

**AN EMBASSY FOR THE UNION OF SOUTH AFRICA IN WASHINGTON D.C.**

**A Thesis submitted in partial fulfilment of the requirements  
for the Degree of Master in Architecture**

**Massachusetts Institute of Technology**

**Submitted :**

**August 31, 1956**

**By :**

.....  
**Julian Beinart**  
**Bachelor of Architecture, University of Cape Town, Nov. 1954**

**To :**

.....  
**Professor Lawrence B. Anderson**  
**Head of the Department of Architecture**

*Circle Jan. 2. 1957*

AN EMBASSY FOR



THE UNION OF SOUTH AFRICA

IN WASHINGTON D. C.

THESIS FOR THE DEGREE OF MASTER IN ARCHITECTURE · AUGUST 1956  
MASSACHUSETTS INSTITUTE OF TECHNOLOGY · JULIAN BEINART

**ABSTRACT OF THESIS**

- a. Title: AN EMBASSY FOR THE UNION OF SOUTH AFRICA IN WASHINGTON D.C.
- b. Name of Author: Julian Beinart  
Bachelor of Architecture  
University of Cape Town, Nov. 1954
- c. Submitted for the Degree of Master of Architecture in the  
Department of Architecture on August 31st, 1956
- d. Abstract of thesis :

This thesis deals with an architectural problem which arises when one country builds buildings to represent it and house its officials in another. It involves the complex architectural problem of creating an environment of building which will pay its respect to the surroundings it faces in the new country, whilst yet retaining in its essential elements those characteristics which can be abstracted from its own country. It is with this conviction that this thesis hopes to explore the possibility of obtaining an architectural expression for this building form, and in this way contribute to the finest advertisement that a country might have in another. It will also attempt at finding a contemporary solution to the problem of the expression of formal social life, one element which is seldom indulged in and even more seldom built for today. In making use of precedent not necessarily of today, it assumes that this form of life is still valid today and that there do exist architectural elements in the vocabulary of today which can be articulated into forms and spaces expressive of this function.

The specific problem to be studied is the design of an Embassy for the Union of South Africa in Washington D.C. In attempting this solution, it is felt that a thorough knowledge of the essential characteristics of the country represented is essential and the author feels fortunate to be able to assimilate what he was learnt

in the United States and yet draw on a knowledge acquired through most of his life spent in his home country.

The solution is based upon a recognition of the environment in Washington; an abstraction of the elements in the buildings which can lend to it, its South African existence; an expression of the formal diplomatic life in Washington in terms of today and the creation of an environment in the complex which will express the unity and confidence of the country it represents and its good relations with the country, in whose capitol it will exist.

**Cambridge, Massachusetts**

**Pietro Belluschi, Dean  
School of Architecture and Planning  
Massachusetts Institute of Technology  
Cambridge 39, Massachusetts**

**Dear Dean Belluschi :**

**In partial fulfilment of the requirements for the Degree of  
Master in Architecture, I herewith submit the thesis :**

**AN EMBASSY FOR THE UNION OF SOUTH AFRICA IN WASHINGTON D.C.**

**Sincerely yours,**

**.....  
Julian Beinart**

To the Union of South Africa and the United States of America, in both of which I have been fortunate to study; to all those people, who have made this possible; and to Marblehead for the inspiration.

**ACKNOWLEDGEMENTS :**

I wish to thank the following people for their advice and co-operation on this thesis:

The Ambassador of the Union of South Africa and Mrs E.G. Holloway; the staff of the South African Embassy in Washington, particularly Mr. Wilmat Theunissen;

The British, New Zealand and Venezuelan Embassies;

The United States Coast and Geodetic Survey and National Capital Planning and Park Commissions;

The South African Tourist Corporation and Mr. Warren West, the South African Information Office and Mr. Wentzel;

The Architects Collaborative and Mr. Vilhelm Lauritzen;

Professor L.B. Anderson, Messrs. Minoru Yamasaki and Paul Rudolph, Professor Eduardo Catalano, Dean Pietro Belluschi, and other members of the faculty at the Massachusetts Institute of Technology;

The Library of Congress and the Rotch Library at the Massachusetts Institute of Technology.

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"The buildings that one country puts up for the use of its officials in another can be regarded as advertisements of its architectural taste and enterprise and must therefore be of the highest possible standard."

The Architectural Review

## #1 THE EMBASSY

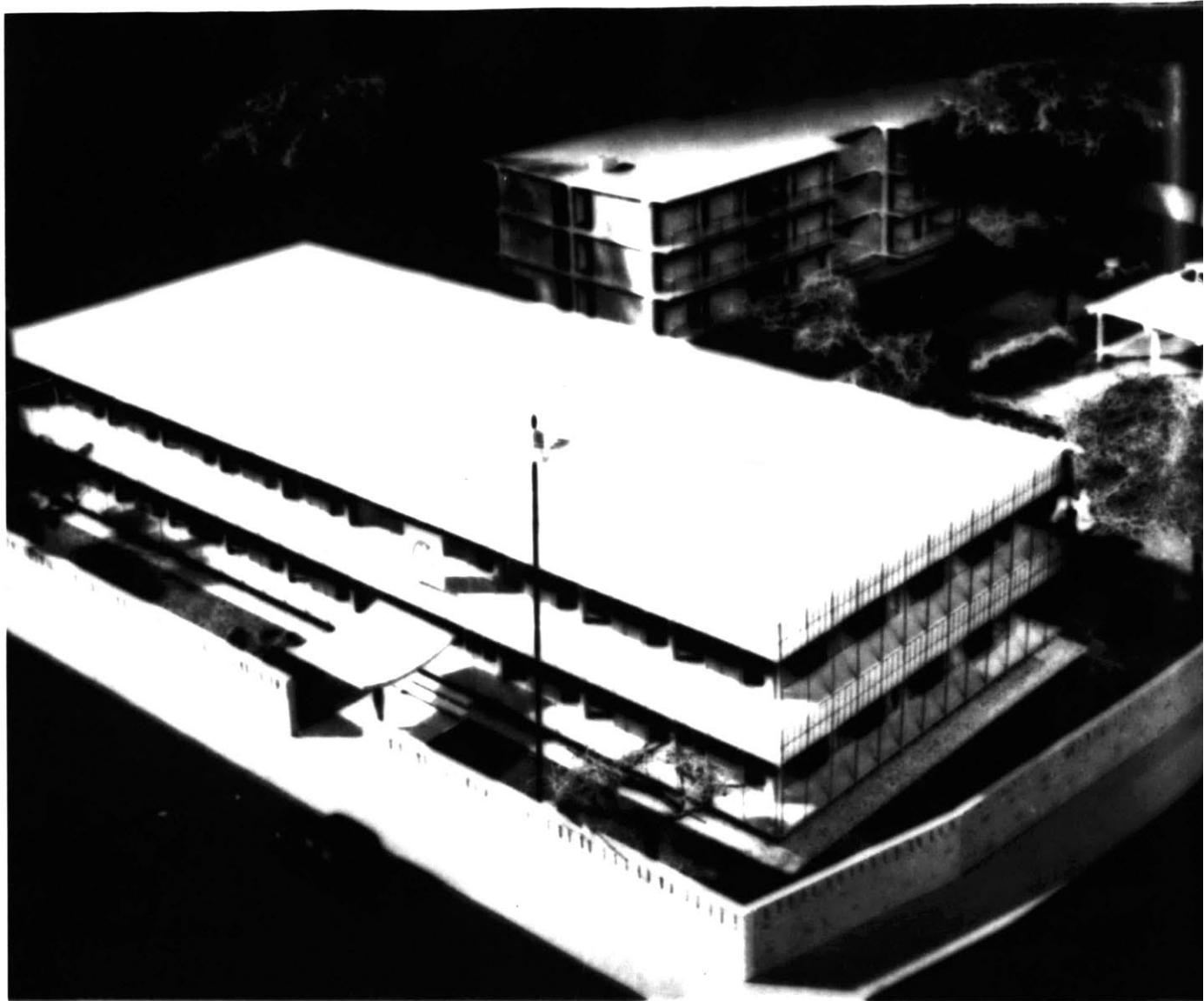
### (a) The essence of an Embassy

Webster's Dictionary defines an embassy as the office or residence of an ambassador. This is a simple yet powerful description of the essential nature of the building or buildings which house the functions of one country in another. When countries establish diplomatic ties with one another, they exchange people to represent them in the respective other country. This group of people look after the immediate interests of the home country in the foreign one as well as dealing with representational affairs such as consular, information, commercial, scientific, military and other ties. This establishes one aspect of the embassy function.

On the other side, however, diplomacy has achieved a further meaning than the purely practical. By the very nature of the word, a certain reflection is passed upon the need of the representative to achieve for his country a certain status or prestige in the other. He is an advertisement, often the only one in the other land. He has not only to advertise his homeland in the sphere of formal business, but he must resort to the more subtle means of showing to the other that he is a good man, that his country is one of good men, and that they are pleased to please the other country. This establishes the social aspect of diplomatic life, one which includes the garden party, the formal reception, the elegance of dress and drink.

This duality of function seems to prevail throughout the functions of an embassy, but the extent of variation depends upon the nature of the home country and the nature of the representation of it in another. For example, the United States representation in the Belgian Congo might be a purely academic one until, say, uranium is

The Embassy of the United States of America in Kobe, Japan  
Architect Minoru Yamasaki



## **US CONSULATE FOR KOBE, JAPAN**

In downtown Kobe, most buildings are closely crowded together, occupying 100% of their lots, much like New York City buildings. But the new headquarters to be built for the US Consulate General staff will stand in impressive contrast; space will be saved on the lot for a traditional Japanese garden to be designed by a local landscape architect, indicating quietly that not all the US roots in Japan are commercial, also that the US respects the wonderful building culture of Japan.

True, there will be a wall around the pleasant compound of offices, apartments, servants' quarters and carports which Detroit Minoru Yamasaki of Hellmuth, Yamasaki & Leinweber, has designed for the land of the ancestors. But the wall is not unusual in Japan. It was a choice between that or putting up grilles over windows and rolling steel shutters over doors for protection from agile second-story men. "Disliking the idea of battening windows, I chose the wall," says Yamasaki. It permitted him to design an office building of considerable delicacy, surrounded by a light-colored bronze with panels of shoji-like plastic shading the glass walls.

The architect also followed the tradition which lifts the usual Japanese building on a platform about 2' off the ground with a wooden platform around. The new consulate's platform will be of cantilevered concrete and wood, but it will serve the same purpose, protecting the first floor from the damage of Kobe's frequent flood waters.

discovered and the interest and nature of the embassy changes rather sharply.

The manner in which the functions express themselves in the buildings of the embassy are further determined by this relationship. The scale could tend to be a large office building in the centre of the downtown Capitol city, such as the American Embassy in Oslo, where a large building is to be erected to house purely office accommodation. The social aspect is catered for at a residence outside the city and the elements scarcely impinge upon one another. The opposite extreme would be the Venezuelan embassy in Washington where the office accommodation is an attachment of the residence on Massachusetts Avenue.

#### (b) The Architectural Problem

Developing from this working of the embassy, the architect needs to study his particular problem with an eye to the relative importance of each aspect of diplomatic life. It might be that the buildings want to be in separate parts of the city and this could mean the acquisition of new land, the problems of ties between the two and the whole aspect concerning the scale of the eventual solution. Scale can be of the utmost importance in the expression of "diplomacy," for the embassy is the element of non-verbal communication which expresses that country to the people of the other. The ostentatious, glaring, overbearing, must be avoided but the fairly grand, subtle and sophisticated must be achieved. Recognition must be taken of what exists around, but yet it must somehow be different.

This is a problem which has recently come very much to the fore with the extremely wise and farsighted programme of the United States Government in dealing with their new buildings abroad. Previously

representative architecture could easily fit into the pattern of the eclectic architecture of any period, for in this way it would be formal indeed, and yet in no way be out of place. After all, a Georgian villa in India would not be wrong for there were surely many Georgian villas in India all existing for their own purpose. Another embassy would not disturb the picture. This has been the policy adopted by most architects throughout the years of diplomatic building and it is significant that the thinking which has gone into the new embassies of today is inspired by greater thoughts than the merely academic of previous years. New concepts of the traditions, climate, culture and environment of the country in which the embassy has to be built, come to the fore and even local materials are employed. This is surely a far way from the International Style ideology of past years.

By what process does the architect arrive at his new concept of the embassy? What really is the architectural problem?

For the building to house people from country A in country B, the building has to live up to the best comfort standards of country A. It has to maintain in function all the necessities which these people would require, but it is now the functions carried out with the materials bought in country B and using all the resources of country B. This building, existing in country B, truthfully should be of the elements that are used in country B, its climatic needs, its building materials, its site problems and its other impositions. This seems feasible enough until one considers that it still has to remain a building of country A and yet has to be a symbol of that country. This is where the architectural dilemma arises and the solution lies in a subtlety and refinedness only achieved by the most sensitivity. Where to draw the line and where to compromise is the task of the designer and in the attempts of recent times, this has seldom been achieved.

The Embassy of the United States of America in New Delhi, India  
Architect Edward Stone

## US EMBASSY FOR NEW DELHI



Louis Cheekman

ARCHITECT: Edward D. Stone

ASSOCIATES: Stanley M. Torkelson,

Lloyd Flood, Richard W. Snibbe

MECHANICAL & STRUCTURAL ENGINEER:

Peter W. Bruder

When they look carefully, the Indian people will recognize in this foreign headquarters building a number of the same wise and graceful practices present in their own ancient building culture.

Architect Stone's proposed embassy is a diplomatic building, a tribute to what he found to admire and use in India. He found a lot; for example, compare the two photos on these pages. Each building has:

A formal pool before the building, around which—in the case of the embassy—cars approach the entrance.

A platform under the building, which in the embassy is used as a lower service floor and garage.

A *canometry* of the kind which can help a building seem to hang motionless in time and

space, above strife, with an easy formality.

A richness of texture, with the emphasis on masonry, perforated screens and tiles.

A whiteness against the sky, another guarantee of calm.

But Stone knew where to stop and keep the embassy his own; that was at the roof line. He made it flat and modest, where India's monuments are deliberately grand in shape and effect. His design never becomes just an architectural dialect story; its great charm is that it is a faithful abstraction of the old spirit, without being an imitation temple. It is likely that people in Des Moines, USA would enjoy this building too. But in Des Moines it would not be identified with Indian building; only in India.

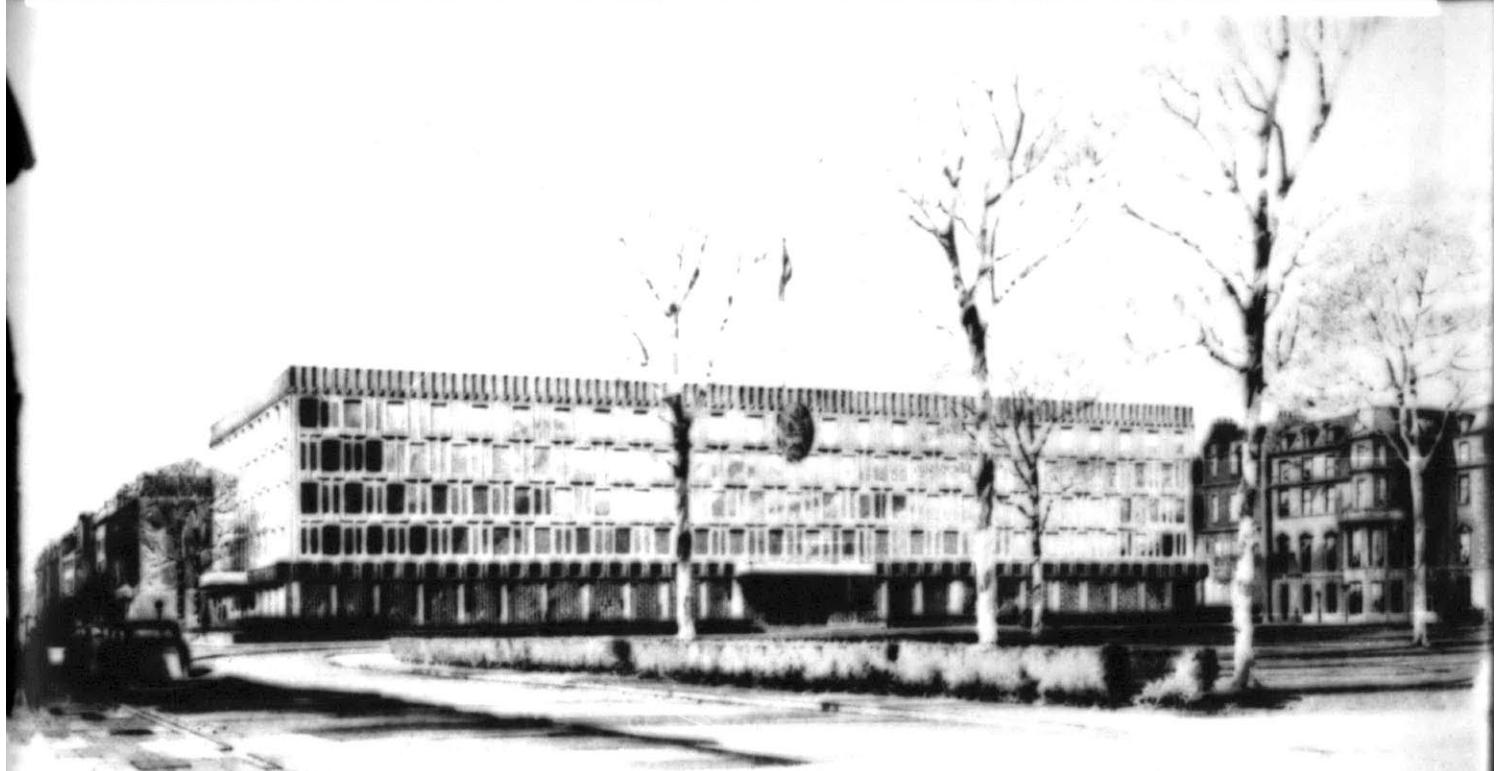
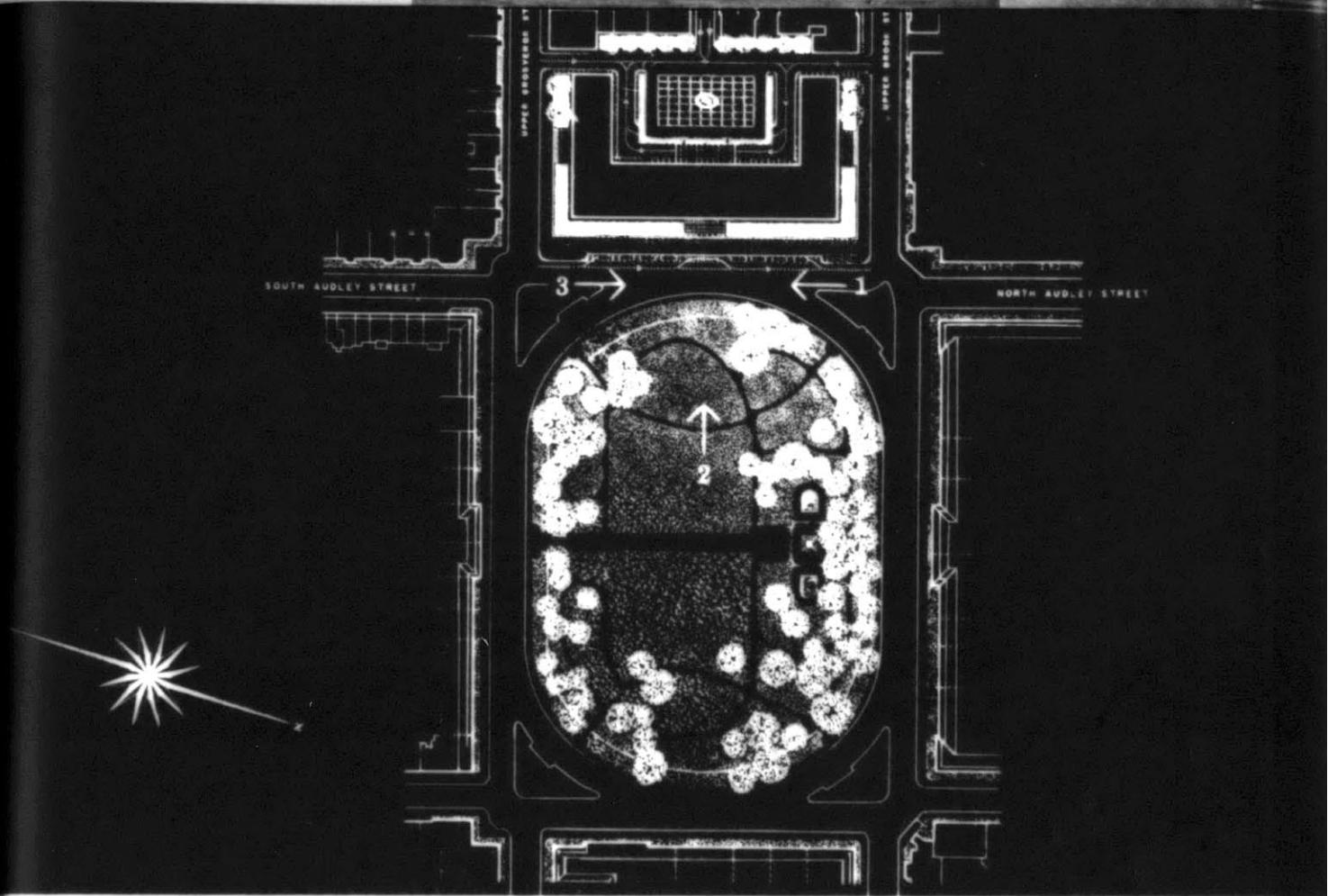
The new embassy will be a long rectangle

**Taj Mahal** was built by Shah Jahan in the sixteenth century in memory of his wife.

Let us look at a few recent examples. Rapson and van der Meulen's American embassy in Stockholm is spoken of as the best office building in Northern Europe. It satisfies all the needs of the American inhabitants, with American conveniences and American accessories. It is restrained in exterior, using the local stone facing and adopting a system which might be acceptable to Scandinavians. It probably takes note of the surroundings, but one wonders whether this attempt, however valid, does not fail because of this very compromise. The new Danish embassy in Washington, not yet built, is not too different from the aforementioned building, and one could almost exchange the buildings, were it not for the difference in size. Looking further afield one sees the solution of Stone in India. This building, supposedly inspired by the Taj Mahal, is a positive approach to the problem in that it goes much further than the Rapson building in identifying itself with the Indian surroundings. The problem is of course more evident in a country such as India, where extreme limitations of climate and tradition exist. It is interesting to note the claims of rival groups that the architectural contributions of Stone or those of Corbusier at Chandigarh are more Indian than the other. The one abstracts the old whilst the other forcibly looks toward the future with a virile yet poetic expression.

