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GRAHAM ANDERSON

SHARJAH, U.A.E.: 'THE URBAN CONSERVATION DILEMMA'
(An Abstract)

Submitted for the Degree of Master of Arts in Geography, 1991

This thesis has two broad aims, to outline and analyse the urban development of the city of Sharjah, United Arab Emirates, illuminating significant events leading to the establishment and subsequent spatial expansion of the settlement. This analysis provides the basis from which the second part of the thesis is derived, thus fulfilling the second aim; to create a series of conservation zones in the city based upon the historical, architectural and cultural significance of groups of buildings, plus their feasibility for preservation according to their physical condition. It is to attempt to redress the balance of the wholesale demolition of historic areas of Middle-Eastern cities that this thesis is offered, in the hope that the suggestions contained within may provide, at the very least, a stimulus or springboard that could result in the extension and application of ideas to other Gulf cities, so resulting in the regional development of conservation zones.

Chapters 1.1, 1.2 and 2 trace the establishment and development of the settlement called Sharjah, outlining significant historic events and their geographical impact upon the town, including the Master Plan of 1969.

Chapter 3 widens the approach, comparing the town to others in the Middle East with respect to components considered to be essential elements of urban cores ('medinas').

Chapters 4, 5 and 6 analyse these individual components; religious institutional buildings, suqs and residential structures, collating evidence to create proposed conservation zones based on both broad-based patterns and individual case studies to exemplify such findings in detail.

Chapter 7 outlines potential problems of large-scale conservation schemes, offering some possible solutions but significantly, presenting the dilemma common to many such cities: the conflict of land use at the heart of the city: its historic urban core.

Chapter 8 concludes the thesis by summarizing all previous evidence and submitting up-to-date findings from a field visit in 1991, thus illustrating any significant developments with respect to conservation in the city.

'SHARJAH, U.A.E. :
THE URBAN CONSERVATION DILEMMA'

Submitted for the Degree of Master of Arts
in Geography

at the

University of Durham,
Department of Geography,
1991,

by

Graham Anderson

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21 APR 1992

Dedicated to

His Highness

Dr. Sheikh Sultan bin Mohammed Al-Qasimi,

Ruler of Sharjah

and

Member of the Supreme Council

of the

United Arab Emirates,

and the

People of Sharjah,

Past and Present.

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PREFACE

It was during my first period of employment in 1982 as a teacher in Al-Ain, U.A.E. that I first became acquainted with the city of Sharjah. The allure of the desert and Bedu culture became a fascination and after visiting the various towns and cities of the Emirates, Sharjah became a favoured destination. This was, principally, because of the relaxed, cosmopolitan atmosphere; but also the picturesque, historically fashioned suqs aligning the creek created a real sense of timelessness where the real flavour of life in less prosperous times was almost tangible. In 1982, demolition of these areas had continued for a decade and could be seen steadily eroding the historic, urban fabric. I witnessed the demolition of some impressive courtyard houses to enable construction of the Al-Mujarrah Suq beside the creek and the gradual deterioration of once-impressive residential structures.

During my return in 1985 and subsequent employment in Dubai, the processes outlined above had continued at an alarming rate. I realised that for any older buildings to survive in Sharjah, strong, convincing arguments had to be prepared. This would illuminate their worth historically, but also encourage their re-integration into the economic and social life of the city. Thus, in 1986, fieldwork for this thesis began. It involved a detailed photographic and literary survey of the old, urban core, noting architectural finery, rate of deterioration, materials of

construction and general quality of the physical structure. To support and illuminate discoveries, several interviews with local inhabitants were conducted and comparative studies researched at the University of Durham during vacations. The findings of this research are thus presented in this thesis.

Many people have contributed to the completion of this work and to them, I owe sincere and extended thanks. Among these, the following persons have been of unquestionable importance;

To my wife, Sheila, whose initial inspiration, motivation, support and constructive criticism have been the mainstay of this study. To my dear friend, Mr. Mustapha Ali Al-Sheriani, Head of the Sharjah Planning Department, whose patience, encouragement and invaluable supply of information, maps, plans and diagrams has made a major contribution to this work. Indeed, without his help, it is doubtful whether the thesis would ever have been produced. To Dr. Gerald H. Blake of the Department of Geography at the University of Durham, whose incisive comments and criticism, total support and encouragement have provided stimulus even in the most difficult phases. To my typist, Mrs. Joyce Brown, whose professionalism and enthusiasm have been an inspiration in themselves. To Mr. Nasser Al-Aboudi, Head of the Planning and Cultural Department in Sharjah, whose comments on the central sections of the thesis were truly appreciated, as were those on the first section of the work by Dr. Ewan Anderson of the University of Durham, Geography Department.

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Finally, for the interest shown and support given to this work, to His Highness Dr. Sheikh Sultan bin Mohammed Al-Qasimi, Ruler of Sharjah and Member of the Supreme Council of the United Arab Emirates. May the value placed by yourself in the education and history of your people, be an inspiration to others, as it has been to myself.

INTRODUCTION

The wealth brought by the discovery and exploitation of vast oil reserves around the Arabian Gulf has had irreversible socio-economic and political changes for the indigenous peoples, and tumultuous morphological changes to their settlements. In just three decades, the once relatively primitive, impoverished, time-locked communities of the United Arab Emirates have expanded into modern, urban centres, with communications infrastructures to rival any in the West. The petro-dollar has emancipated the Bedu from the omnipresent captivity of the desert climate. They have become influential players on the world's political stage; a voice heard, considered and respected, unlike the past, where the voice was so remote as to be ignored. Unfortunately, not all the changes have been positive. Though many customs and traditions survive at the very highest levels, many have been lost, or are seen as inelegant symbols of an austere existence incompatible with the wealthy, comfortable, sophisticated lifestyle of modern Gulf society.

Amongst the first casualties of modernization was the organically evolved urban morphology, with cellular, interlocking built-forms constructed sympathetically with one another, defying and ameliorating the harsh climate. Coral stone and gypsum houses quickly became unfashionable as untold wealth gave full sway to individual fantasies: Swiss cottages, Japanese pagodas and, more commonly, homogeneous, characterless tower-blocks which became 'de-riguerre' symbols



of the 'fast-buck' mentality. The traditional urban structure was bulldozed by the hectare to be replaced by intrusive and incongruous built-forms, alien to Arabian society. It is to try to redress the balance that this thesis is written; to encourage a deeper appreciation and understanding of the adversities that had to be overcome in the past, and to admire the ingenuity of solutions reflected in the urban form of coastal settlements.

It should not be regarded however, as merely a dissertation eulogising the 'glories' of the past, but as the basis from which modern, urban development can be expressed; learning from previous, successful decision-making strategies and building techniques, and employing them in an amended form, relevant to modern society. Thus, continuity and harmonization are encouraged, as opposed to the alienation of buildings and inhabitants resulting from the imposition of Western planning formulae, so often witnessed since the discovery of oil.

Sharjah is a typical example of a city transformed 'overnight' from a sleepy backwater to a confident, dynamic urban centre dominated by the income from oil revenues and the technology necessary to conduct business on a global scale. It is also a city where a considerable amount of land at its core remains undeveloped, dominated by the suqs, mosques and dwellings of the early twentieth century; stubborn survivors of the pre-oil era. Plans for their ritual demolition are already well advanced but not yet implemented, and it is to illustrate their relevance and

value today that such buildings are recommended for conservation. This, it is suggested in this thesis, should be within zones based on a series of parameters, akin to those guiding similar proposals in other Middle-Eastern cities where conservation schemes have been successful.

The geographical approach to urban conservation has considerable benefits. Nowhere (to this author's knowledge), are historical, architectural, economic, social, political and spatial influences combined to explain the urban history of any town in the region. Indeed, no work concentrating purely on the geographical development of a settlement in the Emirates exists. Certainly, no conservation proposals have ever been published, nor groups of buildings studied from such a wide data base. It is to attempt to plenish this deficiency that this work is offered, in the hope that its methods and conclusions can be more widely applied to other cities of the Gulf coast to encourage a rational, regional approach to conservation. Sharjah's geographical position in relation to other Gulf cities can be seen on Fig. i.

The broad aims of the thesis are as follows:

- a. To present a detailed geographical analysis of the history of the city of Sharjah, illustrating the variety and inter-relationship of built-forms and their relevance to potential development today.

- b. To underline the argument for the preservation of elements of the early twentieth century city in a series of conservation zones based on parameters outlined above, and
- c. To provide a framework for the conservation of buildings within which decision-making bodies of other cities of the Gulf could operate by applying the methods and strategies used in this study to their own urban area.

It is hoped these aims will be achieved by progression through the text. In Chapter 1, the remarkable geographical urban history of Sharjah is analysed via a series of eye-witness accounts, historical references and maps. Such an analysis is necessary to illuminate the historical importance of the old urban core and to show the individual historical relevance of buildings based upon their unique merits and contribution to the cultural heritage of the city.

Chapter 2 continues the themes of the preceding chapter, analysing the development of the city after the introduction of the Master Plan in 1969. It forms the basis for contrasts to be made in future chapters by comparing original proposals with actual developments. It also outlines the prevalent attitudes towards conservation experienced during the 1970's and 1980's.

To illustrate the significance of Sharjah to the geographical history of the Gulf and to Middle-Eastern settlements in general, Chapter 3 outlines the main elements of Islamic cities and the importance of examples from Sharjah

in this wider context. This theme is expanded in subsequent chapters as individual types of building are analysed. Thus, beginning in Chapter 4 is a survey of religious institutional buildings which eventually form the core of conservation zones in the city. The emphasis is on the architectural and cultural importance of these buildings, locally and nationally.

Chapter 5 begins the construction of conservation zones using a series of parameters and information gathered from fieldwork observations. It outlines two proposed zones with suqs as their nucleus and surrounding buildings graded according to a summary of their intrinsic values to the city. Chapter 6 continues this theme concentrating on residential structures in a similar context and providing detailed case-studies to reinforce conservation proposals. Chapter 7 presents an analysis of the physical problems and adverse attitudes associated with preserving buildings. Some suggestions for their remedy are also outlined.

Finally, the concluding Chapter 8 brings the analysis up to date with a survey of findings gathered in January, 1991. It illuminates the rate of demolition since the original fieldwork in 1987, and provides a record of achievements and blemishes witnessed recently. It is significant in that it highlights pervasive attitudes at the present time. Also shown is the relevance of this work to other Gulf cities.

The gathering of information for this thesis posed several problems. There are no written records of any description surviving for buildings constructed in Sharjah before 1970. Therefore, some conjecture is employed with

respect to various elements witnessed in some buildings. Older residents were sometimes reluctant to talk about the past as it reminded them of times they would often rather forget! There was also a considerable amount of suspicion about a non-Muslim wanting to know so much about buildings generally thought to be obsolete and worthless. The presence of a camera also alarmed some people, who did their best to prevent key photographs being taken! Many of the older buildings surveyed for this thesis remained inhabited and entry was strictly forbidden; therefore only summary evidence of the exterior could be collected.

One last, but key problem concerns the definition of the word 'urban' in the title. There have been several attempts to provide a conclusive definition for this elusive concept. Within the settlement history of the United Arab Emirates, the term 'urban' could not readily be applied to an area that was composed basically of nomadic tribes, without permanent settlement. However, coastal settlements, once established, grew in importance as more people were attracted to reside permanently for a variety of reasons. Beaumont, Blake and Wagstaff (1976) highlight this problem when comparing various Middle-Eastern countries (1). For the purposes of this study, a settlement is considered 'urban' when it fulfils the following requirements; it is a permanent place of residence for the majority of its population (though will be host for a large minority of visiting tribesmen throughout the year); it possesses commercial and religious functions serving a wide hinterland; it is a key stage in

the transport network of the area (albeit desert tracks) and it is the residence of the ruling sheikh of that area and therefore, the seat of local and regional government. The population figure of the town is less important than its functions, but a settlement may be considered as urban with as few as 2,000 people (depending on regional context). According to these guidelines, the town of Sharjah can be said to have fulfilled these conditions at some time in the early nineteenth century. It is at this time that the geographical history of the city begins in this study, but first will be given a brief outline of locational factors determining the initial establishment of a settlement at this place called 'Sharjah'; 'the Eastern place'.

REFERENCES

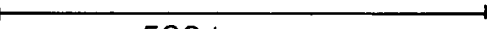
1. Beaumont, Blake and Wagstaff (1976) state the following:

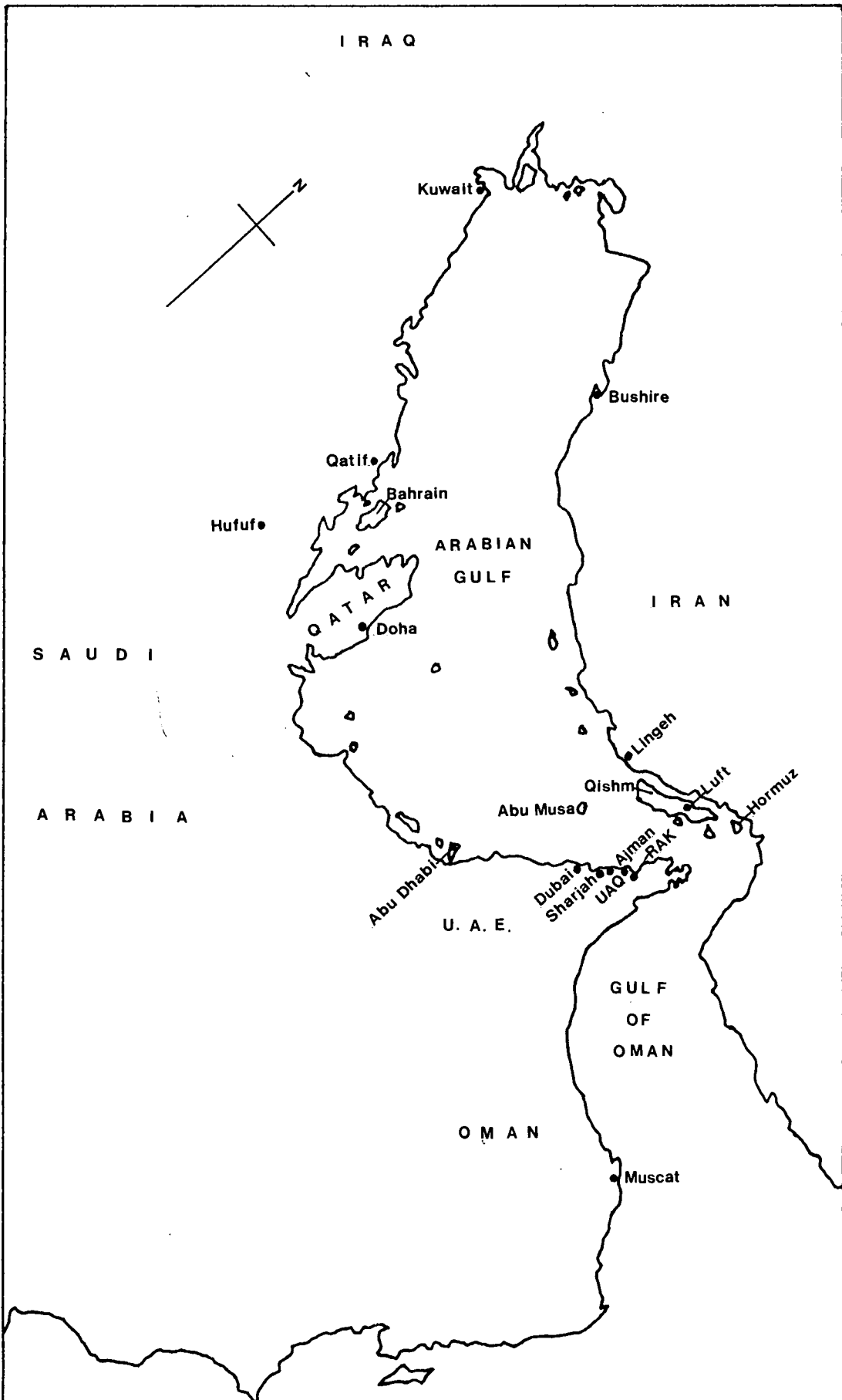
"To begin with, there is no common definition of 'urban', and published national figures are not therefore directly comparable. Israel for example, takes any settlement with over 2,000 inhabitants as urban, except where more than one third of the labour force is engaged in agriculture. In Saudi Arabia the urban threshold is 4,000, in Iran 5,000 and 10,000 in Turkey".

in

BEAUMONT, P., BLAKE, G.H. and WAGSTAFF, J.M.
'The Middle East: A Geographical Study'
(London, John Wiley & Sons, 1976)

Fig. i The Arabian Gulf Area.

Scale:  500 km



Key: RAK Ras al Khaimah U.A.E. United Arab Emirates
UAQ Umm al Qaiwain

CHAPTER 1

THE HISTORICAL URBAN DEVELOPMENT OF SHARJAH

1.1: Origins and Development up to the Early Twentieth Century

1.1i Coastal Settlements

The coastline of the United Arab Emirates (known at various times in the past as the 'Sirr Coast', 'Pirate Coast', 'Trucial Coast' and 'Trucial Oman') has been subject to subtle but important physical changes over the past ten-thousand years. These are due mainly to variations in sea level of approximately one metre higher or lower than at present and although these changes seem small, they have had a pronounced effect upon the pattern of coastal settlement due to the flat topography of the area.

In the first millenium B.C., the sea-level was thought to have been at least one metre higher than at present, with important trading settlements founded at Ad-Dour (near Umm al-Qaiwain) and Al-Ghusais (near Dubai). Both these locations are now several kilometres inland and at the time of their occupation, the area now occupied by the city of Sharjah was, for the most part, submerged. (1).

The emergent nature of the coastline has contributed significantly to the growth and decline of coastal settlements in the United Arab Emirates; a factor which is influential even today and one which greatly affected the role of Sharjah as an important trading centre as recently as the 1950's (see Chapter 2).

Sharjah is situated on the southern shore of the Arabian Gulf on a flat coastal strip of alternating sabkha and low-lying sand dunes. (see fig. 1.1i). The landscape is subject to the prevailing and dominant northerly wind known as the 'shamal', and it is this wind combined with the effect of offshore currents that have helped to either create or destroy the sabkhas, bays, creeks, sand-bars and beaches so influential in the location of early settlements.

The availability of fresh water is the most important locational factor regarding human settlement in the U.A.E. On the coast, fresh water could be found at a depth between four and five metres or in 'lenses' trapped between the low-lying sand dunes. The changes in sea-level affected the purity and quantity of potable water available in the wells, causing people to move to more favourable locations created by the same sea-level change.

The people of the coast have always maintained strong trading links with other civilizations around the Arabian Gulf and further afield. (2). This fact has remained constant throughout their known history, and one which continues to be influential on the physical development of coastal towns in the United Arab Emirates (U.A.E.).

Archaeological and written records of the early development of Sharjah are scarce, but one of the first possible mentions of a port on this site is written by Idrisi, commenting on Pliny's (A.D.23-79) description of the coast of Arabia:

".....the route from Julfar (near Ras al-Khaimah) to Bahrain went across the sea of Qatar, calling at the port of 'Sabkha' which may have been near Sharjah or Dubai, where fresh water could be had". (3)

Sharjah then, in common with all coastal towns in the U.A.E. contains the two major elements favourable to the establishment of early settlement in the Arabian Gulf: firstly, it is situated upon a sheltered inlet of the sea (locally called a 'khor' or 'creek'), providing a safe, natural anchorage for sailing craft where trading links could be founded, and secondly fresh water is available at a relatively shallow depth (Lorimer (1908) (4), states three to five fathoms) below the surface.

1.1ii The Arrival of Islam

From the second century A.D. until the coming of Islam relatively little is known of the people of the area and their settlements, other than that they may have followed some 'animistic' religion, for even as late as 1820, Whitelock refers to buildings called 'senams' built by the Persians near Ras al-Khaimah

"in which they used to worship their idols or images." (5)

Islam spread throughout Arabia from the seventh century A.D. "helped by Sharjah people", (6) presumably indicating some form of permanent settlement at this location but descriptions of the town at this time are problematic due to lack of documentary evidence. It could however, be inferred that because of little alternative, the main built

structures could have been similar to those found until the early twentieth century, using materials such as palm fronds, palm-trunks, animal skins, coral stones, lime and gypsum (collected from the extensive evaporite pans of the sabkha), which were readily available.

It is known that during early Islamic times the most important town in the region was Julfar (near Ras al-Khaimah) whose rule and influence extended as far South as Sharjah. Julfar was a wealthy and thriving trading centre located, like Sharjah upon a 'khor'. Sharjah remained then a small trading settlement in the sphere of Julfar, gradually succumbing to the tenets of Islam as old, animistic practices were dropped.

It is difficult to ascertain accurate population figures for this part of Arabia at this time, although it is suggested that the population density was similar to that of the 1930's. (7). A constant factor in the development of settlements here is that of a tribally-oriented society performing a variety of economic functions at different times in the past, influenced by key factors such as the geography and climate of the region rather than by the forces of Islam which became gradually infused over a number of centuries.

The 'versatile tribesman' formed the basis of the economic structure of the U.A.E. in the past, spending the winter with livestock in the desert and travelling to the coast to fish in the summer. They would also plant date palms and millet and even partake in the pearl harvest. Specialization was not considered a practical alternative and so the division of society into groups based on occupation did not occur until the economy became stronger.(8)

The built form of any settlement here prior to the nineteenth century can only be inferred from the lifestyle of the tribesmen described above. It is likely that a small, permanent settlement was established at Sharjah with economic activity concentrated on the pearl harvest and fishing: these commodities traded for dates and millet with nomadic tribes and for other foodstuffs with peoples of different Gulf civilizations. Residential facilities would probably have been of two main types: the Bedu tent, used principally by the 'versatile tribesman' and, by its nature, a transient form of dwelling in turn swelling or reducing the population as tribesmen moved between port and interior to trade, or as a reflection of a change of allegiance from one tribe or family to another. Secondly, the 'barasti' (known locally as the 'arish'); a dwelling made from palm-fronds consisting of between two to six rooms built around a central yard and surrounded by a wall constructed from the same material.

These would be inhabited by more permanent settlers known as the 'Hadh'r', who unlike the Bedu, were becoming more dependent on fewer occupations such as pearling and fishing. (9)

Mosques would have been constructed from the same materials as the 'barasti' but were not introduced into the built form of the settlement until much later as initially, prayer was performed in the open air, the erection of mosques not being a stipulation of the Holy Qurán.

Any larger, more substantial residences or mosques built from local coral stones and lime-mortar could only be funded by wealthier individuals, and as these were few in number at this time, buildings on a larger scale would not have been common.

1.1iii Early European Colonialism

Into the generally frugal lifestyle of the tribally-based trading society of the Sirr Coast was introduced the first external power that forcefully attempted to control the trade routes between Europe and the Far East: 'South-West Asia was a corridor between the storehouses of the East and the markets of Europe.' (10)

The Portuguese, during the sixteenth to eighteenth centuries 'relied on brute force to dominate the Gulf and its trade.' (11) Prior to their arrival, the Arabs of the Sirr Coast and the Yemen held the control of sea-borne trade which had resulted gradually in an enriching of society since the introduction of Islam in the seventh century.

It was this control of trade the Portuguese wrested to the exclusion of all local peoples to secure their trade routes between the East and Europe.

Their effect however, on the form of ports such as Sharjah was very limited for 'they left no religious and hardly any cultural imprint, except for their cannons and the ruined forts of their garrisons'⁽¹²⁾. The Portuguese concentrated on capturing the port of 'Ormuz', stationed on the island of Hormuz, at the entrance to the Gulf. The creeks and waterways of the Sirr Coast were of relatively little importance to them. They did however, trade with Julfar and erected a fort there in 1631. They may have erected some fortification at Sharjah as one of a series along the coast, although this is doubtful. The Portuguese ruled from Hormuz. They controlled the flow of trade in the Gulf but had little effect upon the pattern of Gulf life, leaving local rulers and institutions intact.

The Sirr Coast ports, other than Julfar, were also not of great significance to other European colonial powers after the Portuguese were forced out of the Gulf by the Persians during the seventeenth century. The Dutch, French and British initially ignored these ports, although dominating trade to the detriment of the local Arabs, until during the eighteenth century when the Arabs began to 'fight back' to regain the trade that was, to a great extent, denied them.

1.1iv The Rise of the Qawasim

The power struggle between the European powers, Persia and Oman in the sixteenth century had resulted in the rise of a new power in the southern Gulf; the Qawasim, who ruled from their base at Ras-al-Khaimah. (13).

It was the Qawasim and their conflicting relationships with the British and the Omanis (who were by now dominant along the southern Gulf coastline) that were to shape the history of the SIRR Coast until the early twentieth century.

The Qawasim was not a single tribal family but a federation of tribes based in and around Sharjah and Ras-al-Khaimah controlled by the Al-Qasimi family ruling most of the area North of the line between Sharjah and Kalba. They are a branch of the 'Huwala' Arabs who migrated to the SIRR Coast during the eighteenth century from the towns of Lingeh, Qishm, Kunj and Luft on the Persian side of the Gulf. An event which was to unify the Qawasim into a separate, autonomous political entity under the Imam of Oman was the Omani Civil War of the early eighteenth century. This was caused by disagreement over the succession to the Imamate, resulting in a split of the tribes of the area into two factions; the Hinawi and the Ghafiri. The Qawasim aligned themselves with the latter, (in common with people who had migrated to the SIRR Coast from North-East and Central Arabia in the fourth and fifth centuries A.D.) (14) but eventually the Hinawi candidate (an ancestor of the present ruling Al Bu Said family of Oman) claimed victory.

This event is important in the development of the area ruled by the Qawasim because in 1763, the Qawasim sheikhs of Ras al-Khaimah, who had extended their influence over the whole Surr Coast, met with the Imam and agreed that their territory should be independent of Oman. The Qawasim then ruled almost the whole of the Musandam Peninsula, except a small enclave near Ras Musandam that remained allied to Oman. At the height of their power the Qawasim also ruled a number of Persian ports, (see above), from where many of their people had migrated.

Before the rise to power of the Qawasim, an indication of the status of Sharjah as a relatively minor, but growing trading centre can be illustrated by the following reference from T.F. van Knipphausen and J. van der Hulst in 1756:

"Between Kateef [Al Qatif, Saudi Arabia] and Seer [Ras al-Khaimah] there are three places on the coast, 'Ajir, Qatar and Sharjah, each of which only had few houses, where from Basrah dates and rice were brought to sell to the Arabs of the desert or to pearl-divers." (15)

This short, but important reference informs us of the two main occupations of the people; pearling and trans-desert trading of rice. The fact that it had 'few houses' (although the exact number, materials of construction and density are not given) implies some degree of permanence; this being emphasized by stating that Sharjah is one of only three settlements on the coastline worthy of note. The economic activities mentioned underline the two geographical divisions of the Qawasim: the Huwala Arab tribes from Persia predominantly maritime oriented and

the Bani Qitab of Bedouin stock from North-East Arabia being land oriented.

Evidence of the migration of the latter tribe is provided by Thomas, who remarks of the 'Najdis' in 1931,

"Then back they came and established themselves in Sharjah. That was seventy years ago [1861]. This very fort was in their hands" (16)

It is difficult to pinpoint a time in history when it can be said that Sharjah became an 'urban' rather than a 'rural' coastal unit. Population numbers and density, the amount and nature of buildings erected, the changing function of the settlement can only be estimated, but for the purpose of clarity Sharjah, with respect to the definition of 'urban' given in the introduction, is suggested to have made the transition from 'rural' to 'urban' shortly after the Qawasim became the ruling force in the region.

Into this place of 'few houses' came various external forces that helped shape the physical form of the town from the eighteenth to twentieth centuries, setting the seed for the resultant large-scale development seen today.

1.1v The Wahhabis

The first of these 'external forces', which perhaps affected the psychology and reputation of the people rather than the built form of their towns were the Wahhabis; a fanatical religious sect of Islam, believing in a fundamental interpretation of the Holy Qurán with the result that, regarding the built form of the town, this would

create a very sober style of mosque with very little (if any) decoration, often with no minarets. Any artistic ornamentation of buildings was frowned upon, as was the erection of elaborate tombs and 'deification' of any sort. It cannot be said with certainty how great the influence of the Wahhabis was on the urban form of the town, but a certain moderation in the design of new buildings would probably have occurred, for by the early nineteenth century, the whole of the Sirr Coast acknowledged Wahhabi authority, although the Qawasim retained a degree of independence. (17)

The second, and probably most influential force in the later urban development of Sharjah was the 'colonization' of the area by the British, whose presence was chiefly felt in the form of the East India Company.

1.1vi The Qawasim, The British and Sharjah

The economy of the Qawasim inhabitants of Sharjah during the eighteenth and nineteenth centuries barely kept the majority above subsistence level. Each family relied upon trade to some extent for their meagre income, both with the desert peoples of the Bani Qitab tribe based in Al-Dhaid and with countries overseas, the latter being of greater importance.

It was principally this sea-borne trade the Qawasim had to protect to retain their independence and maintain their livelihood. Without it, life for many would have been barely tolerable. The Qawasim had well-established trading links both inside the Gulf (notably with the towns

of their ancestors such as Lingeh), East Africa (for slaves) and India (the chief market for pearls).

During the mid-eighteenth century Britain, or more accurately, the East India Company, was becoming more active, wanting to expand its trading connections with the Far East, just as the Portuguese, Dutch and French had attempted before them. This period saw the rise of the East India Company as the major trading force in the Gulf, with British 'Political Agencies' or 'Residencies' located on all coasts to protect the company's interests. The company gradually gained a more political role and as its share of trade increased, there was a parallel decline in the share of Indian and Arab controlled trade. The British were consequently seen as serious and unwanted competitors for trade in basic commodities such as foodstuffs and wood.

The East India Company launched an intensive and effective propaganda against its main competitors, (namely the Qawasim), falsely accusing them on numerous occasions of acts of piracy to justify their sometimes unsavoury retaliatory actions, ironically, including piracy. It is not however, the purpose of this work to follow this saga, merely to indicate how these actions may have helped in changing or moulding the urban form of the settlement at this time.

There is a description, given by Al-Qasimi (1986) of the general appearance of Sharjah at the end of the eighteenth/beginning of the nineteenth century:

"Sharjah town was situated on Sharjah Creek which was shallow and about 150 yards wide. The town was long, narrow and open, defended by a fort and cannons and some detached towers. It was inhabited by the Qawasim, al-Ali, Shewaihin and some mixed tribes amounting to about 3,500 to 3,800 inhabitants in all.

.....Banyans (Indian Brokers) settled there as pearl merchants, goldsmiths and cloth and grain dealers. Fresh water was procurable." (18)

There is here, some evidence of the growing importance of Sharjah. The relatively wealthy 'Banyans' would not have settled in the town, had it not been profitable to do so. These merchants would have the finances to build more impressive houses from stone and mortar, and shops in the suq from which to conduct their businesses. References to pearls and gold indicate a comparatively comfortable life-style as opposed to the marginal existence of their seafaring employees. The Banyans and Persian merchants could afford the luxury of two-storey homes decorated with carved stucco in the styles of their homelands, whilst their poorly-paid pearling and trading crews either lived aboard ship or in a 'barasti' type dwelling along the shoreline.

Wahhabi influence remained into the nineteenth century, to the extent that Wahhabi authorities forced people of the Qawasim to commit acts of piracy they would have not normally considered. These acts, and many others not involving the Qawasim, were magnified by the East India Company and used as propaganda against their supposed 'attackers'.

This enmity culminated in an act of naval and military aggression against the Qawasim by the British in 1819. An

expedition led by Sir William Grant Keir, was despatched by the colonial government in Bombay with instructions to 'destroy all piratical vessels and to occupy the Qawasim stronghold of Ras al-Khaimah'. (19)

Before the results of this attack can be discussed, it is necessary to explain a little of the immediate background events regarding the physical and social development of Sharjah.

The sheikh of the Qawasim from 1803 to 1866 was Sheikh Sultan bin Saqr Al-Qasimi and he was greatly influential after 1814 in the urban growth of Sharjah at the expense of Ras al-Khaimah.

Sultan bin Saqr was deposed by the Wahhabis in 1809 as he had accused them of inspiring the Qawasim to acts of piracy against the British, but in 1812 he escaped from Wahhabi custody and promised the British that all piracy would stop if his position was restored to him. Through the help of Sayyid Said (Imam of Muscat) and the British, Ras al-Khaimah was attacked but the attempt to restore Sultan bin Saqr there failed, and it remained under the control of his rival and nephew, Hasan bin Rahma.

In 1814, Sultan bin Saqr relinquished all claim to Ras al-Khaimah, and moved his residence to two localities; Sharjah and Lingeh. It can be assumed that many people left Ras al-Khaimah and other nearby Qawasim villages and moved South to Sharjah showing allegiance with Sultan bin Saqr, their rightful ruler. Such migrations were relatively common, as Lienhardt (1975) remarks:

"People did move away from circumstances they disliked....When large groups moved from one place to another, they were often following shaykhs of their own. Secession was a sanction against the abuse of authority" (20)

This influx of population would result in a rapid expansion of the built-up area of Sharjah, both in coral-stone and barasti dwellings. The people would come with their boats, skills and experience, adding to the growing importance of the town. This urban expansion would have continued as Sultan bin Saqr's influence widened, but for the attack by the British on all the Qawasim ports including Sharjah in 1819-20, as they believed Sultan bin Saqr had not been successful in preventing piracy. Al-Qasimi (1986) states:

"Fortified houses and towers at the ports of Rams, Jazirat al-Hamra, Umm al-Qaiwain, Ajman, Fasht, Abu Hail and Sharjah were demolished. Their ships were also destroyed, and according to British estimates, the number there was 184 ships." (21)

The events of 1819-20 marked the beginning of formal relations with Britain. Sultan bin Saqr signed a treaty with the British and the other ruling sheikhs of the Sirr Coast called the 'General Treaty for the Cessation of Plunder and Piracy', which provided for a maritime peace with the return of Ras al-Khaimah to the rule of Sultan bin Saqr.

Sharjah's recovery after the British attack in 1819-20 can be illustrated with reference to a map produced in 1822 by Lieut. R. Cogan of the H.C. Marine (see Fig. 1.1ii)

In the two years since the attack it can be seen that Sharjah town had developed into a long, narrow settlement

of approximately half mile long and one eighth mile wide at a location along Sharjah creek opposite the point where the sand spit hinges on to the Layyah peninsula. It would appear that defensive walls had been reconstructed around the town, with two towers erected at prominent corners. Development at this time was restricted not only by the walls, but also the rocky rising ground to the South and by date-palm plantations to the North. There is no indication of the function of individual buildings within the settlement, but three towers are labelled, two on the Layyah peninsula and one East of Sharjah, presumably to defend the wells which must have been the primary source of fresh water for the settlement.

Wellsted (1840) remarks that with reference to Qawasim ports after the British attack:

"All their towns and forts have however been rebuilt." (22)

In 1823 a 'Native Agency' was established in Sharjah which was, until very recently, in an impressive house of coral stone and gypsum mortar beside the creek, where now stands the new Al-Mujarrah suq.

It was from this period until the early twentieth century that some of the most imposing stone-built structures at Sharjah were constructed, mainly from funds provided by the pearl-merchants then based in the town. Some of these structures survive today, although mostly in a poor state of repair, in the districts now called Al-Mujarrah, Al-Marija, Al-Shuwaiheein and Al-Sharq, all of which line the

South bank of the creek. It is this period of history in which Sharjah became the most important port on the Sirr Coast, eclipsing its former superior Qawasim neighbour Ras al-Khaimah until Dubai superseded Sharjah in the twentieth century.

How then, during the rule of Sultan bin Saqr did Sharjah recover from the almost total destruction at the hands of the British in 1820?

It would seem, that of all the former Qawasim ports Sharjah recovered most rapidly, helped by the establishment of the British Native Agency there in 1823, giving prestige and superiority over other coastal Qawasim settlements. Sultan bin Saqr himself ruled for over sixty years, and the stability of his rule, plus the security of the treaty provided the base for economic recovery and urban development. Two indications of the scale and nature of this growth can be gained from descriptions of the town as witnessed by Kemball in 1845 and by Palgrave during his alleged visit there in 1863, towards the end of Sultan bin Saqr's rule when his son, Sheikh Khalid was virtually ruling the town in place of his ageing father.

