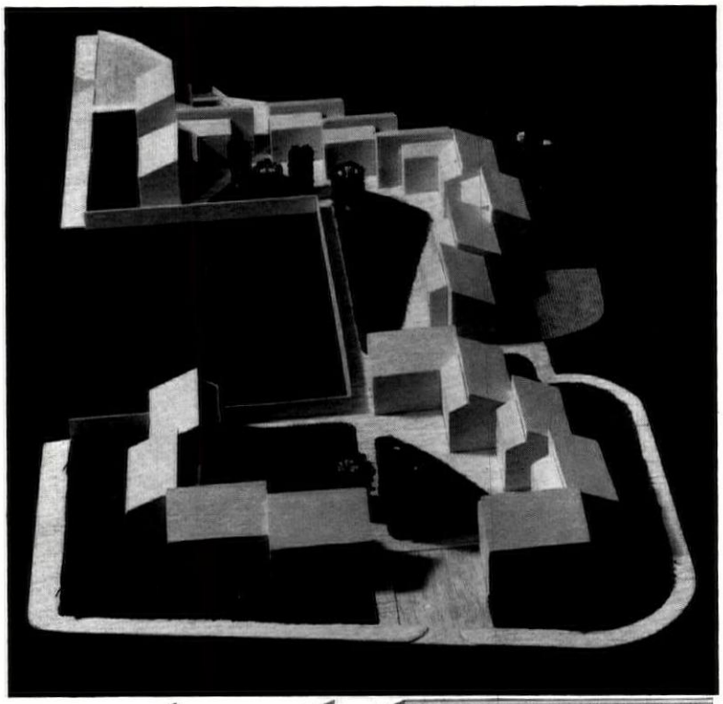
first floor plan, type Ma 4

second floor plan, type Fl 2 and deck

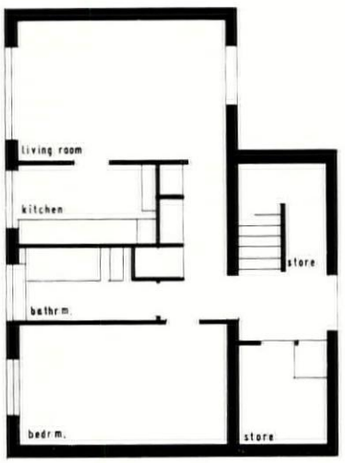
third floor plan, type Ma 5



site plan



view from west



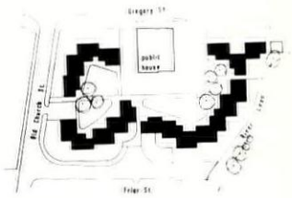
5 0 5feet

plan of ground floor flat

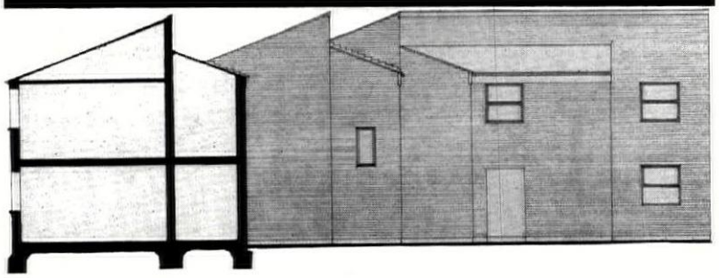
GREGORY STREET, NOTTINGHAM

David Jenkin, City Architect

CLIENT: Nottingham City Council.
SITE: Flat U-shaped area around an old pub, shortly to be rebuilt, between the River Leen and a churchyard. Existing 2-storey houses to north and south.
ACCOMMODATION: 38 1- or 2-person flats for old people in 19 2-storey blocks, clustered round 2 landscaped areas, through which passes a pedestrian riverside walk. Rebuilt pub as centre of larger courtyard.
STRUCTURE AND FINISHES: Loadbearing brick, concrete floors, concrete tile roof.
SERVICES: Electric underfloor heating.
COST: £78,850.
BUILDING PERIOD: February 1966–mid 1967.
Group leader, Brian L. Cook. Job architect, Martin Wenlock. Quantity surveyors, A. W. L. Hall and F. S. Taylor.



site plan

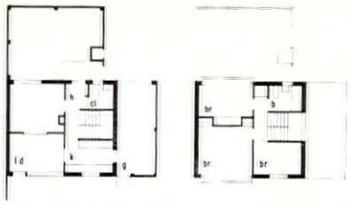


section and elevation of typical dwellings

BAR HILL VILLAGE, CAMBRIDGESHIRE

Covell, Matthews and Partners. School and clinic in association with P. R. Arthur, County Architect

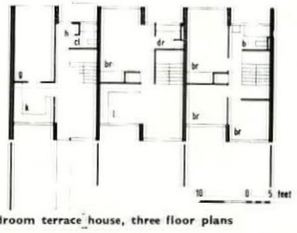
CLIENT: Bar Hill Developments Ltd.
SITE: 350 acres at Bar Hill Farm, Dry Drayton, 5 miles north-west of Cambridge on the Huntingdon road. Open farmland with some hedgerows and mature trees, forming small valley.
ACCOMMODATION: Total, 1,250 houses for 3,500–4,000 people. Phase 1, north and south layouts, 135 houses on 14.5 acres at 37.5 p.p.a. 42 2-bedroom, 66 in 5 varieties of 3-bedroom, 16 in 2 varieties of 4-bedroom, 11 5-bedroom. Primary school for 480 pupils, phase 1 for 200. Clinic. 13-acre industrial site: phase 1, joinery works. Central area of shops, offices, entertainment, warehousing and parking to serve village and surrounding area. Administration and maintenance by Village Trust, financed from ground rents and vested in land ownership to enable financing of development and improvement projects for total village. Each resident to have some representation on Trust.
STRUCTURE AND FINISHES: Generally loadbearing brick, with various finishes for different building types, including painted clapboarding, creosoted clapboarding, rendering, tilehanging and six different types of facing brick (Cambridge golds and Uxbridge flints). Use of standardized building components, including plumbing, heating and stair units.
SERVICES: Oil-fired heating (delivery from central tank). Each house wired for TV. Sewage farm, off site, in association with RDC.
COST: Total, £6–7,000,000. Phase 1, £500,000.
BUILDING PERIOD: Phase 1, November 1965–September 1966. Total completion by 1970.
Partner-in-charge, Brian Falk. Job architects, Roger Whitehead, Noel Bonner and David Williams. Quantity surveyor, Smith and Stoba; for the school, J. Barnsley, Snell and Partners. Structural consultant, Alan Grant and Partners.



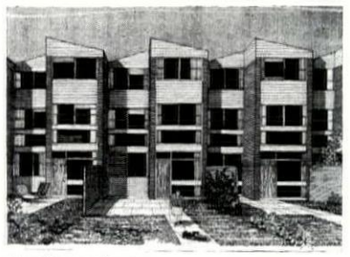
three-bedroom detached house, ground floor plan

first floor plan

three-bedroom patio house, floor plan

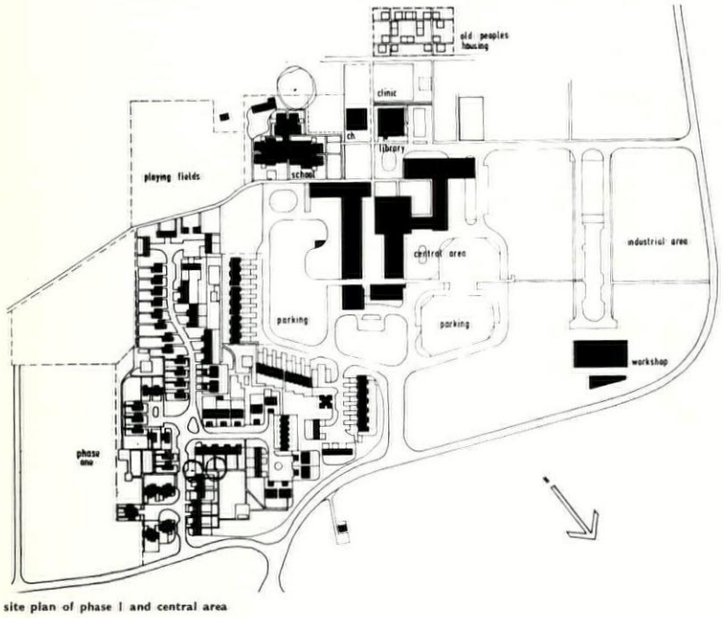


four-bedroom terrace house, three floor plans



view of terrace houses

site plan of village, showing circulation and phasing (1-8)

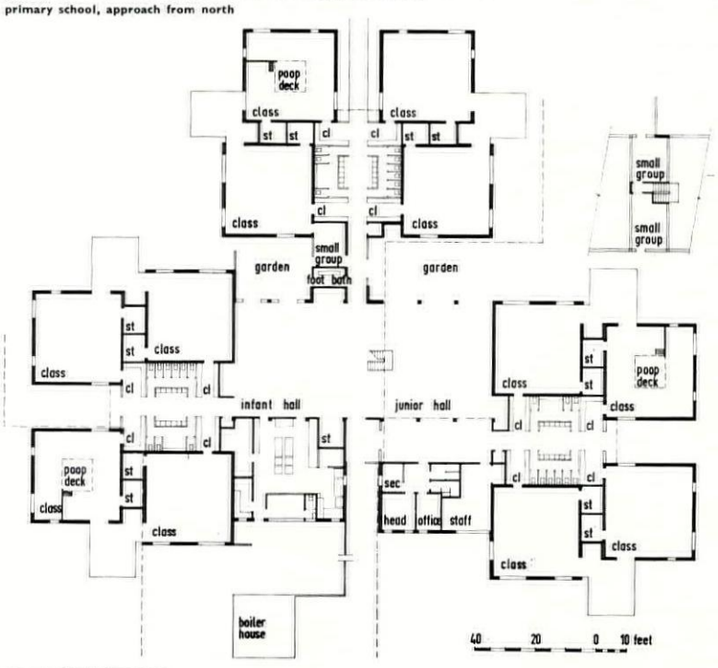


site plan of phase 1 and central area

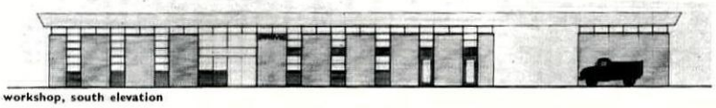
view of detached houses

view of patio houses

primary school, approach from north

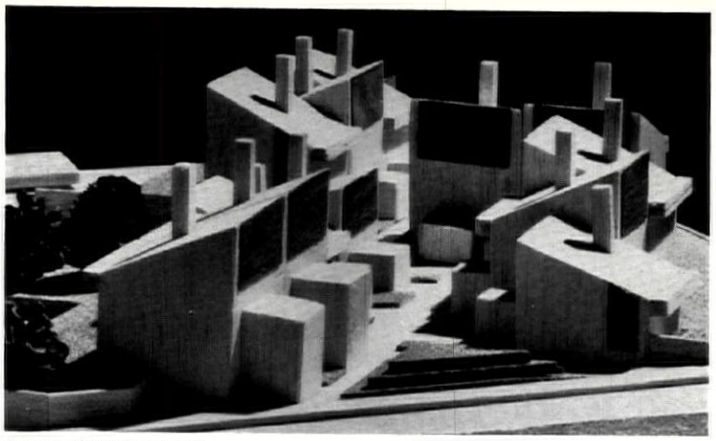


primary school, floor plan

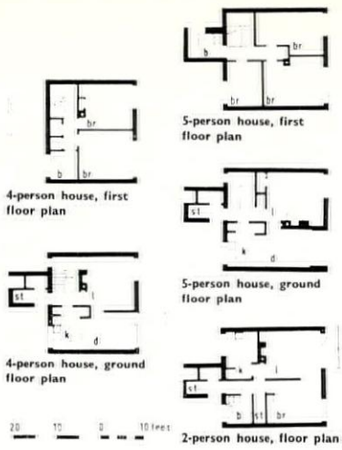


workshop, south elevation

detailed view of model



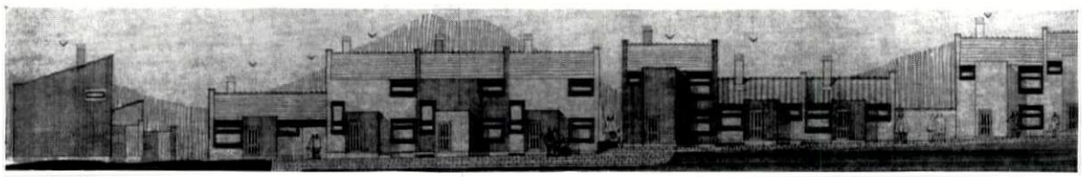
view of model, north-west corner



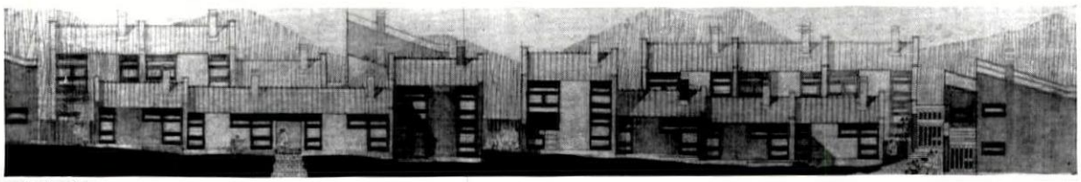
SEAFIELD VILLAGE, WEST LOTHIAN, SCOTLAND

Alison and Hutchison and Partners

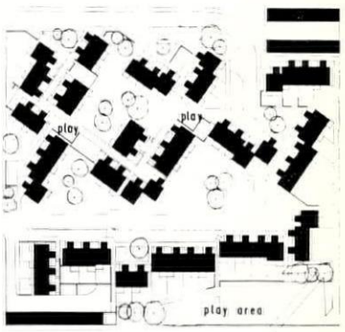
CLIENT: West Lothian County Council.
SITE: 4 acres in Cousland Road, gently sloping north-south.
ACCOMMODATION: 60 houses at 50 p.p.a. 8 5-person, 26 4-person, 26 2-person. 40 garages, 36 car spaces.
STRUCTURE AND FINISHES: Loadbearing 11 in. cavity brickwork, rendered in white and grey. Monopitch roof trusses at 22 degree pitch. Timber windows and cladding.
SERVICES: High pressure coal-fired boiler giving partial central heating.
COST: £245,643.
BUILDING PERIOD: December 1965–December 1966.
Senior partner, R. Forbes Hutchison. Partner-in-charge, J. D. Robertson. Assistants, A. Campbell Mars and R. Gordon.



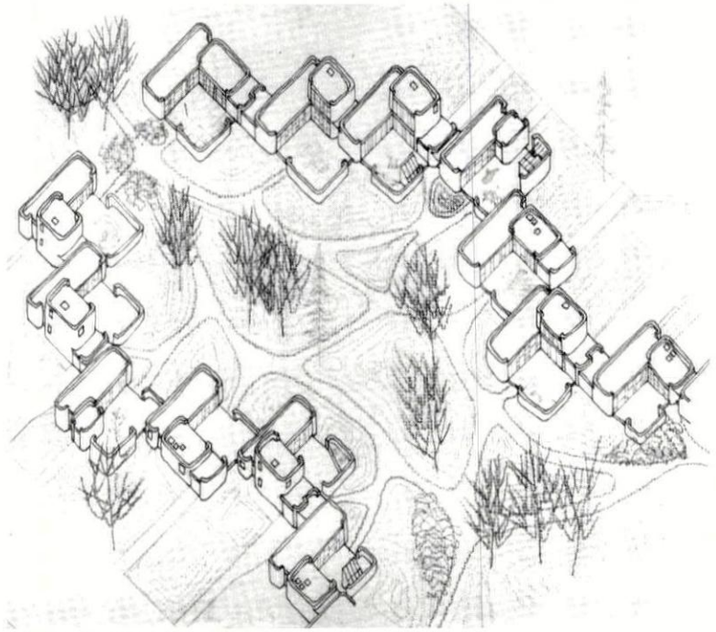
south elevation



north elevation

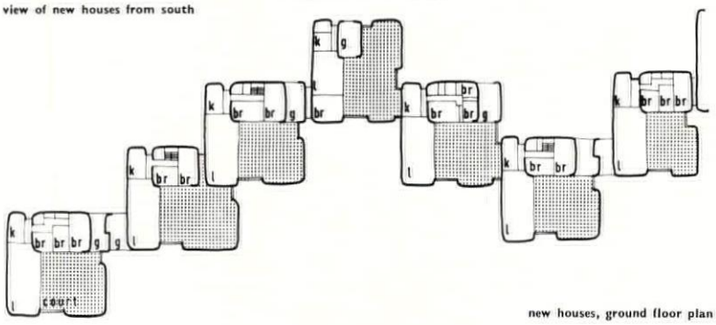


site plan



view of new houses from south

site plan

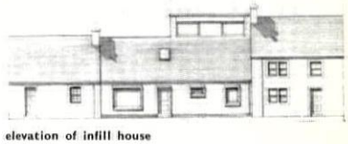


new houses, ground floor plan

HOUSTON VILLAGE, RENFREWSHIRE, SCOTLAND

Shaw Stewart, Baikie and Perry

CLIENT: Major D. Crichton Maitland.
SITE: Existing village 4 miles north-west of Paisley. Comprehensive plan for village growth includes circulation system, infill housing, and development of new housing on 19 acres.
ACCOMMODATION: New housing sites, 6 houses to the acre, courtyard plan with standard kitchen/living room/garage arrangements. Communal gardens. Infill sites, freedom of planning but standardized building elements, materials and finishes.
STRUCTURE AND FINISHES: Loadbearing brickwork with grey facing bricks or roughcast rendering.
COST: Target of £5,000 per house.
BUILDING PERIOD: Gradual growth. First infill house commissioned September, 1965.
Partner-in-charge, Michael Shaw Stewart. Assistant, T. Eaton.



elevation of infill house

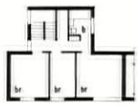
ABRONHILL SOUTH, CUMBERNAULD, SCOTLAND

D. R. Leaker, Chief Architect and Planning Officer

CLIENT: Cumbernauld Development Corporation.
SITE: 50 acres, north-facing slope of 1 in 20, to east of New Town's main hill top, bounded by railway to north and radial road to south.
ACCOMMODATION: 715 dwellings at 48.5 p.p.a. 323 flats: 5 bed-sitters, 91 2-person, 150 3-person, 72 4-person, 5 5-person. 350 terrace houses: 128 4-person, 171 5-person, 13 6-person, 32 7-person, 6 8-person. 42 4-person patio houses. Terrace and patio houses have private open space. 2 shops, 2 meeting rooms. 323 lock-up garages. Spaces eventually for 900 cars.
STRUCTURE AND FINISHES: Traditional, though originally designed for partial prefabrication. Roughcast finish.
SERVICES: Houses all-electric, with underfloor heating. Plastic plumbing units.
COST: £1,934,114.
BUILDING PERIOD: April 1964–July 1966.
Assistant chief architect, G. Callaghan. Group leaders, H. W. Eccles and R. Hunter. Assistants, K. Pimm, N. Kettle, A. Stewart, J. Allan, Miss J. Meredith and D. Nerurkar. Quantity surveyors, J. M. Simpson and A. Duncan. Chief engineer, A. S. Scott. Landscape architects, Miss A. E. Woodward and J. Melrose.

6-person house, first floor plan

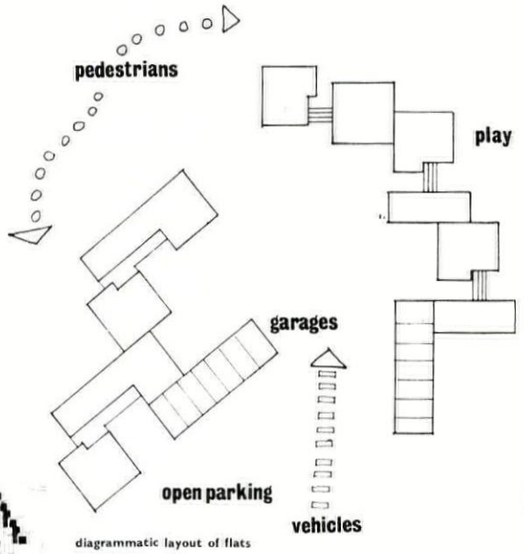
6-person house, ground floor plan



5-person house, first floor plan

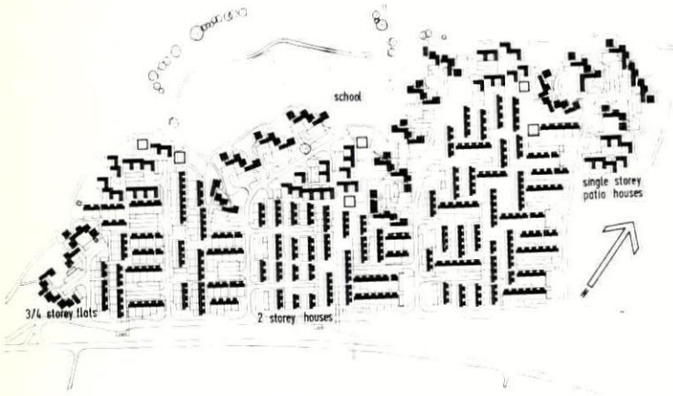
5-person house, ground floor plan

view from south-east towards passage under flats



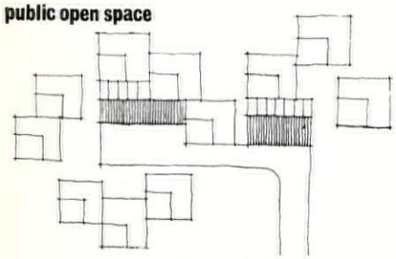
diagrammatic layout of flats

floor plan of flats, 3-person (two types) and 2-person

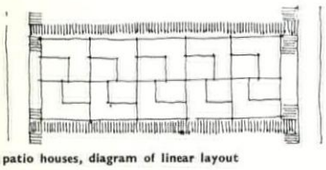


site plan

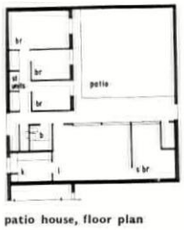
floor plan of flats, 4-person (two types) and bed-sitter



patio houses, diagram of parking court layout



patio houses, diagram of linear layout



patio house, floor plan

view from south-east of pedestrian way between terrace houses

LAINDON 4 AND 5, BASILDON, ESSEX

D. Galloway, Chief Architect and Planner

CLIENT: Basildon Development Corporation.

SITE: 86.5 acres to west of New Town centre with railway and Laindon station to south. Steep scarp on western edge with good views to south-west, gentle slope eastwards over rest of site.

ACCOMMODATION: 1,531 dwellings at 60 p.p.a. net. Houses, 13 2-person, 268 4-person, 810 5-person, 110 6-person. Flats and maisonettes, 91 1-person, 92 2-person, 67 3-person, 45 4-person, 35 5-person. 100 per cent garaging with 29 per cent visitors' parking. Provision for future 150 per cent garaging and parking. Complete segregation of pedestrians and play areas from vehicles. Within the courtyard system, overlooking from 1st-floor level of private living areas and gardens is avoided. Phase 1, all except western edge, 1,300 dwellings.

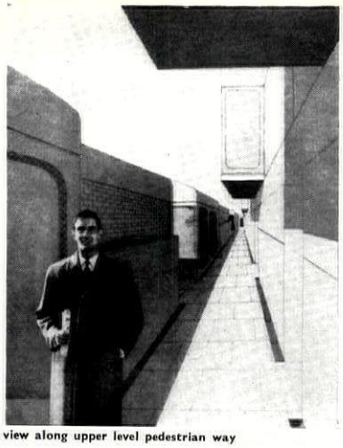
STRUCTURE AND FINISHES: HSSB system, 10½ in. brick cavity walls in large crane-lifted sections of 12 ft. × 5 ft. Use of standard elements such as partitions, plastic roof sections and plumbing components.

SERVICES: Conventional, including wired television.

COST: £5,115,000 overall, including roads. Negotiated contract.

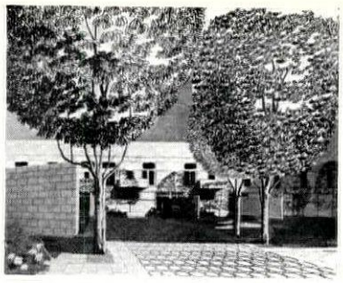
BUILDING PERIOD: April 1967–late 1969.

Design team, Maurice Naunton, John Byron, Clive Plumb and Dave Brewster. Quantity surveyor, E. C. Harris and Partners.



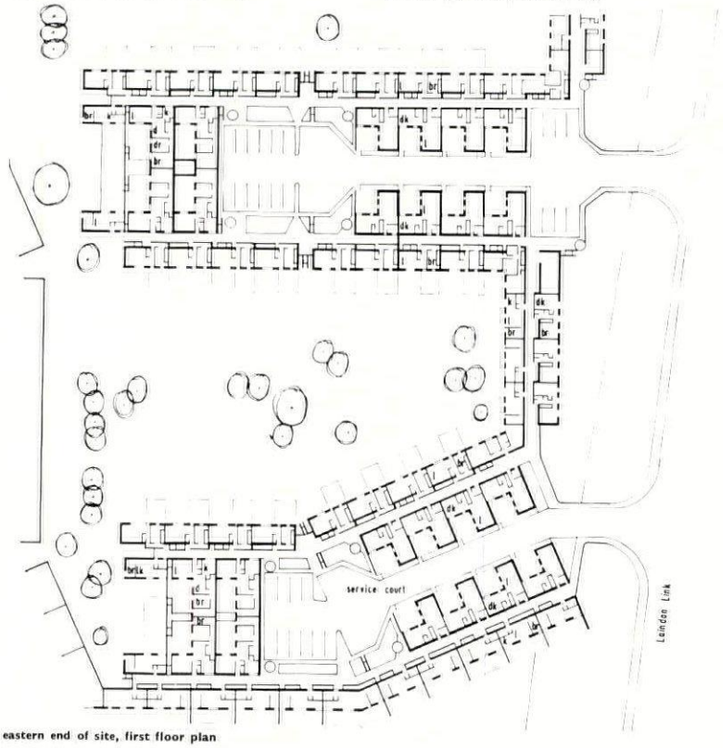
view along upper level pedestrian way

view along internal pedestrian way

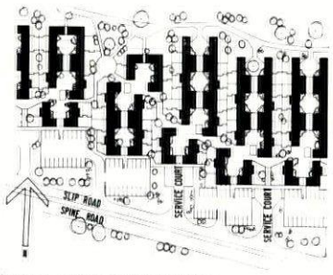


view of semi-private and private open space

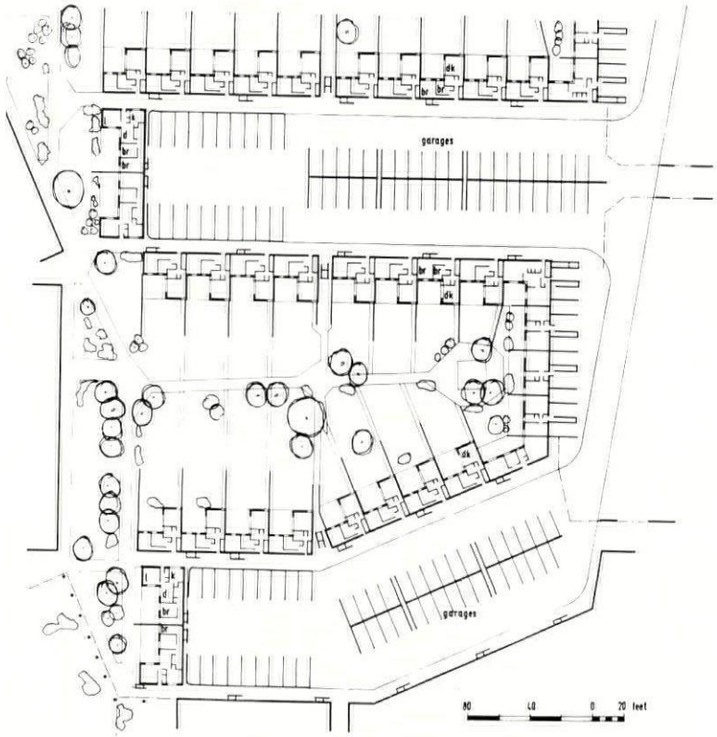
view along main pedestrian way to Laindon station



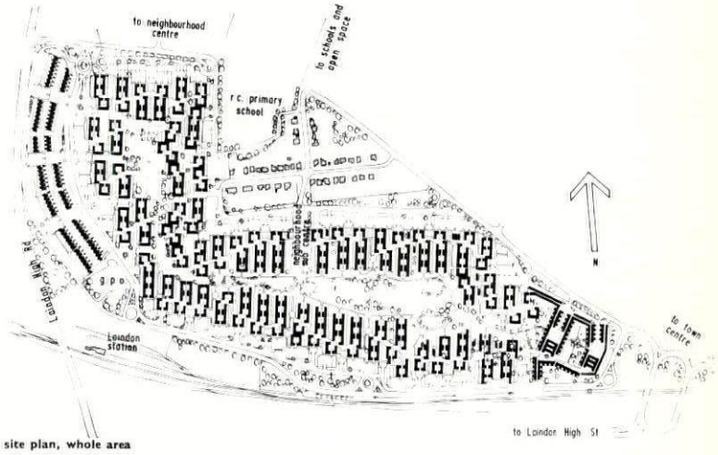
eastern end of site, first floor plan



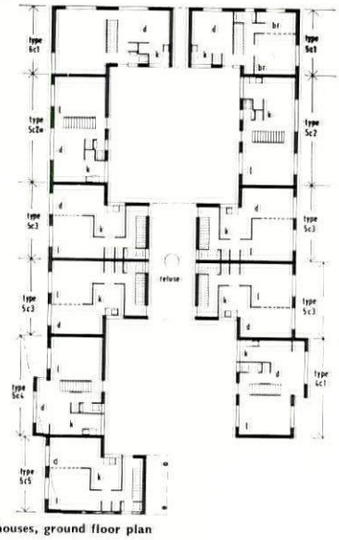
site plan, part of courtyard housing



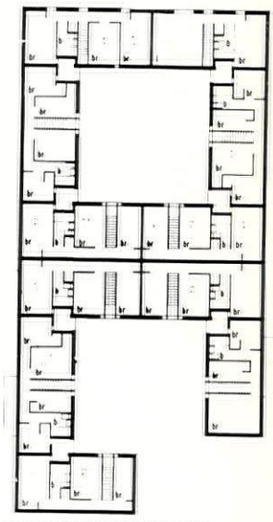
eastern end of site, ground floor plan



site plan, whole area



courtyard houses, ground floor plan

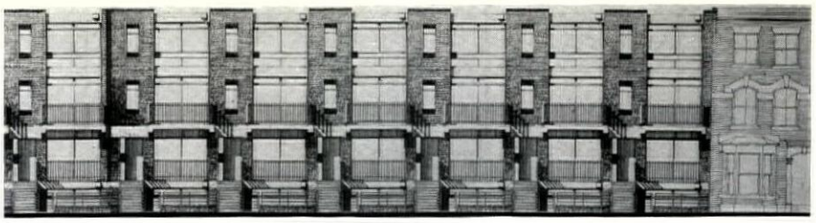


courtyard houses, first floor plan

GORE ROAD, VICTORIA PARK, LONDON

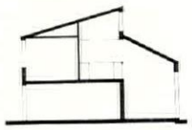
John Spence and Partners

CLIENT: Crown Estate Commissioners.
SITE: 19,000 sq. ft. on north edge of East End park, infill on bombed site in continuous Victorian terrace housing.
ACCOMMODATION: 9 3- or 4-bedroom terrace houses with single bedroom basement flats and 4 2-bedroom mews houses over garages. 11 new garages in addition to existing garages adjoining site.
STRUCTURE AND FINISHES: Terrace houses, loadbearing concrete block crosswalls, ground floor slab of prestressed concrete units, other floors and roofs of timber joists, Crowborough medium stock facing bricks and sheet aluminium roofs. Plaster and paintwork internally. Mews houses, brick crosswalls, precast concrete floor slabs, joisted roof, similar external finishes to terraces, fair-faced brickwork and painted walls internally, with exposed rafters and plywood ceiling.
SERVICES: Terrrace houses, gas-fired ducted warm air central heating, mews houses and basement flats electric underfloor heating. Electric water heating throughout.
COST: £90,000.
BUILDING PERIOD: October 1964–May 1966.
Partner-in-charge, Charles Rathbone. Quantity surveyor, Davis, Belfield and Everest.

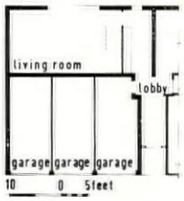


elevation to Gore Road (two houses off picture to left)

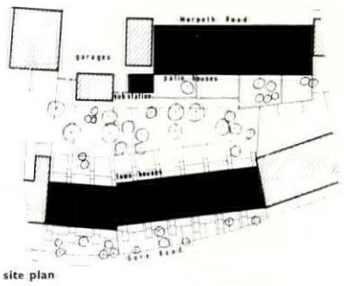
mews house, first floor



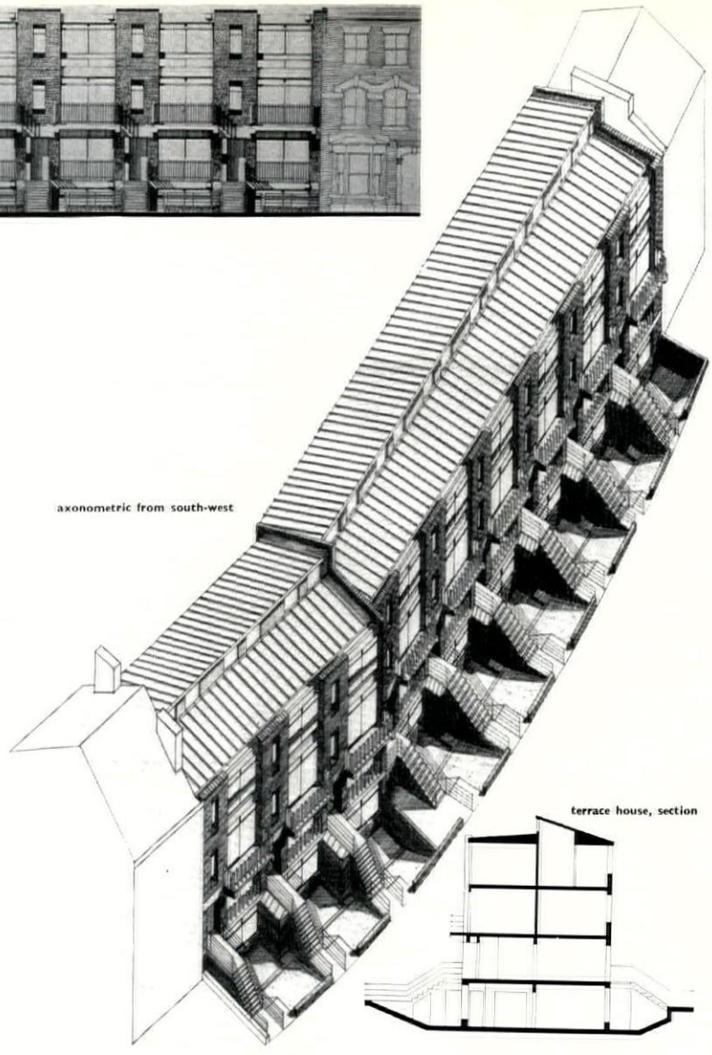
mews house, section



mews house, ground floor



site plan



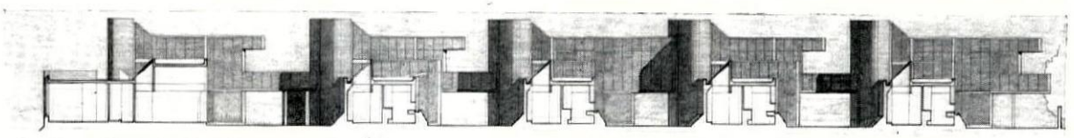
axonometric from south-west

terrace house, section

DUNSTAN ROAD, OLD HEADINGTON, OXFORD

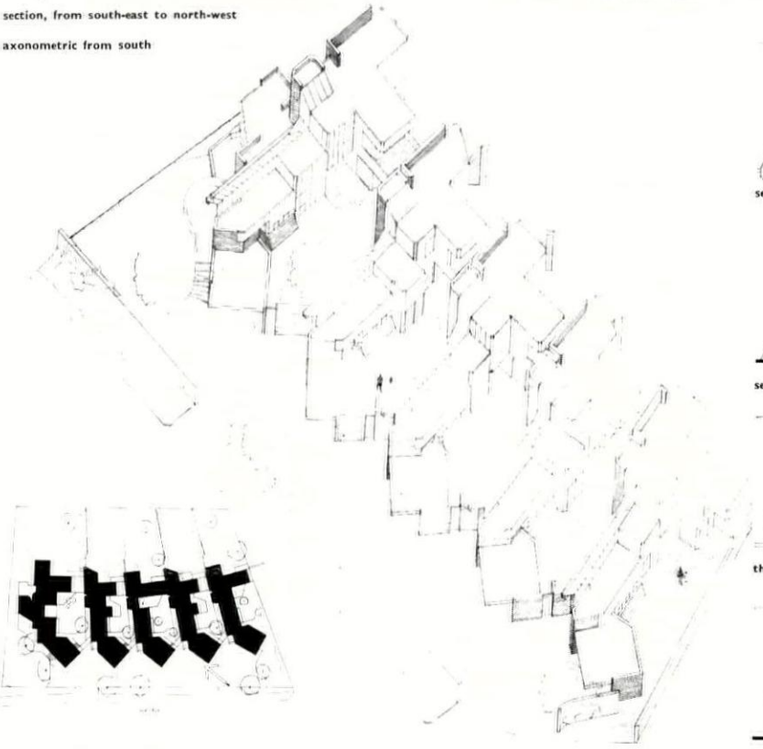
Ahrends, Burton and Koralek

CLIENT: Private consortium of 5 owners.
SITE: 230 ft. × 160 ft. field at northern end of village. Views across valley to north-east from new private courtyards.
ACCOMMODATION: 2 basic house types, with elements common to all houses such as bathrooms, kitchens, staircases, heating and structure.
STRUCTURE AND FINISHES: Loadbearing fair-faced brick spine walls, r.c. columns and beams, timber roofs. Lightweight skin walling on courtyard sides mainly fully glazed. Internally, brick walls painted, ceilings plastered.
SERVICES: Oil-fired warm air heating, off-peak electric hot water.
COST: £44,000.
BUILDING STARTS: March 1966. Quantity surveyor, D. A. Degerdon and Partners. Structural consultant, David Powell and Partners. Mechanical consultant, Associated Architects and Consultants.

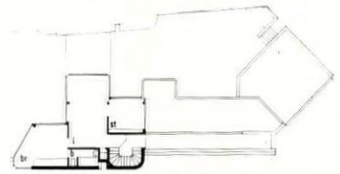


section, from south-east to north-west

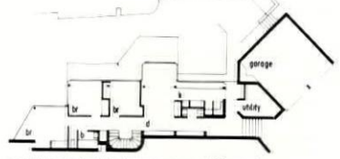
axonometric from south



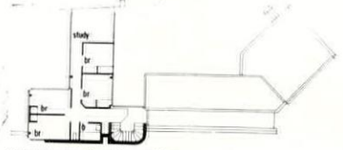
site plan



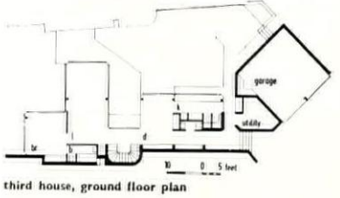
second and fourth houses, first floor plan



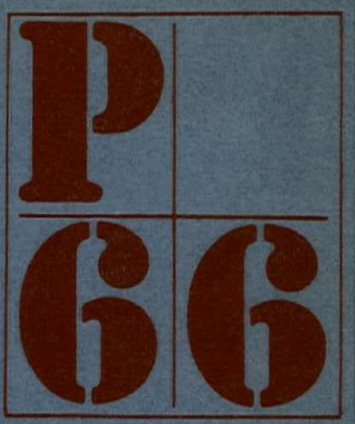
second and fourth houses, ground floor plan



third house, first floor plan



third house, ground floor plan



INDUSTRY COMMERCE

53	Town Centre, Cwmbran, South Wales	*Richard Sheppard, Robson and Partners*
54	Comprehensive Redevelopment, Lancaster Road, Kensington	*Clifford Wearden and Associates*
55	Sheaf Market Square, Sheffield, Yorks	*W. L. Clunie, City Architect*
56	Shops and Car Park, Sheffield, Yorks	*The Owen Luder Partnership*
	Mixed Development, Southport, Lancs	*Julian Keable and Partners in association with Lowe, Ferguson and Partners*
57	Offices, Bromley Common, Kent	*The Owen Luder Partnership*
58	Mixed Development, Buckingham Gate, London	*C. H. Elsom and Partners*
	Shopping Centre, Old Harlow, Essex	*Frederick Gibberd and Partners*
59	University Printing Works, Oxford	*John G. Fryman of Architects' Design Partnership*
	Hotel, Herm Island, Channel Islands	*Erdi and Rabson in association with Boutell and Bramall*
60	Offices for Factory, Derby	*Bicknell and Hamilton*
	Factory and Offices, Swindon, Wilts	*Team 4*
61	Public House, Pimlico, London	*Darbourne and Darke*
	Electricity Transformer Station, Pimlico, London	*Darbourne and Darke*
62	Power Station, Pembroke	*Architects' Design Group*

P 66

The London borough of Kensington and Chelsea is notorious for its flatulent public library and for its refusal to appoint a borough architect until the Ministerial axe falls in 1968. The major redevelopment scheme for the area of North Kensington to the west of Ladbroke Grove, prepared for the borough by Clifford Wearden and Associates, is thus a splendid surprise. Nothing so comprehensive and so radical in its approach has been prepared for any other such area in London: an environmental area à la Buchanan, massive shutting off of present roads, a balanced mixture of housing, shops, offices and entertainment. Perhaps some of the housing layout is overformal: the double herringbone terraces in particular seem guaranteed to disrupt the consistent and harmonious curves of the Victorian housing towards Ladbroke Grove.