Rudolph in Jordan, Sert in Baghdad and Yamasaki in Japan have each solved the problem in similar ways, and Yamasaki says that, when faced with the problem, he could not find any true Japanese architecture today. He had to take those things which had merit to them from the old work, and he in his new design makes use, not of pagoda roofs, but of delicate wood, asbestos screens to simulate paper, the rise of the ground to keep moisture away and suncontrol means. Paul Rudolph uses the local stone of Tangier in new terms and his is no literal translation of the old into the new.

The Winning design in the competition for a new Embassy for the  
United States of America in London, England  
Architect Eero Saarinen

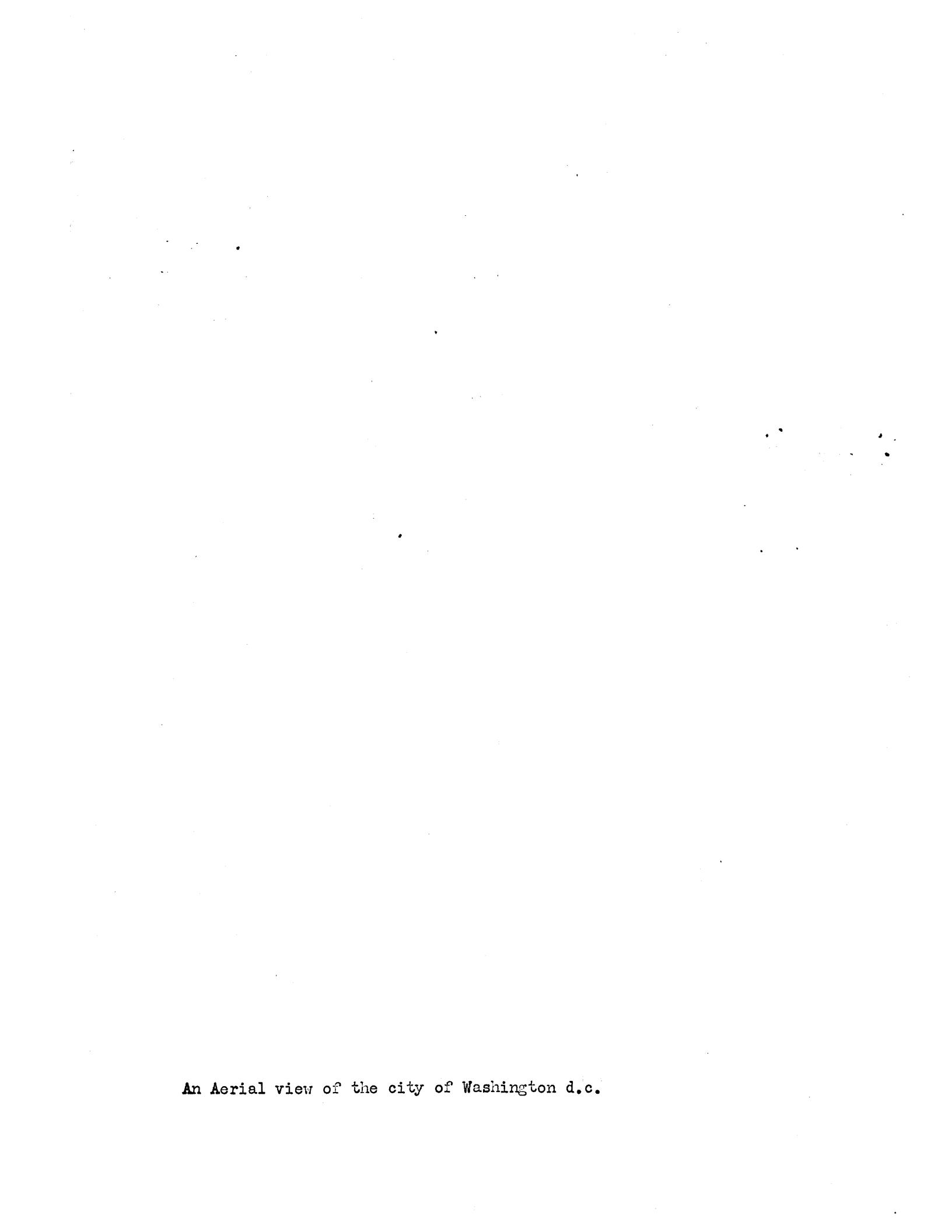


Belluschi speaks of regionalism saying: "but regionalism at its best cannot be measured or imposed, is not a school of thought but simply a recognition within its own sphere of what architecture is to human beings, a deep regard for their emotional demands, and this need not be forfeited even in the most practical demands of a project."

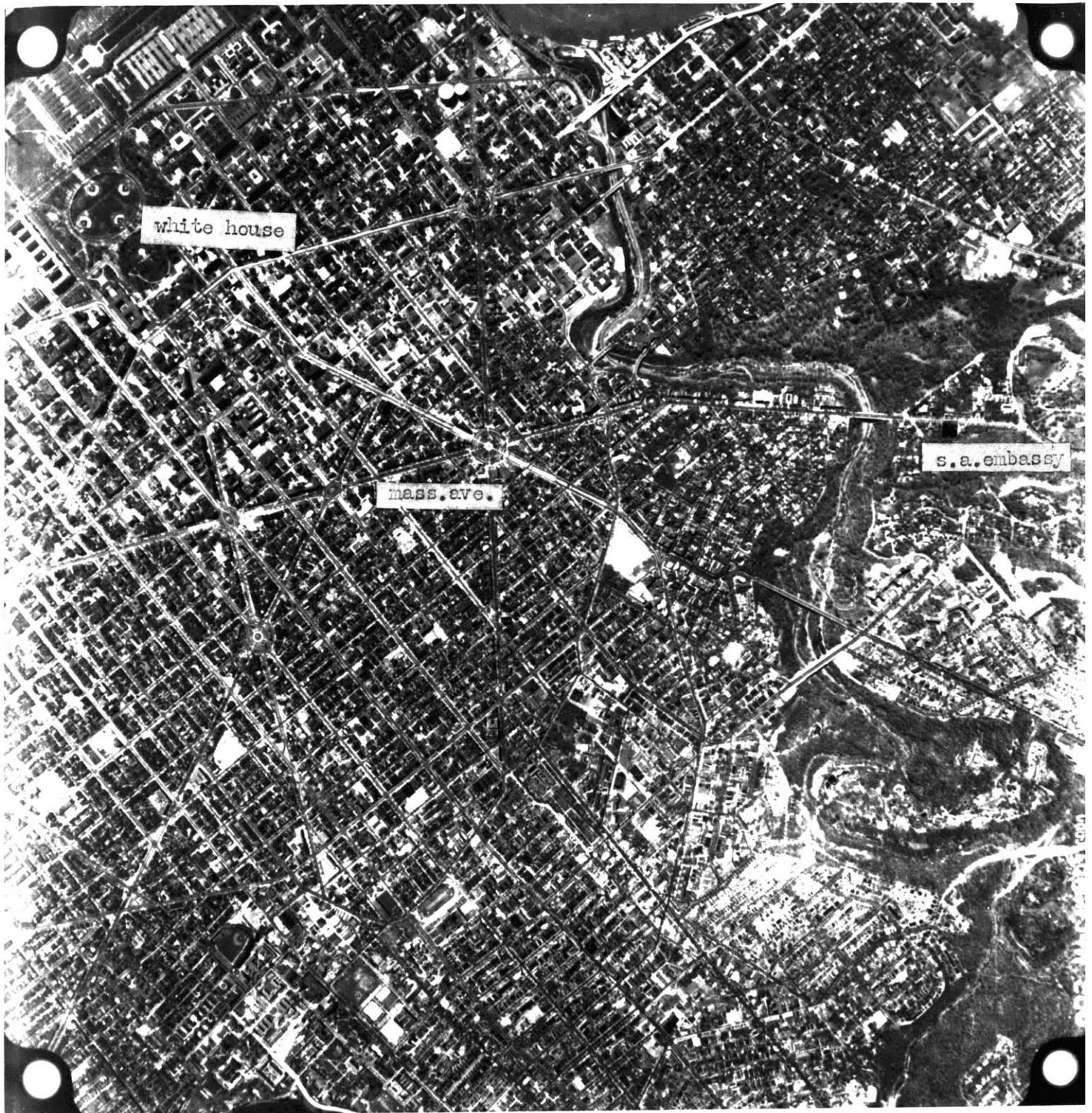
Regionalism has become a word used often when speaking of the relationship of new buildings to their old surroundings but the real architectural problem remains the way in which this is done. Sometimes the cues are more obvious than others, and sometimes they require searching until the essence is seen. Saarinen had not merely the relation of one building to an existing square as an immediate consideration, but the whole tradition of British architecture to consider when he did his London embassy for the United States. How the problem can be approached when the country in which it is to be built is America, will be discussed in a later chapter.

"The character of this magnificent city is basic - built and executed, at the very outset, from a definite plan. . . . There is dignity, distinction and beauty everywhere in Washington."

Washington Complete Guide



An Aerial view of the city of Washington d.c.



## #2 WASHINGTON

## (a) The nature of the City

For the purposes of this study, it will be necessary to take a quick look at the essential nature of this city, its climate and its architectural and social background. Washington, the site of which was selected by George Washington himself, underwent its first planning at the hands of a French engineer, L'Enfant, whose vision was one of French boulevards lined with trees all leading to the Capitol. Its boldness afforded a kind of carte blanche to the future designers of the many grandiose buildings which line these avenues today.

Unfortunately these plans were not carried through to the extent that L'Enfant would have cared, but he did leave a city with possibilities of grandeur and open immensity. This promise has never been achieved and arid sterility has taken the place of much of the boldness that previously seemed possible. Beneath the charm of its tree-lined streets, lies a city, in which the planning of the city as a whole fell before ideas of speculation and inept designing. Circumstances worsened until the McMillan Commission in 1901 bravely tried to restore its initial dignity and promise "by a sedulous devotion to symmetry, axes and a grandiose, if academic, classicism". If it did develop a fine system of parks, this plan nevertheless soon showed its weaknesses and the city fell back to a conflict between private and public interests.

Today the city consists of a central core of Federal buildings, in which the Mall exists in all its presumed splendour, surrounded in a haphazard way by commercial buildings, largely nondescript, which in turn fall away gracelessly into a gridiron web of streets. The magnificent avenues fall away to confused outskirts, the

The Embassies of smaller countries on Massachusetts Avenue, Washington D.C., grouped nearer the downtown area.



centre, "where staid Government employees contrive the less august half of their lives," is close to squalor and slum. Housing is a great lack, especially among the large Negro population, and the incongruity of splendid avenues running between squalid two-story houses, is too evident. Famed for its wide avenues and vistas, it is today choked with automobile traffic of the worst dimensions and the view of the monument at the end of the grand approach through the reflective twoshade colour of the vehicle in front, apparently satisfies many. Indeed Washington shows in many ways the dominance of institutions over men, a bureaucracy of the worst order.

It would be surprising to find the architecture of Washington of greater quality than that of any other aspect of the city, and unfortunately one is not surprised. Apart from the few well-sited and genuinely imposing structures, the great majority of buildings are lacking in human scale, grandiose with ostentatious exteriors. However, with all its drawbacks, Washington still has in its avenues and tree-covered areas, something which can be a good background to formal architecture, and the city awaits good designers to solve its problems.

#### (b) The Architectural Problem of Washington

In the design of a formal building such as an Embassy in Washington, one needs to recognise the environment, not only the immediate, but also the larger environment in which Washington exists. The Embassy in Washington has posed an architectural problem for many a year, but it has been one, which has been conveniently forgotten by the simple procedure of the various governments buying existing structures, usually residential, and converting them into embassies. This has been suitable particularly in the cases of smaller countries, and this is architecturally much the simpler solution as it

The Embassy of Japan in the United States of America on Massachusetts Avenue, Washington D.C.



glosses over any architectural considerations of regionalism by accepting an anonymous architecture. In this way areas of the city have grown into embassy areas, usually situated on the wide avenues, grouped together, largely in order to maintain the value of the neighbourhood. As such the Iran Embassy can exist in the house of the ex-ambassador of the U.S.A. to Britain and function to all intents and purposes.

The larger embassies needing more particular accommodation, soon were erecting new embassies, and on Massachusetts Avenue, the Japanese Embassy, designed in the 1930's by an American firm and the British designed by Lutyens, exist today. In the case of the British, the need for expansion has become an important one and the consequent "temporary" office accommodation sprawls rather ungracefully over the site. More recently the smaller embassies have felt the inconvenience of unsuitable spaces, and Venezuela has built probably the most recent Embassy on Massachusetts Avenue. It is not saying much for the standard of Embassy design in Washington that this is considered in diplomatic circles to be a remarkable building. Belgium is erecting a new embassy at present and a new Danish embassy is being designed at the moment.

It is one of the saving factors of the Washington environment, that it is fairly consistent and that blankets of trees help in maintaining this consistency. When an avenue like Massachusetts Avenue boasts a mosque in addition to its pseudo-Italian, British, South African and other architecture, one wonders whether, considering the problem in its widest sense, this freedom of design is advisable and whether a total environment can be achieved in this way. It seems more feasible that in a recognition of the environment, the climate, the culture, pace, traditions and materials of the United States, a more unified approach to embassy design in Washington can be obtained. However, when one wishes to

The Embassy of Venezuela in the United States of America on Massachusetts Avenue, Washington D.C.  
Note the poor handling of the emblem and flag over the entrance .



abstract out of the complex American environment, something which can be used to translate directly, one is at a loss to find any such typical American characteristic. Many thinkers have written and painted about the essential characteristics of the American milieu, but one doubts whether there is much available for direct translation.

It seems more likely that with a full recognition of the climate, the local siting, the new technology available, and the resultant effect as a symbol in the neighbourhood, a building can be designed, regional in the fullest sense of the word. In which way the essential characteristics of the native country can be maintained, will be discussed later after the essentials of the country concerned, the Union of South Africa, have been considered.

### (c) The Climate of Washington

#### Thermal analysis :

#### Average Monthly Temperatures :

Jan.	34°	Chilly
Feb.	36°	Chilly
Mar.	44°	Chilly
Apr.	54°	Cool
May	64°	Warm
June	73°	Warm
July	77°	Warm
Aug.	75°	Warm
Sept.	69°	Warm
Oct.	57°	Cool
Nov.	46°	Cool
Dec.	37°	Chilly

#### Design factors based upon thermal considerations:

High-branching trees are desirable, and luxuriant vegetation can act as a natural air conditioner. Unshaded paved areas near buildings should be avoided. Primarily avoid excessive radiation and take advantage of all natural breezes.

Four months of outdoor living can be utilised, making possible sleeping porches. Outdoor living can also be utilised in the COOL zone by glazed areas, as there is sufficient solar heat to provide for the heat requirements indoors during these periods.

Avoid construction that will create high temperature lag indoors, delaying night cooling.

Insulate both walls and roof to reduce heating and cooling degree days.

Doors and windows should be kept closed during day, and insect screens are necessary.

Wall design with floor to ceiling openings can be considered for summer comfort, and doubleglazed or storm windows will reduce heat loss.

Exhaust fans are desirable because of night calmness to remove accumulation of daytime heat in the warm periods but all-year conditioning control seems essential, especially if large numbers of people are to occupy fairly small spaces.

#### SOLAR AND WIND ANALYSIS :

The percentage of hours of sunshine varies from 46% to a maximum of 63% possible, with an average of 57% for the year. The arc of the sun varies from 30° south of east to 30° south of west in December to from 30° north of east to 30° north of west in June.

Wind varies from the strongest from the north-east at 53 mph with an average of 7.0 mph for the year. In summer prevailing wind is from the south and in winter north-west and west winds predominate, with October-April the windiest part of the year.

#### Design factors based upon solar and wind considerations :

Sun is major factor in orientation and planning should be for maximum shade in summer and maximum exposure in winter. Exterior

winter solar nooks should be on the south side. Protection against the strong north-west and west winds is desirable, and porches with north-south ventilation are desirable.

Rooms should be generally shaded in summer and open to the sun in winter, and shallow rooms are preferable to deep rooms. East and west walls should be protected from sun, full length screens with large openings for ventilation and adjustable blinds and awnings are desirable. Minimum number and size of windows should be on west, north-west and sides for winter protection.

#### PRECIPITATION ANALYSIS :

Rainfall varies from a minimum of 2.43 in November to a maximum of 4.45 in August and an average of 41.18 inches for the year. The average snowfall is 21.66 inches for a year with the maximum in February.

Design factors based upon precipitation considerations:

It is essential that the site be well-drained, with paved terraces at all entrances. Roof material should be able to resist long periods of dampness and quick temperature changes, but the snow load is not likely to be heavy. Roof evaporation is a serious winter heat loss unless it is adequately insulated.

"I alighted in a country of haunting beauty and found myself among a people whose kindness and warmth of heart are not anywhere exceeded. As I travelled about South Africa, I learnt a page of history new to me, and one, I might add, which is not too well known in Europe or America ..... The newcomer quickly discovers the complexity of the country's problems, and the longer he stays the less likely is he to be ready with solutions. Indeed, he may leave the Union, as I did, with an admiration for the people he met .....

