CONTENTS

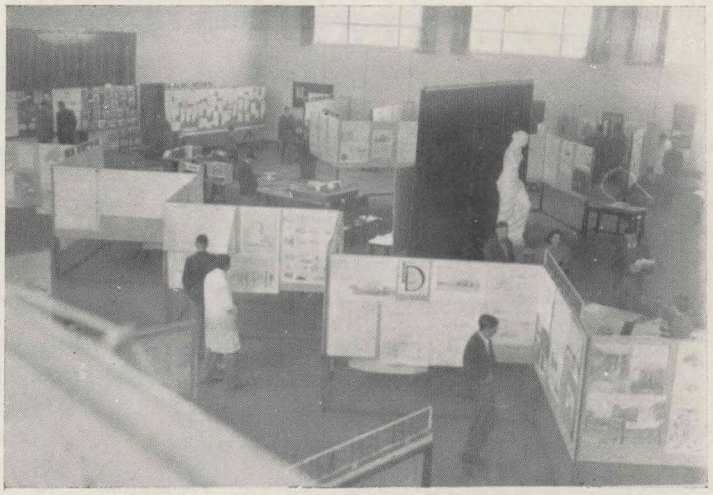
Cover block: From The Architecture of Palladio (English Edition 1742)

Frontispiece Photographs by W. D. Howie and K. S. Donaldson

SOUTH AFRICAN ARCHITECTURAL RECORD

The Journal of the Cape, Natal, Orange Free State and Transvaal Provincial Institutes of South African Architects and the Chapter of South African Quantity Surveyors

611, Kelvin House, 75, Marshall Street, Johannesburg.
Phone 34-2921 Volume Twenty Seven, No. Seven, July, 1942



SCHOOL OF ARCHITECTURE

Three views of the 1942 Exhibition, University of the Witwatersrand

F O R E W O R D

Once a year the South African Architectural Record publishes a report of the Annual Exhibition of the School of Architecture in the University of the Witwatersrand, and illustrates representative examples of the work done by students of architecture. In this issue the survey has been extended to record the completion of twenty-one years in the life of the school and accordingly a few drawings from earlier years are included so as to provide a general picture of the work done in that period. In addition some examples of work carried out by past students are illustrated, and an outline of the courses offered is included in the survey.

The address which follows was given by the Dean of the Faculty of Architecture on the occasion of the twenty-first "birthday" exhibition, and outlines not only the development of the school but also sketches the history of architectural education in the Transvaal from its inception.

The Exhibition opening was attended by about five hundred persons, and the school was honoured by the presence of the Chancellor of the University, the Hon. J. H. Hofmeyr, who, in performing the opening ceremony, delivered an inspiring address on art and architecture in South Africa. The function was also attended by the Chairman of the University Council, Dr. P. M. Anderson; the Principal of the University, Mr. H. R. Raikes; the Vice-President-in-Chief of the Institute of South African Architects, Mr. C. L. F. Borckenhagen; the President of the Transvaal Provincial Institute of Architects, Mr. W. G. McIntosh, and by Mr. D. M. Burton, to whom the school owes so much for its original foundation.

UNIVERSITY OF THE WITWATERSRAND SCHOOL OF ARCHITECTURE • TWENTY-FIRST ANNIVERSARY EXHIBITION

The twenty-first anniversary exhibition of past and present architectural students' work was held in the Examination Hall, at the University, on May 18th and 19th, 1942. The Exhibition was opened by the Chancellor of the University, the Hon. J. H. Hofmeyr. Professor G. E. Pearse presided, and a large and representative gathering was present at the ceremony which took place in the Great Hall.

Professor Pearse in his opening address said:

It is my pleasant duty to welcome you this evening to our twenty-first anniversary exhibition of past and present architectural students' work. We are particularly pleased to have with us our Chancellor who, as Principal of this University, or University College as it then was, was largely responsible for the establishment of our School of Architecture. In these times of stress Dr. Hofmeyr can hardly have a moment to himself, and we are therefore very grateful to him for sparing us an hour or two this evening. We are also grateful to Mr. C. L. Borckenhagen, Vice-President of the South African Institute of Architects, and one of our first students in Quantity Surveying, who has kindly consented to present the prizes, and to Mr. W. G. McIntosh, President of the Transvaal Institute of Architects, also a past student, for his presence here to-night.

Before inviting the Chancellor to open the exhibition I should like to say a few words about the School of Architecture since its inception. Actually, one can trace architectural training in Johannesburg back to 1903, when the first classes were given in the old Tin Temple, under the then Transvaal Technical College, the forerunner of our University. I well remember those days as I was one of the first architectural students. Lectures in design were given by Mr. E. W. Sloper, a man of scholarly attainments and artistic ability, who was a partner of Mr. (now Sir) Herbert Baker. His work, some of which still stands to-day has had a great influence on later domestic architecture in Johannesburg. He left South Africa in 1906 and practised in London, where, as Ernest Willmott, he published a well known work on "English House Design."

Mr. Seton Morris, who lectured to us on the History of Architecture, was one of the founders of the Johannesburg Athenaeum Club, and did much to foster dramatic art in Johannesburg in those early days. He not only took part in many plays but was a playwright and producer as well. He later became Government Architect in Bombay. These two men laid the foundations of architectural training in Johannesburg, but in their attempts to improve the standard of architecture they were faced by fierce competition from the speculative builder whose standard of work consisted of using mud for mortar and plaster and keeping the structure together with wallpaper. This proved too much for them and they gave up the unequal struggle and went overseas.

Herbert Baker continued in practice and laid still deeper architectural foundations in Johannesburg and Pretoria. He did much to foster architectural education and founded the first scholarship in architecture in South Africa. The University honoured him in 1934 by conferring upon him the Degree of Doctor of Laws. Classes were carried on in a desultory way until 1909 when the Transvaal Architects' Act was passed and courses were commenced under the aegis of the Association of Transvaal Architects at the then School of Mines and Technology. These were conducted by several practitioners who gave unstinted service to further architectural education, whilst the Society of Architects, London (S.A. Branch) generously supplied books and equipment.

During the war of 1914-1918 there were few students and very little development took place. In 1920 the courses were reorganised and several architects assisted with evening classes as they then were. In that year representations were made to the University College by the Association of Transvaal Architects and the Society of Architects, to create a chair of architecture, and it is largely due as I said before to the then Principal, our present Chancellor, that this became an accomplished fact. In this connection I would particularly like to mention Mr. D. M. Burton, who not only pressed for the establishment of the chair but also assisted financially in its foundation.

And so, in 1921, the School of Architecture as we know it to-day, commenced in a small sparsely furnished room in the Tin Temple with one student taking the Degree Course, and a small group of part-time students who were working for what was known as the Architects' Registration Course. We had little or no equipment and no library. Lady Phillips, who had always taken a keen interest in art and architecture came to our rescue and gave us a number of casts and also a contribution towards the purchase of the library of the late J. M.

Solomon. The Witwatersrand Council of Education and, again, Mr. D. M. Burton did the rest and this collection formed the nucleus of the fine library which the school possesses to-day. Associated with us in those days were Messrs. Gordon Leith, F. Williamson, H. W. Spicer and M. J. Heir, who gave their services in a part time capacity.

In 1925 the Degree of Master of Architecture was instituted and in that year a Diploma Course in Architecture was commenced to assist those students working in offices who could not afford a full-time course, and also to replace the Architects' Registration Course. A senior lectureship was also created and Mr. A. S. Furner came out from London to take up the appointment. His arrival did much to develop the school as his teaching experience at London University brought to us the latest methods in architectural training overseas.

About that time the University was passing through one of its periods of financial stringency and an inspired article in the "Rand Daily Mail" questioned whether the existence of some of the departments at the University were justified, and quoted the Department of Architecture as having "25 students who are instructed by a professor, a senior lecturer, and a part-time assistant." "This department" the article stated "has been in existence for about five years, and so far only one student has taken a diploma in architecture. No degrees have been awarded." We were not alone in this attack which mentioned several other departments including Mining and Metallurgy, with fewer students, and no less than two professors. However, we weathered the storm, and carried on.

In 1927, The Union Architects' Act was passed with the result that an additional impetus was given to the school. In that year the Royal Institute of British Architects gave full recognition to our Degree Course and partial recognition to the Diploma Course as exempting from the examinations for their Associateship. Thus our Degree Students can automatically obtain the Associateship of the R.I.B.A. and our diploma students, on submission of a thesis, may do the same.

In 1928 the school received a valuable gift from the Carnegie Corporation of New York. This consisted of photographs, prints, textiles and books representing the various schools of architecture, painting, sculpture, etc., from ancient times to the present day, and was valued at £1,000.

Courses for a Diploma in Quantity Surveying were instituted in 1930 and for a degree in 1932. Prior to these dates we had conducted courses in Architecture in Pretoria, but in 1932 the University of Pretoria established its own courses in Architecture and Quantity Surveying. By arrangement with them it was decided that Degrees and Diplomas in Architecture should be awarded by this University and Degrees and Diplomas in Quantity Surveying by the University of Pretoria. The lectures in architecture at Pretoria University have been given by members of our staff. This agreement will most likely terminate this year and the University of Pretoria will commence their own courses in Architecture. Professor Bell-John was appointed by the University of Pretoria to take charge of their courses and has assisted us in the Quantity Surveying classes in a part-time capacity for the past ten years.

A certificate course in Architecture was instituted in 1932 to cater for external students in the Union and Rhodesia, the examinations being conducted by either the University of Cape Town or this University.

Enquiries concerning this course have come from as far afield as Palestine, Kenya and the Belgian Congo.

In Durban a well organised school of Architecture was established under our aegis at the Natal Technical College, about 1924. This school has been taken over by the Natal University College, and by arrangement, their students write our third and fifth year examinations for the Certificate in Architecture.

Another aspect of our work which has grown considerably in recent years are the courses in Fine Arts. Lectures in this subject were commenced at the suggestion of our Principal, Mr. Hofmeyr, in 1922, and classes in pure and applied art were included. The practical side of the work was handed over to the Technical College when we moved to Milner Park.

Mr. W. de S. Hendrikz, a past student of our school who had studied in England, was appointed lecturer in Fine Arts in 1937. He is now on active service as a Captain in the South African Engineering Corps and his work is being ably carried on by Mrs. R. D. Martienssen. The History of the Fine Arts is to-day one of the subjects in the B.A. curriculum, and during the present year is attended by 100 students. A course for the B.A. with Honours in Fine Arts was instituted in 1930 and has proved very popular.

Courses in Town Planning have been given since the inception of the school and our students have been successful in public competitions. One student came first in the British Empire in the final examinations conducted by the Town Planning Institute of Great Britain.

In 1940, after having been a Department in the Faculty of Engineering since our inception we were raised to the status of a Faculty of Architecture. In 1941 a Doctorate in Architecture was instituted, and in that year the Registration Council of Great Britain, under the recent Architects' Act, gave full recognition to our courses for the Degree, Diploma and Certificate. Our students are thus eligible to practice in Great Britain.

THIRD YEAR HISTORY STUDY, 1941
by L. DURSTON

As a result of twenty-one years experience the school can now show a fairly satisfactory record. Up to the end of 1941, 425 students had been registered for the Degree or Diploma in Architecture—73 Degrees had been conferred and 90 Diplomas awarded. The number of students taking Architecture in 1941 were 106, Quantity Surveying 24, Fine Arts 90, and Town Planning 3 ; a total of 223. The research side of our work has brought about encouraging results and many excellent theses have been presented dealing with various aspects of Architecture and the Allied Arts. Some of these have been published and several are on exhibition.

With the co-operation of past and present students we were able to place on record measured drawings of the historic buildings at the Cape, the foundations of South Africa's architecture. We hope to produce a similar work on 18th Century Furniture at the Cape in the near future.

In 1931 the Head of the Department was awarded a grant from the Carnegie Corporation of New York to visit American Universities and study their methods of architectural education. Following this the leading schools of architecture in Canada and Northern Europe were visited.

The first Master's Degree in Architecture was conferred on Mr. R. D. Martienssen, who submitted a thesis on " Constructivism," an analysis of contemporary architecture and construction in Europe. In 1941 Mr. Martienssen obtained the Degree of Doctor of Literature for a thesis on " The Idea of Space in Greek Architecture."

Two members of our staff, Dr. and Mrs. Martienssen, have been awarded Research grants by the Union Government to study Bantu dwellings and pottery. Since the inception of the school the Herbert Baker Scholarship for study in Italy and Greece has been awarded four times and on each occasion has been won by students of this school. The first Rhodes Scholarship awarded to an architectural student in South Africa was won by Mr. M. Bryer, who, whilst at Oxford, was awarded a Commonwealth Fellowship which took him to America. Three post graduate scholarships have been awarded to students of our School, Mr. R. Kantorowich, who continued his studies in America, Mr. K. Jonas whose untimely death has unfortunately interrupted a brilliant career, and Mr. R. E. G. Hope, who has joined the forces and intends taking up the scholarship after the war.

Many of our past students have held offices in our professional societies as Presidents or Members of the Council of the Transvaal Provincial Institute of Architects, the Central Council of the S.A. Institute of Architects, and the Chapter of S.A. Quantity Surveyors.

I should like to take this opportunity of paying a tribute to those of our students, past and present, who have joined the forces. Over 90 are serving, and several of them hold senior rank. Lt. R. E. Cole-Bowen, one of our first students, was recently awarded the Military Cross. Four have, unfortunately, made the supreme sacrifice: George Abbott, who was on the threshold of a brilliant professional career, E. A. Ralph, Wilton Miller and E. J. Knight.