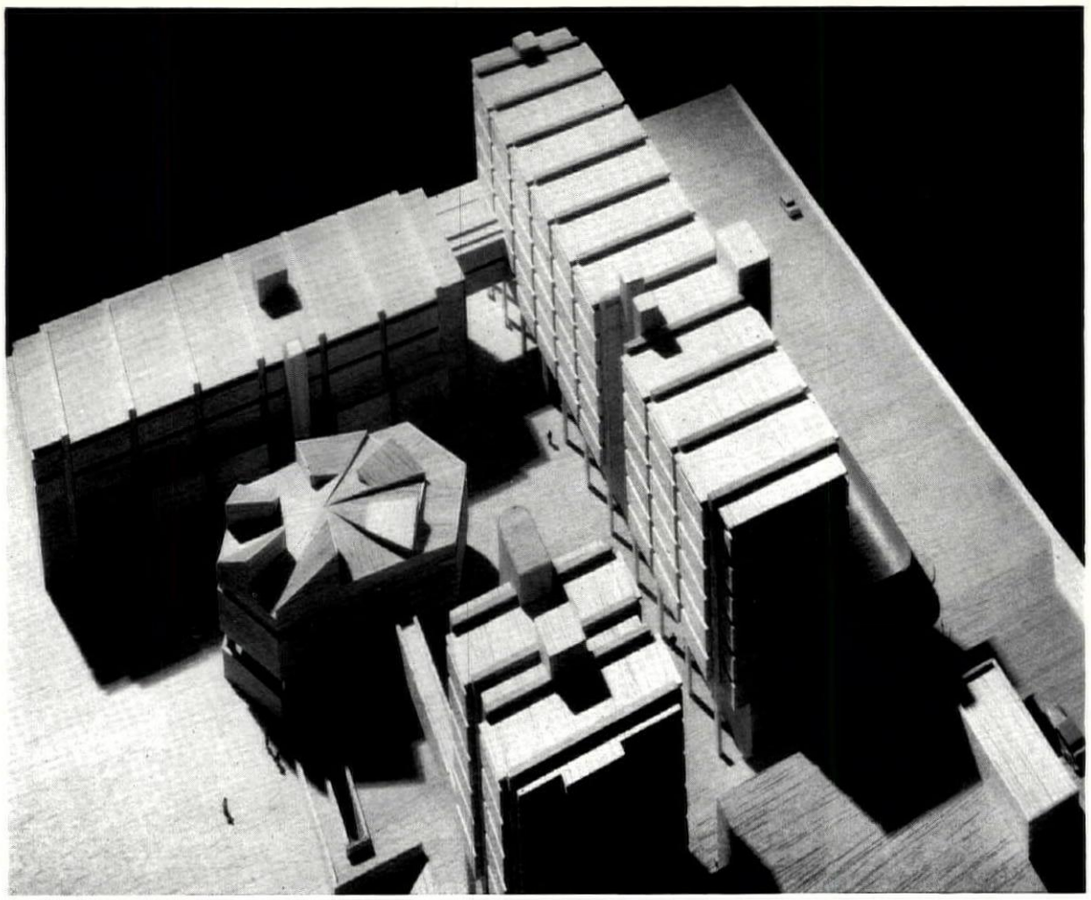
It will be interesting to see the method adopted for carrying the scheme out: whether private developer, borough, or both. It was the LCC Architect's Department's one great weakness, possibly because of its internal subdivision into schools and housing and planning, that it failed to achieve mixed developments of this kind (the Elephant and Castle is the saddest example). Another London borough attempt is the Lillington Street area in Westminster (last year's Preview) by Darbourne and Darke, from which a public house and transformer station have been extracted here for detailed illustration. In the provinces Sheffield is still far ahead. The Sheaf Market Square is not merely an excellent example of sectional organization in itself from its lowest levels of parking and services to the stepped terraces on top, but forms the vital link in the sectional organization of the whole city centre between the existing Castle Market and Park Hill and the future Civic Centre (see page 67). More conventional but also admirable are two new town schemes: Richard Sheppard's robust and urbane town centre group for Cwmbran and Frederick Gibberd's conservation and infill at Harlow village.

There is no more sign than before that private developers are seeking imaginative architects or vice versa (there is prejudice on both sides). A clean-limbed chunk of Victoria Street by C. H. Elsom and Partners (including the demolition of that fine pub, 'The Albert', and its removal to new premises at the rear of the site), a flexible diamond-shaped office block at Derby by Bicknell and Hamilton, a sectionally clever entertainment-office-flat scheme by Julian Keable and Partners at Southport complete with mini Post Office tower—these are the only private enterprise schemes for outworn town centres to keep company the latest achievements of Owen Luder and his developer-client Alec Colman. The great terrace at Bromley Common and the stepped car park on shops at Sheffield follow their earlier projects for Portsmouth (Preview, 1964) and Gateshead and Sutton (last year's Preview). The same architects' Eros House at Catford (AR April, 1963) is almost the only postwar office block to give that intangible Victorian impression of a king-sized client as well as a king-sized architect (cf. the Birkbeck Bank, AR November, 1965). Most property developers, although written up as gay buccaneers by the financial journalists, appear mean-minded and humourless even in their best buildings. Whether Luder's wholesale import of motifs from Japan is entirely justified is another matter; Tange's and Maekawa's great town halls and head offices seem to represent a sense of triumph among the shacks (again something Victorian) which perhaps does not quite fit our more classless society. One wonders what Luder would have made of a job like Pembroke power station, which Architects' Design Group have tried so hard to reconcile with the landscape of a National Park. A leaner, more democratic kind of patronage is exemplified by Team 4's factory for Reliance Controls at Swindon—which, as a striking example of linear planning, is discussed in the general introduction on page 9.

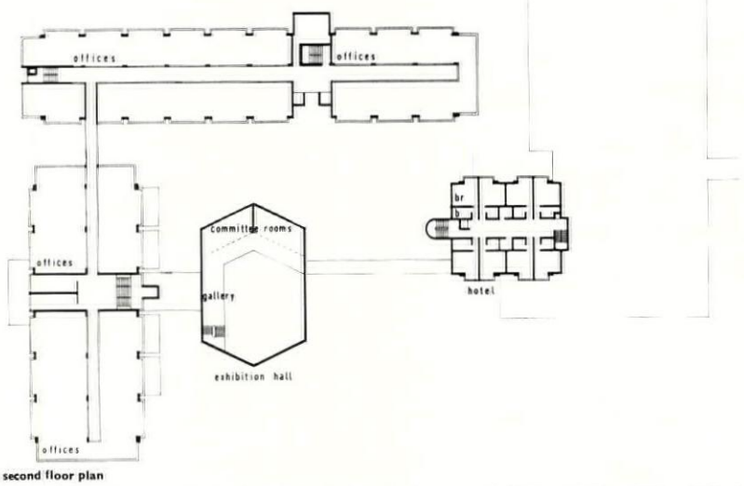
TOWN CENTRE, CWMBRAN, S. WALES

Richard Sheppard, Robson and Partners in association with Gordon Redfern, Chief Architect to Development Corporation

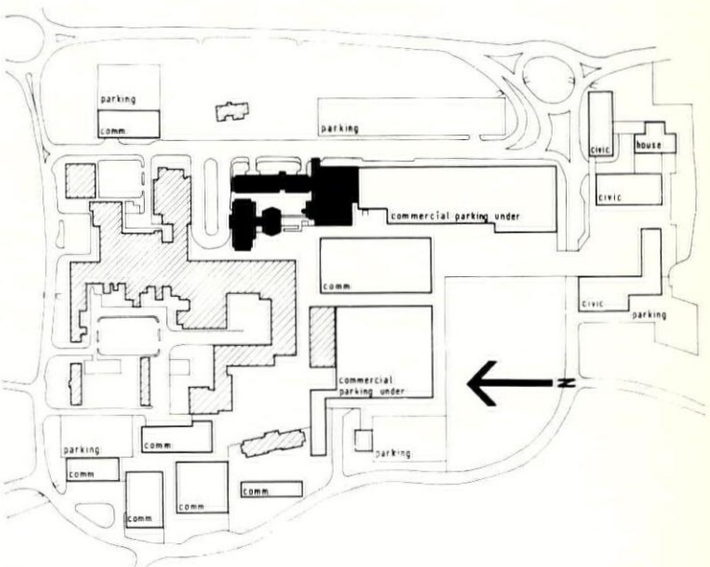
CLIENT: Cwmbran Development Corporation.
SITE: 1.25 acres, clear site adjoining new shopping parades in central area.
ACCOMMODATION: Offices, 70,000 sq. ft. Public library, 12,000 sq. ft. Exhibition hall, 5,500 sq. ft. Public house, 3,500 sq. ft. Lettable shops, 14,200 sq. ft. 50-bed hotel. 499-seat cinema-theatre. Underground parking for 62 cars.
STRUCTURE AND FINISHES: R.c. frame expressed externally, infill panels of black glazed brick or dark semi-engineering brick. Exhibition hall, steel-framed with aluminium cladding. Windows of metal sections, painted.
SERVICES: Heating by high pressure circulation to convectors from calorifiers supplied by the town's district heating system.
COST: £750,000, not including hotel or cinema.
Partners-in-charge, Richard Sheppard and A. C. F. Morris. Assistant, R. H. Ford. Quantity surveyor, Davis, Belfield and Everest.



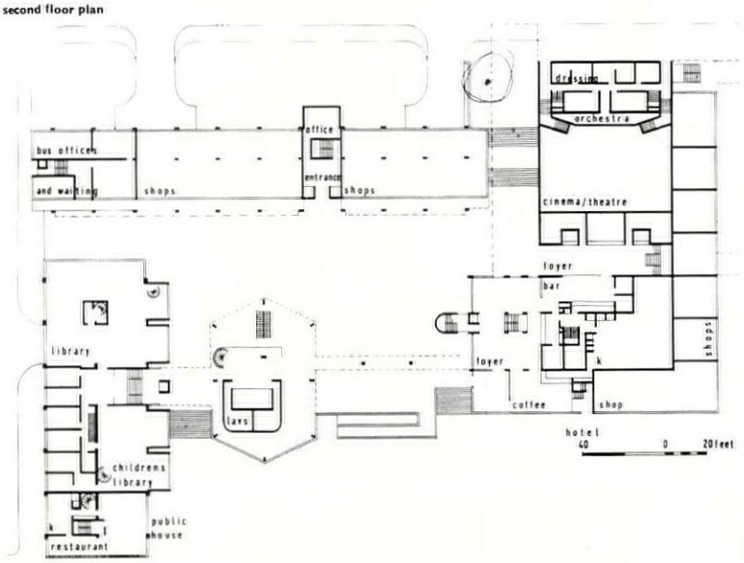
general view from south-west



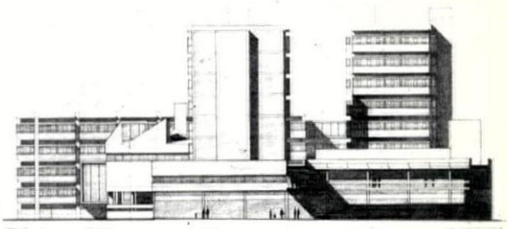
second floor plan



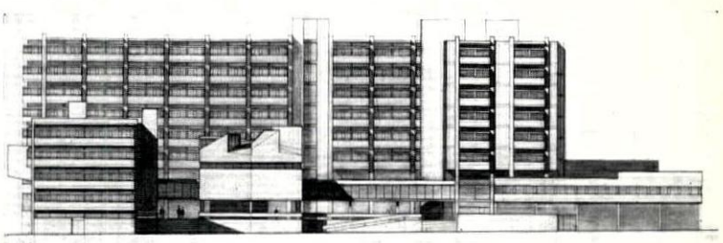
site plan



ground floor plan



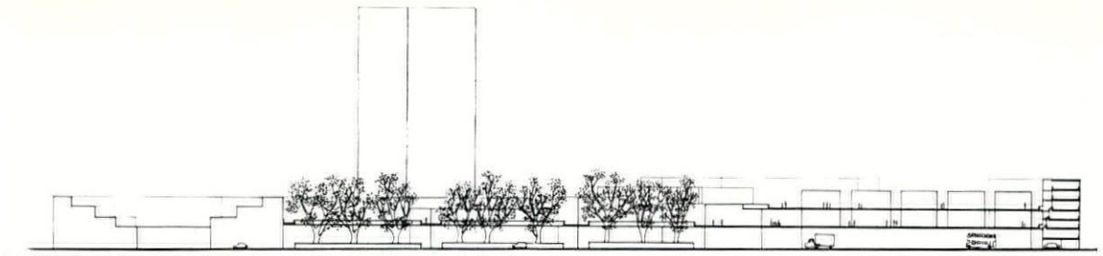
south elevation
west elevation



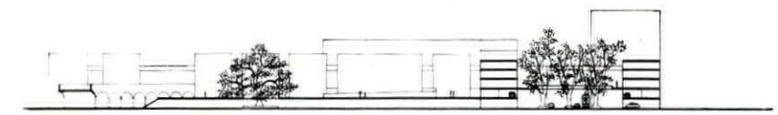
COMPREHENSIVE REDEVELOPMENT, LANCASTER ROAD, KENSINGTON

Clifford Wearden and Associates

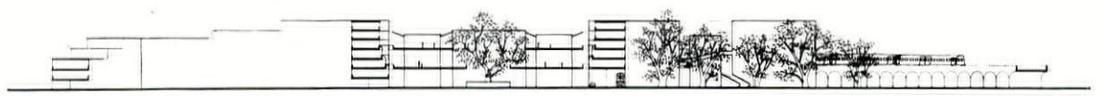
CLIENT: London Borough of Kensington and Chelsea.
SITE: 27 acres, irregularly shaped and slightly sloping.
ACCOMMODATION: Housing for 3,700 people, shops, small offices and commercial premises, communal buildings. Road pattern remodelled to form environmental area. Deck systems starting at each end overlap at central amenity spine, which runs in curve from Latimer Road station to central green square in front of existing church. 3 main housing groups, on west with tall tower block, on north-east and on south-east, connected to central deck by walkways. Access to decks on periphery and from ground floor car park by staircases, ramps, lifts and escalators.
SERVICES: Heating and hot water from central district heating plant.
BUILDING PERIOD: Completion within 1960–72 planning period in 5 phases. Partner-in-charge, Clifford Wearden. Associate-in-charge, Peter Beakins. Assistants, Maurice Eskenazi, Tom Clayton and Samuel Bettany.



longitudinal section, east-west, showing flats, tower block and two shopping levels



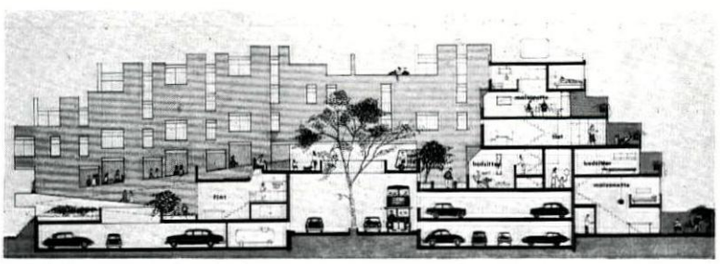
cross-section through Metropolitan Railway, offices, sub-station and Lancaster Road



cross-section through school site, Lancaster Road and Metropolitan Railway

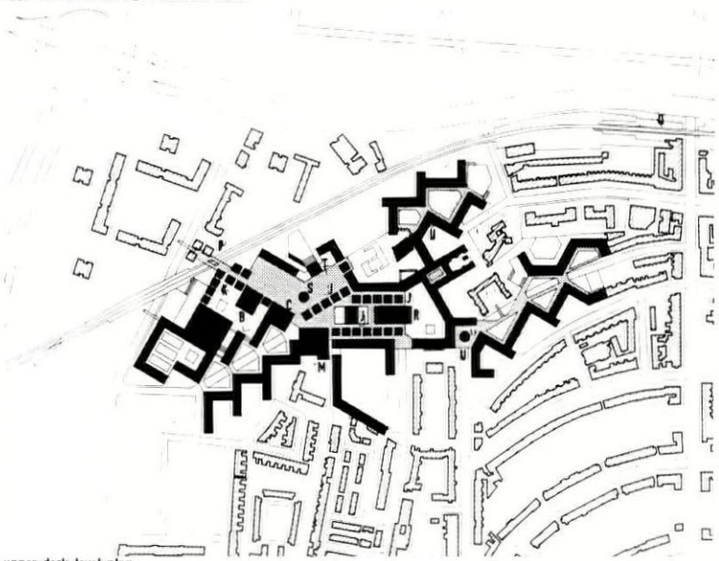
key to plans

A, commerce
B, swimming baths
C, LEB sub-station
D, GPO sorting office
E, church
F, playground
G, bus station
H, library
J, shops
K, offices and commerce
L, health centre
M, old people's hostel
N, tower block
O, workshops
P, Latimer Road station
Q, Ladbroke Grove station
R, hall for indoor games
S, post office
T, restaurant
U, pub
V, school site

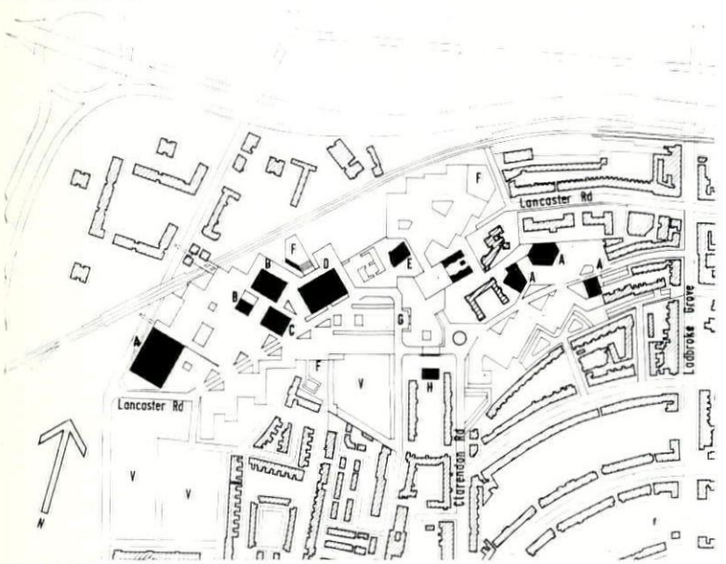


typical section through Lancaster Road

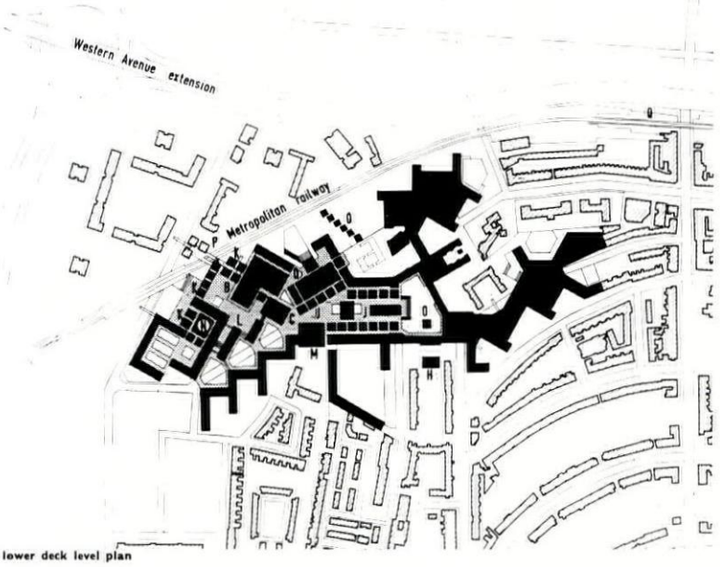
view from south-west



upper deck level plan



ground level plan

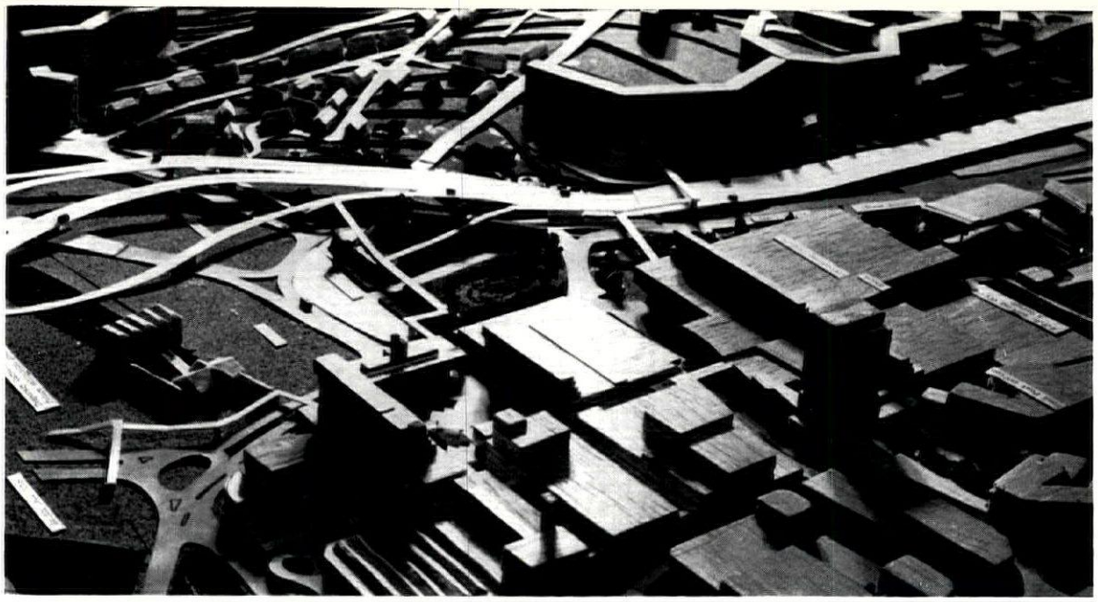


lower deck level plan

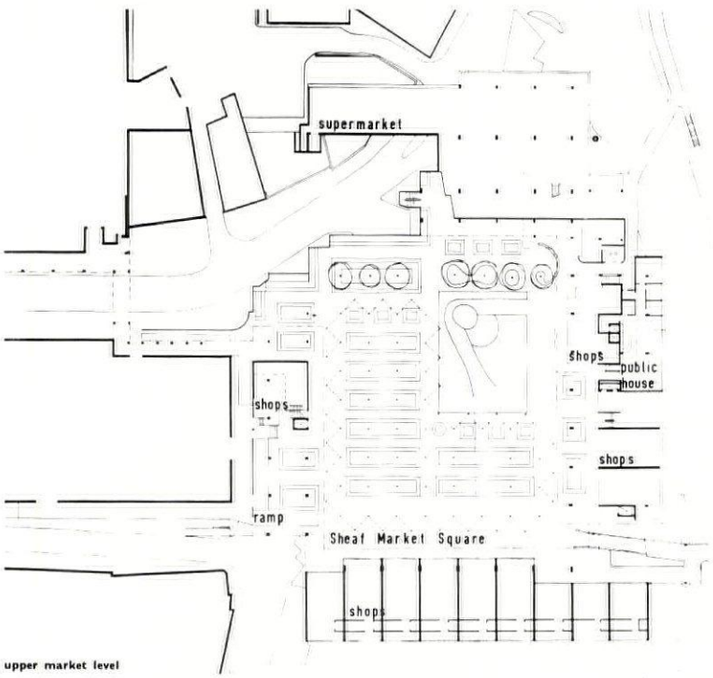
SHEAF MARKET SQUARE, SHEFFIELD, YORKS

W. L. Clunie, City Architect

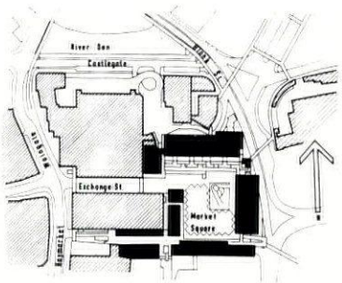
CLIENT: Sheffield City Council.
SITE: At confluence of Rivers Sheaf and Don north-east of city centre, next to Castle Market and future intersection of M1 link and inner circle. Overlooked from east by Park Hill and Hyde Park housing.
ACCOMMODATION: 2-level market square surrounded by shops, with warehousing, motor showroom and bus stops at street level. Pedestrian bridges and streets to link city centre with Park Hill and Hyde Park. 3rd pedestrian level joins Castle Market to bus and railway stations, swimming pool (see AR Preview, 1965) and civic centre (see page 70), giving access to offices, entertainments building and 82 flats in south-facing stepped terraces.
STRUCTURE AND FINISHES: R.c. waffle slabs cantilevered all round, preflex over dock, r.c. fair-faced or with relief murals, brick infill, brick paving. Upper market canopy, fibreglass on tubes and wires. Offices, floor-to-ceiling fixed glass, waffle slabs acoustically plastered.
SERVICES: Street services in underground walkway. Sprinklers, mechanical extract only, from offices via corridor. Convectors at cill level in offices. Flats, solar heat with electric boost.
COST: Phase 1, £1,000,000. Phase 2, £1,000,000. Phase 3, not costed.
BUILDING PERIOD: Phase 1, 1966–1968. Phase 2, 1971-1973.
Assistant city architect, Jan Kot. Group leader, John Taylor. Assistant, Alan Marritt. Quantity surveyor, Cyril Sweett and Partners. Structural consultant, Ove Arup and Partners.



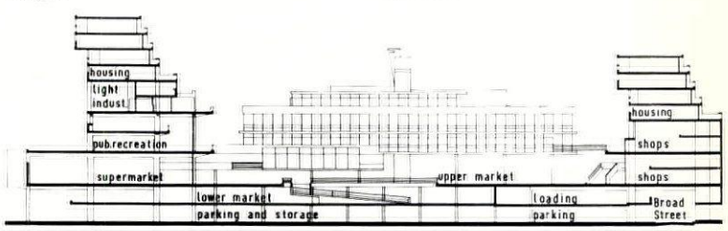
general view of model, showing Park Hill housing in background connected with the market by bridges across the Sheaf Valley



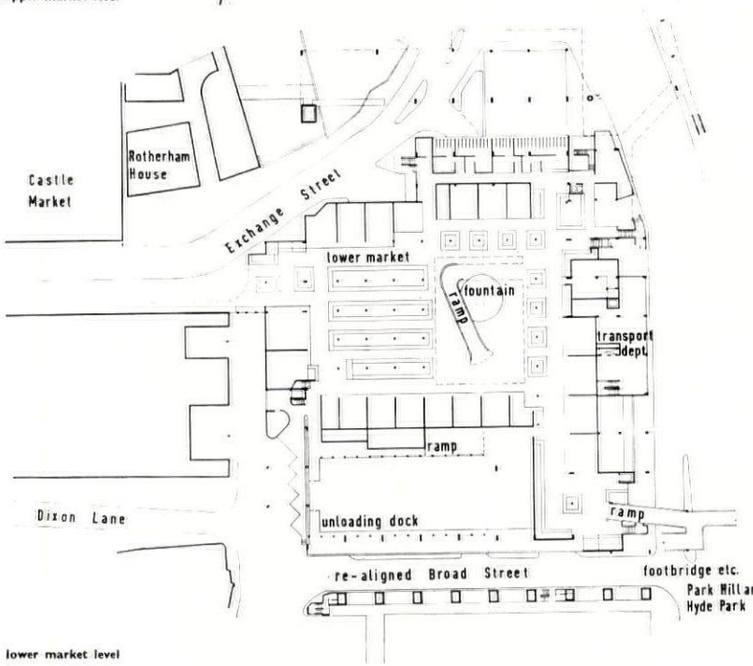
upper market level



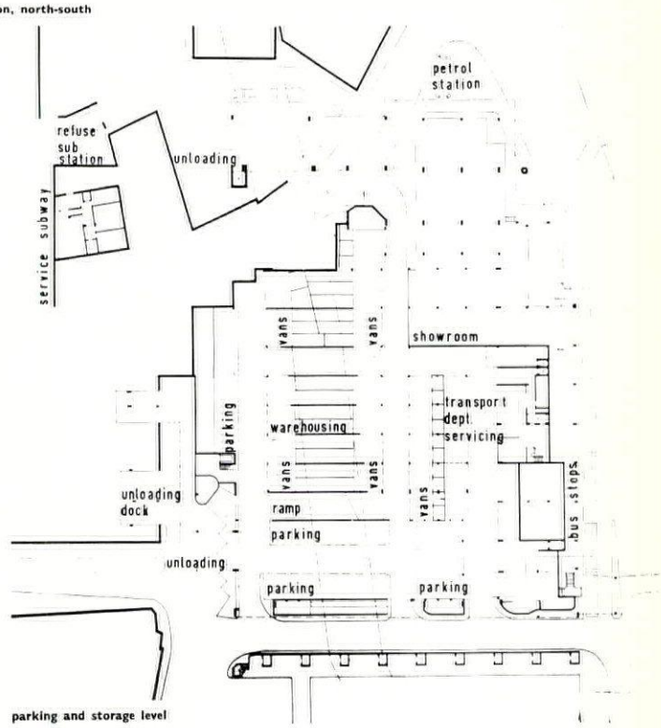
site plan



cross-section, north-south



lower market level

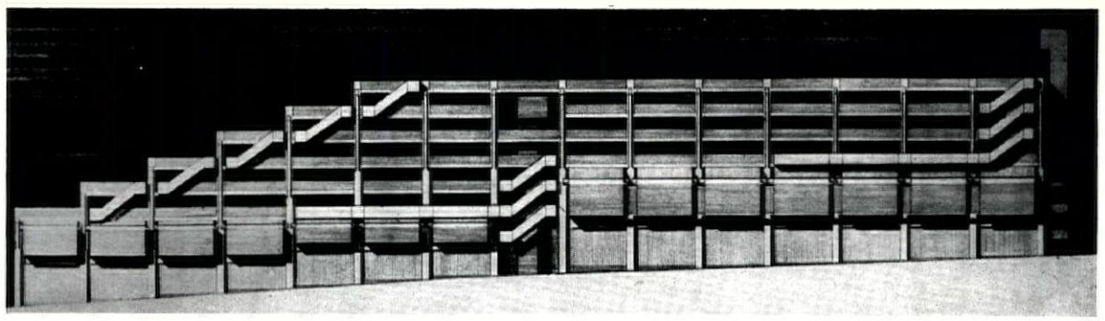


parking and storage level

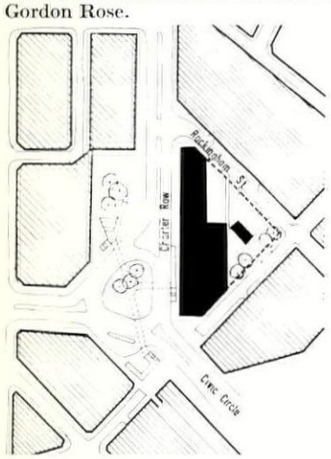
SHOPS AND CAR PARK, SHEFFIELD, YORKS

The Owen Luder Partnership

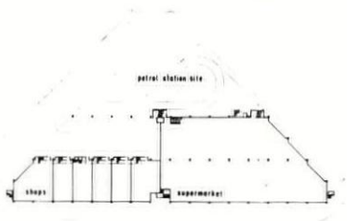
CLIENT: E. Alec Colman Group of Companies.
SITE: 5,670 sq. yds. in central area.
ACCOMMODATION: Supermarket 28,000 sq. ft. 6 shops 17,200 sq. ft. Business uses 6,500 sq. ft. Parking for 600 cars.
STRUCTURE AND FINISHES: In situ r.c. columns and preflex beams with precast floor units, brick infill and precast capping.
BUILDING PERIOD: March 1966–July 1967.
Partners-in-charge, Owen Luder, Dennis Drawbridge and Rodney Gordon. Assistant, Robert Byron. Quantity surveyor, C. R. Wheeler and Partners. Structural consultant, Gordon Rose.



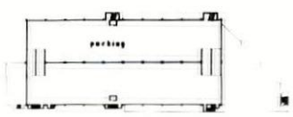
elevation to Charter Row



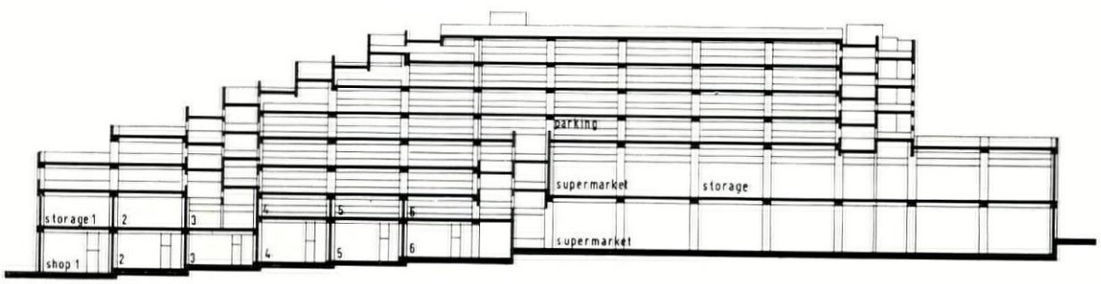
site plan



ground floor plan



third floor plan

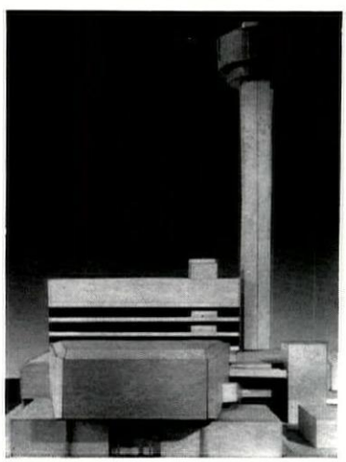


longitudinal section

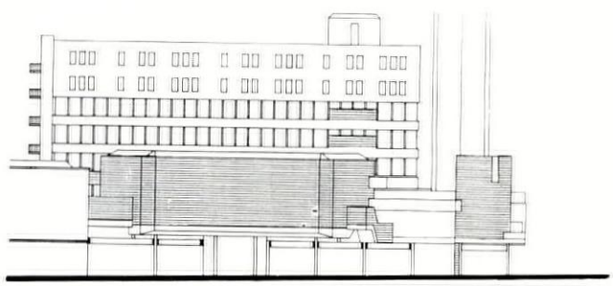
MIXED DEVELOPMENT, SOUTHPORT, LANCS

Julian Keable and Partners in association with Lowe, Ferguson and Partners

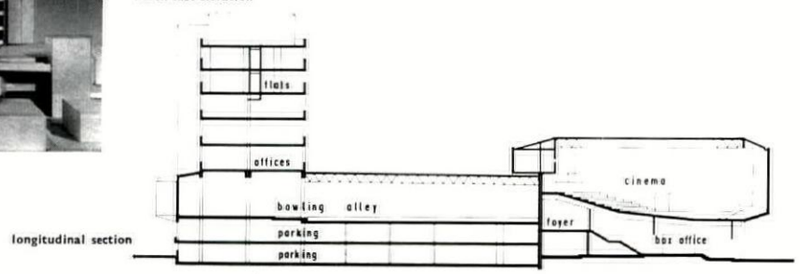
CLIENT: John Laurie & Co. Ltd.
SITE: Off main shopping street, replacing Scala Theatre.
ACCOMMODATION: Shops, cinema, 28-lane bowling centre, parking for 110 cars, 3 floors of offices, 2 floors of flats, entertainments tower over 200 ft. high. Bowling centre cantilevered over various entrances. 3 platforms of tower partly open.
STRUCTURE AND FINISHES: Generally r.c. with precast mullions to offices, metal trusses over cinema and bowling centre. Mainly facing brick externally. Fascia to bowl and cinema, copper-faced felt.
SERVICES: Central boiler plant for offices, separate plenum systems to bowling centre and cinema.
COST: £420,000.
Partners-in-charge, Murray Simons and Gerald Woolnough.



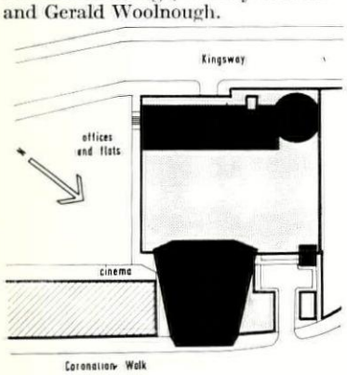
view of model from north-east



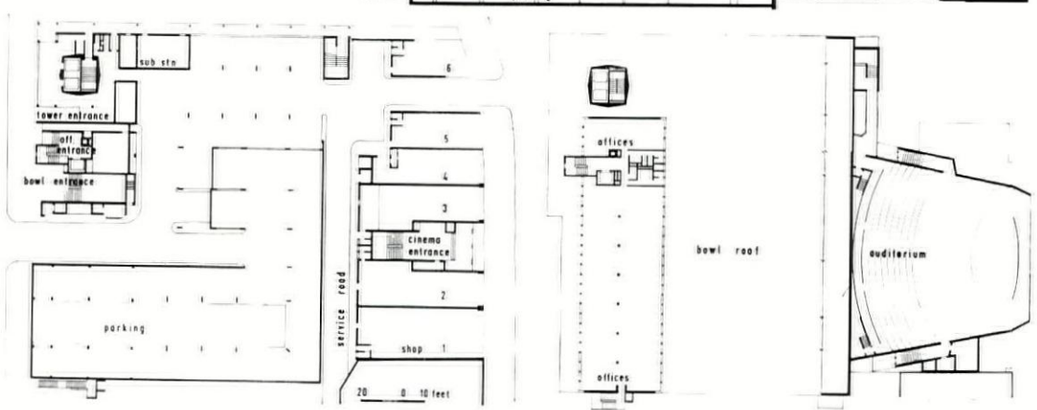
north-east elevation



longitudinal section



site plan



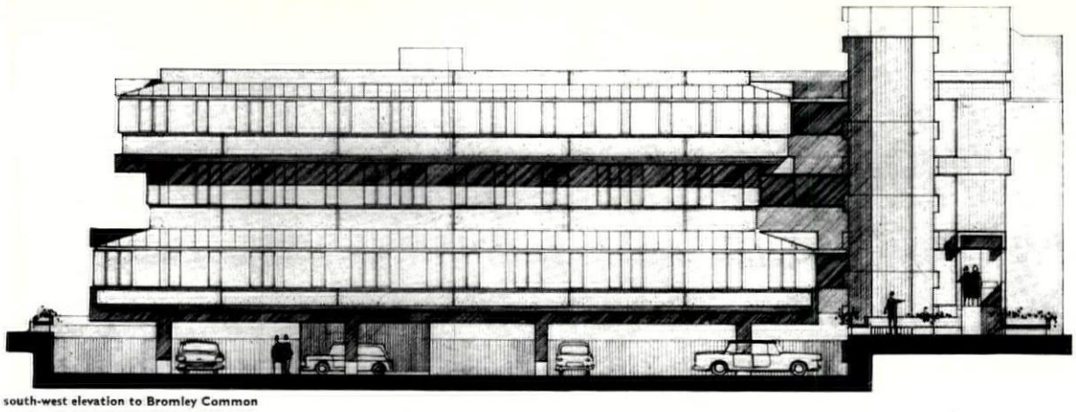
ground floor plan

second floor plan

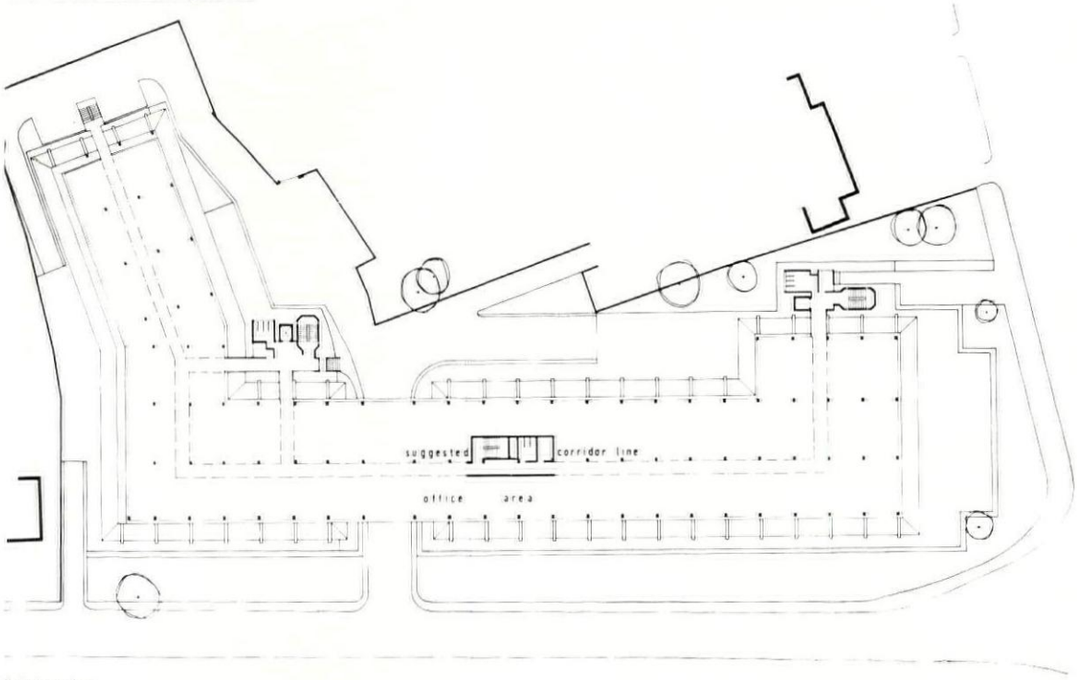
OFFICES, BROMLEY COMMON, KENT

The Owen Luder Partnership

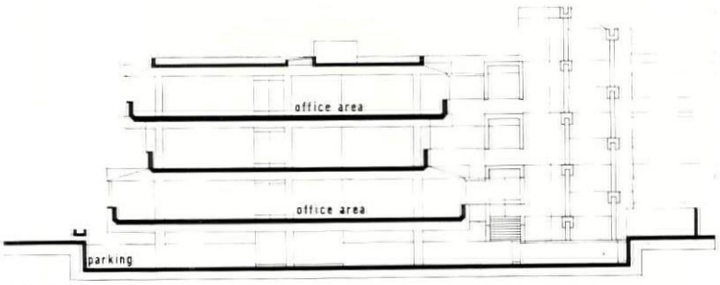
CLIENT: E. Alec Colman Group of Companies.
SITE: 450 ft. × 160–300 ft., 5 minutes from Bromley town centre, within housing area. Site split by right-of-way. Some mature trees on frontage.
ACCOMMODATION: 90,000 sq. ft. offices, parking for 180 cars. All services in 2 external towers and central area.
STRUCTURE AND FINISHES: R.c. slabs and beams, fair-faced, with blue-grey facing brick up to cill, aluminium sliding windows, patent glazing and rooflights. Plaster and lino tiles internally. Circulation tower, r.c. with granitex finish externally, plaster and quarry tiles internally.
SERVICES: Electrical underfloor and water heating, skirting duct for internal services.
COST: £350,000.
BUILDING PERIOD: June 1965–March 1967.
Partners-in-charge, Owen Luder, Dennis Drawbridge and Rodney Gordon. Associate-in-charge, Norman Wilson. Quantity surveyor, Paul Norveil. Structural consultant, W. Pasykowski. Electrical consultant, Rhode Electrics. Special consultant, Services Industrial and General.