It may seem to some, who know how swiftly the illusion of security can vanish in a world of revolutionary change, that the Union is a land basking in almost incredible good fortune. It is a land unravaged by war and uncomplicated by economic doubts and depressions ..... The stranger from less sunny regions may ask himself at times whether all South Africans are fully conscious of their blessings. Their faith in the future and their belief in the continuing prosperity of their homeland is a stimulating optimism in these days of doubt and hesitancy."

H. V. Morton

## #3 THE UNION OF SOUTH AFRICA

## (a) History

In the fifteenth century, small sailing vessels ranging in size from 50 to 200 tons and bearing the flag of the King of Portugal, were penetrating southward along the west coast of Africa. Inland the wild untamed continent of jungle and desert, lay smouldering, moving its populations of black and dark brown ever southward. The race was southward, the European to find the magic way to the East, the black man to escape drought, internecine destruction and to find new pasture for his cattle.

In 1488 Bartholomew Diaz reached the mighty Cape and paved the way for Vasco da Gama to follow and pass him into the Indian Ocean. The country was now known but legend maintained that it was a land of forbidding mountains and barren lands. Consequently no one thought of settling until more than 150 years later the Dutch, discovering the place to be an excellent one for growing fresh vegetables for their scurvy-ridden traders, sent an experienced officer, Jan van Riebeeck, who in 1652 became the first permanent settler. His party of 100 men settled and from that day on settlers poured in, Dutch, German, Danes, Swedes and many others. In 1688 a group escaping the religious tortures of Louis XIV settled, the originators of the Huguenot tradition.

The original inhabitants of the sub-continent, the Bushmen and Hottentots, slowly died out, smallpox and natural causes taking heavy toll of them, leaving the country open to the many whites who slowly penetrated toward the north-east. The Bantu, the tall, well-built black men, fond of war and cattle, but content to leave the agriculture in the hands of their women, were moving westward and the inevitable clash was soon to occur.

The wars in Europe, due to a man by the name of Napoleon, soon had

Johannesburg, the largest city in the Union of South Africa



*Always and everywhere Johannesburg is a city of contrasts . . . ox-wagons and high-powered limousines . . . single-storey native stores and lofty twelve-storey blocks . . . Africans in tribal dress and society attired in the height of Paris fashion . . . a bustling, bustling city that has no time to dwell on its hectic past but is for ever moving forward in step with 20th Century progress.*

The Kraal, the native habitat, and its inhabitants - a distinct contrast to the city ,the technocracy and its inmates.



*Horseshoe-shaped kraals, centred around a cattle enclosure, are common in Zululand. Due to the shortage of timber, the beehive hut is slowly giving way to other types.*

*The bride and her attendants do their special dance: part of the elaborate ritual still followed at a tribal wedding in the more remote districts of Zululand.*



their repercussions in South Africa, as England took first temporary and then in 1806 permanent possession of the country.

Soon friction arose between the Downing Street-controlled officials and the practical farmers, all of which eventually gave rise to the Great Trek of the 1830's.

In the meanwhile the Bantu, proceeding on traditions of ritual and intertribal war, were exterminating, fleeing and scattering themselves all over the East. Chaka, the chief of the Zulu, equipped his impis with shorthanded assegais, and proceeded to wipe out over a million black men. Dingaan succeeded him and his reign coincided with the advent of the white men. Conflicts arose between the Trekkers which culminated in the Battle of Blood River which crushed the Zulu forces. The farmers established the independent republics of Natal, the Orange Free State and Transvaal, which the British, occupying the Cape Colony, at first agreed to leave alone.

Things might have proceeded peaceably enough, if a group of farm children in 1867 had not picked up some stones near the Vaal River which proved to be diamonds. Within a few months, thousands streamed in from all over the world to make their fortunes, and the tremendous conflict arose as to the legal possession of the diamond fields. The Cape Colony eventually incorporated the diamond fields, but the whole aspect of South African life now changed. Foreigners reinforced the non-Dutch element and the detribalisation of the natives had begun. This process of black males streaming to the diamond fields for quick money, returning to the kraals with more spending power, and then remaining in the towns, gave rise to South Africa's blackest problems.

As if this were not enough, in 1870 alluvial gold was discovered in the Transvaal, and the British moved in once more, culminating in the Anglo-Boer war, won by the Transvaal, in 1881. Three

years later richer deposits were found near Barberton, but in 1886 the discoveries on the Witwatersrand caused a greater influx of foreigners than ever before. Johannesburg was the largest city in the country within five years of its founding and today, seventy years later, has over a million people. The Boers, the original inhabitants of the Transvaal, placed their trust in Paul Kruger, president at the time, but his wit was challenged by an Englishman, Cecil John Rhodes, a millionaire through diamonds before he was thirty. His life ideal was a unified Southern Africa to the Zambesi under the British flag. He amalgamated the diamond mines into the De Beers corporation, started doing the same to the gold mines, and demanded equal rights for the Uitlanders in the Transvaal. Kruger could of course not allow this or he would be swamped, the Jamieson Raid followed, and the gathering hostility culminated in war between the South African Republic and Orange Free State versus the British Empire. The war lasted three years. In 1902 the Boers surrendered, but much bitterness however remained. Fortunately the British showed more statesmanship than before, and after a National Convention in 1908, on May 31st 1910, the Union of South Africa was born.

World War I saw the Union a participant and in 1918 the Union was recognised as a nation in her own right. World War II saw General Smuts leading a full effort with the Allied troops and after the war, in 1948, the Nationalist party won the election of that year, and has been in power since.

#### (b) Today

Today the Union of South Africa exists as an independent country in the British Commonwealth, a country of greatly increasing industrial potential and one unfortunately ridden with problems, internal yet reflecting in many ways the troubles facing a larger world.

The peoples of the Union of South Africa - an accumulation of contrasts



Many white South African women work in factories.



This Malay woman, veiled to indicate her religion, is a resident of Cape Town.



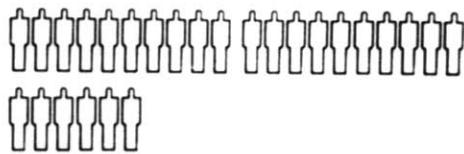
A coloured fisherman from Cape Town where most of the fishing is done by Coloureds.



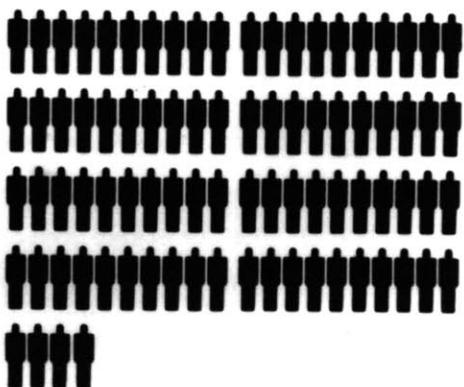
A detribalised Native resident of Johannesburg.

## The Peoples of the Union of South Africa

### WHITE



### NATIVE



### COLOURED



### ASIATIC



EACH SYMBOL REPRESENTS 100,000 PERSONS

Selling cars in Johannesburg is his profession.



This young Pondo girl has her home in the Native territory of the Transkei.



To educate the youth of his own race in Natal is the profession of this Indian.



An Indian fruit seller from Durban, Natal.



A land of astounding natural beauty and superb climate, South Africa exhibits its greatest characteristics in this aspect as well, namely that of contrast. This is a country "without a twilight, where fruit ripens in the valleys in the shade of snow-capped mountains, where there are rivers often without water and hailstones after the temperature is highest." It has desert and greenland next to each other, with fertility and barrenness.

Its population is composed of contrasting groups, a white group of at least eight religions and two official languages, almost three million of these; the Bantu, with almost a dozen languages and different tribal customs, almost nine million in number; Asiatics, about 400,000, and people of mixed blood, Coloured, of about a million.

These population groups exemplify the elements of contrast binding their whole life. The white, generally educated to the accepted degree of Western civilisation, control most of the finance and pay the taxes. The non-white, almost entirely uncivilised to the accepted standards, still mainly exist in a state of dire poverty. Johannesburg, a city of 1,000,000 people, in the typical anonymous form of the fastgrown technological complex, glitters within a few miles of aboriginal kraal settlements not far from the sordidity of Moroka and the other shanty towns.

This short background will have to suffice and has its value in leading to a deeper understanding of the architectural problems of the country and the essential elements which could be abstracted into a building representing it.

#### (c) Architecture

An understanding of the country is easily carried on to an understanding of the architecture of that country. South Africa can fortunately boast a rich heritage of both Bantu architecture and the architecture of the white peoples, and it is the sincere effort

The house and pigeon house at Meerlust, a farm in the Cape Province  
of South Africa  
Note the way in which the plastic possibilities of the white wall  
and black opening are used to the greatest effect



[Photo : Arthur Elliott]

MEERLUST

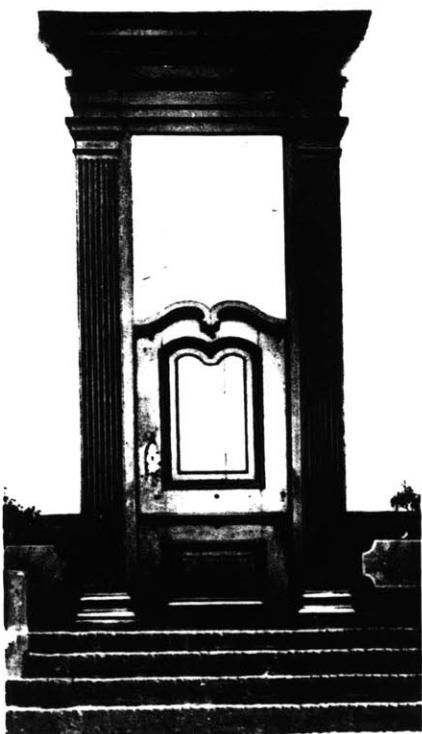


[Photo : Arthur Elliott]

MEERLUST PIGEON HOUSE

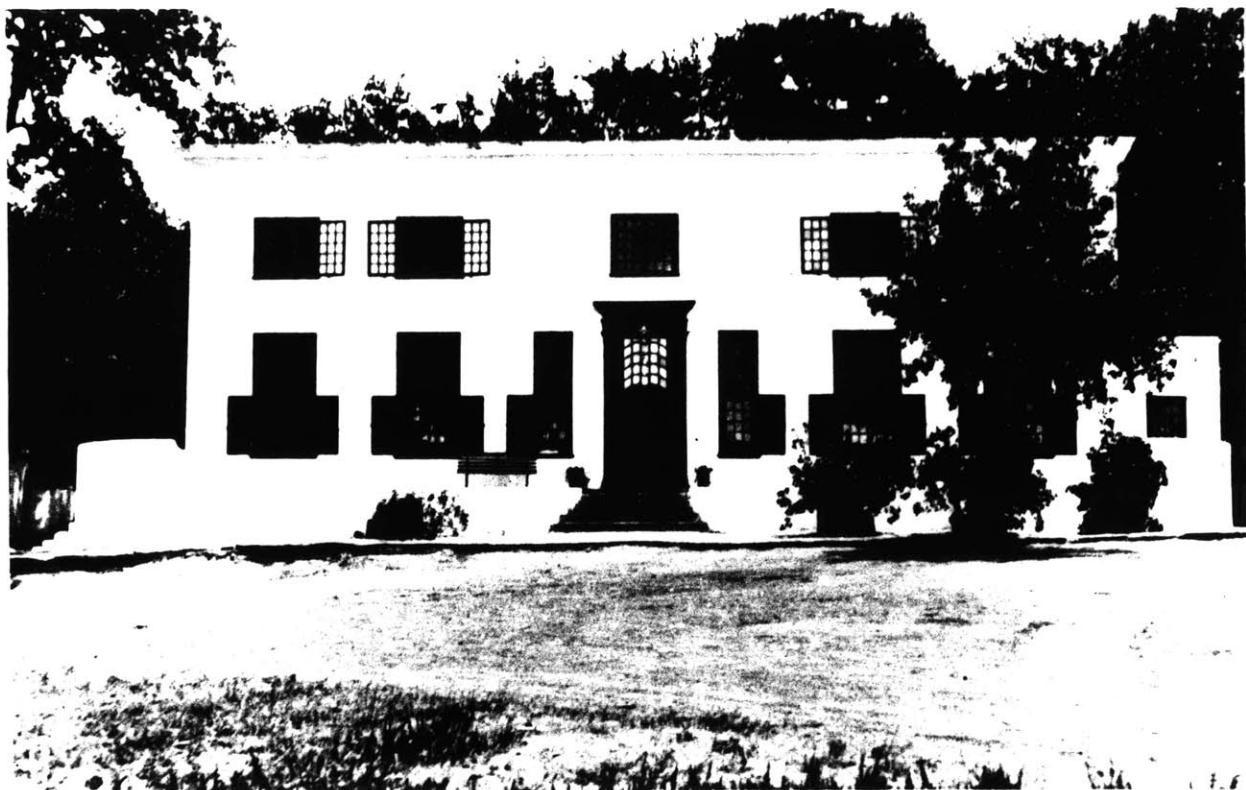
The house at Vredenhof in Paarl in the Cape Province of South Africa

The pattern of black and white and contrast between blank surface and small window pane form a unity not unlike the architecture of the early 20 th century



*Photo: Arthur Elliott]*

THE ENTRANCE DOOR



*Photo: N. Hanson*

THE FRONT  
VREDENHOF, PAARL

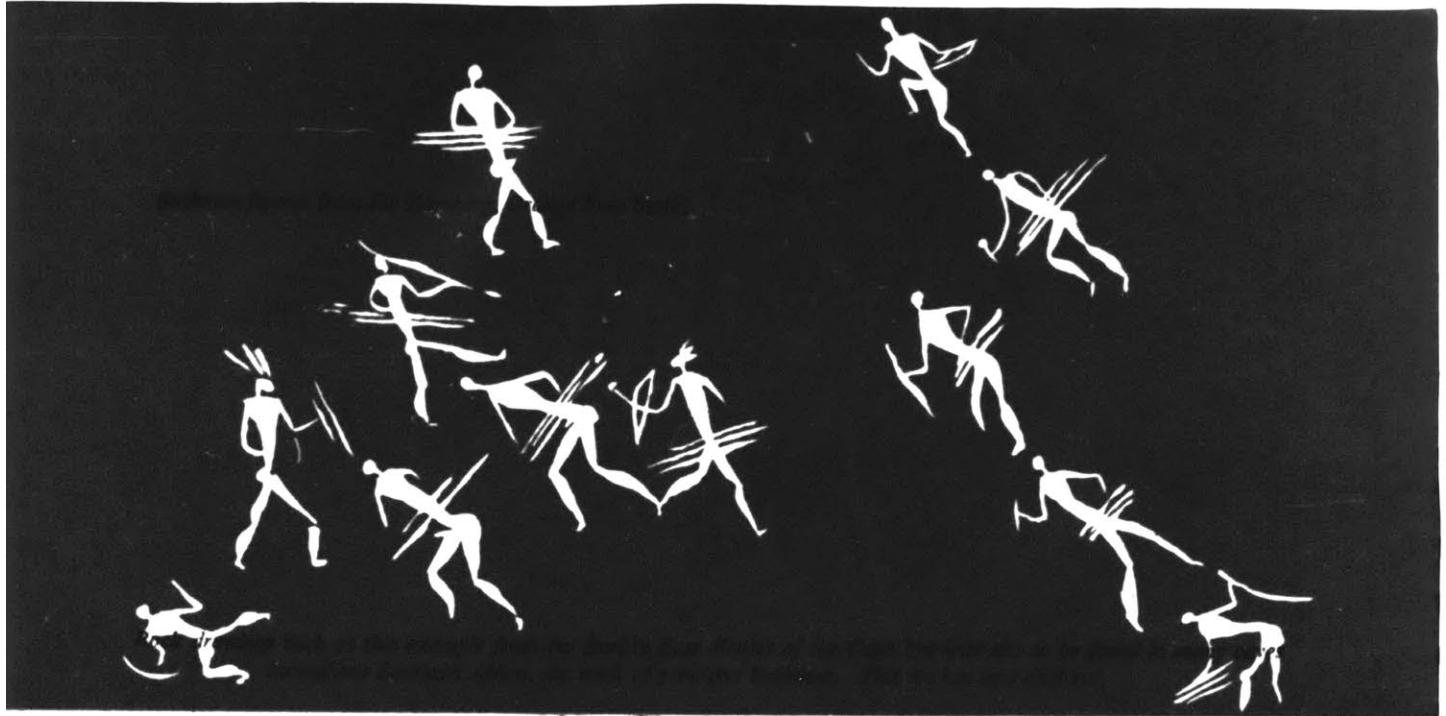
of many architects in South Africa to synthesise their work today with the traditions available from these sources.

When the Dutch settlers came from their native Holland, they brought with them a tradition of fine building, and a fine sensitivity to their new environment. These eighteenth century builders came to an environment around the Western Province near Cape Town, an area with a fine Mediterranean climate. This area is characterised by sunny days with blue skies, green vines, sharp shadows, and fine vistas. Realising instinctively that any applied colour that they might use would be in striking disharmony with the environment, these builders "thus, without really knowing what they were doing, built up a perfect post-impressionist picture of black-and-white gabled houses, with overhanging eaves, standing amid the green vineyard and fruit trees. They left their descendants in the Cape a heritage of beauty and shade."

Abstracting the elements of contrast outlined earlier as being a sharp factor in South African life, they employed the white wall and black roof, the dark glass and light glazing bead, the deep shadow, the rectangular as well as the mould. They built up a true extraction of their environment with "the texture of the plastered walls, thickly covered with layer after layer of whitewash, the rich weather-worn woodwork in the fine entrance doors and great shuttered windows, the dark velvety thatch, the attractive gables and the wonderful purple shadows on the broad wall surfaces cast by the brilliant sunshine - all this seen against a vivid and intense blue sky, with usually a background of mountain and forest, creates a picture essentially South African, which, once seen, is rarely forgotten."

In their town houses too they exemplified the dignity and simplicity of their life whilst maintaining the same fine sense of proportion and shape. It is interesting to note at this point that the early

The oldest aboriginal art forms in the Union of South Africa, the  
paintings of the Bushman people in caves and on rocks



settlers in the United States were Dutch as well, and their early building in the States occurs at roughly the same time.