The Architectural Society of the University has done much to foster an interest in architecture and the allied arts since its inception in 1925. It has organised two interesting congresses, one on Abstract Art and the other on Town Planning. These created considerable interest amongst the general public and prominent professional men took part in the discussions. The proceedings of each were published in book form. Members of the staff have also contributed many articles to the Technical Press in South Africa and overseas.

Since 1927 the " South African Architectural Record " has been edited by members of the staff at the University. Tributes have been paid to it by leading architectural societies and technical journals in Europe, America, Australia and the Far East.

The Council of the University appointed the Department of Architecture in the person of myself as Associate Architect for the design and construction of the Central Block, the Geophysics Building, the Hillman Block and the Dental Hospital. This has given the staff and students an excellent opportunity of keeping abreast of practical work and the constantly changing methods of building practice and

materials. The department also acted as consultants in the planning and design of Escom House, one of South Africa's largest buildings.

I have been fortunate in having had from the inception of the school particularly keen and loyal colleagues on the staff of the Department, and I should like to thank them, our examiners, donors of equipment and books, and all those who have assisted in building up the School of Architecture of this University, and placing it on a firm footing. Finally I should like to congratulate Mr. Hahn, Chairman of the Architectural Society, and his co-workers on the successful arrangement of the exhibits. Considerable structural work was involved, and this has been most efficiently carried out.

I now have much pleasure in asking the Chancellor to open the exhibition.

Dr. Hofmeyr, after congratulating the School on its development and achievements, said that the early settlers had an architectural sense which they expressed mostly in the advantage they took of the country's natural beauty in selecting their sites. But there had been a failure of the tradition they had bequeathed, a failure for which South Africa had paid a heavy price. It had led to the tremendous amount of ugliness to be seen in South African towns, and also to an impairment of the standard of living in the urban communities. But a change is coming in our generation. The impulse for that change we owe to Sir Herbert Baker, who lit again the torch and gave new life to that tradition. With him began a renaissance of architecture in South Africa. We have made up some of the leeway as a result. But we still have a long way to go before we show ourselves worthy of the natural beauty of the land that God has given us.

Great architects should be great artists, having breadth of vision and being in sympathy with the various interests and activities of men, in order to see their work in relation to the work of others. Architects more easily than other artists, could improve the standards of the public's appreciation of art.

Professor Pearse, in thanking the donors of the prizes, referred to a new prize which had been generously donated by Mr. W. G. McIntosh, in memory of his late father, Mr. Frank Gordon McIntosh, and which was being presented for the first time that evening. The prize is awarded for the best thesis on some aspect of architectural construction or set of working drawings submitted by a student in the final year of the Degree or Diploma course in architecture. Mr. Borckenhagen then addressed the gathering and presented the prizes which were awarded as follows :—

Transvaal Provincial Institute Prizes :

First Year :	1st Prize, R. K. Walker.
	2nd Prize, W. Smit.
Second Year :	1st Prize, J. M. Shunn.
	2nd Prize, L. H. Neethling.
Third Year :	1st Prize, R. L. Niebuhr.
	2nd Prize, Miss B. Greenman.
Fifth Year :	1st Prize, A. M. Medalie.
	2nd Prize, D. M. Calderwood.

D. M. Burton Prize, R. L. Niebuhr.

Frank Gordon McIntosh Prize, A. M. Medalie and D. M. Calderwood for a joint thesis on " Domestic Construction."

The Principal, Mr. H. R. Raikes, in addressing the gathering, paid a tribute to the work of the Department of Architecture, and referred to the death of Mr. N. T. Cowin, one of the associate architects of the University Buildings since their inception. He then concluded the proceedings with a vote of thanks to the speakers.

THIRD YEAR HISTORY STUDY, 1941
by L. DURSTON

THE FACULTY OF ARCHITECTURE 1942

The Principal :	Humphrey R. Raikes, A.F.C., M.A.

HEADS OF DEPARTMENTS IN THE FACULTY:

Architecture and Quantity Surveying :	Professor G. E. Pearse, A.R.I.B.A.
Chemistry :	Professor H. Stephen, O.B.E., D.Sc., F.I.C.
Civil Engineering :	B. H. Knight, D.Sc., Ph.D., M.Inst.C.E.
Mathematics :	Professor J. P. Dalton, M.A., D.Sc.
Surveying :	Professor C. W. B. Jeppe, M.Sc., A.R.S.M., M.Inst.M.M., M.A.I.M.E.
Physics :	Professor H. H. Paine, M.C., M.A., B.Sc., F.Inst.P.

MEMBERS APPOINTED BY COUNCIL:

Dean of the Faculty of Arts :	Professor I. D. MacCrone, M.A., D.Phil.
Dean of the Faculty of Engineering :	Professor W. J. Walker, D.Sc., Ph.D., M.Inst.C.E., M.Inst. Mech. E., A.M.I. Chem. E.

A. S. Furner, F.R.I.B.A. ; D. S. Haddon, Dipl. Arch., A.R.I.B.A. ; N. L. Hanson, B.Arch., A.R.I.B.A. ; W. G. McIntosh, B.Arch., Dipl. Q.S., A.R.I.B.A.

LECTURER MEMBERS:

Professor H. Bell-John, M.C., F.S.I., L.R.I.B.A. ; J. Fassler, B.Arch. ; R. D. Martienssen, M.Arch., D.Litt., A.R.I.B.A.

THE LECTURING STAFF

G. E. PEARSE, A.R.I.B.A.	Professor of Architecture.
R. D. MARTIENSSEN, M.Arch., D.Litt., A.R.I.B.A.	Architectural Design, History of Architecture.
J. FASSLER, B.Arch.	Architectural Design, Building Construction, Specifications, Materials.
W. D. HOWIE, B.Arch.	Architectural Design, Building Construction, Geometrical Drawing, Working Drawings.
Professor H. BELL-JOHN, M.C., F.S.I., L.R.I.B.A.	Quantity Surveying and Analysis of Prices, Professional Practice.
W. A. McKECHNIE, Dipl. Q.S., F.S.I.	Quantity Surveying.
W. de S. HENDRIKZ (On Active Service).	Fine Arts.
HEATHER MARTIENSSEN, B.Arch., B.A. (Hons.).	Fine Arts.
JOYCE LEONARD, A.R.C.A.	Freehand and Life Drawing.
A. D. CLARK, B.Sc. (Hons.), A.M.I.C.E., A.M.I., Mech.E.	Sanitation and Hygiene and Theory of Structures.
A. W. T. DANIEL, M.A., A.M.I.C.E.	Theory of Structures.
R. G. VENTRESS, B.Sc., Eng.	Geometrical Drawing and Theory of Structures.
A. GOLDSMITH, B.A., B.Sc.	Electrical Illumination.
Professor H. STEPHEN, O.B.E., D.Sc., F.I.C.	Chemistry.
C. P. WELTER, M.Sc.,	Mathematics.
N. du PLESSIS, B.Sc.	
G. T. R. EVANS, B.Sc. (Hons.).	Physics.

UNIVERSITY OF THE WITWATERSRAND SCHOOL OF ARCHITECTURE • NOTES ON THE COURSES

The School of Architecture offers courses for a Degree, Diploma and Certificate in Architecture, a Degree and Diploma in Quantity Surveying, and the Degree of B.A. Honours in Fine Arts.

The Degree Diploma and Certificate in Architecture and the Degree and Diploma in Quantity Surveying are recognised by the Institute of South African Architects as qualifying examinations for practising in the Union of South Africa.

The Degree in Architecture is recognised by the Royal Institute of British Architects as qualifying for Associate Membership of that body.

The Diploma and Certificate in Architecture are recognised as exempting from the Intermediate Examination of the Royal Institute of British Architects. Diploma and Certificate Students, after completion of a thesis in Design are eligible for election as Associate R.I.B.A.

The Degree, Diploma and Certificate in Architecture are recognised as qualifying for registration under the Architects' (Registration) Act of Great Britain.

The Degree and Diploma in Quantity Surveying are recognised by the Surveyors' Institution.

The Courses are arranged to equip the student as fully as possible to meet the demands of practice.

An extensive course in general planning principles is given, and the detailed requirements of current building types are analysed and embodied in suitable design subjects. Research into the various problems encountered in practice is undertaken by the student, and the various branches of architectural design and construction are closely correlated. Thus lecture work and studio work are closely linked, and the student is encouraged to evolve rational solutions to the problems set.

Visits to brick, cement and other building material factories are a regular part of the course on materials, and buildings in course of construction are studied at various stages under the guidance of a lecturer.

Short courses in the theory and application of acoustical principles in building, and a course in electrical illumination are also given.

Architectural design falls broadly under four headings ; the design term subject, presented as a set of formal geometrical drawings ; the working drawing subject, in which a thoroughly " practical " standard is aimed at ; the sketch design which is planned to develop resourcefulness and imagination in the student ; and finally the thesis subject which is tackled in the final year, and which must reflect a knowledge of research methods as well as creative ability. Town planning is dealt with on similar lines, and the application both in Design and Town Planning to South African needs and conditions is stressed throughout the course.

The History of Architecture is studied with the object of providing a broad cultural and architectural background to the technical studies of the student, and the characteristics of the great epochs of the past are thoroughly analysed.

Courses in the Theory of Structures, Sanitation and Hygiene, Specifications, Estimates and Quantities, and Professional Practice prepare the student for the technical and professional problems that he is likely to encounter in practice.

For the degree in Quantity Surveying (B.Sc. (Q.S.)) full-time attendance is required for the first two years. For the remaining three years students are expected to be employed in the office of a Quantity Surveyor. A Diploma in Quantity Surveying is also offered for part-time students, and this course extends over four years. Tuition in Quantities, Specifications and Building Construction Drawings is given, and in the final year courses are given in Professional Practice and Analysis of Prices. In addition to these the student completes courses in Surveying and Levelling, Geology, Theory of Structures and Architectural Drawing.

By agreement with the University of Pretoria the Degree and Diploma in Quantity Surveying are awarded by that University. Similarly students studying architecture at the University of Pretoria are awarded the Diploma in Architecture by the University of the Witwatersrand.

In the Fine Art Section classes are given in the History of Fine Art, in the technique of painting, pottery and architecture, in life drawing, and in the history of art criticism and appreciation. The courses taken in this section are included in the syllabus for the degree of B.A., or may lead to the degree of B.A. with Honours in Fine Arts.

The Faculty of Architecture is equipped with studios for architectural and art drawing, and has a departmental library with a wide range of reference books which are available to students. Included in the library are many valuable collections of books that have been purchased or donated.

COURSES OF STUDY

FOR THE DEGREE OF BACHELOR OF ARCHITECTURE.

FIRST YEAR :	Architectural Drawing, Geometrical Drawing, Building Construction, Mathematics or the History of the Fine Arts or a Modern Language, Freehand Drawing, History of Architecture. Physics and Chemistry (short courses).
SECOND YEAR :	Architectural Design, History of Architecture, Building Construction, Mathematics or Life Drawing, Theory of Structures, Short courses in Electric Illumination and the Supply of Electricity to Buildings.
THIRD YEAR :	Architectural Design, History of Architecture, Building Construction, Building Materials, Sanitation and Hygiene, Theory of Structures, Surveying.
FOURTH YEAR :	Practical Work in an Architect's Office.
FIFTH YEAR :	Architectural Design, Professional Practice, Town Planning and Landscape Design, Working Drawings, Specifications, Estimates and Quantities, Theory of Structures.

FOR THE DIPLOMA AND CERTIFICATE IN ARCHITECTURE.

FIRST YEAR :	Architectural Drawing, Geometrical Drawing, Building Construction, History of Architecture, Freehand Drawing.
SECOND YEAR :	Architectural Design, History of Architecture, Building Construction, Freehand Drawing, Theory of Structures.
THIRD YEAR :	Architectural Design, History of Architecture, Building Construction, Building Materials, Sanitation and Hygiene, Theory of Structures.
FOURTH YEAR :	Architectural Design and Construction.
FIFTH YEAR :	Architectural Design, Professional Practice, Working Drawings, Specifications, Estimates and Quantities, Theory of Structures.

