Client: Victoria University of Manchester

Architect: E C Scherrer of Scherrer & Hicks, Manchester
in association with
H Thomas, Planning Officer, University of Manchester

Associate in Charge: R G R Clark
E C Percye
E B Kenyon
A Wild

Quantity Surveyors: Rider Hunt & Partners, Manchester

Structural Consultants: W V Zinn & Associates, Manchester

Services Consultants: Oscar Faber & Partners, Manchester

Sculptor: M Yeomans

Clerk of Works: H Massey

University Mathematics Building
Planning and Construction
Sub-committee members:
G H Kenyon (Chairman)
J F Adams
A H Allman
M G Barratt
W T Fuller
N. L. Hanson
C R Illingworth
N H Johannesen
M H A Newman (until retirement)
F J Ursell
P Whittle (until resignation)
R A Rainford Bursar

Nov. 1969
Mathematics Building

When the Consultant Planners presented their proposals for the University precinct, this building, which is designed to house facilities for one of the most generally applied disciplines, was sited for this reason at the centre of the University opposite the Old Quadrangle. It was also the planners' wish that it should form a link between the existing ground level circulation for pedestrians and the new higher level pedestrian deck, and constitute the main vertical feature of the new development. This directive was valid not only psychologically but also rationalised the high cost of urban land in terms of accommodation.

The close proximity of the resultant 19-storey tower to Sir Giles Gilbert Scott's excellently modelled tower of the Church of the Holy Name and to Alfred Waterhouse's Whitworth Tower presented a challenge to the architects in that lively modelling of its form was necessary in order that the new tower should live graciously beside its older neighbours. The University Authorities understandably laid great stress on the absolute necessity for quiet working conditions and the position of the site immediately adjoining a main traffic artery presented considerable difficulties in this respect. For this reason the three large lecture theatres, none of which has windows, have been placed on the south west elevation adjoining Oxford Road and these, together with the mass of the podium, protect the lower floors of the tower against the noise from Oxford Road. The majority of rooms in the podium have windows opening on to the quiet patio. The shape of the tower and the position of its brick-faced walls and opening windows were planned in such a way as to provide further protection against noise from this source. Dark bricks were chosen for the walls of the tower and below the third floor of the podium to contrast with the light grey mosaic facings and glass spandrel panels elsewhere. The roofs of the podium and the floor and terraces of the patio are carefully designed as surfaces that will be seen from the large conference room and from many other rooms in the building.

The main entrance is at first floor level along a ramp from the south which forms the first stage of the public access to the pedestrian deck. The entrance hall and the adjacent library are designed in such a way that from them one overlooks many parts of the building — the rooms surrounding the patio, the patio itself and its richly modelled pre-cast concrete sculpture, the large projecting conference room and the lower rooms of the tower. The architects laid great importance on this element of transparency in creating a corporate setting which it is hoped will be beneficial to the Departments in the building.
The building will be occupied by over 450 undergraduates, 75 post-graduate and research students and 60 academic staff in the Departments of Mathematics and the Mechanics of Fluids. The number of undergraduates will frequently be increased by students from other departments. The accommodation has been arranged with the undergraduate and principal teaching rooms on the three lowest floors, with accommodation for individual departments, post-graduate and research students, and staff in the upper part of the building. The undergraduate library is placed on the ground and first floors and overlooks both the patio and the gardens to the south-west, carrels being placed along the south-west wall. The ground floor contains the heating and ventilating plant and electrical service rooms. The three large lecture theatres are based on the second floor and are approached from a foyer adjacent to the upper part of the two-storey entrance hall which forms a glazed link between the public ramp and the patio. The principal divisions of accommodation within the upper part of the building comprise rooms for the Statistical Laboratory (within the Department of Mathematics) and the Department of the Mechanics of Fluids on the third floor, the administrative offices on the fourth floor, senior academic staff rooms on the fifth floor and a large conference room on the sixth floor where all users of the building, except undergraduates, may meet. Above this lies the accommodation for research and diploma students and academic staff.