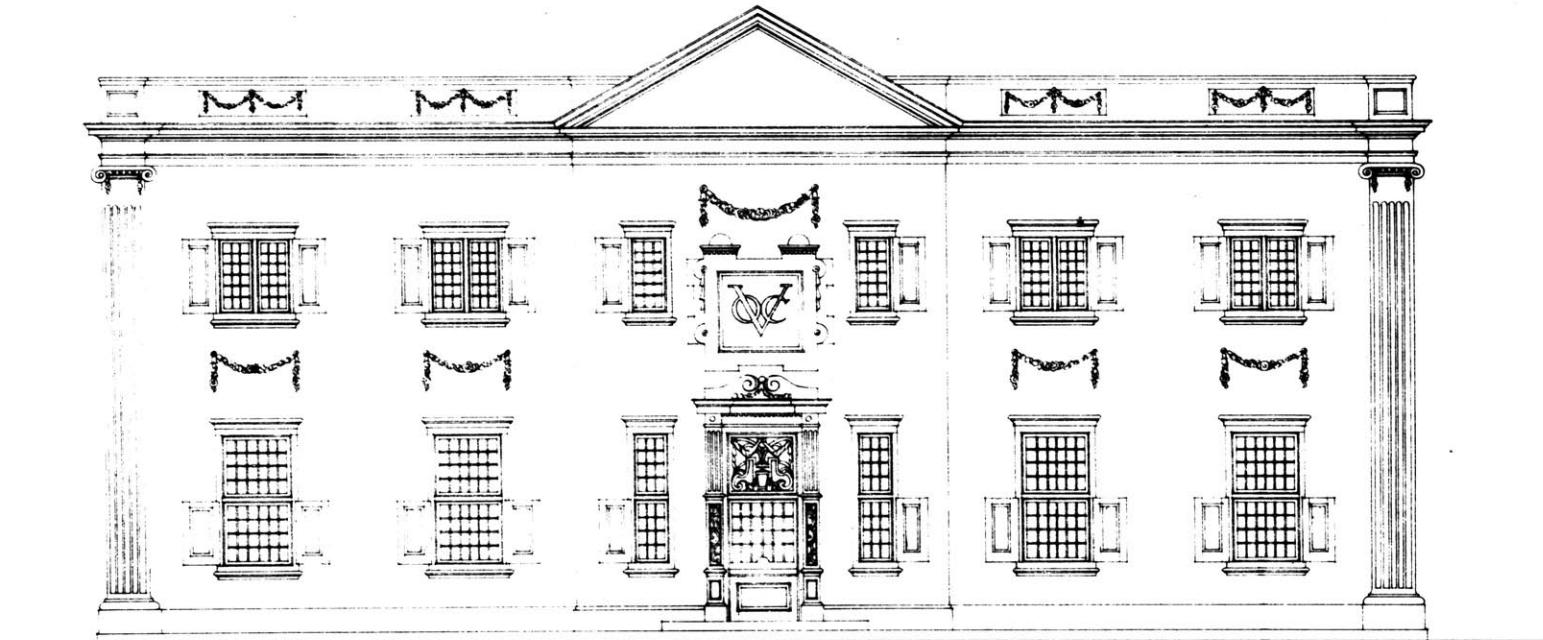
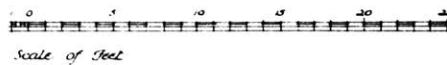
The Bantu on the other hand were too busy at these times, with warfare and nomadic life, to settle and build anything resembling a permanent community and architecture. It was only after the contact with the white men, and the consequent bloodshed, that tribes settled and evolved some habitat which was permanent. In his fine capacity for decoration, the African was well equipped to synthesise sculpture and painting into his simple buildings. His land was not the green vine, the blue mountain, but the brown veld, the rolling hill and the arid land. Using the elements from this earth, the mud, reed and pigment, he built a simple structure to suit his simple life. It contained the huts and the wall, each articulated and often decorated. The Ndebele tribe in the northern Transvaal have achieved great fame through the fantastic ability of their women to apply colour and form to their building surfaces. This inherent ability to translate forms and symbols seen in the technical environment existing around them, is a remarkable feature of the Ndebele painting.

This architecture is far from the sophisticated work of the Cape Dutch. However, it is an essential fact in the South African architecture and any attempt to reveal a true expression in terms of today must take note of this. It is the hope of everyone that not only this synthesis in architecture can be achieved, but also a greater mutual agreement which could ensure a fine life in South Africa for all who live there. It is certainly far from the political to imagine a taking of the best from each group and to attempt an assimilation into an art form essentially South African.

The Government House in Cape Town in South Africa with the rich decoration of this official building and dignity of its simple elements

## GOVERNMENT HOUSE CAPE TOWN

DETAIL OF FAÇADE (1798)



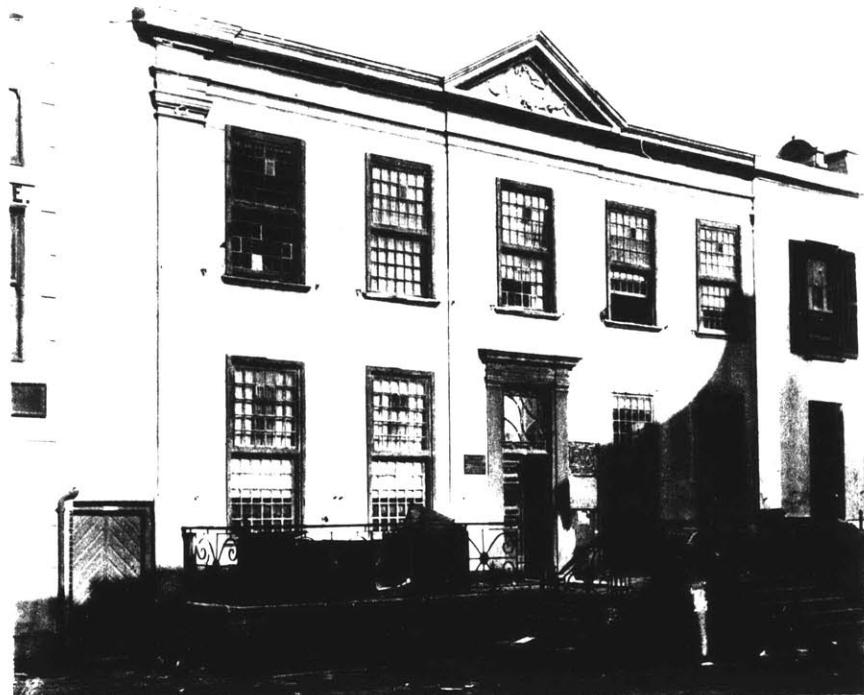
ELEVATION

Reconstructed from the  
Sketch of Hermann Schutte 1798  
by D H Schutte and  
J Kinder Bell.

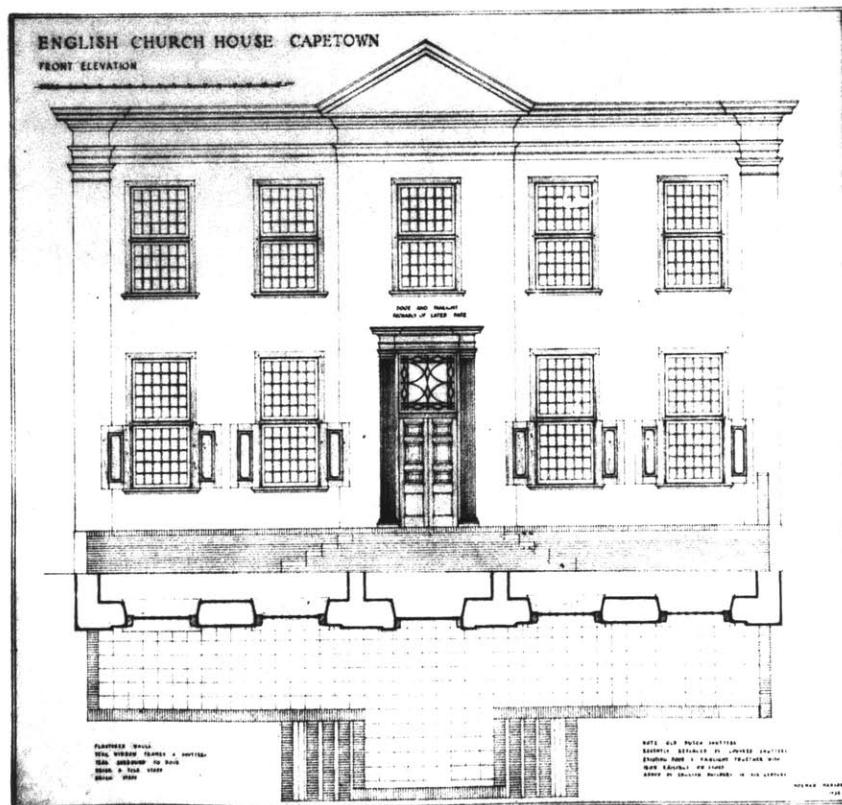
GOVERNMENT HOUSE, CAPE TOWN. DETAIL OF FAÇADE (1798)

A town house in Cape Town in South Africa built during the XVIII th  
Century

The well-proportioned elevation has the house behind and sheltered  
from the street



ENGLISH CHURCH HOUSE, CAPE TOWN



ENGLISH CHURCH HOUSE, CAPE TOWN

The plan of a typical town house in Cape Town in South Africa  
The enclosed court at the rear of the house off the dining  
room is typical of these houses

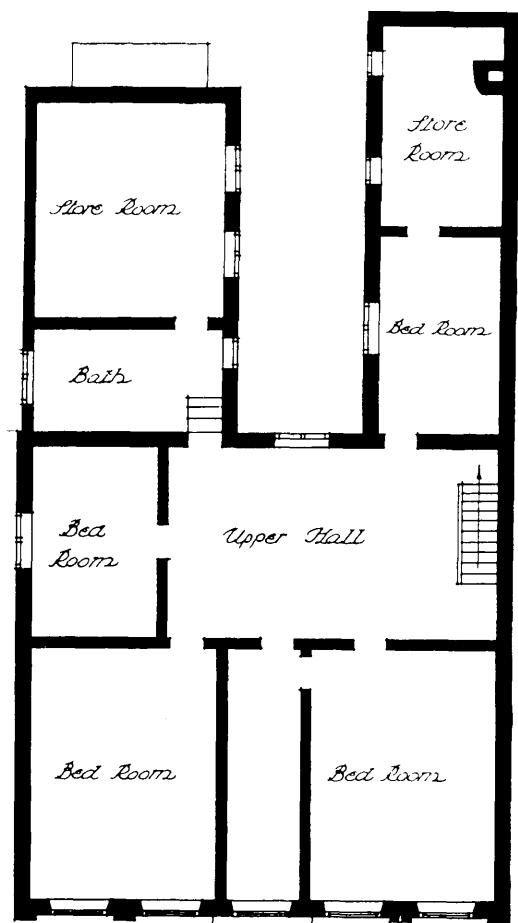
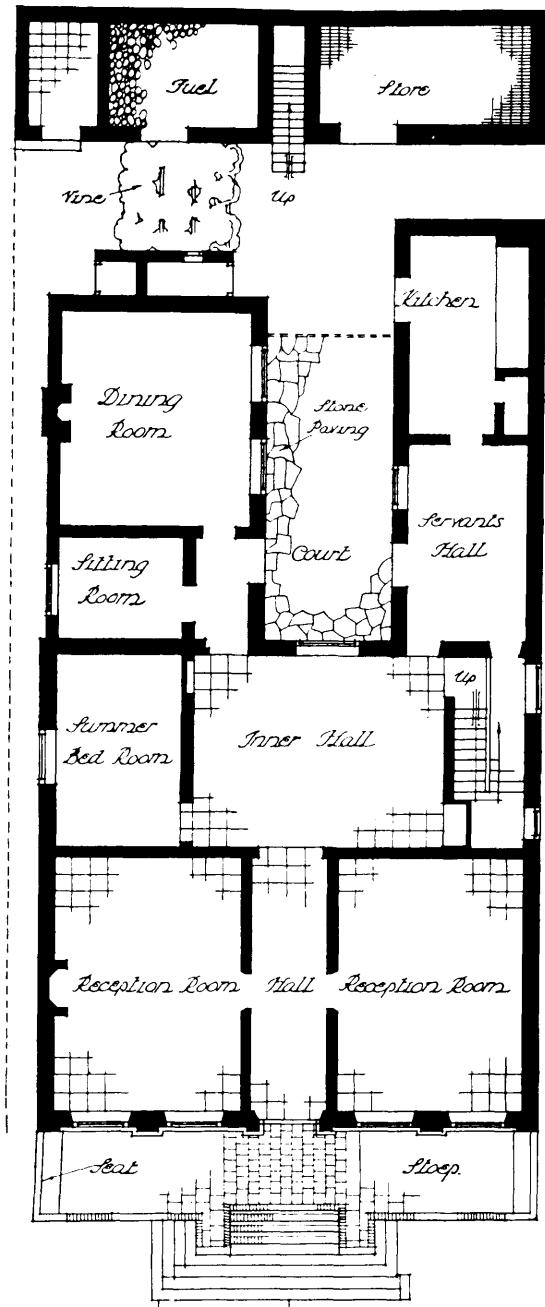
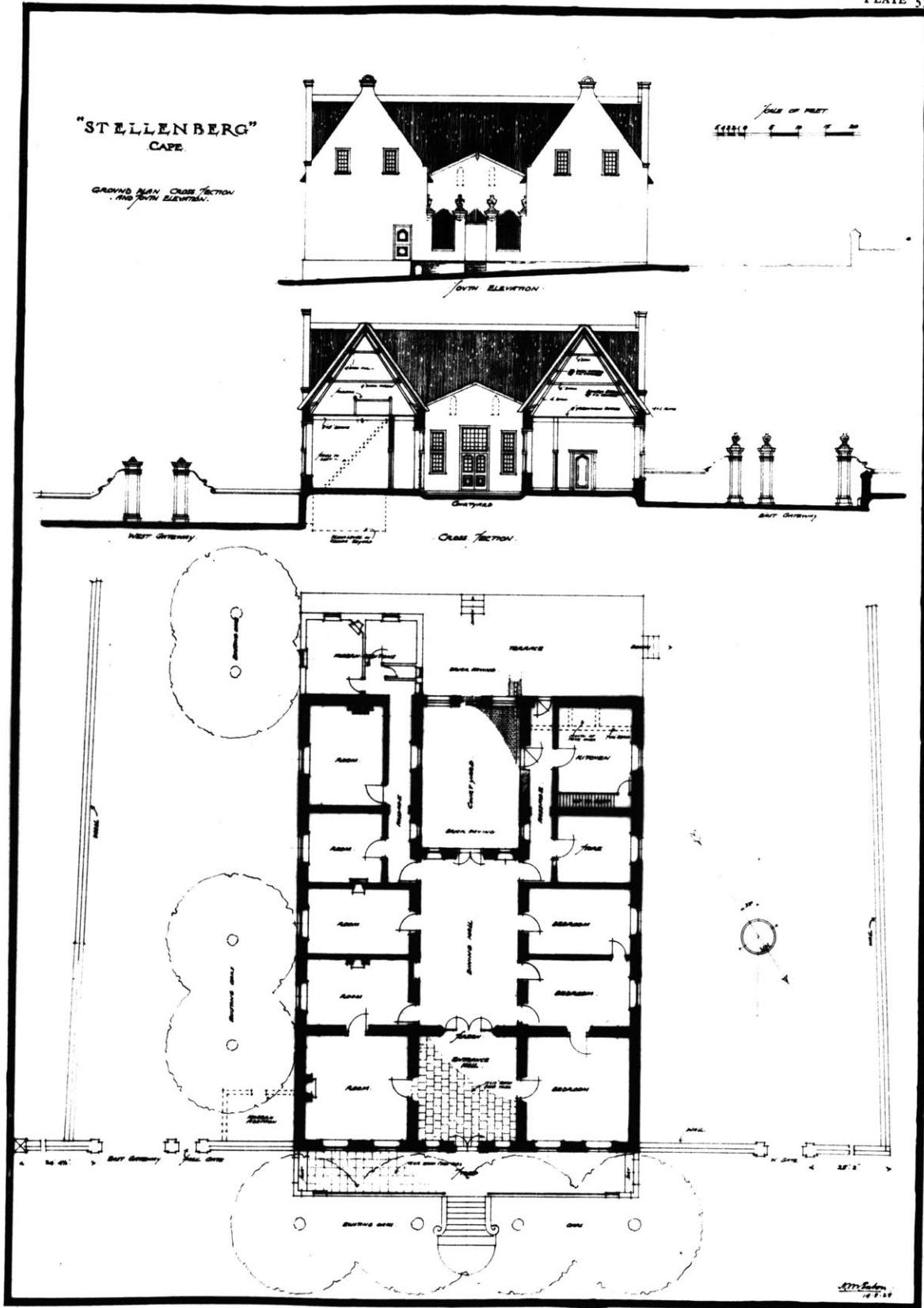


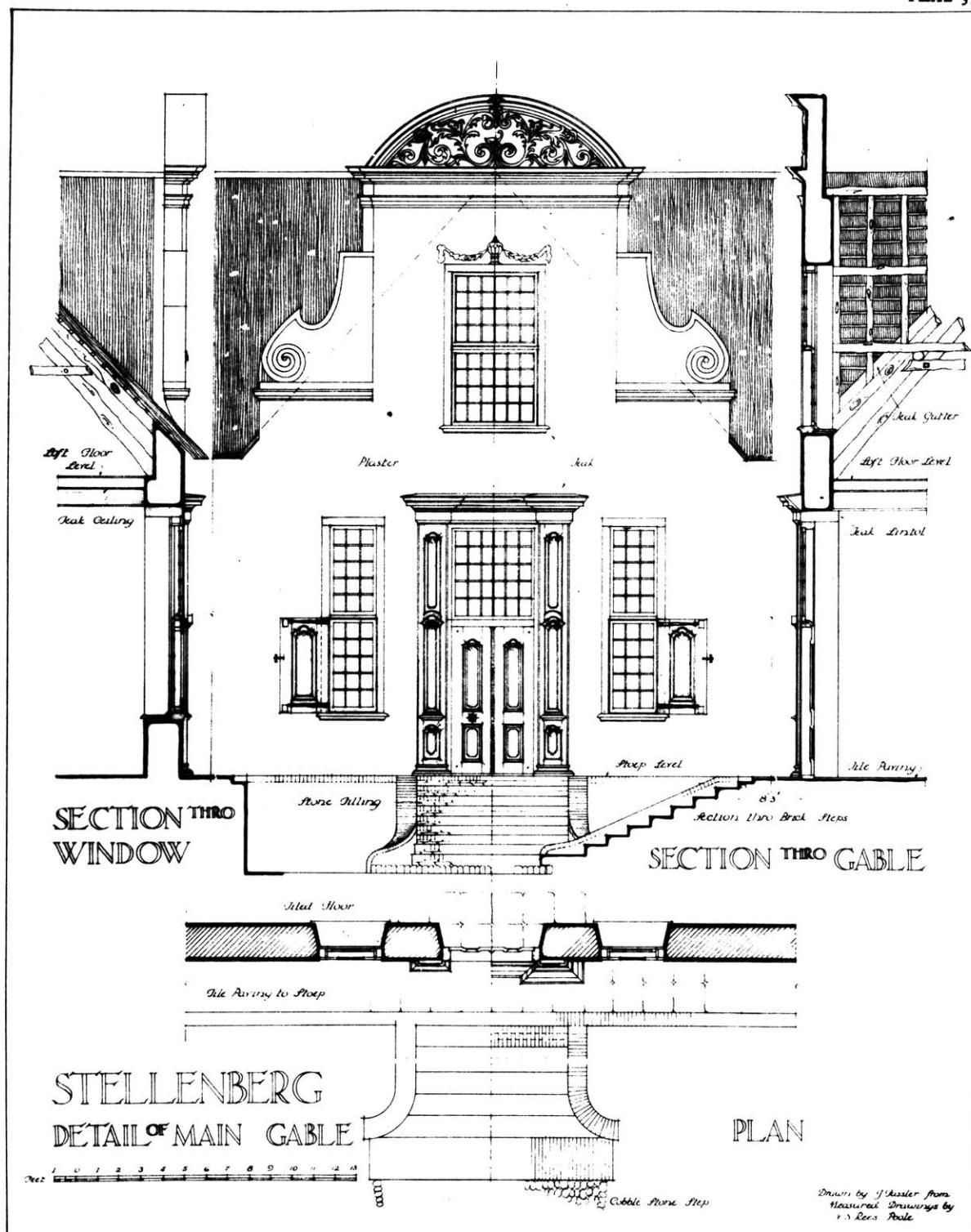
FIG. 6. THE PLAN OF A TYPICAL TOWN HOUSE

The farm Stellenberg in the Cape Province in South Africa  
The symmetrical plan encloses a courtyard paved for the  
outdoor living. The gables and dark thatch roof are the  
enclosing elements.