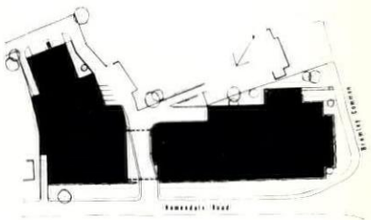
south-west elevation to Bromley Common



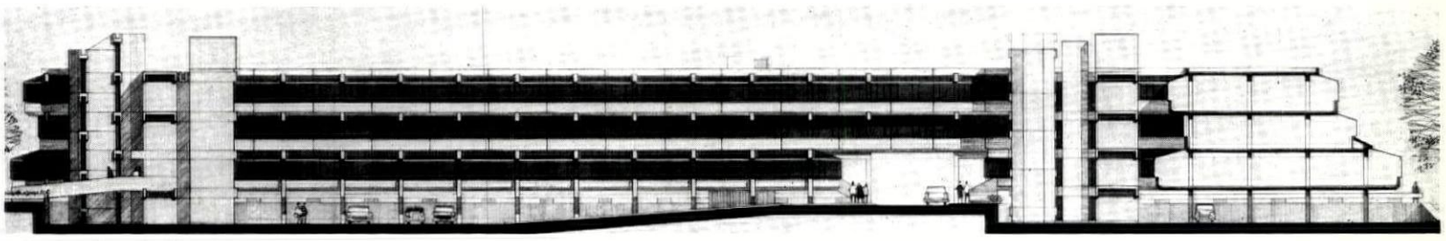
first floor plan



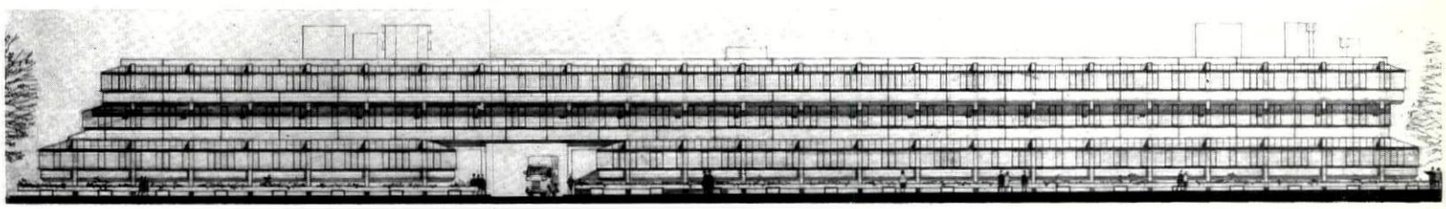
cross-section



site plan



south-east elevation and section



north-west elevation to Homesdale Road

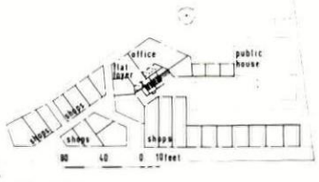
MIXED DEVELOPMENT, BUCKINGHAM GATE, LONDON

C. H. Elsom and Partners

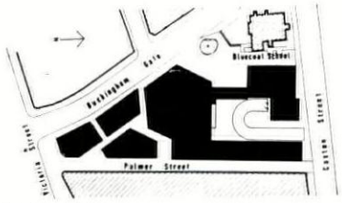
CLIENT: Amalgamated Securities Ltd. and Watney Mann Property Co. Ltd.
SITE: 0.63 acre facing small square with historic Bluecoat School, as part of same architects' Victoria Street redevelopment. Similar existing uses.
ACCOMMODATION: Shops, 26,578 sq. ft. (forming replacement to intimate character of Palmer Street). Offices, 35,493 sq. ft.
48 flats consisting of 24 bedsitters, 12 1-bedroom and 12 2-bedroom, parking for 120 cars. Public house.
STRUCTURE AND FINISHES: R.c., with main loading taken by central core, bush-hammered where exposed at lower levels, white stone facing above with stainless steel cladding to mullions.
SERVICES: Individual electric heating to shops, central boiler plant for heating offices, individual gas-fired hot air heating in flats.
BUILDING STARTS: When permitted by Board of Trade.
Partner-in-charge, W. Pack. Assistant, Robin Kirton. Quantity surveyor, Cyril Sweett and Partners. Structural consultant, Clarke, Nicholls and Marcel.

flats, typical floor plan

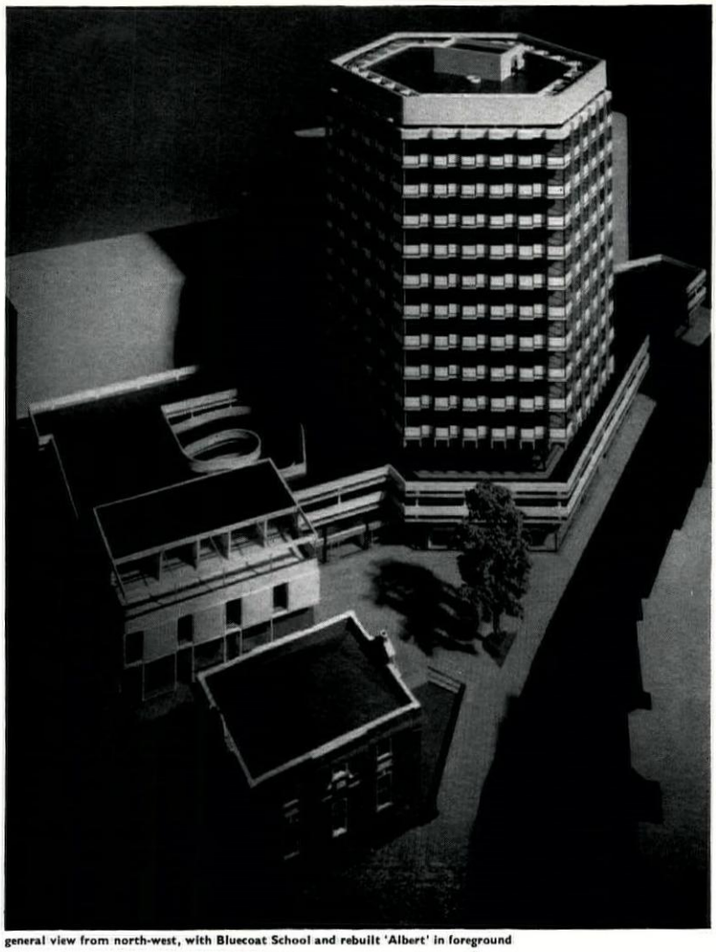
offices, floor plan



ground floor plan



site plan

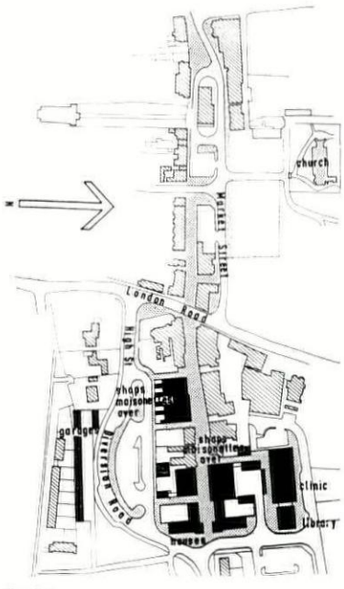


general view from north-west, with Bluecoat School and rebuilt 'Albert' in foreground

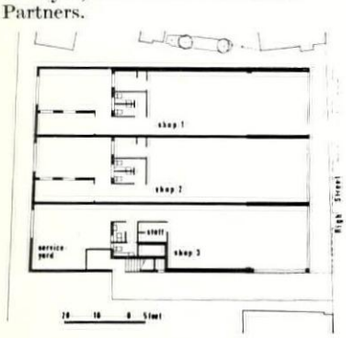
SHOPPING CENTRE, OLD HARLOW, ESSEX

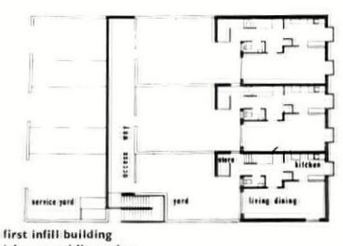
Frederick Gibberd and Partners

CLIENT: Harlow Development Corporation.
SITE: High Street of existing traditional village on east side of New Town. Originally on A11 but now bypassed. Traffic excluded.
ACCOMMODATION: Conversion and infill: 14 maisonettes, 10 3-storey houses, clinic of 7,000 sq. ft., library site, parking for 92 cars.
STRUCTURE AND FINISHES: Loadbearing brick generally, ground floor faced with London stocks, upper floors rendered, roofs of clay tiles or copper sheeting.
SERVICES: Gas-fired ducted warm air central heating to maisonettes.
BUILDING STARTS: January 1966, first infill building on 12-month contract. Rest dependent on site acquisition, road works and closures.
Partner-in-charge, John Graham. Assistant, G. S. Smith. Quantity surveyor, Oswald E. Parratt and Partners.

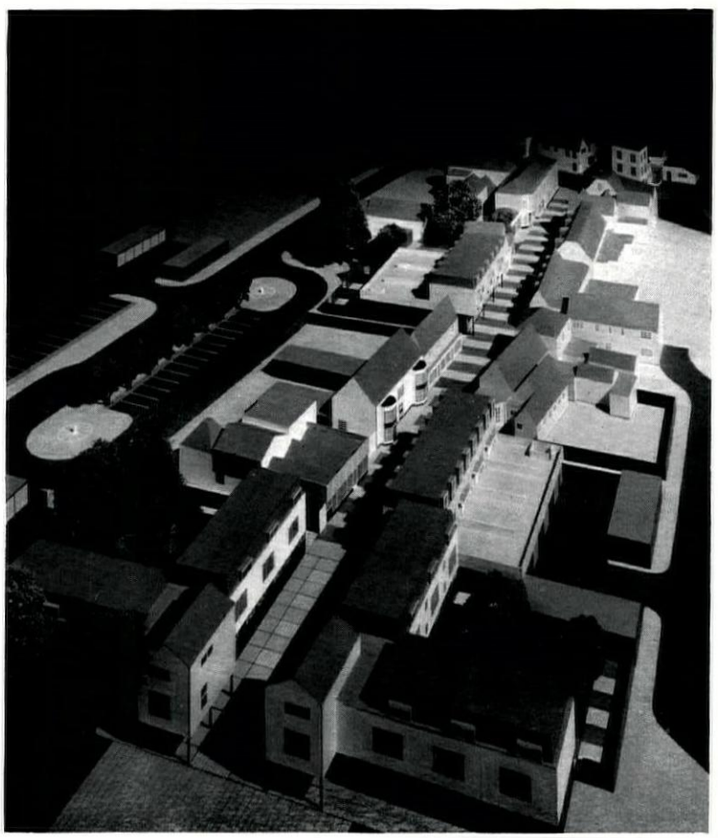


site plan

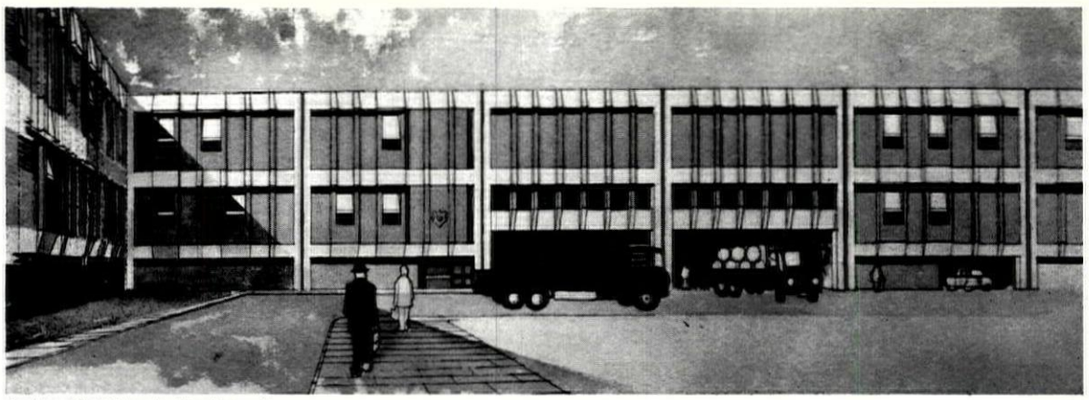




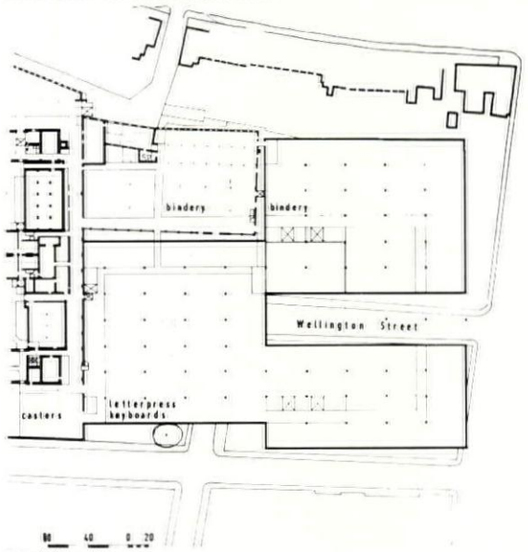
first infill building
left, ground floor plan
above, first floor plan



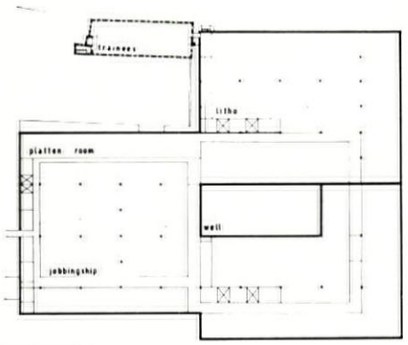
general view from east



view from Great Clarendon Street to north



ground floor plan

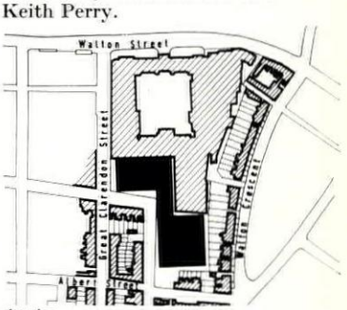


first floor plan

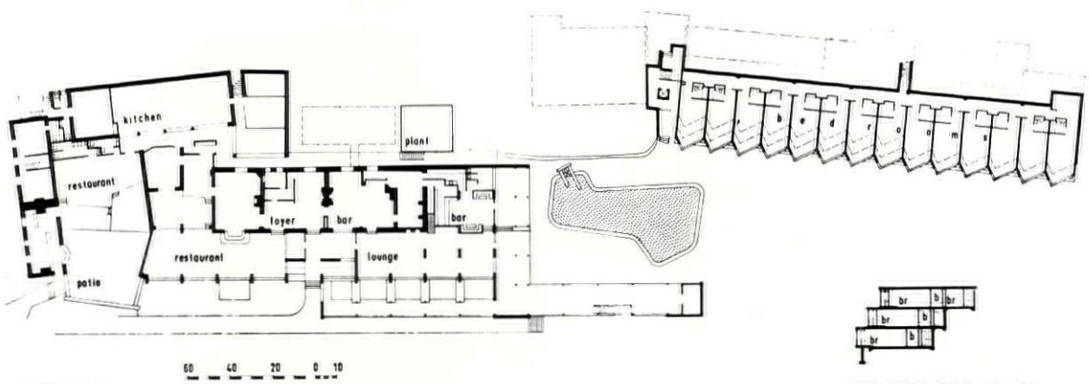
UNIVERSITY PRINTING WORKS, OXFORD

John G. Fryman of Architects' Design Partnership

CLIENT: Oxford University Press.
SITE: At back of existing classical quadrangle of 1835.
ACCOMMODATION: 5-stage master plan. Loading and parking at lower ground level. Production areas aligned with existing departments. Substantial machine loads at upper levels because of confined site.
STRUCTURE AND FINISHES: Steel frame with long span prestressed beams at 4 ft. centres supporting short span slabs. Outer beams carry brick panel walls with flat inner surfaces. Fair-faced brick and concrete externally.
SERVICES: Steam boiler plant extended for heating and cooling unit system, integrated with lighting for wholly artificial environment.
BUILDING PERIOD: Phase 1, June 1966–December 1967.
Associate-in-charge, Frank L. Hawes. Assistants, John Heather and Keith Perry.



site plan



ground floor plan

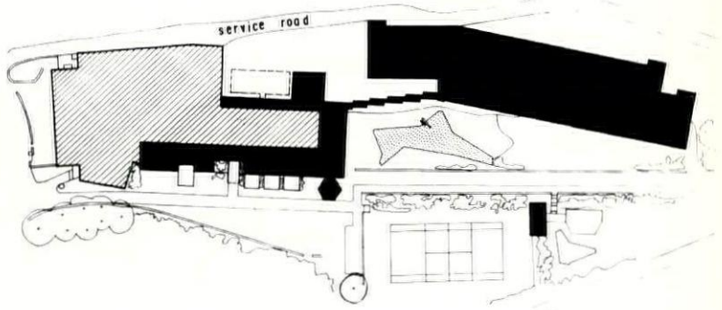
cross-section of bedroom wing

HOTEL, HERM ISLAND, CHANNEL ISLANDS

Erdi and Rabson in association with Bouttell and Bramall

CLIENT: Major A. G. Wood.
SITE: The White House, extension of existing hotel as part of comprehensive holiday development on island. Hilly, partly wooded, facing sea.
ACCOMMODATION: Phase 1, visitors' bar and restaurant, staff accommodation. Phase 2, hotel bar, restaurant and lounge. Phase 3, new wing of 48 bedrooms.
STRUCTURE AND FINISHES: Restaurant and bars, brick piers and beams. Bedroom wing, loadbearing crosswalls and beams. Externally, local type of high relief rendering.
BUILDING PERIOD: Phase 1, completed 1965. Phase 2, October 1965–April 1966. Phase 3, October 1966–April 1967.
Partner-in-charge, B. J. D. Cassells.

south-east view from sea

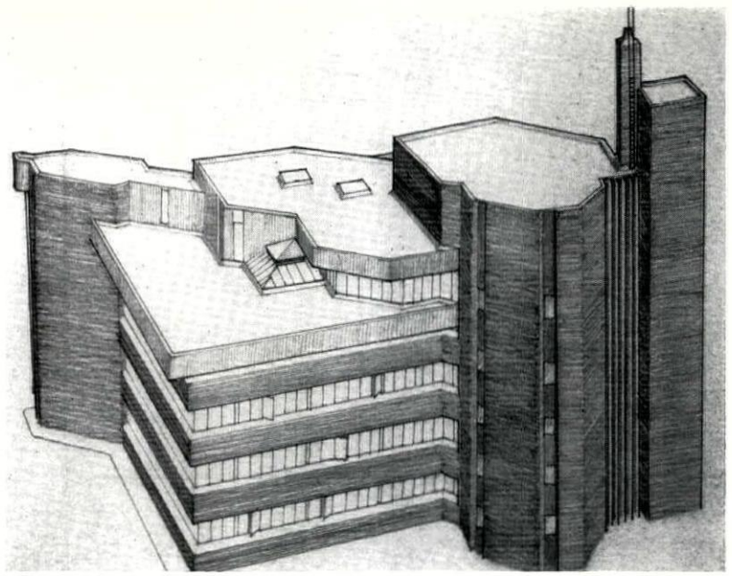


site plan of earlier proposals

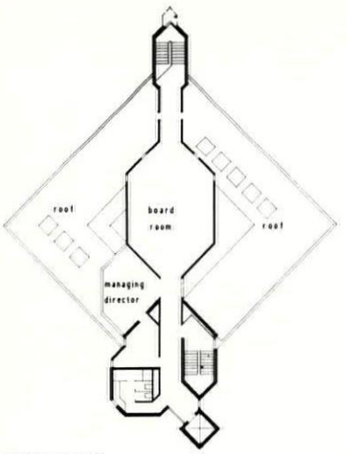
OFFICES FOR FACTORY, DERBY

Bicknell and Hamilton

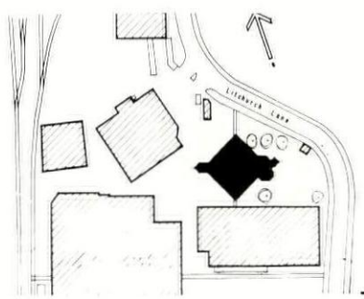
SITE: 0.5 acre in grounds of existing factory next to railway line.
ACCOMMODATION: Total area 18,950 sq. ft., usable floor space 15,200 sq. ft., 163 occupants, parking for 21 cars (partly in existing space). Whole top floor to be used as drawing office.
STRUCTURE AND FINISHES: R.c. frame with flat slabs on piled foundations. Service core in loadbearing brick. Penthouse, light steel frame and timber roof. Blue engineering brick cladding, standard section steel windows, sunbreaker to drawing office and penthouse clad in patent aluminium sheeting. Partitions, mainly patent lightweight, remainder in brick. Floors, generally linoleum on chipboard on battens.
SERVICES: Gas boiler house on roof, perimeter heating by continuous convector units, inner zone by forced hot air via ducts.
COST: £108,000 excluding fees. Quantity surveyor, E. R. Babbs & Sons. Structural consultant, A. E. Beer and Partners.



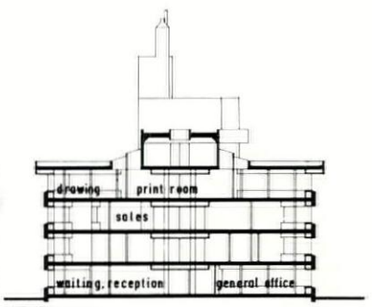
view from south



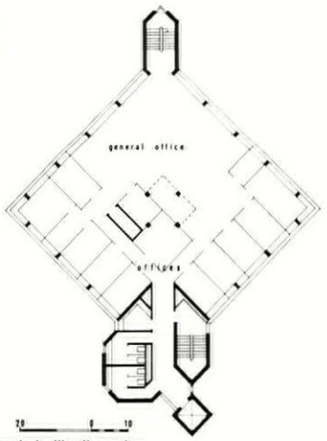
fourth floor plan



site plan



cross-section

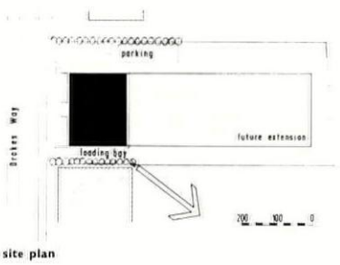


typical office floor plan

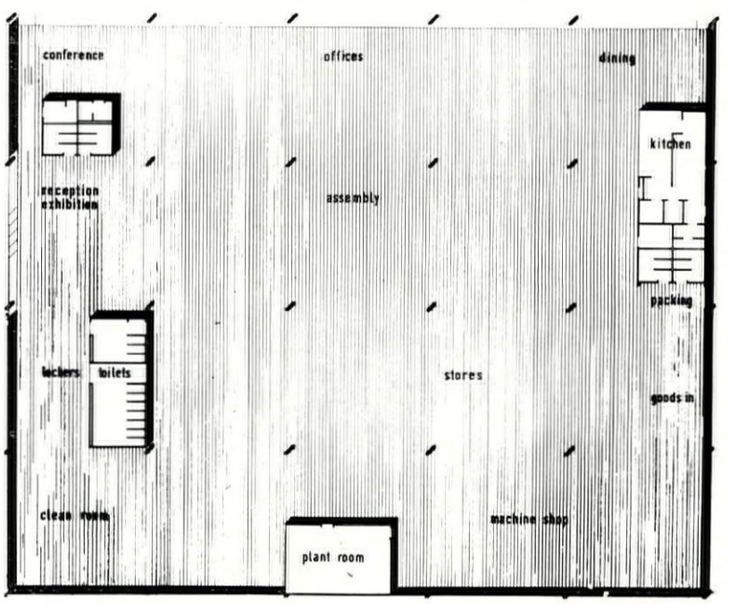
FACTORY AND OFFICES, SWINDON, WILTS

Team 4

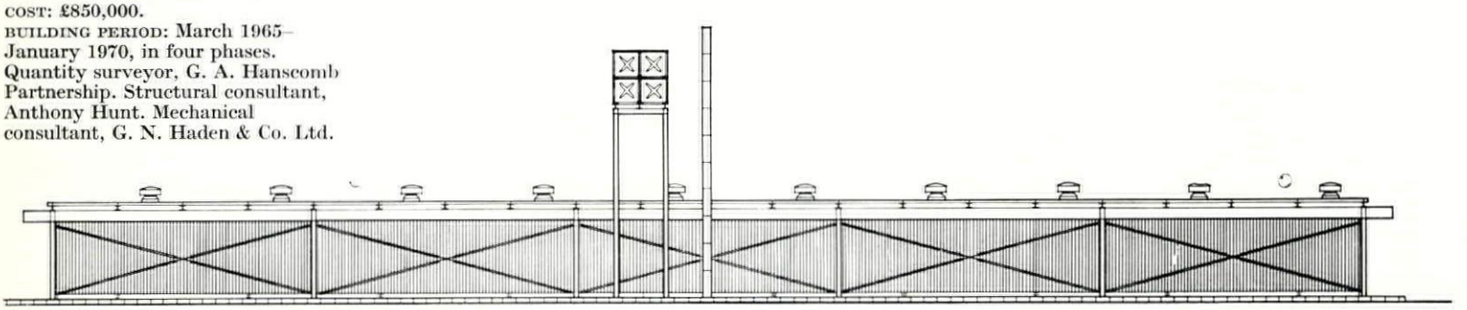
CLIENT: Booker-Bowmar Ltd.
SITE: 6 acres, 800 ft. × 345 ft. strip in Greenbridge industrial estate.
ACCOMMODATION: Factory and offices for Reliance Controls Ltd. Phase 1, 32,000 sq. ft. total, 29,000 sq. ft. usable floor space. Linear growth in 3 further phases along central service spine, separating cars, pedestrians and goods. Maximum use of non-permanent partitions. Internal courts in future phases.
STRUCTURE AND FINISHES: All welded steel frame, steel trough sections with polystyrene infill, plastic-faced externally, painted internally. Roof, steel trough sections with insulation board and 3-layer felt. Floor, r.c. slab with plastic floor tiles throughout.
SERVICES: Underfloor within screed and floor trenches, hot water heating coils, compressed air, water, gas. Within troughs of roofs and cladding, fluorescent lighting and extract fan ventilation.
COST: £850,000.
BUILDING PERIOD: March 1965–January 1970, in four phases. Quantity surveyor, G. A. Hanscomb Partnership. Structural consultant, Anthony Hunt. Mechanical consultant, G. N. Haden & Co. Ltd.



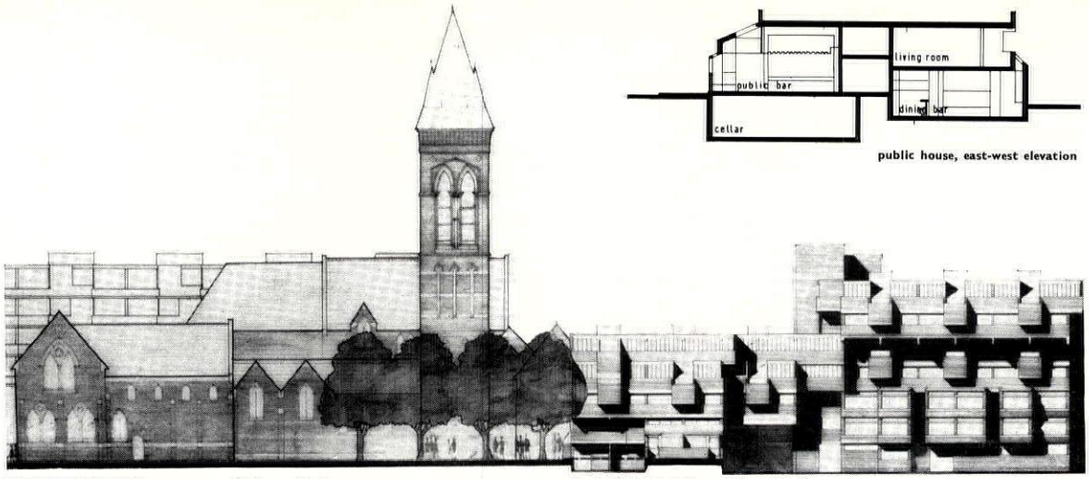
site plan



ground floor plan



south-east elevation

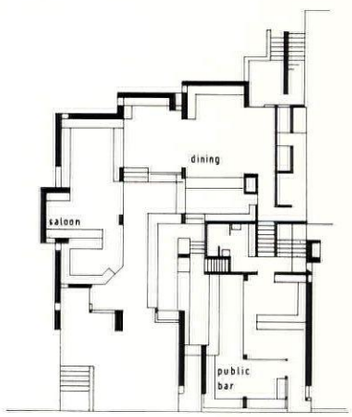


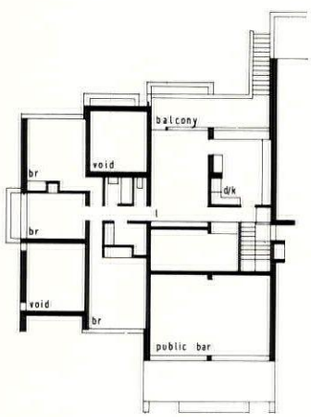
public house, east-west elevation

PUBLIC HOUSE, PIMLICO, LONDON

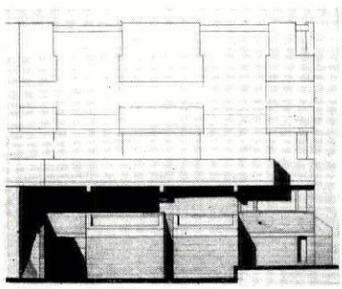
Darbourne and Darke in association with W. D. Shepherd, Chief Architect to Ind Coope Ltd.

CLIENT: Westminster City Council and Ind Coope (London) Ltd.
SITE: Replacing pub of same name, Lord High Admiral. Built into housing block, within comprehensive scheme by same architects (see AR Preview, 1965). Next to St. James-the-Less church of 1861.
ACCOMMODATION: Public bar and saloon bar with dining bar area adjoining, off-licence servery, cellar and lavatories. 3-bed manager's flat.
STRUCTURE AND FINISHES: Loadbearing brickwork with concrete floors, hand-made red and purple multi-coloured facings used internally as well, with areas of painted brickwork. Brick paving with areas of carpet. Ceilings of timber and cork.
SERVICES: Warm air heating.
BUILDING PERIOD: November 1964–autumn 1966.
Partner-in-charge, G. J. Darke. Assistant, C. K. N. Wainwright. Quantity surveyors, G. A. Hanscomb Partnership and H. J. Ridge and Partners. Structural consultant, Flint and Neill. Mechanical consultant, Kennedy and Donkin.

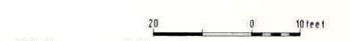




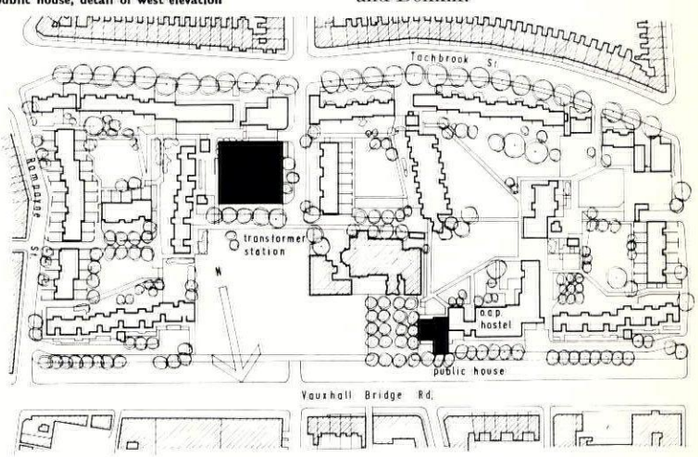
public house, first floor plan



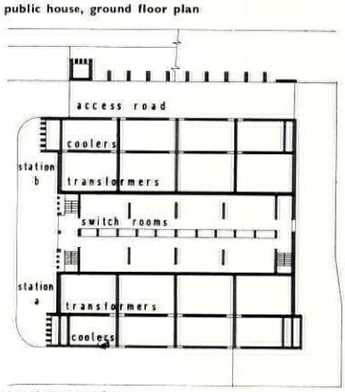
public house, detail of west elevation

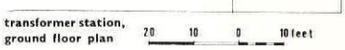


public house, ground floor plan

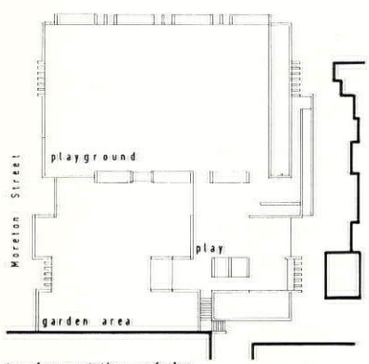


site plan

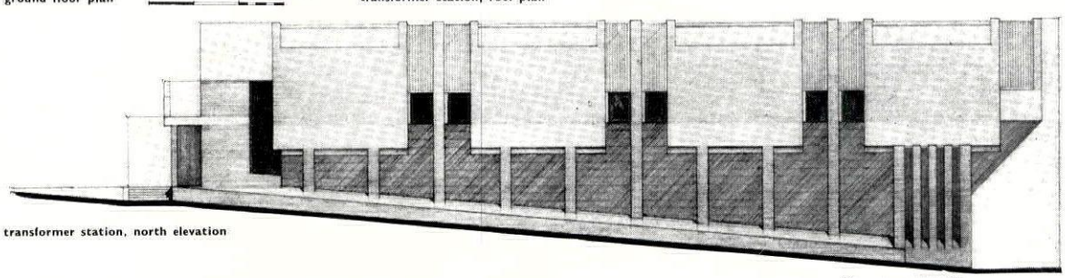




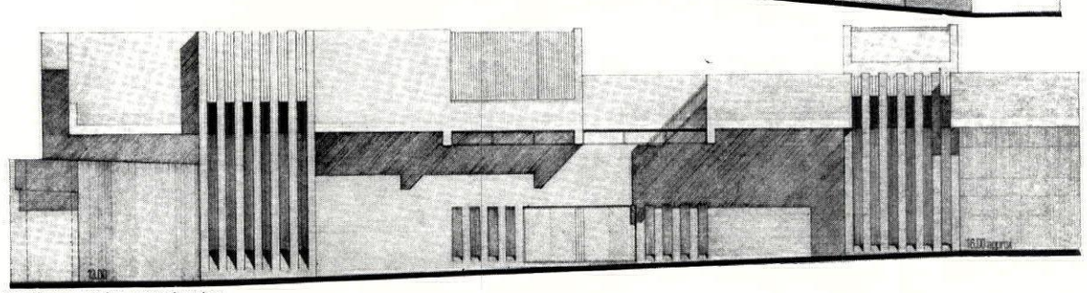
transformer station, ground floor plan



transformer station, roof plan



transformer station, north elevation



transformer station, west elevation

TRANSFORMER STATION, PIMLICO, LONDON

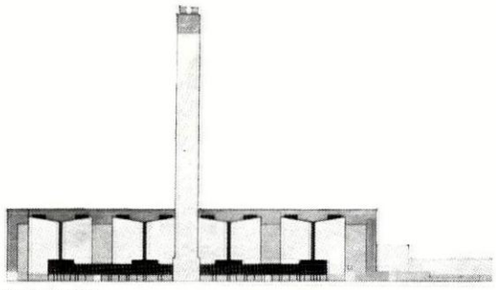
Darbourne and Darke in association with W. Mollison, Chief Architect to LEB

CLIENT: London Electricity Board and Westminster City Council.
SITE: Basements of Victorian terraces, 8–10 ft. below street.
ACCOMMODATION: 8 large transformers and coolers, extensive switch rooms and gear, batteries, auxiliaries room, CO_2 room, cable basement, lavatories.
STRUCTURE AND FINISHES: R.c. with grit-blasted surface, loadbearing brickwork with red and purple multi-coloured hand-made facings. Doors and louvres of teak, wrought-iron balustrades and railings, roof playgrounds.
SERVICES: Natural ventilation of coolers, drainage to roof planting.
COST: £140,000, including equipment.
BUILDING PERIOD: Structure erected 1964, completion within phase 2 of housing scheme 1967.
Partner-in-charge, G. J. Darke.

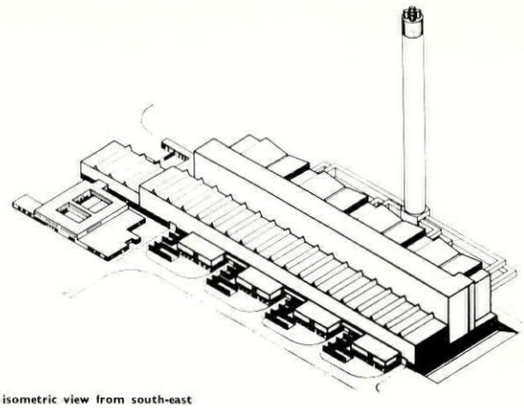
POWER STATION PEMBROKE

Architects Design Group, with Rendel, Palmer and Tritton, consulting engineers, and S. Colwyn Foulkes, landscape consultant

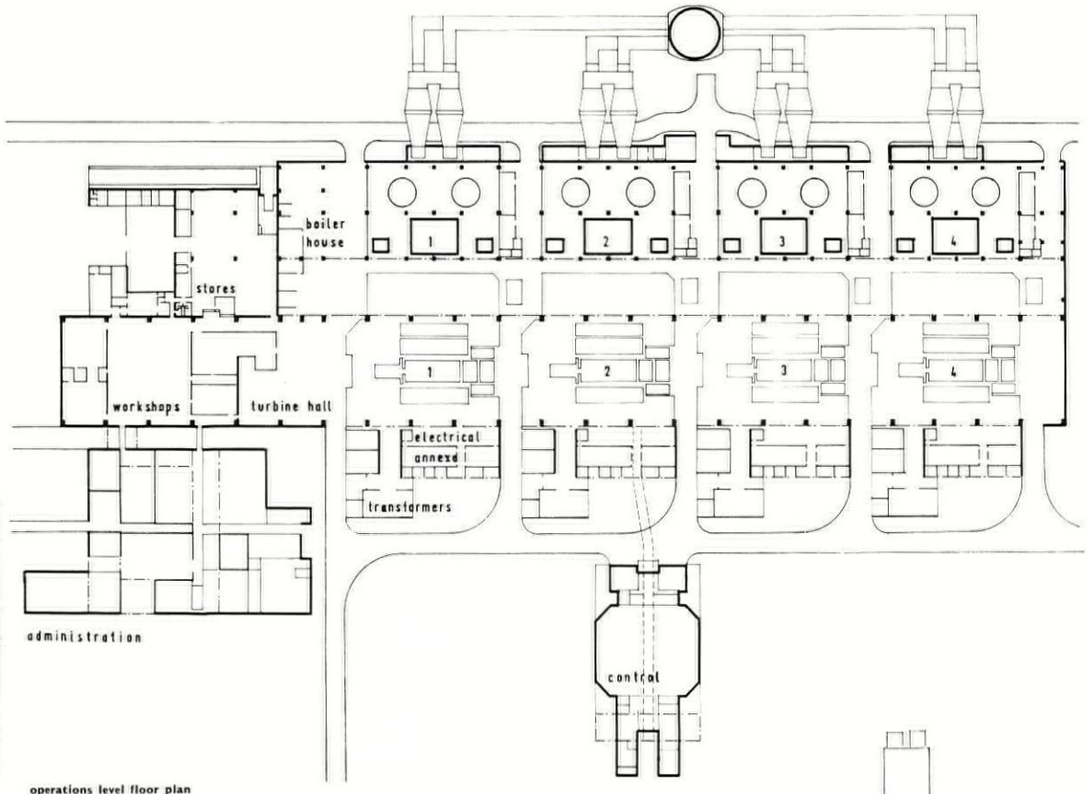
CLIENT: Central Electricity Generating Board (Southern Project Group).
SITE: 480 acres at West Pennar by the mouth of the Pembroke river on the southern shore of Milford Haven. The mud flats, separated from the haven by the Pennar Ridge, have been dredged to expose the underlying rock and a dam will keep out water so that a flat floor to the valley can be created.
ACCOMMODATION: 4 oil-fired boilers, 4 500 megawatt units supplying power into the grid at 400 kV and at 132 kV for local supply. Cooling water taken direct from river mouth and returned into Milford Haven. Turbine house, 1,060 ft. × 130 ft. Boiler house and deaerator, 965 ft. × 200 ft. Main and ancillary buildings designed for maximum circulation under cover.
STRUCTURE AND FINISHES: Main buildings, steel-framed with painted aluminium cladding and glazing. Forms expressed with colour: white, red, dark green and grey.
BUILDING PERIOD: June 1964–September 1971.
Partner-in-charge, John Pike.
Architect-in-charge, D. J. Spate.
Assistants, D. B. Jones, A. M. Knight, N. Simpson, D. Worthington and H. F. Worthington.