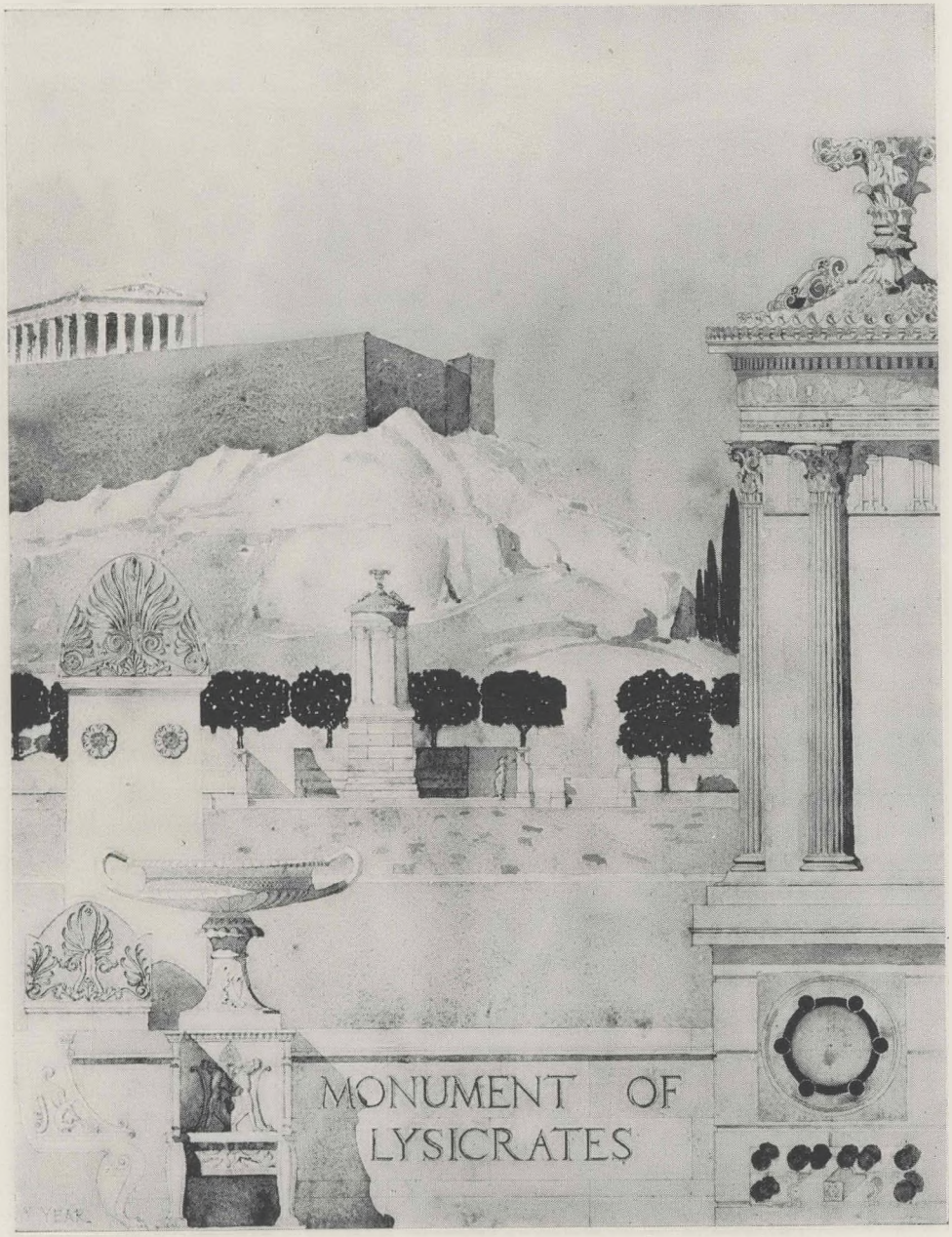
FOR THE DEGREE OF B.Sc. IN QUANTITY SURVEYING.

FIRST YEAR :	Mathematics, Physics, Geometrical Drawing, Building Construction, History of Architecture, Architectural Drawing.
SECOND YEAR :	Chemistry, Mathematics, Building Construction, Theory of Structures I, Elementary Quantities and Mensuration, Geology.
THIRD YEAR :	Building Construction and Materials, Sanitation and Hygiene, Quantities, Surveying and Levelling, Theory of Structures II.
FOURTH YEAR :	Theory of Structures III, Quantities, Specifications, Building Construction Drawings.
FIFTH YEAR :	Professional Practice, Quantities, Analysis of Prices, Building Construction Drawings, Structural Design.

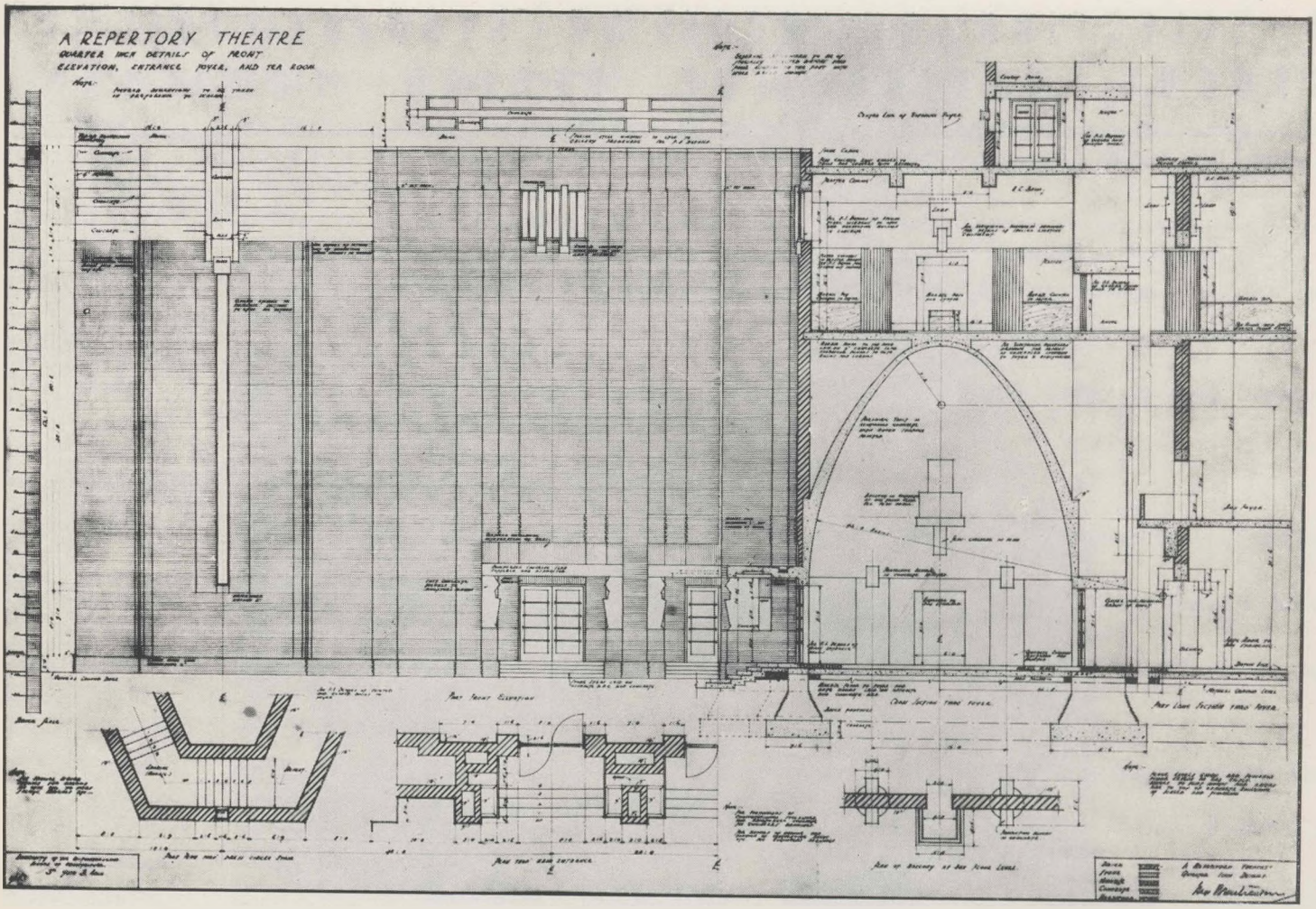
FOR THE DIPLOMA IN QUANTITY SURVEYING.

FIRST YEAR :	Building Construction, Geometrical Drawing, Elementary Quantities and Mensuration, History of Architecture, Architectural Drawing.
SECOND YEAR :	Theory of Structures I, Building Construction, Sanitation and Hygiene, Quantities.
THIRD YEAR :	Theory of Structures II, Building Construction and Materials, Surveying and Levelling, Quantities.
FOURTH YEAR :	Specifications, Professional Practice, Theory of Structures III, Quantities, Building Construction Drawings, Analysis of Prices.