Kemball (1845) provides a general description of Arab fortification in this area and it is safe to assume that Sharjah deviated little from this plan.

"A square fort, with flanking round towers, built of rough stone and coarse lime, capable of containing, in case of siege, from four to six hundred men; with detached round towers for the defence of the creek and landing-place, and to cover the wells that supply the inhabitants with water, make up the general features of Arab fortifications." (23)

However, more indicative of the growing predominance of Sharjah are the following remarks:

"The town consists of cadjan [barasti] huts, constructed of date sticks and mats, around the fort on every side. Stone dwelling houses are rare and Sharjah and Ras-ool-Khyma can alone boast of them." (24)

Reinforcing the permanance of the settlement containing stone houses is its categorization by Kemball as follows:

"Those of the first class - Aboothabe, Sharjah and Ras-ool-Khyma - may be said to contain from 2,000 to 3,500 houses." (25)

This statement does not indicate the proportion of stone to barasti dwellings, but a slightly earlier documentary record, provided by Hennell (26), does differentiate them. (See Fig. 1.1iii).

From this record, the rapid growth of the town is illustrated with the construction of a large number of houses between 1826 and 1831. The figure of 875 more houses in 1831 is almost 30% increase on the 1826 figure; a pattern that is substantiated in other figures from the same source. The population almost doubled in the five years quoted (see Fig. 1.1iii) to reach a total of 13,900 in 1831, the majority of which must have resided in the overwhelming number of barasti huts erected at this time.

The prosperity of the town is illustrated with reference to similar comparative figures for the number of pearl boats, fishing boats, trading vessels and cultivated date palms all of which display a marked increase.

This would appear to lend foundation to Palgrave's colourful account of Sharjah in 1863, where the image of a

thriving, prosperous community is given. However, it must be noted that some authors doubt whether Palgrave actually visited many of the places of which he allegedly provides eye-witness accounts. The position of this author will be clarified in Chapter 5.

Palgrave (1865) (27) estimated the population of the town to 'range between twenty and thirty thousand souls' - a substantial and significant six to seven fold increase of between sixteen thousand to twenty-six thousand people when compared to Kelly's (1968) estimates for the population of 3,500 to 3,800 men in 1820 (28) the initial impetus being from the migration of peoples allied to Sultan bin Saqr from Ras al-Khaimah and other coastal settlements.

As previously mentioned, the 'merchant-class' funded the building of large, sometimes two-storey coral-stone and lime/gypsum mortar houses, constructed around a courtyard. This was home for the extended family and displayed the characteristic features of other homes found throughout the Middle-East. Separate rooms for men and women, 'windows' placed high in the wall for greater privacy and ventilation, and access to the house afforded by an 'L' shaped entrance were some of these features.

The poorer 'labouring-class' homes, although a more insubstantial construction of palm-fronds and wood (the 'barasti') also displayed some of these features. It is these dwellings that were in the majority and were located on the shore where fish would be landed and boats moored.

After the razing of the town in 1820, the old town walls appear to have been further neglected, or as Palgrave (1865) describes them:

"The outer walls of Sharjah are of stone.....a reddish-yellow sandstone found in the neighbourhood. These walls are broken and ruined everywhere, their yellow bastions filled with sand and their curtain pierced with holes." (29)

As part of the town defences there were several watch-towers, one of which stood approximately seventy feet tall, 'octangular' in shape and 'of elegant form, ornamented with herring-bone patterns and pierced with loopholes here and there.' (30) This, with the adjoining, then recently-built, castle were used as an arsenal.

Mosques were becoming a more common feature of the townscape, most of them 'a very simple palm-frond mosque which could hardly be distinguished from the neighbouring barasti compounds, because they could not exceed the other buildings in height and they had no minarets." (31)

There was however 'a large and loosely-built mosque..... constructed near the market place.' (32). This must have been a building of large dimensions because the writer appears to have been impressed by 'the stillness of its lonely precincts.' (33)

The presence of a central mosque near the main suq is not uncommon in Middle-Eastern cities and there is often a hierarchy of trades leading from the mosque to the town's periphery with those activities connected with the building, decoration and maintenance of the mosque found beside it

and crafts such as saddlers and blacksmiths on the perimeter of the town, near to the main gates. (34)

Though a distinct pattern is difficult to prove given the limited evidence for Sharjah, Palgrave (1865) makes clear reference to craftwork activities located both in and around the former suq area: goldsmiths and silver-smiths gave employment to 'numberless families' (35) and there were also weavers, carpet and curtain makers and blacksmiths 'to be met with at all corners.' (36). Some of these trades appear to have been located in particular quarters of the town; 'The northern quarter of the town owns a large number of weaver's establishments,' (37), although this cannot be said to be part of any hierarchy from the evidence found to date.

The suq itself was found, more or less, at the same site as the old suq of today, parallel to the creek on the South bank, approximately one kilometer in length. The volume of trade and variety of goods bought and sold in the suq had increased during the reign of Sultan bin Saqr, due mainly to the profits made from the increased demand for pearls in India and Europe. In addition to the trades previously mentioned, in the suq were sold products manufactured in Western Oman; 'supplies in wool, cotton or in metal.' (38). There was a thriving livestock market with Bedu periodically arriving to sell dromedaries and asses, and even well into the twentieth century, slaves were one of the main commodities bought and sold, though the British had introduced legislation forbidding this act. (39).

Sharjah at this time can be compared to other ports of the Southern Gulf.

"there is no other sea-port locality of any great importance, no other general market place and emporium for commerceit is through Sharjah chiefly that the neighbouring lands receive the goods of Persia and India.' (40)

The pattern of streets and pathways in the town displayed the quality of being narrow and twisted with very few open spaces, or as Palgrave (1865) describes them:

"The streets are clean, but with no idea of symmetry.....These were built just wide enough for pack animals to pass.....and were a labyrinth of lanes and byways, narrow and tortuous.' (41)

These would provide shade from the hot sun as well as aid in the defence of the town.

In the particular case of Sharjah, the high density of buildings and narrowness of alleys (in addition to the above statements) was probably a reflection of the physical location of the town; being limited by the khor to the North, by 'rocky rising ground 30 or 40 feet high, forming a bluff to the South' (42) and by the position of date palms in the sands beyond the town walls parallel to the creek, the town being confined to a long, narrow strip of land between creek, bluff and date-palms, building space being somewhat limited.

One notable building referred to by Palgrave (1865), indicates the increased wealth of the Sharjah ruling family and merchants under Sultan bin Saqr. This is the 'Keysareeyah' a 'long and lofty vaulted building, strongly constructed and

furnished with iron-bound gates, duly closed at night to guard the riches it contains.' (43). The Keysareeyah was in fact the 'government' treasury.

Sharjah then, under Sultan bin Saqr was the most important port on the Sirr Coast. Due to the in-migration of his followers from the 1820's onwards and their development as a highly and multi-skilled workforce, Sharjah eclipsed Ras al-Khaimah in size, wealth and power. The availability of such a workforce and market attracted the merchants and traders to Sharjah. They developed their extensive trading links here and the economy strengthened helped by the stability of Sultan bin Saqr's rule and the presence of the British Native Agent to enforce maritime peace. The urban structure had changed considerably. From a small urban unit of 3,000 men at the beginning of the nineteenth century, it was now the most important coastal town with between 30,000 to 40,000 inhabitants, all of which had to be housed, employed and be given mosques to allow them to practise their religion. The demand for basic commodities encouraged the growth of the suq and a diversification of imports to suit the tastes of the 'merchant classes'. The town was confined physically to the southern shore of the creek, so buildings tended to be erected in close proximity and continued in this form, with little alteration, until the twentieth century. In the mid nineteenth century, Sharjah reached the height of its economic supremacy and its decline paralleled the waning influence of Sultan bin Saqr and mismanagement by his successors.

1.1vii Sharjah as a Trucial State

The first of a series of truces was introduced by the British in 1835 and signed by the rulers of Sharjah (Sheikh Sultan bin Saqr), Dubai, Ajman and Abu Dhabi to stop all hostilities at sea for one pearling season (May to September) only. A series of further treaties culminated in a ten year truce being signed in 1843 (44). It was the prospect of future peace on the pearl banks that led to the strengthening of the economy and consequent urban growth, as seen above. Towards the end of this period, the rulers again agreed to support the proposal of Captain A. B. Kemball (British Political Resident in Bushire, Persia) for a 'Perpetual Treaty of Peace', which was duly signed in May 1853. From this time the area became known generally as the 'Trucial Coast' or 'Trucial Oman'.

Britain had stationed a 'Political Agent' in Sharjah since 1823, principally to ensure maritime peace, but the interior of the Trucial States was largely ignored by the British. It is their concentration on the coastal towns, chiefly Sharjah, that strengthened the position of the coastal rulers as opposed to the land-based tribes of the interior. The economic and political progress achieved by Sharjah attracted pastoral peoples from the deserts and oases to settle in the town, helping to swell the population and increase the built-up area even though for some time they may have retained their nomadic homes, as noted by Palgrave:

"Some Bedouin tents belonging to 'Aamir, a quiet, peaceful district, diversify the scene." (45)

1.1viii The Decline of Sharjah

With the death of Sheikh Sultan bin Saqr in 1866, Sharjah's importance as a port, market and 'emporium' declined for two main reasons.

Firstly, there was for some years after Sultan bin Saqr's death, a power struggle between members of the Al-Qasimi family for leadership of the sheikhdom. Eventually, Sheikh Saqr bin Khalid, grandson of Sultan bin Saqr, gained control of Sharjah and ruled there until his death in 1914. It was during his reign that Sharjah suffered its greatest decline. (46).

Secondly, even towards the end of Sultan bin Saqr's rule, the creek at Sharjah had been gradually silting up, affecting the size and number of vessels that could use the waterway.

Saqr bin Khalid was of weak personality and it was his inability to command the loyalty of the pastoral Bani Qitab tribe based in and around Al-Dhaid that led to the declining influence of Sharjah and gave impetus to the neighbouring settlements of Dubai and Abu-Dhabi, ruled by the rival Bani Yas families.

To illustrate this decline and resultant change in

urban form, it is interesting to compare and contrast Lorimer's (1908) description of the town in the early twentieth century with that of Palgrave, quoted above.

Perhaps the most outstanding change is that of the marked decline in population from an estimated 20-30,000 in 1863 down to 15,000 in 1908: the attraction of the fast growing port of Dubai being a main cause of this drift.

There survived in 1908, a substantial proportion of the built forms described in 1863. The predominant residential structure was still the 'barasti', as Lorimer (1908) states:

"Good masonry buildings are numerous, but the bulk of the town consists of date-branch huts: the streets are a labyrinth of narrow, crooked lanes winding between the date-mat walls of the courtyards.'(47)

The total number of houses including those in the quarter of 'Layyah' (on the northern bank of the creek) was approximately 2,900, belonging mainly to the local tribes (see Appendix 1).

Mosques numbered 21, but their appearance and material of construction is not mentioned.

The suq or 'bazaar' remained an important feature of the town, retaining its focus for trade. It contained 'about 200 shops, and an equal number of warehouses in which most of the merchandise of the place.....is deposited.'(48)

The town walls, though dilapidated in 1863, appear to have no trace at all in 1908: 'and the fortified residence of the Shaikh (referred to as the 'castle' by Palgrave (1865)) and a series of mud towers which command the plain between

the town and the date plantations constitute at the present time the sole defences.' (49). Perhaps the coral stones from the walls were used to construct the 'good masonry buildings.' The 'Keysareeyah' receives no mention at all.

At the turn of the twentieth century there appeared to survive the old weaver's quarter, (called 'Mbaraz' by Lorimer [1908]), (50), although it had become fully incorporated into the urban structure of the town by 1908.

The date plantations, because of the diversity of resources they provided, remained as a barrier to urban expansion and numbered about 3,600 trees.

One important change to the urban form of Sharjah occurred after 1900, when Lingeh was taken from the Qawasim by the Persian administration resulting in a migration of merchants to the Trucial Coast to settle in Dubai and Sharjah. They brought with them their language and a significant architectural development to the area: stone built houses around a courtyard, but with the addition of 'badgir' or 'wind-towers' to allow a constant flow of cooling air to the room below.

The political and economic decline that had set in with the death of Sultan bin Saqr was never really halted or reversed and gradually political pre-eminence passed to Abu Dhabi and commercial activity become dominated by Dubai.

1.1ix Summary

Up to the turn of the twentieth century, various factors had been influential in the urban growth of Sharjah. Its early history was dominated by the adverse climate and harsh physical conditions of the landscape. Resources were few and the people had to use the scant materials available to construct dwellings to the best of their ability. The procurement of fresh water and advantages of its natural port initiated a permanent settlement at the site now called Sharjah from where trading links could be developed both with nomadic desert peoples and those in other parts of the Gulf.

The infusion of Islam after the seventh century A.D. became a dominant feature of the lifestyle of the people and gradually grew more apparent in the built form of the town as time passed. The erection of simple mosques and the adaptation of the courtyard dwelling as a physical expression of Islamic doctrine being an example of the continuity of built form that has lasted for over a thousand years in this area.

As European powers developed their trade links with the East, the strategic position of the Gulf as a corridor for trade was of great importance to them, and the Gulf people had to resist the seizure of this trade (being their livelihood) by these external powers. This was attempted to some degree until the arrival of the British into the area who dominated trade routes, influencing the political structure and government of towns.

The establishment of a 'Residency Agent' in Sharjah to maintain maritime peace, plus the stability of Sheikh Sultan bin Saqr's rule (engineered in part by Britain), resulted in a sustained period of economic and urban growth and political pre-eminence for Sharjah within the Trucial States.

The built form of the town became more elaborate, more solid and permanent, attracting rural peoples to settle and providing a residential base for the trade of immigrant merchants (as a result of political changes elsewhere in the Gulf).

Although Sharjah suffered a decline towards the end of the nineteenth century due to ineffective rule and the silting of its port, it was still a greatly influential force within the Trucial States until the coming of oil, when its more fortunately endowed neighbours superseded it.

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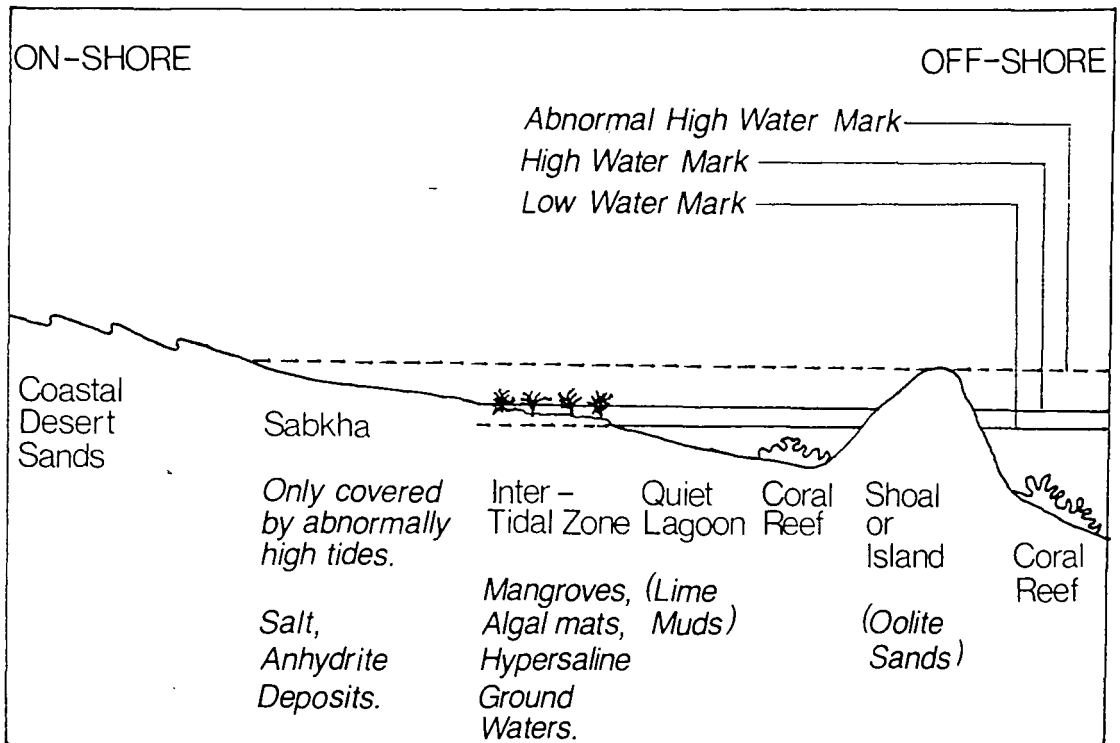
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Fig. 1-1i
Coastal Zones, (After M.E.E.D.)

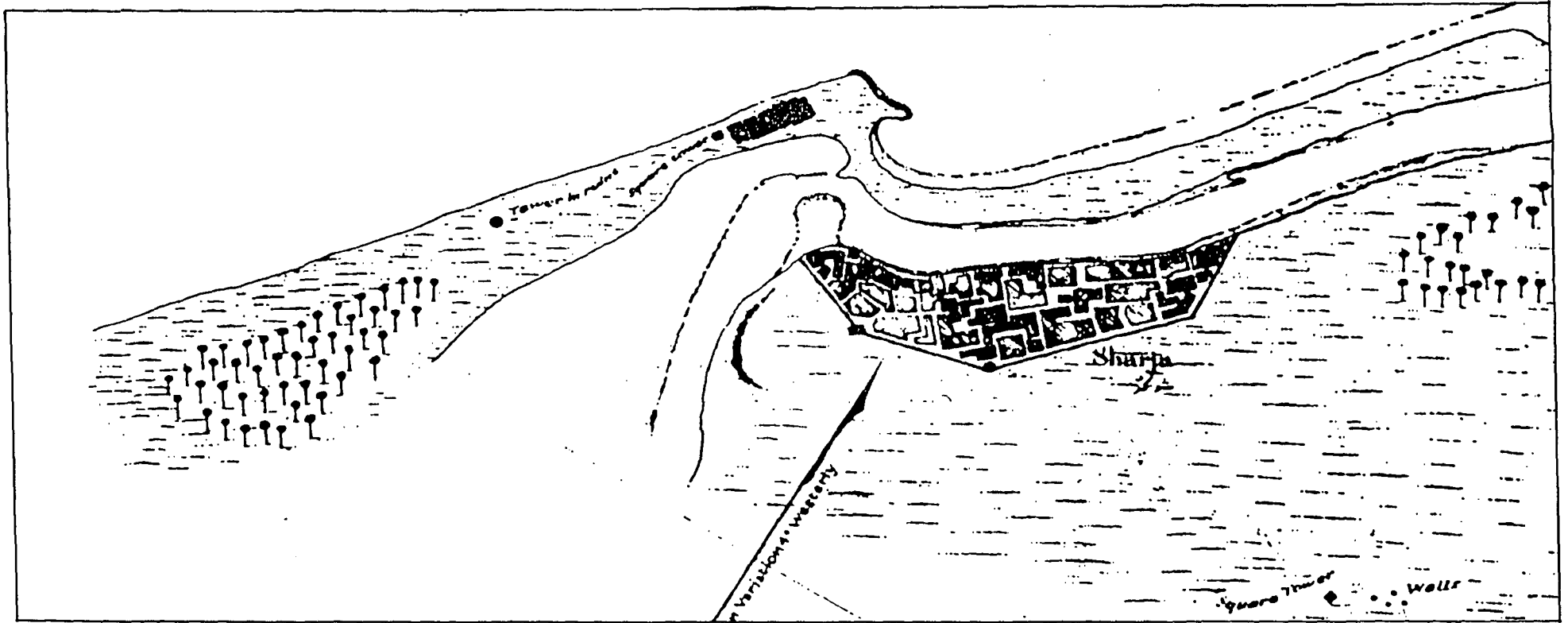


Not to scale.

FIG. 1.iii Sharjah in 1822

(Adapted from 'A Trigonometrical Plan of the Backwater at Sharjah' by Lieut. R. Cogan under the direction of Lt. I.M.Guy, H.C. Marine, 1822).

45



Scale

1 mile

1 km

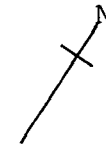


Fig 1.1iii (After Hennell)

STATEMENT of the Number of Inhabitants, Vessels, Houses, and Date Trees of the Joasmee Ports in 1826, contrasted with the same in 1831.

Names of Places.	In 1826.				In 1831.				Increase.	Diminution.	In 1826.					In 1831.					Increase.	Diminution.	1826.		1831.		Increase.	Diminution.								
	Number of Men.	Number of Women.	No. of Youth and Children of both Sexes.	Total.	Number of Men.	Number of Women.	No. of Youth and Children of both Sexes.	Total.			No. of Pearl Boats.	No. of Fishing Boats.	No. of Buggalows for Trade.	No. of Boats or Buttocks for Trade.	Total.	No. of Pearl Boats.	No. of Fishing Boats.	No. of Buggalows for Trade.	No. of Boats or Buttocks for Trade.	Total.			No. of Stone Houses.	No. of Huts.	Total.	No. of Stone Houses.			No. of Huts.	Total.	No. of Date Trees.	Total.	No. of Date Trees.	Total.		
Shaam and Kuleela....	250	300	700	1,250	250	300	700	1,250	..	..	..	15	..	..	15	..	15	..	..	..	250	250	..	250	250	..	..	9,000	9,000	11,000	11,000	2,000	..			
Ramse	250	300	700	1,250	300	350	1,000	1,650	400	..	..	15	..	..	15	..	18	..	..	..	250	250	..	300	300	50	..	4,500	4,500	6,720	6,720	2,220	..			
Ras-ool-Khyma	800	950	2,000	3,750	1,150	1,250	3,000	5,400	1,650	..	10	15	5	15	45	14	35	10	30	89	44	..	200	1,000	1,200	300	1,300	1,600	400	..	28,000	28,000	38,000	38,000	10,000	..
Jasirat-ool-Hamrah....	400	600	1,600	2,600	650	850	2,600	4,100	1,500	..	15	10	..	8	33	20	22	..	12	54	21	..	100	300	400	300	600	900	500	..	..	..	..	..	..	..
Amulgavine.....	400	500	1,450	2,350	750	900	2,900	4,550	2,200	..	15	15	..	8	38	32	25	..	14	71	33	..	15	400	415	27	600	627	212	..	..	..	..	..	..
Ejman	500	650	1,800	2,950	650	850	2,600	4,100	1,150	..	30	20	..	15	65	45	20	..	19	84	19	..	10	650	660	10	800	810	150	..	..	..	..	..	..
Heera	100	150	500	750	250	300	900	1,450	700	..	10	5	..	4	19	25	10	..	7	42	23	..	..	150	150	..	250	250	100	..	8,000	8,000	11,000	11,000	3,000	..
Shargah and Fasht....	1,700	1,800	4,000	7,500	2,500	2,600	8,800	13,900	6,400	..	160	77	..	67	304	210	80	5	75	370	66	..	175	2,000	2,175	450	2,600	3,050	875	..	..	..	..	..	..
Khan .....	..	..	..	..	150	200	400	750	750	..	..	..	..	..	..	17	..	..	..	17	17	..	..	..	150	150	150	..	..	..	..	..	..	..
Total.....	4,400	5,250	12,750	22,400	6,650	7,600	22,900	37,150	14,750	..	240	172	5	117	534	363	225	15	157	760	226	..	500	5,000	5,500	1,087	6,850	7,937	2,437	..	49,500	49,500	66,720	66,720	17,220	..

CHAPTER 11.2 From Lorimer to Master Plan1.2i 1900-1920

The ineffective rule of Sheikh Saqr bin Khaled continued until his death in 1914. Sharjah's influence in the economic and political affairs of the Trucial States had been irrevocably eroded, although in this early period of the twentieth century, it was still regarded by Britain as an important port and administrative centre. Britain's position was that maritime peace must be maintained for the protection of British trade in the Gulf, although a policy of non-interference would be pursued with regard to the internal affairs of the sheikhdoms. It will be shown later how this policy in fact unintentionally weakened Sharjah's position.

Sharjah then, as one of the Trucial States, became a 'quasi' protectorate (1) of Britain and it is this foreign power that was to dominate its geographical development in the twentieth century. It must be remembered however, that Britain never truly colonized the Trucial States as had happened elsewhere. The harsh climate and frugal lifestyle deterred European settlers, but subsequent events inevitably involved Britain in Trucial States' affairs against her initial intentions. The Allied victory in the First World War and the discovery of potentially lucrative hydro-carbon reserves in the Gulf meant that Britain, to protect her own interest, felt

obliged to increase her influence and presence in the Gulf region. In the Trucial States, Britain maintained a tight control on immigration ('.....the Trucial States, where hardly a foreigner who was not a British subject had set foot ashore') (2), but this did not necessarily prevent changes in the social structure of towns such as Sharjah. As was noted by Lorimer (1908), there had been a significant number of Persian immigrants into the area from Lingeh when the town was taken from the Qawasim by Persian Imperial Customs in 1902. There were also, he states:

"about 51 Hindus and 158 Muhammedan Indians.....permanently settled here", trading with their native country:
 "Hindu merchants number 16, but their number increases in the pearling season. There are 35 Khojah traders; and about 14 Khojah women, mostly widows, dealing in gold, lace etc. There is also a large negro community, many of whom still speak their original Swahili tongue." (3).

The latter group, imported by the merchants from East Africa, were sold as slaves to work on the pearling and fishing boats. The merchants themselves greatly influenced the physical and social structure of the town bringing their language, architecture and rice dishes, dominating the trade of towns such as Sharjah. They bought and constructed several shops in the suq and built grand houses in the style of their homeland. Wind-towers ('badgir')

(see Fig. 1.2i); (an early form of air-conditioning) became common; 'ghorfa' (see Fig. 1.2ii), (a second storey terrace for use in the summer months) were introduced and architectural embellishments (see Fig. 1.2iii) unknown before in this area were built into the design and form of houses and mosques. A good example of this is the mosque funded and built by the Al-Naboodah family beside Sharjah Creek. (See Fig. 1.2iv). These mosques gradually replaced the more fragile 'barasti', palm-frond structures and numbered 21 in 1908 (4), according to Lorimer's observations.

The affluence of the Qasimi sheikhs increased due to the volume of trade attracted by the Persian and Indian merchants and the implementation of a taxation system on fishing and pearl harvests as well as on date products, sheep and customs duties. This would total approximately 33,400 rupees per year (£2,227) (5) and enabled the sheikh to build an impressive fortress-like 'palace' in Sharjah, 'Al-Hasn' (see Fig. 1.2v) which was sadly demolished in the early 1970's.

In the early twentieth century the population of the town remained almost totally dependent upon the pearling industry as a source of income, this being the area's only 'cash-crop'. Lorimer (1908) (6) records 360 boats in

Sharjah emirate with the annual export value from the Gulf as a whole being £1,434,399 with an additional £30,439 from the sale of 'mother-of-pearl.' (7). In the Trucial States the 1905 value of pearl exports was 80 lakhs of rupees (£600,000) involving 22,000 men in over 1,000 boats (8).

In spite of this, poverty was pervasive, with the wealth concentrated in the hands of the pearl-merchants. They kept their diving crews continually in debt by granting loans to them during the winter months when pearls could not be harvested. As most of the divers were slaves their impoverishment was perpetual and guaranteed. It is estimated that even as late as the 1930's, 85% of crew members were slaves. (9)

A useful comparative study of the urban form of Sharjah in the early twentieth century is that provided by Constable and Stiffe (1908) (10), contemporary with Lorimer's account of the same year.

There is an immediate discrepancy in the suggested population figures: Lorimer (1908) (11) estimates a total of 15,000 people, whereas Constable and Stiffe provide a more conservative estimate of between 8,000 to 10,000 inhabitants. An explanation for this may be provided by Hennell (1831) in a footnote to his tables of population and possessions of the Joasmee tribes in 1826 and 1831:

"but at certain times of the year great numbers of the Bedouin come in from the interior and remain four or five months in the towns."(12)

Both sources agree that Sharjah was the most important town on the Trucial Coast at this time. Constable and Stiffe (1908) estimate the town to be 'about $1\frac{1}{4}$ miles in extent along the eastern bank of the khor' (13), more than double the length of the town witnessed by Cogan in 1822 (see Fig. 1.1ii). They also mention that growth is prevented by the rocky, rising ground to the South, but reinforce Lorimer's observation of a large proportion of stone houses. Several detached towers of unequal height, a fort and the sheikh's house 'a large, white two-storey building' (14), also receive credit. Date-branch huts, of which Lorimer (1908) states form 'the bulk of the town' (15), are not mentioned by his contemporaries, except for in the villages of 'Liyah' ('consisting entirely of mat huts' [16]) and Khan.

In Sharjah and Ras al-Khaimah (the two major maritime powers of the Trucial States), the detrimental side-effects of the treaties with Britain were beginning to be felt. These treaties (the General Treaty of Peace 1820, the Exclusive Agreement 1892 and Curzon's speech of 1903) had emphasized the necessity of maintaining maritime peace to protect sea-borne trade, but had also in reality severely curtailed Qawasim power and strengthened the position of the major, rival land-based power in the region; the Bani Yas of Abu-Dhabi and Dubai. The strong leadership of the rulers in these towns consolidated their growing status (17) becoming more respected on the coast as well as the hinterland.

From 1900-1920 Sharjah, unlike Dubai, had a very small ruling family numbering no more than 18 adult males (18). This elitist group was very susceptible to power struggles and consequently, the unstable government of the town. The death of Sheikh Saqr bin Khaled in 1914 instigated such a power struggle with Saqr's first cousin, Sheikh Khaled bin Ahmed eventually succeeding. He was however, most unpopular and did little to improve conditions in the town or the prestige of the Qawasim. His failure to withstand a number of both internal and external challenges to his authority weakened Sharjah greatly; its influence in Trucial States affairs suffered a marked retrogression and eventually Dubai challenged Sharjah's seafaring supremacy. It developed as the major entrepôt for the region and had a magnetic attraction for immigrant traders because of its stability and wise government. Merchants thus transacted business here in preference to Sharjah.

1.2ii 1920-40

After the First World War, it became necessary for Britain to become more involved with the internal politics of the Trucial States because of the emergence of two powerful political forces in the region: Iran, ruled by Reza Shah and Saudi Arabia by Ibn Saud. These powers wanted to unsettle British domination of the area and to some extent, succeeded in doing so. Reza Shah forced Britain to move its Political Agencies and naval bases from the Persian to the Arabian coast, with a consequent

rise in status for the latter. Britain decided, in its own interests, to become more involved in the Trucial States as a result of the Iranian threat and to prevent Ibn Saud from controlling the whole of the Arabian littoral of the Gulf.

It is true to say that the physical extent of Sharjah town had changed little during the first four decades of the twentieth century. It remained confined to a narrow strip of land, less than one kilometre wide lining the southern shore of its creek (see Fig. 1.2vi). The urban areas illustrated on the 1933 map are known today as Jubail, Marija, Shuwaiheein, Mujarraah and Sharq, with the detached quarter of Layyah on the northern bank. Its architectural appearance had altered slightly with the influence of immigrant Persian and Indian merchants with their coral-stone houses, mosques, wind-towers and terraces.

Sharjah remained subject to weak leadership throughout the 1920's and 30's. The economic changes here and in neighbouring towns are reflected in a comparison of population figures at this time. (See Fig. 1.2vii).

A severe drop in Sharjah's population is counteracted by the growth of Dubai and Abu Dhabi; most of this growth as a result of in-migration from towns such as Sharjah.

An indication of the scale of migration from Sharjah both on a long-term and daily basis was the creation of a 'donkey-taxi' service between Sharjah and Dubai (19). A journey would cost one rupee; a fare that could not be afforded regularly by the majority of the population. Frequent travel between the two centres was not easy and once people discovered better working conditions in Dubai, permanent settlement by whole families often followed. There was probably no natural population growth because of the high rate of infant mortality and short life expectancy; 'malaria was rife and smallpox cases often happened'. (20).

What then, were the chief factors for the large-scale movement of people from Sharjah? Working conditions in Dubai have been briefly mentioned, but there were other factors involved, both of an attractive and repelling nature.

Dubai and Abu-Dhabi offered better port facilities for merchants and a stable political structure due to their strong ruling families, (21). Sharjah's port had continued to silt up and the instability of its ruling family continued to prevent development.

The 1930's were a period of mixed political and economic fortunes for Sharjah. The pearling industry almost collapsed due to overwhelming competition from the Japanese cultured pearl industry which took the Gulf's luxury markets of France, Italy and India (22). This 'push' factor plus the 'pull' of new oil discoveries elsewhere in the Gulf

led to the migration of peoples from the Trucial States to Bahrain, Qatar and Kuwait. A total of 18,000 males left the Trucial States during the 1930's (23), taking lower-paid, manual jobs, remitting money home and thus providing one of two main sources of income for Sharjah at this time. The second of these sources indicates the growth of British influence in local affairs by means of the establishment of an air-route from London to India via Sharjah.

1.2iii The Growth of British Influence

The discovery of oil in the northern Gulf resulted in Britain re-appraising its attitude towards the Trucial States because of the potential wealth of hydro-carbon reserves it would be possible to control. The remoteness of the area was seen as a hindrance to communications by the British Political Resident in Bushire, Lt. Col. T.C.Fowle. He sought a practical answer to the problem and suggested the construction of an airfield in the Trucial States to be used as a stopover for Imperial Airways on the U.K. - India - Australia route and to allow regular visits to Sharjah from the Political Agent in Bahrain.

The 1932 Civil Air Agreement granted the airline landing facilities at Sharjah and included the building of an airport and rest-house for travellers and staff based on the design of a fort. (see Fig.1.2viii). This was the first permanent British establishment on the Trucial Coast and was funded by the British government. Its construction was

the responsibility of the ruling sheikh of Sharjah, Sultan bin Saqr II who ruled from 1924-1951. He received a total remuneration of 1,100 rupees for his efforts. (24).

Local people were employed to build the 'fort' 1½ km from the town using stone imported from Abu Musa Island (see Fig. 1.2ix). The fort remains today, derelict and inhabited by taxi-drivers in the area now called 'Qasimia'. It did however, give many native Sharjans their first tangible experience of foreign peoples from outside the Middle East and provided lucrative employment in a period of economic decline.

In 1939, the Trucial States were already subject to economic and social changes as a consequence of a world-wide recession and competition from the Japanese cultured pearl. At this time, merchants and traders diversified their activities, emerging more powerfully than ever before. An example of this is the creation of a 'lorry syndicate' (25) in Sharjah. Overland trade was dependent upon the lorry to transport goods from the ports to inland settlements and control of this crucial mode of transport by leading merchants of the town ensured their survival in lean times.

However, Sheikh Sultan bin Saqr II had 'inherited' almost half a century of declining fortunes and mismanagement by his predecessors, and there was little he could do to halt the trend, so the period of the 1920's and 30's witnessed the final decline of Qawasim power in the area.

Six towns attempted secession from Sharjah and the Bani Qitab, once loyal allies, changed their allegiance to the Bani-Yas.

1.2 iv 1940-1950

The outbreak of the Second World War placed greater military and strategic importance on the airfield at Sharjah which became a regular base for the R.A.F.

"The purpose of the R.A.F. in Sharjah was to safeguard the waters of the Gulf from German submarines." (26)

The presence of the airport and rest house in Sharjah marginally improved the local economy by providing employment on a regular basis. An eye-witness account states:

"The area was completely primitive during my stay there, and our (R.A.F.) presence must have contributed to local welfare for we employed people and there were fringe benefits available. I had to pay the sheikh's secretary a good sum monthly for the provision of 'guards'... three shabby individuals known as 'askaris.' We employed local labour for water collection from the sheikh's wells, building maintenance and as mess servants." (27)

Local accounts estimate a payment of 2 rupees per day (28) to guides between Dubai and Sharjah, which during the 1940's was increased to 4 rupees per day. Servicemen paid the 'water carriers' 1 rupee per day for fresh water brought from an area now called 'Al Falaj' (29), situated 3 km from Sharjah town. Wells were sunk here and fruit and vegetables, particularly melons, were grown. Water would be transported via donkey to be sold in the town and provide a low but regular income.