STELLENBERG. PLAN

The main gable at Stellenberg and the detailed section through  
the courtyard  
The elegance of the main entry is emphasised by the ornate gable  
and attic window



STELLENBERG. ELEVATION DETAILS

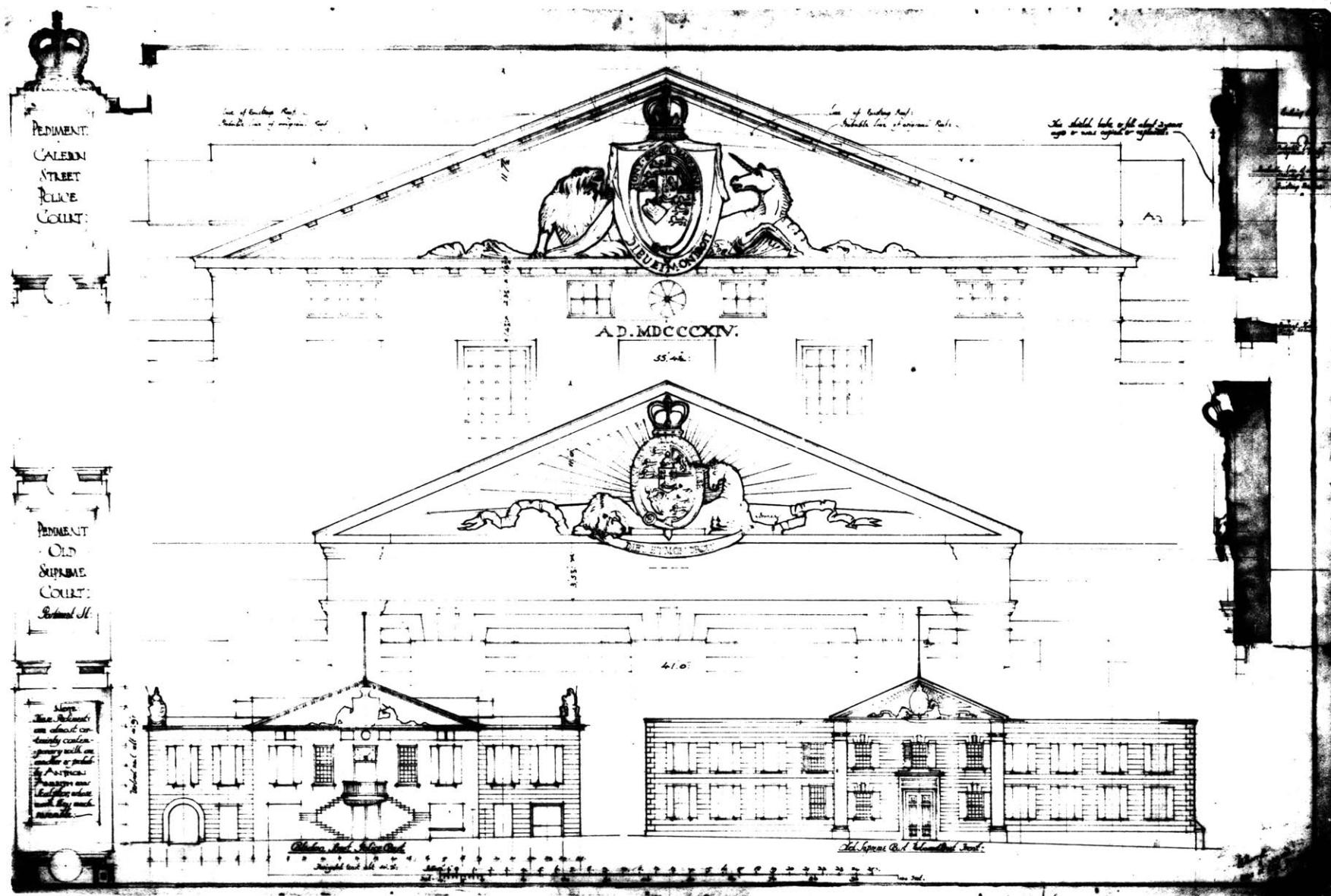
The interior of the church at Tulbagh in the Cape Province of South Africa

The same elements of contrast between light and shade, the extreme simplicity and fewness of shapes make for a unified and dignified composition



TULBAGH CHURCH. INTERIOR

The pediments to the Old Supreme Court and Caledon Street Police  
Court in Cape Town, South Africa  
The use of the gable to emphasise the main entrance to a building  
with the emblem placed above relating to the official nature of the  
building



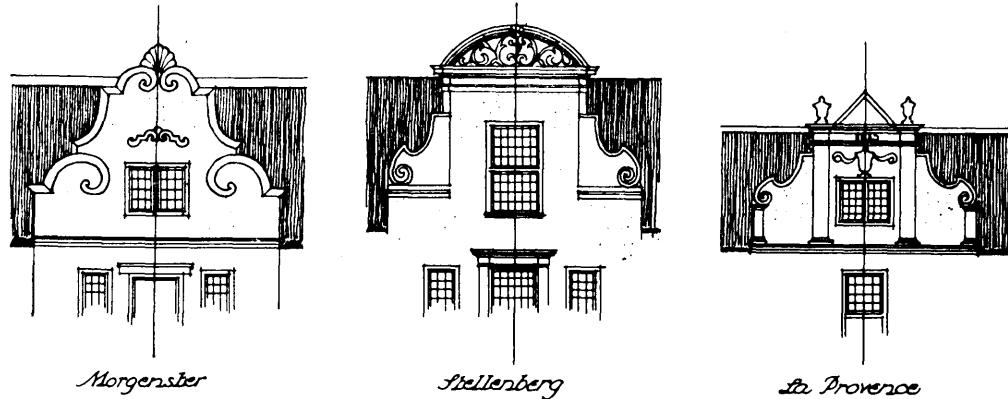
PEDIMENTS TO OLD SUPREME COURT AND CALEDON STREET POLICE COURT

Typical gables to the Cape Dutch houses on the farms in the Cape Province in South Africa  
They vary from the Baroque curvilinear to the austere simple

Dutch love of nature and instinct for beauty brought about the planting of beautiful flower gardens, so frequently referred to in the journals and letters of passing travellers.

There is an indefinable charm about these delightful old houses. The texture of the plastered walls, thickly covered

*Characteristic Front Gables*



*Side Gables*

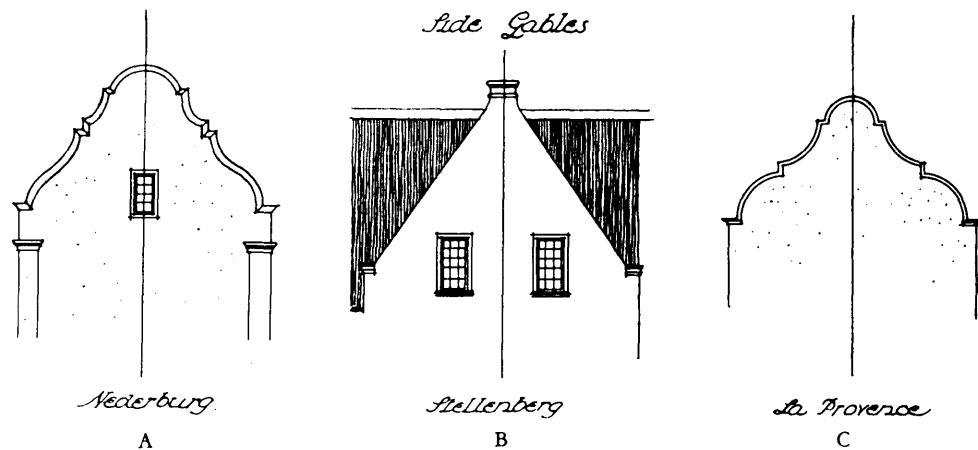


FIG. 18. TYPICAL GABLES

with layer after layer of whitewash, the rich weather-worn woodwork in the fine entrance doors and great shuttered windows, the dark velvety thatch, the attractive gables and the wonderful purple shadows on the broad wall surfaces cast by the brilliant sunshine—all this seen against a vivid and intense blue sky, with, usually, a background of mountain and forest, creates a picture essentially South African which, once seen, is rarely forgotten.

Typical paving materials used in the houses of the Cape Dutch period

will permit of the baking of twenty thousand bricks or a total of one hundred and twenty thousand in all. Although the work is done by slave labour, bricks are not cheap—10 Rdrs per thousand; this is mainly due to the scarcity of wood and its expensiveness."

This account, probably written about 1732, shows that brickmaking was well established and had become an important industry at the Cape at that time.

"The Company still owned potteries and brickworks in 1795, but in 1800 there was no one in town capable of burning bricks or lime."

The bricks normally used were about  $9'' \times 4\frac{1}{2}'' \times 2''$  laid in mud mortar, the external and internal walls being usually 18" to 20" in thickness, and to strengthen the angles long wrot iron ties with large X-shaped anchors were built into the external walls, the ends of these anchors being concealed by the plaster.

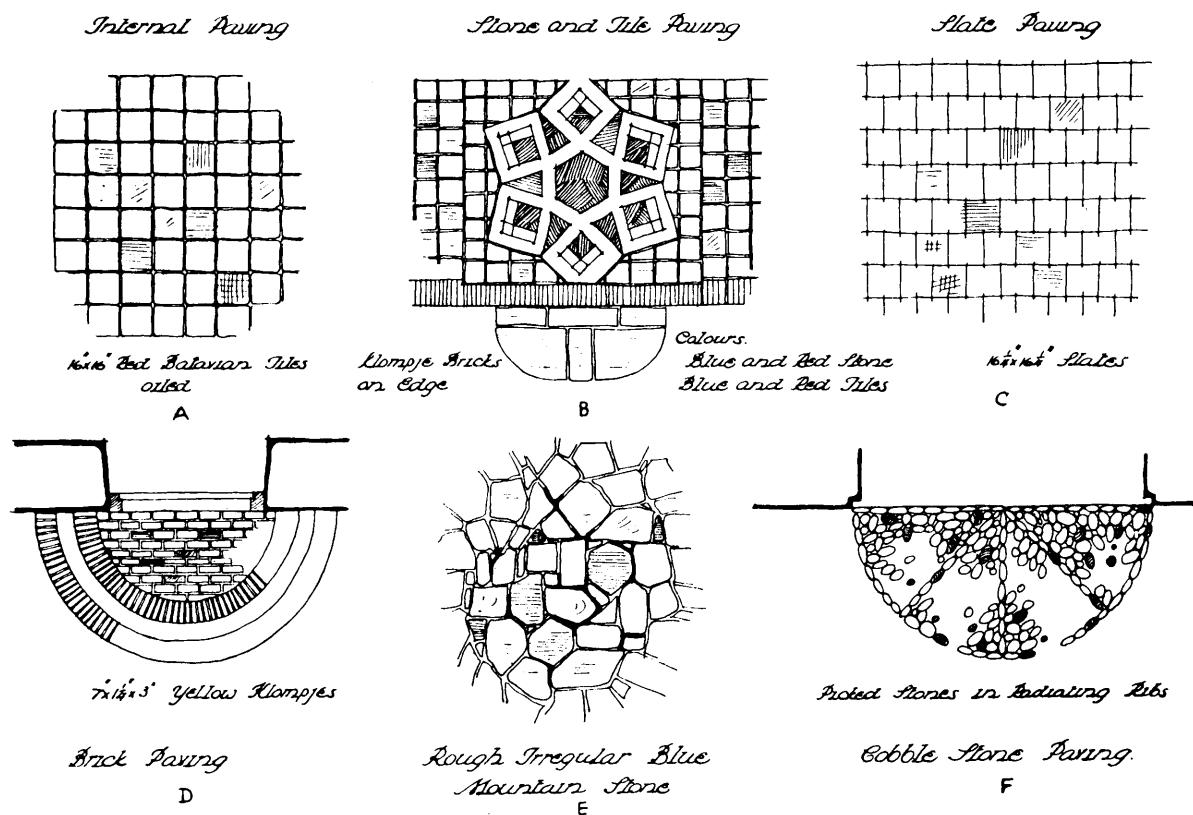


FIG. 23. TYPICAL PAVINGS

"For face work, steps, pavings, fountains, etc., small bricks called 'klompejs,' measuring about  $7'' \times 3'' \times 1\frac{1}{2}''$ , were imported from Holland. Well made and burnt, they were of great decorative value, weathering to a rich golden yellow. The most notable example of their use is at the Castle, where they are used in the entrance in conjunction with imported blue stone and also in the upper portion of the walls and the Bell Turret."

The derivation of the term "klompej" as applied to these bricks is somewhat obscure. Literally it signifies "a little lump" and appears to be a local term of comparatively recent origin. They are called "geele klinkers" (yellow hard bricks) in the record of goods received from Holland and were imported in large quantities, a shipment of 50,000 being recorded.

Bricks about 10" long, called "tiggelsteentjes" (tiles), and "graauwe moppen" (grey bricks), large bricks about 24" long and 6" thick, were also imported, but for what purposes the latter were used it is difficult to know, the only reference to them so far discovered is in the description of the method of constructing the flat roofs: here they were used as a foundation for the lime concrete.

Many of the houses standing to this day were built of sun-dried bricks and some of the walls consist of these bricks rammed hard and plastered over in the manner of *pisé de terre* work. Burchell,<sup>1</sup> who arrived at the Cape in 1810, says: "I have seen houses of this kind which have stood a century and which were so burnt by the sun that they looked like tile."

<sup>1</sup> See references.

"On Massachusetts Avenue, more than on any other street in America, is found the large town house designed for entertaining in the grand manner."

Mario Bucovich

## #4 THE SOUTH AFRICAN EMBASSY IN WASHINGTON

## (a) The South African Embassy

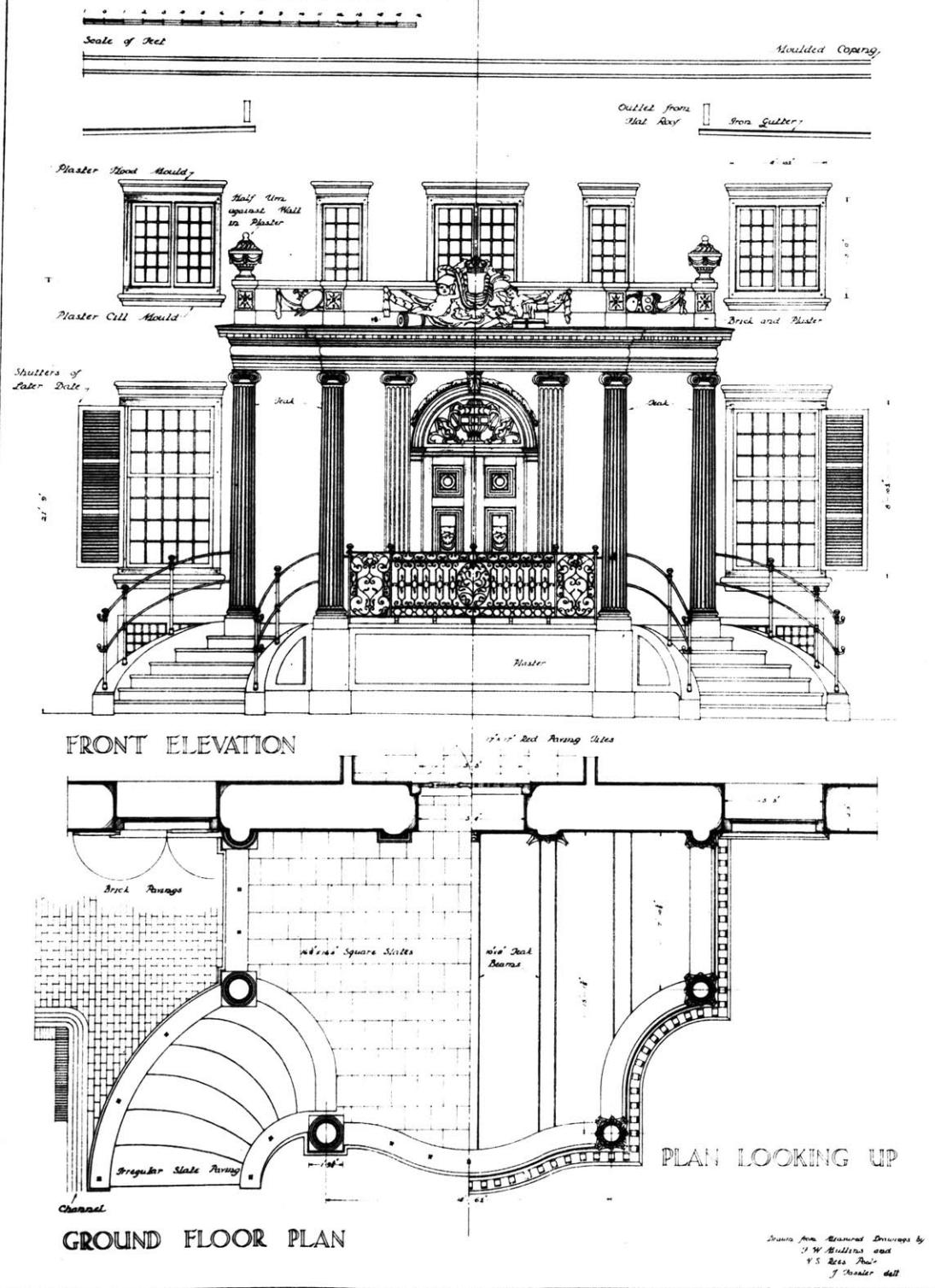
The South African government, being in existence since 1910, has not had too many years in which to build up permanent representations in foreign countries. Consequently there are few embassies or legations representing the Union which have been designed as such and it seems that South Africa House in London is the only. This is a large structure on Trafalgar Square with the largest of all South African Embassies, containing almost all the facilities needed for representation in England. In the capitals of Europe, the majority of embassies exist in bought villas, the representation being small enough to allow one building to suffice.

The South African Embassy in Washington is the second most important of South African Embassies, and its importance reflects the many ties between the Union and the United States. With the Union exporting much of its mineral wealth to the States and being a good market for its manufactured goods, a commercial link exists which is an important tie between the two countries. Uranium-producing South Africa has atomic ties with the States as well as other scientific attachments. There is the important agricultural aspect which coincides between both lands as well as the military and air ties. Information needs to be disseminated and this is an important element in the Embassy composition, as is the need for consular facilities. The South African Embassy in Washington needs to fulfil not only these functions but the important one of social representation. Washington occupies itself with the business of government and accepts as an essential part of this, the social accompaniments. Diplomatic receptions and parties form a constant counterpoint to work in Washington and in this activity the South African representation is required to fulfil its part.

The ~~Kat~~ Balcony at the Castle in Cape Town, South Africa  
This original should be compared to the copy used in the  
Residence of the Embassy in Washington

# THE CASTLE CAPE TOWN

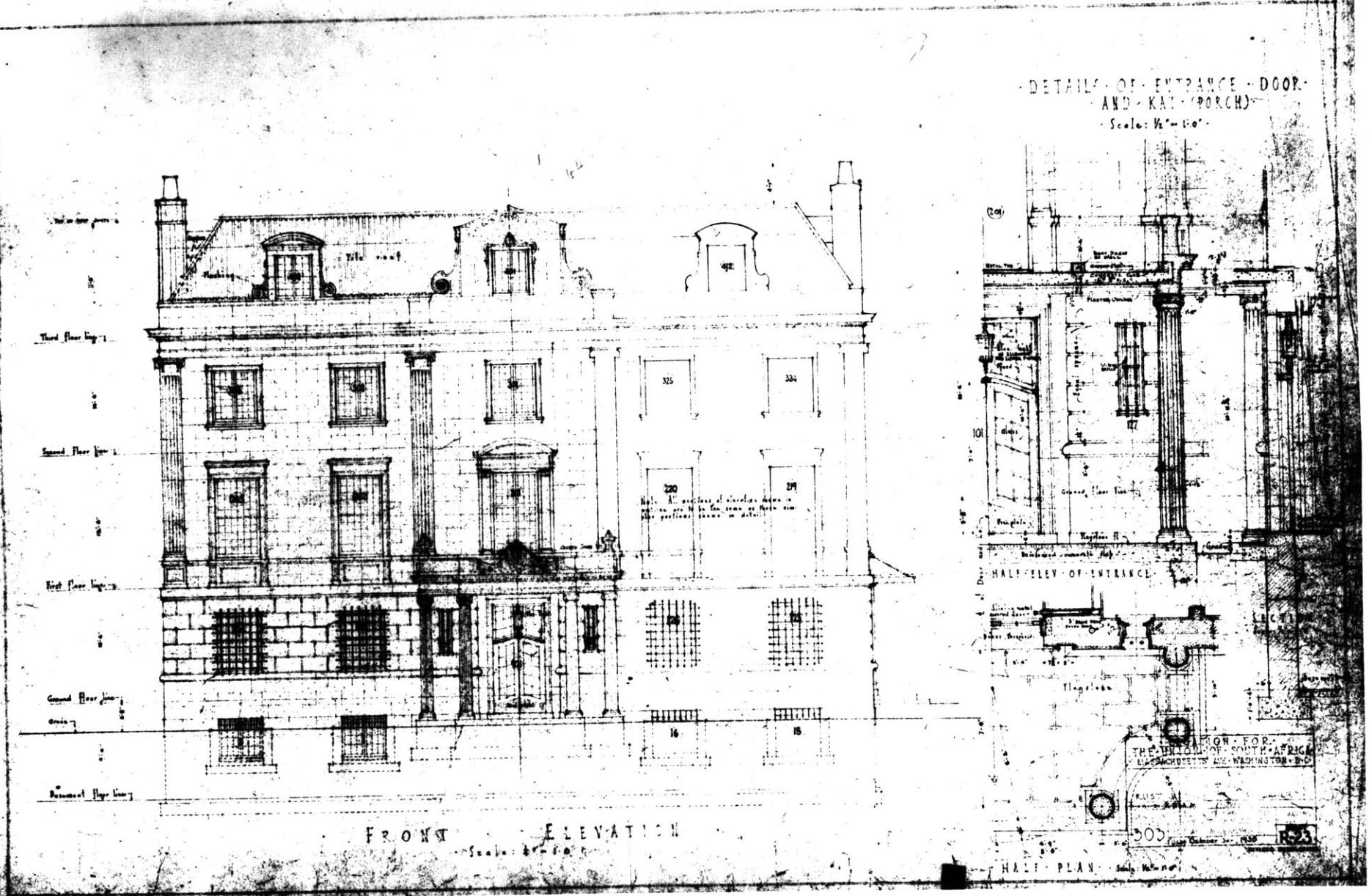
## THE KAT BALCONY



THE CASTLE, CAPE TOWN. DETAILS OF KAT BALCONY

The front elevation of the South African residence in Washington  
D.C.