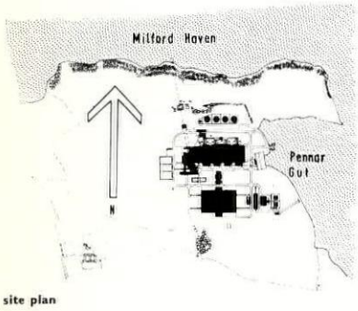
north elevation



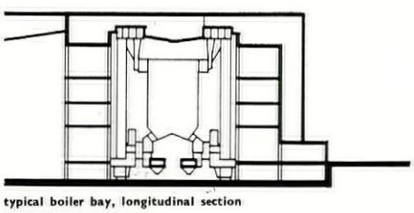
isometric view from south-east



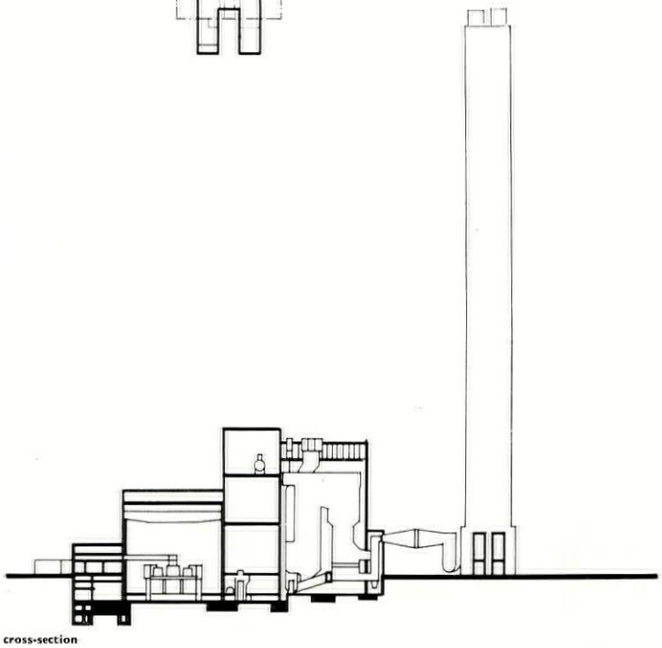
operations level floor plan



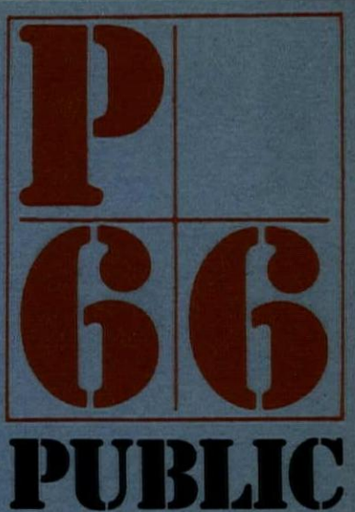
site plan



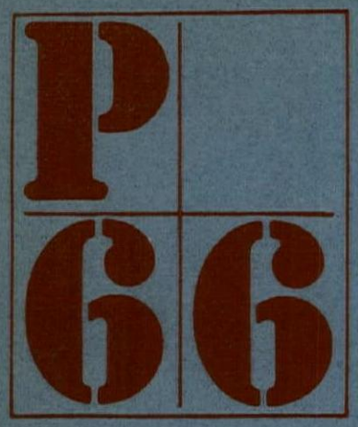
typical boiler bay, longitudinal section



cross-section



65	Civic Centre, Sunderland, Co. Durham	*Sir Basil Spence, Bonnington and Collins*
66	Art Gallery and Museum, Newcastle upon Tyne	*Sir Basil Spence, Glover and Ferguson*
	Central Library, Newcastle upon Tyne	*Sir Basil Spence, Glover and Ferguson*
67	Cinema, Elephant and Castle, London	*Ernö Goldfinger*
	Entertainment Centre, Swansea, Wales	*Ernö Goldfinger*
68	Central Library, Museum and Art Gallery, Salford, Lancs	*Building Design Partnership*
69	Institute of Chartered Accountants, City of London	*William Whitfield*
70	Civic Centre, Sheffield, Yorks	*W. L. Clunie, City Architect*
71	Quarter Sessions Courts, Southwark, London	*Architects' Co-Partnership*
	Magistrates' Courts, Manchester	*Yorke, Rosenberg, Mardall*
72	Geriatric and Psychiatric Hospital, Northowram, Halifax, Yorks	*Geoffrey Rowe, of Abbey, Hanson, Rowe and Partners*
73	District General Hospital, Basildon, Essex	*Anthony B. Davies and Associates*
74	Cathedral, Ibadan, Nigeria	*George G. Pace*
	Church, West Smethwick, Staffs	*Denys Hinton and Associates*
75	Church, Soho, London	*Ahrends, Burton and Koralek*
76	Parish Centre, Newton Farm, Hereford	*Peter Bosanquet and Partners*
	Church, Kings Heath, Birmingham	*Desmond Williams and Associates*
77	Church and Youth Centre, West Dulwich, London	*Hutchison, Locke and Monk*
	Youth Club, East Road, Cambridge	*Gordon Logie, City Architect and Planning Officer*
78	Sports Centre, Benghazi, Libya	*Munce and Kennedy*
80	Social Centre, Victoria Park, London	*Playne and Lacey and Partners*
	Welfare Centre and Housing, Woolwich, London	*Stephen Gardiner and Christopher Knight*
82	Swimming Pool, Harrow, London	*Geoffrey J. Foxley, Borough Architect and Planner*
	Swimming Pool, Armagh, Northern Ireland	*Manning and Clamp*
84	Hostel and Club, West Bromwich, Worcs	*John F. Phillips and Associates*
	Railway Station, Wolverhampton, Staffs	*R. L. Moorcroft, Architect to BR Midland Region*
86	Motorway Bridges, Lake District	*Scott and Wilson, Kirkpatrick and Partners, engineers; Ansell and Bailey, architects*



One of the less desirable aspects of British democracy is the belief that the self-sacrificing efficiency of public servants is encouraged by housing them badly. It is easy to understand the reaction against Victorian civic panoply—the Manchesters, Rochdales and Boltons among town halls, which no doubt, with their performances of 'Elijah' and 'Messiah', were a necessary popular opiate of grandeur at a time when main drainage and public health were the essential but *unseen* municipal tasks. Nowadays municipal achievements in housing and schools are so tangible that symbolic monuments are not felt necessary. Offices however are needed. It is 26 years since Sunderland designated the present site for its civic centre, and meanwhile its chief officers have commuted back and forth to committees in the small town hall from their temporary offices elsewhere in the town. Sir Basil Spence and his partner J. S. Bonnington (of Swiss Cottage experience) have designed what is, apart from the council suite, a long, low, expandable office block. The long municipal corridors are cut into short lengths and wrapped round hexagonal courtyards; and these can be built up in stages without damaging the formal pattern. In his handling of the site Sir Basil shows his customary foresight into popular use; the ground is stepped and paved throughout as a public walking space between park and town centre. At Newcastle, with his Scottish partner Peter Ferguson, Sir Basil has generated similar public use on a piazza spanning the ring road. Closely built into the fabric of the city, the new civic precinct at Sheffield is consciously contrasted with the feeling of hauteur and isolation which afflicts even so informal a Victorian giant as Mountford's Town Hall of 1893. This multifarious group of buildings will display a rather aggressive assemblage of rugged concrete towers. It is of course the Japanese influence again, and if civic grandeur of that type is needed (the Japanese have a very dictatorial vision of local government), it may be appropriate. Certainly H. W. Pearson of Building Design Partnership has achieved an admirably restrained form of the same thing in his library museum and art gallery for Salford. At their most fantastical and Baroque, similar forms appear in William Whitfield's Institute of Chartered Accountants just off Moorgate—but here there is good reason: the original building, tactfully preserved by Whitfield by putting his new taller block parallel and behind (so that it is largely invisible from the surrounding alleys), is itself fantastical and Baroque—a famous firework of 1889-92 by John Belcher and Beresford Pite (see 'Goodhart-Rendel's Roll-Call', AR October, 1965). Dignified reproof to such extravagance can be seen in Yorke, Rosenberg and Mardall's coolly elegant paraphrase of SOM in their magistrates' courts for Manchester—so cool in fact that one might dread approaching justice across its exposed podium on a windy day. Halfway between these extremes is the excellent addition to the London Sessions House in Southwark by Architects' Co-Partnership, in keeping with the original classicism but fully expressive of its internal volumes.

Churches make an encouragingly strong appearance, from George Pace's weird West African style cathedral for Ibadan to various unpretentious groups of parish buildings. The sensitively planned youth centre at Cambridge falls into this category of buildings too, without being a religious foundation). The rebuilt St. Anne's Soho promises to be a splendid design from Ahrends, Burton and Koralek, not just a spectacular church propped on a car park, but also a series of towers of parish rooms chamfering off tiny spaces from the alleyways crossing the site, and creating a real pedestrian environment in London's centre of rarely more than a pavement's width. Here, as at Sunderland, the freedom of the public to penetrate public buildings has both a visual and a democratic quality.

CIVIC CENTRE, SUNDERLAND, CO. DURHAM

Sir Basil Spence, Bonnington and Collins

CLIENT: Sunderland Borough Council.

SITE: 7 acres at West Park, south of central area, generally flat except 45 ft. drop to railway at north.

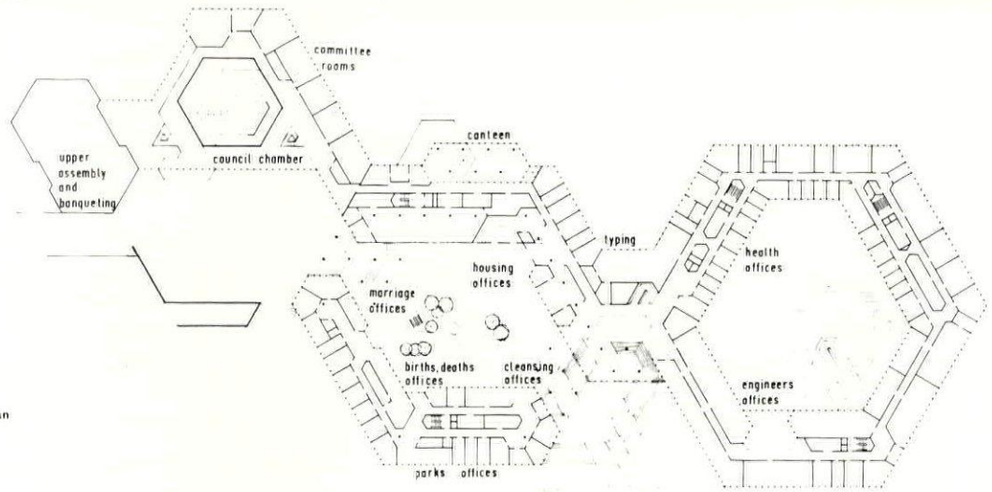
ACCOMMODATION: Administrative offices for 20 departments, 204,000 sq. ft. gross. Council suite 39,000 sq. ft., including members' rooms, mayoral suite, council chamber, civic and banqueting halls. Covered parking for 800 cars.

STRUCTURE AND FINISHES: R.c. frame with 5 in. × 17 in. structural mullions at 5 ft. centres and 6 in. × 5 ft. 5 in. wall columns on centre lines of block. 10 in. flat floor slabs without beams. Parking, r.c. frame with 20 ft. horizontal grid of columns carrying 11 in. flat slab.

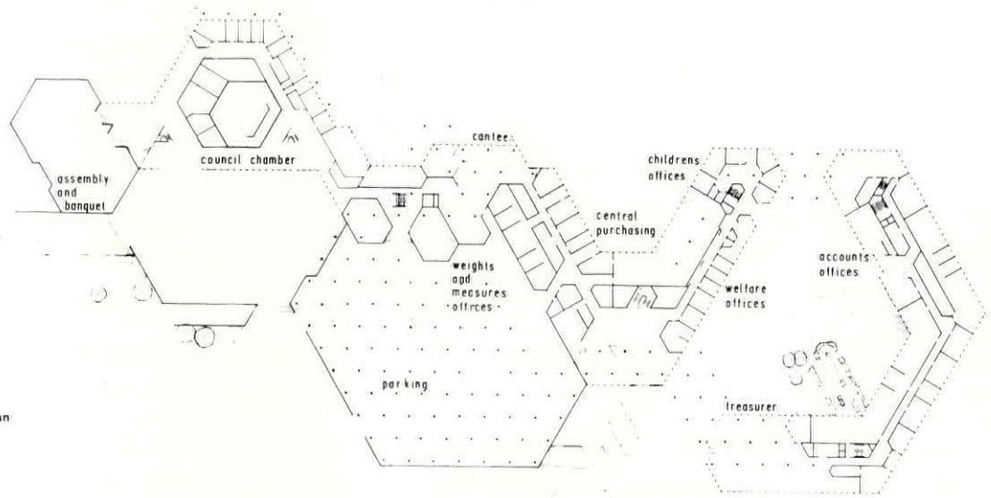
COST: £2,600,000 excluding furniture and fittings.

BUILDING PERIOD: July 1967–1969. Quantity surveyor, Reynolds and Young. Structural consultant, Ove Arup and Partners. Mechanical and electrical engineers, architects' own office.

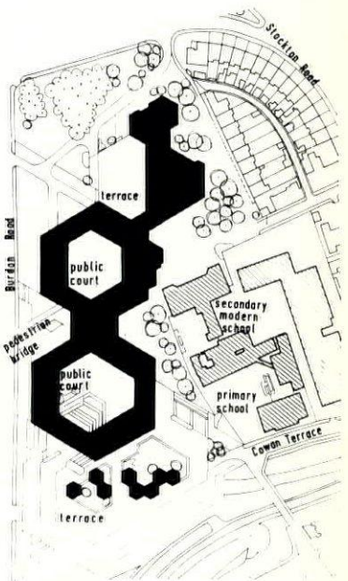
view from north



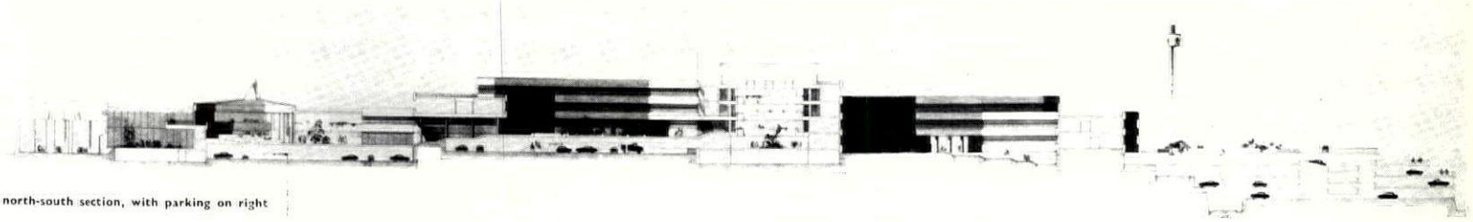
first floor plan



ground floor plan



site plan



north-south section, with parking on right

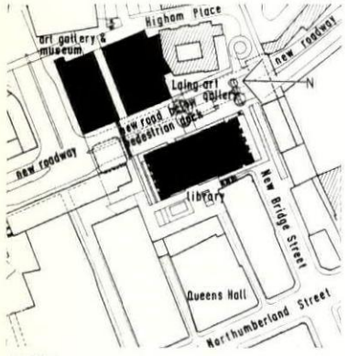
east elevation

ART GALLERY, MUSEUM, AND CENTRAL LIBRARY, NEWCASTLE UPON TYNE

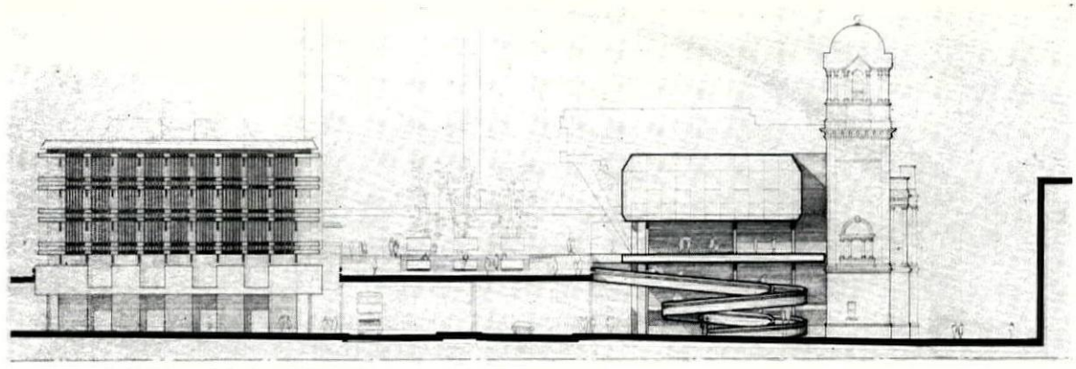
Sir Basil Spence, Glover and Ferguson in association with George Kenyon, City Architect

ART GALLERY AND MUSEUM

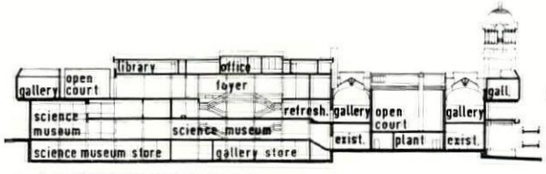
CLIENT: Newcastle upon Tyne City Council.
SITE: 220 ft. × 150 ft., excluding existing Laing Art Gallery site.
ACCOMMODATION: 60,000 sq. ft. of exhibition space for Art Gallery, Museum of Decorative Art and Science Museum. Storage areas, restoration rooms, lecture theatre seating 300, administration offices and workrooms including library.
STRUCTURE AND FINISHES: R.c. frame of columns and plate floor slabs. Precast exposed aggregate concrete panels and dark facing brickwork to lower levels. Internal walls of plaster, fair-faced brickwork or fabric linings.
SERVICES: Full air-conditioning to art gallery storage and picture galleries. Gas-fired warm air heating.
COST: £1,354,000, including alterations to existing galleries and pedestrian deck and ramps.
BUILDING PERIOD: 1968–1970.



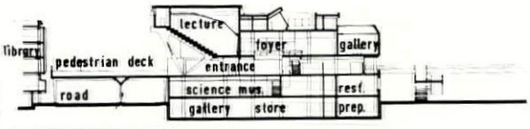
site plan



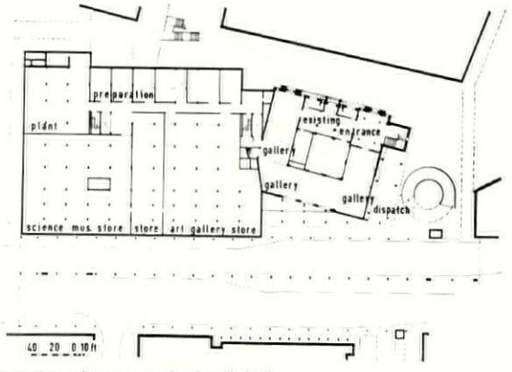
south elevation, showing library on left and art gallery on right, with ring road and piazza between



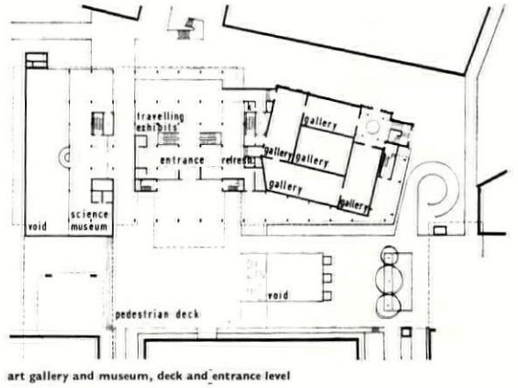
art gallery and museum, north-south section



art gallery and museum, east-west section



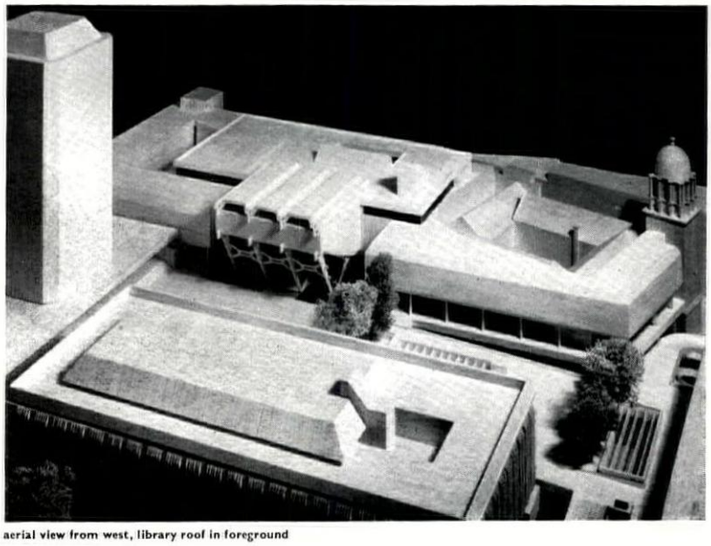
art gallery and museum, road and service level



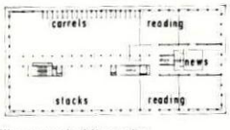
art gallery and museum, deck and entrance level

LIBRARY

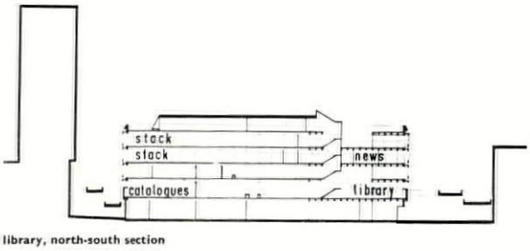
CLIENT: Newcastle upon Tyne City Council.
SITE: 200 ft. × 100 ft. in central area, including site of existing Central Library and Laing Art Gallery, facing pedestrian square over new north-south road.
ACCOMMODATION: Stack for 3,000 books, public lending department with 50,000 books, 400 seats for readers.
STRUCTURE AND FINISHES: R.c. frame on 9 ft. grid, precast concrete vertical louvres to upper floors, with precast exposed aggregate infill panels. Dark facing brickwork to base, aluminium sheathing to penthouse. Internally, timber panels and facing bricks.
SERVICES: Gas-fired warm air heating and ventilation system.
COST: £917,000, including pedestrian deck and ramps.
BUILDING PERIOD: June 1966–June 1968.
Partner-in-charge, P. S. Ferguson. Associate-in-charge, T. A. Moran. Project architect for Art Gallery and Museum, C. G. H. Sharpe. Project architect for Library, A. Pilcher. Assistants, H. Atkins and C. M. Park. Quantity surveyor, Reynolds and Young. Structural consultant, Ove Arup and Partners. Mechanical and electrical consultant, Steensen, Varming and Mulcahy.



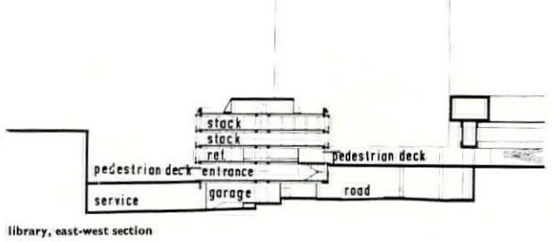
aerial view from west, library roof in foreground



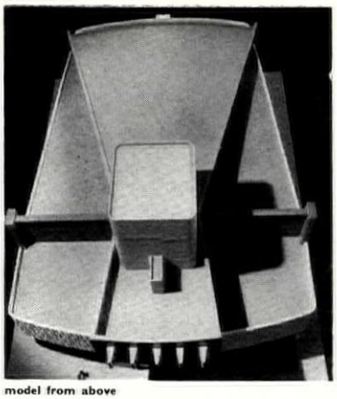
library, typical floor plan



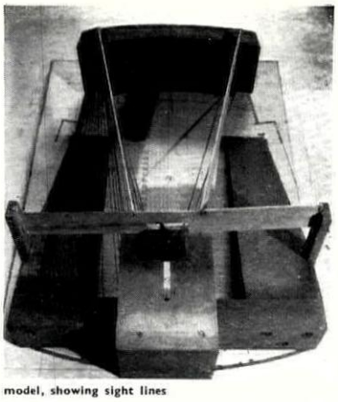
library, north-south section



library, east-west section



model from above



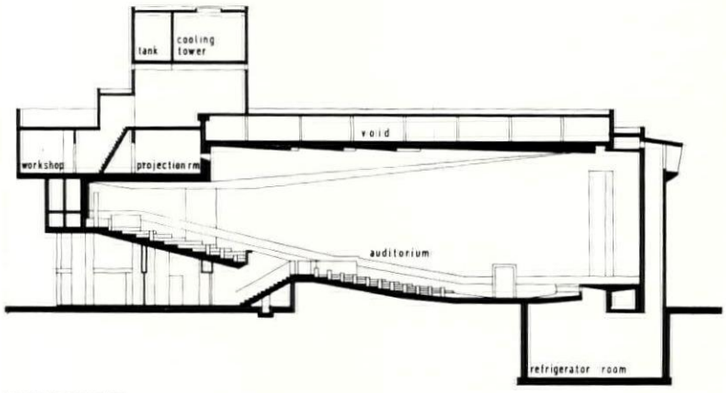
model, showing sight lines

model, showing structure

CINEMA, ELEPHANT AND CASTLE, LONDON

Ernö Goldfinger

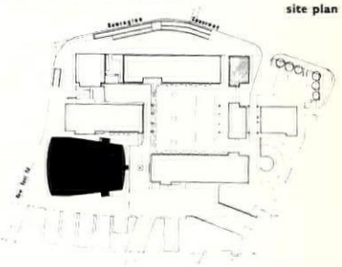
CLIENT: Rank Organization.
SITE: Odeon Cinema, replacing former Trocadero, at southern end of comprehensive development.
ACCOMMODATION: Seating for 1,044, with offices, foyer and amenities.
STRUCTURE AND FINISHES: R.c. 12 in. perimeter wall to auditorium, with patterned white concrete externally and woodwool slabs as permanent shuttering internally, supported on 2 columns at spring of cantilever. Central post-tensioned in situ r.c. beam with 102 ft. clear span and 2 diagonal beams, enclosing sight-lines of auditorium, meet at southern end on the same 2 columns. Central segment of roof, with steel trusses, serves as maintenance void.
COST: £181,700, excluding fitting out.
BUILDING PERIOD: November 1964–April 1966, followed by fitting out.
Assistant, Niemira Molis. Quantity surveyor, Davis, Belfield and Everest. Structural consultant, Ove Arup and Partners. Mechanical and electrical consultant, J. Roger Preston and Partners.

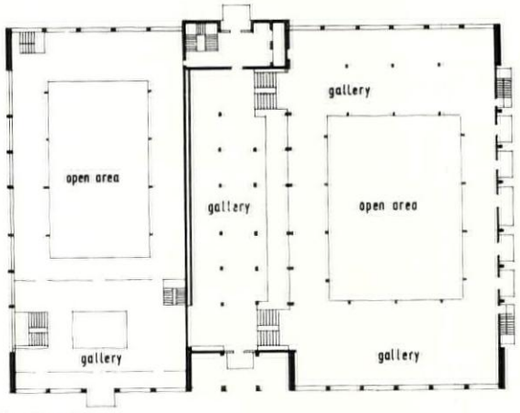


longitudinal section

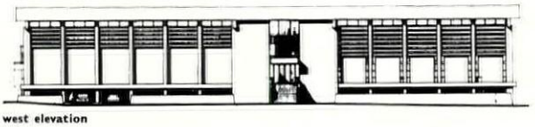
view of entrance front

site plan



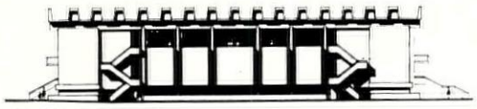


first floor plan

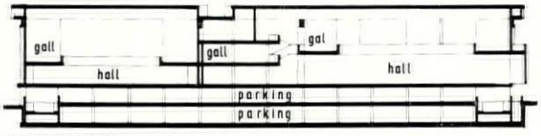


west elevation

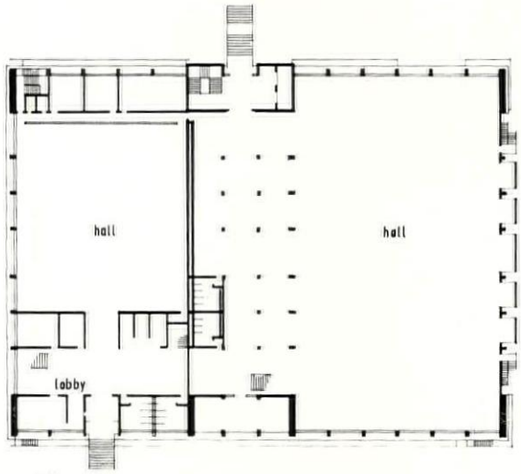
east elevation



north elevation



longitudinal section



ground floor plan

site plan

ENTERTAINMENTS CENTRE, SWANSEA, S. WALES

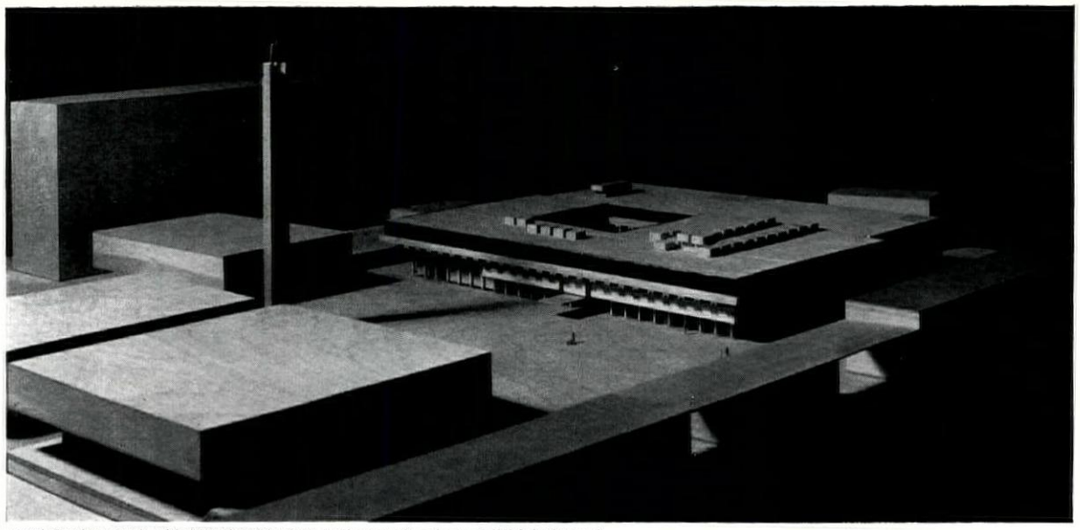
Ernö Goldfinger

CLIENT: Swansea Borough Council.
SITE: 239 ft. × 180 ft. at Orange Street in central area, next to parish church, new hotel, retail market, future car park and bus station, future south perimeter road.
ACCOMMODATION: Large hall, 163 ft. × 96 ft. × 30 ft. high, surrounded by galleries, suitable for 28-lane bowling alley, with smaller rooms on 3 levels, which could be used for restaurants, exhibitions and assembly independently from main use. Small hall, seating 650, suitable for small theatre or assembly room or dance hall. Car park for 256 cars on 2 levels.
STRUCTURE AND FINISHES: R.c. frame with prefabricated roof of large elements. Spacing of columns dictated by car bays, by unobstructed space in bowling alley and by flexibility of other uses.
SERVICES: Halls heated and ventilated from roof plant. Car park naturally ventilated from 'moat' on three sides.
COST: £800,000–1,000,000.
Associate-in-charge, Jack Blacker.

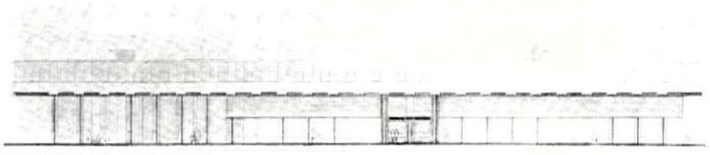
CENTRAL LIBRARY, MUSEUM AND ART GALLERY, SALFORD, LANCS

Building Design Partnership

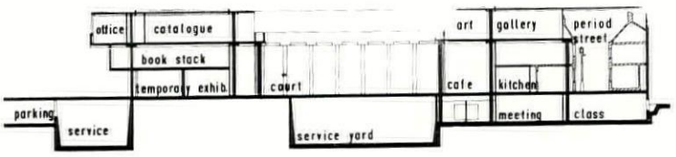
CLIENT: Salford City Council.
SITE: 1.75 acres facing new civic square in Ellor Street redevelopment area planned by Sir Robert Matthew and Prof. Percy Johnson-Marshall (see AR Preview, 1965).
ACCOMMODATION: Central library, children's and lending (with mezzanine gallery) on ground floor, stacks in mezzanine, arts and science with local history and music on 1st floor with administration. Museum, on ground floor, including period street and full-scale model coal mine (in basement). Art gallery, on 1st floor, with museum administration, labs, stores and staff rooms. Café next to courtyard. Basement, lecture theatre for 250 and smaller meeting rooms, service bays, plant, workshops, parking for 30 cars.
STRUCTURE AND FINISHES: R.c. frame and ribbed coffered floor in exposed concrete, lightweight r.c. roof. Concrete panel walls and glazing in vertical mullions. York stone paving continued from civic square, carpeting in library and galleries. Furniture and fittings include interchangeable 'cartridge' showcases in museum.
SERVICES: Gas-fired heating by warmed, filtered, washed and humidity-controlled air. Full air-conditioning in art gallery, lecture theatre and part of museum, cooling provision in 1st floor of library. Lighting built in to museum showcases and bookcases.
COST: £1,050,000, including furniture and fittings.
BUILDING PERIOD: October 1966–January 1969.
Partner-in-charge, H. W. Pearson. Assistant, J. E. Morton. Quantity surveyor, J. D. Gorie. Structural engineer, R. Goodfellow. Mechanical engineer, R. E. Varga. Electrical engineer, N. L. Houghton.



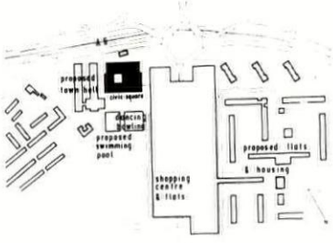
general view from south, with entertainments centre, left foreground, and town hall, left background



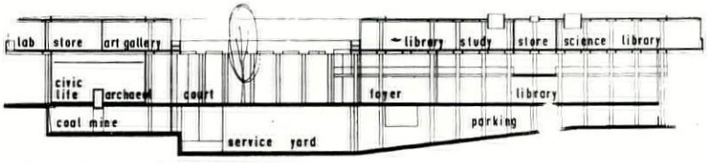
south-west elevation to civic square



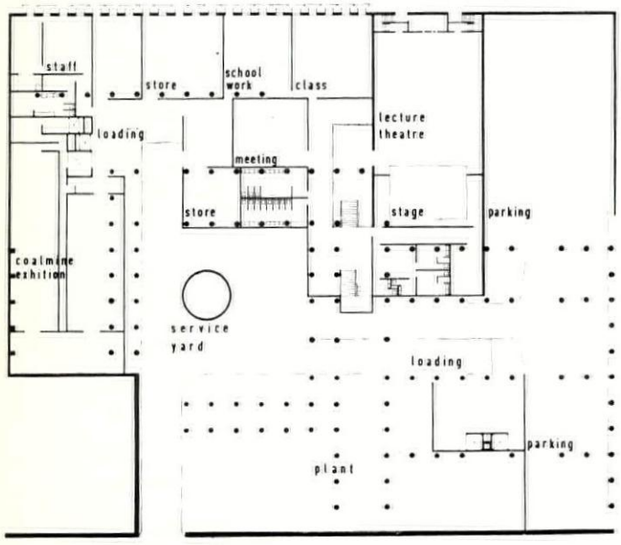
section, south-west to north-east



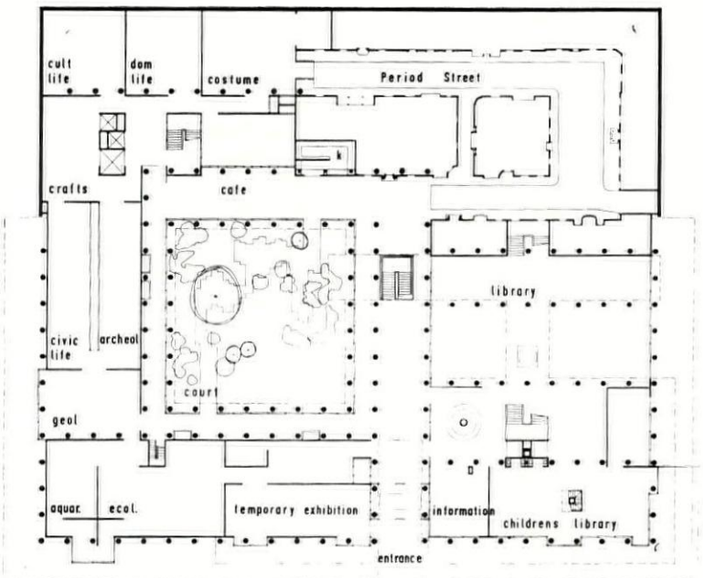
site plan



section, south-east to north-west



basement floor plan



ground floor plan

Cheddar Secondary Modern School *Architect: B. C. Adams, A.R.I.B.A., Somerset County Architect*

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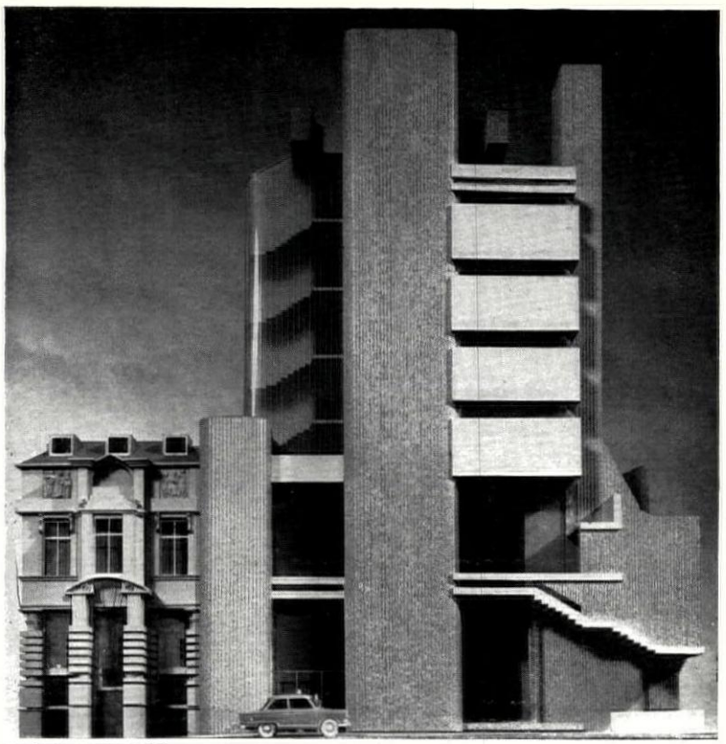
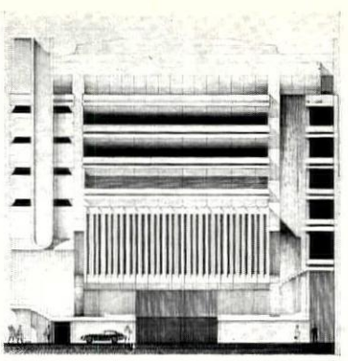
INSTITUTE OF CHARTERED ACCOUNTANTS, CITY OF LONDON

William Whitfield

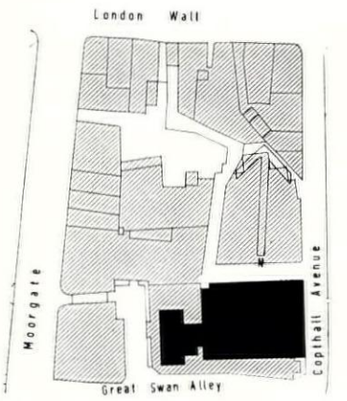
CLIENT: Institute of Chartered Accountants in England and Wales.
SITE: Copthall Avenue and Great Swan Alley, very restricted site alongside existing Baroque building of 1889 by John Belcher and Beresford Pite (see 'Goodhart-Rendel's Roll-Call,' AR, October, 1965), to be renovated simultaneously.
ACCOMMODATION: Office accommodation for secretariat. Facilities for institute members: Great Hall seating 500 for meetings and banquets, reception areas, committee rooms, council chamber, lounges, library, restaurants. Public house, re-accommodated on site.
STRUCTURE AND FINISHES: Small extension to existing building in loadbearing brickwork faced with Portland stone. Normal r.c. frame up to floor of Great Hall. Upper floors suspended from beam at roof level in order to free large area for hall. Externally, exposed aggregate concrete and stainless steel.
SERVICES: Full air conditioning to all members' rooms in new building and to council chamber. Main plant and boilers in roof space.
COST: £500,000, including renovation.
BUILDING PERIOD: Late 1966–late 1968.
Associate-in-charge, David Lyle. Assistants, Alan Black and Donald Downie. Quantity surveyor, Reynolds and Young. Structural consultant, Lowe and Rodin. Mechanical and electrical consultant, Steensen, Varming and Mulcahy. Special consultants: easements, Bryan Anstey, and catering, J. Lyons and Co.



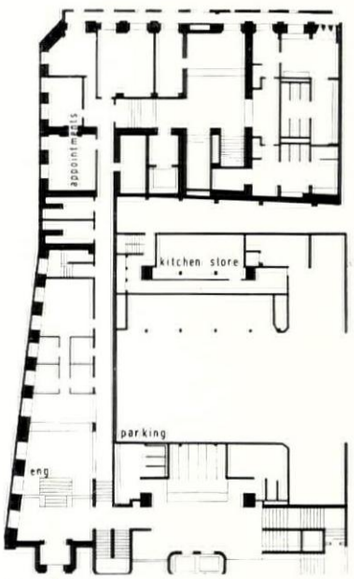
east elevation to Copthall Avenue



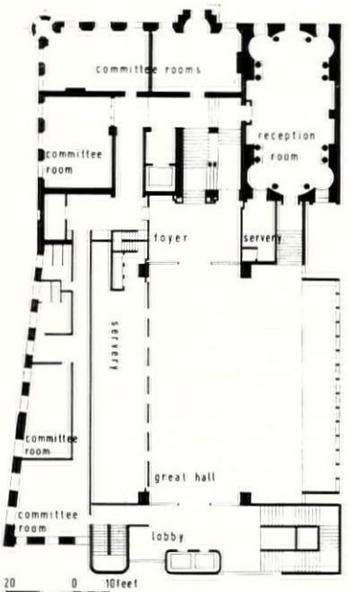
north elevation to Langthorne Court



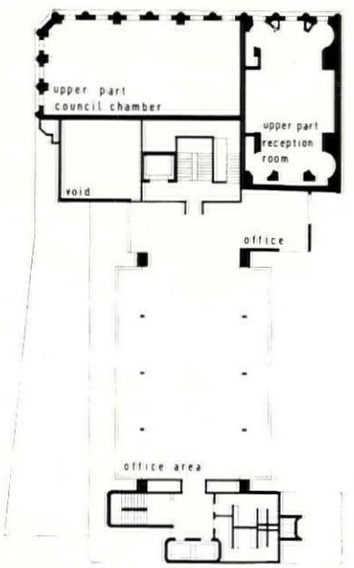
site plan



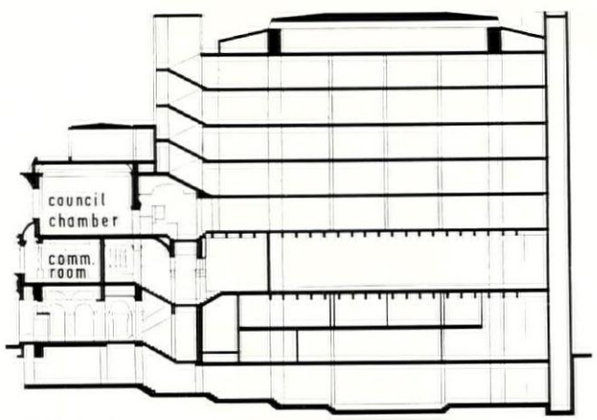
ground floor plan



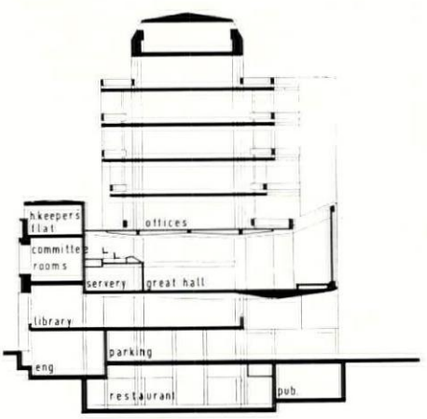
second floor plan



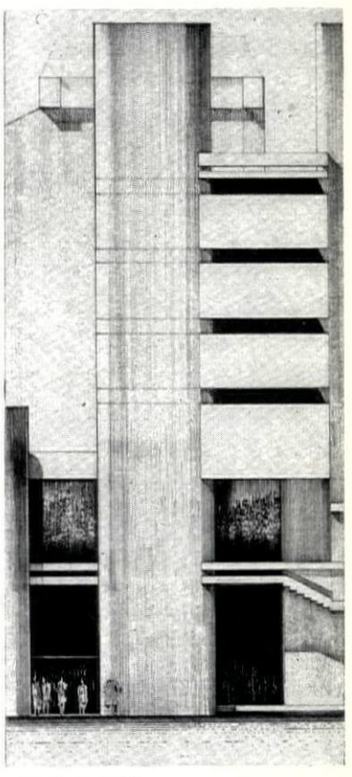
fourth floor plan



longitudinal section



cross-section

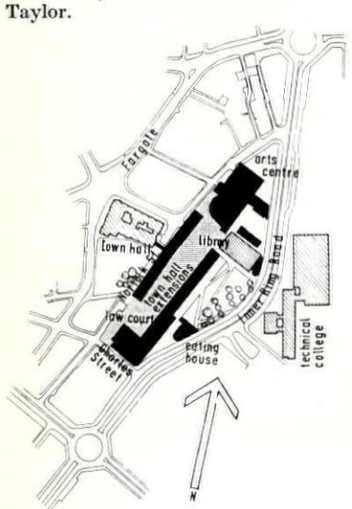


detail of east elevation

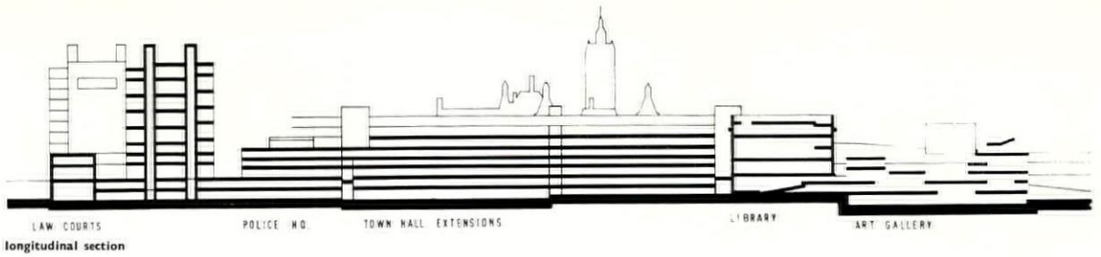
CIVIC CENTRE, SHEFFIELD, YORKS

W. L. Clunie, City Architect

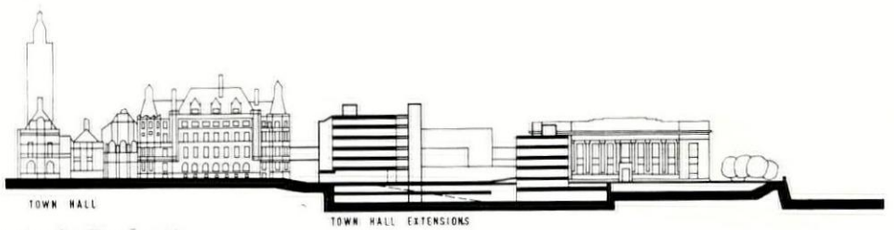
CLIENT: Sheffield City Council.
SITE: Bounded by Norfolk Street, Charles Street and inner ring road, between main shopping thoroughfare and Sheaf valley (see page 55 of this Preview). Town Hall and Technical College adjoining, Civic Hall not far distant. Already on site, Central Library, Graves Art Gallery and Lyceum Theatre.
ACCOMMODATION: Pedestrian precinct over north-south service road which leads to parking for 600 cars, service and storage areas, enlarged library stacking bay. Phase 1, first of 2 Town Hall extensions, including treasurer, engineer, architect, housing, public works, parks, cleansing and baths; police headquarters, boiler house, parking for 300 cars, alterations to Town Hall, new registry office. Phase 2, second of Town Hall extensions, canteen and public house, magistrates courts and county court, probation offices, lettable offices. Phase 3, assize courts, lettable offices. Phase 4, arts centre, including civic theatre seating 900, small theatre seating 500, art galleries, restaurants.
STRUCTURE AND FINISHES: Not yet finalised.
SERVICES: Low pressure hot water system from central boiler. Full air-conditioning to law courts.
COST: Phase 1, £3,294,000. Total, £8,597,000.
BUILDING PERIOD: Phase 1, February 1967–March 1970. Phase 2, June 1970–March 1973. Phase 3, January 1973–June 1975. Phase 4, June 1975–March 1979. All these dates are affected by the recent Government restrictions.
Deputy city architect, B. F. Warren. Assistant city architect, Jan Kot. Senior group leader, E. A. Whitaker. Assistants, J. F. Rose and A. K. Taylor.