Other than the British fort, there were only minor changes to the built form of the town at this time. Approximately 40% of the people lived in stone-built houses, chiefly those of the rich, merchant families, whilst the remaining 60% remained in the 'barasti' (arish) or 'khaimah' (tent). (30). Although 'abject poverty' prevailed for the majority, it must be remembered that the cost of living was extremely low. A 100 kg sack of imported rice would cost only 8 rupees, a goat 1½ rupees and fresh fish was usually available cheaply. (31). This should not detract however, from the generally impoverished lifestyle of the inhabitants. A point worthy of note is that;

"As far as buildings were concerned, we saw on our way to bathe beyond the town, shacks constructed of beaten-out 4-gallon petrol tins we had discarded, and families were living in these shacks. During my stay food had been shipped from India to feed the hungry natives. Their numbers had been increased by immigrants who had sailed from Persia, and who were probably in a worse state at home than in Sharjah, where there were pickings from foreign service people." (32)

Photographic evidence of the form of Sharjah town during the 1940's is provided by the Admiralty Naval Intelligence Division (1944) (33), (see Fig. 1.2x and 1.2xi).

Poverty, caused principally by the decline of the pearling industry, was exacerbated after the Second World War when, in 1946, India implemented a law forbidding the import of pearls from the Trucial Coast. The number of pearling boats fell and the economy of Sharjah was further weakened. Only the economy of Dubai survived and this for

two main reasons: the strength of its gold market and the realization that its creek must be dredged to allow shipping to dock and trade successfully. (34). Sultan bin Saqr II could do nothing to prevent the silting of Sharjah Creek, chiefly through lack of funds.

Opportunities for the import of goods and services into the Trucial States ports were explained to all the rulers by Petroleum Development (Trucial Coast), but Sheikh Said bin Maktoum of Dubai most readily took advantage of this, realising that the best port facilities were likely to receive increased trade as the above company's oil exploration activities widened. Paramount in this, 'the old idea of improving the port facilities was revived' (35) and Sheikh Said invited Sir William Halcrow and Partners to survey the creek and advise on the possible dredging and deepening of the creek entrance. By 1959, Dubai Creek had been dredged sufficiently to allow vessels up to 500 tons to enter, whereas Sharjah's negligence of its creek had resulted in rapid silting up (exacerbated by violent sand and rainstorms in the early 1950's) and therefore trade, (which had paralleled Dubai's in 1950) declined rapidly in favour of its rival and neighbour, Dubai.

Heard-Bey (1982) also states that:

"A sum of money was given to the Ruler of Sharjah, Sheikh Saqr bin Sultan, by the Ruler of Qatar to improve the creek, but it was never used for that purpose." (36)

To add to the economic depression, as part of Britain's conscious re-alignment of its 'special' position, the British navy took measures to control the slave trade which had been rife since the nineteenth century. The result was that the livelihood of local sailors was adversely affected, as was the sheikh's income as he received duties from the slave trade which was astonishingly estimated to import 12,000 slaves per year into the Trucial States and Gulf Area.(3)

Sultan bin Saqr's acute position became apparent when, in 1937, the Resident Agent was asked to consult all the Trucial sheikhs to give details regarding the boundaries of their sheikhdoms. Sultan was the only one who refused as he knew his influence in the hinterland had greatly diminished. Indeed, the Political Agent in Bahrain had noted that Sultan had not visited Dhaid (the home-base of the Bani Qitab) for seventeen years. (38).

Sharjah does illustrate a suggestion of Beaumont, Blake and Wagstaff (1976) that: 'ancient towns and cities which survived the vicissitudes of inter-regional trade successfully were those enjoying strong, economic relationships with a surrounding population of cultivators.' (39). It could be inferred that although the 1940's cannot be considered as 'ancient', Sharjah never-the-less had to fight for its survival because its 'cultivators' (the Bani Qitab of the Dhaid Oasis) had gradually drifted away from the Qawasim to ally themselves with the Bani-Yas. Thus, they gave no agricultural support to the coastal people who needed their produce to survive. Prior to this, the

Bani Qitab tribe were strong allies of Sharjah and were located principally in and around the oasis settlement of Dhaid, probably the most important inland village of the Qawasim empire. The Qawasim erected a fort over the main 'falaj' (spring and conduit watering system) and the town was administered on behalf of the ruling sheikh of Sharjah by a 'wali'. Dates were collected for the sheikh, as were water rates from the falaj. Periodically, the Bedouin element of the Bani Qitab, would travel to Sharjah to sell dates and livestock and replenish their supplies of fish, rice and other imported foodstuffs from the suq, thus the two settlements enjoyed a symbiotic relationship. The Bani Qitab could now purchase commodities imported via Dubai and exchange agricultural produce for fish.

This insidious weakening of the Sharjah economy and diminution of status placed an element of responsibility on Britain to change the state of affairs and improve the welfare of the people.

1.2v 1950-1960

Britain was the first power to introduce the concept of unifying the Trucial States into a single political entity by the creation of the 'Trucial States Council' (40) in 1952.

Various schemes were accomplished by the Trucial States Council to improve social conditions. The Trucial States Court was created in 1952 and the Trucial Oman Levies (a force of local and Jordanian soldiers commanded by volunteer

British Officers) were formed and based in Sharjah; a significant development continuing a history of British military presence in the town. The rôle of the Levies was to establish peace between local, rival families, to end the slave-trade and later, as a defence force for the Trucial States. It was hoped that their presence would create an atmosphere of co-operation and stability between the sheikhdoms and thus form the basis for economic and social development.

In 1952, after severe storms in the area, the Trucial States Council allocated money for preliminary water resource surveys of Dubai and Sharjah creeks which had both gradually silted up.

As Hay remarked (1959):

"His [Sheikh Saqr bin Sultan II] capital, which has a population of about 5,000, presents rather an untidy and derelict appearance and shows obvious signs of decay it has suffered from the silting up of its creek. There's a rather dilapidated suq...but there is not much trade." (41)

Without these natural harbours, trade, and in turn the economic and social well-being of the towns, would have remained at subsistence levels. In association with this, in 1953 a modern 'Trade School' (42) was built in Sharjah to educate its young people in administrative skills which would eventually be used to help govern their town without British help. This 'social awareness' was a new concept in the area, in total opposition to prevalent past attitudes that favoured the few and kept the majority impoverished.

The first 'Five-Year Plan' of the Trucial States Council Development Office was initiated in 1954 at a cost to the British government of £450,000 (43). Amongst its achievements was the creation of an Egyptian Educational Mission in Sharjah in 1958-9; illustrating the British government's wish to see greater Arab involvement in the local infrastructure.

As remittances from workers in neighbouring oil-rich states and aid from Britain and Arab countries increased, there was a noticeable improvement in the economy of Sharjah. Increased oil-company activity involved the British to an even greater extent in internal affairs, but in spite of the economic improvement there was little change in the physical urban structure, apart from a few concrete-slab structures to house newly created administrative and educational institutions.

Thesiger (1959) provides a rather uncomplimentary summary of his visit to Sharjah at this time:

"We approached a small Arab town on an open beach: it was as drab and tumble-down as Abu-Dhabi, but infinitely more squalid, for it was littered with discarded rubbish which had been mass-produced elsewhere." (44)

Barastis remained the most common form of housing, coral-stone dwellings were abundant and, 'the fishermen lived in tented encampments on the seashore when drying fish.' (45)

Roads between towns were still tracks. The only tarmac in Sharjah was the airport runway built by the R.A.F. in the 1930's. The decade of the 1960's was however, to see the pace of change quicken.

1.2vi 1960-1972

The discovery of oil in Abu Dhabi in 1960 heralded an unprecedented pace of change for the Trucial States. These insignificant, tribal sheikhdoms were catapulted from the status of economic and cultural backwaters into the world of the 'petro-dollar' in less than two decades. Changes in all aspects of society and urban form were fundamental and profound. They had to be to enable the rulers and their advisers to cope with the volume of international business that would be attracted by this newly-found wealth. It was inevitable that mistakes would be made by the rulers who were inexperienced in the world of high finance. Indeed it is a credit to them that the traditions of local society have been preserved at all.

It has been shown that only minor changes in the built-form of the town had occurred before 1960 with the construction of the 'fort' and other military and administrative buildings. The physical extent of the town occupied roughly the same area as witnessed and described by Lorimer in 1908 (46) with little spatial expansion. The people inhabited the same style of dwellings in approximately similar proportions and the economy was sustained by the same basic activities of pearling, fishing and the 'carrying' trade.

In Sharjah the Municipality ('Baladiya') was founded in 1971 (47), continuing a tradition of administrative and planning skills encouraged and developed by the British since the Second World War. The Municipality was responsible for the welfare of the people, but also for the implementation of the master development plan for the town based on zoning

principles, drafted by the ruler, Sheikh Khaled bin Mohammed. He, and his brother Sheikh Sultan (the present ruler), have constantly revised and been responsible for the planned growth of the town since 1965, and continue to be greatly influential. It was Sheikh Khaled who first realised that steady growth could only be achieved with the constant, applied efforts of people indigenous to the area. He therefore encouraged Sharjans who had migrated to oil-rich Gulf states to return to their town and help the Municipality and Development Office to establish a firm economic base, a planned and coherent physical expansion and improved welfare services for its people. (48).

The construction of roads accelerated urban growth in Sharjah. The Second Five-Year Plan of the Trucial States Council (1961-66) was more ambitious than the first but insufficient funds were raised. Britain therefore increased its aid to £1 million over three and a half years in 1965 with £200,000 extra for current development expenditure. Indeed, by the end of 1970, 1,300,722 Bahraini Dinars had been spent by the Development Fund on Sharjah whose population had now grown to 31,500 (49). The bulk of this money was used to build roads and communications.

Other sources of income came from the sale of red oxide found on Abu Musa Island (50), the sale of postage stamps from the newly created post office in 1963 and Kuwaiti aid for the erection of four mosques. Two of these were located in villages once separated from Sharjah, now engulfed by the city.

One of the first major projects of the Development Fund was the construction of 'Arouba Road' in Sharjah which before 1965, like all other roads in the town, had been merely tracks. This road formed the previous southern limit to expansion, but after its improvement funded by Saudi grants, it became the town's arterial road and eventually as part of the main coastal highway from Dubai to Ras al-Khaimah. A 4 km stretch of road was built between Sharjah and Khan, linking this small fishing village with the town in 1968. Arouba Road was an important step in the urban growth of Sharjah (see Fig. 2.12).

Businesses and offices were located here and consequently spawned a wide variety of trading activities, haphazardly juxtaposed, encroaching further south onto land once preserved for the date-palms of the people;

"Sharjah's dusty main street.....is lined with mud huts and shops that display cotton textiles, rice, pots, pans, leather goods and a variety of other products in open-air counters. Scraggly palms provide the only green in a tan desert landscape." (51).

The trend was for low-cost, concrete-slab structures to be erected. Multi-storey blocks with shops and offices at ground level and flats above were constructed to the south of Arouba Road and also as replacements for older buildings in the town centre. These developments were part of the government programme to improve living standards which also included a comprehensive and reliable water and electricity supply.

1.2vii British Withdrawal

The Labour Government of Britain in 1968 decided that all British troops should be withdrawn from the Trucial States as part of a series of cuts in defence spending. It was hoped this would be completed by 1971, allowing time for the sheikhdoms to adjust to their newly-found independence. The rulers were keen to establish a federation (led by Abu Dhabi and Dubai) fostering the idea introduced by Britain in 1952, as they were now used to frequent consultations with each other. The federation of the United Arab Emirates was formally declared in July 1971 with six of the present seven sheikhdoms united into a single state.(52).

Funds from oil rich Abu-Dhabi and Dubai were now channelled into national schemes to physically unify the states into one whole, workable entity, (See Chapter 2).

The early 1970's were a period of great historical significance for Sharjah. Not only was it united into the federation, but two other events were to affect the course of its urban development more than any other in the past. Firstly, in an attempted coup led by the deposed Sheikh Saqr bin Sultan, Sheikh Khaled was sadly killed in 1972. However, the new U.A.E. government did not permit Saqr to rule, and with the support of Sharjah's 32,000 (53) population he was seized and imprisoned for life. Sheikh Sultan bin Mohammed, Khaled's brother, was proclaimed ruler and it is his personal knowledge and interest that have been greatly influential in the recent social and physical development of Sharjah.

Secondly, oil was discovered in commercial quantities in Sharjah's territorial waters off Abu Musa Island in 1972. It is the influence of oil revenues that has affected all aspects of life in the town. They gave impetus to economic development and radical changes in its physical form and social structure, in an attempt to portray to the world a modern, thriving commercial centre rather than a primitive and impoverished settlement.

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Fig. 1.2i: A Sharjah Windtower ('badqir')



This early method of ventilation was introduced to Sharjah with the Persian immigrants who arrived in the nineteenth and early twentieth centuries. Wind blowing from any direction into the tower is funnelled down to the room below to give a cooling breeze.

Fig. 1.2ii: A First-Floor Terrace ('ghorfa')



The 'ghorfa' was surrounded by unglazed 'windows' and vents that were often highly decorated with pierced, plaster screens, bars and shutters to allow cooling breezes to enter from all sides. Such a room would be used mainly in the summer months for living and sleeping. The privacy gained from screened windows would protect the women from the gaze of passers-by, yet allow them to look out if necessary.

Fig. 1.2iii: Minor Architectural Features



Indo-Persian influences are clearly evident on this first-floor verandah, with ogee curves surmounted by carved floral decorations accepted in Iranian, Shi'a architecture but not of the Wahhabi sect, once dominant in Sharjah. Such decorations are carved in relief from a gypsum panel and the background is stained black with a charcoal mixture. The length of roof poles ('chandal' or mangrove) determines the width of the rooms below.

Fig. 1.2iv: The Naboodah Mosque (1990)

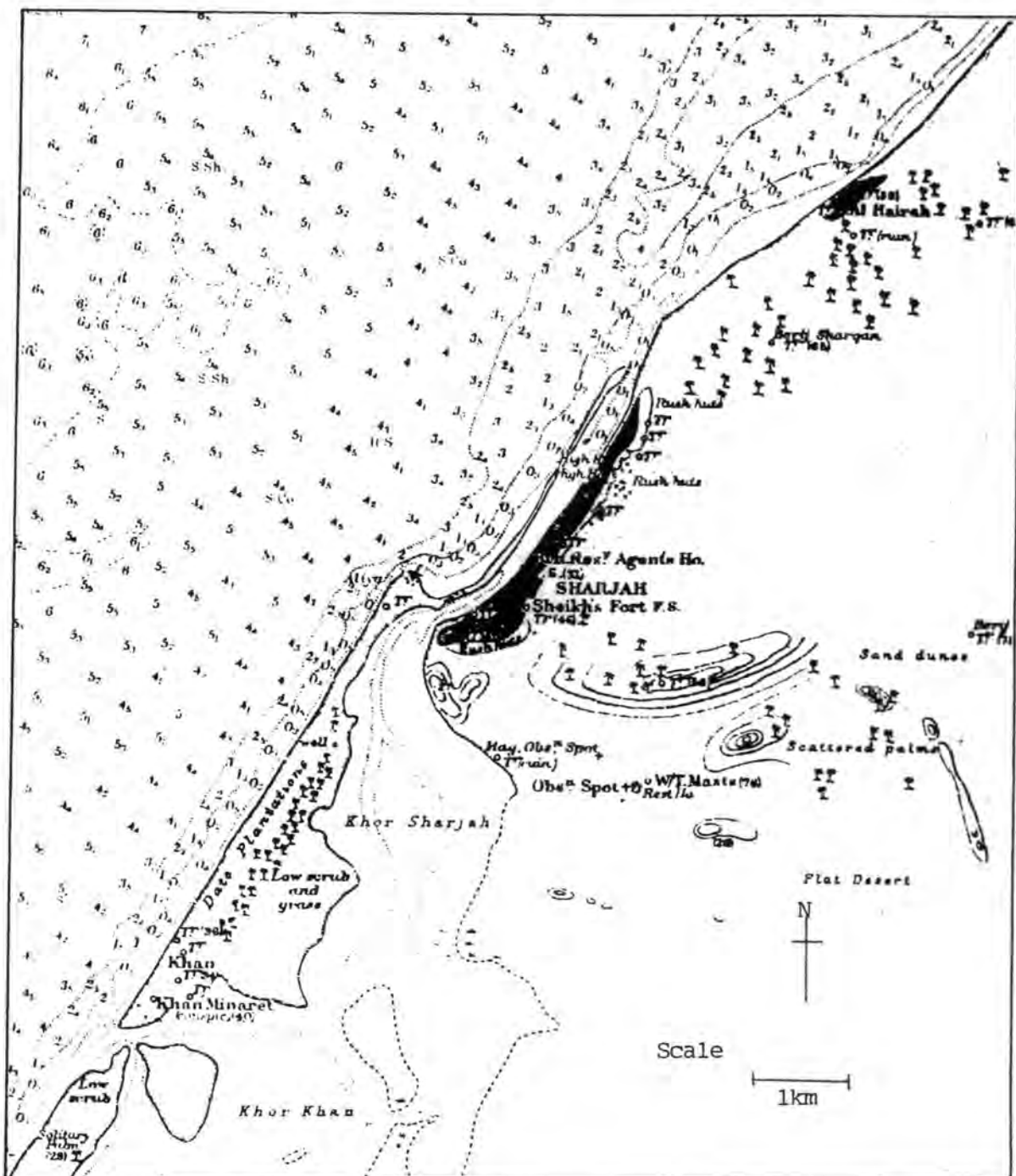


Fig. 1.2v: 'Al-Hasn' Palace (After Hafeez, 1967)



Fig.1-2vi : Sharjah in 1933. (After Ltnt. Cdr. D.H. Fryer, R.N.)

Key ● Location of Watch Tower on Fig. 1-2x



The urban area indicated above consists of the areas now known as Jubail, Marija, Shuwaiheein, Mujarrah and Sharq. Hairah, Khan and Layyah (Aliya) are shown as distinct settlements, guarded by watchtowers.

The main town of Sharjah is divided into two zones: the darker, shaded area presumably consisting mostly of coral stone dwellings and areas marked 'rush huts', locally known as 'arish' or 'barasti'. The only buildings worthy of mention at this time are the Sheikh's Fort, British Resident Agent's House, the R.A.F. 'Rest House' and two 'High Houses' towards the northern end of the town.

Limits to spatial expansion can be clearly seen as rising ground to the South and East, extensive date-palm plantations to the North and the creek to the West.

Fig. 1.2vii

Comparative Populations in
1908 and 1939

Town	Population	
	1908	1939
Sharjah	15,000	5,000
Abu-Dhabi	6,000	10,000
Dubai	10,000	20,000

(After R.Said-Zahlan, 1978)

Fig. 1.2viii: The R.A.F. 'Fort'

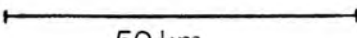


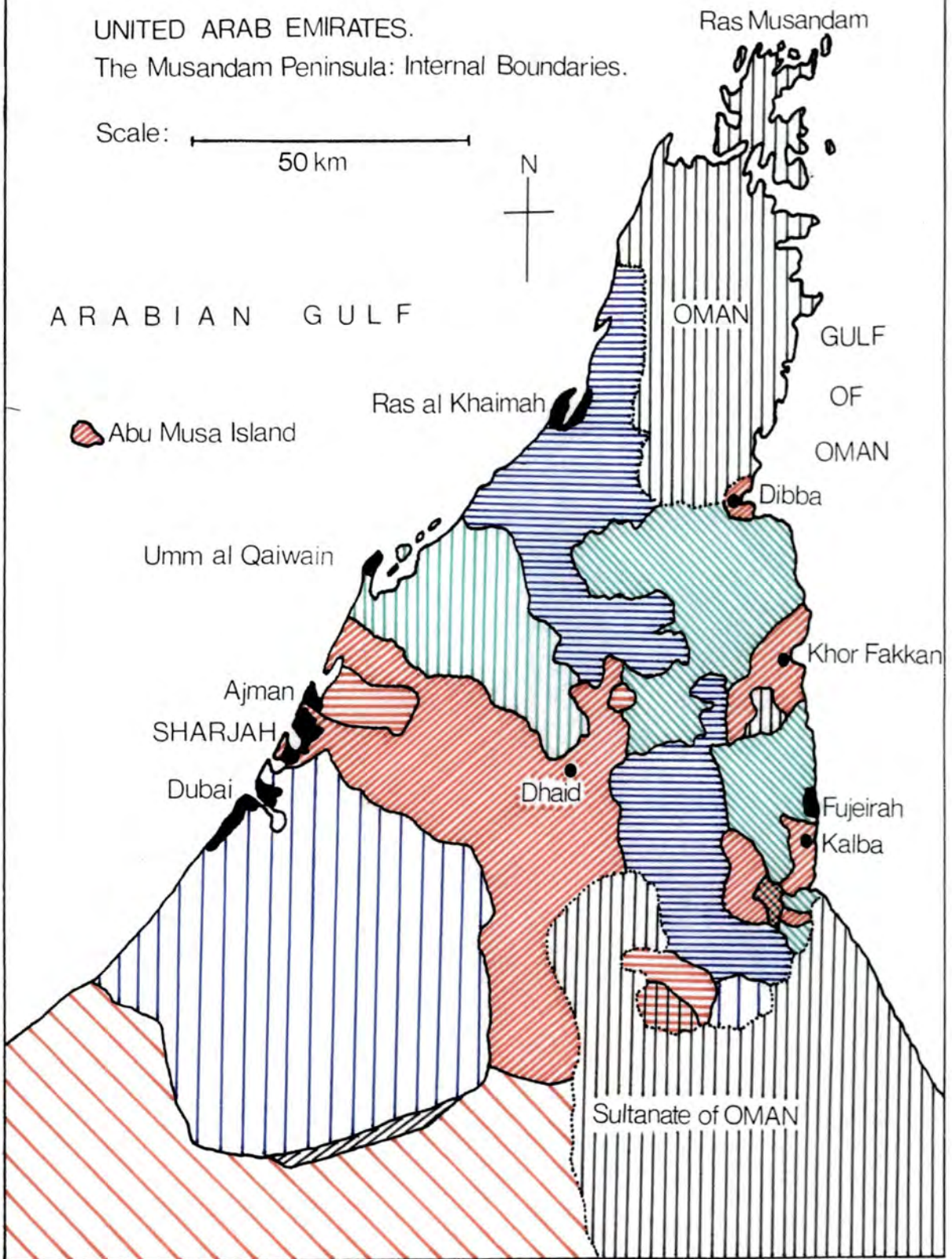
This building is now in a poor state of repair and is inhabited by taxi-drivers. The 'fort' was however, originally intended as a fortified rest-house for passengers flying from London to India and Australia. It was constructed in the 1930's using stones from Abu Musa Island, (these were stronger and more easily worked than the local coral stone), by local labourers under the direction of the sheikh.

It functioned as a 'fortified hotel' throughout the 2nd World War, when it was also used as a barracks for R.A.F. personnel.

Fig.1.2ix

UNITED ARAB EMIRATES.
The Musandam Peninsula: Internal Boundaries.

Scale:  50 km



Key:



FIG. 1.2x: SHARJAH FROM THE DESERT, LOOKING NORTH-WEST
(After Admiralty Naval Intelligence Division, 1944)



This photograph clearly reveals the narrow, elongated spatial distribution of the urban area. Most of the coral stone/gypsum houses are situated close to the creek, with the more insubstantial 'barasti'-type dwellings to the rear, closest to the camera. Significantly, enclosed date-palm plantations containing barasti-huts are defended to the left by a solitary watch-tower, its location is suggested on Fig. 1.2vi.

FIG. 1.2xi: SHARJAH, LOOKING SOUTH (After Admiralty Naval Intelligence Division, 1944).



This photograph, looking South, shows the creek to the lower right of picture. The ruler's fort 'Al-Hasn' can be clearly seen centre left with its large watchtowers and courtyard.

Courtyard dwellings dominate the built-up area, with the large example shown bottom right, the British Residency Agent's House. Continuing South from this, the covered alleyway of the main suq can be seen.

The above and previous figures do provide evidence of a substantial settlement, which is perhaps not immediately apparent from Fig. 1.2vi.

CHAPTER 2

URBAN LAND USE-PLANNING AND DEVELOPMENT IN SHARJAH SINCE 1969

It is necessary to briefly describe the town's main morphological features immediately before the 1969 Master Plan was introduced.

2.1 Sharjah, 1968

The following physical features can be seen on the aerial photograph of Sharjah taken in 1968 (see Fig. 2.1).

The main built-up area of old Sharjah town can be divided into five areas. From South to North these are: Jubail (near the causeway), then Marija, Shuwaiheein, Mugarrah and opposite the end of the sand-spit, Sharq.

Most of Jubail consists of vacant land occupying a low hill alluded to by Lorimer (1908) as

"rocky, rising ground 30 or 40 feet
high forming a bluff to the south." (1)

This was (and still is) the site of the town's main cemetery and therefore, a considerable barrier to urban development in this direction. An even greater obstacle to spatial growth lies immediately to the South of the graveyard: the runway and administrative/residential buildings of the Royal Air Force (R.A.F.) station at Sharjah. It is worth noting in the late 1960's the funnelling of urban development into an area East of the R.A.F. station with the first road link to Dubai, Arouba Road, forced around the northern end of the runway.

The road in effect, divides the town into its old and modern areas: the former to the North and the latter to the South. Well into the 1970's this distinction was clearly visible:

"Arouba Road gives a false impression that Sharjah is a one-street sort of place. Seaward, suqs still have much pristine charm but there are plans for their ritual demolition. To the right grid-iron highways separate the town from the R.A.F. base." (2)

There are two areas of what appear to be, regular, grid-like developments on Fig. 2.1. The first of these is the area known as 'Maisaloon'. This is one of the first areas of new settlement built to any sort of planned, regular pattern and is quite separate from the rest of the town.

Secondly, in the South-East, is the area known as 'Falaj', from where most of Sharjah's water supply had been brought in the past. This is highlighted in Fig. 2.2.

The embryonic modern road system and development of Maisaloon area are evidence of the early implementation of town planning ordinances by Sharjah Municipality, suggested by Sir William Halcrow and Partners (British Planning Consultants) in their 'master plan'. (3)

2.2 Town Planning for the State Capital of Sharjah, 1969

The report on the situation found in Sharjah in 1969 attempted to:

"define as closely as possible the expected growth of the town and to highlight the problems that exist at present and to offer solutions and principles that should be adopted in order to maintain a balanced initial growth." (4)

The aims of this chapter are to analyse the stated objectives of the Master Plan; to discuss the problems it highlights, to assess whether the solutions suggested were implemented, to what degree these may be seen as successful and to illustrate the level of consideration accorded to conservation of historic areas.

2.2i Land-Use Zones

The city was to be divided into eight land-use zones (see Fig. 2.3) which were dissected by a largely rectangular road grid with deviations around the lagoon and R.A.F. station. The older parts of town were designated as mixed residential and commercial areas, maintaining the function they had always had, although the Master Plan suggested their wide-scale redevelopment. Purely commercial areas were to surround the lagoon, allowing waterfront access as a docking facility or as a visual amenity, thus attracting business to the area. Commercial centres were also planned around Zahra Square which was to become a major road intersection at the Sharjah terminus of the trans-peninsular road to Dhaid and the East Coast.

The main industrial areas were situated well away from residential zones with a considerable amount of space for future expansion eastwards, close to the Dubai - Ras al-Khaimah road which provided excellent transport facilities.

Port functions were to be concentrated on the western bank of the creek and connected via road bridge to the eastern bank as indicated on the map.

2.2ii Redevelopment Proposals

Halcrow's, and indeed the Ruler, favoured the complete redevelopment of the old town, for it was seen as a symbol of 'backwardness' and lack of 'progress'. Their proposals were fortunately, severely curtailed because of the fragmented and complicated landholding structure. The report did contain design proposals to permit the preservation of the character of the town and although not ideal, it does indicate a sense of the need to preserve the town's heritage; a sentiment that sadly diminished as further amendments were added to the plan in the 1970's. There is however, a degree of ambiguity in Halcrow's recommendations.

Upon inspection of the suggested redevelopment procedure of a hypothetical area of the old town (see Figs. 2.4 a -d) the course of events from a survey of land ownership to a completely redeveloped area can be seen.

The problem of adverse attitude to preserving the old quarters was common to all the 'Trucial States' towns. It is mentioned by Unwin that "the U.A.E. rulers wish to have modern, international cities," (5). Fortunately the balance is tilting in favour of preservation with greater emphasis on conserving the urban heritage, regretting some of the more destructive episodes of the last two decades.

2.2iii Initial Expansion

A major problem of first phase expansion was the complicated land-holding structure in the town. The government of Sharjah owned only roughly one third of the land within the urban area, the remainder being owned by

the wealthier Sharjah families in a fragmentary, non-conforming pattern. Plot sizes varied in dimensions greatly and it was found difficult to develop areas of land of sufficient size to make large-scale building projects viable (such as those previously suggested in the redevelopment plans). There was widespread resistance against compulsory purchase and, as there were large, open areas of land available adjacent to the old town, to solve the problem it was decided to allocate plots to residents in the area of Maisaloon in lot sizes ranging from 50 feet x 50 feet to 100 feet x 100 feet*, thus creating vacant property in the old town, later to be demolished. The allocation of land in this manner follows traditional patterns, whereby the ruler would donate land to his subjects on which to build, usually in parcels of this size.

This can be seen in Fig. 2.5.

A summary of first phase development is illustrated on Fig. 2.6 and the second phase of expansion is outlined on Fig. 2.7, extending the pattern of development in the first phase.

2.3 Roads

Sharjah's position at the geographical centre of the Trucial States (see Fig. 1.2ix) gave it a natural advantage as a major node in any future transport network. Halcrow's devised a preliminary road layout in 1963 based on the concept that Sharjah would become a terminus for roads from Dubai to the South, Ras Al-Khaimah to the North and Dhaid to the East. Before this time, the only tarmac area in

* 15.24m² to 30.48 m²

Sharjah town was the runway of the R.A.F. airfield. All roads were simply dirt-tracks that wound their way between the dense network of houses. Very few would have been of sufficient dimensions to allow vehicular access, even if motorised transport had been widely available. The road network was fundamental to the whole of the Master Plan. The roads provided a firm direction and pattern to Sharjah's growth and divided the future town into neat, rectangular units to create a grid-iron network with roundabouts at intersections common to many developing Gulf towns (see Fig. 2.8).

Sharjah town development was therefore totally dominated by the concept of the efficient circulation of traffic at the expense of any other factor. As in Kuwait, where the road grid wholly destroyed the traditional township, less positive planning followed. The Master Plan was unable to totally prevent piecemeal development along major roads where isolated buildings were erected bearing no relationship to any other around them. Cantacuzino's summary of Isfahan's Master Plan could well apply to Sharjah:

"It [the town plan] assumed the indefinite rule of the private motor car and proposed road development which was at loggerheads with the organic pattern of the existing.... urban fabric." (6)

In short, 'the city is designed for cars rather than for people!'. (7).

2.4 Port and Creek Development

The very reason for the choice of location and subsequent growth of Sharjah was its position on the banks of a natural harbour, which had been created by the long-shore drift forming a sandspit parallel to the coastline. This provided a safe anchorage for fishing and pearling craft; the sandspit protecting the harbour from the open seas (see Fig. 2.1). Paradoxically, the sandspit which had created the physical conditions attractive to settlement at this location, also helped to hasten Sharjah's decline after the Second World War. Economic factors previously mentioned, played a leading role in this trend, but physical processes were instrumental in the change of fortune and would have probably negated Sharjah's role as a port had oil discoveries and their ensuing wealth not prevented this.

The lagoon and narrow channel (creek) of Sharjah's port had been subject to silting since their formation, due to the emergent nature of the coastline. The entrance to the creek had almost been closed due to the growing sandspit. Silting was exacerbated by the comparatively low tidal range in the creek as opposed to the open sea (8) and by a sequence of particularly severe winter storms that had occurred in the early 1950's.

Fig. 2.1 clearly shows the entrance to the creek opposite Sharq area and the extent of silting around the sandspit can just be detected around the mouth of the creek and at various places along its length.

However, in 1965, interest became focused upon the building of an offshore, two-berth, deep-water jetty

extending out to sea West of Layyah village and construction commenced that year. By 1969, the jetty was completed without external financial help and a causeway bridge linking the new pier and Layyah village to the main part of Sharjah town was also constructed (see Fig. 2.9). Thus began a series of radical changes that altered the coastline of Sharjah town irrevocably.

In Fig. 2.9 preliminary modifications are outlined.

2.5 Development to 1972

To summarize the urban growth of Sharjah up to 1972, it may be helpful to study photographic evidence to illustrate the physical expression of historical events and trends in this and previous chapters. Fig. 2.10 provides the key photograph, showing an aerial view of the town in 1972.

Fig. 2.11, taken from above Layyah, shows the physical extend of Sharjah town.

Fig. 2.12 shows the Shuwaiheein area from above Arouba Road.

Taken from above Maisaloon, Fig. 2.13 shows areas of most recent urban development; up to 1972.

2.5i Land-Use Zones

There are some general similarities between land-use zones planned and those implemented to date. Fig. 2.14 illustrates land use in Sharjah as planners see the town upon completion of current and future planning ordinances up to the year 2,000. This includes extensive demolition

and redevelopment of the old, inner city areas of Sharjah and the gradual expansion of the built-up area towards the new Sharjah International Airport. It is intended that development will be co-ordinated so that land use zones evolve as illustrated on Fig. 2.14.

2.5iii The Port

Perhaps the greatest difference between projects planned and those implemented is found in the growth of Port (Mina) Khaled, the port of Sharjah.

Until 1974, concepts were developed as planned. The sandspit was breached at the Layyah end and the former outer creek allowed to silt up, creating land for the proposed Corniche Road. The inner creek and lagoon were dredged and encircled by an extension of the Corniche Road.

Before the end of the decade, the new Port Khaled had expanded to a twelve-berth facility. Berths and quays were put into operation as soon as construction was completed, 'as Sharjah's booming economy sucked in imports at an ever-increasing rate.' (9).

Fig. 2.15 shows a current plan of Port Khaled, with the Creek entrance dredged and located at Sharq, the former entrance to the creek now sealed to form part of the West Wharf and the position of present and future quays labelled.

2.5iii Phases of Growth

To examine the rates of physical growth of the town, it is necessary to compare Figs. 2.6, 2.7 and 2.16.

On Fig. 2.16 areas of actual urban growth up to 1980 are shaded in green. There is a general similarity with the First Phase developments outlined on Fig. 2.6, but with amendments, most of which result from the vast underestimation of population growth in the Master Plan. This led to areas being developed far sooner than anticipated.

Further physical growth, shown on Fig. 2.16 up to the year 2,000, depicts an extension of industrial and residential zones parallel to the Dhaid Road, serviced by a grid-iron network of primary distributor roads, capable of further extension if and when necessary. It is important to note that any future growth must extend in this general direction as now the town has advanced both East, to the Ajman border forming a continuous urban zone with this neighbouring town, and West to the Dubai border, thus limiting growth in these directions, but, has post-Master Plan development given any real consideration to the concept of conservation of the older, inner city areas? Indeed, is there anything remaining worthy of conserving? The remaining chapters will attempt to answer these questions by analysing the built-forms remaining in the older quarters of the town, present arguments for their conservation, suggest a co-ordinated plan for their re-use, propose a series of methods that will help in reconstruction and thus reintegrate these older areas in future development proposals as functional, living, working, yet historic zones of the city.

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8. The normal tidal range of the creek being approximately 1 m compared with 2 m in the open sea. see
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9. 'Sharjahport: Sea Gateway to the Emirates' in
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FIG. 2.1: SHARJAH, 1968 (After Middle-East Photographic Surveys: M.A.P.S.)

On this map the following features are illustrated.

The area of land North of Sharjah Creek is the eastern extension of a peninsula separating two natural harbours, now called Khaled and Khan Lagoons. Sharjah Creek terminates in the kidney-shaped Khaled Lagoon, the entrance of which can also be identified. The old fishing/pearling village of Khan is just off the photograph to the far West of the peninsula. The village that can be clearly seen on the peninsula is that of Layyah, the 'suburb' of Sharjah on the northern bank of the creek. It is joined to the southern shore by a causeway to Jubail near the British Petroleum (B.P.) Compound, which had also been established during the 1960's. A new roundabout and road linking Layyah to Khan can also be seen.