The maximum use has been made of the garden area lying between the Williamson Building and Oxford Road in that this has been extended northwards to the library windows in order to create a pleasant and quiet area in this important position. This also enhances the setting of the new building as seen from the main entrance to the Old Quadrangle.

The building is served by an oil-fired heating installation which will also serve the adjacent proposed Computer Building.

Two passenger lifts are provided, each with a speed of 350 feet per minute.

The nett usable floor area is 64,361 square feet and the gross floor area 102,775 square feet.

By agreement with the University Grants Committee, a procedure of "competitive negotiation" was adopted to select a main contractor with whom to negotiate the contract. As a result of obtaining preliminary tenders, J Gerrard & Sons Ltd were selected and negotiations were completed in a total contract sum of £819,926, including certain items of furniture and fittings.
First Floor Plan
### Schedule of Accommodation

#### Ground Floor
- 4 Lecture rooms, each seating 50
- 2 Lecture rooms, each seating 30
- Wind tunnel laboratory
- Computer room
- Library
- Boiler house and heating and ventilation plant
- Oil storage
- Electrical sub-station
- Electrical switch room
- Office: mess room
- Cleaners' mess room
- Locker room
- Cleaners' stores
- Cleaners' toilets
- Men's toilets
- Refuse disposal unit

#### First Floor
- Entrance hall and lobby
- Tutor's room
- 1 Lecture room seating 80
- 1 Lecture room seating 60
- 1 Lecture room seating 50
- 2 Lecture rooms each seating 30
- Library (quiet work areas)
- Porters' room
- Porters' mess room and store
- Cleaners' store
- Women's toilets
- Men's toilets
- Cloakroom
- Paved internal patio

#### Second Floor
- 3 Tutors' rooms
- 2 Lecture rooms, each seating 80
- 1 Lecture room seating 60
- 1 Lecture room seating 50
- 2 Lecture rooms, each seating 30
- Diploma students' room (statistics)
- Lecture theatre A (seating 176)
- Lecture theatre B (seating 178)
- Lecture theatre C (seating 178)
- Projection room to theatre A
- Cleaners' store
- Foyer

#### Third Floor
- Statistical Laboratory
- Library
- Discussion room
- Professor's room
- Department office
- Computer room
- Five research rooms
- Nine staff rooms

- Department of the Mechanics of Fluids
- Library
- Discussion room
- Professor's room
- Department office
- Conference room
- Twelve staff rooms
- Two stores
- Men's toilets
- Women's toilets
- Ventilation plant room
Second Floor Plan
<table>
<thead>
<tr>
<th>Floor</th>
<th>Rooms</th>
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| **Fourth Floor**             | Copy room
Process room
Administrative officer's room
General office and reception
Cleaners' store
Women's toilets
Ventilation plant room      |
| **Fifth Floor**              | Three professors' rooms
Chairman's room
Senior executives' room
Discussion room
Cleaners' store
Staff toilet                  |
| **Sixth Floor**              | Conference room
Preparation room
Men's toilets                |
| **Seventh Floor**            | Two computer rooms
Computer staff room
Three staff rooms
Women's rest room
Cleaners' store
Women's toilets              |
| **Eighth, Tenth, Twelfth, Fourteenth & Sixteenth Floors** | Five staff rooms
Research students' room
Diploma students' room
Cleaners' store
Men's toilets                |
| **Ninth, Eleventh, Thirteenth & Fifteenth Floors** | Professors' room
Five staff rooms
Research students' room
Discussion room
Cleaners' store
Men's toilets                |
| **Seventeenth Floor**        | Four staff rooms
Diploma students' room
Cleaners' store
Men's toilets                |
| **Eighteenth Floor**         | Five staff rooms
Discussion room
Cleaners' store
Tanks and lift motor room access |
| **Lower Penthouse**          | Cold water tank room                                          |
| **Upper Penthouse**          | Lift motor room                                               |
From South West
Fourth Floor Plan
From South
Sixth Floor Plan

Typical Floor Plan
From West
Section through Podium
Patio from South West showing Sculpture
Lecture Theatre A
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<td>J Gerrard &amp; Sons Ltd., Swinton, Manchester</td>
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