The replica of Die Kat balcony is used as an entrance portico and  
simulations of Cape Dutch gables exist as dormer windows for the  
servant quarters



### (b) The Status Quo

Today the South African representation in Washington is situated on Massachusetts Avenue to the north-west of Washington. In an area in which the British, Irani, Bolivian, Brazilian and new Danish Embassies exist, they possess a fine location, well wooded and well sited. Massachusetts Avenue is a broad road carrying heavy traffic, 29,000 automobiles passing the Embassy every 24 hours, often with stoppages and long lines of slow-moving vehicles. The avenue is lined with fine tall trees which cast a deep shadow over the road and the broad pedestrian sidewalk on either side.

The South African government originally occupied quarters in down-town Washington but in the 1930's it was found desirable to move into an area more suitable for Embassy development. This is an extract from a letter from the Minister in Washington to the Secretary of External Affairs in 1936:

"The site must be in a good, desirable neighbourhood, easy of access . . . with the embassies close to each other, there will be little likelihood of depreciation, as the value remains high."

It was then decided to purchase the Lot 805, with 103 foot frontage and 129 foot depth, and on this site a building was erected, which is still in use today. John J. Whelan was commissioned as architect and working under the obvious limitations of never having been to South Africa, he designed a building which is remarkably suitable in many respects, but fails miserably in many others. This building was to house the office accommodation on the ground floor, the reception on the first, the private living area on the second, the servants in the attic, and the kitchen and storage in the basement. The main faults found today lie in the fact that during official receptions, the kitchen being two floors below the reception rooms, is totally inadequate, the servants' quarters are in the wrong position, the building is not airconditioned, the

A road map of Washington D.C. showing the location of the various Embassies



office space is divorced from the chancery building. Apart from these obvious reasons, there are the architectural faults of bad, cheap building, and the aesthetic faults of poor reproduction. The similarity between the Kat balcony in Cape Town and the portico here is that of someone copying it from a photograph, whilst the gables are a far cry from even copies of good Cape Dutch work. At the outbreak of war, it was found that the office accommodation was insufficient to house the expanded military needs, and the strip of land, 804, 64 feet wide, was bought and a temporary building erected, even worse than the residence in every respect. It is badly built, the proportions in relation to the large building are ridiculous, the character of Cape Dutch, with white walls and small-paned windows has been distorted with brown walls and windows which cost great amounts to clean. Here is an extract from the Embassy report to the South African government inspectors on April 17th, 1956:

- "1. Until 1939, the office accommodation consisted only of the residence . . . the present annexe was constructed during the war . . . erected in haste to accommodate large military and other personnel.
2. There is a French saying that nothing endures except the provisional and this has been demonstrated by the long life of temporary wartime buildings in Washington, which are now being pulled down at the President's personal direction.
3. In an endeavour to give it a South African aspect, the exterior contains a few elements of Cape Dutch architecture. It cannot be said that the venture was a success. The Cape Dutch gables, the many-paned sash windows and mock shutters are quite out of keeping with a shingled roof, brown coloured walls, mansard attic windows and a jutting line of airconditioners. Secondly the fine architecture of the Cape is quite unsuited to the climate of Washington with its humid summer smog or drizzle and winter frosts and snows. Thirdly the style of the annexe and its modest size is in jarring dis-harmony with the more massive proportions of the residence. The residence is a dignified structure,

stone-faced and classic in line with a portico modelled on that of Die Kat at the Castle in Cape Town. Dwarfed by it, the annexe gives the appearance of a small and rather flimsy outhouse, the type of structure put up at trade fairs.

4. Aesthetic considerations aside, the annexe is quite unsatisfactory from a functional point of view. It consists of three floors of small offices. The top floor contains two medium-sized and two very small offices, occupied at present by the accounting and administrative section. It is understood that the whole was originally intended to be used for storage purposes and later converted.
5. The second floor consists of six offices, of which only one makes any pretensions to size, and a small landing near the front door which is occupied by the telephone exchange and used as a waiting room for visitors . . . A fourth office is used by the cypher clerk and is sealed off from the cyphers and coding machines by flimsy hardboard partition. Access to the compartment containing the machines is by a wooden door, covered by a thin steel plate and fitted with a combination lock.
6. . . . amongst the least satisfactory of government offices in Washington.

\* \* \* \*

9..The functional disadvantages of the annexe and of the remaining office accommodation are:
  - (a) The annexe has no office or area which can be used as a reception room for the numerous visitors to the Embassy who call on Consular or Commercial business.
  - (b) The annexe has no suitable accommodation for a registry . . . Access between the annexe and offices is across an open driveway leading to garage, parking lot and delivery area . . . also underground tunnel linking the basements, which can be used during thunderstorms or when the driveway is snowcovered.

\* \* \* \*

(f) Cypher department which is partitioned from coding clerk's office in the ahnexe is barely

enough to contain the safes, coding machines, etc. used by the coding clerk . . . There is no room for the Embassy secret files.

(g) Accommodation for coding machines, cypher and safes in the annexe is unsatisfactory for security and working conditions.

(h) Present annexe badly insulated. Individual air conditioners have been fitted, which impair the cleaning of the windows.

• • • •

(j) . . . no space or office for reception for senior officials calling on the Ambassador or Counsellor.

(k) No provision is made for a library, and it is therefore impossible to fulfil the requirements that library books be kept under lock and key.

(l) Separation of two buildings most unsatisfactory from a security point of view. Messengers, who are in the basement, have difficulty in watching over the ingress of the main building and visitors are frequently found wandering through the corridors because the telephone operator is busy with the exchange.

(m) Individual air conditioners are expensive and wasteful.

(n) There is no room for the Information Attaché and Scientific Attaché and their staffs. There is some advantage for the latter to remain in the present premises in the city in the same building as his Commonwealth colleagues.

(o) . . . the practice is in most embassies to station messengers in a room in front next to the door where they can act as keepers of the gate.

(p) The entire female staff (11 persons) share 1 toilet.

(q) The embassy compares unfavourably with all other embassies. Australia, New Zealand and Canada have fine office buildings separate from the ambassadorial residences . . . The immediate neighbours are Iran and the Apostolic Mission, the former a large building in red brick. Across the street is the majestic bulk of the British Embassy, a little lower down Brazil, an ornate pile designed for a millionaire by the architect of the National Gallery of Art."

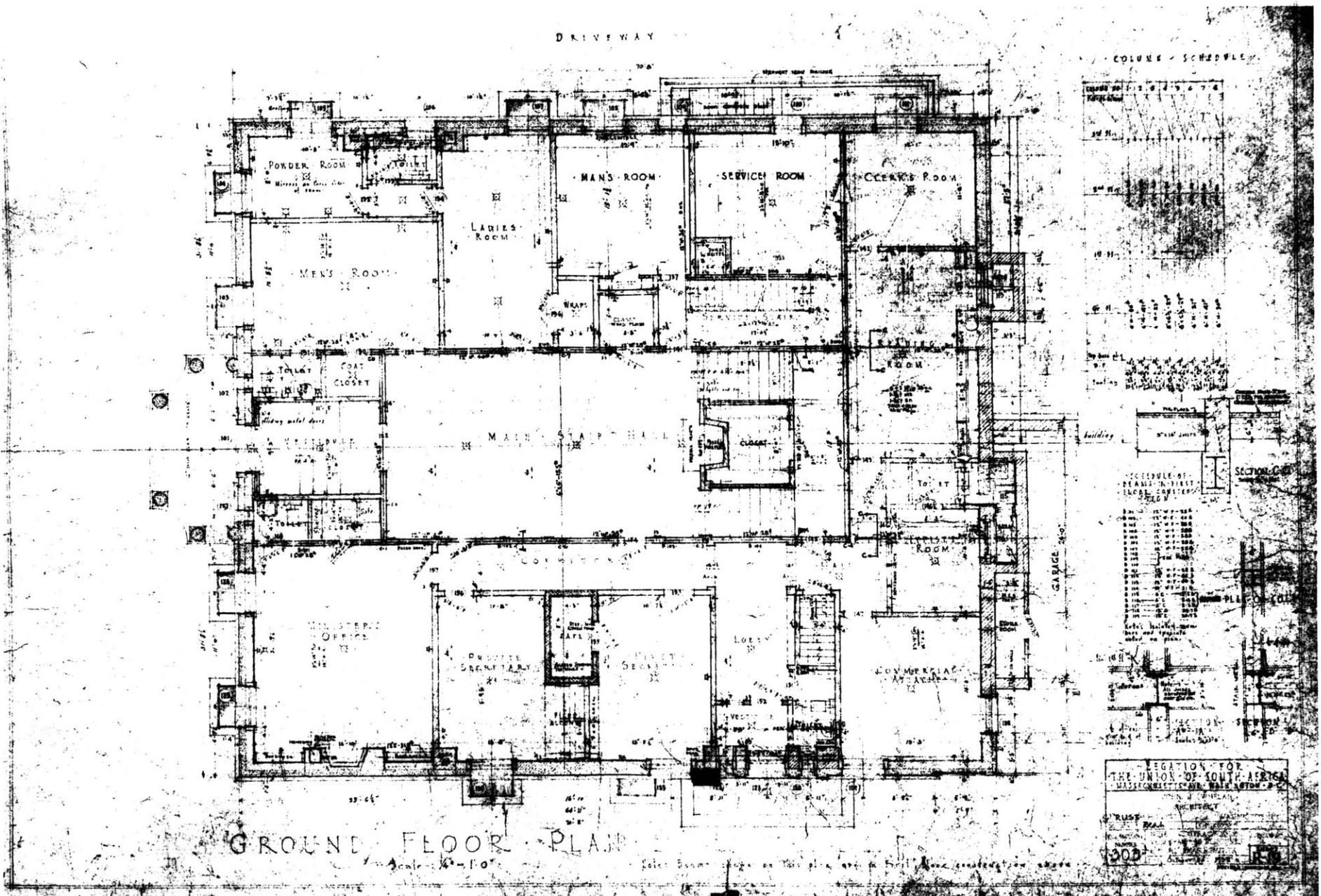
A view of the South African Embassy complex from the pedestrian walk on Massachusetts Avenue.

The thick foliage shelter the buildings which are usually in shadow. The Residence is the building above the Chancery.



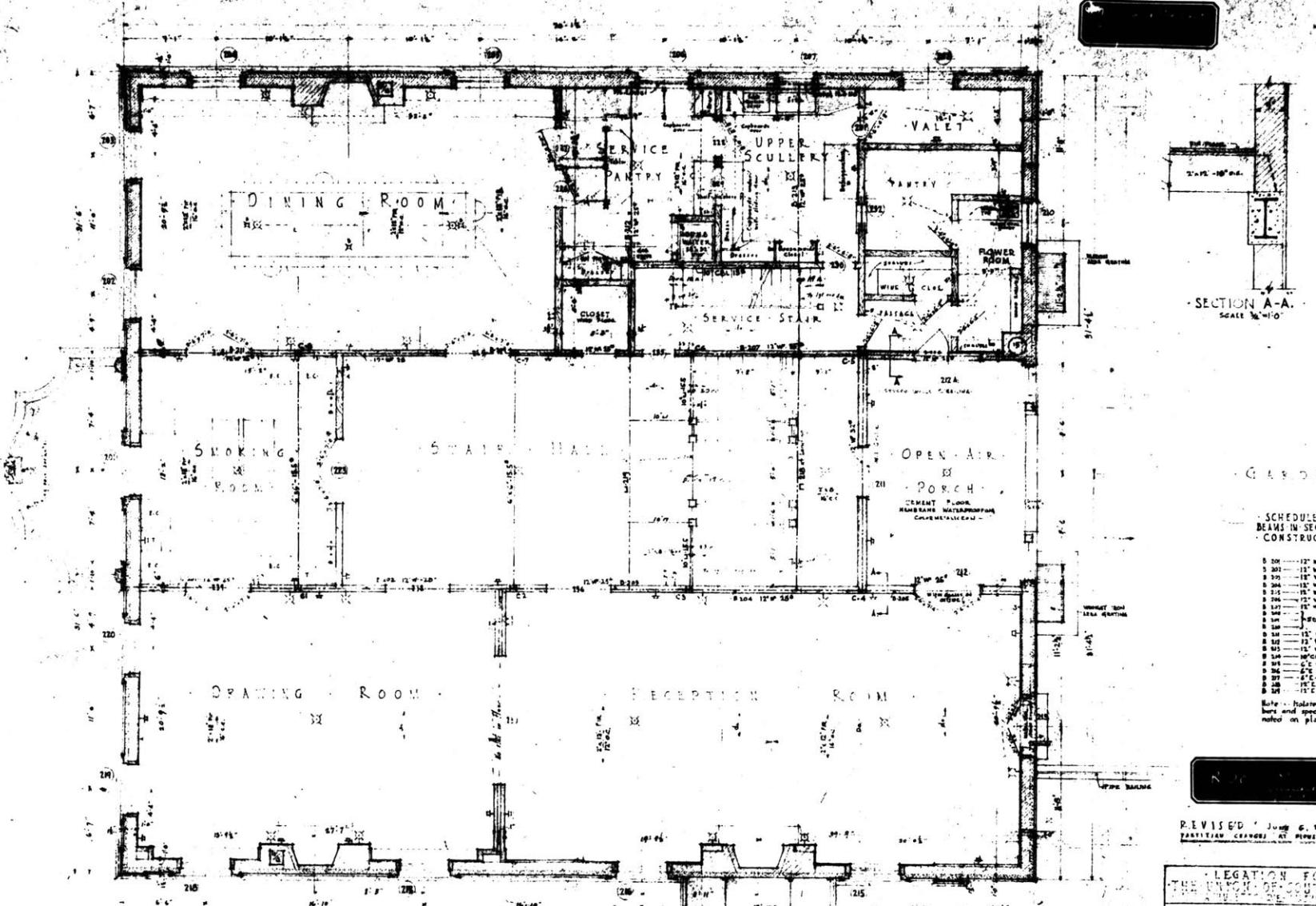
The ground floor plan of the South African residence in Washington D.C.

The ample stair hall does well to serve the fairly wide staircase leading to the reception floor. The rooms on the lower side of the building are devoted to office accommodation.



The first floor plan of the South African residence in Washington D.C.

The reception rooms lead off the stair hall, where guests are received and then proceed in the direction of the small garden at the rear of the building. The service to the dining room is from an upper servery served from the kitchen two floors below.



## FIRST FLOOR PLAN

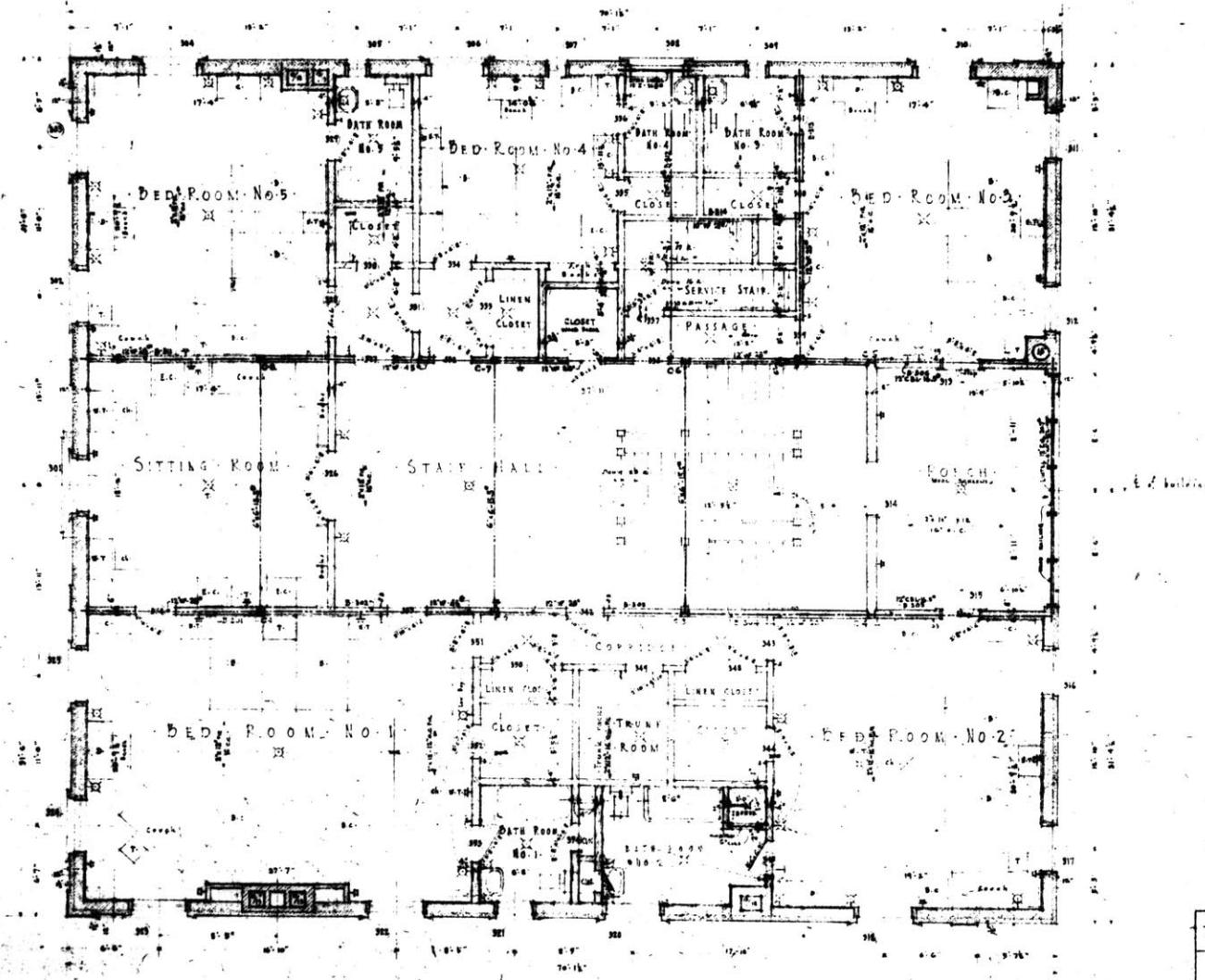
Scale 1:14 = 10'

ROOF BEAMS SHOWN ON THIS PLAN ARE IN SECOND FLOOR CONSTRUCTION ABOVE.