North of Layyah is a finger-pier, built in 1964 to improve port facilities. To the East is the sandspit which created the northern shore of Sharjah Creek, protecting it from the open sea.

Key and photograph overleaf.

FIG. 2-1: SHARJAH, 1968 (After M.A.P.S.):

Key to photograph overleaf.

SCALE:

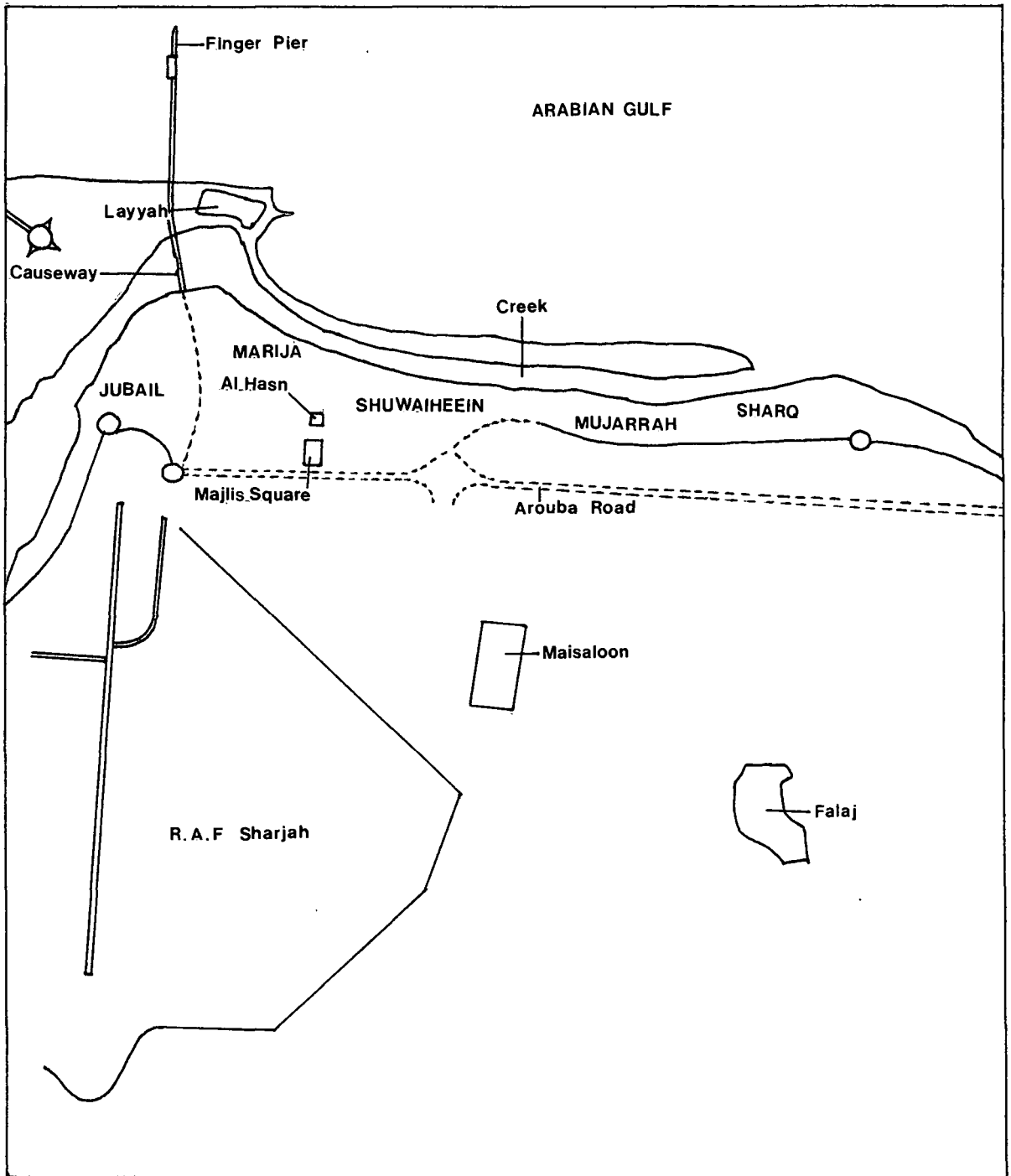
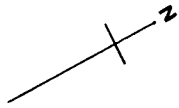
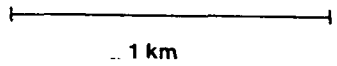


Fig. 2.1: SHARJAH, 1968 (After M.A.P.S.)



FIG. 2.2: FALAJ AREA, 1968 (After Halcrow's)

Scale



Illustrated here are barasti settlements in the Falaj area, South-East of the main town. Although these structures are native to the area they defy convention by being erected in very definite rows, aligned North-South, for reasons yet to be explained. Also shown are superimposed, proposed roads and the future plan of the Sharjah Radio Station with a roundabout right centre.

The water table is very close to the surface at this location (less than 2 metres) and would have been a major locational factor for settlement at this point. In times past, water was collected from wells by Falaj residents and sold for drinking purposes to the people of Sharjah.

Fig. 2.3: Proposed Land Use Zones In Master Plan (1969)(After Halcrow's)

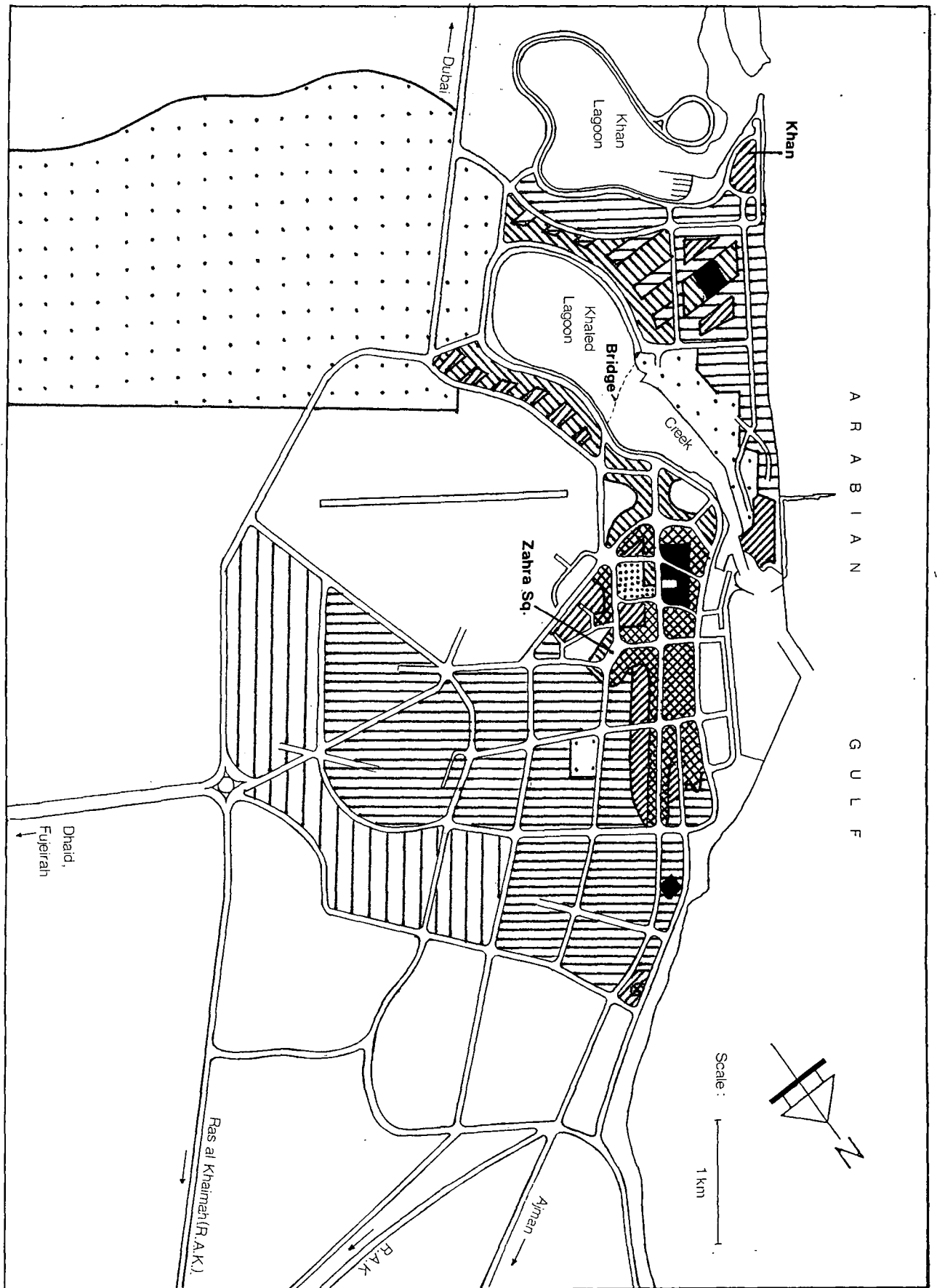
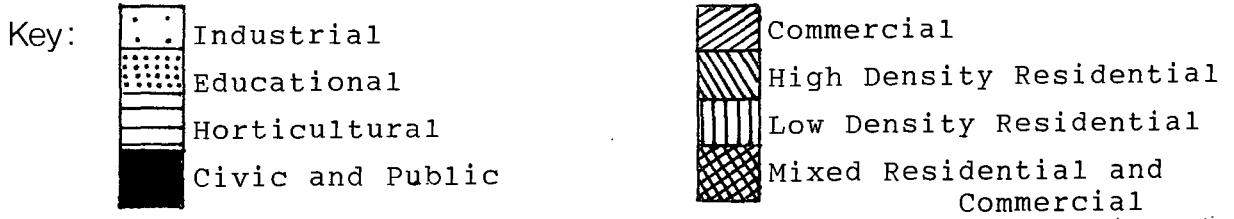
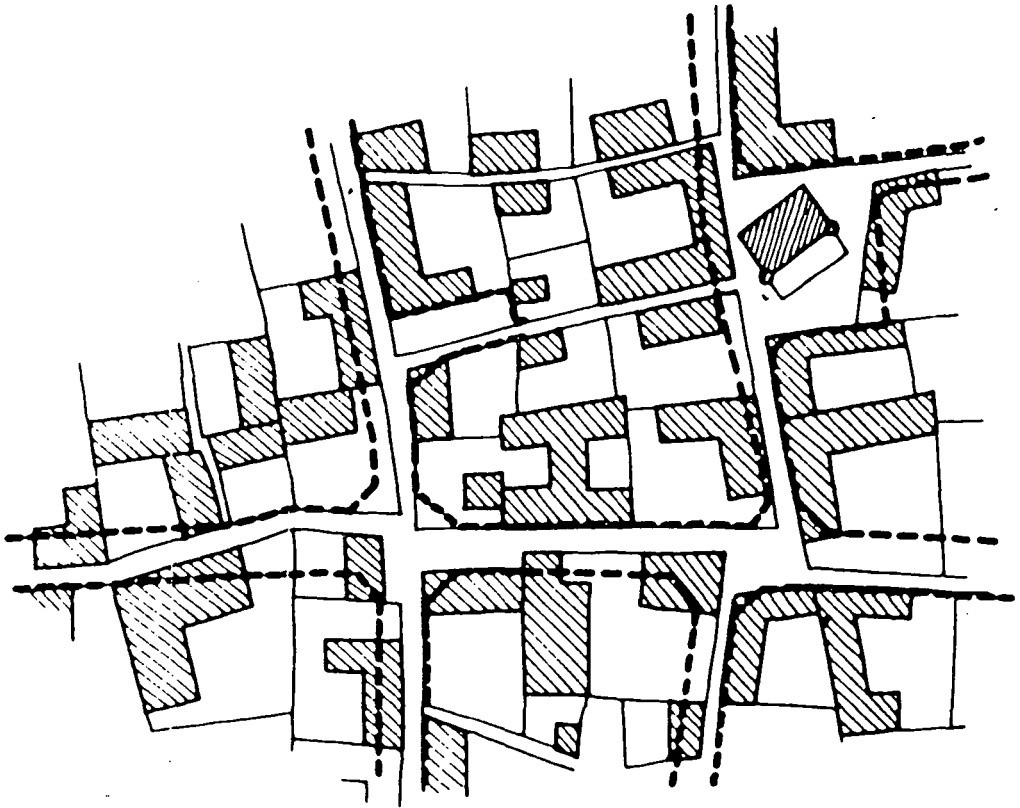


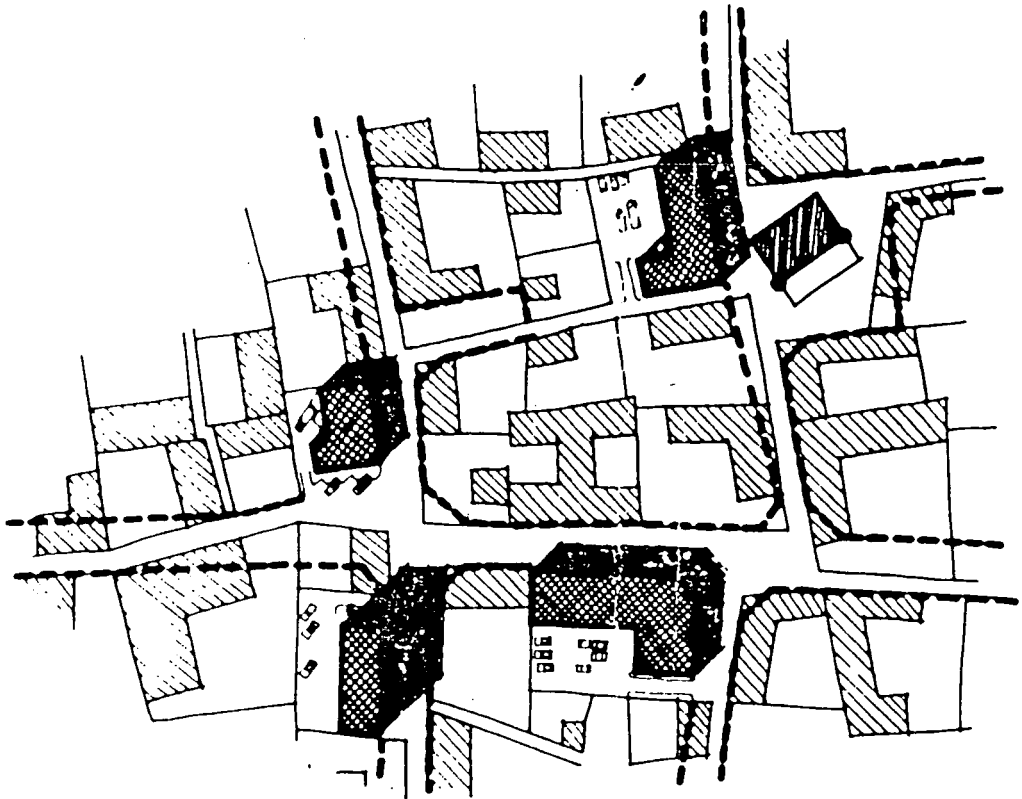
FIG. 2.4: HALCROW'S REDEVELOPMENT PROPOSALS FOR SHARJAH, 1969




a. Existing Town:

'After a survey of land ownership, building lines for new development — — — are established. Minor streets or passages will be designated as service roads or pedestrian streets'. (Halcrow's 1969).

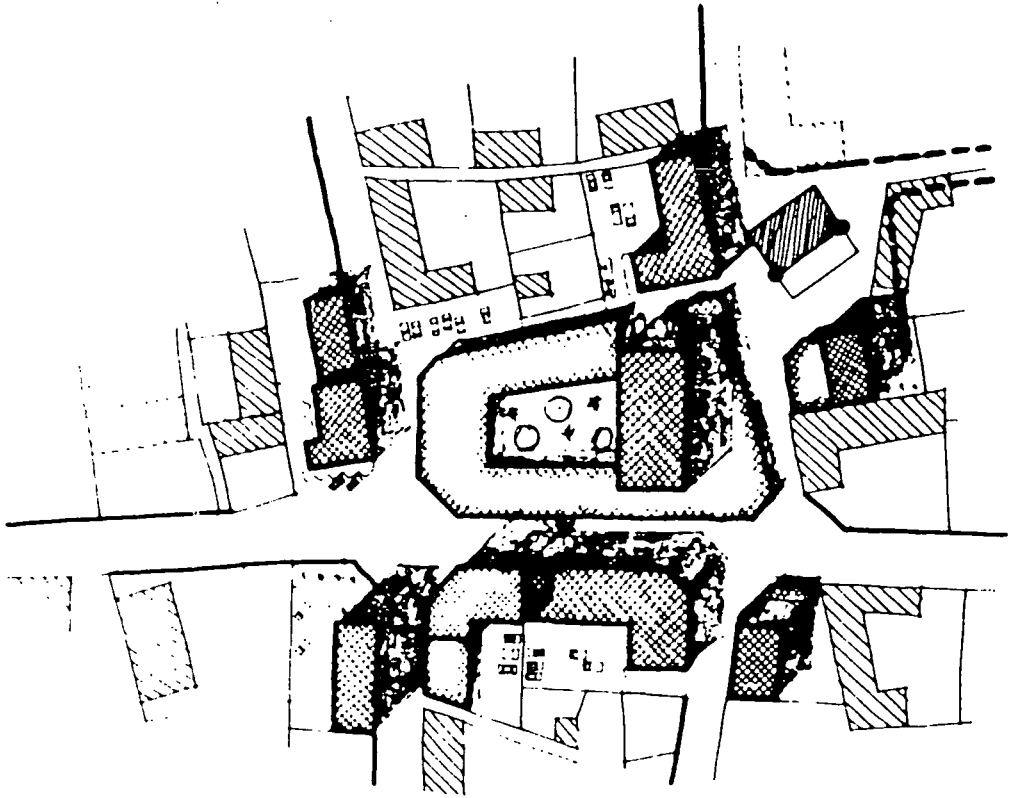
The above illustration shows a hypothetical area of the old town with its narrow alleys, closely juxtaposed buildings and fragmented plot size and distribution. Proposed building lines do little to indicate any form of preservation; rather their intended course through some existing buildings suggest complete destruction as they are amalgamated into larger, more 'convenient' development plots.


FIG. 2.4: continuedb. Redevelopment Commencing

'New buildings  conform to new building lines, plot ratios etc., and are planned to allow for off-street parking and unloading of merchandise as decreed in zoning plan. Existing buildings remain.' (Halcrow's, 1969)

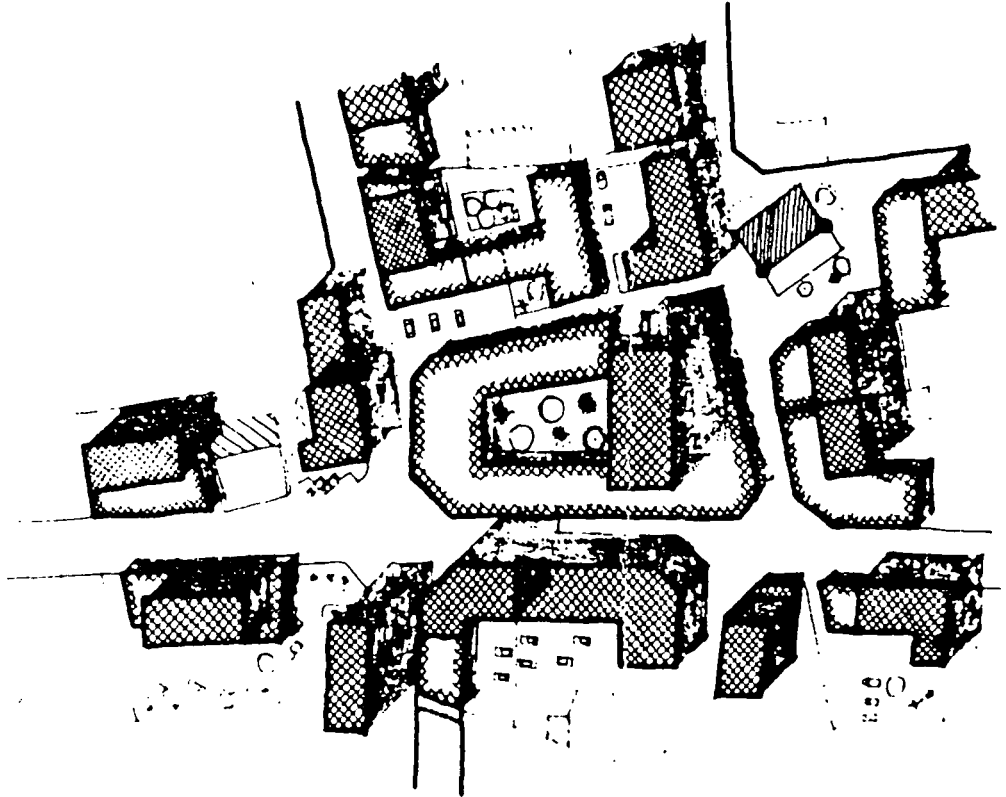
As redevelopment commences, it appears that newly planned buildings are constructed on the same site as the old, at the expense of the latter, and facilities are introduced into the organic, pedestrian scale structure of the old centre to allow car-parking and vehicle movement as alleys are widened into roads and buildings retreat to new set-back lines.



FIG. 2.4: continuedc. Redevelopment Progressing

'Old properties  along main roads compulsorily acquired and demolished up to new building lines. Some adjoining properties amalgamating and redeveloping as one site for better utilization of land' (Halcrow's, 1969)

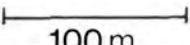
Here, the concept of compulsory purchase is introduced into the development structure, thus enabling developers to fully utilize land at the centre of the town to its maximum economic potential through the merging of building plots and complete redevelopment of others. There is little justification for such wholesale disregard of the organic structure that had previously evolved and served the inhabitants well for many years, other than to impose Western development proposals that were a totally alien concept to the indigenous population whether of merchant or labouring classes.

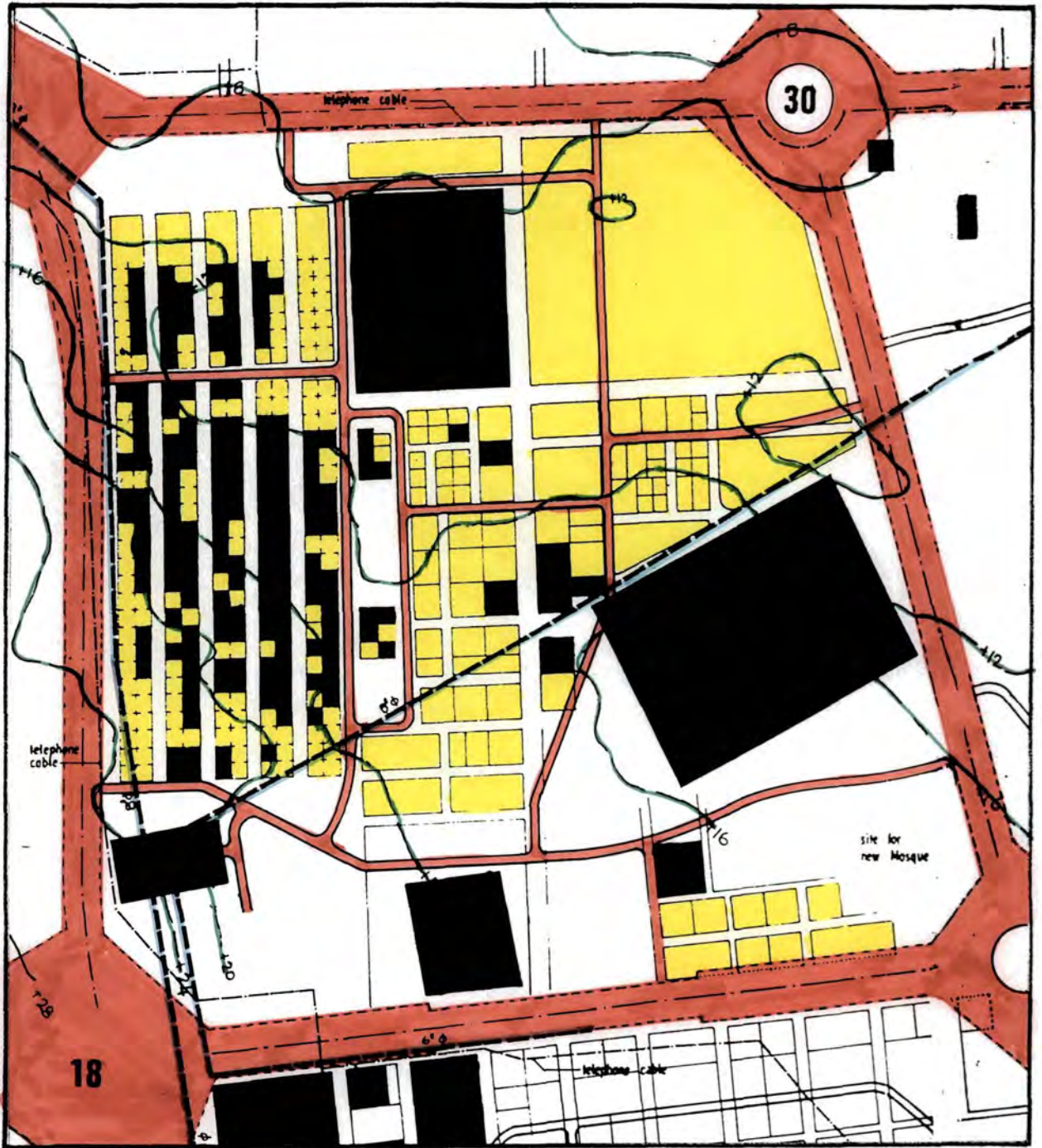
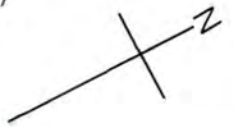
FIG. 2.4 continuedd. Redevelopment Completed

'Only isolated old properties remain'. (Halcrow's, 1969)

The paucity of old buildings left on this sketch indicates the almost total level of 'redevelopment' and the lack of serious preservation schemes in the old town. The old buildings remaining, now isolated, would lose their original function as their occupiers are estranged from their environment, move out and consequently leave buildings to fall into disrepair and decay. This would provide future excuses for their demolition and the construction of a modern, Western-style town centre. The only building above, apparently surviving in tact and maintaining its original function was the mosque.

Fig. 2-5 Maisaloon (1969) - Proposed Development. (After Halcrow's)

Scale  100 m



Key :







- | | | | |
|---|-----------------------------|---|---------------------------------|
|  | Primary Distributor Roads |  | Occupied Plots |
|  | Secondary Distributor Roads |  | Plots allocated, but unoccupied |
|  | Water Mains | | |
|  | Contours (feet) | | |

Fig. 2.6: Master Plan (1969) First Phase (After Halcrow's)

It is worth noting that most of these areas avoid reclaimed land and extend from the main body of the old town funnelling down the Dhaid Road. The low-density, high value property area along the Khan-Layyah Road is included, as is the redevelopment of all old areas.

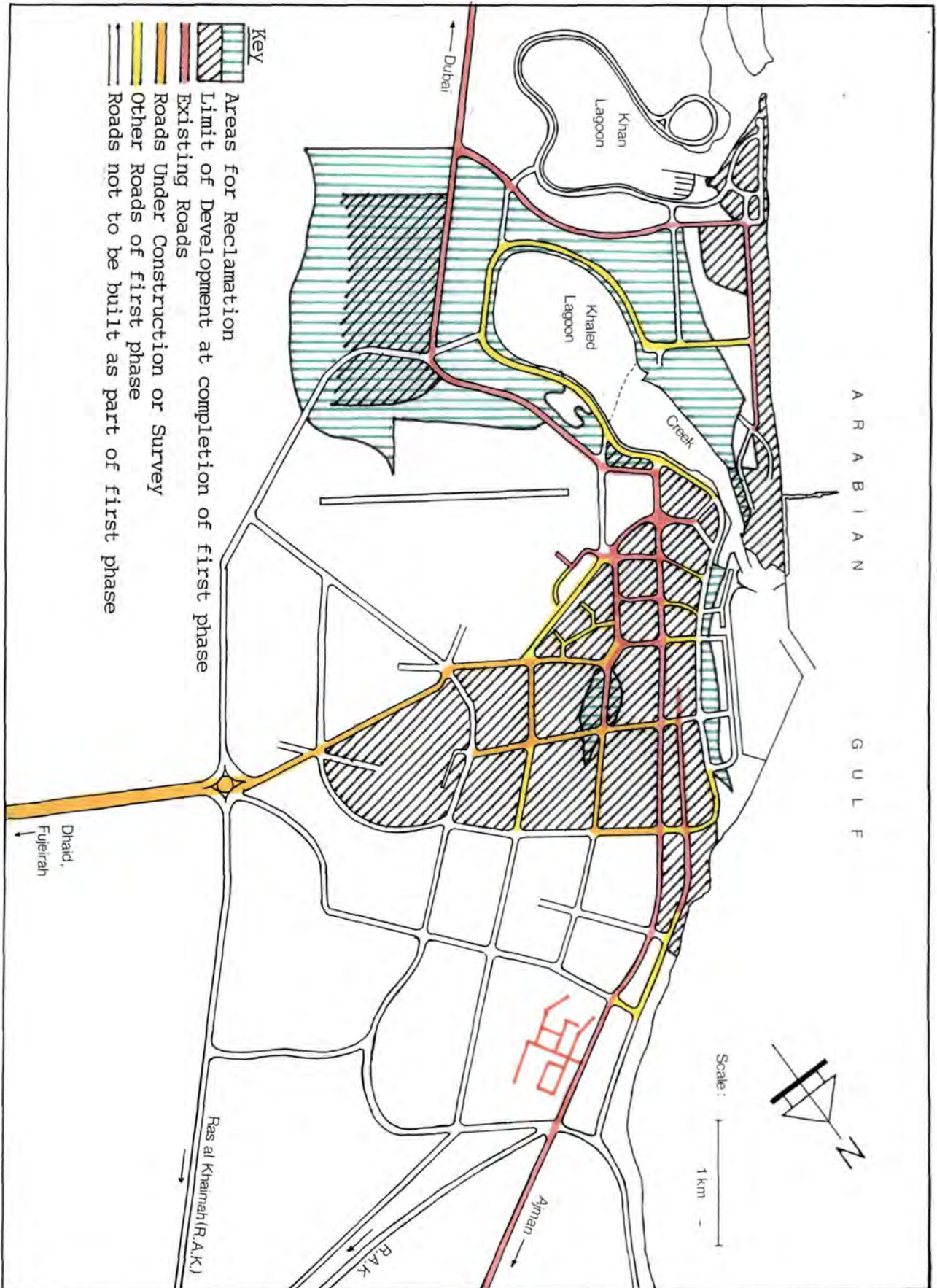


FIG. 2.7: THE MASTER PLAN: SECOND PHASE DEVELOPMENT (After Halcrow's(1969))

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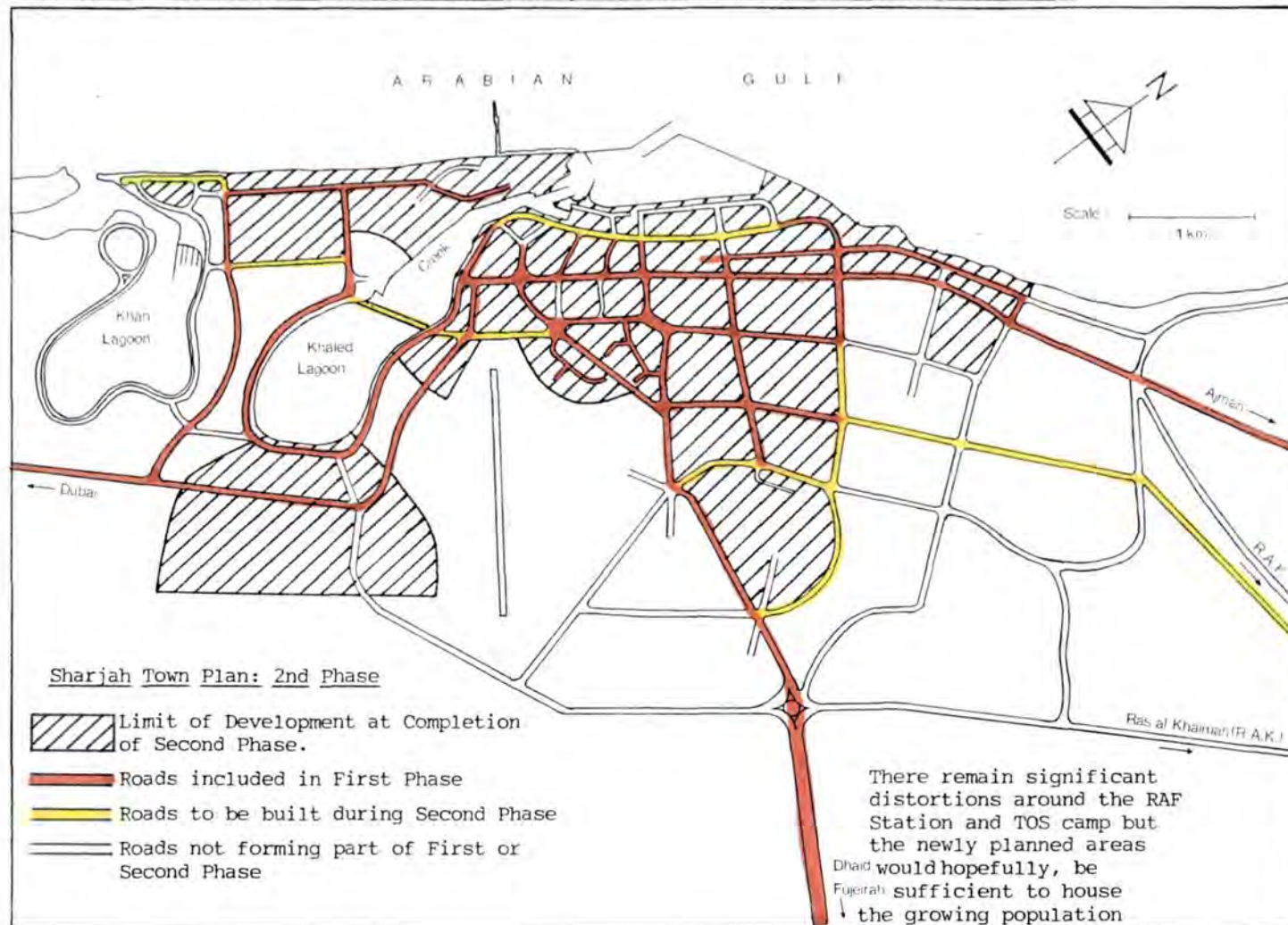


FIG. 2.8: THE MASTER PLAN: ROAD NETWORK (1969) After Halcrow's

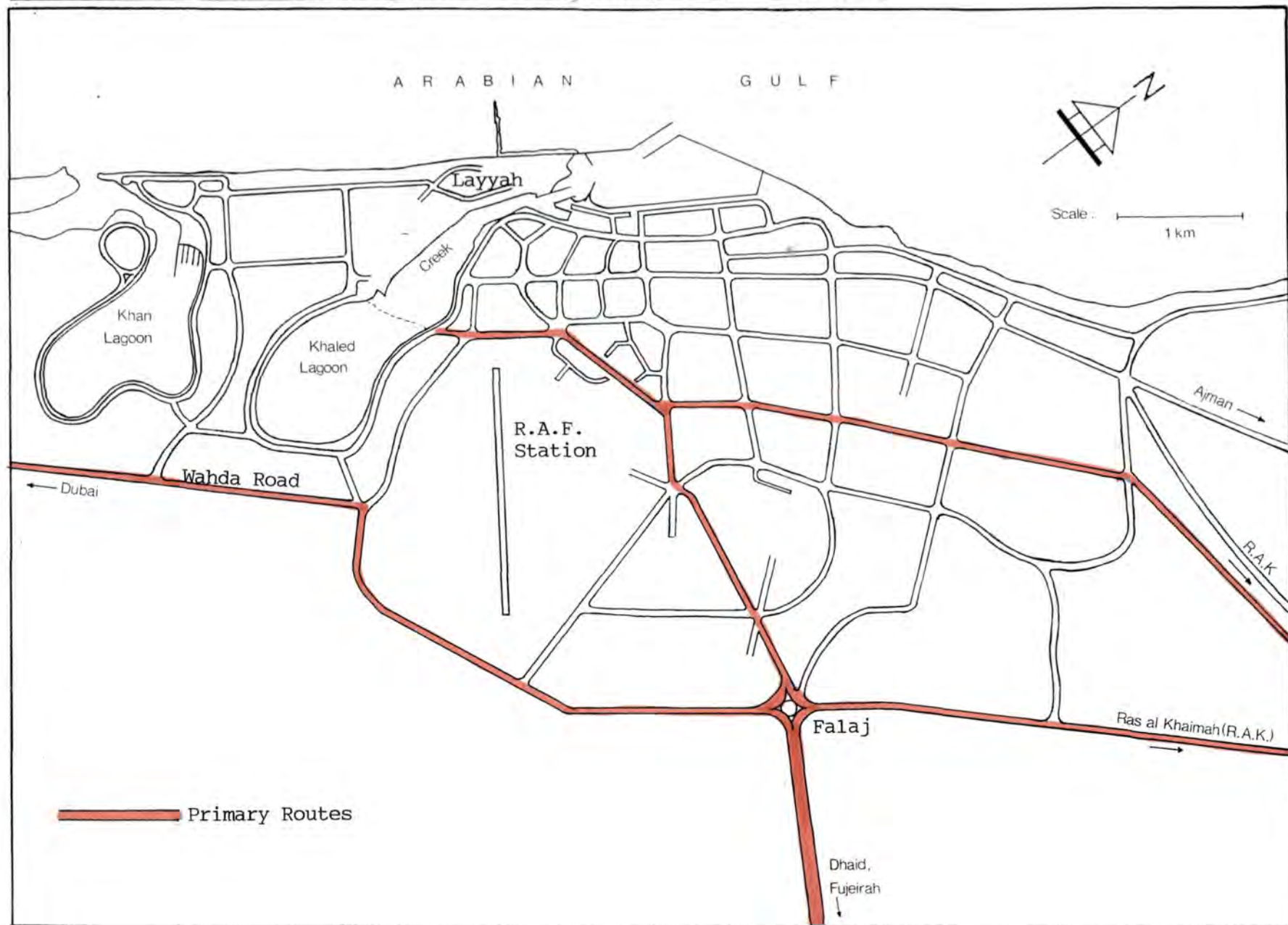


FIG. 2.9 Layyah, Jubail and Marija
 (After Halcrow's 1969)



Scale 500 m

Fundamental to the improvement of the inner creek was the severing of the sandspit from its base at the northern end of the Layyah Peninsula. The point of detachment is clearly indicated. The proposed course of the dredged creek is also shown with silted areas prevalent in that region. To prevent further silting, protective breakwaters were recommended both East and West of the new creek entrance, which would permit greater flow velocities and thus keep the channel permanently clear.