A SELECTION OF WORK BY STUDENTS OF THE SCHOOL DURING THE PERIOD 1923-1942



FIRST YEAR STUDY, 1923, By W. G. McINTOSH



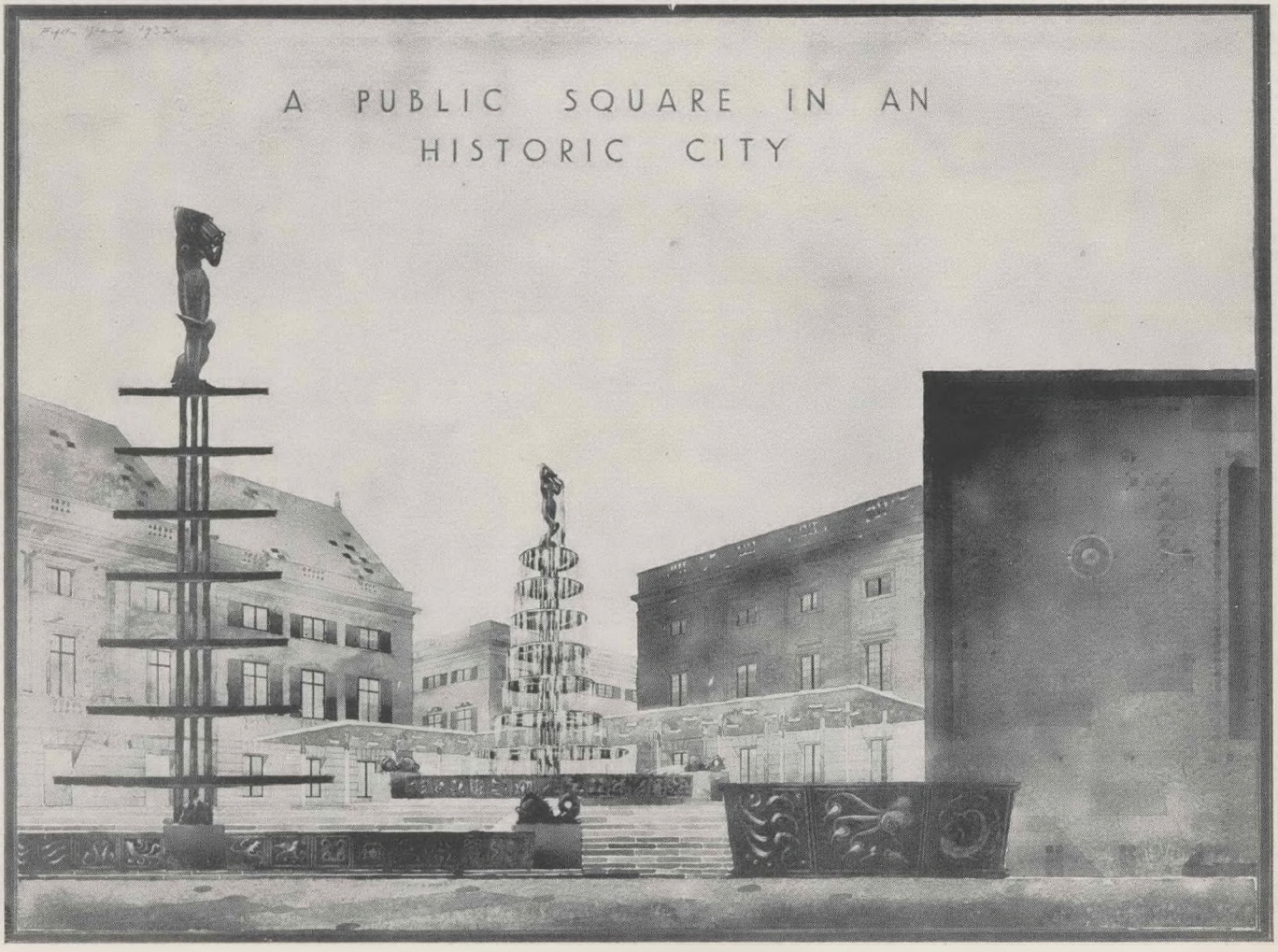
QUARTER INCH WORKING DRAWING

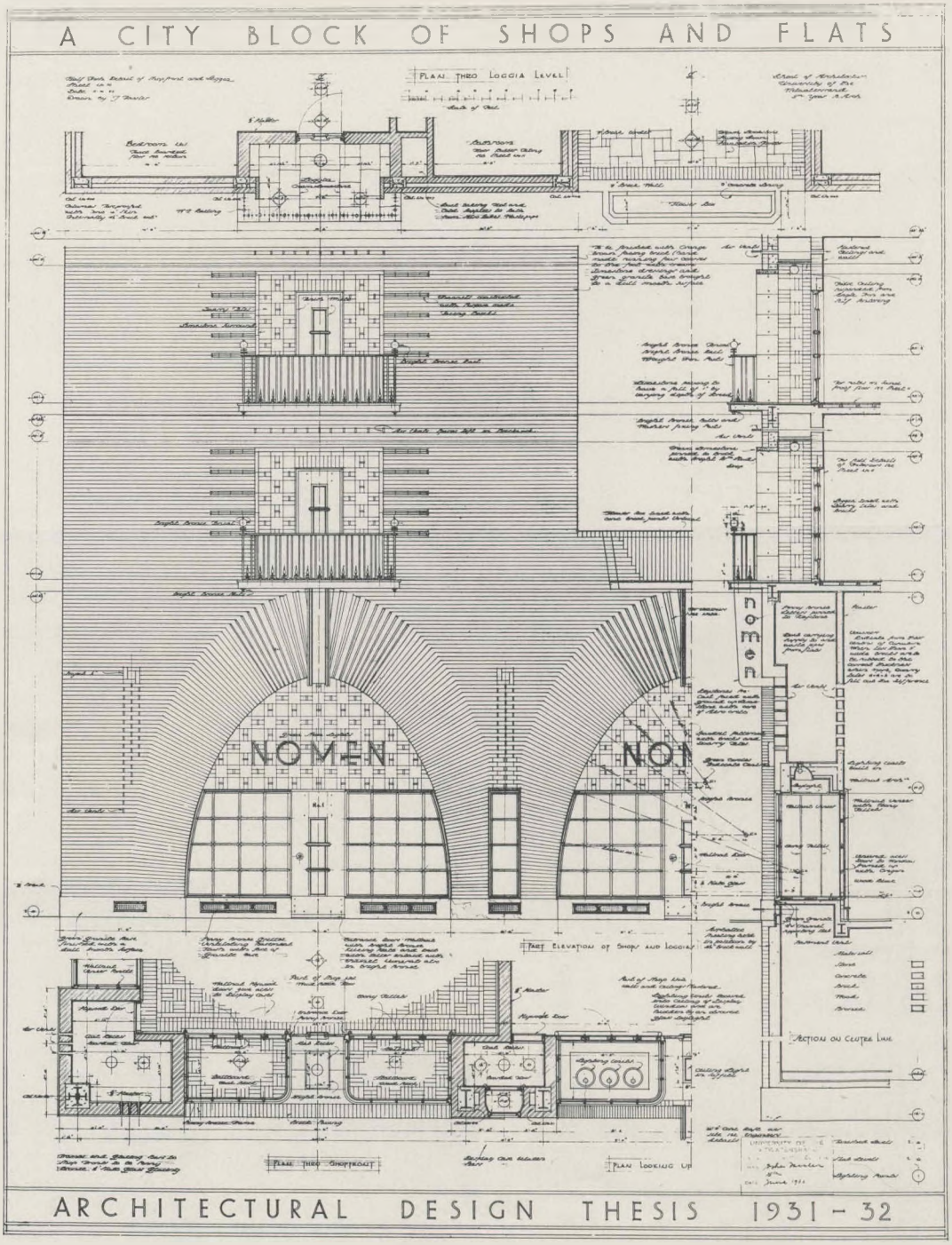
By R. D. MARTIENSSEN

FIFTH YEAR DESIGN 1928

FIFTH YEAR DESIGN 1932

A RENDERED STUDY By J. FASSLER

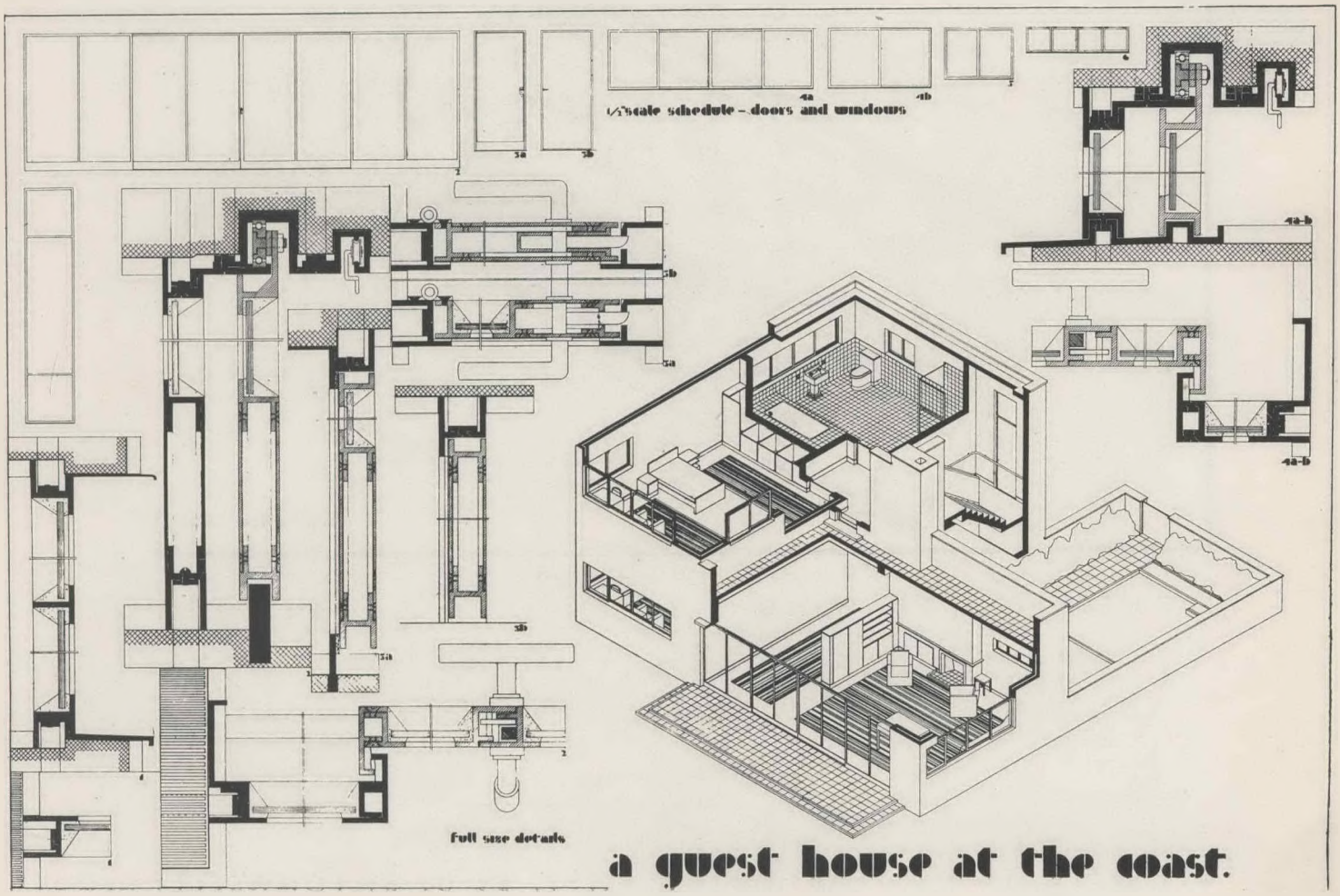




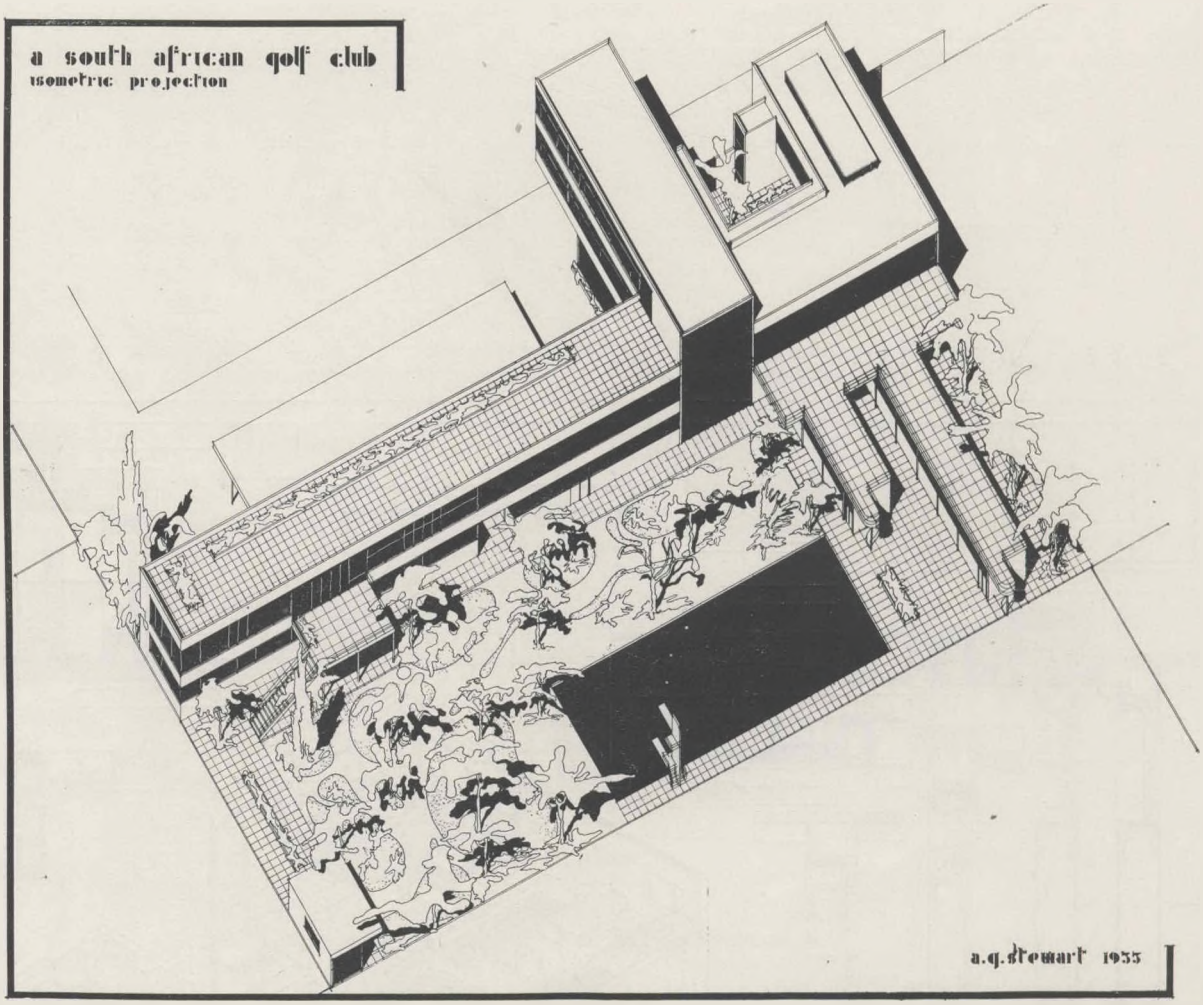
THESIS DESIGN, 1932, By J. FASSLER

SECOND YEAR DESIGN 1932

FULL SIZE DETAILS AND ISOMETRIC By W. D. HOWIE



FIFTH YEAR DESIGN 1933

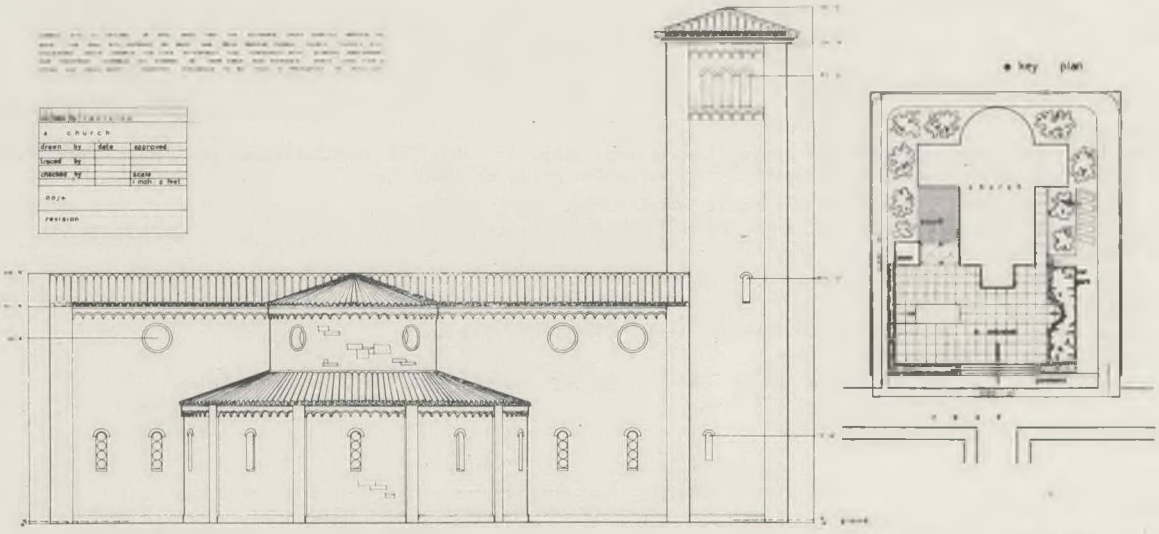


ISOMETRIC DRAWING By A. G. STEWART

OPPOSITE: THIRD YEAR DESIGN, 1937, By U. R. TOMASELLI

CHURCH

• eighth inch scale working drawing • elevation and key plan



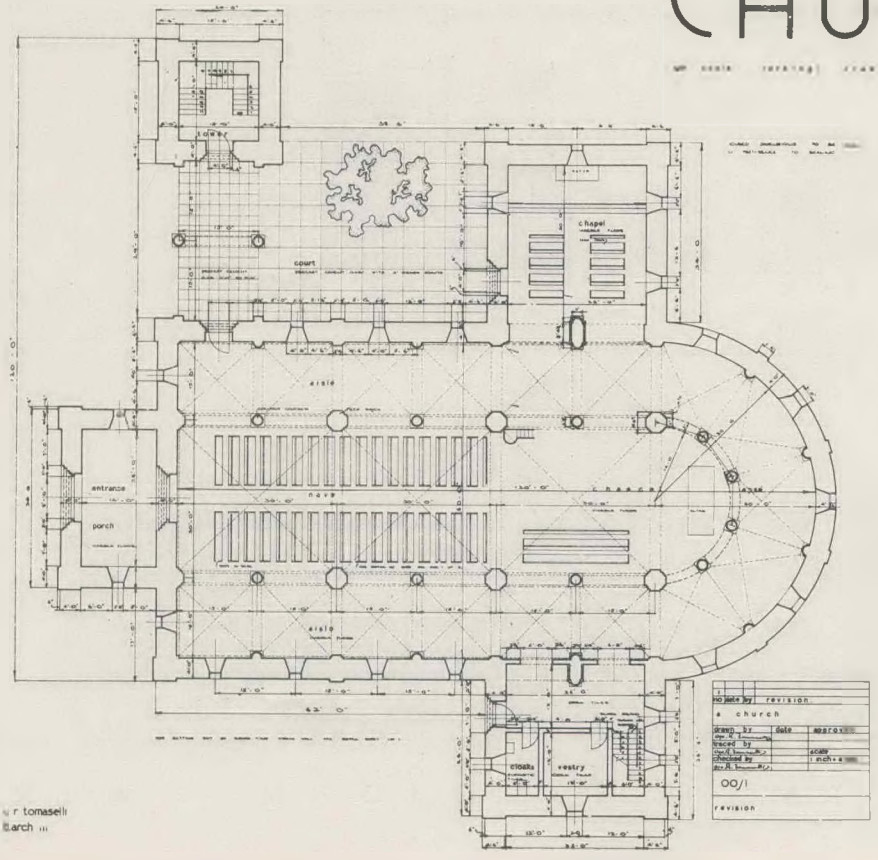
• key plan

• east elevation

u r tomaselli
B.arch iii

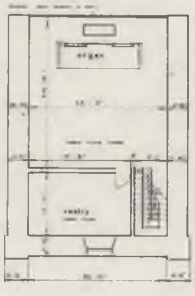
CHURCH

plan



basement plan

plan of transept



u r tomaselli
B.arch iii

THIRD YEAR DESIGN 1937

The following programme outlines the accommodation required by directors of a hospital, which it is proposed to build in the Northern Suburbs.