LEGATION FOR THE UNION OF SOUDAN	
JOHN J. WILLIAMS ARCHITECT	
RUST BLDG.	
NAME	YARDAGE & CO., INC.
ADDRESS	100 E. 42nd STREET, NEW YORK
PHONE	222-1222
TELEGRAMS	JOHN J. WILLIAMS
TELEGRAPHIC ADDRESS	JOHN J. WILLIAMS
TELETYPE NUMBER	120

The second floor plan of the South African residence in Washington D.C.

The ambassador's suite and other suites lead off the stair hall and a common sitting room serves all the occupants



SECOND FLOOR PLAN

Scale:  $\frac{1}{4}$  in. = 10'

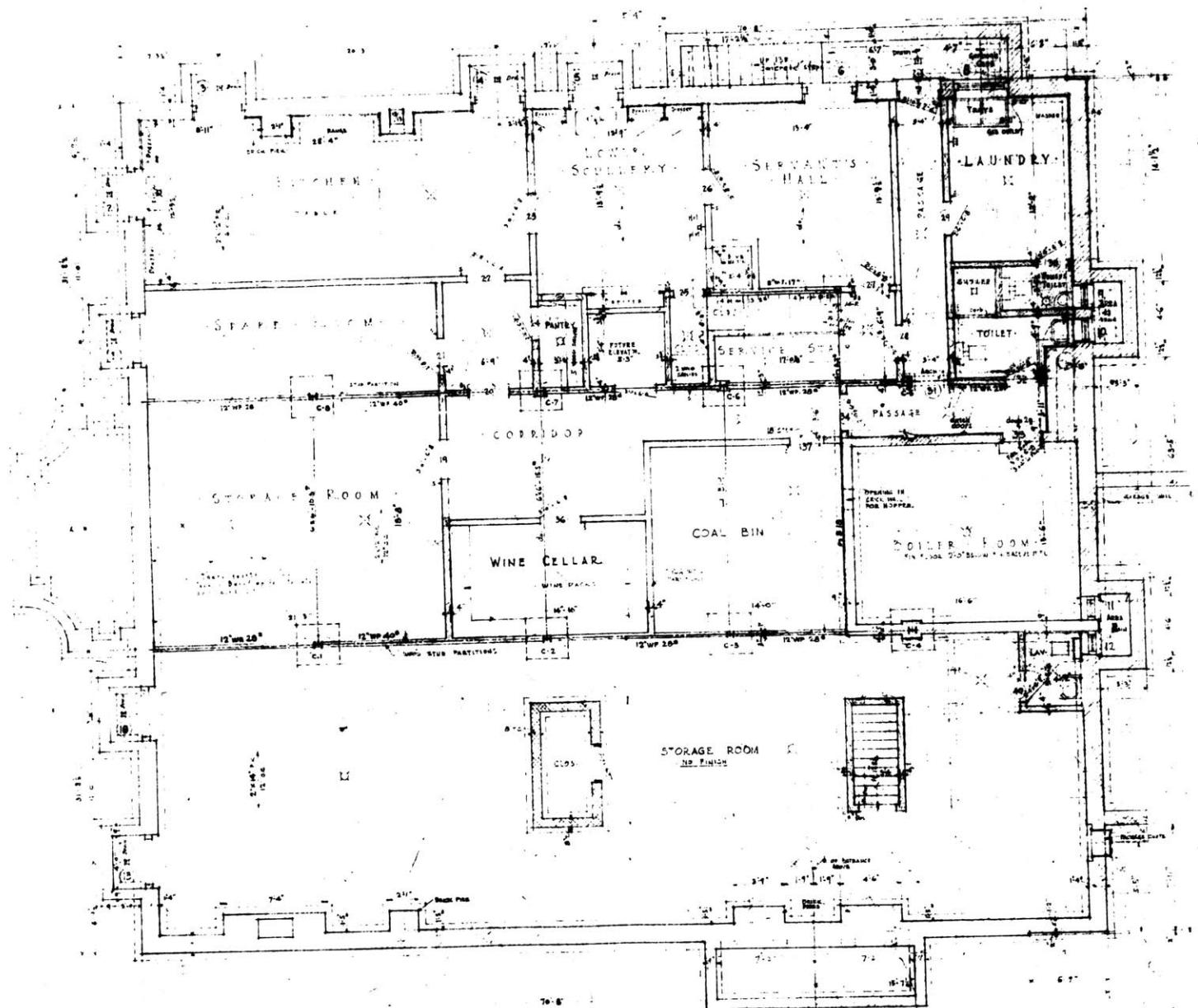
NOTE: - BEAMS SHOWN ON THIS PLATE ARE IN THIRD FLOOR CONSTRUCTION ABOVE

REVISED JUNE 16 1956  
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303

The basement plan of the South African residence in Washington  
D.C.

The kitchen serves by means of a dumb waiter to the floors above  
which is proven to be quite inadequate. The wine cellar is affected  
by the heat from the boiler room.



BASEMENT, PLAN

$$S_{\text{min}} = \frac{1}{4} \pi - 1.0^\circ$$

Salisbury, where he has placed one in Arundel Tower, conjecturing

RUST

1273

**R-18**

### (c) The Workings of the Embassy

This report lays the finger on most of the trouble which exists at the moment and it requires little more description of the buildings themselves. However, a look at the actual workings of the Embassy is necessary.

#### (i) The residence

The residence is firstly the house of the ambassador and his family and secondly the social centre of the Embassy. Here are held the formal receptions, the dinner parties and garden parties, but here also the ambassador entertains his friends, and leads the life of the normal family. This dichotomy is the problem which the architect has to solve and the way in which he provides spaces for the use of private as well as public, can be the success or failure of the scheme.

As a house for the Ambassador, it needs the flexibility which is needed by the fact that different ambassadors with larger or smaller families, could require different accommodation and the residence should cater for the extreme case. There is the added problem of supplying accommodation for visiting guests, from the home country as well as local guests.

For formal entertaining the whole aspect of formal reception and entertaining needs to be of great significance as this is the only impression gained by the majority of the visitors to the Embassy. The accommodation of up to 600 guests at a Union Day reception, the problems of service and preparation, and the flow of guests are elements to be noted. The visitor may arrive by car, chauffeur-driven, alight, visit the men's or women's room, be announced and received, mingle, usually proceed toward the direction of the garden, return when dinner is served, bid his farewell and return by the way he came.

### (ii) The Chancery

The chancery is really the office building of the ambassador and his staff and provides areas for the public, semi-public and private areas. The visitor may enter, look at newspapers or magazines, read a book for information on the country, visit the consular section, information section or have an appointment with one of the officers. Most of the work at the Embassy is done by mail, telephone or messenger, and the flow of non-staff is certainly very light.

The Ambassador requires a large, well-appointed area, as does his second-in-command, the Counsellor, with the respective secretaries. The other officers generally have similar requirements, with a security section consisting of a cypher room, which is in itself a vault with a large wall-safe, with an adjoining room for working for one girl. This is secret, ideally off the ground floor, with no view if possible from the outside. The security problem lies not so much in the fact that one wishes to stop people from entering this area, but in knowing when they have been in, and what they have seen.

The chancery could be a fine chance for the advertising of the finest elements of the home country and this could well be the core of the building. It appears that in the case of this Embassy the consular service has a branch in New York, as does the Information service, and it could be foreseen that these branches would eventually move to the larger city, where the larger demand might exist.

It seems that the chancery, a building which is really a little grouping of exclusive offices, might not be of the same significance in the complex as the residence, with the latter expressing in some way the larger relationship in the diplomatic life of Washington.

All the staff of the chancery live within driving distance of the Embassy and as parking in the case of Massachusetts Avenue is not allowed, on-site parking is essential for the staff. Service for both buildings is required, and the residence, having catering from outside for its largest receptions, needs an area for this prepared food to be delivered.

(d) A Concept for a New Embassy

Considering all the information briefly outlined up to this point, it requires to be stated which approach to the problem could be attempted today which would satisfy the deepest as well as the most obvious requirements of the Embassy. The first consideration seems to be the factor of separation between the two buildings: should they be separated, should the complex be one building or should they be linked in some way? It seems difficult before a thorough examination of the design problem, to answer this, but it certainly seems to point in this case to a continuation of the present separation between the buildings. It would appear to be a clearer expression of the function of these units, both in space and time, with the one being able to exist independently of the other. For security reasons this seems desirable as well, as the chancery, functioning from nine to five, could then be closed off and the residence would have a life of its own. In the climate of Washington, it seems feasible to allow the Ambassador to walk in the open to the chancery and vice versa for most conditions, and if necessary a tunnel connection could suffice for extreme conditions. The Embassies in Washington vary in their feelings about this problem, and the solution depends largely upon the wish of the Ambassador at the time.

The second thought seems to concern the provision of some open space to express the formality and the relation of building to public. The piazza, plaza, forecourt or plein express this idea

in relating a public building to the users and beholders and it seems as if this could be a fine element in the Embassy complex, if at all feasible. This could be as a visual link between the buildings and a display area for sculpture and the necessary flag, which is so often badly placed in relation to the building. The open space in so many ways acts as non-verbal communication between buildings and people that its use in the formal building complex could be of great significance. In further consideration, it seems likely that the buildings will need to possess the balance between formality and the residential character of the surroundings. The problem of officialdom in building is a large and complex one which is now receiving attention in the future design of buildings in Washington. Some claim permanence as a criterion whilst others claim symmetry, stone or other devices. The maintaining of some of the residential character is of great importance and although the architecture of the surroundings is hardly consistent, it does seem likely that a group which is restrained and unostentatious would be most appropriate.

The aspect of relative importance of the various elements and their expression is another difficult problem on which to generalise. In the study of this problem, it is felt that a certain aspect of this Embassy needs thought above all else. This relates to the actual representation of the country and, in this relation, it must be presumed that the Union of South Africa will not exist as a country suffering from internal dissension but will face the future with the confidence that it can obtain by solving its own problems. It could be a shining example in a world ridden by unbelieving and doubts. If this is to be the case, there will have to be in this group some of this optimism, an intimation that the problems can be solved and will be. The one building of social importance, the residence seems to be the more significant in the Washington environment and it could be quite feasible that this

could overshadow the chancery which in this case takes on the functions of a small office building.

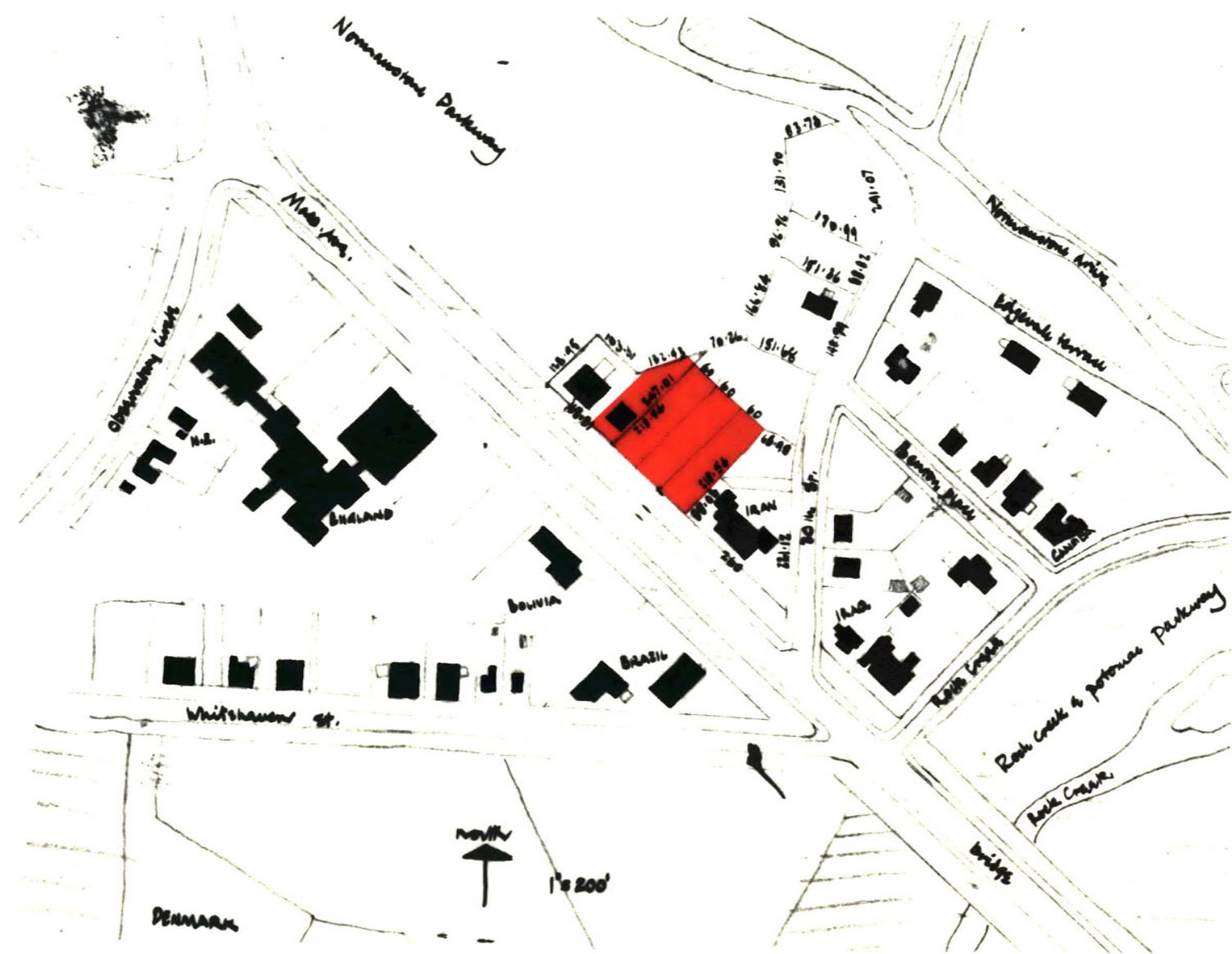
A further conceptual consideration will be the abstraction of the elements of South African architecture and their application to the new design. The elements of contrast so striking in the Cape Dutch work, the use of light and shade, the use of white and black, the lack of colour where colour abounds in the surroundings; all these might be incorporated. It is significant that the area of Washington in which the Embassy is located has the elements of green foliage and thick vegetation which is typical of the Cape landscape. The decoration and colour of native architecture should be used to highlight certain areas and the nature of Bantu kraal planning might be an indication toward an interesting planning form.

These things which have been briefly stated here could be the material out of which a new embassy could arise. It will possibly not directly incorporate all these but if it is to be successful, it will have to recognise them and to the extent that it employs them in creating an integrated whole, will it be truly successful.

#### (e) The Site

The first step in determining the scope of this problem will lie in the extent that the present buildings are to be retained. It must be borne in mind that the residence satisfies up to a point, but that a large amount would have to be spent on an airconditioning system and replanning the services, while the integrity of the structure would always be in doubt. However, it is a fairly recent building, and the waste of pulling it down might not be justified. The Chancery seems totally unsuitable and there seems little point in retaining it. Another factor to be borne in mind is the existence of three lots of land between the Embassy land

A map of the area in close proximity to the South African embassy  
and the location of the new site.



and the Iranian Embassy, three strips of land 60 feet wide and about 230 feet in depth, land which at one time was offered for sale to the Embassy. Based upon these and the wider considerations, there seems to be three alternatives which could be adopted:

- (i) The first would mean the retention of the present Residence, and the repair of its necessities. The kitchen could be brought to the ground floor by removing the office accommodation there at present, the services could be improved and airconditioning installed. A new Chancery could then be built either in the place of the present or more feasibly with the additional purchase of one width of 60 feet. This could be set back, forming a court between the two buildings and opening the Residence out onto this court through its side entrance.
- (ii) The second possibility concerns the demolition of both buildings and the erection of two new buildings on the present site. The area for this would almost surely be inadequate and additional land would have to be bought. It would also unnecessarily destroy the Residence and the resulting piece of land does not seem to be too easily handled.
- (iii) The third possibility is the one which this thesis is to embrace, and the scope of which will be the scope of this thesis. It suggests the selling of Lot 805 with the existing residence; as this is a selfcontained unit which could be well suited to a small embassy or large private residence and as the ssituation is an excellent one, this should not be too difficult. The revenue from this could then be used to purchase the 180 foot frontage of Lots 801-803 and with the demolition of the Chancery the 240 foot frontage would be adequate for the design of a new Embassy incorporating all the required features.

This site will now be considered as the site for the problem and a short discussion of its characteristics follows. The site is

A view looking up Massachusetts Avenue in Washington D.C.  
The wide pedestrian way is enclosed on both sides by trees which  
cause the walk to be in shade and the wide road to be in the light



extremely heavily wooded and, whilst this causes difficulties in the site work, the undoubted benefit of shade and visual character overweigh this heavily. The site has a sharp slope from Massachusetts Avenue and also along the avenue, and this might also create its architectural problems or blessings. Massachusetts Avenue borders the site, which has no other access way, and this broad tree-lined avenue is a strong element in the architectural problem. The Normanstone Park, inalienable U.S.A. territory, is at the back of the site and this is also thickly wooded. The Iranian Embassy is to the bottom of the site and the previous South African Residence is above the site. The site is within easy reach of downtown Washington and yet far enough away to yield privacy and easy access. Its location in an area of existing Embassies makes it a fine one and the chances of its depreciation seem rather unlikely.

The Embassy of Iran on Massachusetts Avenue in Washington D.C.  
This building faced in red brick with white mouldings is the  
neighbour of the thesis site, to the immediate right of the site.



The Embassy of Brazil on Massachusetts Avenue in Washington D.C.  
This building is diagonally opposite the South African Embassy  
site and is hidden from the avenue by dense tree growth.



The Embassy of Bolivia on Massachusetts Avenue in Washington D.C.  
Framed by trees, this small building is almost directly opposite  
the South African Embassy site.



The Embassy of Great Britain on Massachusetts Avenue in Washington D.C. This building, the largest of the Embassies in Washington, is sited diagonally above the South African Embassy site. Designed by Sir Edward Lutyens, its brick buildings and chimneys are an imposing group on the Avenue.



## #5 PRELIMINARY PROGRAMME OF ACCOMMODATION

CHANCERY

## AMBASSADOR'S OFFICE

large office, wallsafe, small toilet, library,  
conference table, accessible to public.

## SECRETARY'S OFFICE

waiting area

## COUNSELLOR'S OFFICE

large office, wallsafe, accessible to public.  
SECRETARY'S OFFICE

## FIRST SECRETARY'S OFFICE

SECRETARY'S OFFICE

## SECOND SECRETARY'S OFFICE

SECRETARY'S OFFICE

## THIRD SECRETARY'S OFFICE

largest office used as consular office, easily  
accessible to public, wallsafe.

SECRETARY'S OFFICE

## THIRD SECRETARY'S OFFICE

SECRETARY'S OFFICE

## MILITARY ATTACHE'S OFFICE

facilities for maps and charts on walls

SECRETARY'S OFFICE

## AIR ATTACHE'S OFFICE

facilities for maps and charts on walls

SECRETARY'S OFFICE

## AGRICULTURAL ATTACHE'S OFFICE

possibly small laboratory and sample space

SECRETARY'S OFFICE - TWO

## COMMERCIAL ATTACHE'S OFFICE

SECRETARY'S OFFICE

## SCIENTIFIC ATTACHE'S OFFICE

this is optional as the section might remain  
in present accommodation in the city

SECRETARY'S OFFICE - TWO

**INFORMATION ATTACHE'S OFFICE**  
easily accessible to public, storage space  
for booklets, films and exhibition material  
**SECRETARY'S OFFICE - TWO OR THREE**

**ADMINISTRATIVE OFFICER'S OFFICE**  
**ADMINISTRATIVE SECTION** with bookkeeper and assistant  
bookkeeper, small wallsafe

**SECURITY SECTION**  
consisting of a CYPHER room, in itself a vault,  
with large wallsafe; also room adjoining for work  
by one SA girl; secret, no view from outside, ideally  
off ground floor

**REGISTRY or mailing room**  
not accessible to public, pigeon hole system for  
sorting mail, mail leaves by taxi three times a week

**ENTRANCE AND WAITING AREA**  
**RECEPTIONIST'S AREA** adjoining with telephone exchange  
**READING ROOM** for SA newspapers, etc.