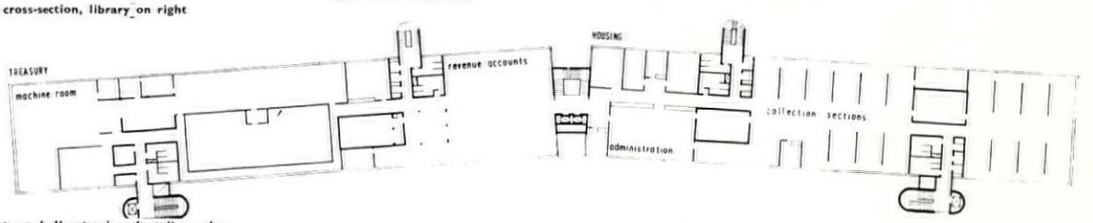
site plan



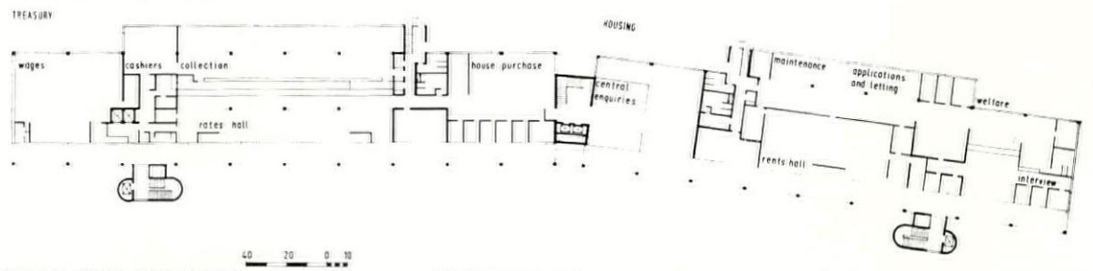
longitudinal section



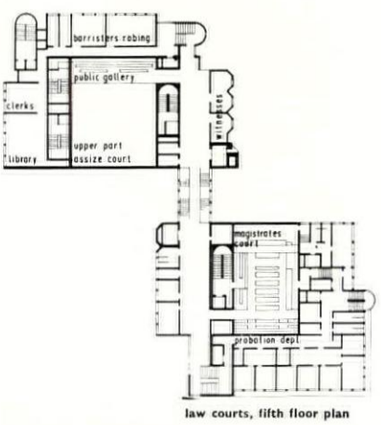
cross-section, library on right



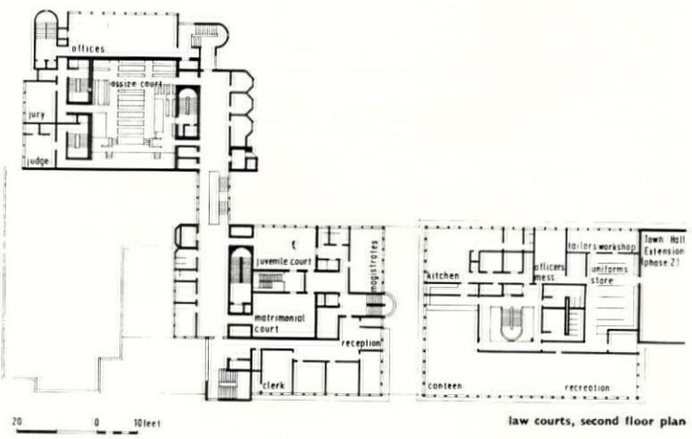
town hall extension, first floor plan



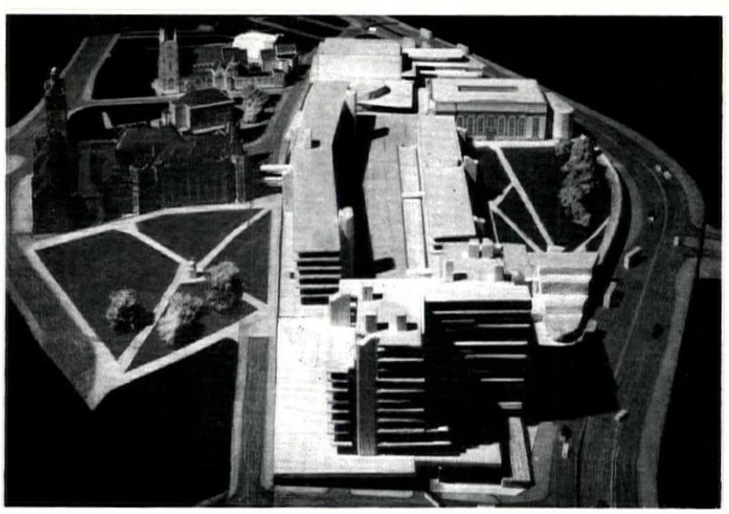
town hall extension, ground floor plan

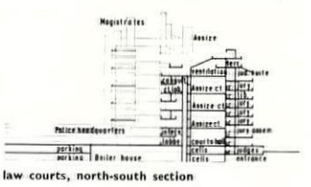


law courts, fifth floor plan

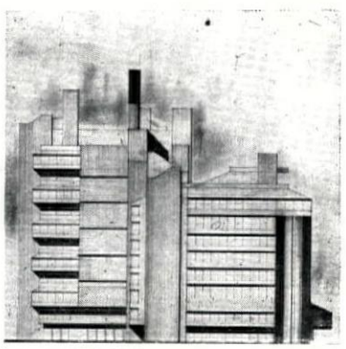


law courts, second floor plan


view from south: law courts in foreground, town hall on left, town hall extension left centre, library right background



law courts, north-south section


law courts, west elevation

no compromise

This is the CONWAY by Cornwell-Norton, a chair with strong views about quality. It is noticeably well-made. And it takes pride in a selection of covers that are of strikingly higher quality than you normally find on chairs at this price. In short: no compromise just because it is a 'contract' chair. For the detail-conscious architect the Conway is the right choice—without reservations.

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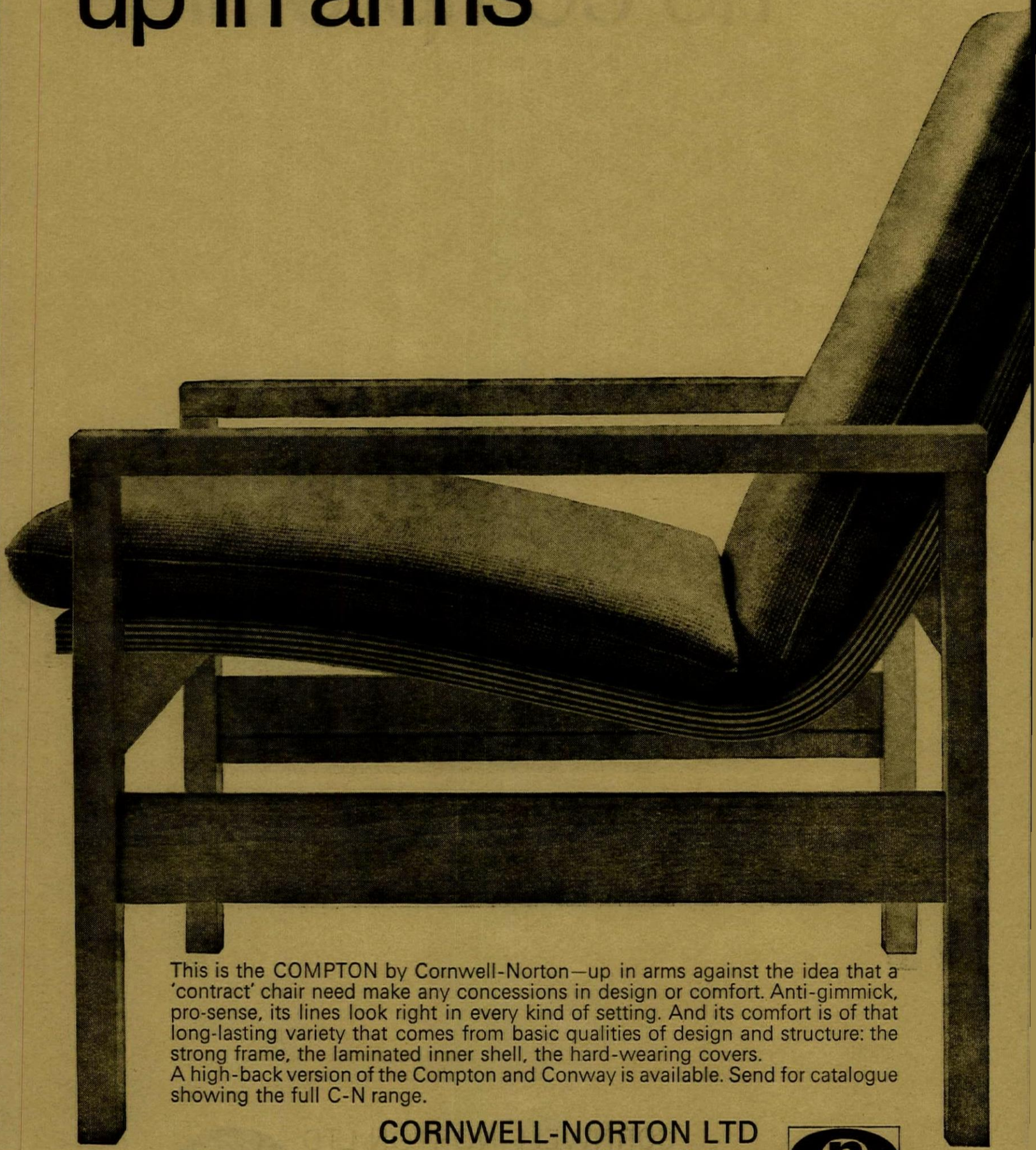
up in arms



This is the COMPTON by Cornwell-Norton—up in arms against the idea that a 'contract' chair need make any concessions in design or comfort. Anti-gimmick, pro-sense, its lines look right in every kind of setting. And its comfort is of that long-lasting variety that comes from basic qualities of design and structure: the strong frame, the laminated inner shell, the hard-wearing covers.
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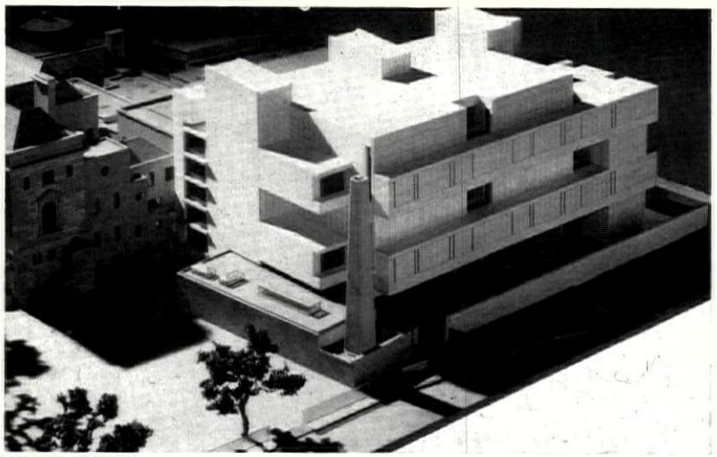
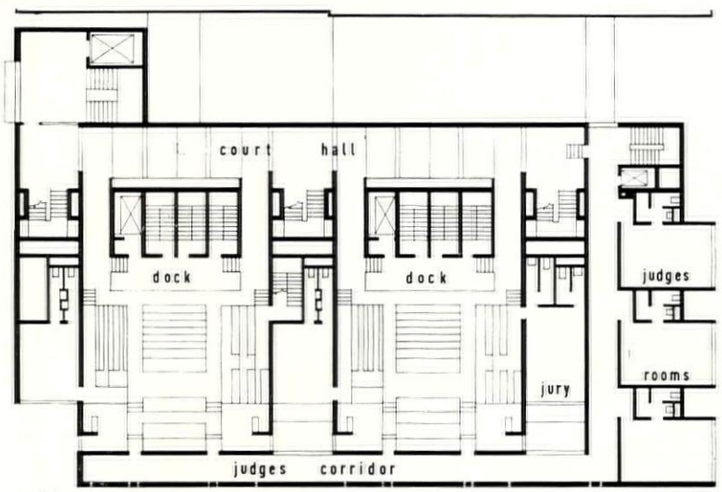
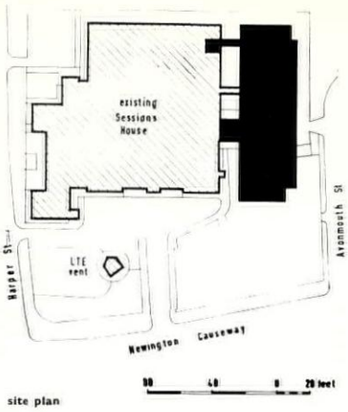
Cornwell-Norton Ltd. 23 Frogmoor, High Wycombe, Bucks. Tel: High Wycombe 4634



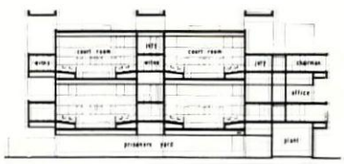
view from south-west



ground floor plan, prisoners' yard below



site plan

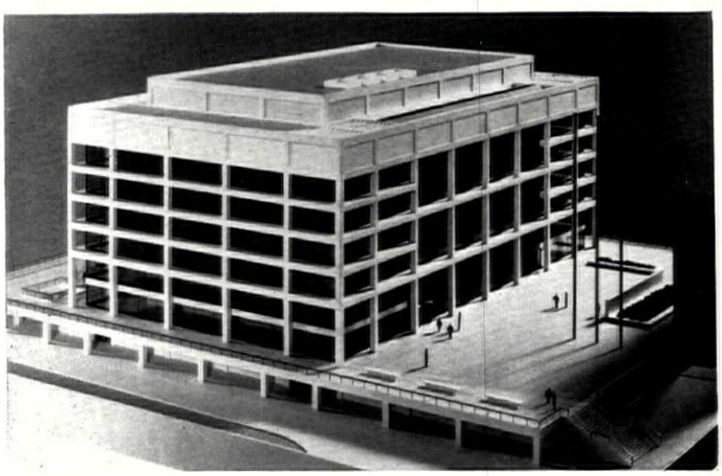


longitudinal section

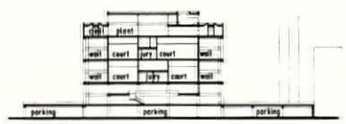
QUARTER SESSIONS COURTS, SOUTHWARK, LONDON

Architects' Co-Partnership, in association with Hubert Bennett, GLC Architect

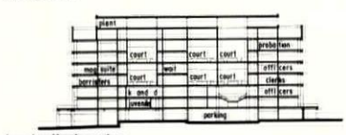
CLIENT: Greater London Council.
SITE: 19,250 sq. ft. on west side of existing London Sessions House, over existing prisoners' yard and ancillary buildings. Boiler house and fuel store to be retained until Phase 2.
ACCOMMODATION: 6 new courts (2 of them in Phase 2), 6 chairmen's rooms (all in Phase 1), offices, jury and witness rooms. New prisoners' yard with access to existing cells, new male and female prisoners' waiting rooms.
STRUCTURE AND FINISHES: R.c. frame, slabs and external walls with lightweight concrete block linings and roach-bed Portland stone cladding, metal framed windows. Internally, Portland stone, felt, wood panelling and plaster, suspended ceilings of acoustic tile.
SERVICES: Full air-conditioning throughout, with roof plant. Public, prisoners' and chairmen's lifts.
COST: Phase 1, £548,000.
BUILDING PERIOD: Phase 1, early 1967–early 1969.
Structural consultant, J. H. Humphreys, GLC. Quantity surveyor, Cyril Sweett and Partners. Mechanical consultant, Associated Architects and Consultants. Electrical consultant, C. A. Belcher, GLC.



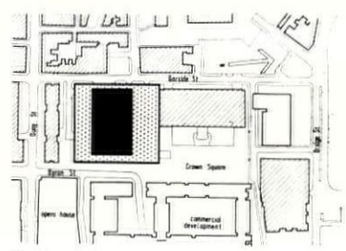
view from north-east



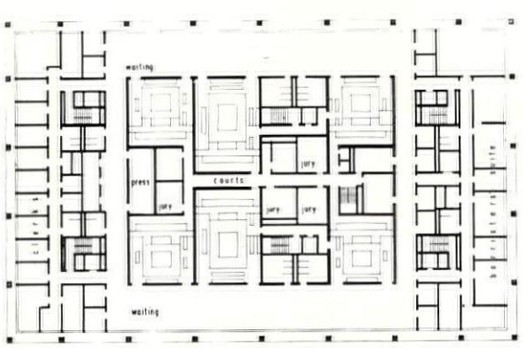
cross-section

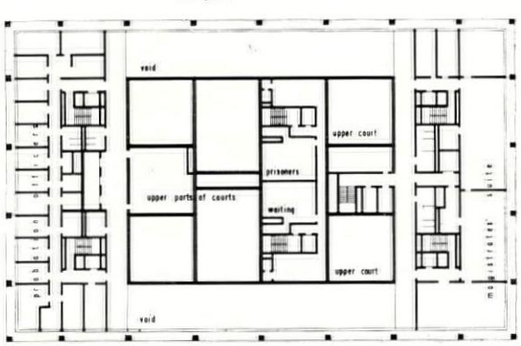


longitudinal section



site plan





above, lower level of courts, floor plan right, mezzanine level of courts, floor plan

MAGISTRATES' COURTS, MANCHESTER

Yorke, Rosenberg, Mardall, in association with S. G. Besant Roberts, City Architect

CLIENT: Manchester City Council.
SITE: Crown Square, 1.85 acres, city centre site next to existing Law Courts, slight fall east-west.
ACCOMMODATION: 12 courtrooms, 2 juvenile courts and 1 summons application court, with related offices at east and west ends. Entrance on podium covering whole site. Parking for 111 cars beneath, with prisoners' reception yards and service areas.
STRUCTURE AND FINISHES: R.c. frame with light coloured ceramic facing. Fixed windows bronze-framed, with light brown tinted glass. Travertine floors and wall linings in public areas.
SERVICES: Air conditioning to courts, offices and public areas, with plant room at roof level.
COST: £2,460,000.
BUILDING PERIOD: February 1967–August 1969.
Quantity surveyor, T. Sumner Smith and Partners. Structural consultant, Matthews and Mumby Ltd. Mechanical and electrical consultant, Zisman, Bowyer and Partners. Acoustical consultant, Sandy Brown.

GERIATRIC AND PSYCHIATRIC HOSPITAL, HALIFAX, YORKS

Geoffrey Rowe, of Abbey and Hanson, Rowe and Partners, in association with P. B. Nash, Architect to the Leeds Regional Hospital Board

CLIENT: Leeds Regional Hospital Board.

SITE: 18 acres in grounds of Northowram Hall. House of 1863 eventually to be demolished. Mature landscape with trees and gardens, gently sloping to south-east.

ACCOMMODATION: Medium-stay geriatric and psychiatric hospital, to be built in 3 phases. Phase 1, 8 32-bed L-shaped geriatric wards, with administrative offices, day hospital including occupational therapy and physiotherapy depts., chapel, kitchen and staff dining rooms, small laundry, workshops. Main hospital street running south-west to connect with future psychiatric wards. Northowram Hall reconstructed as teaching unit.

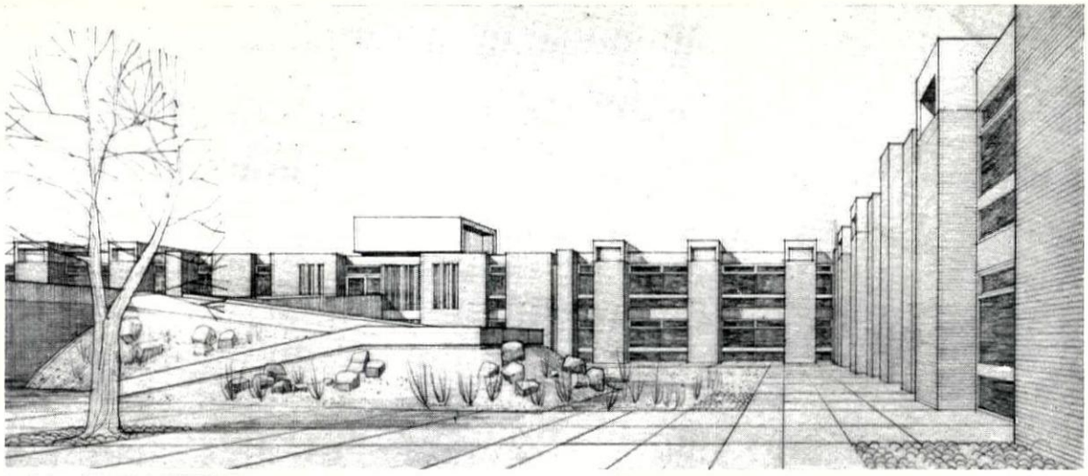
STRUCTURE AND FINISHES: 2-storey ward block, light steel frame with castella beams, suspended precast floors and roofs, roof slab edge bush-hammered. 1-storey blocks, loadbearing brick, roofs on patent timber beams. External facings generally of local buff-coloured bricks and exposed aggregate slabs with some white glass infill panels. Base walls of shuttered concrete. Windows sliding sash aluminium with timber sub-frames, fascias of white stove-enamelled aluminium ship-lap boarding. Rooftop plant copper-sheathed. Local stone re-used in landscaping.

SERVICES: Heating, low pressure hot water to skirting heaters and high level radiant panels. All service runs at high level.

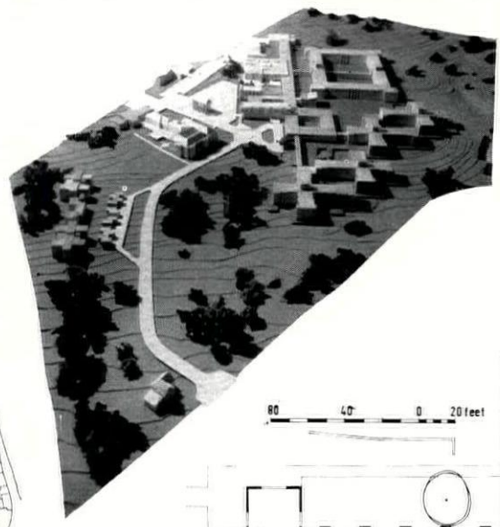
COST: Phase 1, £1,056,000.

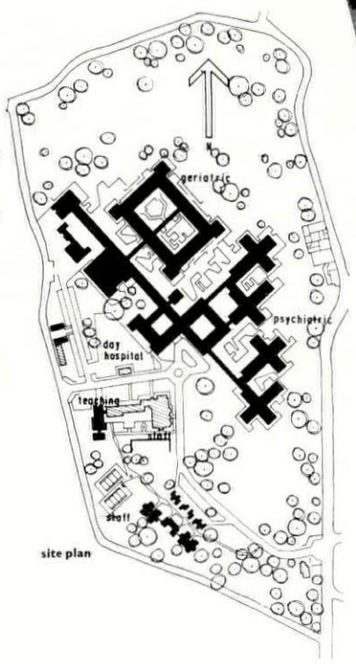
BUILDING PERIOD: Phase 1, April 1966–December 1968.

Associate-in-charge, Peter Bryant. Assistant, Lawrie Mawson. Quantity surveyor, Rider, Hunt and Partners. Structural consultant, W. V. Zinn and Associates. Mechanical and electrical consultant, R. W. Gregory and Partners.



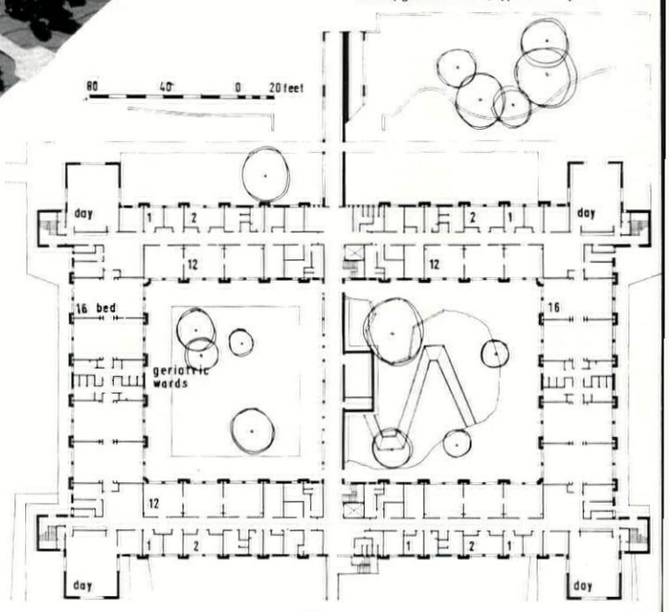
geriatric wards seen from courtyard



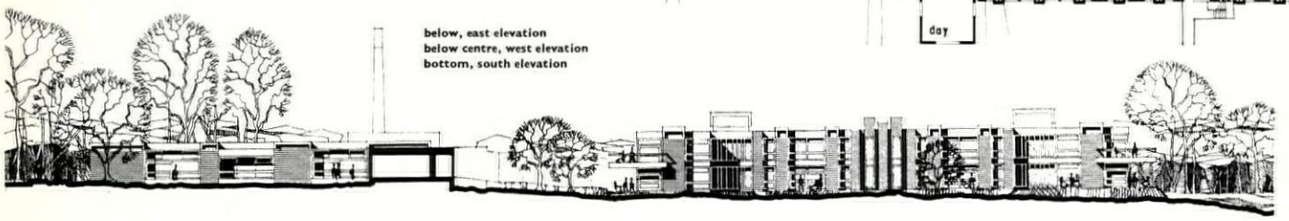


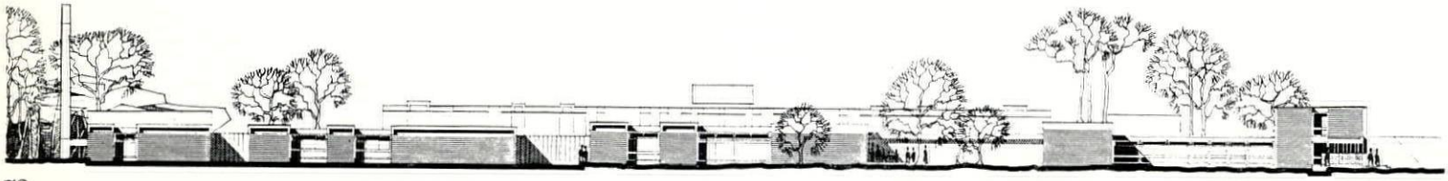
site plan

left, general view from south-east
below, geriatric wards, typical floor plan



below, east elevation
below centre, west elevation
bottom, south elevation





Client : John Burchall Ltd., Enfield, Middlesex. *Architect : Adam Gelister, D.I.C., A.R.I.B.A.*
Fabricator : Williaam J. Cox Ltd. *Contractor : Sprosson & Babb Ltd.*

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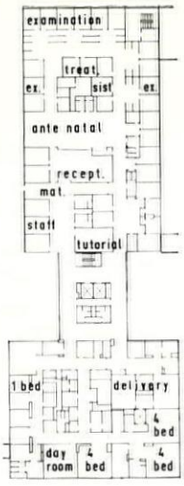
DISTRICT GENERAL HOSPITAL, BASILDON, ESSEX

Anthony B. Davies and Associates in association with W. G. Plant, Architect to North-East Metropolitan Regional Hospital Board

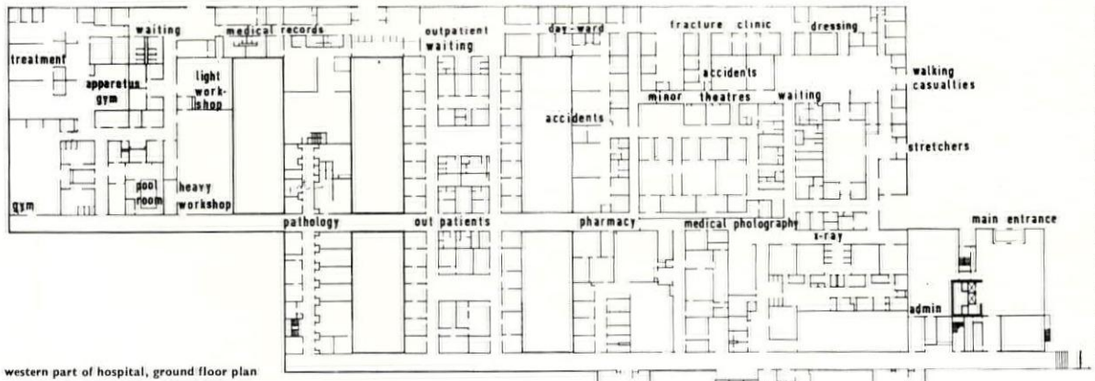
CLIENT: North-East Metropolitan Regional Hospital Board.
SITE: 40 acres of open farmland south-west of New Town centre. North-south slope.
ACCOMMODATION: Phase 1, 374 out of 642 beds. 28-bed general, 22-bed maternity, 14-bed intensive care, 30-bed paediatric ward units. Possible later addition of 260 psychiatric beds. 4 out of 6 major operating theatres in Phase 1, with 3 minor theatres. Bed-sitters for 208 nursing staff, 17 houses for senior nurses and junior doctors. Sloping site is used to give southern aspect to wards, with diagnostic and surgical departments between them and the outpatients on the northern entrance side. Circulation by streets linking main elements.
STRUCTURE AND FINISHES: In situ r.c. frame with exposed aggregate or precast panel finish. Windows mainly wood with southern faces double glazed.
SERVICES: Runs below main level, contained within north-south slope.
COST: Phase 1, £4,900,000.
BUILDING STARTS: April 1967.
Partner-in-charge, Anthony B. Davies. Associate-in-charge, Derek Montefiore. Quantity surveyor, Monk and Dunstone in association with Regional Hospital Board. Structural consultant, Clarke, Nicholls and Marcel. Mechanical and electrical engineers, Regional Hospital Board. Drainage consultants, Genever and Moon. Landscape consultant, Mrs. S. M. Haywood.

view from north of main entrance and administration tower, with accident department on right

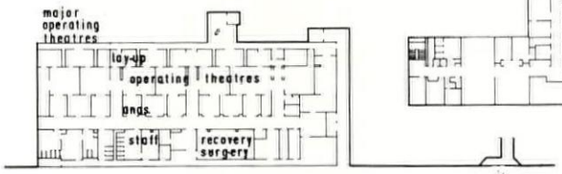


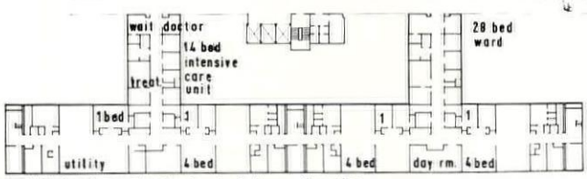
maternity ward, floor plan

administration tower, floor plan

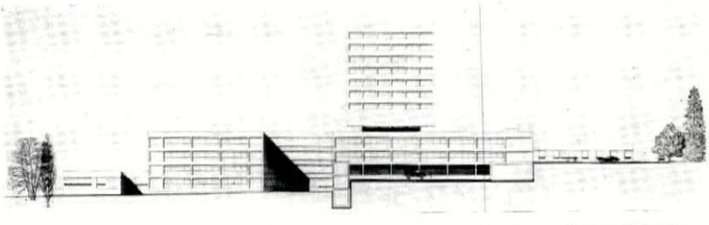


western part of hospital, ground floor plan

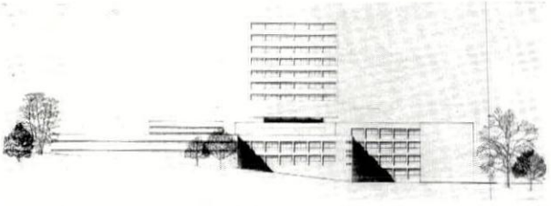




ward block and operating theatres, typical upper floor plan

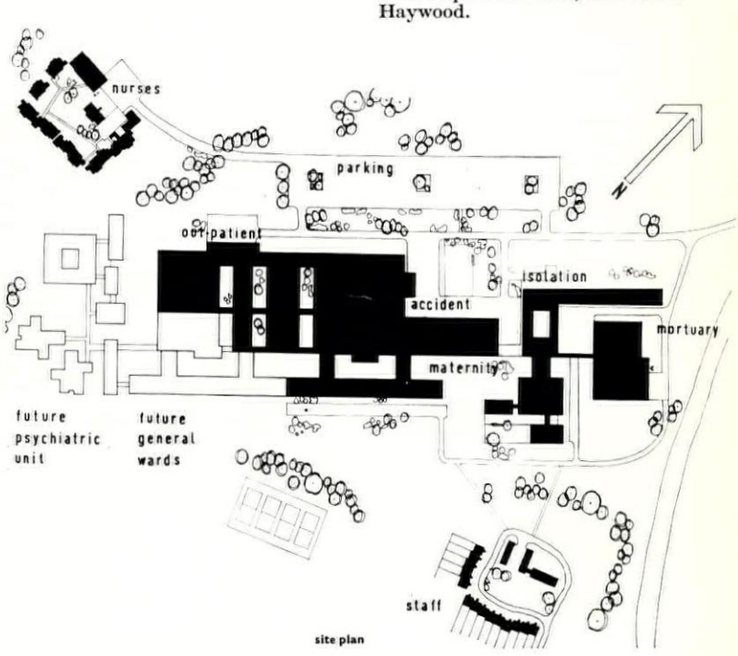


above, east elevation

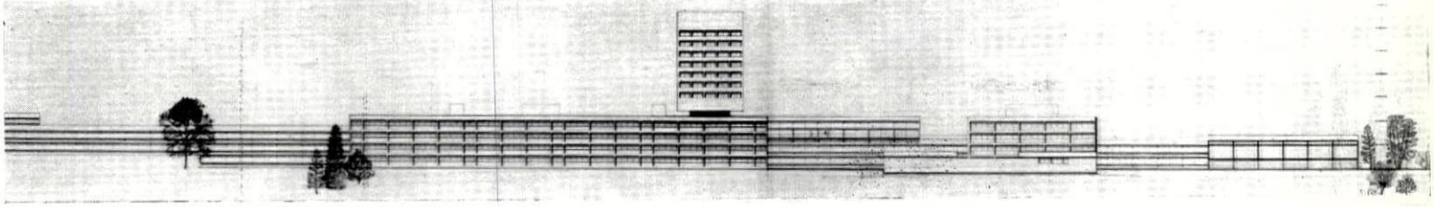


left, west elevation

below, south elevation



site plan

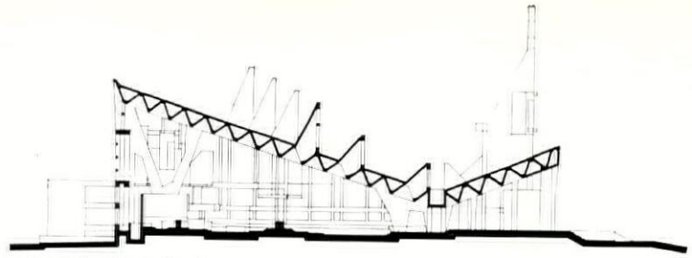


CATHEDRAL, IBADAN, NIGERIA

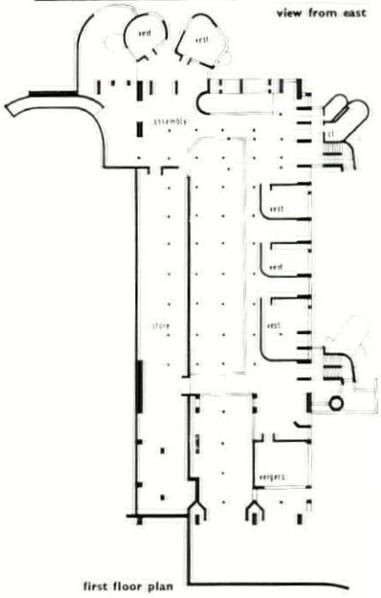
George G. Pace

CLIENT: Diocese of Ibadan.
ACCOMMODATION: Plan evolved to meet particular functions of cathedral as against parish church. Seating for 2,000, 4 enclosed chapels, bapistery, chapter house, 8 vestries, hall, large chair store, parking for 400 cars.
STRUCTURE AND FINISHES: R.c. main frame, walls of precast units alternately louvred and glazed. Roof of precast lightweight concrete vaults and flats covered with aluminium sheeting. Floors of crushed and polished sea shells in cement. Furnishings all designed by architect.
SERVICES: Water and electricity.
COST: £450,000.
BUILDING PERIOD: 1966–1968.
Quantity surveyor, Thompson and Alexander. Structural consultant, Ove Arup and Partners.

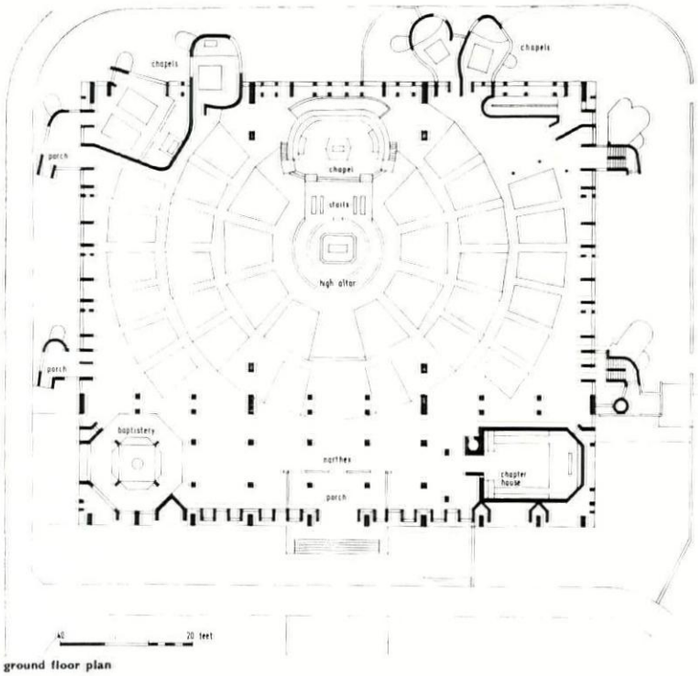
view from east



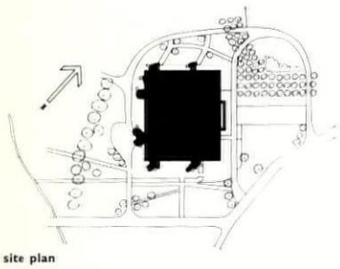
section, south-east to north-west



first floor plan



ground floor plan

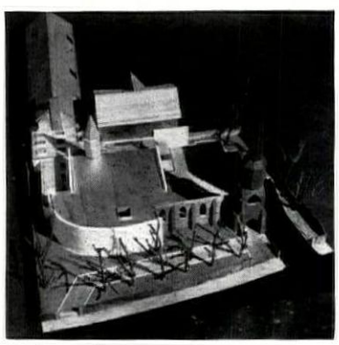


site plan

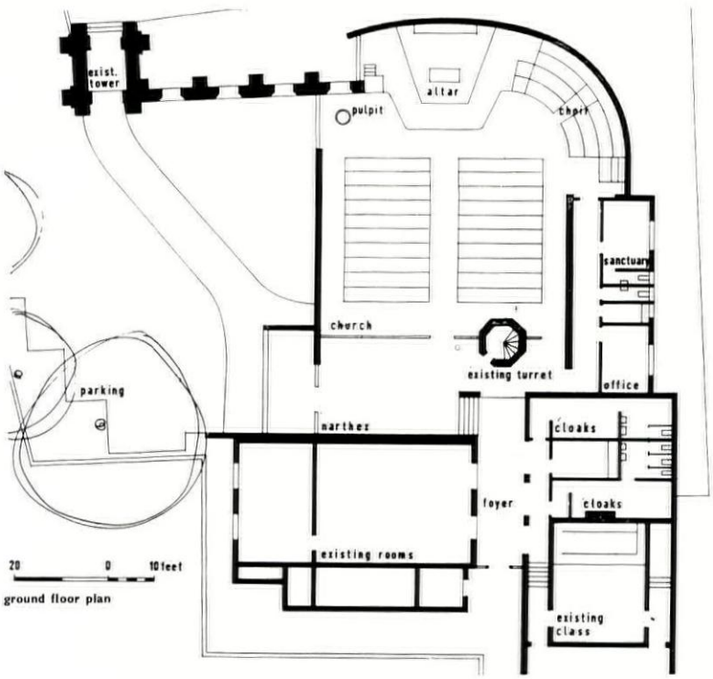
CHURCH, WEST SMETHWICK, STAFFS

Denys Hinton and Associates

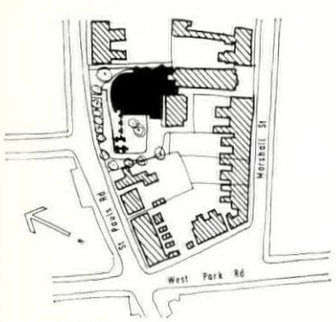
CLIENT: Vicar and Parochial Church Council of St. Paul's.
SITE: Ruins of large Victorian Gothic church in yellow brick, existing parish rooms and parish hall, good trees on perimeter.
ACCOMMODATION: St. Paul's Church, seating 250 in pews and extra 150 when sliding doors open to narthex. Choir of 32.
STRUCTURE AND FINISHES: Loadbearing brick with yellow-grey facing to match walls retained. Hall wall of textured plaster. Timber or metal joists and beams with asphalt roof covering. Floors, brick paving in narthex, p.v.c. sheet in church, cork elsewhere.
COST: £28,123, excluding organ.
BUILDING PERIOD: September 1965–June 1966.
Associate-in-charge, Charles Brown. Assistant, Christopher Langstone. Quantity surveyor, Silk and Frazier.