To achieve this, it was decided also to maintain the existing lagoon area for the hydraulic requirements necessary to keep the channel open and for future amenity purposes, by dredging.

FIG. 2.10: SHARJAH, 1972 (After Middle East Photographic Survey)

Compared to 1968 (see Fig. 2.1), the urban area of the town has increased considerably. Prominent features are Zahra and Majlis Squares. The latter no longer exists, but both were attempts to beautify the town with landscaped gardens, as is also shown at the roundabouts along Arouba Road. The entrance to Sharjah Creek at this time is beside Layyah village. During the 1970's, the creek was dredged, land reclaimed from the sea and the entrance moved to a point opposite Sharq. Newly developed areas of tower blocks, both for commercial and residential purposes, have been built along Arouba Road with its fast coastal connections to Dubai and Ras al-Khaimah.

The areas of 'old' Sharjah lie on the northern side of Arouba Road which marked the limit of the urban area until the 1960's. The area of Shuwaiheen shows the high density, cellular structure of courtyard dwellings common to many Middle Eastern cities. The suq lies parallel to the southern shore of the creek. The runway of the R.A.F. station appears at bottom left.

Key and photograph overleaf.

FIG. 2·10; SHARJAH, 1972.(After M.A.P.S.)



Scale

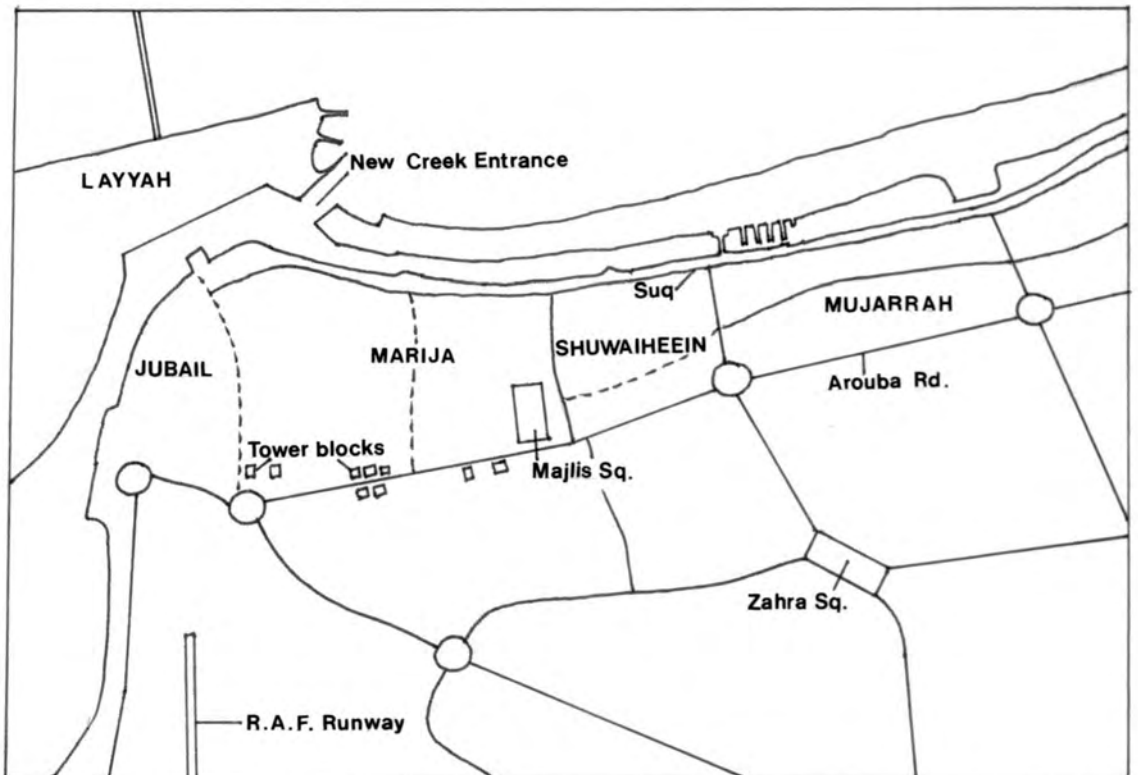
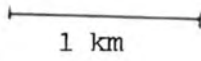
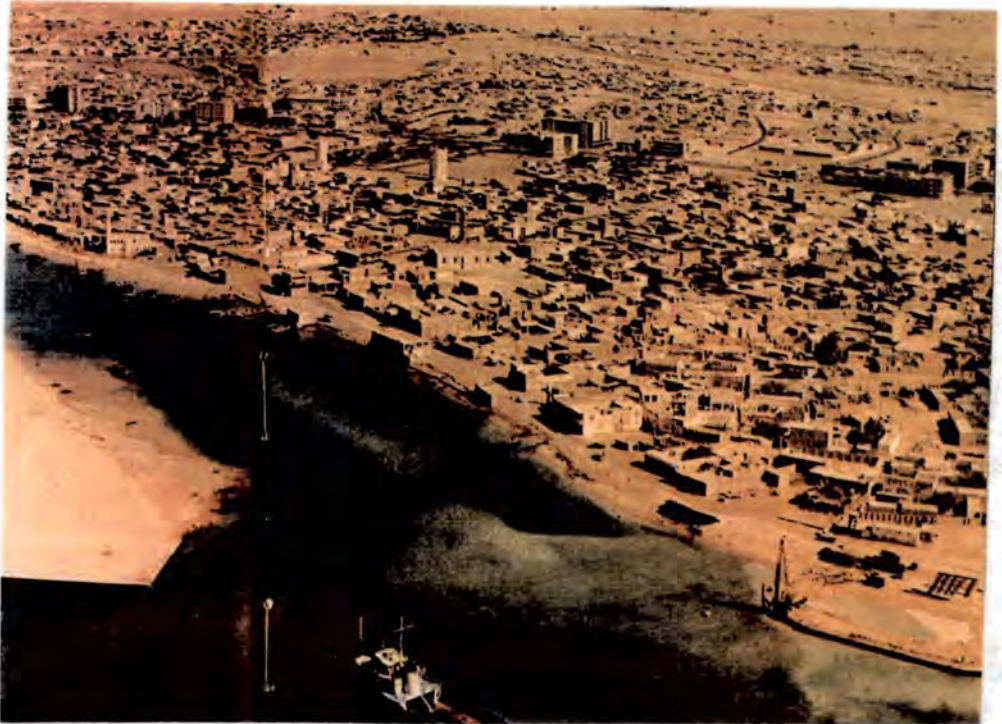


FIG. 2.11 An aerial view of Sharjah, looking South-East (1972)
(After Moser)



Evidence of silting at the mouth of the creek can be clearly seen. The majority of dwellings are coral-stone courtyard houses with added windtowers and terraces. There is a noticeable lack of tarmac roads, with narrow alleys between buildings.

The Naboodah Mosque can be seen centre, left. To each side of this stretches the alley of the sug in close proximity to the Southern shore of the creek where dhows are moored. Fish and imported goods could therefore be landed and sold immediately.

Al-Hasn Palace has already been demolished, all that is left beside the two newly constructed, white-washed towers is a watch-tower (top,centre).

Arouba Road bisects the town through the upper half of the photograph providing a physical divide of old and new Sharjah. The older half would have changed little since the beginning of the 20th Century.

FIG. 2.12 Sharjah, looking North-West (1972, After Moser)



An interesting feature is the 'barasti' (arish) dwelling lower centre. These simple, palm-frond structures housed 60% of the population well into the twentieth century. Although of simple form, it retains the characteristic courtyard feature with high 'walls' for privacy. Wind-towers and terraces can be seen on the coral-stone dwellings to the rear.

Lower right of the photograph is the newly constructed Arouba Road, now dividing old from new. It provided the impetus for large scale development, as its fast, coastal links encouraged the growth of transport and trade, especially between Dubai and Sharjah.

FIG. 2.13: SHARJAH, LOOKING SOUTH-WEST (After Moser, 1972)



Multi-storey tower blocks are in evidence, as is an attempt at aesthetic improvement in Zahra Square (centre)

The road layout has been extended to these modern areas but tracks provide the only access to buildings in the areas between the main roads. It should be noted that new buildings (left) retain the high wall feature for privacy.

In the distance is the village of Al-Khan, although linked by road, still relatively remote.

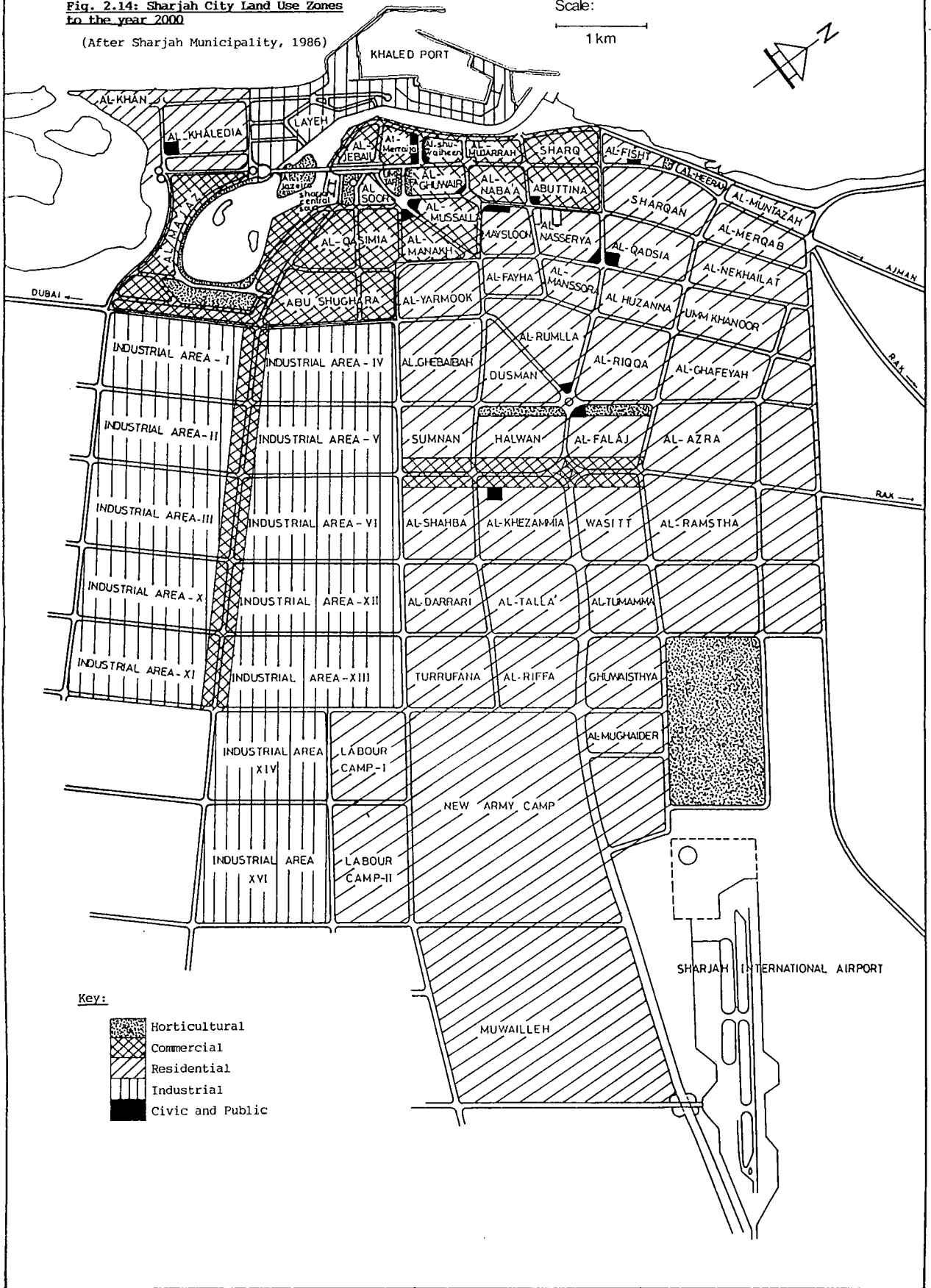
The number of tower blocks (centre, right) indicates the beginning of the construction boom in Sharjah that ensued with the discovery of oil in 1972.

Fig. 2.14: Sharjah City Land Use Zones to the year 2000

(After Sharjah Municipality, 1986)

Scale:

1 km



This diagram illustrates the layout of Port Khalid, Sharjah, in 1982. Accommodation for local craft is provided by the Town, Suq and Fish wharfs.

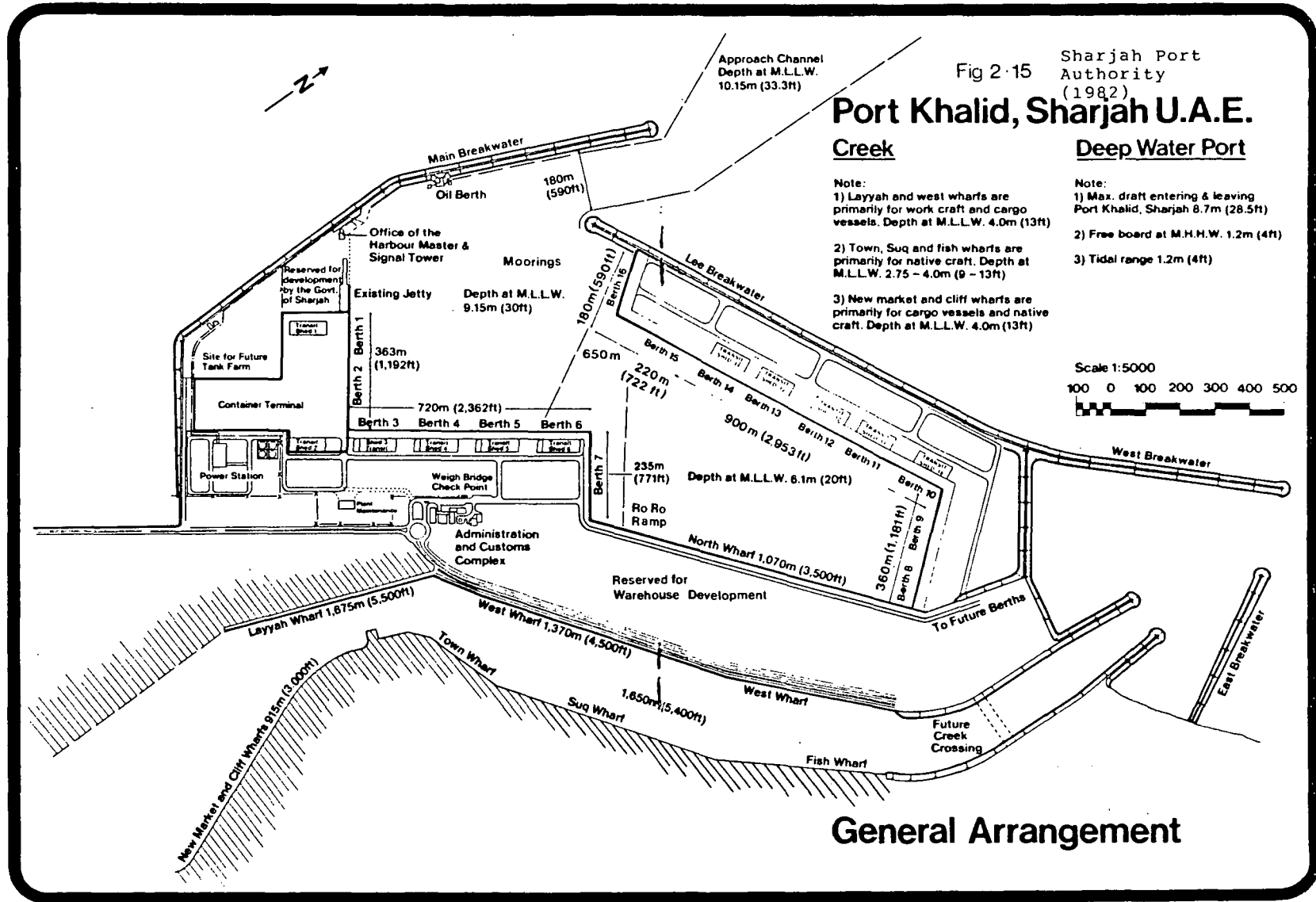
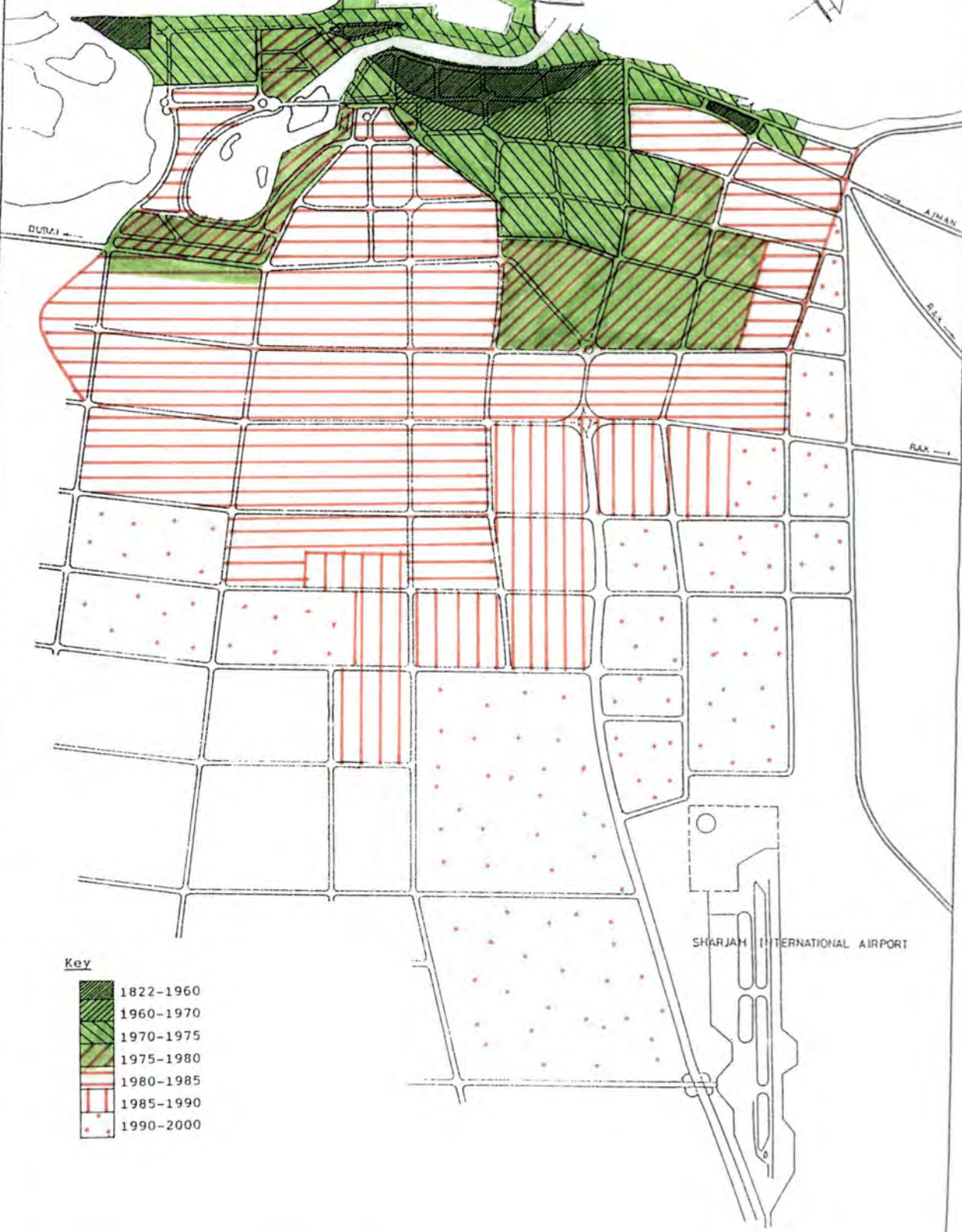









Fig. 2.16: Sharjah City - Phases of Growth, to the Year 2000 (After Sharjah Municipality)

Scale:

1km



Key

-  1822-1960
-  1960-1970
-  1970-1975
-  1975-1980
-  1980-1985
-  1985-1990
-  1990-2000

CHAPTER 3

ELEMENTS OF THE ISLAMIC CITY

3.1 Aims and Objectives

Sharjah was once the pre-eminent port between Bahrain and Ras Musandam, particularly during the period from the turn of the twentieth century to the Second World War after which it was superceded by its rival, Dubai. During this relatively short period Sharjah experienced a rapid growth of population and consequently, spatial expansion that involved the construction of many fine houses from locally collected coral blocks ('farush') and gypsum-based mortar ('juss'). In Sharjah 'farush' is also referred to as 'hasa', meaning 'sea-stone' with smaller pebbles and stones called 'beem'. It is this period of building that survives most tangibly and extensively in the old core of the city and it is this period that makes the urban fabric of Sharjah unique in the United Arab Emirates.

It is true that other cities such as Dubai also contain pockets of pre-Second World War buildings in various states of repair. Many of these are of grander design, loftier with more intricate detail and embellishment and yet retain an atmosphere and ambience that is quite different to Sharjah. In the latter there remains an extensive, almost contiguous zone of individual examples of domestic, vernacular architecture that is unparalleled in the Emirates.

Sharjah's inheritance of this vernacular architecture then, is a unique, substantial and - as a complete entity - a living, historical document.

It is the contiguous, close-knit relics of Sharjah's architectural heritage that arguably renders this city most analogous to that of the ancestors of today's local families. It is this inheritance that should be preserved for future generations, not only as a record of times past, but as a living integrated unit of the urban fabric.

Many scholars have argued intensely for the preservation of the old city cores ('medinas') of Middle-Eastern cities for the benefit of the indigenous populations and nations as a whole. They have experienced varying degrees of success, but there remains an over-whelming imbalance in favour of demolition, redevelopment and often total destruction of ancient city cores, preferring alien, Western built forms of little relevance or meaning to an Islamic lifestyle, to be superimposed upon them. Inevitably, this changes people's attitudes to their city. As Bokhari (1982) notes:

"It is a fact that the sudden removal of the old core, or large sections of it, drastically effects the social behaviour of all city dwellers. It also affects their affection and action towards their city, their decision to remain and restore or leave and vandalize. Ultimately this will influence the authority's and developers' decision to invest or bulldoze." (1)

Within the U.A.E. established old town centres have generally been 'bulldozed' rather than receiving investment. There appears to be a pervasive prejudice against all built forms from the pre-oil era which are perceived, quite incorrectly, as symbolizing backwardness, lack of sophistication and regression as opposed to the equally prevalent "wish to have new, modern, international cities" (2). In brief,

such cities have lost their heart but retain skeletal forms physically representing Western planning ideologies, far removed in culture and tradition from the southern littoral of the Arabian Gulf. This devastating course of action has already begun in Sharjah, but to a greater degree in other U.A.E. cities such as Abu-Dhabi and Ajman where only isolated old buildings remain.

Tradition should not necessarily be seen as something "of the past", for tradition implies continuity through acceptance of some norm of behaviour, it

"is not a nostalgic vision but rather an aspirational dynamism that possesses an intrinsic natural integrity and identity which could respond creatively to the present confrontation (to Modernism) and necessary changes." (3)

The objectives of city planners should surely balance the desire for modern, high technology economic and social systems of the affluent West with the successful, traditional lifestyles indigenous to the region and

"avoid social shock and the destruction of cultural identity." (4)

Sadly, as Lawless (1980) states,

"the balance sheet to date is gloomy." (5)

Azzawi (1986) neatly summarizes the situation in many Middle-Eastern cities through his comments on policies implemented in Baghdad;

"Such destructive schemes reflected the short sighted official policies which were put forward by ignorant civil engineers (and to a lesser extent by inept architects): they had no appreciation of domestic vernacular architecture and lacked the imagination to put forward alternative proposals which would have alleviated the mass destruction of this exquisite architectural heritage." (6)

It is the aim of this thesis to attempt to convince decision-makers that such mistakes should not be repeated in Sharjah, and that conservation, whether in the form of restoration or rebuilding, can be implemented as a viable, integrated alternative to the complete destruction of traditional built forms and their replacement by high-rise, high-density blocks constructed with climatically unsuitable materials. Such structures inevitably impose upon the privacy of others and use uneconomic methods of cooling and ventilation. This overall aim will be attained by fulfilling the following objectives.

- i) To present a detailed, analytical account of spatial forms remaining in the old core of Sharjah city using cartographic, photographic and diagrammatic representations of vernacular architecture.
- ii) To assess the extent to which these built forms correspond to or deviate from the 'agreed', recognized standard components of other, comparable Middle-Eastern cities, thus illustrating their wider significance to the heritage of the Arabian Gulf and Middle-East as a whole.
- iii) To elucidate and reinforce reasons why such forms should be preserved rather than demolished.

- iv) To suggest practical, alternative uses that will preserve these built forms where changes in society and lifestyle prevent their often rejected or outmoded original use.
- v) To exemplify methods of successful, economic preservation and restoration where physically feasible.
- vi) To use case studies of vernacular architecture to illustrate the climatic, religious and cultural adaptations of previous generations showing their relevance to the revival of older buildings for modern day usage and,
- vii) To suggest viable options for problems that may arise from the implementation of conservation schemes, i.e. the displacement (temporary or permanent) of some of the immigrant population of the historic areas.

3.2 Components of the Medina

It is generally agreed there are several basic components to the pre-industrial Islamic city. These are not greatly different to pre-industrial cities outside the Muslim world.

("all pre-industrial cities resemble one another closely") (7)

indeed it is maintained by some that,

"There is not, nor was there ever, an 'Islamic City', or even an Islamic system of City building" (8)

but it is argued,

"Islam expanded into wide regions with disparate traditions of design, architecture and urban form. It was carried in many directions by various groups each drawing upon a particular subset of those traditions combined in a unique amalgam." (9)

Abu Lughod (1983), goes on to state that Islamic space is expressed by certain basic

"deep structures and recurring idioms functionally suited to the social structure and dominant technology during periods of maximum city growth." (10)

In Sharjah the built form of the pre-industrial city is a reflection of the subset of amalgamated traditions of its previous inhabitants, particularly those of the early twentieth century. These people were mainly the descendants of migrants from Persia, or may have been migrants themselves, and therefore it would not be surprising to find Persian elements in the townscape of the old core. Being a port and entrepôt there would have been a significant proportion of international, ephemeral inhabitants, its population changing daily and seasonally as trade demanded. Visiting foreigners, particularly from the Indian sub-continent, would settle temporarily or permanently as circumstances dictated. These people would undoubtedly have some influence upon the built form of the town as well as the local maritime merchant families, their workers and families and nomadic Bedu using the port to trade produce from the desert. Each town would have its own amalgam of traditions and recurring idioms making that town unique. Yet there are common elements found in Islamic cities generated by 'some mechanism' which Abu Lughod (1983) suggests is the legal system and

"notions of proper behaviour in space
and legal regulations in property
relationships." (11)

Under the Islamic legal systems, planning began with the ceding of urban space to supra-individual entities; a group, which may have been related by kinship, origin, descent or function but in any case the details of their settlement were left to themselves. Thus arose the clear distinction

between semi-public and public space, the former being the interior of the 'super-block' or 'residential island' and therefore the origin of the cellular structure so often found in Islamic cities. This theory then illuminates the first common element of Islamic cities, the courtyard house, which is found in profusion in the older quarters of Sharjah town, namely Shuwaiheen and Marija.

The creation of these 'residential islands' indirectly formed the second common element of Islamic cities, namely the circulation system of main thoroughfares, alleyways and culs-de-sac between these 'residential islands'. This circulation system is referred to by Bianca (1982) as

"a sophisticated system of interior passages creating various grades of seclusion and privacy within an otherwise continuous urban structure." (12)

The term 'sophisticated' implies some degree of co-ordinated planning between residential blocks, yet Abu Lughod (1983) maintains that

"passages between cells served chiefly as the boundaries of contiguous cells; they occupied land that was residual" (13)

and therefore the system of passages and alleyways was very much secondary to the erection of residential buildings. Whether planned beforehand, agreed upon at some stage of development between neighbouring residential blocks or haphazardly juxtaposed, the old core of Sharjah does exhibit this appearance of disorganised complexity with, on first impression, little sign of mass co-ordination or planning.

Yet, as will be shown, the physical form of traditional cities exhibits a

"progression of urban space extending hierarchically from the public domain down to the smallest unit of the city, the residential courtyard and its exclusively private domain." (14)

Again, whether this hierarchy was created intentionally or not has been a matter of debate, but Bianca (1982) goes on to state that:

"in traditional Islamic society the shared values, the religious consensus and the social interdependence between the members of the community were strong enough to co-ordinate individual decisions in a natural and flexible way - thus producing an organic whole out of a sum of individual acts of buildings. There was no formal scheme which would give in advance a rigid, global picture of forthcoming developments." (15)

Here then, is an explanation for this haphazard appearance. Local problems had to be debated upon by neighbours affected by further building and so these people had a pronounced effect upon the physical form of each other's property. Decisions agreed upon had to respect the rights of neighbours' privacy and territory both on a vertical and horizontal plane. Thus, there was created a unique social structure and physical form. Problems that had to be confronted were relevant only to proximate neighbours in that time and space and the solutions can be witnessed today in the correlation of vernacular architectural forms that grew organically to form the urban whole. As Bokhari (1982) states:

"the urban structure of an organic city in any region of the world is in reality but a reflection and an image of needs, aspirations and ethos of its society, adjusted and modified by many other factors such as economics, individual choices and the macro- and micro-climatic conditions." (16)

Although climatic conditions in Sharjah would have been similar to other Emirates' cities, it is the influence of personalities that creates difference and uniqueness in the built form of the old core and it is their needs, aspirations and skills that are reflected in the buildings.

Cantacuzino (1982) appears to support these suggestions, and his description of streets in old Arab quarters fits perfectly well for those of the Sharjah medina:

"The buildings of the Arab city are inward looking and the streets narrow, often tortuous lanes which, with the exception of the specific souk or bazaar areas, are flanked by high blank walls with only an occasional door to mark the entrance into the private world of house and courtyard." (17)

Case studies of houses and alleyways from Sharjah will attempt to corroborate his observation that

"there is no architecture of the street" (18)

These two elements combined - residential islands and the circulation system - comprise the bulk of domestic vernacular architectural types found in most Islamic cities. It is these elements on which further studies will concentrate, as it is these built forms that provide physical testament to the skills, techniques, limitations, aspirations and lifestyles of the people that created Sharjah

town in the early part of this century. It is the combined efforts of these people that gave Sharjah its pre-eminence on the Surr Coast as a trading port, and their experiences lay the foundations for the successful transition of Sharjah into the oil-rich decade of the 1970's.

Vernacular architecture (those forms created individually by merchants, craftsmen and builders) is often neglected, overlooked and ignored by planners, who are more likely to preserve monuments that are superficially seen as superior, exemplary or of sufficient architectural merit to warrant preservation. Yet these monuments are, by definition, not wholly representative of their contemporary built forms. When the surrounding urban context is removed by demolition, they are relegated to a quaint, historic facade, a tourist attraction with perhaps an incidental impression of how life used to be. An excellent example of this alienation as monuments has already occurred in Sharjah. In 1971, the ruler's palace 'Al-Hasn' (see Fig. 2.1v) was demolished to allow a dual carriageway flanked by multi-storey apartment blocks to be erected on the site. The intention was to create the town's own version of Wall Street, with international banks occupying ground and first floor levels. The name 'Boorj Avenue' was adopted because decision-makers decided to leave but one tower - the Boorj - of the former palace standing uncomfortably and incongruously as the centre-piece

of a small roundabout. Thus, the structure was alienated not only from the building of which it was an integral part, but also from any other form of vernacular architecture of its era. The full extent of this rupture of the urban fabric can be seen quite clearly in Fig. 3.1.

The vernacular architecture of a city

"forms 'a physical environment of exceptional coherence and harmony" (19)

a harmony which in the above example has clearly been flouted. And yet, as Belkâcem (1982) states,

"this urban raw material, possessing roots that are firmly attached to local reality, has always been the real foundation of urbanization. It is the peoples' architecture, built by farmers and fishermen, and not promoters for princes or rich merchants." (20)

As this form of architecture has sadly been neglected in many Middle-Eastern cities, examples from Sharjah will be examined in detail to assess their importance to the local and national heritage.

A further element of pre-industrial Islamic cities, that of the main thoroughfare or routeway through the city, has already been briefly mentioned. Routeways became the main focus of the public life of the city and contained many of the other basic elements of such cities: the Friday Mosque ('Jami')/madrassa/hammam complex and 'khans': the equivalent of storage and lodging facilities for visiting merchants. These arterial routeways were

often

"the continuations, within cities, of the long-distance routes that connected cities with one another. One or more of these main arteries served as the linear centre for manufacture, commerce and vending." (21)

These activities were located in close proximity along the arterial routes thus forming the 'suq', typical of Arab-Islamic cities. In Sharjah, the main suq alley which remains parallel to the southern shore of the creek was in fact the continuation of routeways South-West to Dubai and North to Ajman, Umm-al-Qaiwain and Ras al-Khaimah, and contains some of the elements common to other Islamic cities. In the pre-industrial era one of the two main Friday mosques was that sponsored and constructed by the 'Al-Naboodahs': a rich pearl-merchant family owning extensive properties within the town. This mosque survives, although largely rebuilt to its original design, and will be discussed later. There was also a 'madrasa' (or 'mutawa', the Islamic School) and 'hammam' (bathing facilities) located near to this point (though the latter facility was of an extremely basic nature).