The items given are intended to define the scope of the hospital, and it will be necessary for students to do research in planning and equipment in order to state the problem more fully. This must be the end to which all preliminary work should be directed.

The site slopes to the north and is protected from the south by a low ridge.

OUTLINE ACCOMMODATION.

WARD UNITS.

One large ward for men; One large ward for women; Two two-bed wards for men; Two two-bed wards for women; Four Single bed wards for men; Four single bed wards for women; Two observation wards, one bed each.

SUGGESTED SERVICE ACCOMMODATION FOR EACH WARD UNIT.

Sink room, W.C.s and lavatories; Bathrooms; Linen stores and clothes stores.

OPERATING THEATRE UNIT.

Operating theatre; Wash-up, anaesthetic room, etc.; Surgeon's room.

ADMINISTRATION.

Entrance Hall, Waiting room; Matron's room, Secretary's room; Office; Dispensary.

KITCHEN ACCOMMODATION.

Kitchen, larders, servery and scullery; Nurses' dining room, nurses' rest room ; Nurses' W.C. accommodation.

LAUNDRY.

This will handle the hospital and staff linen.

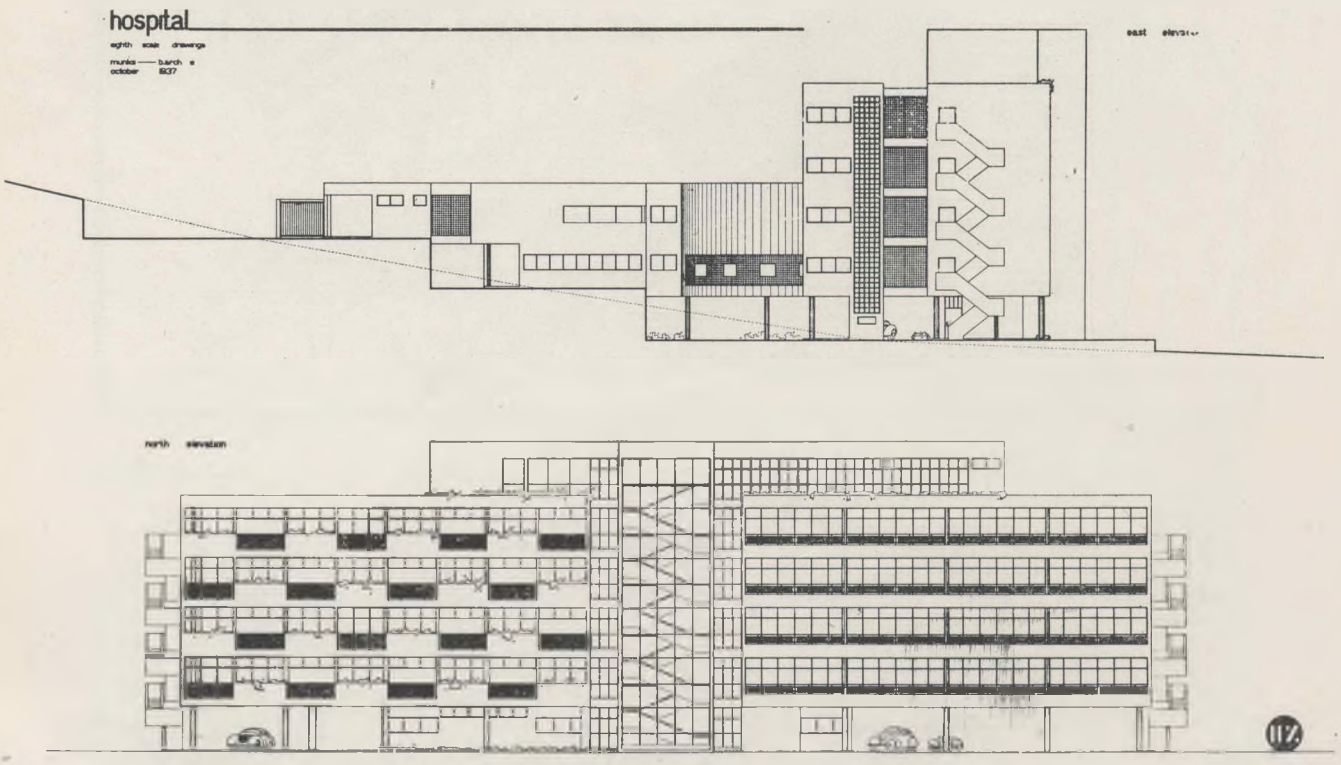
MORTUARY AND CHAPEL.

NURSES' LIVING QUARTERS.

The nurses will live on the site, and a unit is required which will embody suitable living and sleeping accommodation.

DRAWINGS REQUIRED.

Plans, sections, elevations and isometric sketches to a suitable scale to illustrate the scheme. These must be drawn on Whatman's paper and may be presented in any medium.

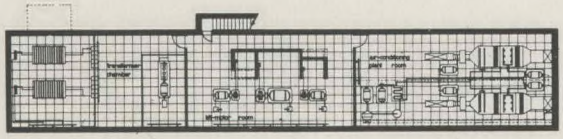


A HOSPITAL By JOAN MUNKS

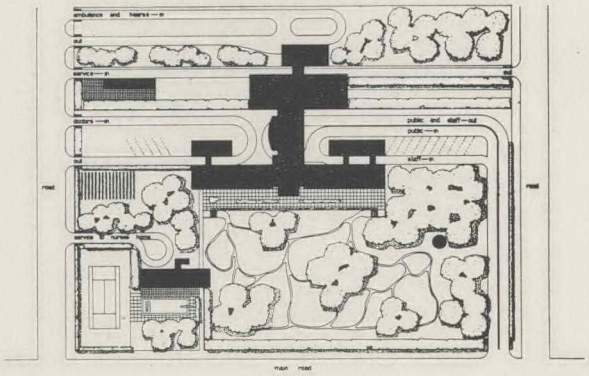
hospital

eighth scale drawings

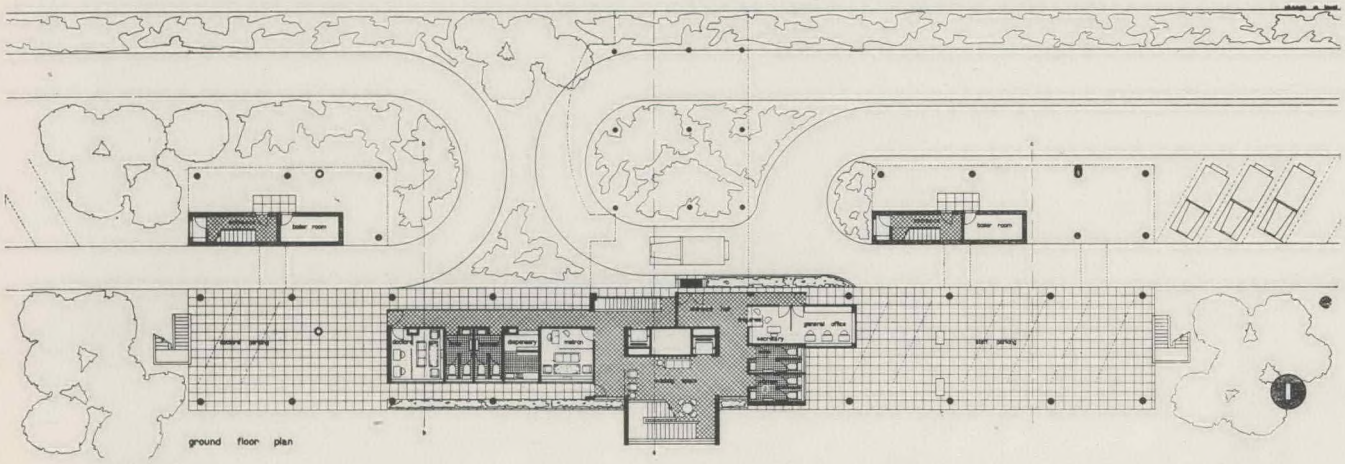
munks — b.arch iii
october , 1937



basement plan



site plan

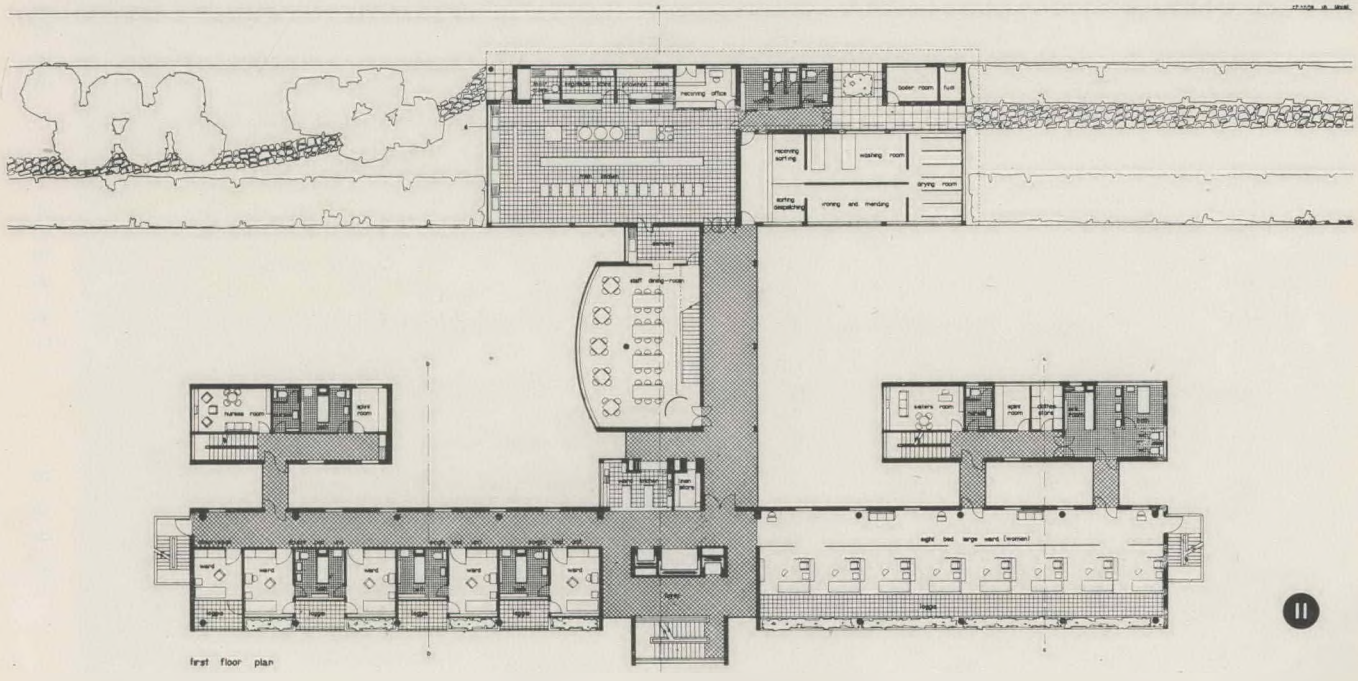


ground floor plan

hospital

eighth scale drawings

munks — b.arch iii
october 1937



first floor plan

A NEW PLAN FOR RUSTENBURG

FIFTH YEAR THESIS DESIGN, 1939, By HEATHER MARTIENSSEN

DEPARTMENT OF ARCHITECTURE

FIFTH YEAR THESIS SUBJECT, 1939

What factors govern the nature and elements of the small towns in the Transvaal? Analyse statistically, topographically and economically at least four rural centres of the Transvaal, and combine in a report your findings under these and any additional headings which you consider relevant to your research. Your report is to include, where possible, photographs, diagrams, etc., showing regional characteristics and the nature of essential agricultural activities adjacent.

Select one existing town for consideration and treatment on rational lines.