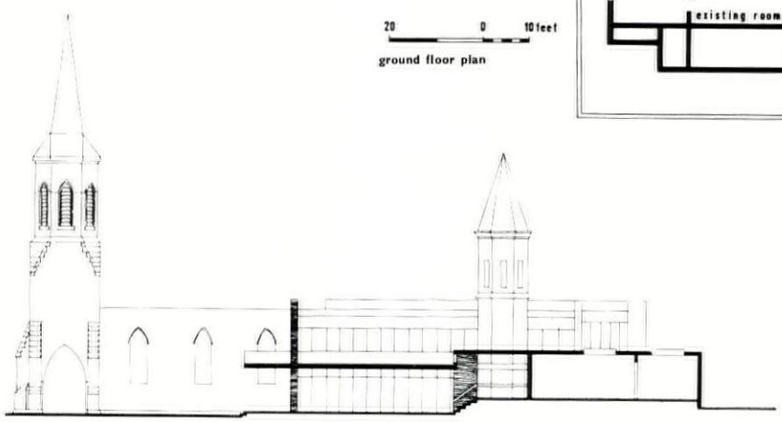
view from north



ground floor plan



site plan

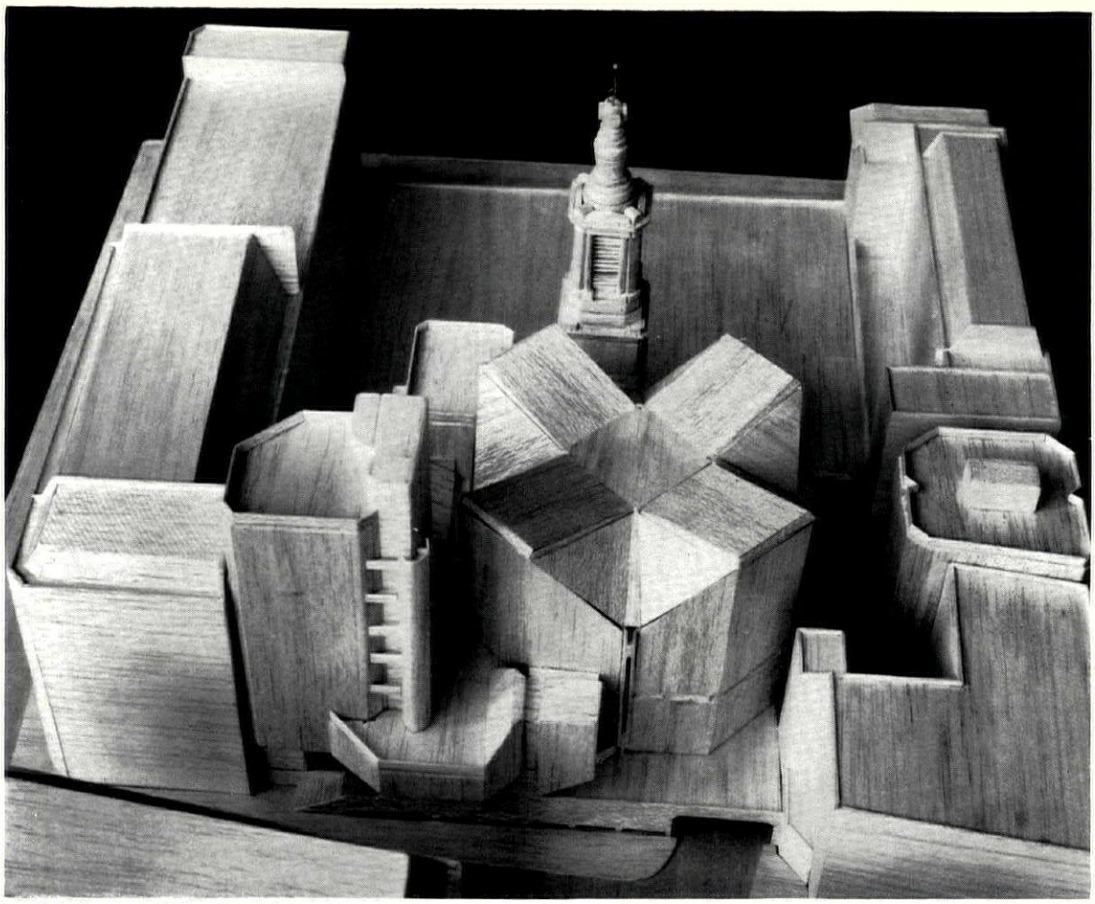


east-west section through narthex

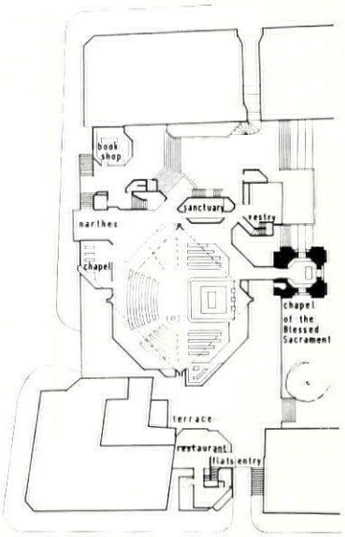
CHURCH, SOHO, LONDON

Ahrends, Burton and Koralek

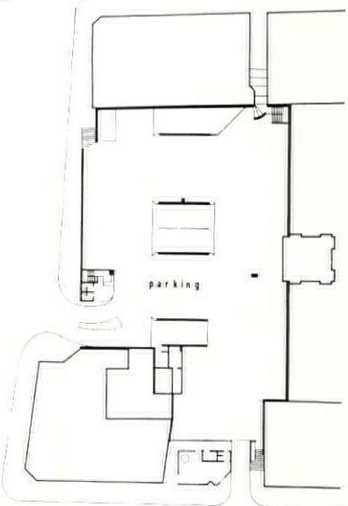
CLIENT: Rector of St. Anne's, Soho, and London Diocesan Fund; National Car Parks Ltd.
SITE: 13,500 sq. ft. on site of bombed St. Anne's of 1690, keeping tower of 1802 by S. P. Cockerell.
ACCOMMODATION: Church seating 250 with choir of 20, non-denominational Chapel of Abraham, Chapel of Blessed Sacrament in tower, sacristy and vestry, rectory, church offices and public rooms, flats.
STRUCTURE AND FINISHES: Underground car park, r.c. walls, columns and floors. Church, r.c. frame, steel roof trusses used to support lower walls by suspending metal bars between lower edge of roof and floor slabs, with subsidiary metal bars holding wall. Walls and roof, 2 sheets of structural glass with 8 in. cavity, louvred metal mesh, heating in cavity ventilated for slower control. Floors and other walls tiled. Rectory offices and flats, r.c. walls and floors, similar structural glass to church with the introduction of curved transparent sections and solid ventilators.
SERVICES: Church, plenum system for ventilation and heating, boiler with intake and extract in tower. Elsewhere, hot water system serving convectors and calorifiers.
Quantity surveyor, E. C. Harris and Partners. Structural consultant, Charles Weiss and Partners. Mechanical and electrical consultant, Associated Architects and Consultants. Car park, Chamberlain Parking Systems Ltd.



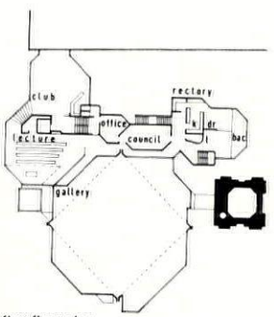
general view from east, with Dean Street in foreground



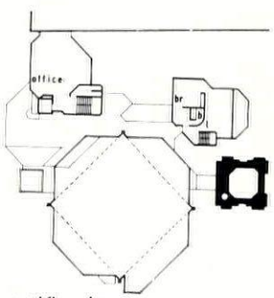
ground floor plan



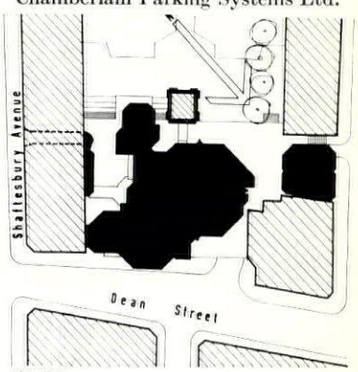
lower ground floor plan



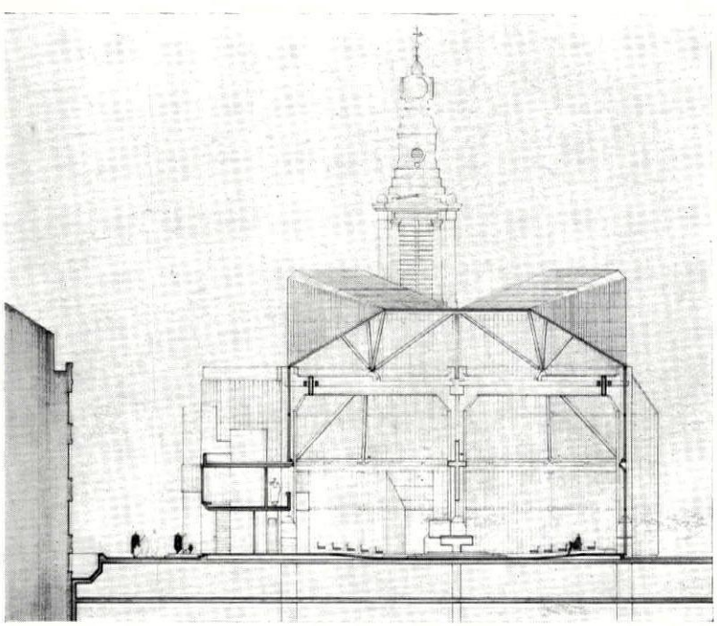
first floor plan

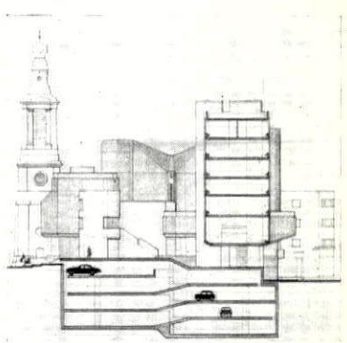


second floor plan

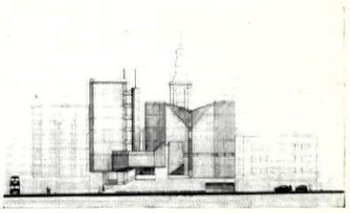


site plan





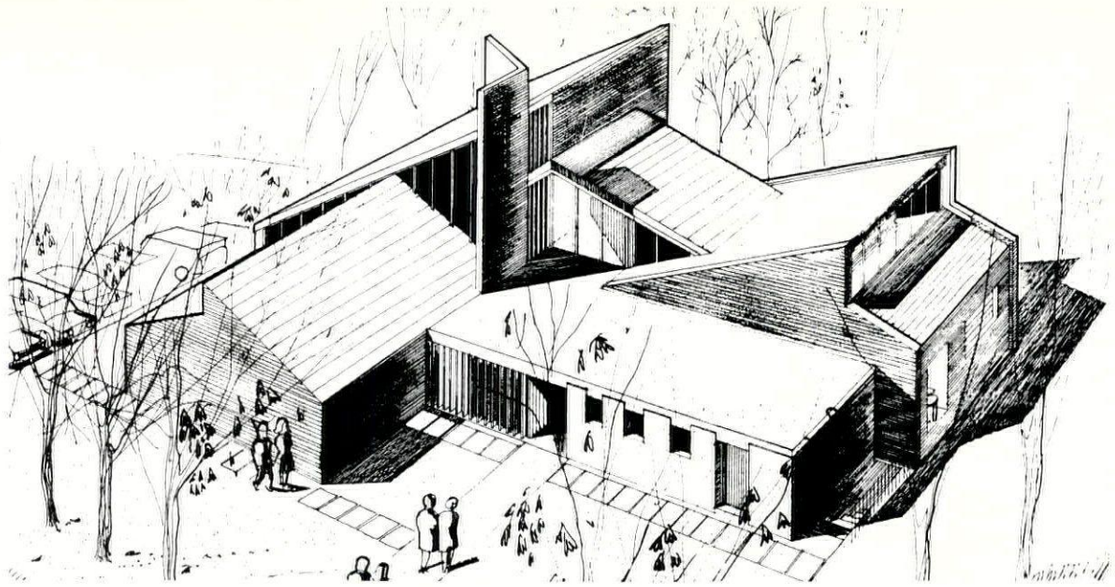
above, east-west section showing car park
left, north-south section
below, east elevation to Dean Street



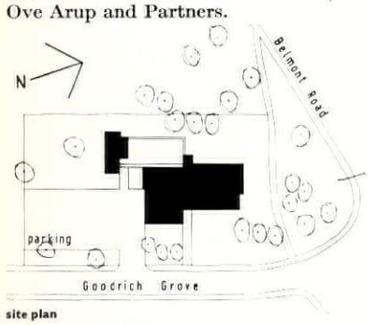
PARISH CENTRE, NEWTON FARM, HEREFORD

Peter Bosanquet and Partners

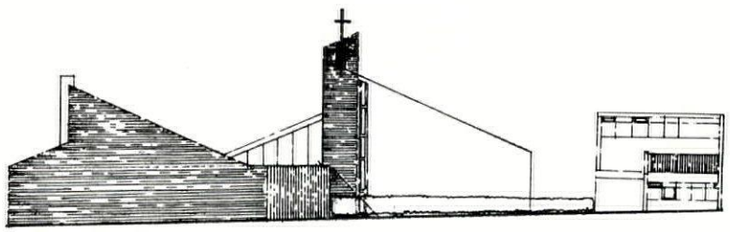
CLIENT: Rev. R. B. Ninis.
SITE: 0.6-acre former orchard.
ACCOMMODATION: Phase 1, hall seating 210, with rooms for old age pensioners and junior groups. Phase 2, church seating 121, with choir of 18.
STRUCTURE AND FINISHES: Loadbearing brickwork and blockwork largely fair-faced, with pine joists and boarding of roofs exposed internally. Floor to sanctuary hardwood, vinyl elsewhere. Stained glass in timber clad west wall.
SERVICES: Oil-fired hot water heating. Sewage to septic tank.
COST: Phase 1, £24,595. Phase 2, £10,500.
BUILDING PERIOD: Phase 1, summer 1966–spring 1967.
Partner-in-charge, Peter Bosanquet. Associate-in-charge, Brian Hook. Quantity surveyor, Davis, Belfield and Everest. Structural consultant, Ove Arup and Partners.



view from east



site plan



west elevation

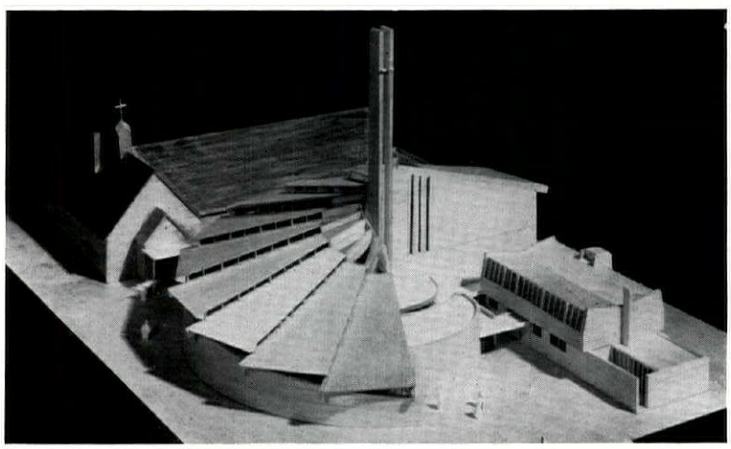
ground floor plan

first floor plan

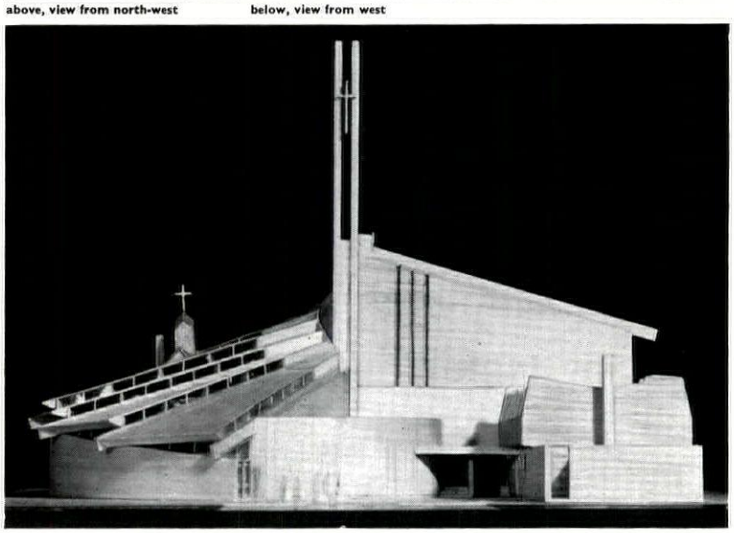
CHURCH, KINGS HEATH, BIRMINGHAM

Desmond Williams and Associates

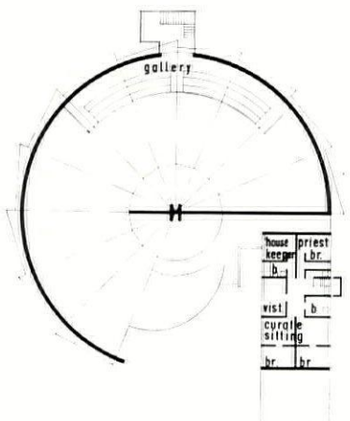
CLIENT: Rev. Fr. E. O'Sullivan.
SITE: 0.75 acre next to existing hall in residential area, near centre of Kings Heath.
ACCOMMODATION: St. Dunstan's Church, seating 680, including gallery. Parking for 60 cars. Presbytery for parish priest, 2 curates and housekeeper.
STRUCTURE AND FINISHES: Loadbearing brick perimeter walls, fair-faced internally. Roof of steel trusses, timber purlins, boarded ceiling, aluminium sheeting. Composition tile floor. Concrete block core to tower. Double-glazed rooflight.
SERVICES: Heating by underfloor electric cables, with electric warm air in side chapel to act as booster when congregation small.
COST: £95,000.
BUILDING PERIOD: March 1966–February 1968.
Partner-in-charge, Desmond Williams. Associate-in-charge, J. Edmondson. Assistant, D. Mottershead. Quantity surveyor, Flood and Wilson. Structural consultant, Ove Arup and Partners. Lighting consultant, Pilkington Bros.



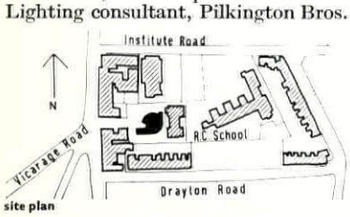
above, view from north-west



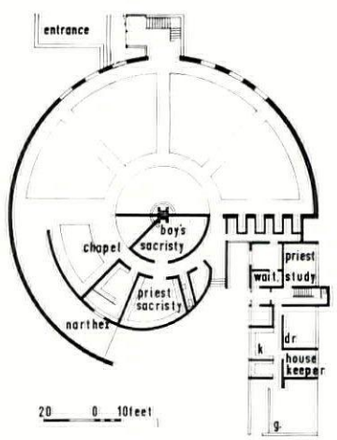
below, view from west



first floor plan



site plan



ground floor plan

built-in furniture

CONSORT
CONSORT

Low cost storage

Study bedrooms

designer R. L. Carter Des RCA FSIA

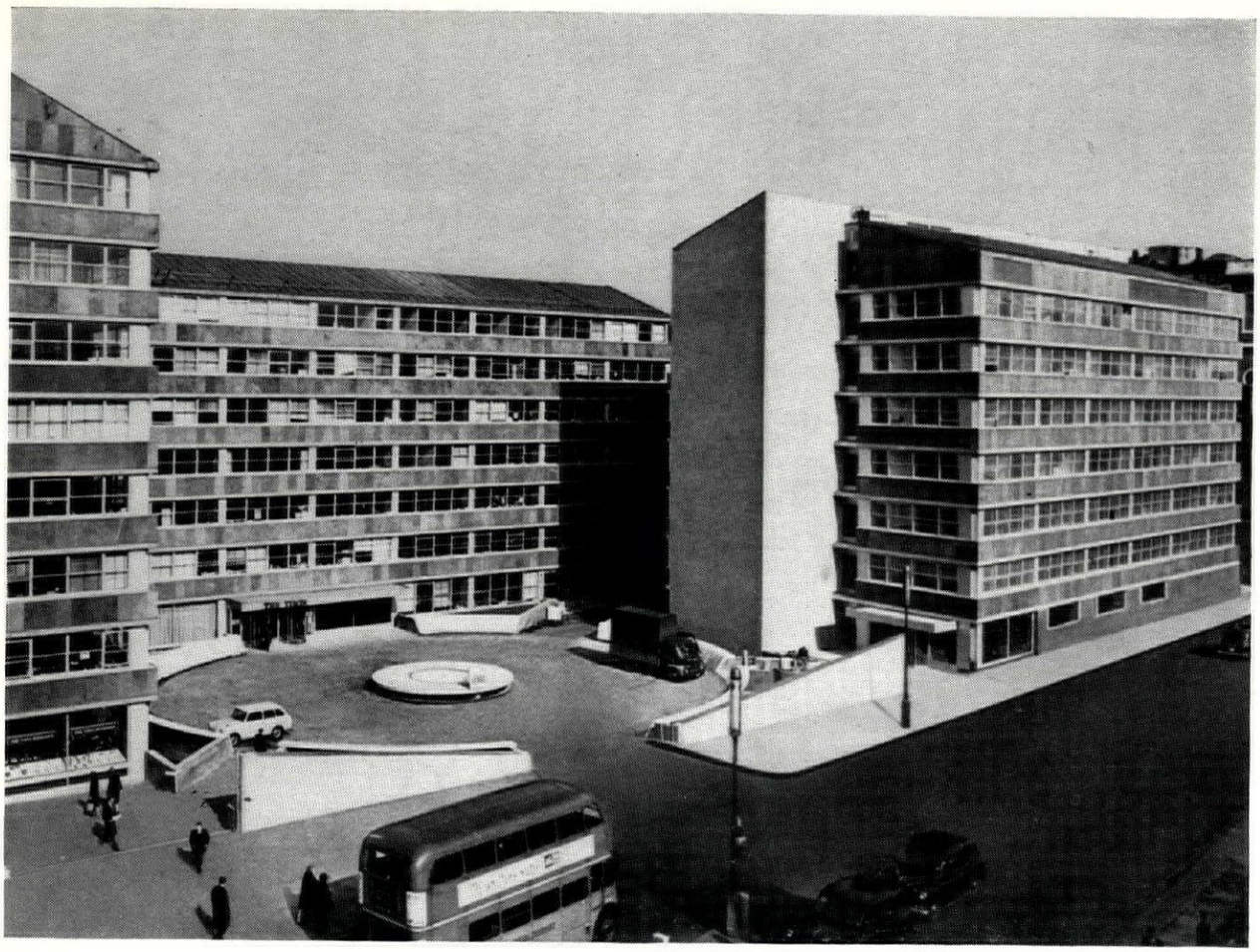
A S H Woodcraft Ltd Vicarage Place Walsall

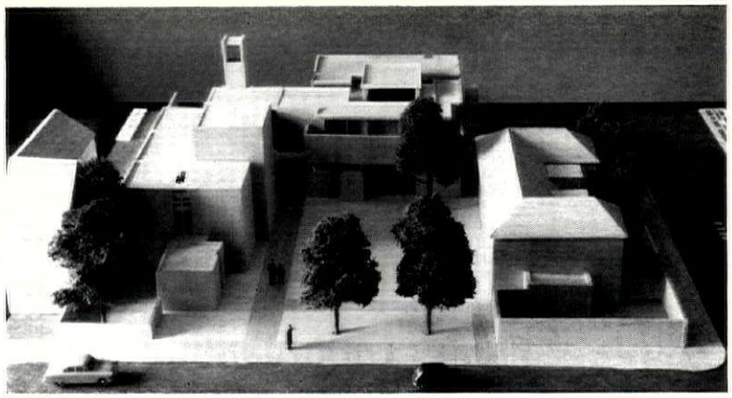
Walsall 26021

London office

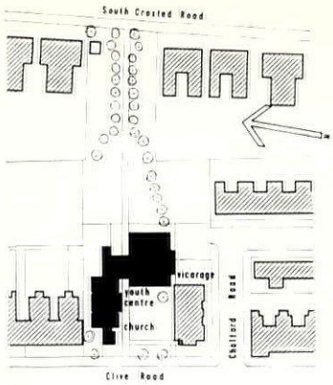
1 Marshall Street London W1

Gerrard 2607 .

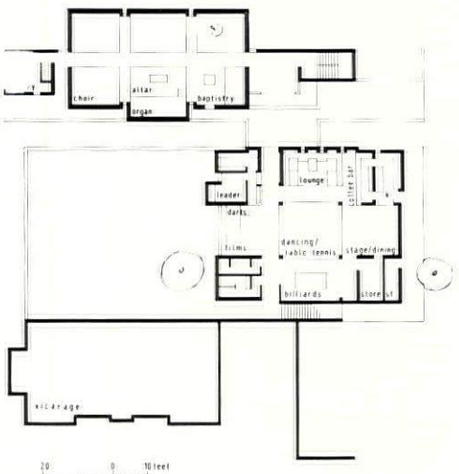




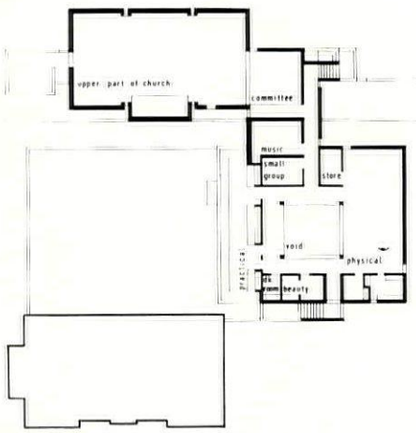
view from west



site plan



ground floor plan

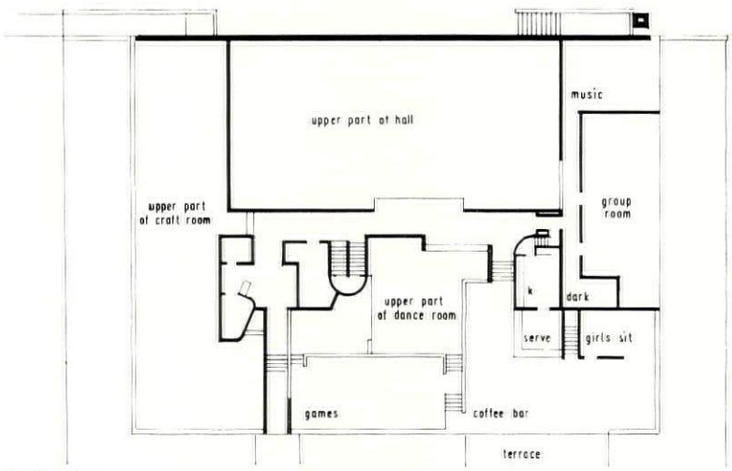


first floor plan

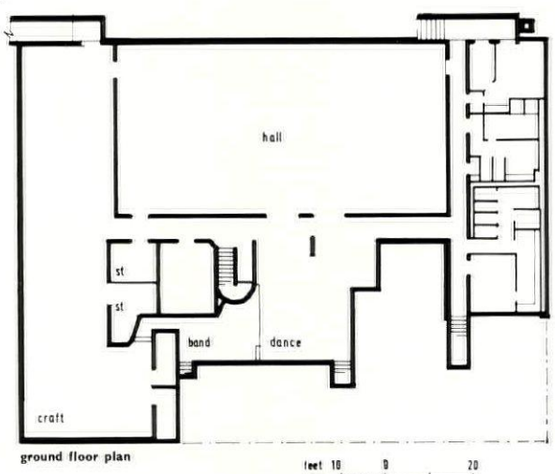
CHURCH AND YOUTH CENTRE, WEST DULWICH, LONDON

Hutchinson, Locke and Monk

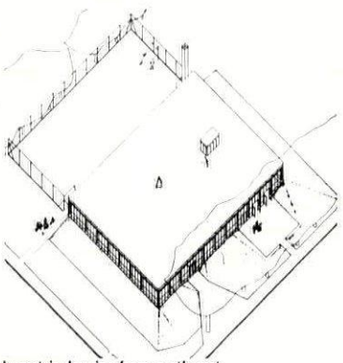
CLIENT: Diocese of Southwark.
SITE: Replacing existing Emmanuel Church of 1876, level site next to vicarage in residential area. Public footpath crosses site. Numerous mature lime trees.
ACCOMMODATION: Church seating 112 normally, with extension for 55. Youth centre to cater for average nightly attendance of 140.
STRUCTURE AND FINISHES: Church, loadbearing 15½ in. brick walls with in situ concrete beams and roof slabs. Youth centre, 11 in. brick cavity walls with four central columns carrying r.c. first-floor slab and timber roof. Metal windows, lead flashings. Various internal finishes: white plastic compound, fair-faced concrete, lacquered timber to walls and ceilings, concrete, brick and p.v.c. floors.
SERVICES: Heating: church, electric radiant panels; youth centre, gas-fired boiler for ducted warm air.
COST: Church, £13,000. Youth centre, £27,000, excluding furniture.
BUILDING PERIOD: March 1966–June 1967.
Partner-in-charge, A. J. Monk. Assistant, K. Birks. Quantity surveyor, E. C. Harris and Partners. Structural consultant, Charles Weiss and Partners.



first floor plan

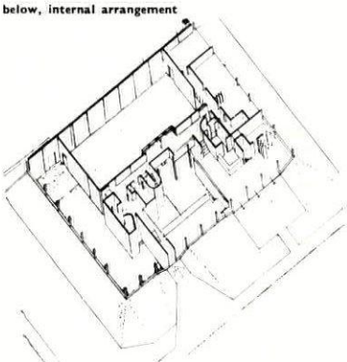


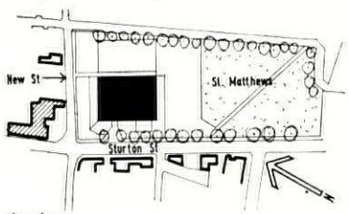
ground floor plan



isometric drawing from north-west

below, internal arrangement





site plan

YOUTH CLUB, EAST ROAD, CAMBRIDGE

Gordon Logie, City Architect and Planning Officer

CLIENT: Cambridge City Council.
SITE: St. Matthew's Piece, 0.91 acre on part of existing recreation ground within East Road redevelopment area.
ACCOMMODATION: 12,261 sq. ft. for average nightly attendance of 300. Entrance route at upper level leads members past variety of activities at lower level. To be open day and night 7 days a week.
STRUCTURE AND FINISHES: Loadbearing brick walls support r.c. slab at upper level, roof of light steel beam and column structure. 3 elevations of patent glazing, 4th of sandlime facing bricks.
SERVICES: Oil-fired low pressure hot water heating, ducted warm air to halls.
COST: £57,750.
BUILDING PERIOD: March–December, 1966.
Deputy city architect, G. W. Cartmell. Principal assistant, J. C. Williams. Senior assistant, John Barrow. Quantity surveyor, Henry Cooper and Sons. Mechanical and electrical consultant, H. W. Tuckey and Partners.

SPORTS CITY, BENGHAZI, LIBYA

Munce and Kennedy

CLIENT: Kingdom of Libya, Ministry of Labour and Social Affairs.

SITE: 55 hectares of reclaimed and raised salt flat on edge of inner harbour, 1 mile from town centre.

ACCOMMODATION: This and the architects' similar Sports City at Tripoli form national training centres suitable for international games. Stadium for athletics and soccer seating 40,000. Domed sports arena for tennis and boxing seating 5,000. Olympic open-air pools seating 2,000. Tennis and basketball courts each seating 1,000. Practice pitches for soccer and polo, and athletics track. Practice courts for tennis, basketball, volleyball. Gymnasia, shooting galleries and velodrome. Boathouses, ships and jetty for rowing and sailing. Large sports club with restaurants and bars. Cinema for 500, hostel for 50, 11-storey administration block, maintenance facilities. Parking for 5,000 cars, 6,000 cycles, 150 buses.

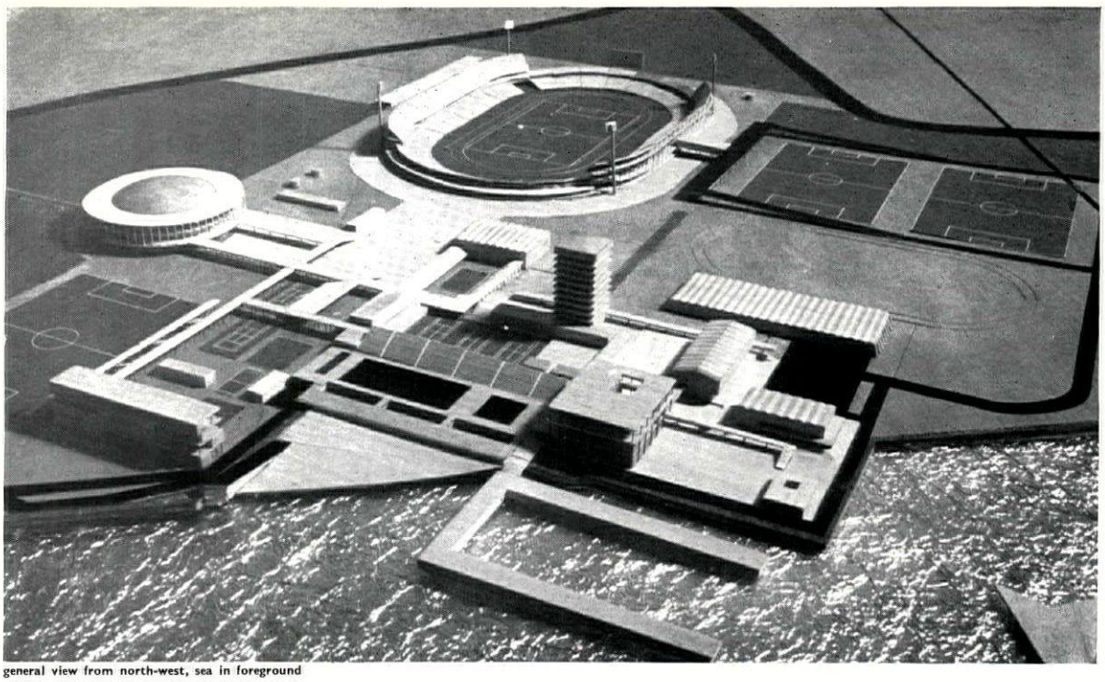
STRUCTURE AND FINISHES: In situ r.c. frame with precast cladding generally. Sports arena dome, glass reinforced plastic insulated structural cladding with impregnated burnished copper flake finish, on structural aluminium frame to prevent creep. Gymnasium and perimeter concourse of sports hall, roofs of folded plate glass reinforced plastic.

SERVICES: Fully ducted ring system for district heating, water, electricity and telecommunications.

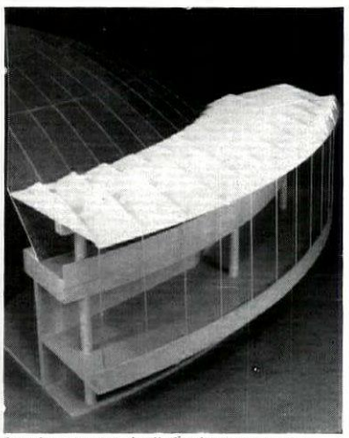
COST: Phase 1 (reclamation), £1,600,000. Phase 2, £2,000,000. Phase 3, £2,000,000.

BUILDING PERIOD: Phase 1 already completed. Phase 2, spring 1966–autumn 1967.

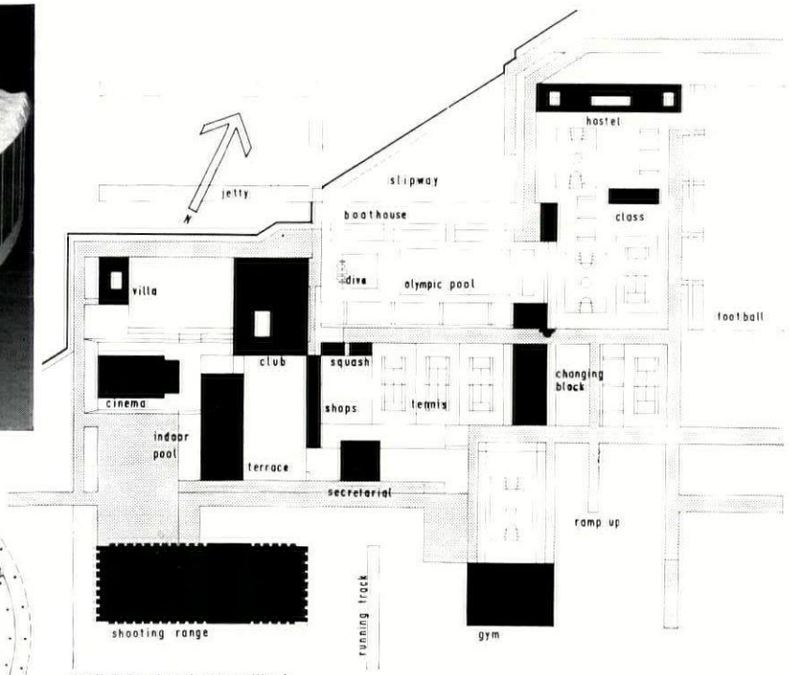
Partner-in-charge, John Sheldon. Associate-in-charge, Michael Hirst. Assistants, Michael Wilde, Paul Hutton, David Dobby, Emer Brett and Neville Jackson. Quantity surveyors, W. Cantley and G. McKinnon. Structural engineers, C. Shippen and M. Sanger. Mechanical engineer, B. Haynes. Electrical engineer, R. Oliphant. Consultant on dome structure, Hume, Tottenham and Bennett.