The suq is the centre for all commercial transactions in the city and its physical form may vary from being grouped around a junction of main routeways, main institutional buildings or, as in Sharjah, linear which as Costello (1980) indicates is found more frequently in Iran, where bazaars

"tend to be linear and the types of products sold are grouped in sections." (22)

This would not be entirely unexpected for Sharjah for three main reasons; firstly, the morphology of Sharjah Creek (see Fig.2.10) encouraged the unloading of merchandise in its shallow, sheltered waters parallel to the coastline for up to 3 km in length and was protected by a sand bar. Therefore, to reach any part of the town, goods would have to be transported a comparatively short distance from a suq established along its almost entire length. Secondly, the routeway linking Dubai to Ras-al-Khaimah ran in linear form through Sharjah parallel to the creek and thirdly, as many of the merchants residing in Sharjah were of Persian descent, it is likely they would wish to create a suq with which they had been familiar in their homeland. There is historic evidence to support the division of the suq in Sharjah into sections for different trades, but whether there is evidence of this today will be examined later. It is clear however, from fieldwork, that until very recently the appearance of shops within the suq would have closely reflected Baer's (1964) description:

"Shops face the street, without door or windows, and are closed only by shutters." (23)

The 'khan' - "the urban equivalent of caravanserais" (24)

were typically

"a large square building with an enclosed courtyard, which serves as a warehouse. The upper stories are living quarters for merchants or they are again used as warehouses. The khan has only one entrance, which is closed at night." (25)

By its very nature as a place of storage and refuge it was inextricably linked with the functions of the main suq and found in close proximity to it, but as more modern forms of storing merchandise have become available the khan has tended to become obsolete and within the present Sharjah townscape, very little evidence has been found of the location of such buildings. It is worth noting however, that Sims (1978) makes the point when discussing markets, khans and baths, that they were

"primary focal points of the urban landscape and tended to remain relatively fixed in location, but the original structures are hardly ever extant, owing to the ravages of war, fire and other natural disasters, and the upgrading of market facilities over the centuries, not to speak of the destruction wrought by modern town planning." (26)

Perhaps then, it is not surprising to find little evidence of khans and baths in Sharjah, although the point must be made now and expanded later of the place name of a neighbouring village of Sharjah - Al-Khan - named after such a facility and now part of the urban mass of the main city.

The remaining feature of pre-industrial Islamic cities yet to be discussed is that of the common forms of military architecture constructed as part of the town's defences. Unwin (1982), in his comparison of the constituent elements of pre-industrial Islamic cities by various authors, cites the following examples: Costello has identified four common features; 'the citadel, the palace, the mosque-bazaar complex, and courtyard houses', Hourani broadly states the

same, also indicating the existence of 'the citadel, the royal city or quarter', and Unwin (1982) himself concludes with five main elements:

"the citadel, the palace, the mosque,
the souq and narrow, winding streets." (27)

These comparisons are noted here to illuminate the point that in most assessments, the citadel and palace are seen as two separate entities. In Sharjah however, this was not the case. Being a relatively small and generally impoverished settlement until the discovery of oil, funds would not have been available for the construction of two imposing buildings. Indeed, even the ruling sheikhs would have found problems financing such projects and in common with other Emirates rulers would combine the functions of residence and defence into one building - the fort. Sharjah's fort, and its fate, will be discussed in greater detail later.

Other military architecture would include the construction of walls and gates to help defend the town in times of attack, as have been frequent in the history of Sharjah. The existence of gates implies the presence of walls, but as there is no evidence of the latter since the nineteenth century, it follows there will be no evidence of the former. There is extensive evidence of another major form of military architecture - the watch tower - remaining today. These once encircled the city and were the main defensive structures built.

This chapter has briefly discussed the components of Islamic medinas. There will now follow studies of each of these elements in detail to assess the extent to which they survive in the Sharjah medina, to suggest which of them should be preserved, why this is necessary and how this may be implemented as part of a global conservation plan for the city.

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FIG. 3.1 BOORJ AVENUE (1990)



This view of Boorj Avenue taken from the Habib Bank beside the creek shows the remains of 'Al-Hasn'; the tower ('boorj') at the centre of the roundabout. Its alienation is obvious. The tower blocks to the right contain banks at ground level, some government and business premises on upper storeys, with residential apartments forming the majority of properties. Identical rows of tower blocks flank the avenue in a grossly intrusive manner and dominate the townscape of both Shuwaiheein and Marija.

CHAPTER 4

RELIGIOUS INSTITUTIONAL BUILDINGS

4.1 Mosques

If there is one element that is instantly recognised as typifying an Islamic city, then the mosque must surely qualify. It is the mosque and its alignment with the holy city of Makkah that has repeatedly formed the basis around which Islamic cities developed:

"No other religious practice has been so instrumental in establishing the basic physical frame of a Muslim City than of facing towards the Ka'ba for prayers. The hidden axis...inevitably determines the orientation of the mosque and also the alignment of the principal streets at whose intersection is found the rectangular space of the mosques" (1)

The extent to which this 'hidden axis' has influenced the geographical development of Sharjah will be illustrated with reference to older, surviving mosques within the areas of Marija and Shuwaiheein.

The most important mosque in any Islamic settlement is the 'Friday' or 'Jami' mosque where male members of the whole community may come together to pray on the Muslim holy day. It is a key element of the city that unites people from different families, quarters and indeed nationalities in a single act of worship. The Jami mosque however, is not merely a place of prayer but:

"is traditionally considered as a multi-functional space: serving for prayer, for congregations, for jurisdictions, for lectures and is a place of rest." (2)

Its influence upon the community is therefore profound and manifold, and pervades all aspects of Islamic life in both religious and secular activities:

'the Jami mosque provides the scene for activities involving the total population of the city.' (3)

Yet the Jami mosque was never elevated into a psychologically isolated, aloof, distance place of reverence, or physically separated from its congregation by extensive grounds but built as a constituent part of the urban fabric, fitting as a jigsaw piece into the labyrinth of alleyways that characterize its environs. Its accessibility to the general public was essential to maintain its influence and status at the centre of urban life.

There are also several other mosques, of varying size and importance, scattered throughout Islamic urban landscapes built to serve the immediate surrounding community, the inhabitants of a particular area or quarter, or even the individual members of an extended family group. Sharjah is no exception to this, and examples of such neighbourhood mosques will also be discussed in the context of assessing their feasibility for conservation.

4.1i The Jami Mosques of Sharjah

It must be emphasized that the area of Sharjah to be examined is that of the old urban core - the medina - principally containing the quarters known as Marija and

Shuwaiheein (see Fig. 2.14). Many of the old buildings in these areas have relinquished their former use and status to more modern counterparts. A case in point is the Jami mosque. Until the advent of the oil-based economy during the 1970's, one of Sharjah's two Jami mosques was that funded, for the most part, by the Naboodah family in the 1920's/30's. It is located at the former centre of the main alleyway of the suq, beside the creek in Marija. This is known simply as the 'Naboodah Mosque' and will form the basis for discussion in this chapter. However, Sharjah's new Jami mosque, the King Faisal Mosque, (see Fig. 4.1), has recently been completed near to the former Expo site in Qasimia and contains many of the elements of the typical religious complex; an Islamic school for study of the Holy Qu'ran (the 'madrasa' or 'mutawa'), ablution facilities for personal cleansing before prayers (the 'hammam') and the place of worship itself (the mosque or 'masjid'). This is one of the largest mosques in the U.A.E. and was sponsored by the royal family of Saudi Arabia to cement fraternal ties with its ally, Sharjah.

The Naboodah mosque dates from the 1920's, but is not the first mosque to be built in Sharjah. Indeed the present mosque is an almost identical reconstruction of one that stood before, which had to be rebuilt in the 1970's as the structure had become dangerous.

Palgrave (1865) talks of

"a large and loosely built mosque" which
 "has been constructed near the market
 place." (4),

and could possibly have occupied the site of the present Naboodah Mosque. Lorimer (1908) (5) confirms the existence of twenty-one mosques, two of which are Jamis. It is likely that the site of the present Naboodah Mosque had been used as a Jami before the Naboodah family constructed their building in the 1920's. The site occupies a prominent position on the Sharjah section of the main North-South arterial route from Dubai to Ras-al-Khaimah, located centrally in the main suq alley (see Fig. 2.11). It is also built directly on the southern shore of the creek, allowing easy access for fishermen at prayer times, whilst also being readily accessible for the permanent population of Marija.

The location of the second Jami mosque of the medina is that presently occupied by the mosque on Salahadin Road, (see Fig. 4.2).

No mention of either this, or the Naboodah Mosque, exists in the English language literature assimilated to date, but a tenuous confirmation of the presence of one of them in 1930 is illuminated by Abdullah (1975):

"In response to the Palestinian Islamic Congress in Jerusalem in 1930, a meeting was held in the chief mosque in Sharjah, at which two educated young men, Mubarak Al-Nakhi and Ibrahim Al-Midfa, gave enthusiastic nationalist speeches, after which money was collected for the Palestinian cause." (6)

Although this reference does not specifically name the mosque involved, it is suggested the Naboodah Mosque is, arguably, the most likely venue as the Al-Midfa family also built properties in the Marija area and their own house and

majlis was only a short distance away (see Fig. 4.2). It is likely they performed their own Friday prayers here.

The above event alone could warrant sufficient historical and political importance to preserve the structure, and its importance as a centre of culture and learning through meetings and debate could be revived.

But what of the structure itself? Should the building be preserved as merely a monument to one unconfirmed event of the past? Or does the building merit attention from its architectural and cultural value?

The following section will attempt to justify a conservation programme for the Naboodah Mosque.

4.1ii The Naboodah Mosque

It must be remembered that Sharjah could never have been considered a 'city' in terms of population, physical extent or political/economic importance within the Gulf region before the advent of oil discoveries. It was a sizeable town (see Fig.1.2vii) of major influence within Sharjah Emirate, to a lesser but fluctuating extent on the Trucial Coast and always in a relatively minor role in the context of the Gulf as a whole.

It would be expected therefore that such a town would not necessarily be endowed with a wealth of grandiose, architect-designed, well-constructed buildings. It would never have contained buildings or monuments to rival those of some of the great Islamic cities such as Baghdad, Isfahan or Makkah. Its population consisted mainly of extremely poor fishermen and pearl-divers, subordinate to a minority group of richer pearl-merchants and the ruling family. The income of these groups of people was almost totally dependent upon the pearl harvest, an unpredictable source of revenue and the cause of much poverty and hardship. This, allied to an unfavourable, harsh climate for up to nine months of the year, were hardly incentives to encourage the erection of grand building schemes. What was built in Sharjah (and substantial sections of it remain today), was a town composed of buildings constructed almost entirely from materials locally available, using local crafts and skills in their

erection, limited by the funding of the pearl merchants and adapted to ameliorate the harsh climate using technology appropriate and available at that time. As Dostal (1983) remarks:

"cultural solutions develop out of certain existential situations or provide answers to them. We comprehend a cultural fact to the extent that we perceive the context in which it is to be placed." (7)

The Naboodah Mosque is an egregious example of a major built form, but it must be noted at this point that photographic survey was limited as the mosque is rightly regarded as a place of worship even though it is, at the moment, disused. A close encounter from a non-Muslim was not always welcomed by some of the older inhabitants of the immediate vicinity!

The original structure was built by Isa-Obaid Al-Naboodah, 60 to 70 years ago, when the mosque was known simply as 'Masjid Al-Jami': the 'Friday Mosque'.

The mosque is essentially square in plan and aligned towards Makkah: the mihrab facing a West South-Westerly direction (see Fig. 4.3). It has two storeys, reflecting the seasonal movement within the household, with a lower, enclosed floor for winter prayers and an upper, three-sided storey with large 'masherabiyyah' or shuttered windows to control ventilation in summer. The open side of the upper storey can be seen quite clearly in Fig. 4.4, with the flat

roof supported by wooden Ionic-style columns. This feature best indicates the date of the original structure. It is known that the Naboodah family imported these columns from the Malabar Coast of India, ready carved from whole teak trunks, for use in the construction of their family home approximately sixty-five years ago. These were used as roof supports for further additions to the Naboodah house between 1925-1930, and it is likely that all of these columns were imported at the same time. Assuming the original mosque was built concurrently or just after completion of the Naboodah house, a date in the late 1920's can be assumed with some certainty. These wooden columns are one of the few components of the original structure remaining and have been left in situ when the rest of the mosque was rebuilt in the 1970's.

The mihrab is a tall structure of between 8-9 m high, extending over both stories so the internal niche could be faced for prayers in summer and winter.

Senior members of the family emphasized the difficulty of building safe staircases to an upper floor. Wood was a rarity, and virtually all wood was imported from India or Zanzibar. Therefore, the construction of staircases was seen as a great and unnecessary expense for most families. Local masons did not possess the technical expertise to fashion staircases from the local building materials of petrified coral-blocks and gypsum mortar; indeed to create any safe, flat surface from either the irregular, hard, brittle coral blocks or soft gypsum would have been a

considerable task.. Whenever staircases were erected, stone was usually imported from Abu Musa Island which could be worked easily into relatively regular, durable blocks.

To import this stone involved high capital expenditure, so the staircases in both the Naboodah House and mosque do indicate a degree of prestige, even opulence, and help to create a form of mosque that is unique among its peers and reflects the elevated social standing of this family.

The building materials previously mentioned are used in the majority of built forms surviving in Sharjah from the first half of the twentieth century. The Naboodah Mosque has survived better than most due to its almost continued use until recently, a large-scale rebuilding programme in the 1970's and frequent maintenance. Even so, the foundational instability of its minaret is indicated by the presence of simple, supportive wooden scaffolding (see Fig. 4.3). This was also used for repainting and replastering when necessary.

The gradual dilapidation of the mosque does confirm a trend experienced by Lawless (1980):

"Religious, cultural and educational buildings have lost their wealthy patrons who have moved elsewhere: maintenance is therefore minimal if it is carried out at all." (8)

In Sharjah, the former patrons of buildings such as the Naboodah Mosque were some of the first families to benefit financially from the increase in prosperity brought about by oil revenues in the 1970's. They were among the first to leave the old quarters of the medina in favour of

a new lifestyle in modern, air-conditioned villas in newly planned areas of the city. They were compensated for the loss of land by the Sharjah government and former residences and other family-sponsored properties were all but forgotten, leaving their fate in the hands of the planners (and their superiors) and property developers. That some old buildings remain at all today is by pure chance or fate. Even so, their days are numbered.

The limitations of the crude building materials of coral-block and gypsum may help to explain the lack of domes on any pre-1960's mosque on the southern Gulf coast as noted by Unwin (1982):

"While the dome is undoubtedly important it should though be pointed out that in several parts of the Islamic world, including the Southern Gulf, it was not a widespread traditional feature of the architecture." (9)

Broadbent (1983) acknowledges this observation, when he summarizes:

"The basic Islamic forms clearly derive from the fact that very little suitable timber was available for building on the Arabian Peninsula. The dome, the vault and the arch clearly are masonry forms.....

The masonry in many cases, took the form of mud-brick.....

Brick lent itself particularly well to dome, vault and arch construction, which - given the shortage of timber - often had to be done without centering." (10)

Mudbricks were rarely used in Sharjah, where coral was readily available. The shortage of timber in the town has already been noted, but to attempt to construct a dome from coral and gypsum without wooden supports, when even stair-cases were uncommon, may provide adequate explanation for

the lack of dome construction during this period. In short, the materials were entirely unsuitable and the exercise would have been futile, even with skilled masons.

The minaret of the mosque, unlike many later examples in Sharjah, stands astride its North-Eastern corner. It typifies a common form of minaret, as defined by Lewcock (1978):

"Eventually a common form of minaret developed, which began as a square, changed in the next storey to a polygon and then to the cylindrical main shaft. The balcony was constructed of light wood or cantilevered on brackets or superimposed niches. The top of the minaret formed another storey, frequently contrasting in shape, and then it was crowned by a dome or a conical roof." (11) (see Fig. 4.5)

The minaret, being some twenty metres high, would have been the tallest structure in Sharjah in the pre-oil era, and a significant landmark for passing maritime transport:

"the Islamic minaret served as a beacon for travellers." (12).

It emphasizes the importance of the Naboodah family not simply because of its height, but moreso for the inclusion of a dome structure at its summit, the problems of which have been discussed above:

"Minarets were originally added not to call to prayer but as symbols of the presence of the people who built them." (13)

A further endorsement of their wealth was the complete covering of the former rough coral block walls with a smooth, white, lime/gypsum based plaster to aid in reflecting the heat of the sun as well as providing a suitable medium on which to carve simple decoration.

Lewcock (1978) describes the advantages of these materials for building, but notes particularly the use of lime in coastal areas:

"when it was burned from sea-shells." (14)

It is not surprising to find such lime plaster in Sharjah, being a coastal town, even though lime has to be fired at a much higher temperature and is therefore more expensive to use for wall coverings than gypsum mortar.

Visually, the Naboodah Mosque was dominant in the Sharjah townscape for the fifty years after its construction, but to what extent did the physical form of the building influence the surrounding network of alleyways? From Fig. 4.2, the prominent location of the mosque can immediately be recognised, with its distinctive alignment towards Makkah. This is repeated in all other mosques, but the alignment of streets does little to complement this orientation, more often being diametrically opposed to it. What appears to be more influential is the linear form of the creek that runs from North-East to South-West through Fig. 4.2. The main suq alley runs parallel to the shore, as do several of the internal alleys of this area. Although there are several variations and distortions to the pattern, many other alleys cross in a North-West to South-Easterly direction, terminating at the main suq alley. The Naboodah Mosque then, is not a major influence on the physical form of the city. Geographical constraints discussed earlier being more significant.

The general aim of this chapter was to assess various factors that should be considered if conservation proposals were to be discussed or implemented by planning authorities. It is suggested the argument weights heavily in favour of the preservation of the Naboodah Mosque, as summarized by

the following:

- a) The mosque is of unique architectural form and structure in the city; influenced by the limitations of the environment and the skills of the craftsmen during its original construction and later rebuilding. 'The old mosques have a nobility which derives from simple forms, sometimes embellished by limited areas of decoration.' (15). Its design and form reflect Persian influence, but blended with indigenous character, provide a combination unique to this coastline. Few examples of mosques of this type are found in the U.A.E.
- b) Culturally, it is of major importance to the city, being a former meeting place for the community and illustrating the major influence that merchant families had upon the physical form of the town.
- c) The mosque, due to its reconstruction in 1970, is comparatively well preserved and would need only minor improvements to restore it to its former grandeur. The weakness of the minaret may, like the rest of the mosque, be only superficial flaking due to saline erosion from the creek and could be arrested with the introduction of a suitable damp-course.
- d) It was and remains, a beacon, and its disappearance would undoubtedly lessen the visual impact of the water-front. A replacement with another mosque of foreign design would do little to enhance the suq area. Indeed it would detract severely from it.

- e) Lastly, and perhaps most importantly, it is a holy place, a place of worship and therefore worthy of respect and care. A symbol that signifies the Islamic ethos of the town and one that, perhaps romantically, should be seen as the site where the ancestors of today's local population performed prayers and as such is worthy of deference.

4.1iii Neighbourhood Mosques

Neighbourhood mosques were built specifically for the people living in the immediate vicinity to perform the ritual of prayer on a daily basis. Thus, worshippers in the neighbourhood mosque were associated with a particular area or quarter of the town. It is likely that, because the sphere of influence was spatially less than the Jami mosques, the congregation would know each other well and were probably linked by family or occupational ties. In any event, the neighbourhood mosque had to be of sufficient physical dimensions to comfortably accommodate the male population of the surrounding area for daily prayers, and is therefore a useful indicator of the population of that area.

Whereas the Jami mosque has a much wider influence and both secular and religious functions, the neighbourhood mosque is more usually devoted to the sole purpose of prayer, although it is not unknown for local meetings to be held periodically in them. These smaller mosques performed an important function in uniting the inhabitants of an area in a specific act of worship and were an integral part of the hierarchical structure of society. As Ansari and Shaheer (1982) remark:

"Well-knit cohesive neighbourhood communities... a hierarchic distribution of mosques performing the role of integration, and integration of man with his God and of the whole community within itself are thus some of the elements of an ideal Muslim city." (16)

Lorimer (1908) (17), noted the existence of nineteen neighbourhood mosques in Sharjah in the early twentieth century, scattered throughout the townscape. Many of these

mosques will have since either fallen into disrepair beyond redemption or have been demolished as part of the global development plan for the city. It is a fact that today very few neighbourhood mosques of the old urban core could claim to date from the time of Lorimer, although there are notable examples from subsequent decades of this century. It must be stated that dates are difficult to verify as no written records were made of dates of construction and local inhabitants questioned possessed only vague recollections of such details.

To illustrate the variety, methods and materials of construction, integration with the community and cultural value to the local heritage, here are briefly presented several examples of neighbourhood mosques, not only from Marija and Shuwaiheein but also from areas hitherto only briefly mentioned.

It is hoped that by illuminating the cultural and architectural significance of these mosques that they too may be positively considered for preservation along with the Naboodah Mosque.

4.1.iv. The 'Al-Zarouni' or 'Al-Zrana' Mosque

This is a mosque of compact, simple, even 'cosy' appeal and one that remains in regular use today. Its alignment mimics that of the Naboodah Mosque, the mihrab facing West South-West towards Makkah. The date of the structure could only be estimated with uncertainty. It has the general appearance of being much older than it probably is (that is, if one considers 50 to 60 years as 'old', as one must in this part of the Gulf), as Fig. 4.6 suggests.

Its plan is basically square, with the tall mihrab on the western wall. This is reminiscent of the same feature on the Naboodah Mosque and was erected in this manner for the same reason: so that prayers could be spoken facing the internal niche in summer in the upper storey of the mosque and in winter in the lower storey. This latter storey is approximately 11 m square and is totally enclosed by walls over 0.3 m thick. It is estimated that this lower storey could accommodate up to 150 males comfortably and could theoretically serve a community of approximately 500 people.

The west wall contains five rectangular unglazed 'windows' four to the North and one to the South of the mihrab. These windows are closed with wooden shutters. Entry to the lower storey is via doorways on the North East and South East corners. It is worth noting the presence of several air-conditioners placed in the wall of the lower storey (see Fig. 4.6). This suggests a lack of ventilation in the lower, winter prayer room and is indicative of the poor temperature regulation provided by cement-based materials in this climate: cement tending to retain and internally radiate heat to a far higher degree than the previously used, more porous coral stone and gypsum.

The open upper storey is located over the South West corner of the mosque and is shaded by a cement roof over original wooden poles, the wide expanse of roof provided by placing two sets of poles end-to-end, supported by a central series of rectangular pillars (see Fig. 4.7). The unscreened windows are 2 m high. All have a characteristic pointed arch but do not conform to any standard width. There are three

sets of horizontal poles across each window (for safety reasons?) and the upper storey is approached by staircase from the South East corner.

The mihrab is noteworthy, (see Fig. 4.8). It is a tall structure 4 m high with sides gradually tapering to an apex that is graded into four steps of descending size with a flat summit.

The continued use of this mosque has allowed constant maintenance to be performed and due to this, the mosque displays few signs of serious saline erosion common to many of the older properties in Sharjah. It is not totally devoid of it, as Fig. 4.7 indicates, where flaking of the exterior plaster is occurring to a height of 1 m. It is the major problem that prevents wholly successful restoration of older properties and one that needs intensive, further research to attain a fully satisfactory conclusion.

Having recognised this, the saline erosion on the Zarouni Mosque is minimal and with vigilance, major deterioration of the structure should be avoided.

The mosque has no minaret, prayers being called through loudspeakers mounted on the corners of the flat roof. The lack of minaret, flat, domeless roof and dearth of decoration would clearly reflect Wahhabi influence if it had been built a century earlier, but perhaps these features are evidence of the continued influence of this puritanical sect, for the mosque is unique in its stark, yet comforting simplicity.

Its preservation would be relatively inexpensive as deterioration of the external walls remains superficial and could be held in check through regular supervision. The

mosque is an excellent example of the development of architectural forms at micro-level in the mid part of this century and exemplifies structures constructed at the nucleus of quarters or neighbourhoods in the pre-oil era.

4.1.v. Al-Khan Mosque

Al-Khan village is now a rather dilapidated, ramshackle 'suburb' of Sharjah city, located at the South-West corner of the Khan-Layyah Peninsula (see Fig. 2.3). It is populated by poor, low socio-economic status groups of immigrant, manual workers from the Indian sub-continent. They occupy former pearl-merchants' houses constructed from coral-block and gypsum mortar in the early twentieth century. These have gradually deteriorated through lack of funds and neglect into little more than slums. In the midst of this impoverishment is found a fine example of a neighbourhood mosque erected at approximately the same time as the original Naboodah Mosque in Marija.

Fig. 4.9 shows its location by the shore of Khan Lagoon, and its position with respect to the Jami mosque of Khan village and the only other neighbourhood mosque of the settlement. Fig. 4.10 illustrates its proximity to the shore where, in times past, fishing boats would be moored, sheltered in the lagoon. It is likely that several fishermen's barasti huts would have been erected around the mosque which have since disappeared, for the mosque would have been used by fishermen and their families.

Architecturally, it is the simplest mosque studied to date, but displays some interesting features. The mosque is, like the Zarouni Mosque, a basic 11 m square, between 3 - 4 m high (depending on ground level which slopes significantly to the South), with the mihrab facing a westerly direction.

Its simple form is appealing and although exterior surfaces are substantially eroded by seepage of sea water (and therefore saline deposits,) it is worthy of consideration by merit of its antiquity; being one of the few mosques surviving with little alteration from the time of Lorimer, (1908). Even if the best possible solution would be to dismantle and reconstruct the mosque in the proposed conservation zones of Marija and Shuwaiheein, the effort would surely be worthwhile as an original neighbourhood mosque of the early twentieth century would then be preserved.

Its disuse permits an interior assessment of such a mosque to be made without hindrance or supposition, giving an accurate and enlightening insight into the methods, skills and technology available at the time of construction.

The interior of the mosque is shown in Fig. 4.11.

Deep erosion of gypsum between coral blocks is clearly evident in Fig. 4.10 where salts have penetrated to a depth of up to 10 cm at a height of 1.5 m. The base of the mihrab is severely eroded, with coral fallen from the structure due to the disintegration of the adhesive mortar. It does not possess a minaret.

Why then, should an abandoned, remote, perhaps insignificant mosque of deteriorating structure be worthy of conservation? Indeed, how would it be possible to improve the building when it is so severely eroded? To answer the first of these fundamental questions, the following points must be considered.

In many Middle-Eastern cities, the important buildings of imposing, grand design have received funding for their restoration. Although such actions are to be welcomed, it has been observed by Cantacuzino (1982) that:

"the more important mosques, madrasas and town gates are subjected to that familiar and deplorable process of clearance, leaving the monument free standing and visible from all its sides the way it was never meant to be." (18)

In Abu Dhabi the only building of any historical significance remaining is the Old Fort, now housing the U.A.E. National Archive. A commendable piece of restoration, yet surrounded by broad, tree-lined avenues and tower blocks; an incongruous island of culture in an otherwise aggressive purlieus of steel, glass and concrete.

This sterilisation of monuments should not be allowed to occur in Sharjah. By preserving buildings such as the Al-Khan Mosque either in situ or, as is suggested in this case, a complete rebuilding and integration into a designated conservation zone among other examples of vernacular architecture from the same era, one is attempting to recreate the environment of that era with buildings that can be used for their original purpose (such as the mosque)

or, with little imagination, adapted for more modern uses. Per square metre, it must be more economic and more psychologically satisfying to restore a neighbourhood mosque, to form a new nucleus to a conservation zone, than to execute a similar project concentrating solely on one, impressive structure that would be totally unrelated to the modern built environment emerging around it.

There are several projects in the U.A.E. intended to preserve 'important' buildings as monuments (e.g. the forts at Ras-al-Khaimah, Ajman, Dubai and Hatta to be used as museums) but none to preserve the vernacular architecture; that of the local people and their resources at a specific point in history. By preserving structures progressively in a designated conservation zone, restoration is accomplished tastefully, with respect for the original builders, architects and buildings themselves.

The Khan Mosque is one of the few remaining examples of a building of its type and age surviving in Sharjah and with careful co-ordinated dismantling, could be rebuilt successfully.

The question of how this is to be achieved needs further research. There remain problems of recreating an exact match of the gypsum-based mortar and limewashes that were originally applied. This has been attempted in preliminary investigations at the Naboodah House, but as yet a perfect match has not been achieved. It will be only a matter of time and with the introduction of thorough chemical and structural analysis a solution should be found quickly.

A further problem is the actual method of construction. The technique of coral-block building has not been used in Sharjah since 1955 and would require the patient acquisition by builders of new skills by experiment. This should not be impossible to achieve, especially if the advice of older citizens who may remember techniques is sought. Building in such a manner is entirely conceivable, as has been proved by the successful restoration of the Jahili Fort in Al-Ain (using mud-brick), and the Sheikh Saeed House in Shindagah, Dubai, using the same coral and gypsum as found in the Khan Mosque. The suggested relocation of the mosque can be seen in Fig. 6.14.

4.1vi The Al-Mananah Mosque

This mosque is named after the Al-Manaei family and found at the heart of the old quarter of Marija, adjacent to the Mukhtar House (see Fig. 4.12). It is similar in ground area to both the Zarouni and Khan Mosques, being approximately 11 m square. It consists of one storey and is 5 m high. To the rear is a small courtyard surrounded by a high wall and pierced by a carved doorway through which the mosque is entered. Beside the doorway is a squat, cylindrical minaret of 1.5 m diameter of a type not encountered elsewhere in the city (see Fig. 4.13). The minaret is no longer used for the call to prayer, the ubiquitous loudspeakers mounted on the roof transmit the taped five-times daily call.

The mosque was originally limewashed, although as at Khan, much has been eroded. It is constructed of coral-block and gypsum mortar, easily identified through the disintegrating layers of plaster (see Fig. 4.12). These superficial layers are in an advanced state of deterioration but the coral stone core of the wall is basically sound, although rising damp renders the mortar extremely friable during summer dehydration.

The unglazed, segmented arch windows are shuttered and barred as would have been the case at Khan (indeed this example could serve as a model for the replacement of those at the latter) and a similarity to the Zarouni Mosque can be seen in the stepped summit of the mihrab.

Its advantages as a potential candidate for conservation are that in situ, it is surrounded by residential properties of a similar age and character and would not need complete dismantling to achieve effective preservation. A thorough overhaul of woodwork, repointing, replastering and lime-washing would be needed plus a suitable, effective damp course. It is also still used on a regular basis for daily prayers and has received limited maintenance until the present day.

4.1vii The Layyah Mosque (See Fig. 4.14)

Layyah no longer exists as a residential area of Sharjah. Its location was on the northern bank of the creek opposite Marija at the point where the protective sand spit hinged on to the mainland peninsula. The entire area has been demolished, levelled and rebuilt as part of the Port Khaled deep-water port facility; the mosque is the only building to survive the demolition.

It is testimony, however, to the ambiguity contained in Halcrow's Master Plan (1969) where, although such buildings are recommended for preservation, it becomes isolated, remote and ill-maintained, through the redevelopment of the surrounding area. Eventually it may deteriorate to the point where demolition will ensue for safety reasons.

Fig. 2.4d highlights the above perfectly. Before the latter stage is reached, an example of religious architecture as unique as the Layyah Mosque would greatly benefit from rebuilding and relocation within a designated conservation zone, where its qualities can be appreciated to the full and it may once more function as it was intended.

4.1viii Summary

Although by no means an exhaustive list the above examples clearly illustrate the relative wealth and diversity of neighbourhood mosques remaining in the older quarters of Sharjah city. The selection attempts to justify possible preservation on either religious, cultural, historical or architectural merit rather than the unrealistic, broad-brush postulation that all 'old' structures must be preserved simply because of their chronological superiority. The neighbourhood mosques

did form the focus of the local community and as such, reflects the relative wealth, skill and attitudes of that community.

To revive these mosques it is necessary to restore them to their former pre-eminence in the local community; to re-introduce them as religious centres and meeting places by integration into a renovated cluster of contemporary properties, where they are accessible to new residents who may be attracted to settle in these revitalised zones. It is precisely these forms of small-scale, local architecture that have been destroyed in Sharjah, but the city could lead the Gulf in conservation and given the support and acclaim it deserves, for it has the material in relative abundance. This is not simply a romantic vision but one that native Sharjans should actively participate in creating; it is a debt that should be paid for the gross mistakes of the 1970's when vast numbers of older, quality buildings were bulldozed.

They may even influence the design of future mosques and limitations upon such designs could be imposed so they too contain forms indigenous to the region. As has been noted elsewhere:

"The contrast of solid and void is not only appropriate to the climate but would lend itself admirably to modern architectural expression." (19)

It is only within the vernacular syntax of the historic built environment that these buildings will be successful as spiritual and religious centres. They can only thrive as working units of a community if they are rejuvenated within a human-scale context, as part of an evolved organic system, rather than one designed for the convenience of the motor vehicle. These systems could be reintroduced into specified zones of Sharjah city using past building techniques but

with necessary modifications for a modern society's mode of living: people would not perform prayers in an uncomfortable climate if they have the means to do otherwise. These modifications and examples of the vernacular syntax will be discussed in subsequent chapters. A moot point before this departure is made; the destruction of historically, culturally or architecturally significant buildings is not confined to the economic boom period just after the discovery of oil in the 1970's, but continues unchecked today. A prime example is the case of the Airport Mosque (Masjid Al-Matar) erected near the terminal building of the old airport on King Faisal Road. The mosque (see Fig. 4.15) was completed in the late 1970's and although radically different from any discussed to date is arguably attractive with its proliferation of Indo-Persian and Turkish filigree work, elegant domes and richly decorated minaret. Totally incongruous to the Gulf region and undeniably garish when compared to local examples, it was located in an area of modern Sharjah far removed from the old quarters and possessed a certain audacious charm. The city was obviously proud of its creation as it featured prominently on postcards of the city and was constantly referred to in tourist guides. Yet during the mid-1980's the mosque was demolished and another, larger mosque was constructed in its place (see Fig.4.16). It is lamentable that this distinctive, if controversial, structure should receive such an undignified conclusion after such a short life and incomprehensible that a new mosque should have to be built at this exact location, when plentiful space was available for several square kilometres around the old airport. It is a perfect example of

one of Sharjah's greatest dilemmas and one that will be expanded upon at length: the ambivalent attitude of its decision-makers towards the quality of their built environment.

4.2 Other Religious Buildings

The mosque, although pre-eminent in Islamic religious buildings, is not an isolated feature in Middle-Eastern cities. Most settlements would have associated institutional buildings erected near the mosque forming a distinctive cell, with the common purpose of performing worship according to respected customs and traditions and enlightening the population with the teaching, interpretation and reading of the Holy Qu'ran.

4.2i Hammam

To perform prayers successfully, it is necessary for the worshipper to be washed before entry to the mosque. To facilitate this act of ritual, buildings are often erected near to the mosque where water is available for bathing. These are known as 'hammam'. In many cities these buildings were elaborately decorated and often domed, typical of which (although of greater antiquity than any of Sharjah's buildings) is the 'Hammam Al-Bzouria' in Damascus (see Fig. 4.17). The complicated structure and use of rooms indicates an elaborate ritual associated with bathing. This was indeed the case in many Middle-Eastern cities, but in smaller, more isolated settlements such as Sharjah, the ritual was reduced to a more basic level.

There were no hammams constructed in Sharjah of the type illustrated from Damascus. Indeed, these structures appear to be a rather insignificant feature of the Sharjah urban landscape. In most older mosques, the hammam consists of a tap or stand-pipe above a shallow stone basin allowing drainage of the water to the exterior.

The hammam area may be separated from the rest of the mosque by a screen or wall.

It may be postulated that the number of hammams and indirectly mosques, could be limited by the availability of fresh water sources. Where a well could be dug would provide the basis for the establishment of hammam and therefore, mosque,

but not so in Sharjah. The scarcity of fresh water would not allow all those that worshipped to bathe completely as ritual dictated, so two modifications were made. Firstly, many people washed only hands, lower arms and feet and secondly, it is known that many people would bathe openly in the salt water of the creek before entry to the mosque. As most mosques were only a short distance from the creek (most of them less than 100 m), it was considered an acceptable custom to bathe in this way, as the body would remain clean on entry to the mosque. Hammams were thus, an architecturally insignificant feature of the religious complex because of the modifications to ritual practised in Sharjah. They exist as entities only in the crudest of forms, but would necessarily be preserved as part of the mosque complex in any conservation plan.