Embodying the data which you have established :—

1. Prepare a scheme to replace the existing town which will satisfy the requirements implicit in its situation and purpose.
2. Develop in detail the civic centre, the elements of which are to be determined by your researches.

SUGGESTED PROCEDURE

a. Familiarise yourself with every aspect of life in the Transvaal. Study its geography, communications, climatic variations, geology, agricultural pursuits, etc. Obtain or prepare a large-scale map clearly showing these features.

b. Collect photographs of typical landscapes and towns as a background to your work.

c. Obtain all statistics, etc., from government departments (or other authorities) and maps and surveys of towns selected.

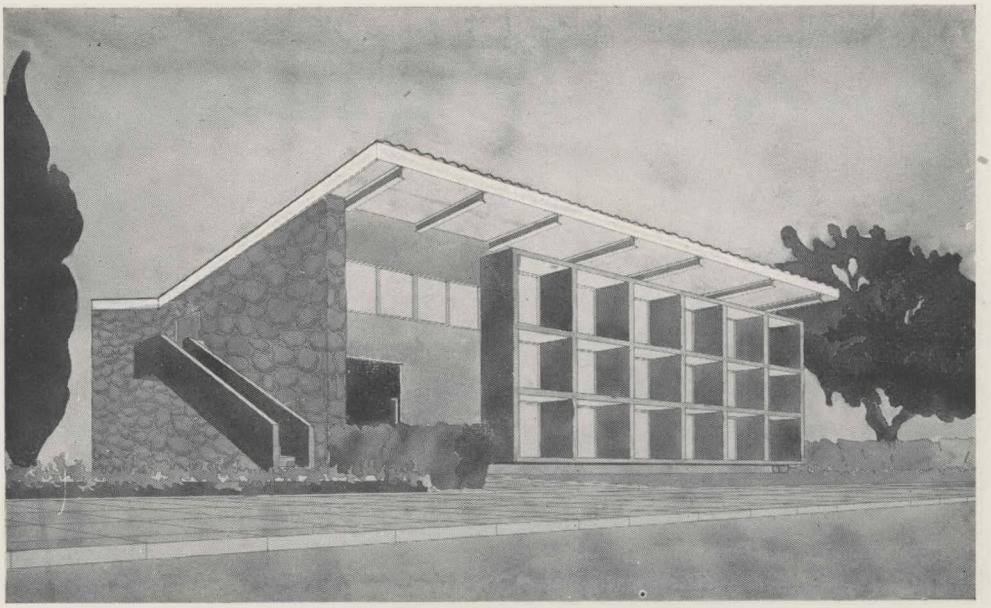
d. Collate all data and prepare all the necessary diagrams and sheets of drawings, notes, etc.

e. Prepare sketch schemes and detailed analyses of your single selected town.

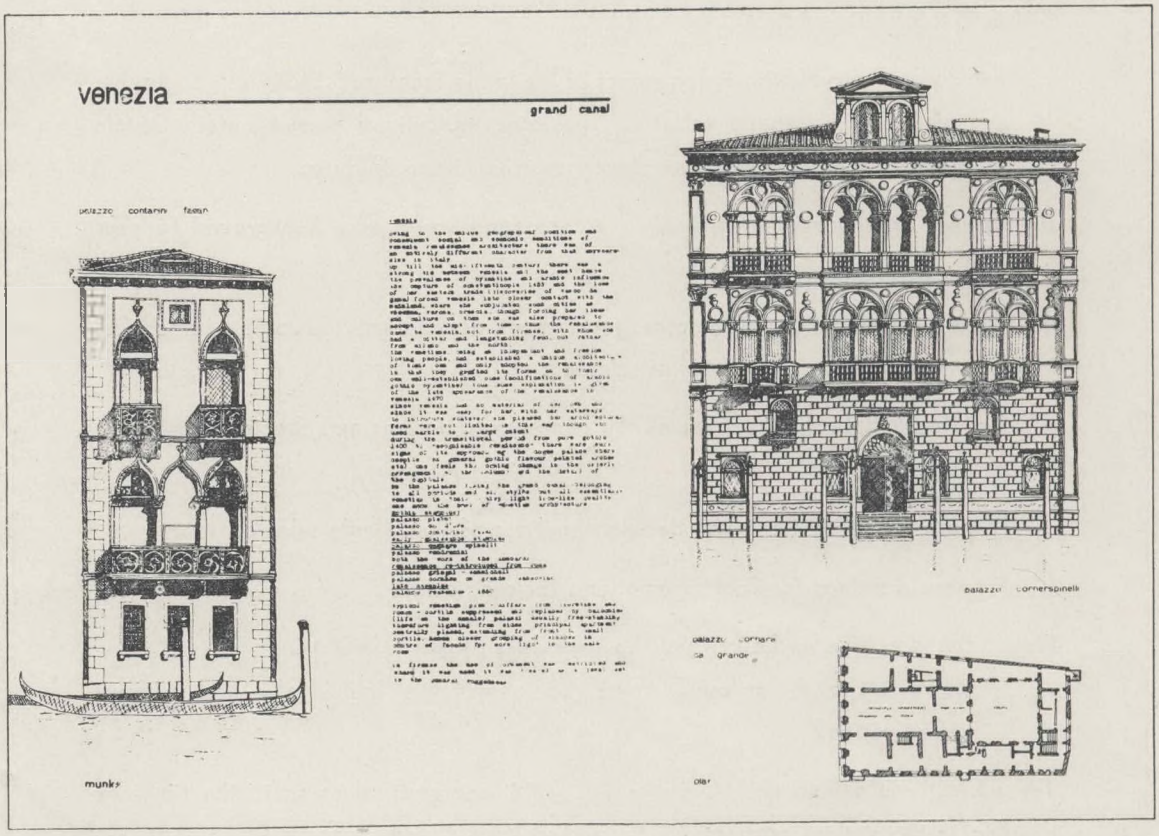
f. Prepare drawings for final scheme, and for civic centre.

Note : Items a to c, inclusive, may be undertaken jointly.
Items d to f, inclusive, must be undertaken individually and without collaboration.

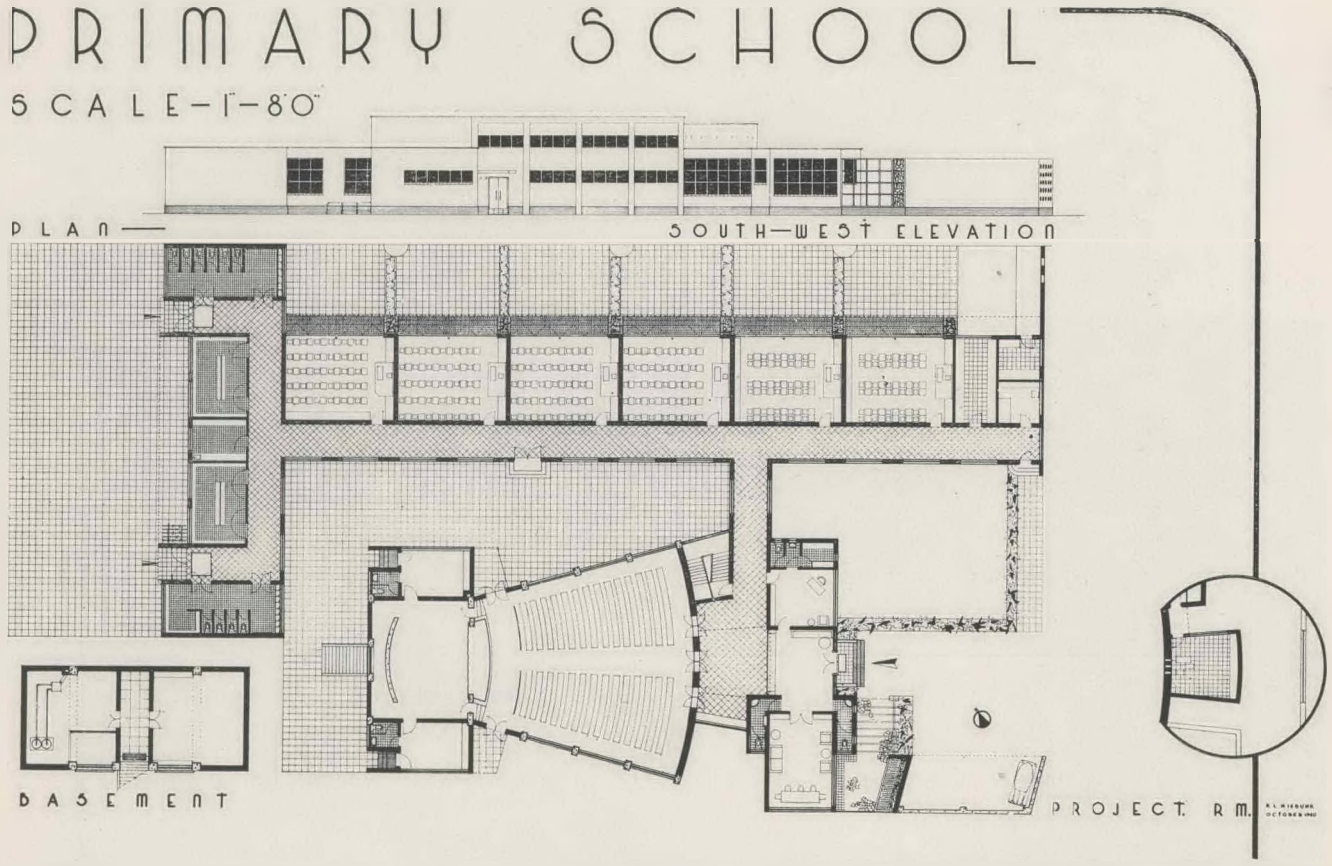
The subject will extend until October 1st, 1939, and restrictions as to the times of handing in the various portions will be posted later.



Second Year Design, A Small Bank
R. E. G. Hope



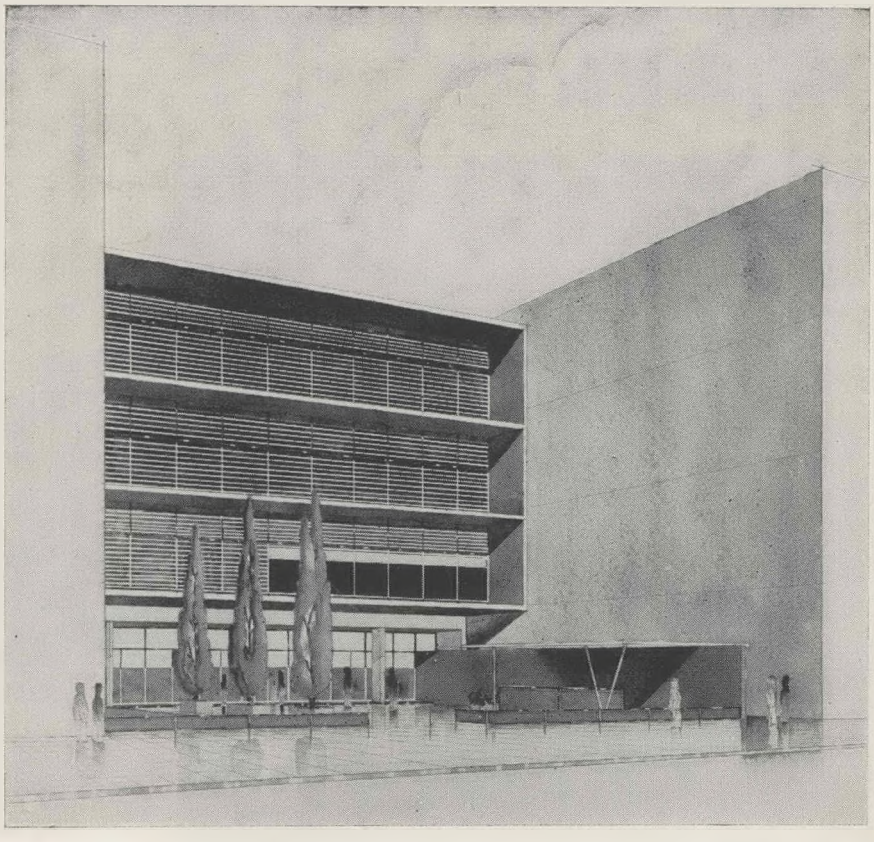
Third Year History Study By Joan Munks



ABOVE:

Second Year Design,

1940. R. L. NIEBUHR

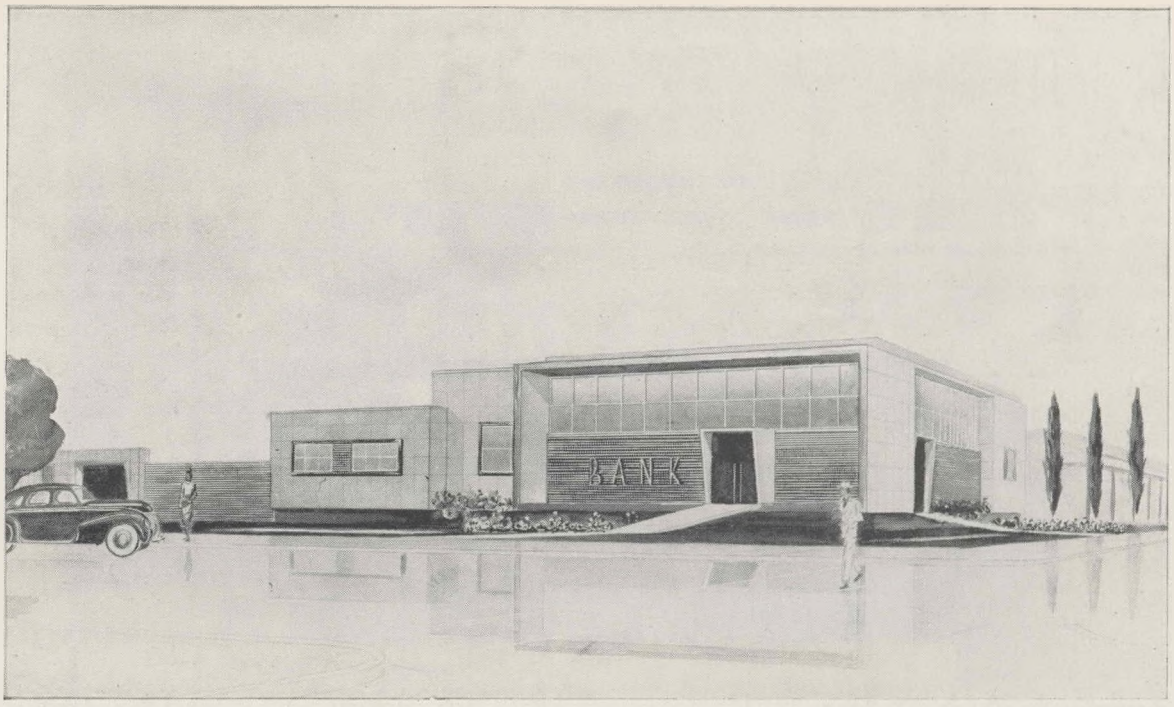


RIGHT:

Fifth Year Design,

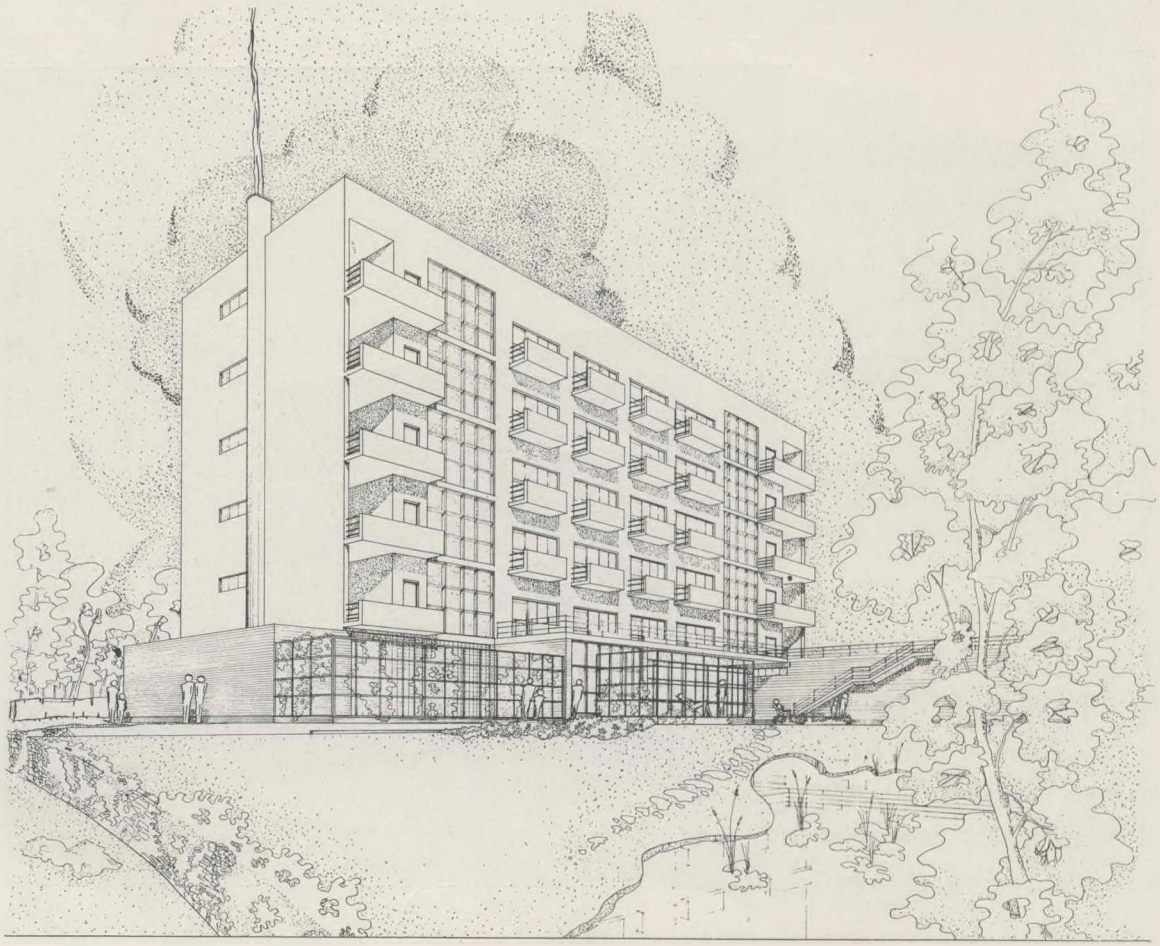
1941. R. A. Todd

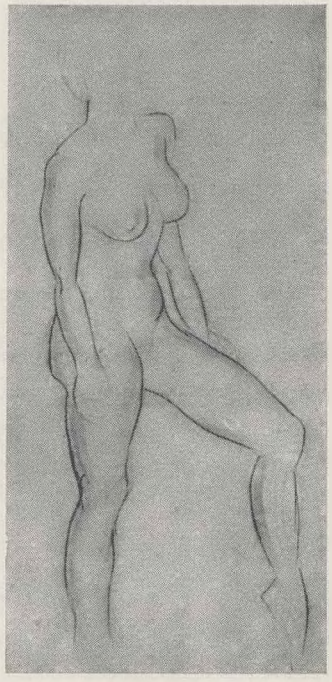
"Headquarters Building for a Classical Association." Perspective presented with working drawings.

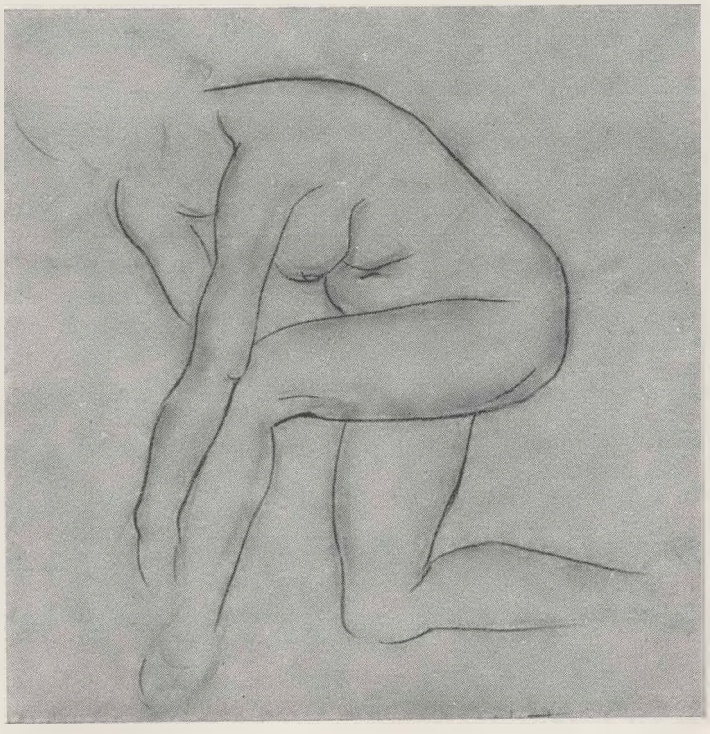


Second Year Design, 1941, A Bank. P. A. Westwood

Fifth Year Design, 1941, A Hotel D. M. Calderwood







ABOVE: FIRST YEAR. Two studies from groups of sketches showing vernacular building. Duncan and Humphreys (1942)

RIGHT: Life Drawing (1940). Fifteen minute studies by Heather Martienssen

SCHOLARSHIPS AND PRIZES

PRIZES IN THE SCHOOL OF ARCHITECTURE

The D. M. Burton Prize of £5 awarded annually to the best all round student in any year of study for the Degree or Diploma in Architecture.

The A. S. Furner Prize of £5 awarded for the best and most original design submitted by a student in any year of study for the Degree or Diploma in Architecture.

The Louis Bustin Memorial Prize awarded annually for the best solution of a planning problem in any year of study for the Degree or Diploma in Architecture.

The Gordon Leith Prize of not less than £5 awarded to a student who in the final year of the course for the Degree has obtained an aggregate of seventy-five per cent. of the marks obtainable in all subjects, and has proved consistently good in architectural design in all years of the course.

The Farrow and Laing Prize of £7 10s. 0d. awarded annually to a Johannesburg student in any year of the Degree or Diploma Course in architecture who submits the best set of working drawings and a specification for a building costing approximately £7,500 and suitable for the full requirements of the Quantity Surveyor.

The Frank Gordon McIntosh Prize of £5 5s. 0d. awarded annually for the best thesis on some aspect of architectural construction or set of working drawings submitted by a student in the final year of the Degree or Diploma Course in Architecture.

QUANTITY SURVEYING PRIZES

The Chapter of Quantity Surveyors Gold Medal awarded annually on the nomination of the University of Pretoria to the most successful candidate (at Johannesburg or Pretoria) in the final examination for the Diploma in Quantity Surveying.

The Chapter of Quantity Surveyors book prizes of the value of one guinea and two guineas awarded annually to students (at Johannesburg or Pretoria) adjudged by the University of Pretoria to be the best in the first or second year respectively in the subject of Quantities.

The Bell-John Prize, a book prize to the value of one guinea awarded for the best student (class work and examinations) in Third Year Quantities.

The Farrow and Laing Prize of £7 10s. 0d. awarded annually to the student in the subject of Quantities, in the Final Year who is adjudged by the University of Pretoria to be the best in this subject, taking into account both the year's work and the examination results.

Graduation Prize. The South African Association of University Women offer a prize of books to the value of £3 3s. 0d. to be awarded annually to the most distinguished woman graduate of the year.

POST GRADUATE SCHOLARSHIPS

The H. B. Webb Gift Research Scholarship of the annual value of £300, and tenable for two years, is awarded once in every five years to graduates in any faculty holding the M.A. M.Sc. Degree or one of equal or higher status.

Two Union Post Graduate Scholarships of the value of £225 per annum for two years are placed at the disposal of the

University by the Union Government to be awarded to the most distinguished graduates in any faculty.

A University Council Post Graduate Scholarship of the value of £225 per annum for two years is available for award every year under the same conditions as apply to Union Post Graduate Scholarships.

SCHOLARSHIPS OPEN TO STUDENTS OF THE UNIVERSITY OF THE WITWATERSRAND AND OTHER SOUTH AFRICAN UNIVERSITIES.

Union Government Research Scholarships varying in value from £80 to £250 per annum for one or two years, are granted annually by the Union Government for scientific research.

The Herbert Baker Scholarship of the value of approximately £300, for study in Europe, is awarded at intervals, and is open to all South African students of Architecture under 30 years of age who have had at least six years architectural training.

The Rhodes Scholarship of the value of £400 per annum is available each year to a student from the Transvaal Province and is tenable for three years at the University of Oxford.

The Elsie Ballot Scholarship of the value of £400 and tenable at the University of Cambridge is awarded at intervals.

R.I.B.A. PRIZES AND SCHOLARSHIPS

Architectural students and past students in South Africa are eligible for the following prizes and studentships, awarded by the Royal Institute of British Architects:

The Soane Medallion and £150 (Fifth Year Students).

The Victory Scholarship, a Silver Medal and £150 (Fifth Year Students).

The Tite Prize, a Certificate and £50 (Third and Fourth Year Students).

The Pugin Studentship and £75 for measured drawings (Third and Fourth Year Students).

The Godwin and Wimperis Bursary, a Silver Medal and £250 (Fifth Year and Post Graduate Students).

The Alfred Bossom Travelling Studentship, Gold Medal and £250 (Post Graduate Students).

The Owen Jones Studentship, a Certificate and £100 (Fifth Year and Post Graduate Students).

The Henry Saxon Snell Prize and £100 (Fifth Year and Post Graduate Students).

The Grissell Gold Medal and £50 for Constructional Design (Fifth Year and Post Graduate Students).

The R.I.B.A. (Hunt) Bursary and £50 for Housing and Town Planning (Fifth Year and Post Graduate Students).

The R.I.B.A. Silver Medal and £50 for an Essay (Fifth Year and Post Graduate Students).

The Henry L. Florence Bursary and £360 (Post Graduate Students).

The Neale Bursary and £70 (Fifth Year and Post Graduate Students).

The Arthur Cates Prize and £50 (Fifth Year and Post Graduate Students).

The R.I.B.A. Silver Medal and £5 in books (Fifth Year Students).