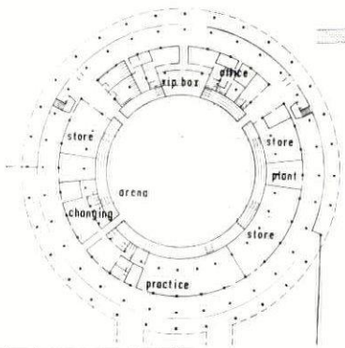
general view from north-west, sea in foreground



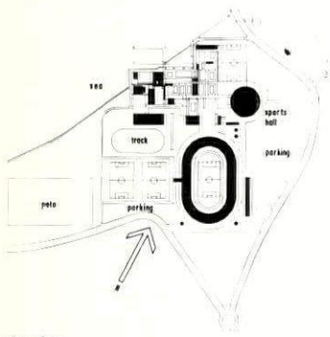
domed sports arena, detail of perimeter concourse



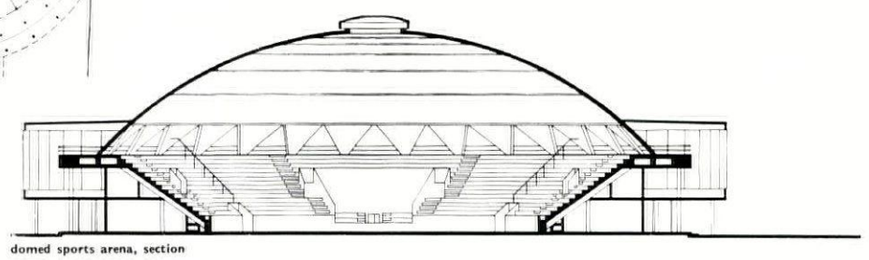
detailed site plan of sports 'village'



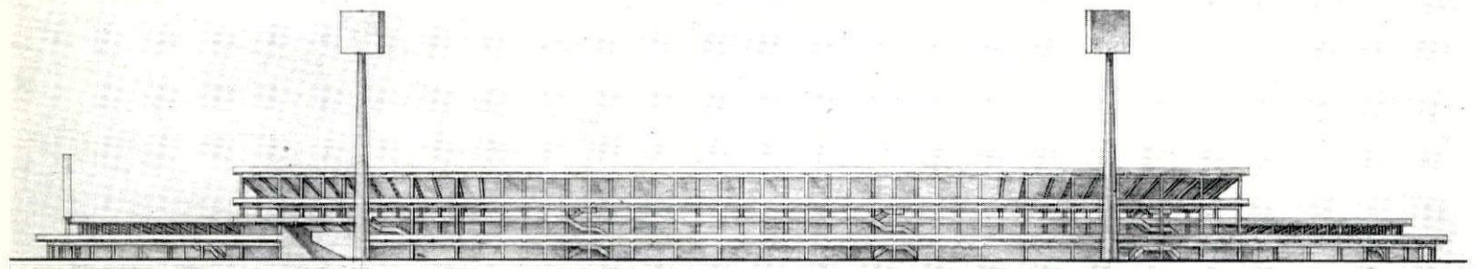
domed sports arena, floor plan



site plan



domed sports arena, section



athletics stadium, east elevation

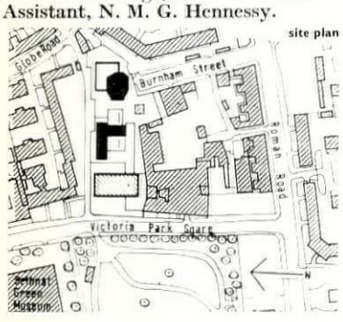
SOCIAL CENTRE, VICTORIA PARK, LONDON

Playne and Lacey and Partners

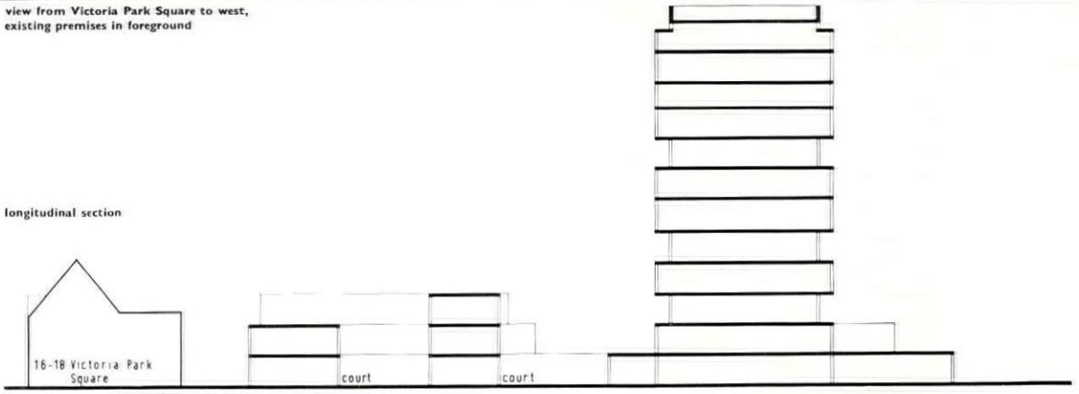
CLIENT: University House Inc.
SITE: 44,000 sq. ft. on east side of large park in East End, replacing light industry and including present premises of University House, with play centre and social study group.
ACCOMMODATION: Social centre, 3 gymnasia, changing rooms, art and craft rooms, workshop, darkroom, print shop, stage workshop, committee rooms. Group medical practice. Day nursery, indoor and outdoor, run by local authority. Department of child health and environment with classrooms. Legal advice bureau and offices for 3 housing associations. Students' hostel.
STRUCTURE AND FINISHES: Probably r.c. with industrialized techniques.
COST: £800,000.
BUILDING PERIOD: 1967–1970.
Partner-in-charge, P. J. Vallance.
Assistant, N. M. G. Hennessy.

view from Victoria Park Square to west, existing premises in foreground

site plan



longitudinal section



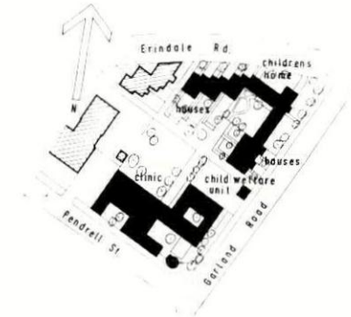
WELFARE CENTRE AND HOUSING, WOOLWICH, LONDON

Stephen Gardiner and Christopher Knight

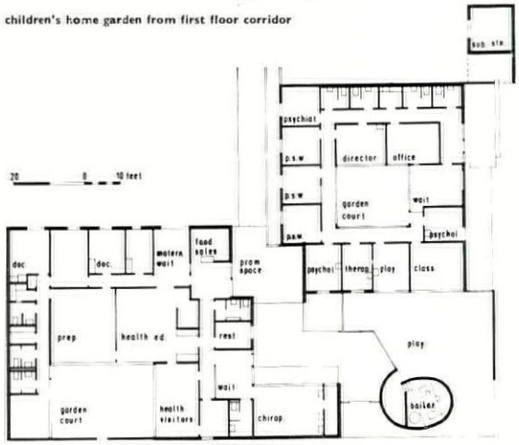
CLIENT: Greenwich Borough Council and Greater London Council.
SITE: 0.65 acre island site in Garland Road, surrounded by housing and school. Part of site already developed for community centre and library. 3 existing terrace houses.
ACCOMMODATION: Maternity clinic, child guidance unit, home for 10 children plus housemother and with assistant, 5 new terrace houses and garages. Parking for 6 cars for maternity and child guidance.
STRUCTURE AND FINISHES: Loadbearing blockwork generally, with some glazed screens calculated for roof loads. Roofs, timber joists with some box beams. Ground floor of children's home and houses, painted blockwork. Elsewhere, cedar shiplap boarding.
SERVICES: Maternity, child guidance and children's home, gas-fired central heating. Houses, gas-fired hot air heaters.
BUILDING STARTS: June 1966 (deferred under Government restrictions).
Quantity surveyor, Harry Trinick and Partners. Structural consultant, John de Bremaeker and Partners. Mechanical consultant, Rosser and Russell. Electrical consultant, Couzens and Brown. Landscape consultant, GLC Parks Division.

children's home garden from first floor corridor

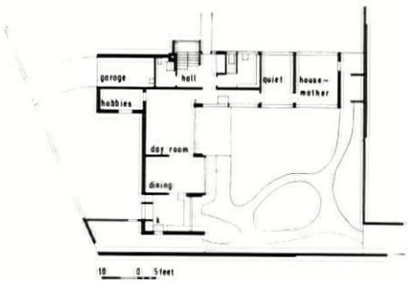
maternity clinic, entrance forecourt



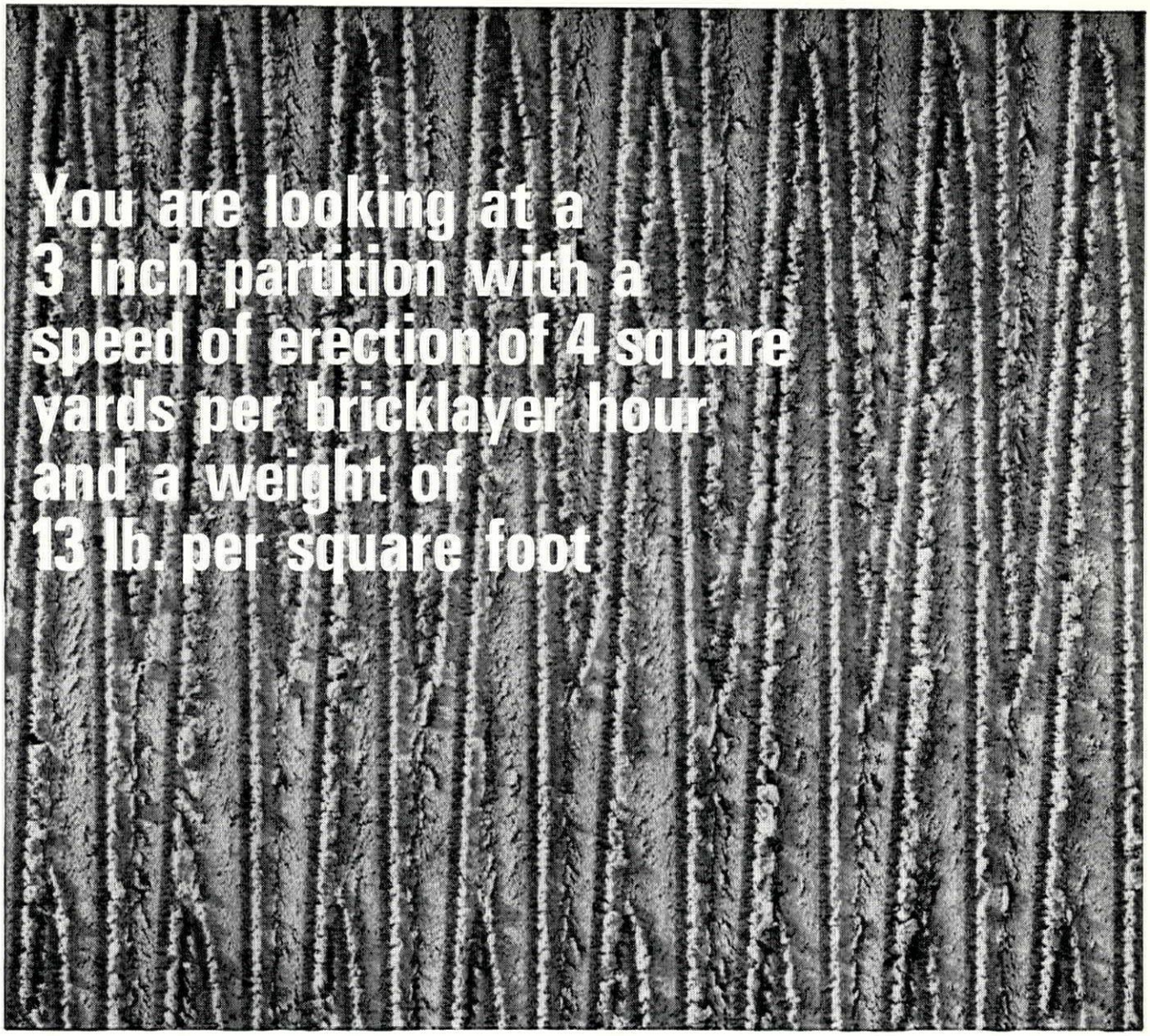
site plan



maternity clinic (left) and child guidance unit, ground floor plan



children's home, ground floor plan



Thermalite is the secret

Set a bricky to lay Thermalite blocks and his surprise will change to delight when he finds how fast he can work. Why? Because a Thermalite block is one hand lift, is much lighter than an ordinary block and one block is equivalent in area to six bricks. With Thermalite, skilled labour time is saved, mortar content decreases, productivity rises and costs fall.

Lightness also reduces dead loads and cuts costs of foundations and structural members. Here are the weights per square foot (including mortar) of the range of Thermalite wall thicknesses —

2 in.	2½ in.	3 in.	3½ in.	4 in.	6 in.	8½ in.
9 lb.	11 lb.	13 lb.	16 lb.	18 lb.	27 lb.	38 lb.

Of course lightness isn't everything. Knowledgeable people value Thermalite for its excellent thermal insulation, loadbearing and fire resistance properties, and because it holds joinery and fittings direct without plugging. Finishing is easy too — either by dry lining, traditional plaster or direct decoration. In addition you can be sure of first class quality, local delivery and a technical advisory service backed by years of experience.

Write for the new 1966 Edition of our brochure or look us up in Barbour Index.

THERMALITE YTONG LIMITED, HAMS HALL, LEA MARSTON, SUTTON COLDFIELD, WARWICKSHIRE. TEL: COLESHILL 2081. A LAING COMPANY

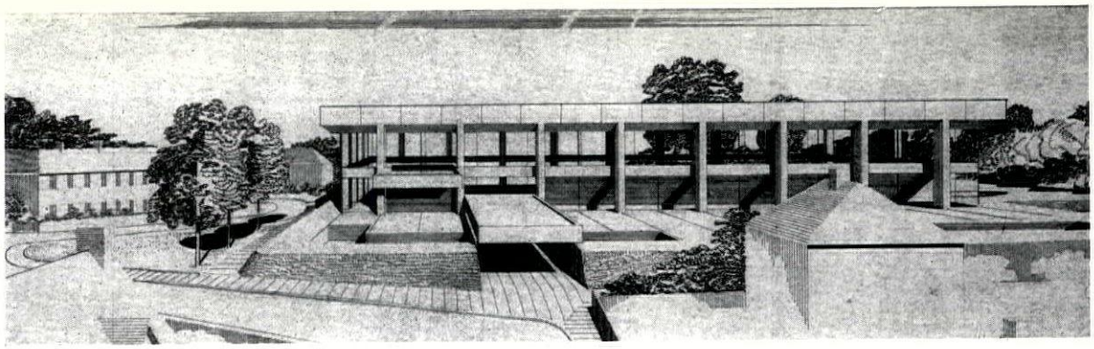
Density
Dry density of approximately 47 lb. cu. ft. Equilibrium density of approximately 49 lb. cu. ft. in protected positions.
Compressive Strength
To British Standard 2028 Type A.
Moisture Movement/Drying Shrinkage
To British Standard 2028 Type B
Thermal Conductivity
'k' = 1.3
Nominal Face Sizes
18" x 9" or 9¾" or 6".
Actual Face Sizes
17⅝" x 8⅝" or 9⅛" or 5⅝"
(tolerance to British Standard 2028).
Thicknesses
2", 2½", 3", 3½", 4", 6" and 8½"
(tolerance to British Standard 2028).
Blocks are also available in modular sizes.
Fire Resistance
Incombustible
4" loadbearing = 2 hour grade
4" non loadbearing = 4 hour grade

THERMALITE

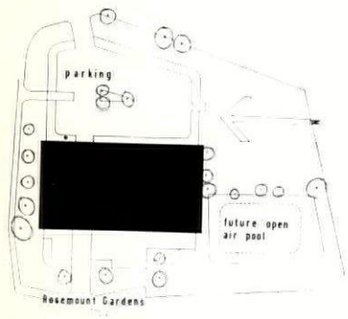
SWIMMING POOL, ARMAGH, N. IRELAND

Manning and Clamp

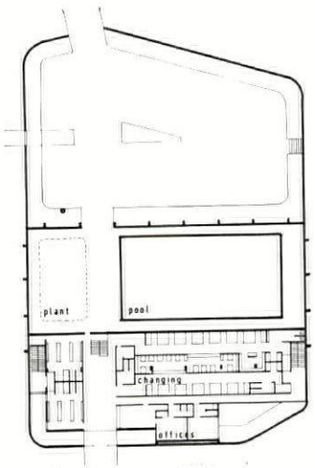
CLIENT: Armagh Urban District Council.
SITE: 2 acres, replacing disused reservoir on hilltop south-east of city. Placed within existing embankments, only pool hall breaking skyline, giving spectators distant views.
ACCOMMODATION: 25 metre pool and learners' pool, seating for 160, 2 schools' changing rooms, public changing rooms, offices, parking for 30 cars.
STRUCTURE AND FINISHES: R.c. and loadbearing brick, pool hall roof of steel lattice construction.
SERVICES: Oil-fired warm air heating, mechanical extract ventilation, sand filtration.
COST: £160,000.
BUILDING STARTS: 1966.
Associate in charge, J. E. Ball.
Assistant, T. L. C. Freeman.
Structural, mechanical and electrical consultant, Jenkins and Potter.



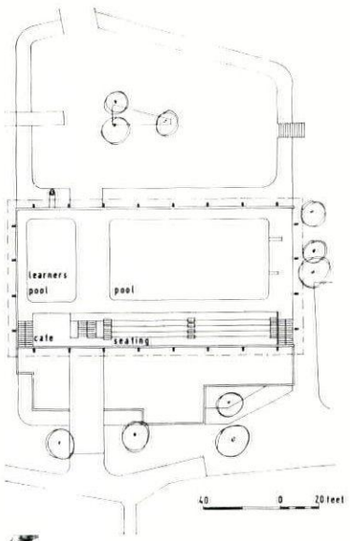
general view from south



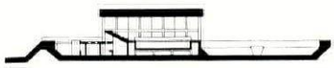
site plan



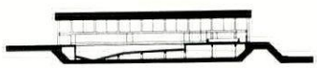
ground floor plan



first floor plan



cross-section

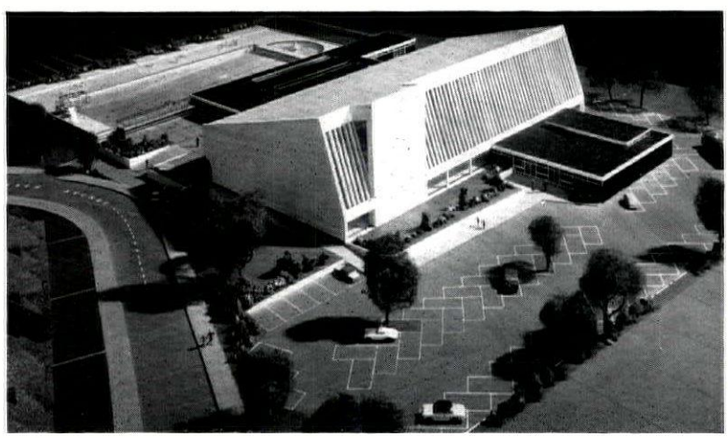


longitudinal section

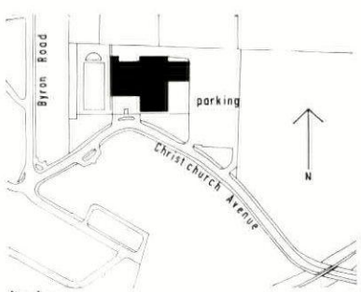
SWIMMING POOL, HARROW, LONDON

Geoffrey J. Foxley, Borough Architect and Planner

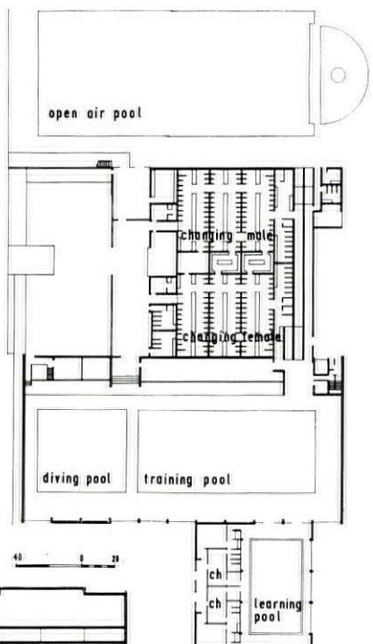
CLIENT: London Borough of Harrow.
SITE: Christchurch Avenue, Wealdstone, nearly flat site of 3.5 acres, formerly allotments, next to existing open-air pool.
ACCOMMODATION: Main pool 165 ft. × 49 ft., divided by movable 6 ft. boom into training 110 ft. and diving 55 ft. Learners' pool 55 ft. × 30 ft. with separate entrance and changing rooms. 600 seats for spectators. Parking for 155 cars.
STRUCTURES AND FINISHES: Main pool, in situ and precast r.c. with steel roof trusses, calcined flint-faced precast slabs, aluminium cladding, double-glazing in structural glass, double-glazed aluminium screens, aluminium trough roof decking. Learners' pool, loadbearing brick crosswalls and concrete columns on pad foundations. Internally, tiling, unglazed mosaic, sprayed asbestos cement walls and ceiling over pools.
SERVICES: Space and water heating by electrode boilers and thermal storage units. Plenum ventilation system, filtration plant.
COST: £527,000 (June 1964 estimate).
BUILDING STARTS: When national economic policy allows.
Group leader, W. Mlek. Assistants, G. H. Scott and B. Keyworth. Quantity surveyor, Davis, Belfield and Everest. Structural consultant, Jenkins and Potter. Mechanical engineer, R. B. Gross. Electrical engineer, V. W. Taylor. Consultant on filtration plant, Jenkins and Potter.



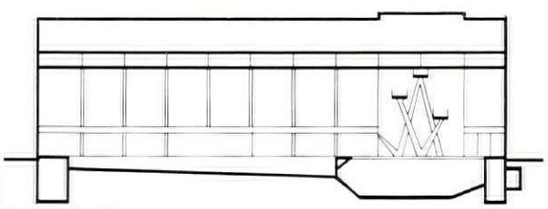
general view from south-east



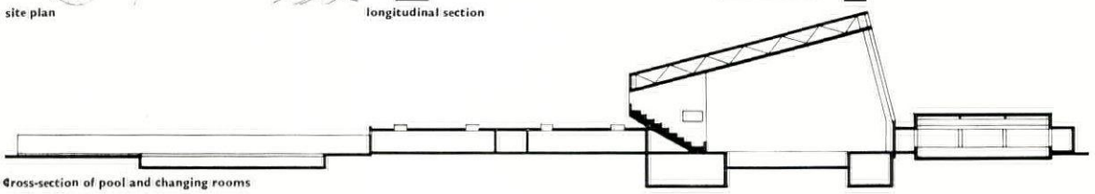
site plan



ground floor plan



longitudinal section

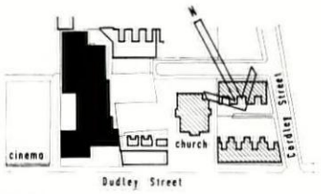


cross-section of pool and changing rooms

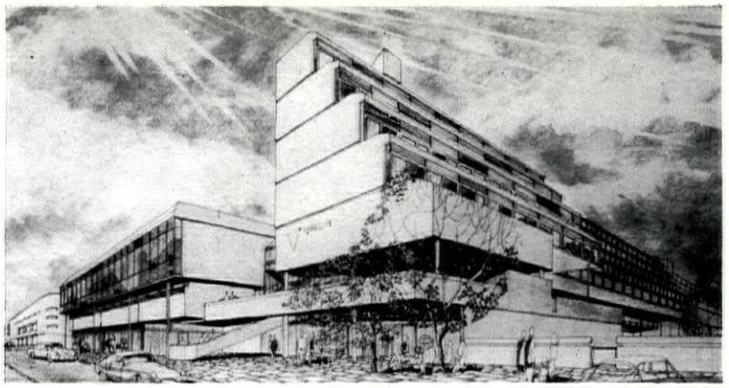
HOSTEL AND CLUB, WEST BROMWICH, WORCS

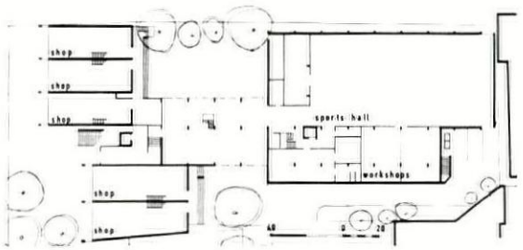
John F. Phillips and Associates

CLIENT: Trustees of West Bromwich and District YMCA.
SITE: 3,600 sq. yds. on site of private residence at end of town centre on main traffic route, serviced from cul-de-sac.
ACCOMMODATION: Recreational and residential centre at second floor level, over 5 shops and storage. Main sports hall 100 ft. × 50 ft. with viewing space on 3 surrounding levels, male and female changing rooms, snooker, table tennis, coffee bar, lounges, quiet room, TV rooms, restaurant seating 150. Private chapel and administration. 103 study bedrooms over.
STRUCTURE AND FINISHES: In situ r.c. frame carrying in situ box frame for bedrooms, which form double square 14 ft. 6 in. × 7 ft. 3 in. allowing structural walls to be vertically continuous. Red brick infill with hardwood windows and aluminium louvres.
COST: Phase 1, £164,000. Phase 2, £120,000.
BUILDING PERIOD: Phase 1, July 1966–October 1967. Phase 2, 1969 completion.
Partner-in-charge, John F. Phillips. Associate-in-charge, Brian Marchant. Assistants, F. L. Steed and R. J. Jesson. Quantity surveyor, Branson and Chester.

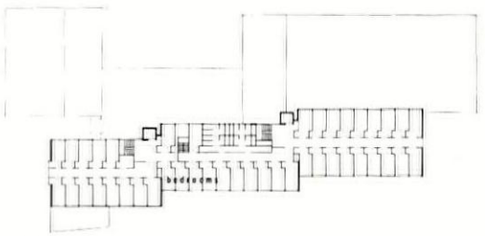


site plan

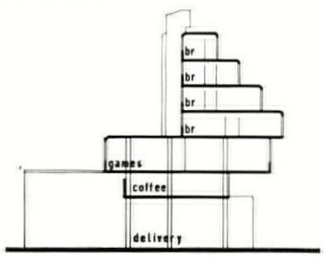

general view from north



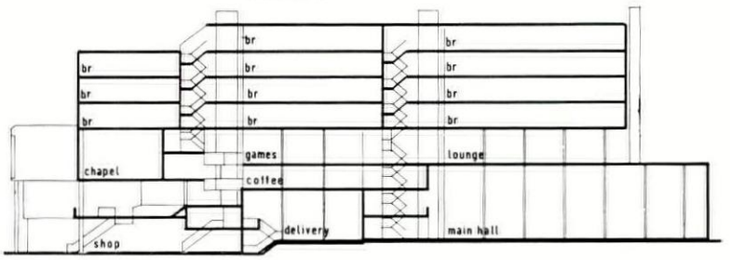
ground floor plan



plan, level 6



cross-section

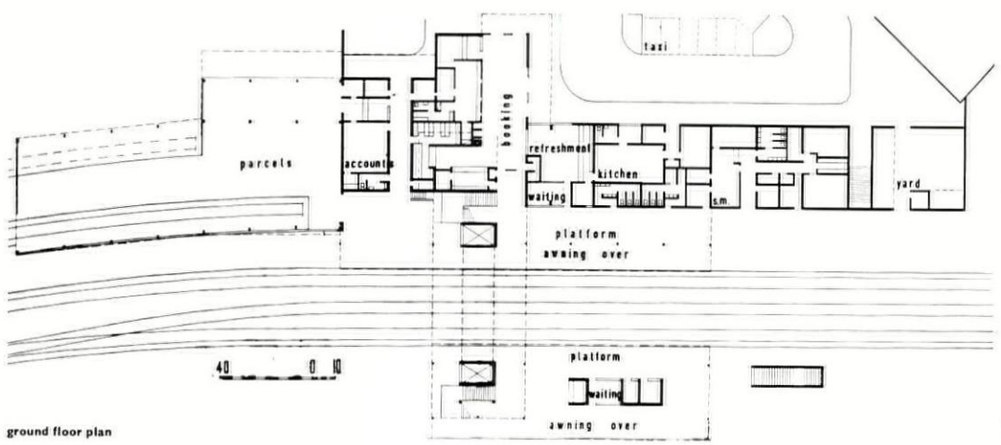


longitudinal section

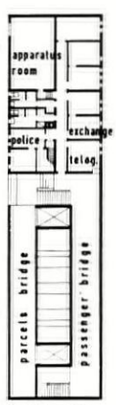
RAILWAY STATION, WOLVERHAMPTON, STAFFS

R. L. Moorcroft, Architect to BR Midland Region

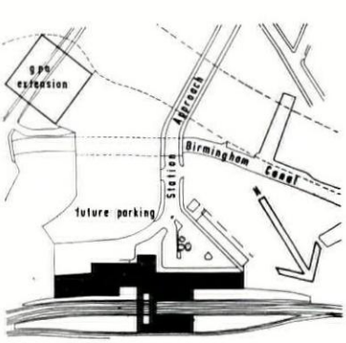
CLIENT: British Railways Board.
SITE: Wolverhampton High Level Station, replacing existing buildings, east of city centre.
ACCOMMODATION: Usual operating and passenger facilities for medium-sized through station, with centralized parcels handling depot and telephone exchange.
STRUCTURE AND FINISHES: 2-storey block, r.c. walls on piles with ribbed precast panels above and half brick facing below. Bridges, r.c. bush-hammered with applied black stone aggregate finish to towers, panels of vitreous enamelled steel in aluminium frames, lighting by rooflights. Single-storey block, brick crosswalls on r.c. raft covering old substructures, 11 in. external cavity walls, roof of built-up timber beams with coloured asbestos fascia. Platform awnings, steel frame with similar roof, timber soffits.
SERVICES: Oil-fired heating.
COST: Phase 1, £325,000. Phase 2, including main buildings, £176,000.
BUILDING PERIOD: Phase 1, November 1964–November 1965. Phase 2, December 1965–March 1967.
Principal assistant architect, J. S. Wyatt. Sectional architect, P. Dunster. Assistant-in-charge, J. M. Collins. Quantity surveyor, J. B. Whybrow. Structural consultants, BR Midland Region Chief Civil Engineer's Department (Phase 1) and A. E. Beer (Phase 2).



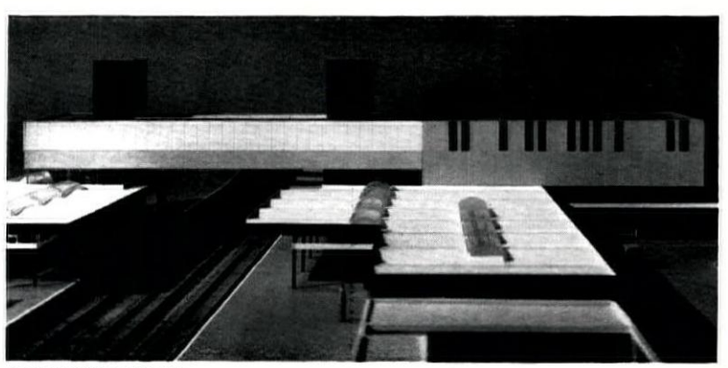
ground floor plan

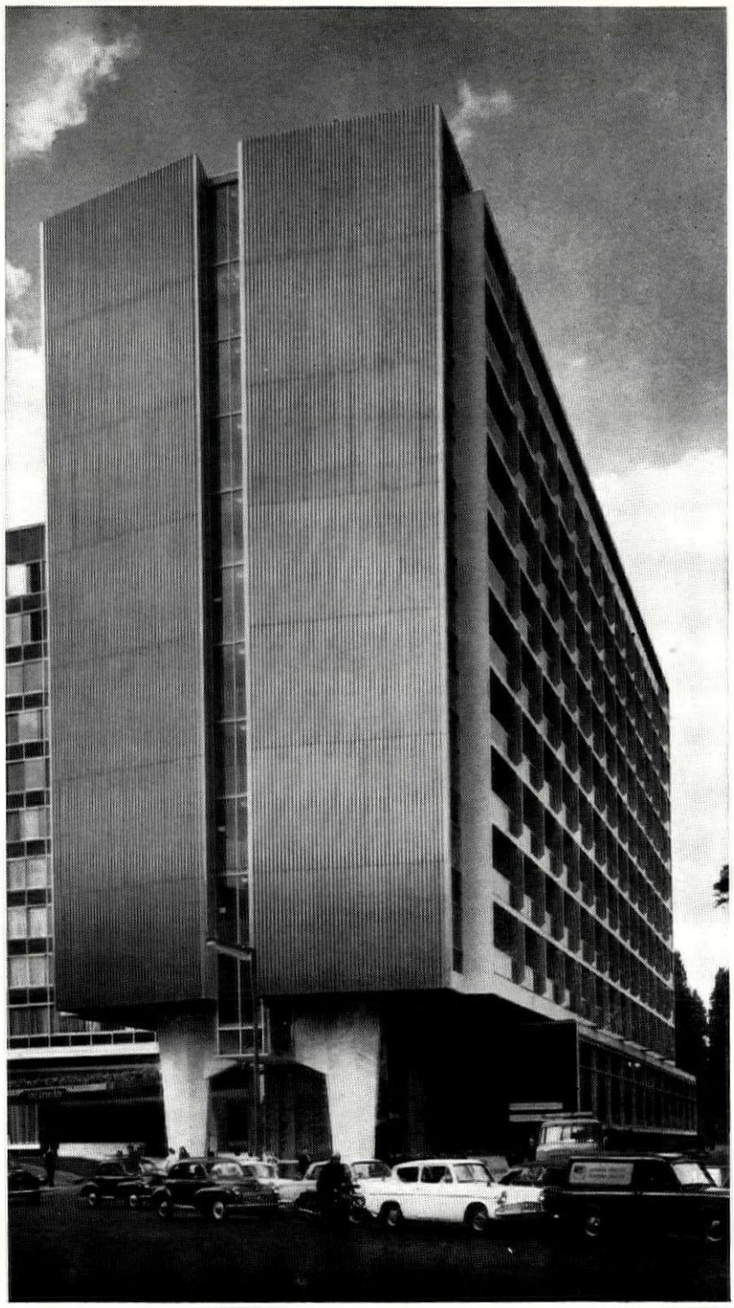


first floor plan

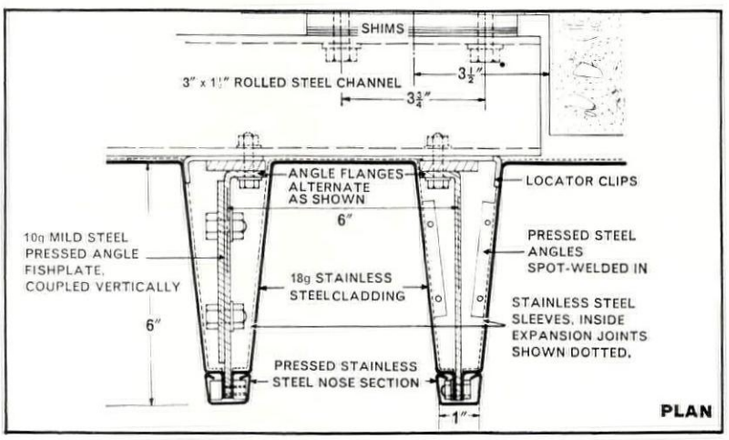


site plan

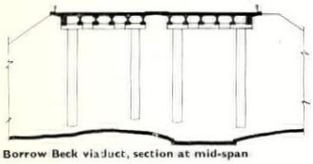

general view from north-west



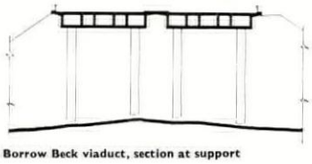
The Royal Garden Hotel, Kensington Architects: R Seifert & Partners. Contractors: Messrs Tersons Ltd. Stainless Steel fabrication: Culford Art Metal Ltd



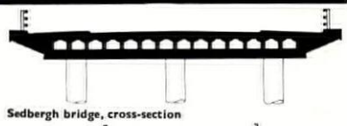
Borrow Beck viaduct, general view with main line railway bridge in background



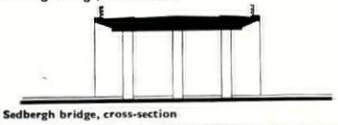
Borrow Beck viaduct, section at mid-span



Borrow Beck viaduct, section at support

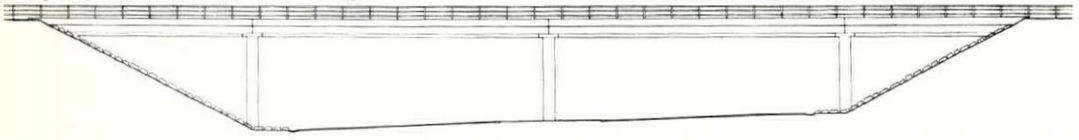


Sedbergh bridge, cross-section



Sedbergh bridge, cross-section

Sedbergh bridge, elevation. Motorway passes under existing road

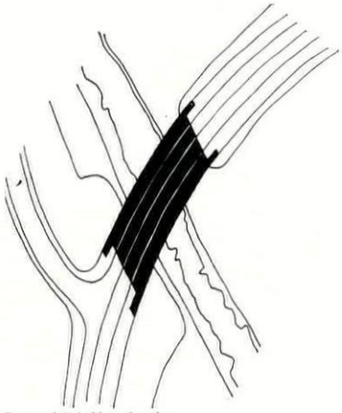


Borrowdale bridge

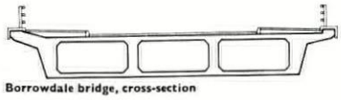
MOTORWAY BRIDGES, LAKE DISTRICT

Scott and Wilson, Kirkpatrick and Partners, engineers. Ansell and Bailey, architects

CLIENT: Ministry of Transport.
SITE: M6 Killington-Tebay section, from Yorkshire dales through Lake District, insertion of motorway with least possible disturbance to area of great natural beauty.
STRUCTURE AND FINISHES: 3 typical bridges shown. All r.c. left exposed from shuttering with guard rails of hollow steel sections galvanized, precast flags, kerbs and drainage channels. Borrowdale bridge, random stones from river bed to slopes, fibreglass coping to outside edges of slab. Sedbergh bridge, masonry pitching to slopes. Borrow Beck viaduct, contrast with adjoining main line railway bridge. Partner-in-charge, Arthur Bailey.



Borrowdale bridge, site plan



Borrowdale bridge, cross-section

CONTRACTORS ETC

Student Amenity Centre, Hull University. *Architects:* Gillespie, Kidd and Coia. *General contractor:* F. Shepherd & Sons.

Hall of Residence, University of Warwick. *Architects:* Yorke, Rosenberg, Mardall. *General contractor:* Sir Robert McAlpine.

Picture Gallery, Christ Church, Oxford. *Architects:* Powell and Moya. *General contractor:* Benfield & Loxley Ltd.

Hall of Residence, Battersea College of Technology. *Architects:* The Austin-Smith Salmon Lord Partnership. *General contractor:* Holloway Bros. (London) Ltd. *Sub-contractors:* H. J. Cash & Co. Cementation Ltd. Alumin Building Components Ltd. Otis Elevator Co., Ltd. Benham & Sons. Panelite Structures Ltd. Victoria Joinery Ltd. Welstead Ltd. Crosby Doors Ltd.

College of Art and Design, Coventry. *Architect:* Terence Gregory, City Architect and Planning Officer. *General contractor:* William Moss and Sons Ltd. *Sub-contractors: Electrical installation:* Harris & Sheldon. *Heating and ventilation:* Thos. Ash Ltd. *Windows:* Williams and Williams. *Floors:* FC Construction Ltd. *Bricks:* G. H. Downing & Co., Ltd.

Approved School, Portslade, Sussex. *Architects:* Richard Sheppard, Robson and Partners, in association with J. Catchpole, East Sussex County Architect. *General contractor:* H. J. Paris Ltd.

Pentagon Blocks, Lambeth, London. *Architect:* Edward Hollamby, Borough Architect. *General contractor:* Bernard Sunley & Sons.

Seafield Village, West Lothian, Scotland. *Architects:* Alison and Hutchison and Partners. *General contractor:* James Harrison & Co. (Builders) Ltd.

Housing, Gore Road, Hackney, London. *Architects:* John Spence and Partners. *General contractor:* W. Loweth & Sons.

Shops and Car Park, Sheffield, Yorks. *Architects:* The Owen Luder Partnership. *General contractor:* Tersons Ltd.

Offices, Bromley Common, Kent. *Architects:* The Owen Luder Partnership. *General contractor:* Tersons Ltd.

Factory and Offices, Swindon, Wilts. *Architects:* Team 4. *General contractor:* Pope Bros. *Sub-contractors:* Modern Engineering Ltd. Ruberoid Ltd. G. N. Haden & Co., Ltd.

Public House, Pimlico, London. *Architects:* Darbourne and Darke, in association with W. D. Shepherd, Chief Architect to Ind Coope Ltd. *General contractor:* Rush & Tompkins.

Electrical Transformer Station, Pimlico, London. *Architects:* Darbourne and Darke, in association with W. Mollison, Chief Architect to London Electricity Board. *General contractor:* W. C. French.

Cinema, Elephant and Castle, London. *Architect:* Erno Goldfinger. *General contractor:* Tersons Ltd.

Church, West Smethwick, Staffs. *Architects:* Denys Hinton and Associates. *General contractor:* W. Neenan (Contractors) Ltd. *Sub-contractors: Metal beams:* Metal Sections Ltd.

Railway Station, Wolverhampton, Staffs. *Architect:* R. L. Moorcroft, Architect, BR Midland Region. *General contractor* (stage 1): Tarmac Ltd.

Building techniques, materials and equipment, furnishings and fabrics are the tools that architects must use. Many British and foreign products introduce themselves by way of the REVIEW'S *advertisement pages—and the AR Reader's Enquiry Service, contacted by using the reply-paid form at the back of the magazine, will produce more detailed information without waste of time.*

Ian Nairn

STOP PRESS

A monthly anthology from all over Britain of townscape problems, outrages and opportunities, compiled by Ian Nairn with drawings by G.J. Nason.

SOS

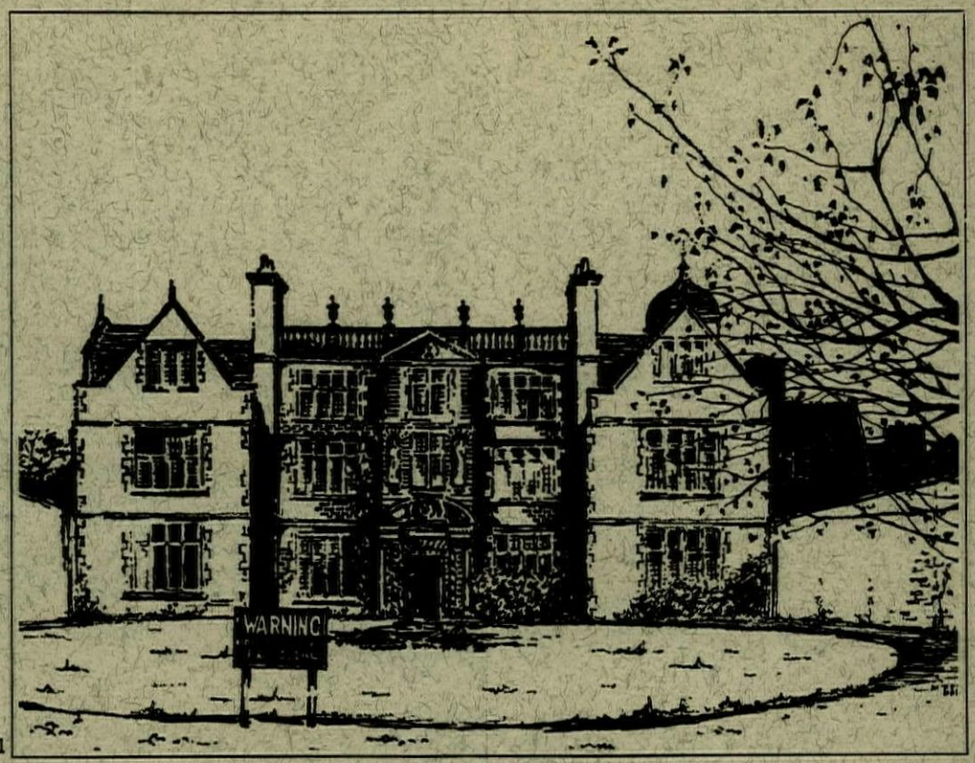
CASTLE BROMWICH HALL, BIRMINGHAM
Tudor, with a splendidly carved Baroque frontispiece, 1. Now empty, and open to vandalism in the characterless eastern suburbs of Birmingham; surely some organization in the city would be able to use it.

LANCASTER
The houses between the arrows, 2, are at present under a clearance order. The site is superb—part of the crescent of Georgian houses which faces the Castle. If they cannot be improved then their replacement should be of the highest possible standard. What usually happens to cleared sites in Lancaster is shown below, 3.

3

OPPORTUNITY

SUDBURY, SUFFOLK
A blasted corner, 4. Don't just leave it, mates—and don't plant it up with shrubs, either. If the reason for demolition was the revered sight-line, then make it a proper square; if not, then put a building back.



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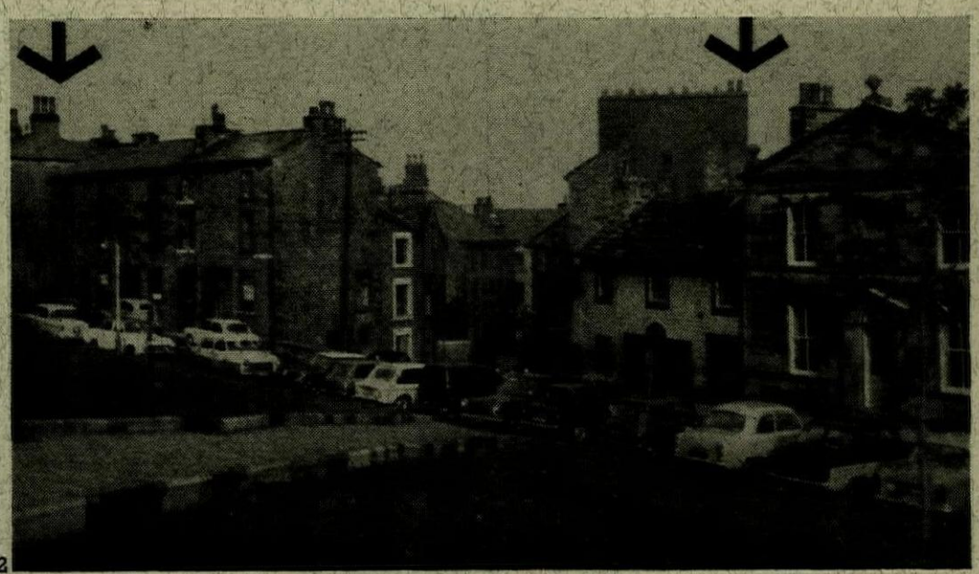

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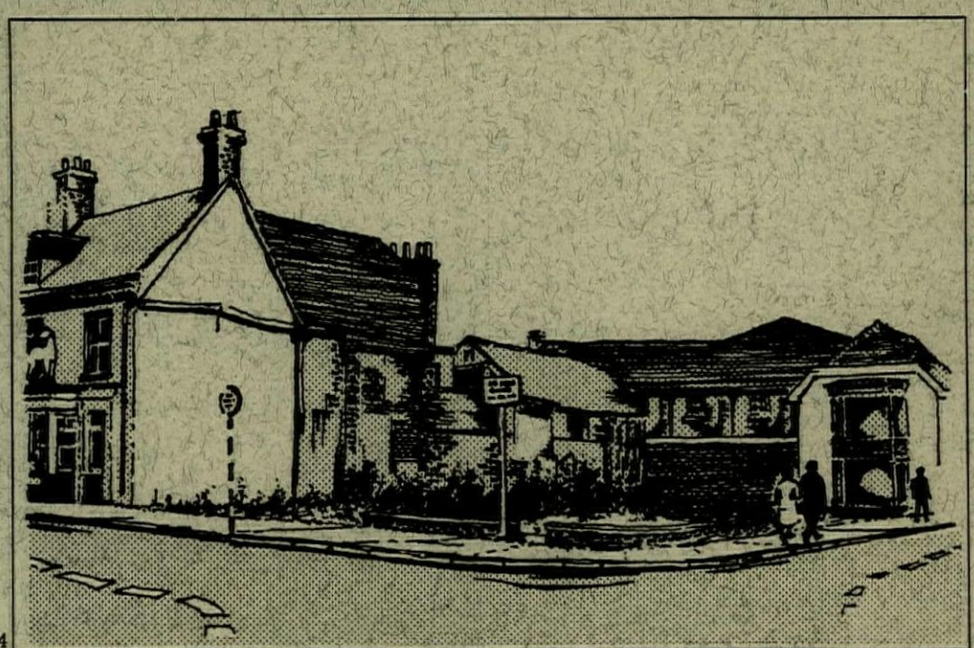


4

OUTRAGE

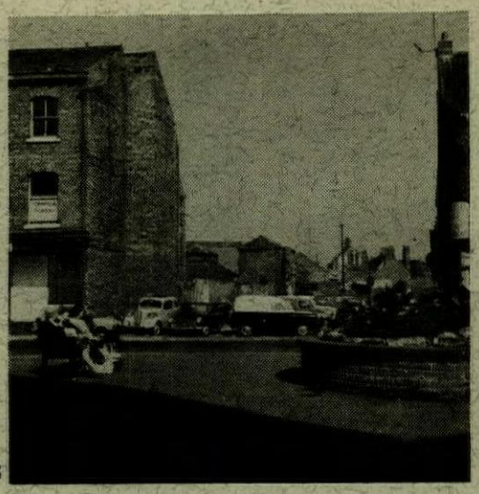
YORK
York is running neck and neck with Worcester as Britain's most maltreated cathedral city. The outrage is the familiar hole-in-the-town, 5.