4.2ii Madrasa

The madrasas, or Islamic schools, were the principal institution for religious teaching and learning in the Islamic city. It is known that during the twentieth century, up to the 1970's, there were two Islamic schools in Sharjah, the most important of which was the 'Al-Taimiah Al-Mahmoudiah', established in 1905 opposite the Naboodah House in Marija. The site of this school (see Fig. 4.2) is now obscured by makeshift, corrugated iron shacks used as storage facilities for traders in the suq, and entry to the area is not possible. It may be that the original core of the building exists behind the facade of shops and stores around it, but this is merely supposition. Its location is however, significant for it forms one part of a sequence of features that could form the basis of a conservation zone in Marija. The buildings presently standing on the site of the Islamic school could be modified into teaching units once more, or demolished and rebuilt as close to the original plan as possible.

The second feature requires little physical change or financial input and involves the use of an area of vacant land between Al-Taimiah Al-Mahmoudiah and the Naboodah House. The space is known as 'Al-Arsah', and is the site of the former camel market that was once held here regularly. The livestock market has since moved to a creekside location in Jubail.

The third feature is the Naboodah House itself, which will be discussed at length in a later chapter; but here is clear indication of the type of conservation scheme that could be implemented: the renovation of the Naboodah House as a museum, the reconstruction and re-use of buildings forming the Islamic school and the relocation of a camel-market at Al-Arsah, as an addition to the one at Jubail.

The scarcity of schemes to preserve such Islamic schools in the Emirates gives just cause for concern, and the fact that such institutions were a fundamental element of the urban fabric should be a strong enough argument to warrant preservation or rebuilding.

Dubai has taken the lead in this direction with its plans to restore and re-use its once important school 'Al-Madrassa Al-Ahmadiyah' in the Al-Ras area of the city. This school was established in 1910 and built by Sheikh Ahmad bin Dalmouk, but the initiative for a seat of formal learning came from the merchant community of Dubai, who felt a need for learning on a broader base than the pure study of the Holy Qur'an could provide (20).

Restoration of the building is being undertaken by Dubai Municipality with the aim

"to preserve the character of the old school" by using it as:

"a library for old manuscripts, an art centre, a documentation centre or for some other historical or cultural purpose." (21)

On first-hand observation of the building, it is difficult not to be impressed by the grandeur of the interior with its elegantly carved archways and plaster screens, reflecting the Persian ancestry of the merchant community (see Fig. 4.18).

If such a scheme can be attempted by Dubai Municipality, then similar schemes could surely be approved by Sharjah Municipality, perhaps in conjunction with local, influential families and the business community, to preserve and enhance their built environment and provide tangible, living examples of their heritage and culture.

Having examined each of the three basic religious elements of Islamic cities in some detail, various conclusions can be drawn. Sharjah possesses a relative wealth of older, religious buildings that display a diversity of architectural and cultural influences from various decades of the twentieth century. Many of them remain within their original vernacular matrix of buildings and are still used by local inhabitants. In general, they are of a fairly sound structure and could be improved to a reasonable standard with comparatively small financial outlay. There is scope for the development of conservation zones based upon cores of religious buildings to recreate quarters similar to their original form, but accommodating the needs of a modern lifestyle. The resurgence of a fundamental religious ethos in the emirate (via the influence of Saudi Arabia), may induce a more serious approach to the preservation of religious structures,

encouraging the establishment of centres of Islamic teaching in these old buildings. Frank, open debate with decision-makers is needed to give impetus to such schemes, thus preserving the religious heritage of the town before it is lost forever.

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FIG. 4.1: KING FAISAL MOSQUE (1990)



This mosque contains elements for the performance of Friday prayers, for ritual bathing/cleansing and for the teaching of Islam. It was completed in the mid 1980's at a site close to the old airport in Qasimia. It was sponsored by the Saudi royal family.

Fig. 4.2: Location of Major Built Forms, Salahadin Area, Sharjah, 1987)

Scale  50m

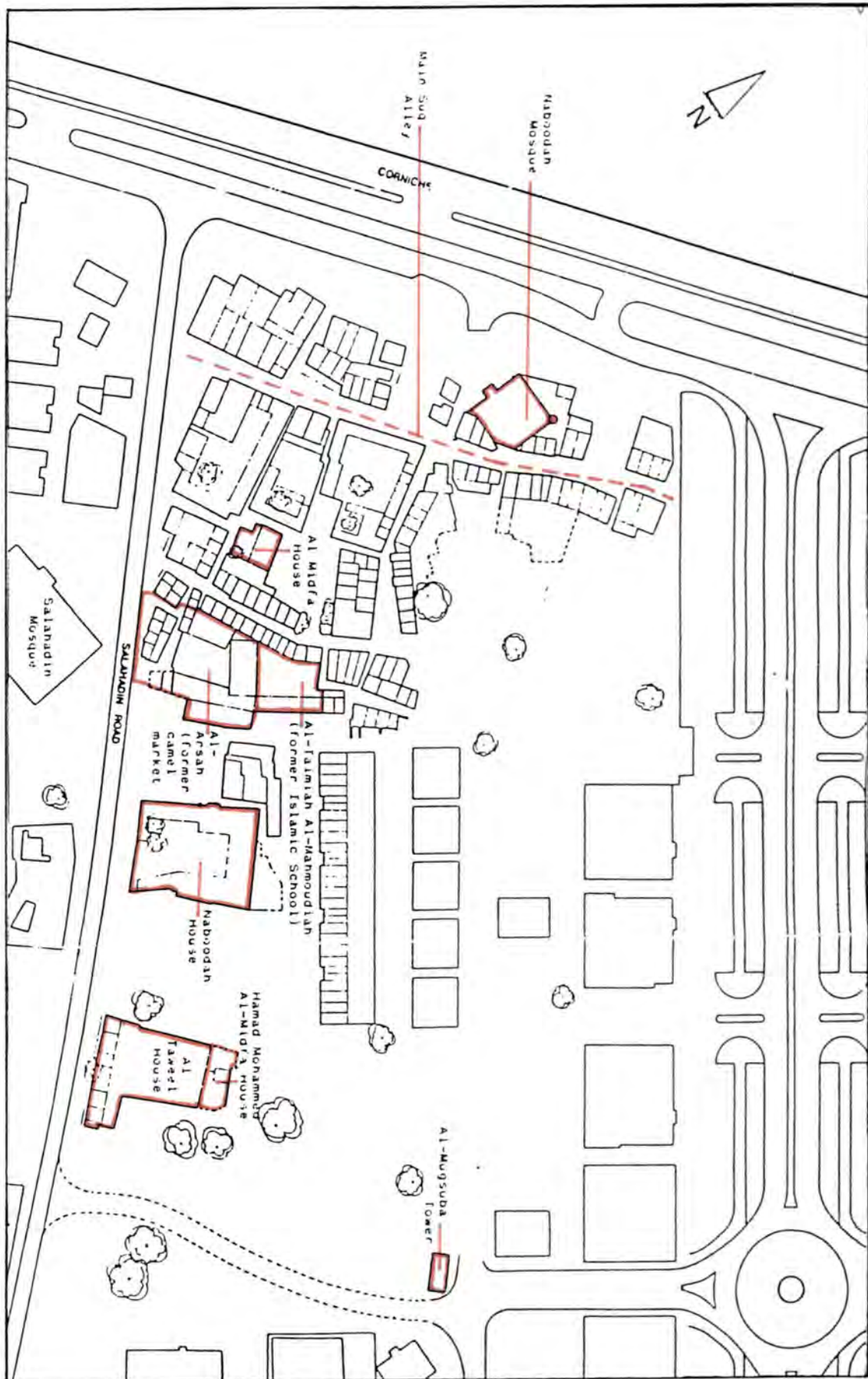


FIG. 4.3 THE NABOODAH MOSQUE FROM THE SOUTH (1987)



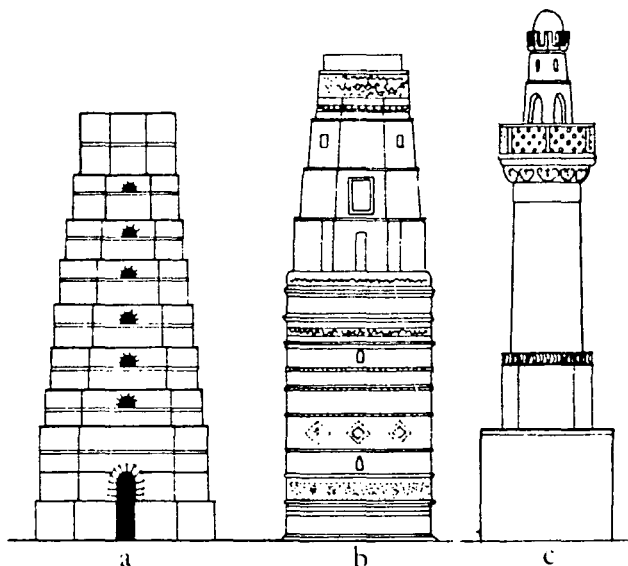
On this photograph of the Naboodah Mosque, the mihrab wall and kubla can clearly be seen, facing West South-West. The mihrab is a tall structure extending over both storeys of the mosque. On the upper storey, used for summer prayers, masherabiyah-type windows are evident with moulded, shelly-cement panels imported from Iran, providing necessary screening. These would have replaced carved gypsum-mortar screens during the period of rebuilding. The lower storey unglazed windows are barred and shuttered.

FIG. 4.4: THE NABOODAH MOSQUE INTERIOR (After Hafeez, 1970)



The interior of the upper storey is revealed in this photograph. It is enclosed on three sides by walls containing screens or full-length barred windows, allowing ventilation and lighting adjustment as conditions dictated. The wooden columns supporting the roof are an original feature, incorporated into the reconstruction in the 1970's. They are of mostly Ionic style with some Corinthian and are imported, ready-carved from whole teak trunks from the Malabar Coast of India.

FIG. 4.5 (After Lewcock) 1978
THE EVOLUTION OF THE MINARET



The evolution of the minaret: (a) the standard Roman lighthouse (in this case a reconstruction of the pharos of Dover); (b) west minaret of the mosque of al-Hàkim, Cairo; (c) a characteristic later type, incorporating square base, octagonal centre and cylindrical top.

FIG. 4.6: THE ZAROUNI MOSQUE FROM THE SOUTH (1987)



The photograph shows the southern face of the mosque with its four unglazed windows, pointed arches and entrances to both upper and lower storeys. The overall impression is of a mosque of relative antiquity, with its simple, bold architectural forms, but little evidence was seen of the original building materials of coral and gypsum. Like the Naboodah Mosque, large parts of this mosque will have been rebuilt in cement, due to the deterioration of the gypsum mortar, but has retained its original design.

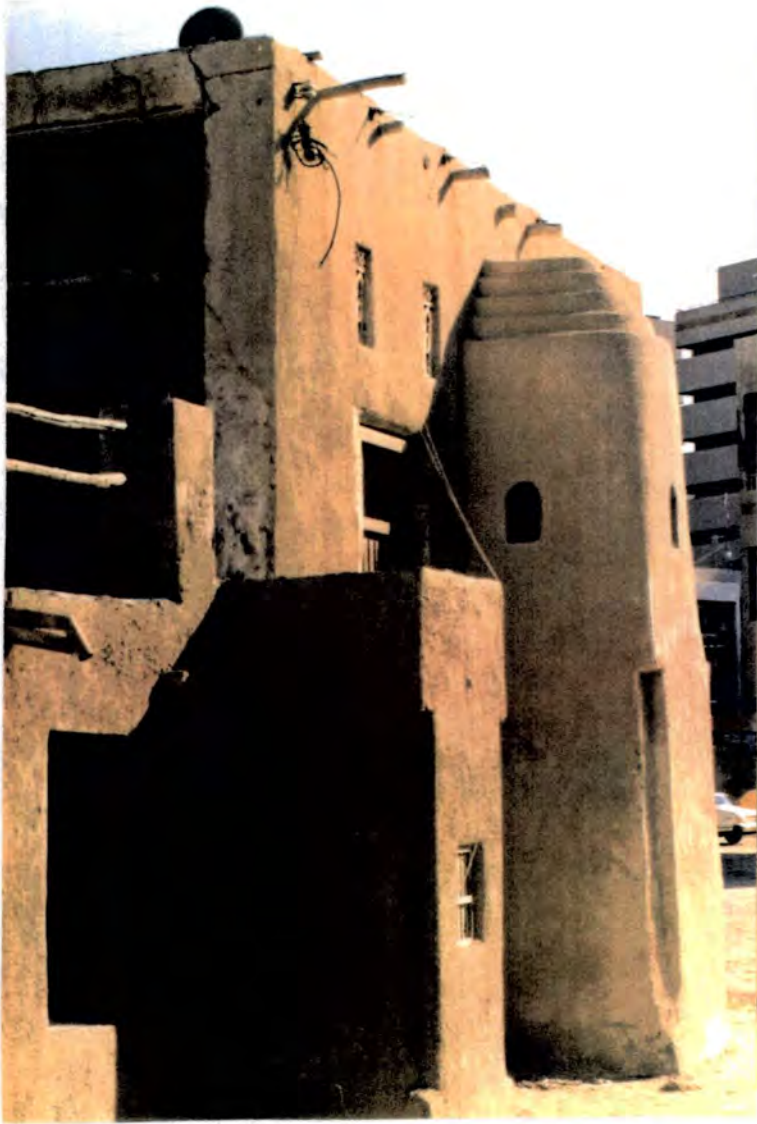
FIG. 4.7: THE ZAROUNI MOSQUE FROM THE NORTH (1987)



The roof is the feature to be noted in this photograph. To create a wider expanse of roof, shading a larger part of the upper storey, rectangular columns have been erected as central supports. The original wooden 'chandal' beams were then placed either side of these supports, thus creating a wider, more effective shade.

Note also the presence of basal, superficial, saline erosion on the North wall to a height of 1 m.

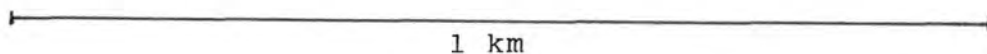
FIG. 4.8: THE MIHRAB, ZAROUNI MOSQUE (1987)



The most noteworthy feature of the mosque is the mihrab, shown here. As in the Naboodah Mosque, it is built over both storeys to allow for worship in summer and winter. The stepped summit is but a short step from a 'semi-dome', an unusual feature on mosques of this area.

FIG. 4.9: AL-KHAN VILLAGE, 1968 (After Halcrow's)

Scale



Al-Khan village occupied the South-West corner of the Khan-Layyah Peninsula. It guarded the entrance to Khan Lagoon which provided safe natural harbour for pearling and fishing fleets. Many of the plots shown here remain today, although in grave condition. The proposed roadways, as marked on the photograph, have not yet been constructed, as Khan has been sadly neglected by municipal authorities. The locations of Khan's three mosques are highlighted, with the Khan Mosque beside the creek to the West.

FIG. 4.10: AL-KHAN MOSQUE (1987)

The South West face of the mosque is shown, with the mihrab oriented towards Makkah. Its proximity to the shore can clearly be seen. This is the main reason why erosion has occurred at base levels in the mosque. Salt water from the creek has seeped underground to be drawn by capillary action into the porous gypsum mortar and coral. These materials are exposed by erosion as later layers of plaster have fallen off. The 'herringbone' arrangement of coral blocks is a feature peculiar to Khan. Its function is not known, and it was never witnessed elsewhere.

FIG. 4.11: AL-KHAN MOSQUE: INTERIOR (1987)



This photograph shows a flat, timber roof of horizontal planks 2 m high and in sound state of repair (this was probably woven palm-frond matting and gypsum mortar originally). These are supported by two sets of narrow rafters joining a large, axial stone girder, in turn supported by two octagonal pillars with capitals. The girder displays widespread cracking and disintegration. At weak points, makeshift timber supports have been inserted to strengthen the structure.

FIG. 4.12: THE AL-MANANAH MOSQUE (1987)



This photograph shows the western wall of the mosque with barred and shuttered windows and stepped mihrab. The Mukhtar House can just be seen to the right. Saline erosion is prevalent throughout the mosque, even to roof level, but upon inspection the walls appeared to be fairly sound under the external, cement skin.

FIG. 4.13: THE AL-MANANAH MOSQUE MINARET (1987)



This unique, squat minaret could also have doubled as a watch-tower. It was once fully limewashed, as layers near the summit indicate. Erosion from ground level has eradicated most of the limewash, along with gypsum mortar. The wooden door is original and carved in the workshops of the suq.

FIG. 4.14: THE LAYYAH MOSQUE, 1970 (After Hafeez)



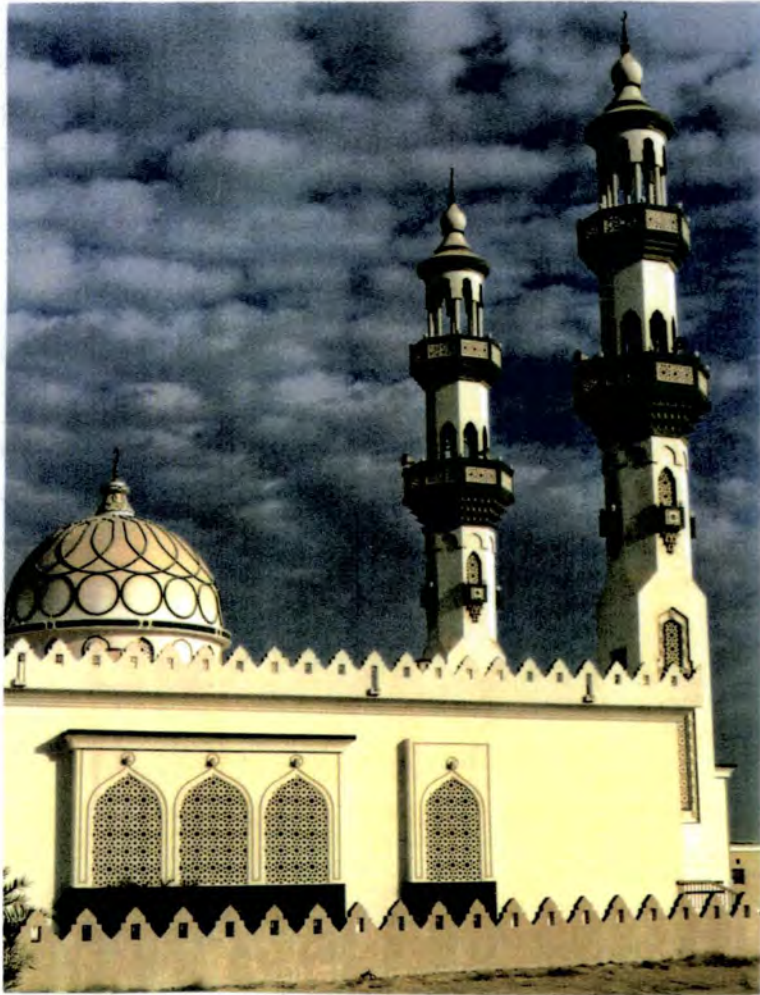
This mosque is now surrounded by buildings servicing the main deep water port of Sharjah, Mina Khaled, and as such, was unable to be photographed. However, the mosque remains little changed today and is one of the oldest religious structures in the city. Its form is essentially Arab and native to the U.A.E. area, as opposed to other mosques that may contain Persian, Indian or even Turkish elements. Its appealing simplicity reflects Wahhabi influence, with a lack of detailed ornamentation and a solid, bold form.

FIG. 4.15: THE OLD AIRPORT MOSQUE (1983)



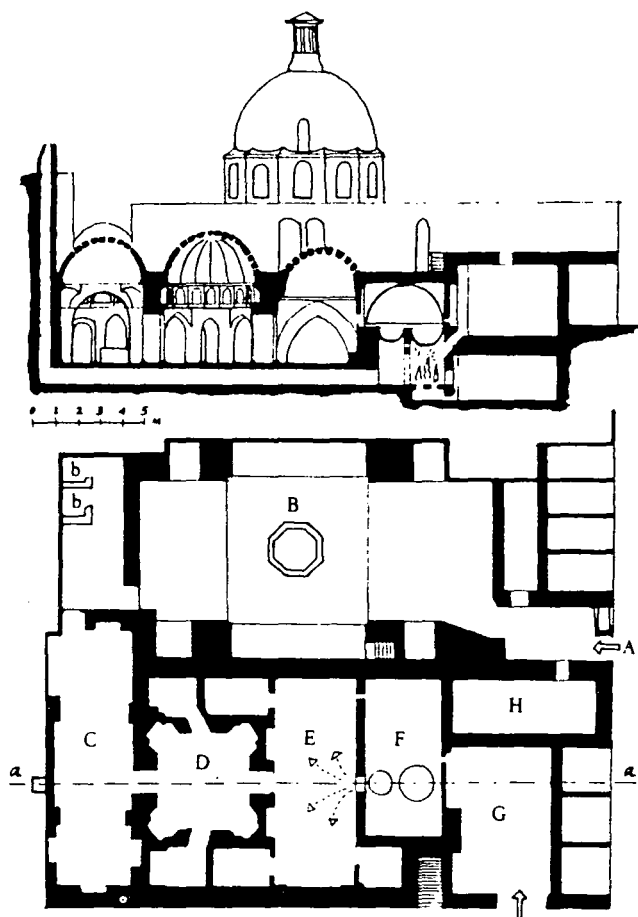
This mosque, located near to the old airport in Qasimia, no longer exists. It has been demolished and replaced by a larger building on the same site, shown on Fig. 4.16

FIG. 4.16: THE NEW AIRPORT MOSQUE



Certainly larger than the Old Airport Mosque, but not remarkably so. Attractive, yet arguably not as attractive as its predecessor; the reason for this replacement remains a mystery!

FIG. 4.17: THE HAMMAM AL-BZOURIA, DAMASCUS (After Sims)



The Hammam al-Bzouria, Damascus. A, entrance with shops on each side; B, disrobing room, with fountain in the middle; b,b, lavatories; C, cold room; D, warm room; E, hot room; F, steam room; G, fuel; H, water-tank.

The section is taken on the line a-a, and behind it can be seen the great dome of the disrobing room.

FIG. 4.18:AL-MADRASAH AL-AHMADIAH, DUBAI



This view of the internal courtyard of the school gives some idea of the splendour of the whole building. Its carved, Persian arches are a particularly attractive feature. Worthy of attention is the prevalence of saline erosion, seen here on the right-hand column to a height of almost 2 m. A similar process has occurred on many Sharjah buildings, yet the Dubai authorities are willing to face and tackle the problem, thus restoring the building to its former glory. This has already been witnessed in the renovation of the Sheikh Saeed House; a commendable example for Sharjah to follow.

CHAPTER 5THE SUQS OF SHARJAH5.1 Introduction

In the Islamic city the suq was the main venue for commercial activities within the town. It was also the location where most social interaction and discourse would occur and was therefore a major component of the economic and social life of the community it served. In Sharjah, as in many Middle-Eastern cities, the main suq of the old town is linear, lying on the southern shore of the creek, following its course for up to 2 km. This configuration is, it is suggested, the result of a combination of factors detailed in Chapter 3. Its length and spatial distribution ensured that the suq was of unquestionable importance to the economic welfare of the city before the discovery of oil, for it ran for almost the whole length of the town, being rarely more than 200 m from any other building (see Fig. 5.1). It was therefore, easily accessible to the population and its commercial activities dominated the economic life of the town throughout the nineteenth century and the early decades of the twentieth century prior to the discovery of oil. The fundamental importance of suqs (or, in Iran, 'bazaars') is well noted by Ansari and Shaheer (1982):

"The bazaar, acting as the artery, not only of economic life, but also the public, social life of the city extends into each corner of the city, filling the urban scene with life and vitality". (1)

and they go on to state its importance as an integrating medium between formal and informal components of the city.

It is the 'life and vitality' of the suq that should be preserved in any urban conservation scheme as well as the built forms, and so attempts should be made to ensure the old suqs continue as viable, economic locations even though they are in competition with more modern, Western style shopping and trading facilities that have become widespread since 1970.

The physical dimensions of the suqs must render them as the main component of any conservation scheme and any designated zones should be formed in relation to them.

Most buildings suggested for conservation are in close proximity to the suqs, and performed functions that in the past would have been inextricably linked with them; such as forms of storage facilities, workshops or residences.

The aims of the chapter are thus, as follows:

- to outline the main elements of traditional Middle Eastern suqs and to assess how these elements are evident in the suqs of Sharjah:
- to attempt a detailed analysis of the suqs as they appear today and to relate the remaining forms to historical references, elucidating their cultural and historical value to the city and region;
- to construct an urban conservation scheme based upon geographical zones devised from the historical, cultural and architectural importance of individual components of the suq:

- to suggest alternative uses for buildings to ensure their survival and integration into the urban fabric of the medina, reviving ancient crafts and building techniques of the area, and finally:
- to show how the concept of the suq will be maintained for the future in the development of modern suqs and the revival of the old.

5.2 Elements of Middle-Eastern Suqs

Ismail (1972) summarizes the various forms of urban markets found in Middle-Eastern cities by recognizing three main categories:

- i) the spontaneously developed suq,
- ii) the architecturally designed 'qaysariyyah' and 'khan' and
- iii) the open market place or 'maydan' (2)

Sims (1978) suggests a further three-fold structural composition of the typical Islamic market, this being:

- i) a network of covered streets,
- ii) a secured gate and covered edifice in its midst and,
- iii) khans. (3)

These similar classifications are not exhaustive, for there are found other components of suqs not specifically mentioned above, exemplified in some suqs, as additional, complementary services to the chief commercial function. One such common element is the 'maristan' or infirmary (in Persian 'bimaristan': place of a sick person) (4), often located in or near the main suq alley, as it needed to be accessible to the public. The suq alley, being part of the main thoroughfare of the town was the most easily accessible location and therefore, often the site of the town infirmary. Likewise, the main religious components of the 'kulliye' complex were usually situated along the main throughfare. Thus, the Friday Mosque (Masjid-i-Juma) the Islamic school ('madrassa' or 'mutawa') and baths or ablution facilities ('hammam') would form an integral part of the suq area. As these elements have been previously discussed, reference to

them will be incidental and included only for the sake of clarification.

The suq areas of Sharjah will be examined to establish the presence of non-religious elements throughout its urban history. An assessment will be made of their current socio-economic functions, their relevance to the town's urban fabric and their suitability for conservation. However, before such an examination is possible, a definition and explanation of terms needs to be made.

5.3 Middle-Eastern Suqs: A Terminology

The suq, market or bazaar consists of a series of shops and workshops arranged in linear fashion along both sides of main thoroughfares, often radiating from the main religious complex along routes used by merchants and travellers. The thoroughfares themselves may be covered-in to create shade and protection from dust, and could be formally constructed as a series of wood, brick or stone vaults, or of more informal construction, perhaps as simple as a covering of woven palm-fronds spanning the main alley. The shop and workshop units are usually one-roomed premises, with an open, unglazed face presented to the main suq alley. In Sharjah's suqs, these units range from as small as 3 m x 7 m to 10 m x 15 m in floor area (see Fig. 5.2) and rise to a height of up to 7 m. These units may be segregated according to the commodities manufactured and sold. In his study of Lahore, Noe (1980) recognizes that

"the distribution of various bazaars in the city follows consistent patterns." (5)

with less desirable, more noxious activities (such as potters and tanners) located at the city's extremities and activities related to personal hygiene, dress and religious ritual near to the centre (see Appendix 2). He suggests that this

"hierarchical arrangement is an expression of economic and functional efficiency. Thus, bookbinders and cobblers locate together near the leather suppliers, tailors near cloth merchants; and the wholesale grain market near the gates." (6)

Whether this hierarchical arrangement ever existed in Sharjah, or indeed if it remains today, will be examined below.

Sims (1978) refines her definition of the suq further: the suq being:

"the source of shelter, security and water and equally the mercantile focus of so many journeys. Markets were also manufacturing centres for goods of all kinds, especially for small and precious wares." (7)

The extent to which local crafts and manufacturing activities remain within Sharjah's suqs, their changing form and adaptation plus their relevance to a further conservation scheme, will also be assessed.

Sims' (1978) "secured gate and covered edifice" parallels Ismail's (1972) concept of the 'qaysariyyah', which as part of the suq

"took the form of a double row of rooms and workshops opening on a central passage or court. It was regularly roofed and could be locked." (8)

As such, it was often used as a strongroom and sometimes guarded. Within it could be found trades dealing in precious wares such as gold, silver and the finest silks. It was also the 'treasury' of the ruling authority, which on the Southern Gulf coast would have been the sheikh. The qaysariyyah (in Ottoman Turkey known as the 'bedesten'), being a building of primary importance would often be found at the heart of the suq and, depending upon the level of sophistication of the ruler and his government,

"often became the fiscal centre of government, where taxes and duty were collected and funds distributed for the upkeep of municipal institutions." (9)

Both Sims (1978) and Ismail (1972), note the importance of structures known as 'khans' (also known as 'caravanserais', 'funduqs' or 'wekalas', depending on location). These were an integral part of the mercantile community, of more formal construction than the workshops of the suq and whose chief functions were as stores for visiting merchants and as a resting place for the duration of a merchant's visit. Indeed, their importance to the traveller or merchant as places of rest and refuge is summarized neatly by Stacey International in their comments on Jeddah, Saudi Arabia:

"Known locally as khans, Jeddah's caravanserais where visitors sheltered, were celebrated among travellers as sanctuaries and sacred places free from insults and robberies." (10)

Khans were often square or rectangular and constructed around a central courtyard with storage facilities on the lower floor and lodging facilities above, and as such needed some form of defence to deter potential thieves. Therefore, strong gates barred the entrance. Sims (1978) also remarked that:

"the chambers for merchants, where their merchandise could also be deposited were usually on the upper floors, and the ground floor was originally used for stables and shops, together with large scale storage." (11)

The khan was thus a key element in the growth and development of trade between rural and urban areas and of overseas trade, and their occurrence may provide some indication of the economic importance of the town.

Finally, the concept of the open space or 'maydan' is suggested by Ismail (1972) as a form of urban market, but it combined its commercial activities - as the venue for the

open sale of goods either in the open air or in shops surrounding the space - with ceremonial functions, being the

"place for the processions of the ruler, military parades and the scene for public events such as gatherings, executions, and funerals." (12)

The key elements of the suq have been outlined. Each of these elements will now be studied in turn to establish their past or present morphology, spatial distribution and viability for future preservation.

5.4 The Suqs of Sharjah: Historical Evidence

Historical accounts of the suq at Sharjah are scarce and, for the most part, gloss over detail. The two most detailed descriptions are of mixed value. The first of these is a questionable source - William Gifford Palgrave - who allegedly visited the town during his travels in Arabia during the 1860's. Bidwell (1976) (13) highlights some of the marked discrepancies between Palgrave's (1865) and Doughty's (1876-78) later accounts of places visited by both. Bidwell (1976) states that Philby doubted whether Palgrave ever visited the Trucial Coast, but being more positive, although Palgrave's narratives are often verbose (as was the fashion in Victorian Britain), his description of Sharjah is very detailed, with elements of it known to be true. In particular, his references to manufacturing activities such as that of

"light, red cloaks common in Oman" (14)

known to have been manufactured into the twentieth century as confirmed by Lorimer (1908):

"Abas are manufactured of fine sheeps wool" (15)

It is unwise to be totally dismissive of Palgrave, for even if concrete evidence is offered against him, he must have at least been witness to a first-hand descriptive account of the town from someone who knew it well, using this as the basis for his own narrative. Considering this uncertainty, a reasonable picture of the suq area in mid-nineteenth century Sharjah can be obtained from Palgrave's text.

The second source - Lorimer (1908) (16) - is arguably the most reliable account of the Gulf in the early twentieth century and although lacking the detail of Palgrave, provides a rare insight into the town at this time, confirming some of the statements made by Palgrave forty years earlier.

From Palgrave (1865), an image of a thriving merchant and manufacturing centre with an abundance of foodstuffs, manufactured goods and a general air of wealth is portrayed:

"This constant current of trade gives to Sharjah an air of activity and of wealth not to be found in any other Arab port of the Southern side [of the Gulf] and attracts to it strangers of many countries." (17)

It has already been established that Sharjah maintained regional pre-eminence as a trading centre through most of the nineteenth century (see Chapter 1), but this prosperous image - (though plausible it may have been for the merchant families) - must be seen relative to the abject poverty suffered by the majority of the population, remembering that the slave trade was flourishing at this time (see page 60 Chapter 1.1)

"here too is the principal slave market of the inner Persian Gulf." (18)

However, Palgrave's (1865) description of the suq provides the basis for further analysis, illuminating some surprising revelations as well as those that can be substantiated by later evidence. Here, appears the first verification of the segregation of activities:

"Towards the Southerly end of the town is situated the large market place, divided into separate Sooks or quarters, according to the received Eastern custom." (19)

and:

"The Northern quarter of the town owns a large number of weavers establishments, wherein are made the light red cloaks common in Oman, long cotton robes....., carpets too, and curtains for domestic use." (20)

The economic importance of weaving to the town is stressed by Palgrave:

"In lands guiltless of factories and steam engines, this business is a lucrative one, and employs many hands." (21)

Unfortunately, he supplies no further information on the categorization of the 'quarters', whether by religion, trade or ethnic groups but does go on to describe the manufacture of articles in gold and silver, of which he makes great emphasis:

"In Sharjah I saw for the first time good specimens of that peculiarly beautiful gold and silver filigree with which weapons, besides.....belts, cups and pipes are often adorned; it is of a perfection rarely now to be met with in the workmanship of any other land. This branch of handicraft supports numberless families in the larger towns..Goldsmiths and silversmiths ply their patient labour." (23)

This industry was supported by the import of gold from India, accompanied by other luxury items:

"Merchants....make great display of Cachemire shawls, Bengal manufactures, Persian arms, and jewellery of various kinds." (24)

"It is through Sharjah chiefly that the neighbouring lands receive the goods of Persia and India." (25)

Whether these manufacturing activities have continued to the present day and whether the presence of 'quarters' or the segregation of activities in the suq has remained will be assessed in due course. However, one unexpected revelation from Palgrave's (1865) account is the existence of a building known as the 'Keysareeyah': a direct link with both Ismail's (1972) and Sims' (1978) classification of markets in their reference to a 'qaysariyyah'. It is unexpected because only Palgrave (1865) refers to such a building. However, in the context of his rather colourful account it is plausible. The amount of precious goods he refers to would warrant the protection of such a stronghold. He states that:

"Near its [the suq's] centre stands the Keysareeyah, a long and lofty vaulted building, strongly constructed and furnished with iron-bound gates, duly closed at night-fall to guard the riches it contains. In a thick stone tower within the precincts of the Keysareeyah, is kept the government treasure. The shops around are neat and well-built, and the whole has an air of solidity and wealth." (26)

This obviously substantial building must have been a major element of the urban landscape and its parallels with the descriptions by both Ismail (1972) and Sims (1978) are striking. Part of their description has already been quoted (see page) but Ismail (1972) goes on to emphasize the function of the qaysariyyah as the market dealing in textile goods, which could support Palgrave's (1865) allusion to 'cachemire shawls' and 'Bengal manufactures' being imported into the town. Sims, (1978) quoting Ibn Battuta's reference to fourteenth century Constantinople, provides a further

insight into the functions and appearance of a qaysariyyah, once more with remarkable resemblance to Palgrave's (1865) account:

"Ibn Battuta....remarks that each bazaar had gates that were closed at night. This is a feature of a specific Islamic market structure usually called the qaysariyya, an oblong hall, roofed and colonnaded (and always in Ottoman Turkey) domed, with a door at one or both of the short sides that was securely locked at night." (27)

"The Ottoman qaysariyyah (the bedesten), was a similar internal strongroom, always located at the heart of the market area. It housed the trade in valuable objects...precious metals, gems and the richest textiles." (28)

It could be argued that Palgrave (1865) knew of such structures from encounters elsewhere in the Middle East and merely fabricated his description to support his concept of Sharjah as a major trading and manufacturing centre and therefore worthy of the existence of a qaysariyyah. However, the comparison with Ismail (1972) and Sims (1978) is not made exclusively to support Palgrave's account, but to draw comparison with the most modern of Sharjah's suqs - the Suq Al Mujarrah - located by the creek in the old quarter after which it is named. This newest of suqs in the town is located at the junction of Corniche Road and Khalij Road in the Western corner of Mujarrah. Its location in relation to previous built forms (since demolished) is illustrated on Fig. 5.3 .