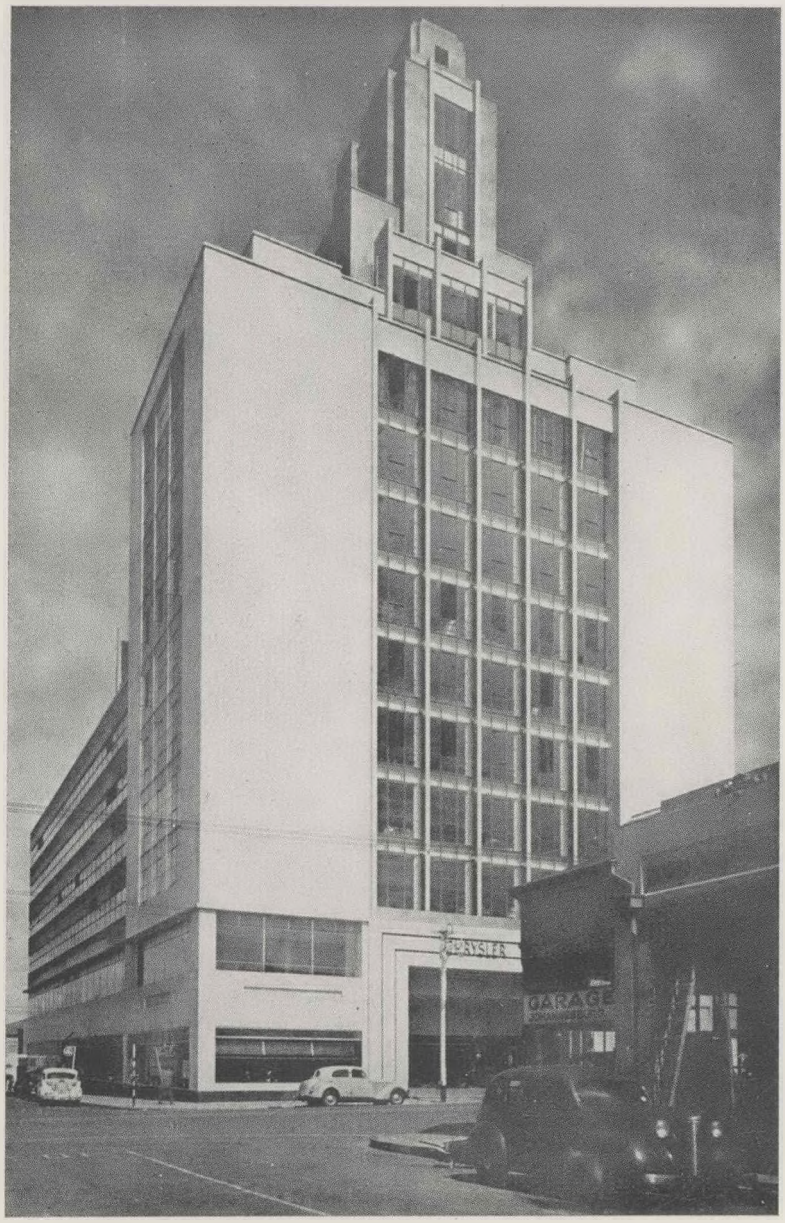
The R.I.B.A. Bronze Medal and £5 in books (Third Year Students).

A SELECTION OF THESES PRESENTED BY STUDENTS FOR THE DEGREE OF BACHELOR OF ARCHITECTURE.

ABBOTT, G. E.	A Survey of Modern Domestic Architecture in the Transvaal
ARONOWITZ, AXELROD, BOCK, BOHLANDER, CHRISTOS, IVO, JENKS, LEVY, SIEMELINK, TROPE	The Hotel in South Africa.
AYERS, L.	Parking Garages.
BIRCH, K. S.	English Furniture.
BOTHA, L. J.	Farm Buildings.
BRYER, M. L.	The Sociological Aspect of Town Planning.
CHALMERS, G. T.	Yesterday and To-Day; The Evolution of the House.
CLARK, D. E.	Modern Furniture and Interior Decoration.
COATON, Miss N.	Shops.
CONNELL, IRVINE-SMITH, JONAS, KANTOROWICH, WEPENER.	Native Housing.
DE BRUYN, J.	Gardens—Their History and Design.
DALTON, Miss N.	Interior Decoration.
DOBSON, Miss A. and FRIENDLY, Miss J.	Mine Housing.
DRAKE, C. F.	Airports.
FISCHER, P. U.	Community Centres.
FREEMAN, F. F.	A Small Town Hospital.
HENDRIKZ, W. de S.	The Stage.
HERSCH, C.	Mural Paintings—History and Technique.
HOPE, R. E. G.	Native Schools.
HOWIE, W. D.	Housing.
KALLENBACH, C. R.	Industrial Architecture.
KLING, O.	Building Materials.
LEDGER, J. A.	The Sports Stadium—A General Survey of the Origin, Development, Planning and Modern Tendencies in their Design.
LOUW, Miss E. O.	Kindergarten Schools.
MARTIENSSEN, Mrs. H. M.	A Survey of Living Conditions in the Rural Areas of the Transvaal.
MEDALIE, A. M., and CALDERWOOD, D. M.	Domestic Construction.
MOSTERT, T. du T.	An Olympic Stadium—History of the Origin, Development, and Ideals of the Olympic Games.
PRISSMAN, B.	Figure Sculpture in Relation to Architecture.
RADOMSKY, H.	Development and Design of Theatres.
SIEW, M.	Industrial Architecture in the Transvaal.
SINCLAIR, C. M.	Flats.
SIVE, Miss R.	Some Aspects of Colour in Architecture.
STEGMANN, A. M.	The Background of Architecture.
THOMSEN, A. M.	Temporary Architecture.
VAN NIEKERK, T.	The Architecture of the Contemporary Church.
VISSER, P.	Crematoria.
WILSON, A. F.	The Greek Temple in Italy and Sicily.

July '42

A SELECTION OF WORK BY PAST STUDENTS OF THE SCHOOL

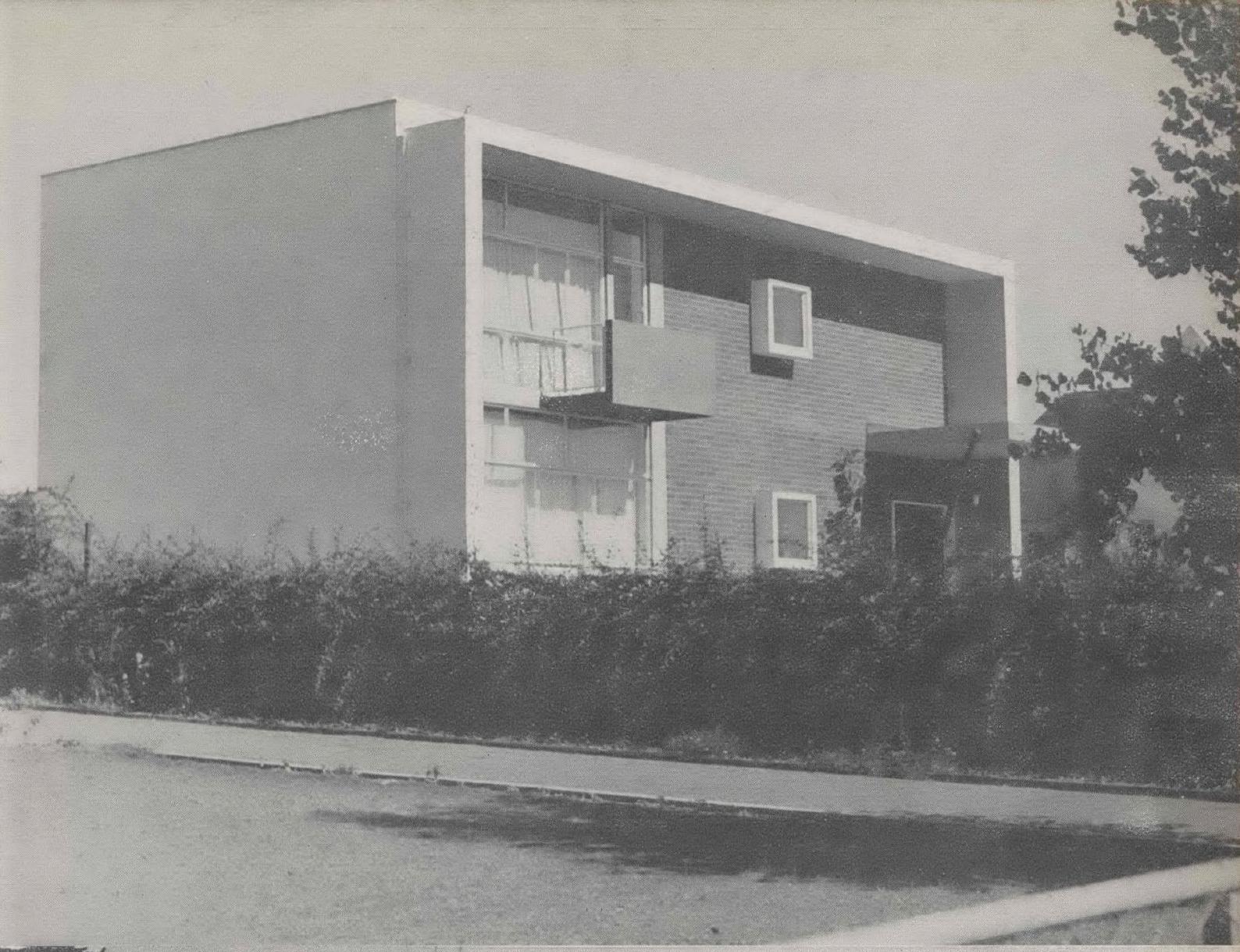


Chrysler House, Johannesburg, 1939.
By Nurcombe and Summerley

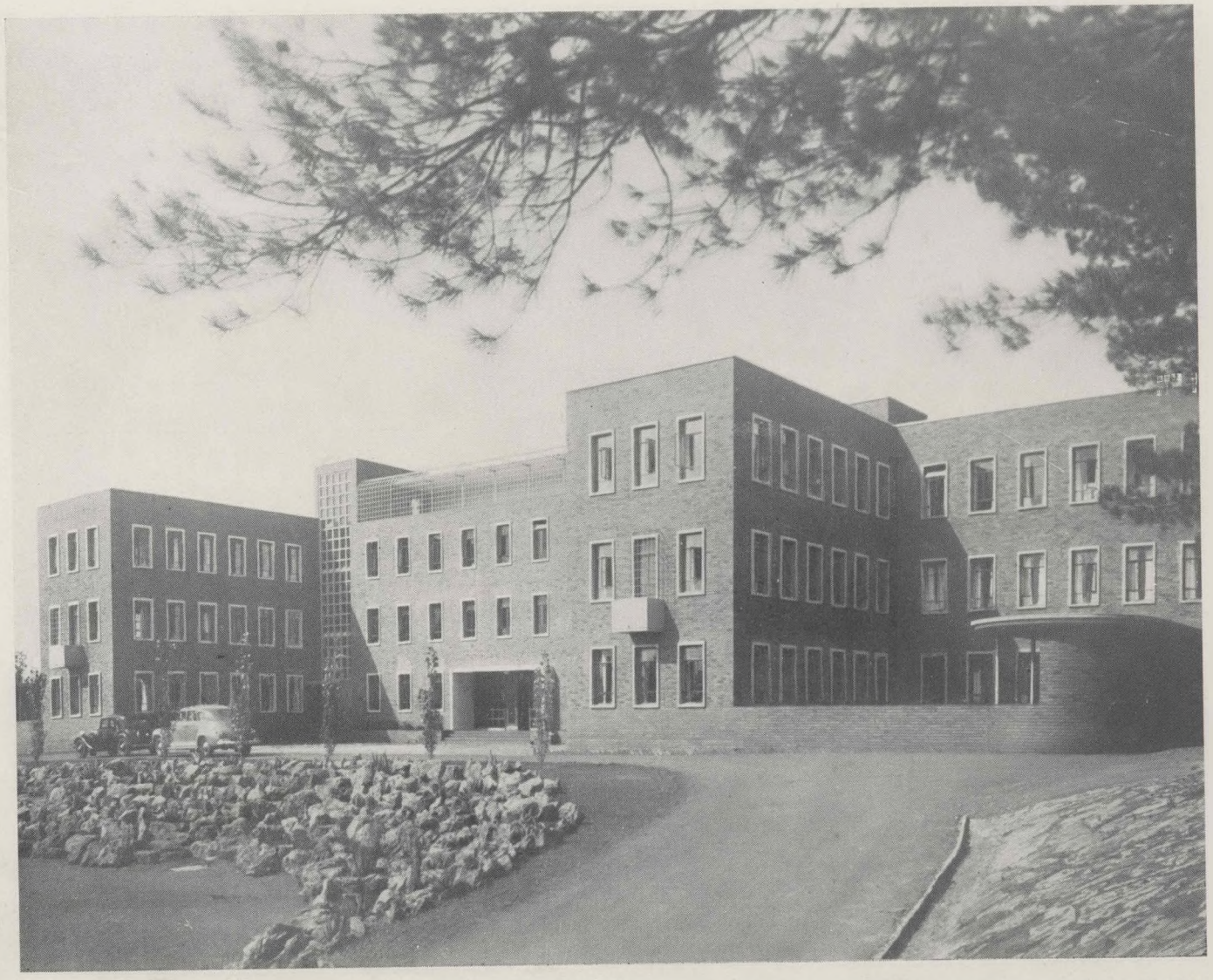
House at Johannesburg
Hanson, Tomkin & Finkelstein, 1938

House at Pretoria By
W. G. McIntosh 1937

House at Johannesburg
R. D. Martienssen, 1940



The Royal Johannesburg Golf Club House, 1939. By A. R. Martin (Reid & Martin)



Johannesburg Children's Home By Norman Eaton and Fair