CAUTION

YORK
Here is also an attempt to do the right thing, which in fact is too weak and completely wrong for the specific site—a triangular square with the space leaking out already along convex sides. The new building, 6, simply helps it along. (The roofline is pigeons, not *outré* decoration).

R·I·P

GREAT WESTERN REGION, WORCESTER LINE
Do you remember Adlestrop, along with Edward Thomas? The last trains stopped there on New Year's Day, and at Chipping Campden and several other stations. The REVIEW presents an anthology of details from these two stations not in a spirit of nostalgia but because these anonymous, prefabricated structures are still unmatched for combining utility, elegance —and robustness. Most of these flimsy-looking sheds are nearly a century old; I wouldn't like to guess what today's industrialized housing will look like in about A.D. 2050. 7, 9-11, from Adlestrop; 8, 12-14, from Chipping Campden.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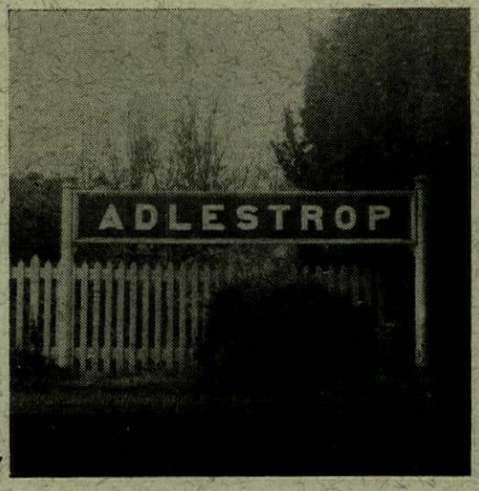

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8


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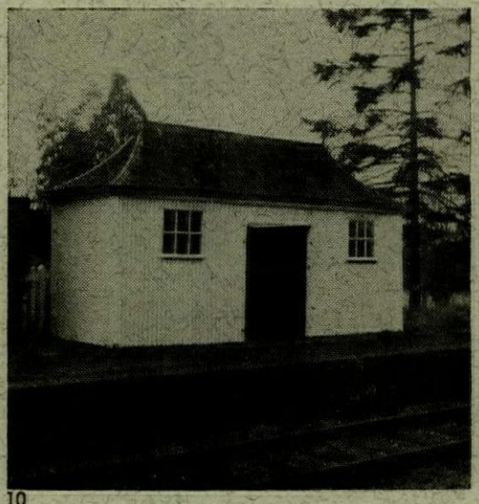
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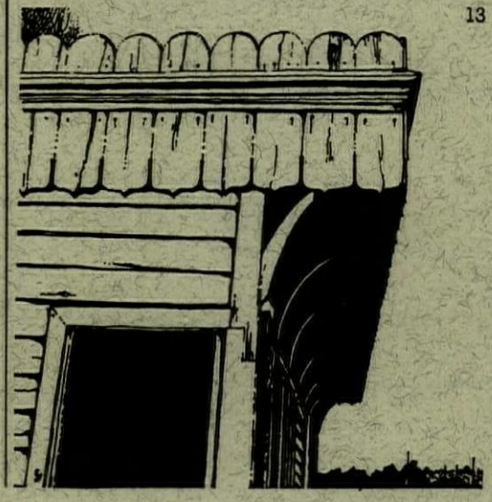

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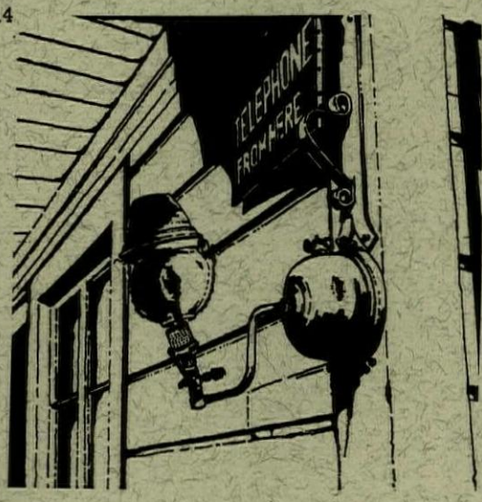

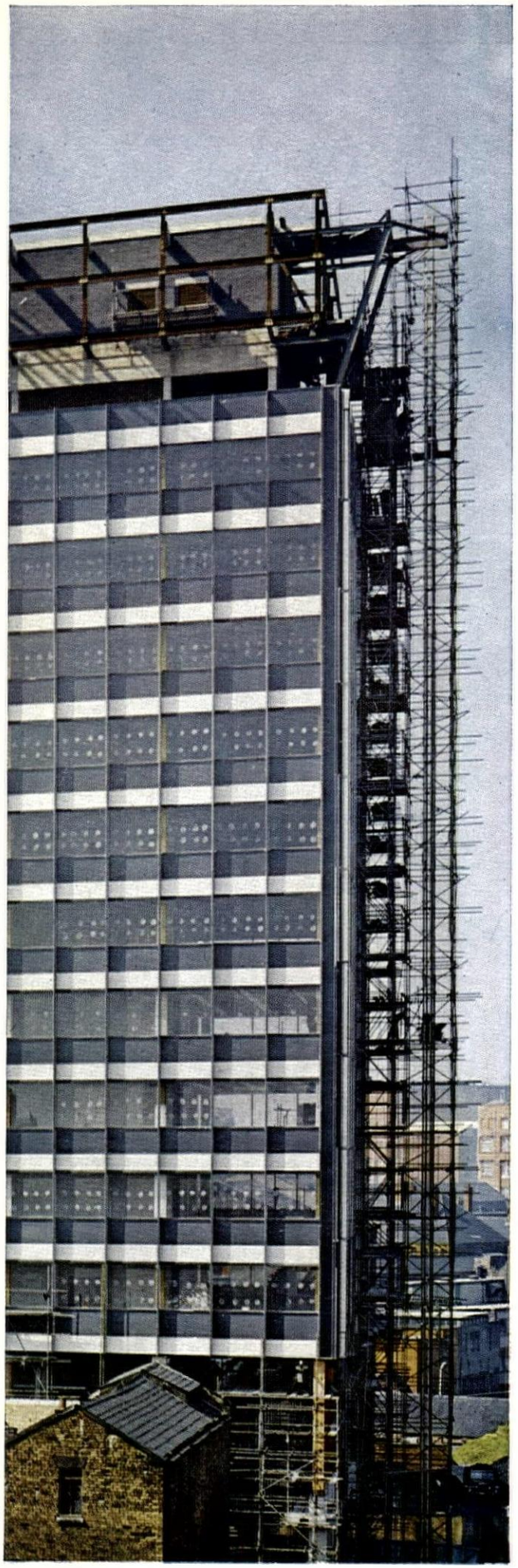

A tale of EIGHTEEN STOREYS

You are looking at Littlewoods' new building in Liverpool—and at a bit of history!

This is the highest office block in Liverpool (320 feet above sea level.) It is also the first structure in Britain to be designed as a rigid all-welded steel frame using high yield stress steel Universal beams and columns (rolled at Dorman Long's Lackenby Mill.)

Why? Because on this contract, the consulting engineers found that for overall economy and speed of construction steel showed definite advantages over other forms of construction.

Using a steel framework had other advantages. Smaller columns gave more usable space. No haunches meant clear runs for services. Less deadweight allowed small foundations.

Fabrication and erection of all structural steelwork (about 2,200 tons in the first phase) was carried out by Redpath, Brown & Company Limited.

Architects, Quantity Surveyors and Electrical Engineers
W. L. Stevenson, Esq., O.B.E., Manager, Littlewoods Department of Architecture & Planning.

Consulting Structural Engineers
Bingham Blades & Partners, Liverpool.

General Contractors
Tysons (Contractors) Ltd., Liverpool.

DORMAN LONG
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"TURNALL" Asbestos-Cement

"SPANTILES"

Span up to 15ft without end lap

"TURNALL" "SPANTILES" can be fixed on purlins up to 6 ft 6 in. centres. Rafters and battens are unnecessary. As 15 ft² of roofing is laid in one operation erection times are considerably reduced and overall costs automatically cut. "TURNALL" "SPANTILES" are also suitable for pitches as low as 5°.

Standard Lengths: 8 ft to 13 ft in 12 in. increments.
13 ft to 15 ft in 6 in. increments.

Standard width: 19 in. Net cover width: 12 in.

Nom. thickness: $\frac{5}{16}$ in.

Accessories: A complete range is available.

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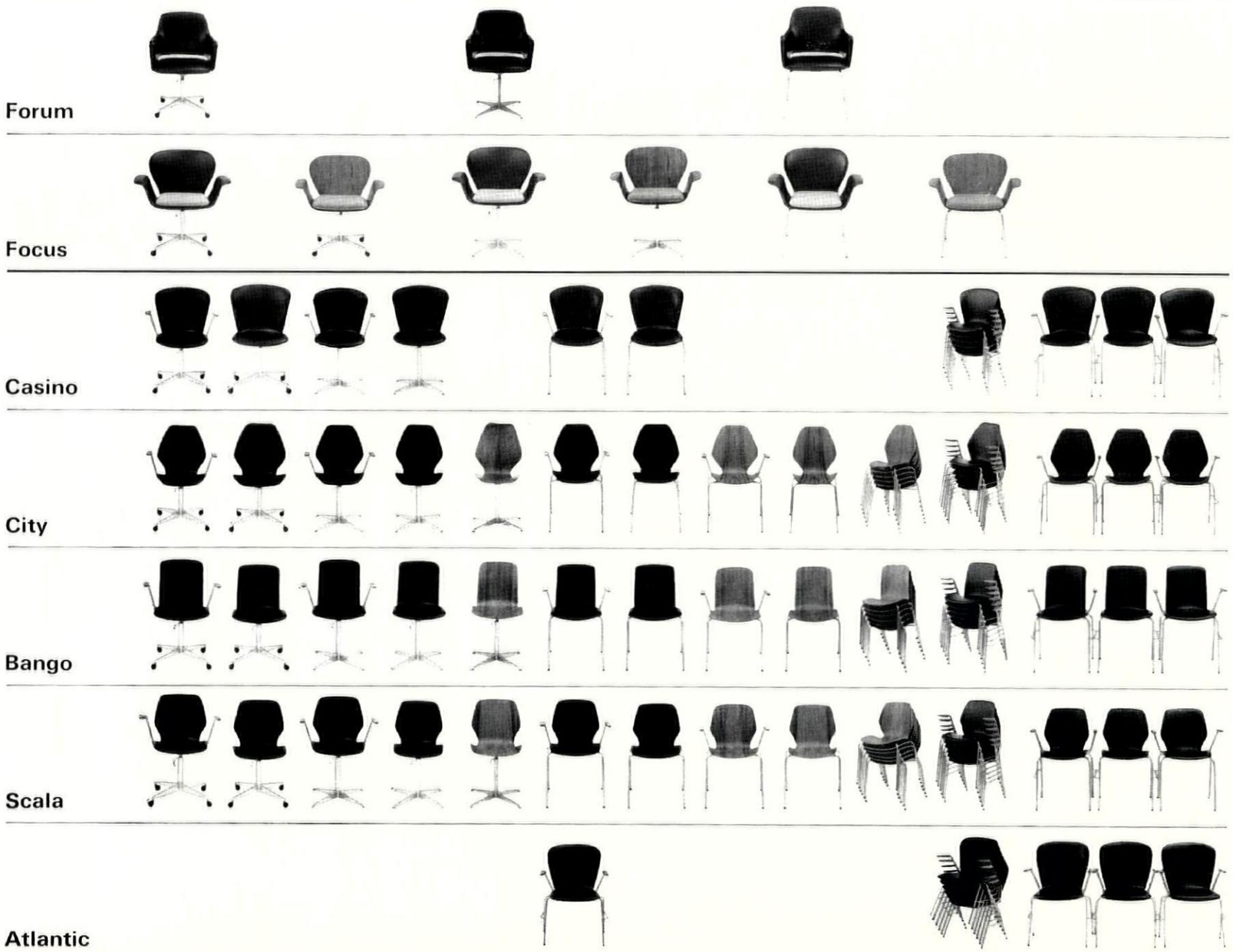

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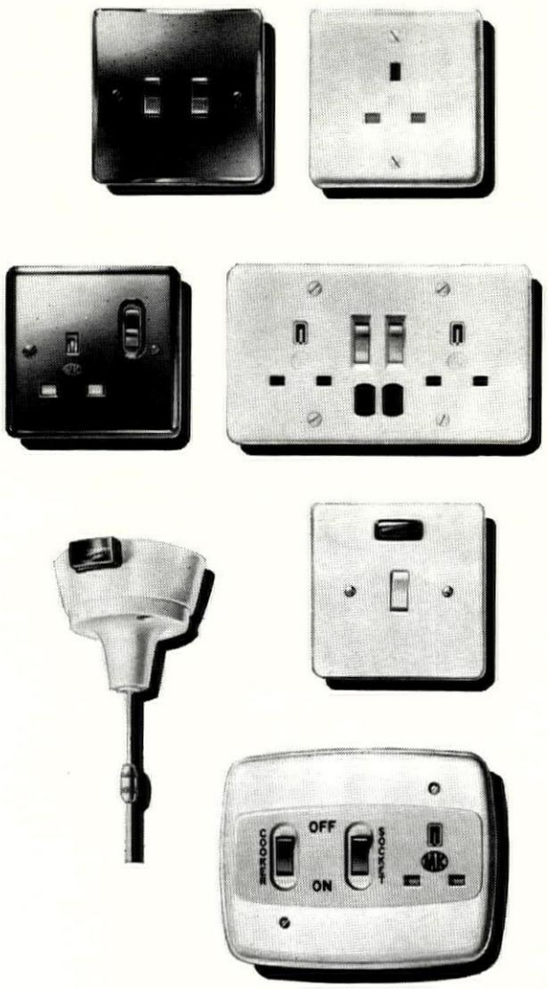

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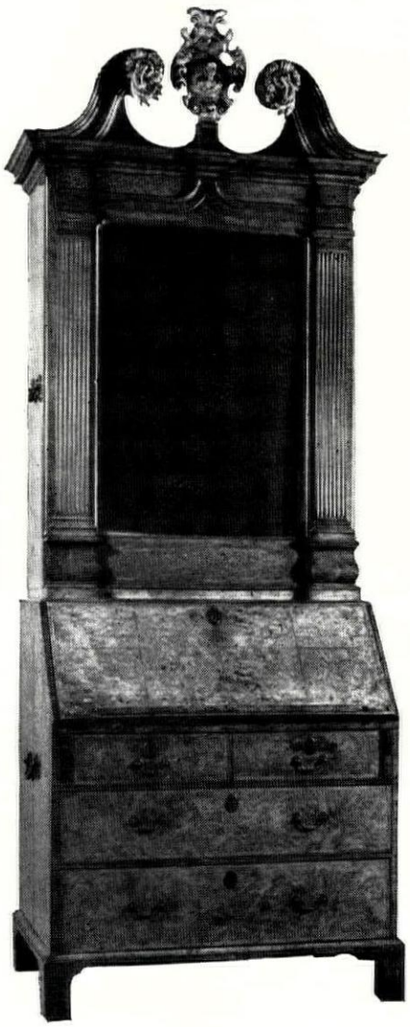

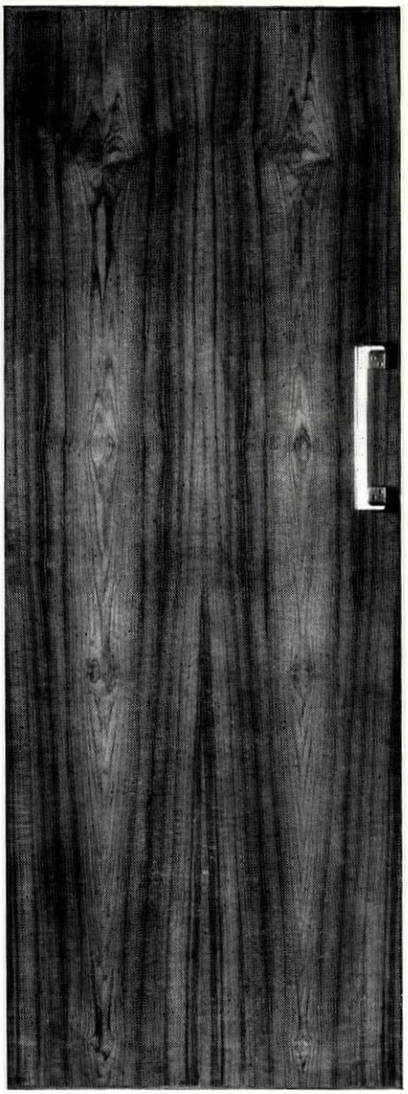

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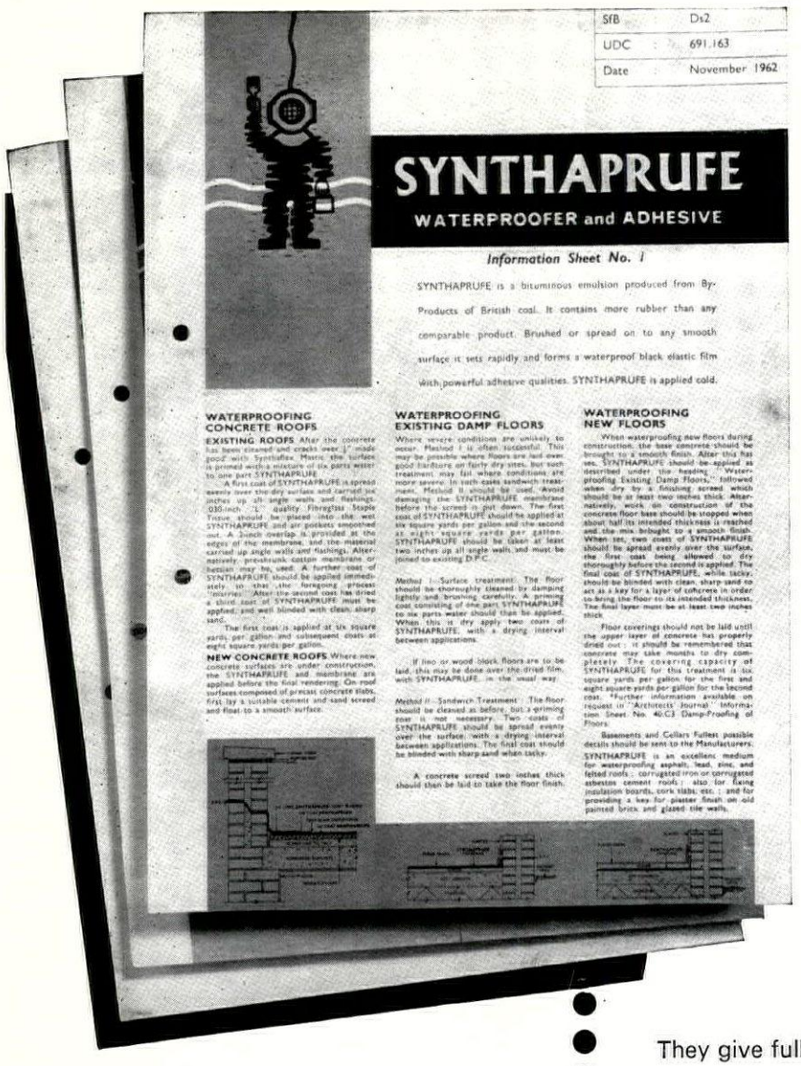

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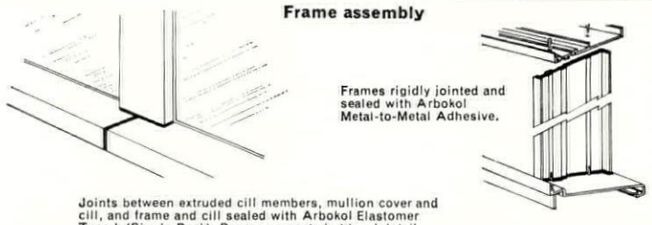

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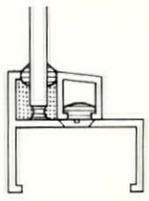

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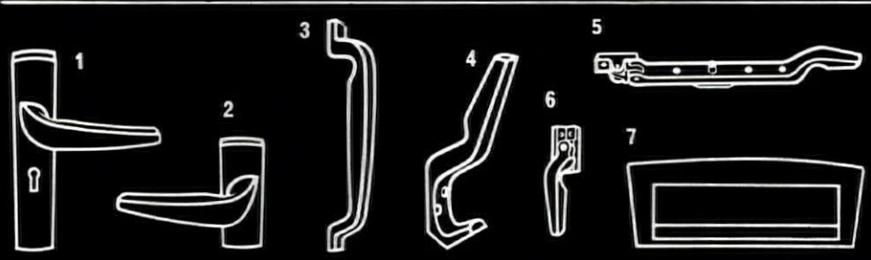

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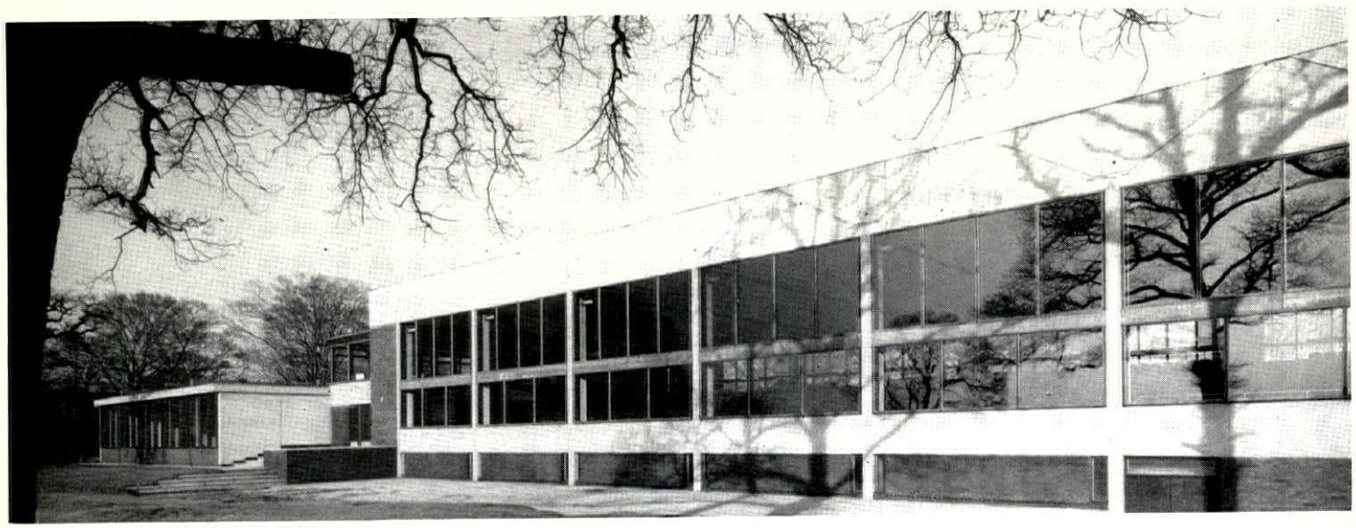

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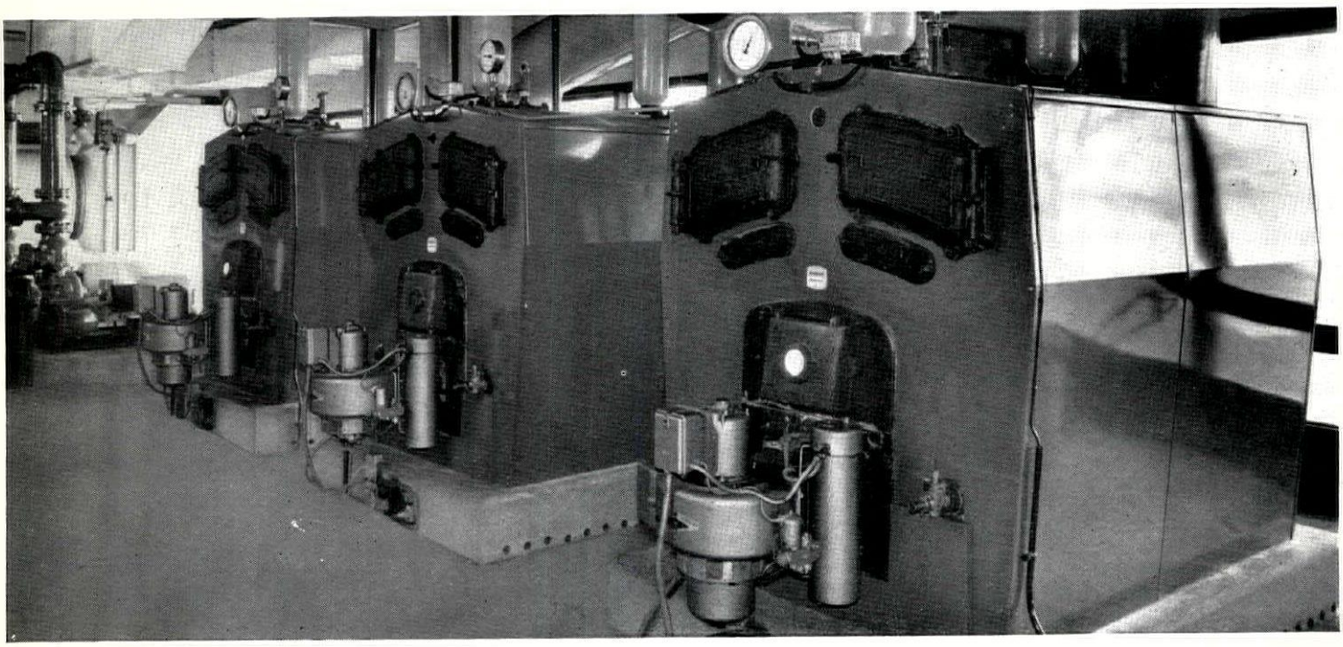

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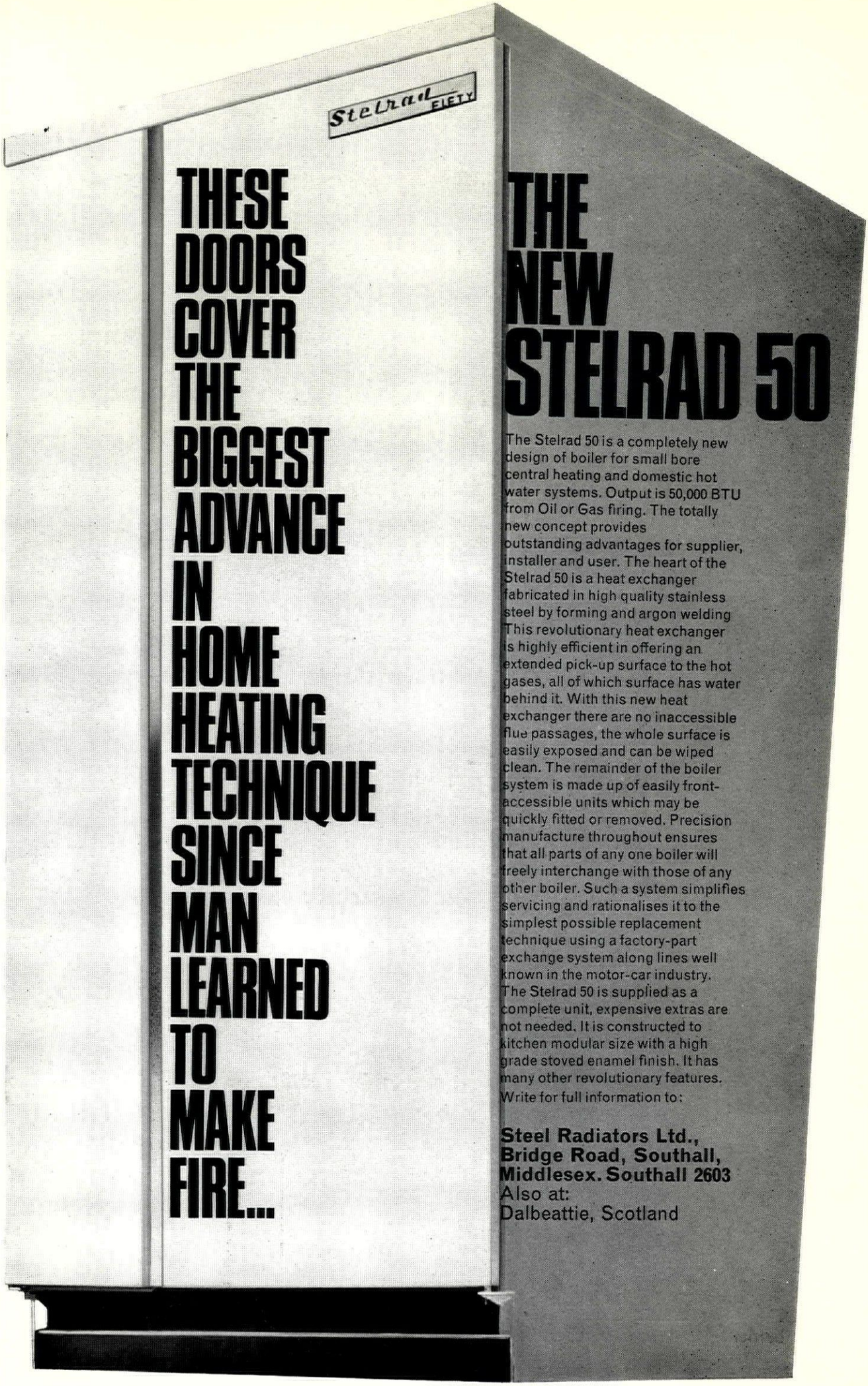

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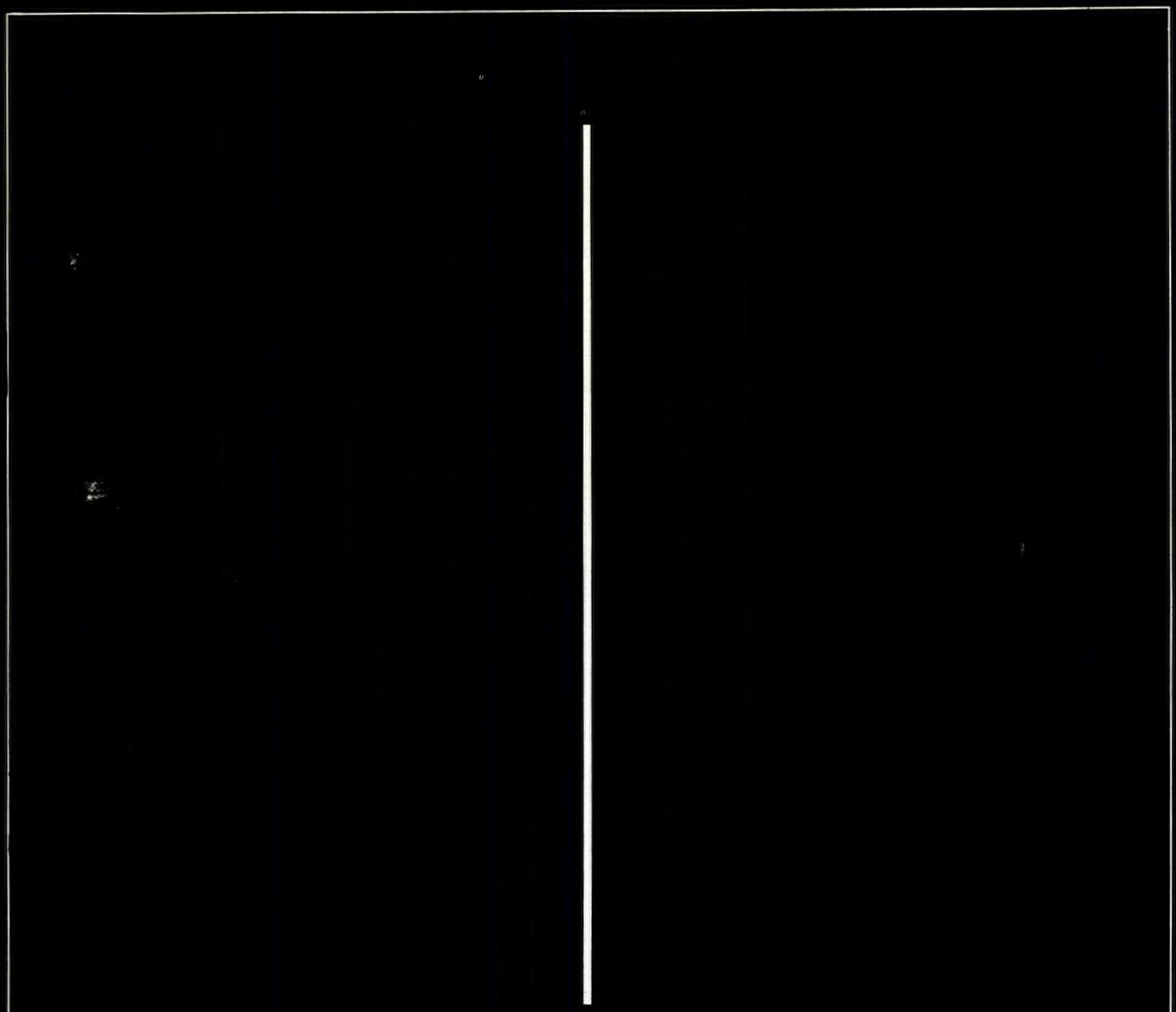

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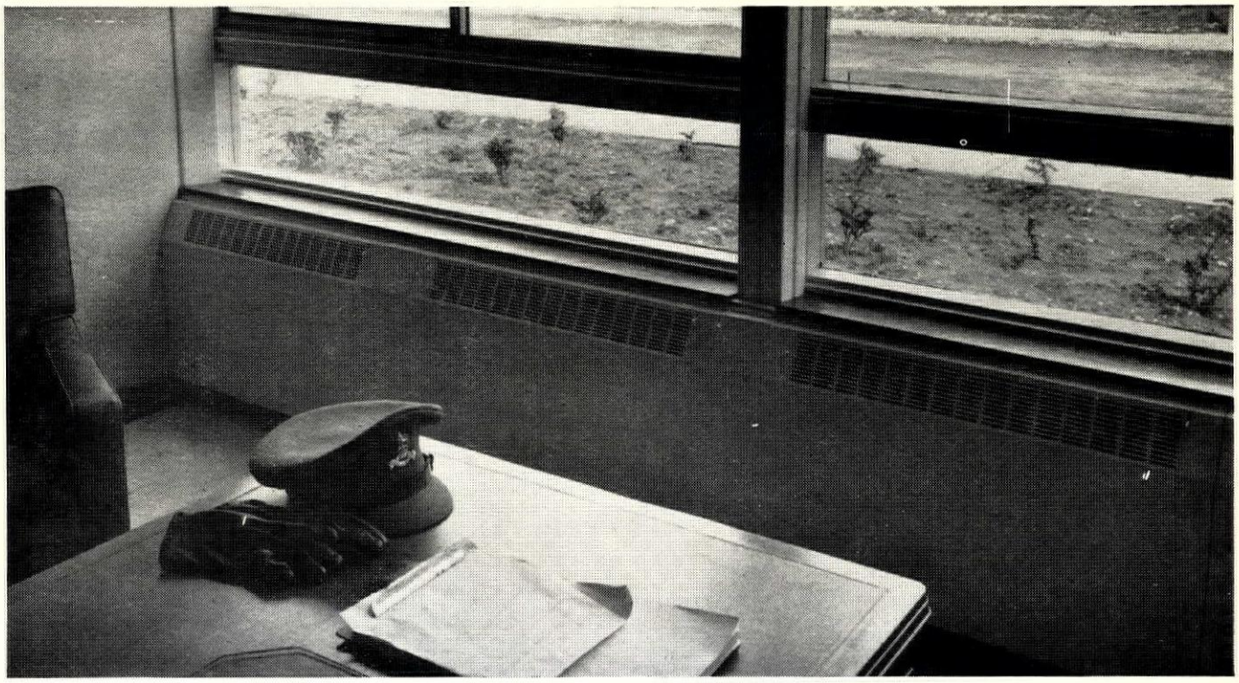

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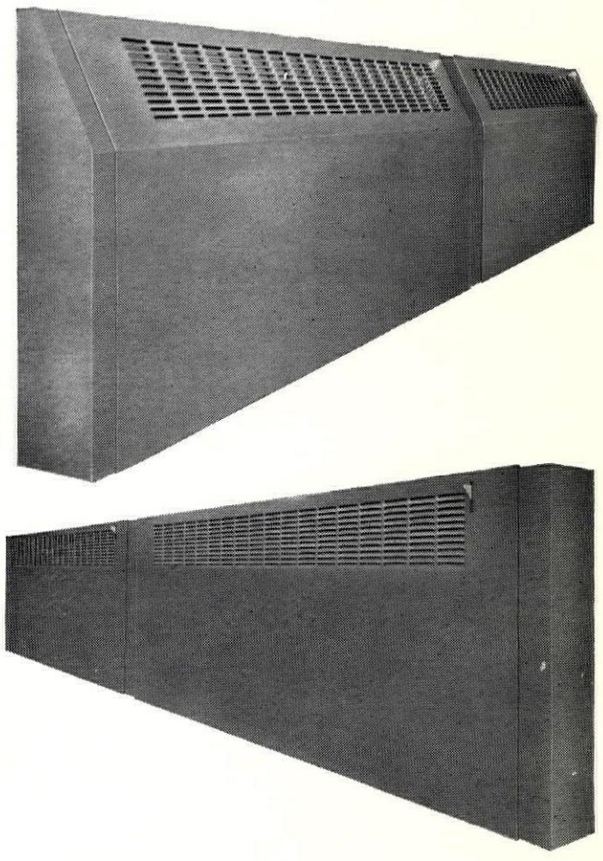

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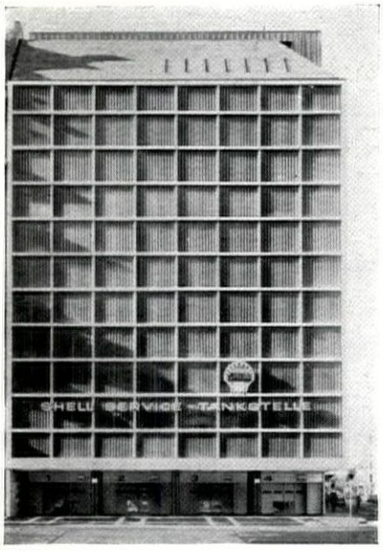

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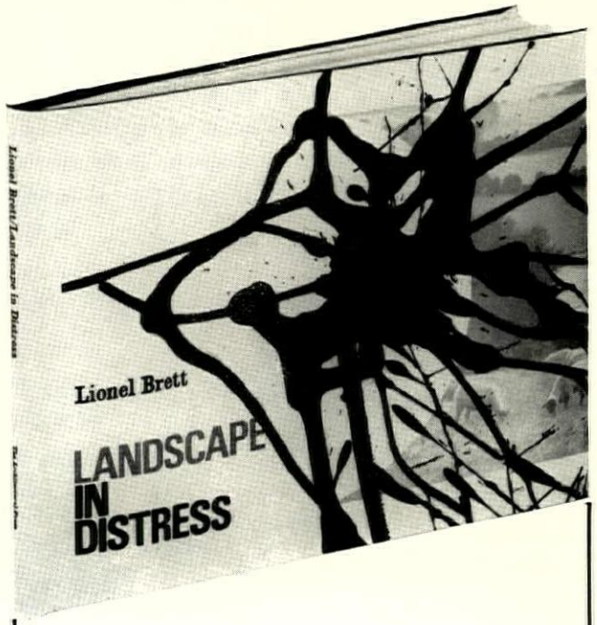

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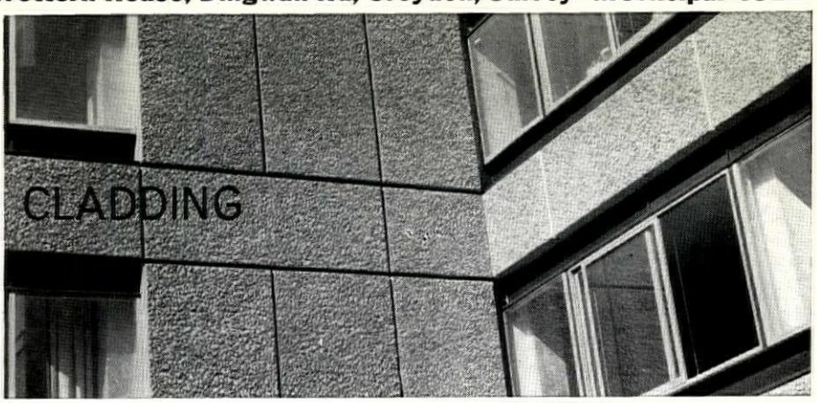

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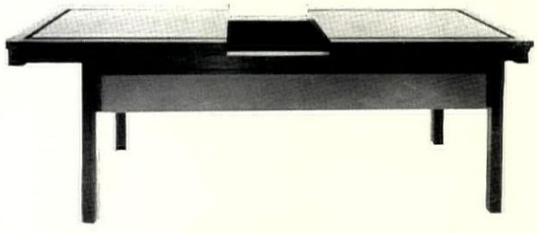

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