**LIBRARY**  
locked, for use by staff, especially section for  
agricultural attache, reference

**EXHIBITION AREA**  
temporary or permanent

**TOILET FACILITIES**  
public  
male staff and female staff  
messengers

**MESSENGERS' AREA and CHAUFFEURS' AREA**  
teamaking, storage, cleaning, etc.

**DUPLICATING ROOM**

**SERVICE AREAS**  
airconditioning, meter, etc.

**SERVICE ACCESS**  
shipping, delivery, etc.

**PARKING FOR 25 to 30 cars**

AMBASSADOR'S RESIDENCE

## PUBLIC ENTERTAINING:

ENTRANCE HALL with formal staircase if necessary

MEN'S ROOM WITH TOILET AND CLOSET FACILITIES  
accessible off entranceLADIES' POWDER ROOM AND TOILET  
accessible off entrance

## RECEPTION and LIVING ROOMS

the disposition and size of these should take  
into account the fact that they might at times  
accommodate crowds and at times only house the  
Ambassador's family

## DINING ROOM

seating for 24 at long table; also for official  
party buffet supper

## OUTDOOR RECEPTION AREA

desirable in Washington to have outdoor area  
preferably off reception area, either in garden  
or on terracesPRIVATE LIVING:MAIN BEDROOM Suite  
large, storage space, toilet and bathrooms, trunk-  
room, linen, etc. bedroom-study for Ambassador  
and large bedroom for couple

## PRIVATE LIVING ROOM

Two or three BEDROOM SUITES  
bedrooms, bathrooms, storage, linen, etc.

## Two GUEST SUITES

PRIVATE DINING-ROOM  
possibly combined with formal dining-room

SERVICE

KITCHEN

fully equipped, outside catering during formal  
receptions

SCULLERY

SERVICE PANTRIES

VALET'S ROOM

FLOWERROOM

LAUNDRY

WINECELLAR

SERVICE ROOMS

STORAGE

SERVANT ACCOMMODATION - one family  
bedrooms, living, toiletsGARAGE for one official and one private car,  
workshop

GARDEN for entertaining or gardening

### Preliminary Design Studies

A few of the major design issues confronting the problem are here shortly discussed and explained:

- (a) In an endeavour to create an open area on the site, linking the buildings together, various solutions of grouping were tried. With the slope of the ground being fairly great, problems of relation were found and the solution lay in creating an open plane on the medium Massachusetts Avenue level, placing the house on the hill, thereby giving it importance, and the Chancery on the lower level.
- (b) In order to obtain a plastic relationship with the surrounding buildings, the lower Chancery echoes the roof plane of the Iran Embassy at a lower level, and the residence on the hill associates with the existing South African residence, causing a relationship which encloses the plaza area. The retaining wall and flag further act as enclosing elements.
- (c) The activity of formal reception was associated in this process with the change of level, and the residence accommodates the change of level in it, leading to the garden at the top level at the back of the site.
- (d) The Chancery building is linked in various solution alternatives and the possibility exists of placing the residence over a change of level and continuing a semblance of the retaining wall as an enclosure to the Chancery, resembling the native Kraal. The Chancery is thought of as a building around a central core which may house exhibits and allow constant dynamic viewing of the centre.
- (e) Automobile traffic on a small site is a problem to be handled

by the judicious placing of roads and an attempt is made to keep the circulation to a service road and using the plaza as circulation.

(f) Contrast by the light of open spaces and the dark of enclosures with the additional opening of central light wells, is studied.

The Villa Savoie at Poissy in France - Architect Le corbusier  
This country house is the great example of how the entrance space  
into the house can be achieved by the use of an elegant change of  
level within the building. The main accommodation is raised on pilotis  
off the ground and the drive-in occurs on the ground. The elegance of  
the ramp is matched by the overall excellence of the house, probably  
the finest solution of its kind.



En entrant dans la propriété, on voit la maison.



Arrivée des voitures sous les pilotes.



La maison est un objet posé au-dessus du sol, au milieu du paysage.

The relation of two buildings over an open space with a change in level  
Drawings by Paul Rudolph showing various possibilities in the linking  
together of two buildings of different sizes by means of a unifying  
device. Fig.I. has the residence raised above a platform in which are  
the chancery and service elements. Fig.II has the residence echoed by  
a small block of the chancery sitting on the platform. Fig.III has the  
residence on a minor podium echoed by the chancery in itself a small  
podium. Fig.IV has the residence dominating on a change of level with  
the chancery formed by the wall continuation of this change. Fig.V is  
similar with the chancery here directly echoing the residence shape.  
Fig.VI. shows a solution in which there exists no relationship.



Fig. VI

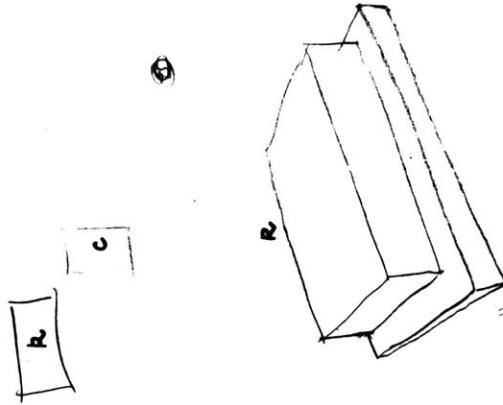


Fig. V

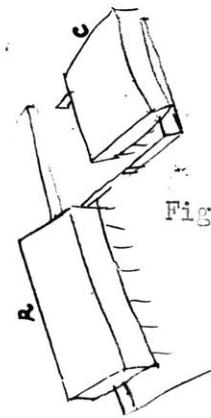


Fig. IV



Fig. III

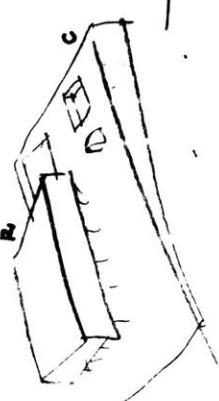


Fig. II

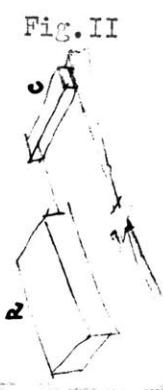
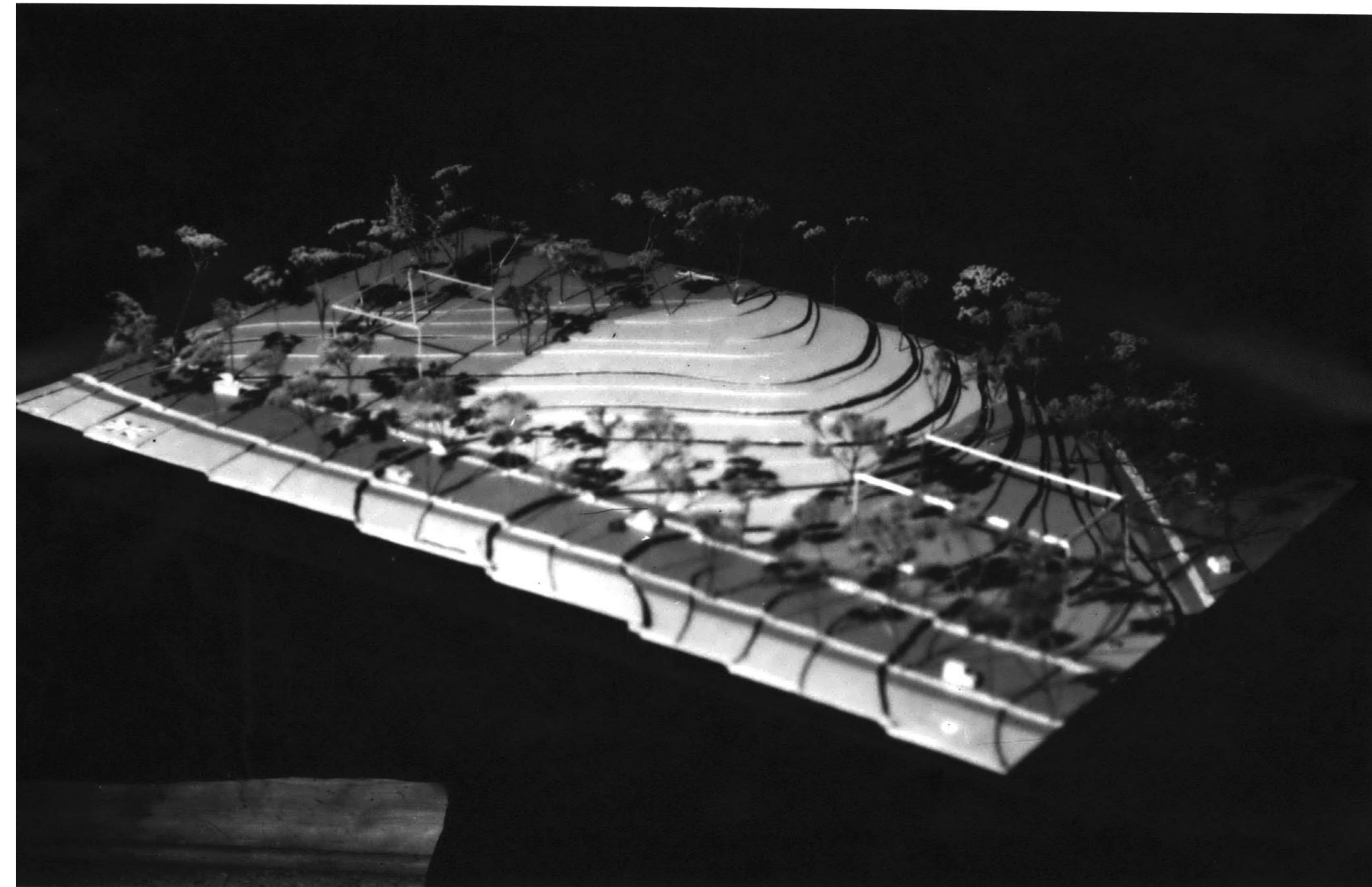
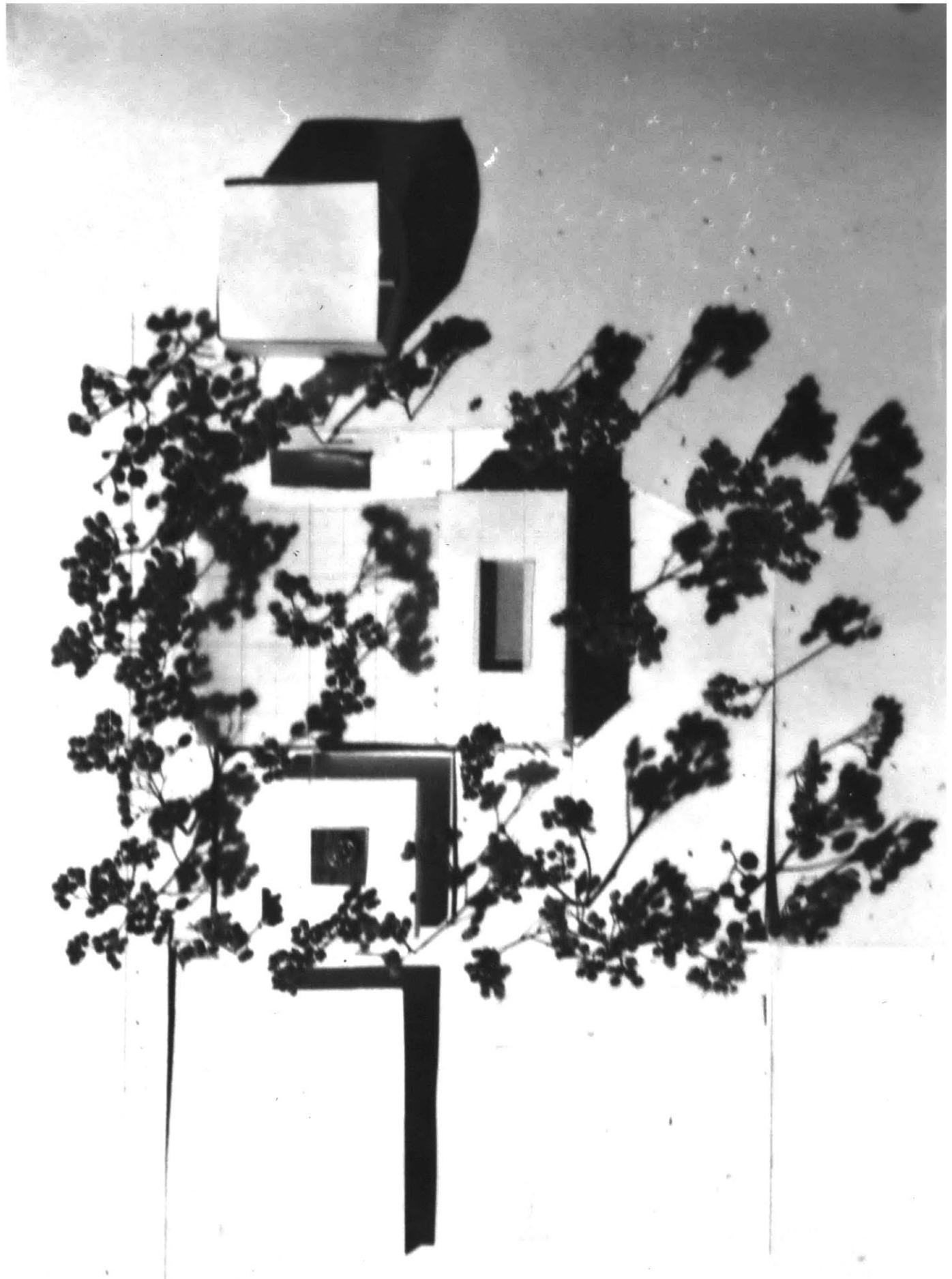


Fig. I

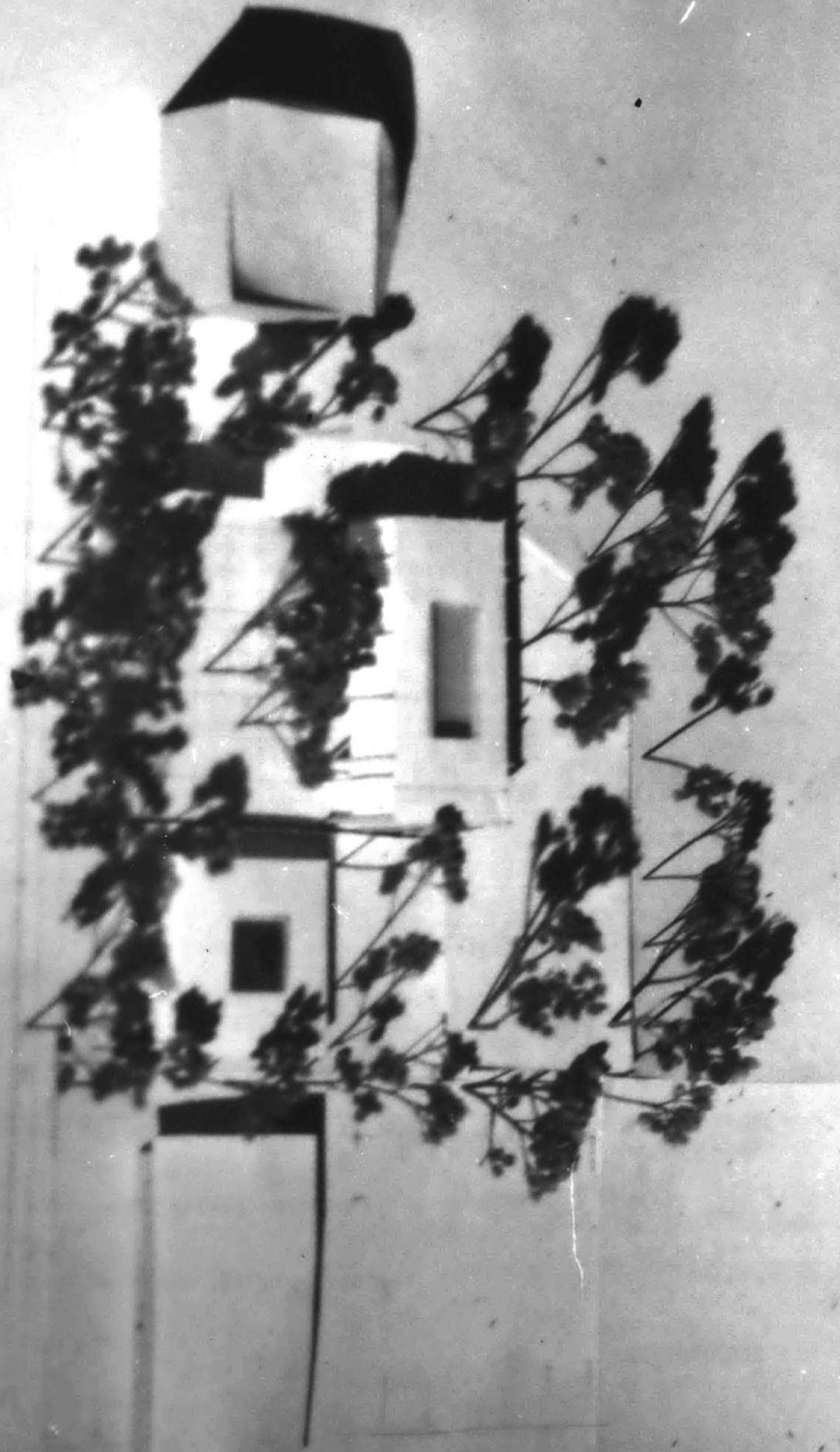
A model of the site showing the Avenue with the buildings flanking the site which is indicated in the light colour. The effect of the slope of the ground can be seen.



A plan view of a sketch model showing a proposed solution to the problem. The attempt is to link the buildings on either side of the site by some plastic relationship. The building on the extreme right is echoed by the square Chancery and the building on the left of the site is echoed by the Residence. The enclosed open space is now encircled on three sides and the fourth by trees of the Avenue.



A view of a sketch model showing the plastic relationship of the lower buildings on the right and the taller buildings on the left, enclosing an open space, with the garden beyond.



## #7 BIBLIOGRAPHY

Washington, City and Capitol. Federal Writers' Project. American Guide Series, 1937

Washington Complete Guide

Know your Capitol City. U.S. Department of Health, Education and Welfare

Bucovich, Mario. Washington D.C.

Fletcher, Sir Banister. A History of Architecture on the Comparative Method

Gotch, J.A. The Growth of the English House

Le Corbusier. Oeuvre Complete. 1934-1938

Pearse, G.E. Eighteenth Century Architecture in South Africa. 1933

Publications of the South African Tourist Corporation:

South Africa 1954

The Union of South Africa

South African Scene - Vol. I

The Natives of South Africa

Native Life in South Africa

The Peoples of South Africa

South African Heritage

South African-American Survey 1954-55

Cape Countryside - South Africa

Johannesburg - South African Metropolis

"How South Africa's Blacks are Housed", reprinted from Optima, published by the Anglo-American Corporation of South Africa

Architectural Forum, January 1955, May 1955, June 1955, April 1956

Architectural Record, December 1955

The Architectural Review

Architecture d'Aujourd'hui, Mai 1954

American Institute of Architects Bulletin, January 1951

The Bulletin of the Beaux Arts Institute of Design, Vol. 8, 1931-32

The Architectural League of New York, Vol. 40, 1925 Paris Prize