The suq, as Fig. 5.4 illustrates, cannot be said to reflect any local style of architecture, but whether intentional or not, it does exhibit many of the features of the

qaysariyyah or bedesten, including some mentioned by Palgrave (1865) in his text.

The suq can be locked securely at both ends at night, protecting the wares of traders inside. It is essentially rectangular, roofed and with an internal colonnade on the upper storey. The remaining two sides also possess doors that can be locked securely. It is quite clearly domed, and

"long, lofty, vaulted and strongly constructed." (29)

From first-hand experience, it is known that the few shops open in the suq before its official opening in 1987 stocked high-quality textiles: silks, satins, embroidered and beaded polyester silks imported from India and Japan, and it is likely that jewellers will establish themselves here, echoing Ismail's (1972) observation of the market dealing in textile goods and Palgrave's (1865) 'riches'.

The uncanny similarities of appearance and function with traditional qaysariyyah, give additional credit to the architects of the suq who have, at the very least, tried to design a building within the constraints of Islamic architecture and is a vast improvement on many other modern buildings in the Emirates, including several in Sharjah. The only real, but justifiable, criticism is that some of the most important properties of the pre-oil era were demolished to enable its construction, including the residence of the British Political Agent in Sharjah, as shown in Figs. 5.3 and 5.5. One must be consoled with the knowledge that a building of such magnificence has been erected in its place,

but the loss of the former will always be a matter of regret.

To continue the historical development of the suq, it is necessary to examine the more reliable, if imperfect, account of Lorimer (1908). As was previously illustrated, there are parallels to support Palgrave's (1865) narrative of the area, but one particular example from Lorimer (1908) is important in denoting the existence of quarters within the suq. He states:

"The only divisions of the town are the main town or Sharjah Proper, and the quarters of Layyah. There was formerly another detached quarter called Mbaraz to the North of the town, but it is now incorporated." (30)

This 'northern' quarter, which would equate with either present day Mujarrah or Sharq, was also referred to by Palgrave (1865) as the quarter containing many weavers' establishments: it will be interesting to note the increase (if any) in the number of tailors and weavers opening business in this 'northern quarter' of Sharjah, once the new Al-Mujarrah Suq is fully occupied.

Lorimer (1908) does provide a more accurate estimate of the number of retail outlets, stating:

"Sharjah Proper contains a bazaar of about 200 shops." (31)

and gives some indication of the existence of ethnic merchant groups trading regularly in the town:

"Hindu merchants number 16. There are 35 Khojah traders and about 14 Khojah women, mostly widows, deal in gold, lace etc." (32)

and also a permanently settled immigrant community:

"There is a large negro community, many of whom still speak their original Swahili tongue. About 51 Hindus and 158 Muhammeden Indians, British subjects, are permanently settled here." (33)

Lorimer (1908) gives no further detail of any individual buildings in the suq (including a qaysariyyah), but does mention that

"At Sharjah Town.....there are public arrangements for the watch and ward of shops at night, and a small due is recovered on this account from the occupiers," (34)

confirming the likelihood of theft witnessed by Palgrave (1865).

The two historical perspectives above provide the basis for comparison with the present day. Other authors visited the suqs later in the twentieth century and their works will be commented upon, but as the general historic framework of the suqs has been established, the extant spatial distribution and structure of the old suqs remaining today will now be examined.

5.5 The Surviving Old Suqs of Sharjah

Although extensive demolition and rebuilding programmes have occurred all around the old suq areas of Sharjah, there remain today manufacturers, retail outlets and traders based in and around the old suqs in spite of the temptation to move to more modern premises in the area. On entering parts of the old suq, especially after sunset, the appearance of thriving economic activity and social interaction remains very much apparent. Customers patronize favoured shops, there is friendly rivalry among traders, an atmosphere of excitement and a continuity of the inveterate customs of price-bargaining, measurement of cloth, spices, rose petals and rice and the purchasing of traditional articles superseded in other commercial areas of the town by modern, mechanized and electronic Japanese gadgets. These somehow, do not hold the same allure under the palm-fronds of the main suq alley. That it maintains this 'life and vitality' today is testimony to the tenacity of traders to remain, forcibly by economic reasons or voluntarily for personal reasons, which could be a fulfilment of promises made by son to father, or indeed the simple desire to work in the old suq environment and continue the 'old' way of life.

By their continued existence today, the old suqs prove that there is a demand, even a desire for this vital component of the Sharjah medina to be maintained and must,

by their patronization, reflect the view of a significant proportion of the population.

However, the old suqs have not completely escaped the developer's knife. Until the mid-1970's, Sharjah's suq had stood as one, continuous, meandering alley parallel to the southern shore of the creek from a point near the site of the Political Agent's house in Mugarrah to just past the Naboodah Mosque in Marija (see Fig. 5.6). This represents a distance of almost 1.0 Km, and probably displays a similar spatial distribution to that witnessed at least by Lorimer and perhaps by Palgrave.

Unfortunately, 1977 saw the awarding of contracts by the Government of Sharjah for the development of a dual carriageway linking Arouba Road to the proposed Corniche Road, flanked by a series of identical tower blocks financed by national and international banks that would occupy the lower floors (35). Residential facilities and some government departments would complete the remaining habitable space in an effort to elevate the street - to be named Boorj Avenue - to the status of financial centre of the emirate. Whether the government's aim was economically justified and whether there was sufficient demand for such a centre is not for debate here, but a matter of great concern is the impact the creation of Boorj Avenue had on the old town of Sharjah.

Its obvious intrusion into the organic structure of the old town can be compared to Lawless' (1980) observations on the routing of Abdorazzaq Avenue through the centre of Isfahan, Iran:

"Abdorazzaq Avenue actually breaks through the main route of the bazaar, and is drawing commerce away from it and accelerating the decline of an already poorly serviced urban quarter." (36)

This view is supported by others including Cantacuzino (1982) who states:

"The east-west cut through the Great Bazaar just south of the Friday Mosque was like severing somebody's main artery." (37)

As intrusive and brutal the construction of Abdorazzaq Avenue was, it is suggested the impact of Boorj Avenue was even more catastrophic for the following reasons.

Firstly, as in Isfahan, the main suq was severed into two parts, with the section of the main alley in the quarter of Marija left completely isolated from the remainder in Shuwaiheen. Secondly (again with similarity to Isfahan) the effect of Boorj Avenue was to draw businesses away from the main suq alley, establishing themselves along Arouba Road and the fast-growing suburbs beyond. Arouba Road now possessed a direct link to the creek (via Boorj Avenue) and therefore sea-borne merchandise, and had become the main north-south route replacing the old suq alley, and offered more modern facilities. Thus, the decline in maintenance of the older buildings of the suq areas accelerated. Thirdly, not only did the physical fabric of the suqs suffer, but the creation of Boorj Avenue involved the wholesale demolition

of the former palace of the ruling sheikh - 'Al-Hasn' (see Fig. 5.7). This was probably the most architecturally outstanding building in Sharjah and its wanton destruction highlights the thoughtless actions approved in the name of progress during the 1970's.

The effects of the construction of Boorj Avenue are still felt today where the economic decline of the suq both in Marija and Shuwaiheein has never fully recovered to its former prosperity. Many shops lie barred and shuttered permanently; their wooden roofs and supporting structures decaying rapidly; walls spalling and plaster crumbling through over a decade of neglect. However, all is not gloom. There is a positive aspect to the situation, for the suqs have indeed been maintained as functioning economic units in spite of the effects of developments such as Boorj Avenue. These remaining suq areas will now be examined in detail. As the main suq is now permanently divided into two sections by Boorj Avenue, each will be surveyed individually (although comparisons and contrasts will necessarily be made throughout the text).

5.6i Suq Saqr, Shuwaiheein

The section of the old suq remaining in Shuwaiheein begins in the south at Boorj Avenue and runs north for 300 m to a point where was formerly located the Khanshab House. (see Fig. 5.8). Another part of the suq is located further north. Once contiguous, it is now separated by three, modern tower-blocks and is found at the junction of Corniche Road and Khalij Road. The new Al Mujarrah Suq faces this section on the opposite side of Khalij Road.

The main suq is located south of the Corniche Road which runs parallel to the southern bank of the creek on land reclaimed from the sea. (see Fig. 5.8). There is an area of vacant ground between the Corniche Road and the suq, used as an ad hoc parking area for customers and for traders loading or unloading merchandise from road vehicles. This part of the suq is colloquially known as Suq Saqr, and will be referred to as such henceforth.

Although most retail outlets and manufacturing activities are found on the main suq alley, there are exceptions located in other buildings further inland (see Fig. 5.8). The whole of Shuwaiheein is divided into two almost equal areas by a track of vacant land created by the demolition of older properties to provide land for a new road linking Boorj Avenue with Khalij Road. This unfortunate act was not implemented during the exuberant 1970's, but during the 1980's; a period when the negative effects of the wanton destruction of older areas of cities had been debated and disseminated by many respected Middle-Eastern academics; at a time when even

the local press had been proclaiming the advantages of conservation. The result of ignoring these opinions is a regrettable loss of many older properties, a visual scar on the urban landscape and the division of a once tightly knit community into disparate zones. The one positive consequence of this act was that it created an area of contiguous buildings from the first half of the twentieth century in one compact location, that could now theoretically, be almost wholly preserved as a designated conservation zone with Suq Saqr as its linear nucleus.

The suq itself is a series of small shops and trades lining both sides of the alley, which at its widest point is no more than 7 m. Sections of this alley are roofed over with a simple, interwoven mat of palm fronds (see Fig. 5.9). In places this is in a shoddy state of repair and needs urgent attention. A vulgar attempt to remedy this can be seen in Fig. 5.10 with the use of corrugated iron sheets spanning the suq alley. The crude attempt at repair raises the question of whether repairs could be financed by central authority to ensure they were accomplished using materials complementing or imitating the original? Indeed, could in this case, palm fronds not have been used? It would certainly blend aesthetically and employ techniques evolved historically. Materials could be used that are locally abundant and therefore cost less. Thus, the character of the suq is preserved. Functionally, it shades as well as corrugated iron and has a distinct advantage in that in times of rain, water passes through the structure onto the street below and is not drained in increasing

amounts onto the roof of supporting buildings, thus weakening their structure. Once erected, providing adequate maintenance is sustained, a palm frond structure should last for a number of years. It is this sort of micro-scale, inexpensive form of conservation in a traditional, analogous manner, that could form a significant part of a macro-scale conservation scheme.

Both Palgrave (1865) and Lorimer (1908) emphasized the importance and prevalence of textile and weaving establishments in Sharjah's suq, and from Fig. 5.11, this observation would appear to have endured until today. Of the 103 retail outlets aligning the main suq alley, 32 sell textiles with a further 25 selling textile-related products (i.e. ready-made clothing, bedding) or tailoring, totalling 55% of all retail/workshop premises. If the survey is widened to include all retail outlets north and west of the line of demolition, then of 175 outlets, 96 are textile related activities, maintaining the proportion of such trades at 55%.

More specifically, pure textile retailers are concentrated at the centre of the main suq alley, with tailors aligned along minor alleys to the south of the main suq in juxtaposition to the textile retailers. This is not uncommon because of the close relationship between the two activities and is witnessed in many suqs of the Middle East. Noe (38) (1980) comments that in Lahore tailors are found near the

cloth merchants and this would also be true of suqs in Dubai, particularly the Naif Suq in Muraqqabat which deals specifically in textile products.

Suq Saqr displays an historical agglomeration of textile-related activities which should be preserved in any conservation plan. It is worth highlighting the fact that of 175 potential retail or workshop premises, only 8 remain vacant. As a suggestion, if such a zone is to be economically strengthened, it may be worth considering the relocation of various textile-based activities aligning the track south of the demolition zone, parallel to Arouba Road (see Fig. 5.8). This route has developed since the 1970's as a subsidiary market area to Suq Saqr and is composed of a series of retail outlets of a quite different composition to the latter, though some activities are related. They are established in buildings dating from the 1960's and are generally more structurally sound than those of Suq Saqr but of much less historical, cultural or architectural value. Although their comparative youth is in their favour, they are nevertheless scheduled for demolition. Priority should be accorded to the conservation of Suq Saqr, so the buildings of the southern track, known as 'Mahakham Road', should be allowed to be demolished providing potential resources were directed to Suq Saqr.

To relocate activities, consideration must be given to the traders already located in the Suq Saqr area. Their businesses should not be adversely affected wherever possible and therefore activities such as butchery and electrical goods sales would be advised to locate elsewhere. However, activities

such as the embroidery and retailing of Arabic floor cushions and mattresses would complement the textile base of the suq and could feasibly be accommodated either in presently vacant premises or alternatively, as part of restored and converted properties currently unoccupied. There is also argument that some residential buildings could also be converted for commercial use. A detailed plan of relocated activities is shown on Fig. 5.12.

By proposing that certain activities are to be located in the Suq Saqr area, the traditional atmosphere and functions of the suq are maintained; relocated businesses will benefit from the extra custom provided by the patrons of the suq and the latter in turn will benefit from the customers of relocated businesses. Concentration on moving of textile-based trades from Mahakham Road will account for 29% of businesses displaced by development plans. By adding other compatible services, the proportion will increase to 52.2% (see Fig. 5.13). Therefore, over half the businesses could be accommodated in the Suq Saqr Conservation Zone using vacant premises (which currently number 8) and the renovated upper storeys of the premises in the suq area (Fig. 5.12). Other, incompatible activities could either be relocated in Marija Suq, where they will complement businesses already established there, or in more modern parts of the city where their businesses will thrive.

These businesses would have to be relocated as a matter of course. The whole area is scheduled for demolition and

the option of moving to Suq Saqr in renovated, well-serviced units in a revitalized commercial area should appeal to many owners. However, onus must be placed on owners to maintain buildings to an acceptable standard, once renovation is completed. By insisting that once renovated to a high standard, such standards are adhered to, the physical structure of the area should not deteriorate as it has done to date.

The concepts of relocation and compulsory maintenance raise several problems. Buildings must be selected that can be successfully restored. Businesses must be relocated sympathetically and fines for neglect of buildings levied at a reasonable rate. Homes must be provided for inhabitants displaced by these transfers if suggested plans are to be implemented.

5.6ii Suq Saqr: Condition of Built-Forms

Two materials dominate the construction of buildings in Suq Saqr (Fig. 5.14). The first of these is composed of two elements and represents the earliest phase of building remaining in the town; these are natural, irregularly shaped coral blocks collected from the sea shore (known locally as 'farush' or 'hasa') cemented together by a gypsum-based mortar ('juss'). This material can also be found locally in the evaporite pans of nearby shallow lagoons. Buildings constructed of such materials tend to date from the period 1900-1940. Secondly, the use of cement either as mortar, plaster or in blocks represents modern accretions to buildings.

5.6iia Building Materials

In many buildings the two forms of material are combined with the result that the core of the wall is earlier coral and gypsum and, as a result of weathering and erosion, a superficial plaster of cement has been applied as protection at a later date. The adverse consequences of such a combination will be discussed later. There are examples of buildings where gypsum mortar has also been applied as a protective layer over coral stones.

A substantial number of buildings are constructed from a third material, a combination of two elements; blocks composed of a shell-based aggregate combined with a cement mortar. The former has a soft, friable texture and is more susceptible to erosion than the latter. In such buildings, the cement mortar is seen to project between the blocks which recede in a concave manner as weathering progresses. This combination of materials is more common in the south and east of the area and in general represents a phase of building between the predominant use of coral and that of cement.

5.6iib Salinity Levels

The general, physical condition of all buildings in this area - irrespective of construction materials, is illustrated in Fig. 5.15. This is an approximate measure of the height to which erosion - chiefly by the seepage of subterranean salts into the structure - has attained. It can at once be recognised that buildings of greatest saline erosion levels are concentrated on the main suq alley. Erosion to a height of 3 m is widespread and it is likely that many of the properties aligning the suq whose exterior walls were obscured by shutters

hoardings, textile drapes or other wares would suffer to the same degree, especially if constructed from coral stone and gypsum. These buildings are likely to suffer most being in closest proximity to the creek, which in times before land reclamation almost lapped the rear walls of the shops on the northern side of the alley.

Added to this was the problem of drainage and sewage. The irregularity of built forms, their haphazard distribution and general level of neglect had resulted in an inadequate drainage system being developed for the area. During heavy, though infrequent, rainstorms the combination of high water table plus increased throughflow would result in septic tanks overflowing and seeping into properties. Salts contained within the effluent would combine with saline solutions already present to intensify erosion. This problem is common in many towns of the Arabian Gulf coast. A combination of widespread damp-coursing, repointing, rendering and in some cases rebuilding, will be needed to upgrade the area to an acceptable standard. Where properties have been 'repaired' by the use of a cement plaster, its removal is essential not only to decrease the effects of salinity, but also to restore the building to its original appearance.

Concrete and cement structures do not escape saline erosion - for cement is known to encourage this process and is evident on the walls of buildings where irregular white lines indicate the level of salt penetration. Not all of these structures should be demolished simply because of their materials of construction; on some buildings, especially those with upper storeys, moulded concrete blocks provide decorative

features acting as internal screens ('masherabiyya') copies of Iranian styles prevalent in the 1960's (see Fig. 5.16) and in use for the past two hundred years. Though such embellishments are a comparatively recent addition, they are nevertheless representative of a phase of building that should be considered 'historical' because of the comparatively condensed period of building experienced by towns of the Gulf coast, i.e. built forms here have evolved in the relatively short time of a century unlike other Islamic cities that have experienced a much longer period of growth. Such decorations have the effect of appearing older than they really are, and beneficially enhance built forms of the area.

Given the problems of physical structure outlined, which then are the buildings or elements of buildings of the most historical, cultural and architectural value to the city and country as a whole? In the following subjective synopsis a grading of built forms on this basis will be attempted. It must be remembered that the majority of buildings in this area remain occupied (see Fig. 5.8), therefore observation and recording could only be made in detail of exteriors of occupied buildings. All parts of unoccupied buildings were examined via a variety of methods such as personal observation and recording on the ground. Aerial survey from surrounding tower blocks, interviews with some storekeepers of the suq, officials at the Municipality and various government departments, and comparative studies using the few photographic sources available of old Sharjah were also undertaken.

5.6iii A Grading of Buildings

Realistically, it cannot be suggested that all buildings of antiquity should be preserved. There are limitations of finance, technology and restrictions imposed by a bias of attitude for or against conservation amongst decision makers. To some extent, each of these can be overcome but even in the relatively opulent Arabian Gulf states, however desirable from a conservationist viewpoint, the preservation of the whole Sharjah medina is unrealistic. Urban renewal is already too advanced in some areas to prevent the demolition of some older buildings, but this does not mean there is no scope for a conservation scheme. What is needed is a rational, specious framework that will prioritize certain areas and yet allow developers and planners some flexibility in their approach, should such a scheme be taken on board. The following represents subjective classification of built forms based upon fieldwork research in the late 1980's, resulting in proposals for the creation of the first conservation zone in Sharjah, based upon the Suq Saqr area of Shuwaiheein. It is loosely based upon similar parameters employed in the scheme of the 'Association Sauvegarde de la Medina' (A.S.M.) in the Tunis medina (see Appendix 3).

5.6iiia) The Classification of Built-Forms

Each building has been allocated a 'rank' from an amalgamation of the following parameters: architectural, historical and cultural merit, plus their physical condition. For each of these parameters, buildings are graded into three categories (see Fig. 5.17) and the results correlated to form a composite map illuminating priority areas. Examining each of these categories in detail, certain patterns are revealed. The combined parameters are explained in Appendix 4.

b) Architectural Merit

It can be seen clearly from Fig. 5.18 that the majority of buildings of Architectural Category 'A' (i.e. those of greatest architectural merit - see Fig. 5.17) are grouped towards the northern end of Suq Saqr, extending East towards the centre of the quarter of Shuwaiheen. Those of Architectural Category 'B' (i.e. those of significant architectural merit, see Fig. 5.17) are spread fairly evenly throughout the area, but form particular concentrations along the North side of Suq Saqr and at the centre of the quarter. Buildings of Architectural Category 'C' (i.e. those of little architectural merit, see Fig. 5.17) are once more spread evenly throughout the area and form no significant concentrations.

Examples of Category 'A' buildings are illustrated in Figs. 5.19 - 5.21. Fig. 5.21 shows the relative position of these buildings to the entrance of Suq Saqr. It is not difficult to see that if the buildings of Plot 265 are left to decay or are demolished, a significant part of Suq Saqr will be lost, and the atmosphere and vitality of the suq irrevocably diminished.

Other Category 'A' buildings are also illustrated on Fig. 5.18. These are principally those buildings of greatest antiquity (pre 1930) that contain a residential upper storey or 'ghorfa'. These can be found at Plots 218, 263, and 274. The first of these is shown on Fig. 5.22. Although in a sad state of repair it nevertheless displays some interesting features: firstly the existence of the original gypsum-based plaster that covers the coral-block core of the walls, secondly the use of expensive timber to construct a staircase (a rarity for a building of this age in Sharjah) and thirdly, the use of internal recesses between pillars: an example of the 'pier and panel' construction often seen in such houses,

"This method of construction produced tall, light buildings with walls of minimum mass thus eliminating heat retention as far as possible." (39)

Away from the main suq alley, there are pockets of Category 'A' buildings. Plot 280 can be seen in an aerial view on Fig. 5.23. Of particular note is the main entrance to this building (see Fig. 5.24). This group of buildings, centred upon a traditional courtyard, represents well the type of domestic, vernacular architecture erected in Sharjah before 1930, even though it is admittedly, severely eroded, abandoned and decaying.

In contrast to this are Plots 277 and 285, which are generally of much better repair (see Fig. 5.15) and contain important architectural elements not witnessed to date in this study. Plot 277 contains the finest, tallest and least eroded windtower (badgir) in Shuwaiheein. Its location can be seen on Fig. 5.18 and its appearance in Fig. 5.25. Clearly a link with the Persian ancestry of its original inhabitants, this

particular badgir could rival any of those in neighbouring Dubai in splendour. It stands over 12 m high and is 2 m square with vents at each face. The house remains occupied and suffers relatively little from saline erosion, so common to other properties of the area. Other notable architectural features are round-arch panels on the exterior, eastern wall and the presence of a large, stepped buttress feature supporting the southern corner of the badgir. The building remains whole, with the addition of later, temporary accretions to the structure.

Plot 285 has similar characteristics. It contains a badgir, (although markedly less flamboyant than its neighbour) and an original, wooden door with an inset for entry. A room near the main entrance is used as a carpentry workshop. More detailed analysis of residential structures will be given in a later chapter.

Amalgamating architectural, historical and cultural merits with the physical condition of buildings in the Suq Saqr area, a proposed conservation zone has been created, grading buildings in four ranks (see Appendix 4) that would allow a degree of flexibility for authorities to operate within. If finance is the paramount restriction on preservation, then it would be logical to preserve those buildings requiring proportionately less cost to renovate because they are in a less advanced state of decay and disrepair. Within the conservation zone as proposed in Fig. 5.26, there are two such ranks that would allow such prioritization; Rank 1 (red) and 3 (pink). The former are those that fulfil the following conditions:

- i) they are of greatest architectural or cultural merit to the city,

- ii) they are (for the most part) of greatest antiquity (pre 1930),
- iii) they are in comparatively better physical condition than other buildings of a similar age (although not entirely exempt from saline erosion and decay), therefore requiring less restoration and less financial input.

It can be seen from Fig. 5.26 that several of the buildings discussed above as being of greatest architectural merit, also fulfil the other conditions for Rank 1 buildings in the conservation zone (i.e. Plots 277, 285 and parts of Plot 265) and would cost proportionately less to preserve. If finance is the major restriction then these buildings should be accorded priority for restoration. However, two points must also be considered:

- a) Some areas of the exterior walls of these buildings were covered by hoardings, shuttered or draped textiles and so no accurate assessment of the levels of saline erosion could be made.
- b) The rear of buildings on Plot 265 indicates an advanced state of decay, but this is due principally to the temporary shacks erected by poor, immigrant workers in the courtyard from discarded materials (especially corrugated iron sheets), which tends to generate a shoddy and unsanitary environment which if removed, would create a more positive image of the building. This problem is repeated in many buildings of the medina.

Rank 3 buildings also fulfil conditions i and ii above but differ in age, being significantly younger. Indeed, they could have been erected as late as the 1960's/70's, but reflect in varying degrees, the continuation of architectural styles in the pre-oil era. The two buildings within this category in the Suq Saqr area are Plots 218/217 - the Sarah Hosman Hospital - and its neighbour, the Zarouni Mosque (discussed in Chapter 4). Parts of the hospital date from the early twentieth century, but most of it has been rebuilt at various times and now predominantly reflects built forms of the 1950's/60's. Its cultural importance to the medina cannot be doubted: it forms an integral part - the maristan - and remains a popular maternity/paediatric hospital for women of all nationalities. Its removal would be greatly detrimental (although schemes for its expansion incorporating Plots 208-216 could be considered).

As Rank 3 buildings are younger than Rank 1, the level of erosion and disrepair expected would be less and therefore, prove least expensive of all to restore, especially as these buildings are in constant use and receive regular maintenance. An extremely limited budget would prioritize Category 3 buildings for preservation.

If funding is not the paramount restriction, but factors of antiquity, architectural and cultural merit are pre-eminent, then buildings of Category 2 can then be considered more realistically. These buildings fulfil conditions i and ii above, but suffer from a more advanced state of erosion,

rendering some very unstable. In some cases it would be less expensive to record, demolish and rebuild securely than to patch ad hoc and ultimately, with little positive effect. The key position of many of these buildings in the main suq alley (see Fig. 5.26) raises their value greatly. It could be argued that funds should then be allocated to this group first because they are physically unstable and in urgent need of repair, whereas more stable buildings are likely to remain longer until such time as funds can be sought.

Lastly, Category 4 buildings (shaded brown) are those that fulfil only condition ii above. They are of greatest antiquity, but individually are not of outstanding architectural merit and are generally of weak physical structure. It may be suggested they are given least priority, but this then poses a problem. From Fig. 5.26 it can be seen that the majority of buildings in Category 4 are found along the main suq alley where collectively, they create the focus of the whole conservation zone in Shuwaiheein. Therefore, their importance is increased substantially.

To decide to which category (ies) of buildings funds should be allocated is the debate to which decision makers should address themselves, considering all the factors above. It is not an easy problem to solve, and the outcome is dependent upon circumstances not only of finance, but of attitude. Further research needs to be done to secure the most satisfactory solution.

5.7 Salahadin Zone, Marija

The Marija area of Sharjah extends from Boorj Avenue in the East to Jubail in the West and is arguably, the most historically and architecturally significant area of the Sharjah medina. It was once contiguous with Shuwaiheein, but the construction of Boorj Avenue during the 1970's severed the link permanently and it is now a distinct, physical entity.

The Marija area is further subdivided by a road running North/South through the quarter, known as Salahadin Road, This is a kerbless, narrow, tarmac track superimposed onto the site of a dirt track through the area. It neatly separates the remains of Marija Suq from the rest of the quarter, which is chiefly residential. The Marija Suq area is known colloquially, but confusingly, as 'As-Suq', therefore for the sake of clarity, the area between Boorj Avenue and Salahadin Road will be referred to as 'Salahadin' and discussed as a separate unit from the rest of Marija.

This part of the medina has been the subject of previous discussion - indeed a study in 1987, on the potential for conservation of buildings contained therein and therefore, only a relatively brief synopsis will be made of the area, for a conservation proposal has been accepted, though not yet implemented, by the Sharjah Government. A criticism and extension of the findings of a previous study led by Christof and entitled 'Conservation Study for the Marijah Area - Sharjah' (40) completed in October 1987 will also be made. This study was presented to the ruler in 1987 after three

months' intensive field research on the Salahadin area. Their report, though unpublished, provided a series of topographical and aerial drawings of the area with detailed plans of buildings considered to be worthy of preservation. Though professionally executed and presented, the report was not encouraging in its findings and recommendations and appears to justify what were already the desires of influential government departments and decision-makers, rather than offer an objective, radical or perspicuous set of proposals that could be potentially fulfilled if certain parameters were met. It did not attempt to justify any concept of a 'global' conservation scheme for the areas implying a disregard for the historic, organic, integrated relationship of buildings, but chose to isolate architecturally significant buildings, examine them in detail and recommend they be preserved in situ as 'monuments' or museums. Three such buildings were emphasized in this manner; The Al-Midfa House, Al-Naboodah House and the Al-Mugsuba Tower (see Fig. 5.27). It is not entirely surprising these three were recommended, for the following reasons; the Al-Midfa House was used as the Sharjah Tourist Centre during the 1970's/early 1980's until this government organization was transferred to 'prestigious' office accommodation in Boorj Avenue. It had therefore, already received substantial maintenance and remained in a comparatively sound state of repair. The government already had tentative plans to preserve the building as some sort of historic monument, perhaps as a museum or craft centre and therefore the Christof report

merely reinforced local ideas at that time. A similar case could be argued for the Naboodah House, where plans were well advanced, even in 1987, to preserve the house as a museum for the city of Sharjah. Indeed, during the period of this author's observations, representatives from the Department of Museums and Antiquities in Sharjah were already experimenting with various mixtures of locally extracted materials to produce a match for the gypsum-based mortars and limewashes used in the original structure.

The Al-Mugsuba Tower is probably the most significant defensive feature remaining in the city. It is all that remains of a large, courtyard house named 'Al-Bait Al-Gharbi' (the 'Western House'). It is located near to the former eastern extremity of the town, facing the desert and serving as a watch-tower in case of attack. There were also vague plans mooted for its preservation at the time. In summary, the Christof plan did not provide any further recommendations not already considered by the government, but the fact that the team were invited to produce such a report was very encouraging, for it illuminated a growing concern and a shift of emphasis away from total demolition to one of conservation and re-use among decision-makers, confirming that the town does indeed contain elements worthy of conservation. It is a positive trend that has accelerated into the 1990's, culminating in the designation of Marija Suq as a conservation area by the ruler, His Highness Dr. Sheikh Sultan bin Mohammed Al-Qasimi. As plans for this, though unpublished, are assumed to have been made, any further

proposals in this study are made on an entirely subjective basis, but may highlight points not considered. As this area has already been the focus of much attention, further analysis here will be brief to enable greater concentration on other areas that have been comparatively neglected or overlooked but may positively benefit from further consideration whilst the encouraging moves towards conservation continue.

5.7i The Midfa House, Salahadin

The historical, architectural and cultural importance of this building not only to Sharjah, but the United Arab Emirates as a whole, cannot be overestimated. It is a unique example of architectural styles and methods introduced into the Emirates in the first half of the twentieth century chiefly by Persian immigrants who were, at Lingeh, once ruled by the same Al-Qasimi family ruling Sharjah today. It is the Persian influence that is at once recognised in the Al-Midfa House. From both Figs. 5.28 and 5.29, the dominance of the wind-tower (badgir) is clearly illustrated. To the author's knowledge, this is the only cylindrical badgir in existence in the U.A.E., perhaps even a wider area, and is an outstanding example of its kind, reflecting the skill of masons at that time. The entrance doorway and portal (see Fig. 5.30) are also impressive: a rectangular porch containing a zig-zag fluted arch above a wooden doorway accompanied by decorative pillars at each side. Other noteworthy architectural features include the fluted ogee curves between pillars on the northern wall of the interior courtyard and the later, cement additions of moulded block panels to create a decorative finish to exterior walls.

Although an outstanding building, it is relatively compact, containing only two rooms, the larger of which was ventilated by the badgir. The house would have been but one of many properties constructed and owned by the influential Al-Midfa family: one of the major merchant families in Sharjah who have continued business interests in the city today.

This particular building was constructed by Ibrahim Mohammed Al-Midfa and once housed the Sharjah Tourist Centre. It was designed as the main 'majlis' or meeting room for the men of the Al-Midfa family and as a rest house and as such, must have received significant financial input and care to produce a building of such note, reflecting positively on the ancestors of today's generation.

5.7ii The Al-Naboodah House

More typically representative of the residential structures erected by Sharjah's merchant families in the early twentieth century is the Naboodah House on Salahadin Road. The house belonged to Mr. Isa bin Obaid Al-Naboodah, a famous pearl merchant. This too was recommended by Christof for conservation, following an initial idea to renovate the house transforming it into a city museum, suggested by the Department of Planning and Surveys in Sharjah, and by representatives specializing on conservation invited by the Department of Culture from the Department of the Interior, Amman, Jordan in 1986. The idea was sound, and has since been implemented under the authority of His Highness the Ruler of Sharjah. As its future is therefore assured, a brief commentary will be given here for the sake of completeness.

Fig. 5.31 indicates the wide-scale spatial distribution of the building, reflecting a pattern common to all cities of the southern Gulf coast; that of rooms surrounding a central courtyard, with very few openings to the exterior. The southern sector of the building was unfortunately demolished when Salahadin Road was improved.

The Naboodah House was one of the finest, though not the largest, merchant houses built in Sharjah. It retains its importance today on architectural, historical and cultural

merit, as it represents well the development of family residences by accretion over a number of years. At its height six branches of the Naboodah family lived within its walls, numbering in total between fifty to sixty people.

The oldest part of the property aligns the western side of the courtyard and dates from between 1905-1910. This can be seen in Fig. 5.32. Of particular note is the arched ventilation screen above one of the unglazed windows. This was carved from wood imported from Zanzibar and displays the skill of local craftsmen at that time. It is unusual in that

- i) it is made of wood, when this material was rare and expensive,
- ii) it was more common for such screens to be carved from gypsum plaster and
- iii) it has survived at all when subject to eighty years use and lately, neglect.

Such screens would have also been found above neighbouring windows and doorways, but have been replaced by holes for modern air-conditioning units, surrounded rather crudely by cement plaster.

Moving in a clockwise direction to the northern corner of the house, the second phase of building, 1910 - 1920, is represented. Perhaps most significant is the addition of a first-floor terrace - the ghorfa - reached by ascending a spiral staircase carved out of gypsum and stone. Many of these stones were imported from Abu Musa Island as they were of a more durable quality than those locally found in Sharjah (this indicates the relative wealth of the family). An outstanding feature is the use of highly decorative columns

supporting the roof of the colonnade facing the courtyard (see Fig. 5.33). These columns - as in the Naboodah Mosque - were imported ready-carved from whole teak trunks grown on the Malabar Coast of India and installed with pedestals and capitals around the North and East sides of the courtyard, pre-empting construction in these areas. The latter are of Ionic style and remain in almost perfect condition today. Their presence helps to assess the age of the rooms on the eastern side of the courtyard, which must date from circa 1930-35, as in two places (see Fig. 5.34), walls have been built incorporating the columns within them, resulting in an unsatisfactory and unstable condition. The capitals penetrate the canopy above and form the base for vertical supports in further wall construction at first floor level, creating another ghorfa above (see Fig. 5.35). The main majlis was located outside the main entrance on the western side and no longer exists. Evidence of the skill of local craftsmen can be found in the interior carving of walls and screens, such as those in Fig. 5.36 (between rooms on the northern side), and of wall paintings and carvings in later rooms. Its renovation and use as a museum for the city can only be applauded.

5.7.iii The Al-Mugsuba Tower

One of the few defensive structures surviving in Sharjah is the Mugsuba Tower, found in an isolated position in eastern Salahadin. It is basically a cuboid, constructed of coral stone and gypsum with one small entrance on the western wall (see Fig. 5.37). It is severely eroded by saline seepage at lower levels, but comparatively solid above. The interior consists of a room with a right-angled staircase at the eastern end leading to an exit hole in the roof (see Fig. 5.38). The interior remains largely intact, the stone staircase supported by mangrove poles still sturdy and comparatively little worn. This tower would have formed part of the defensive structures erected in or near the royal palace/fort, used as a watch tower to prevent attacks from the landward side. It was formerly surrounded by a compound of dwellings inhabited by the family of the late Sheikh Saqr bin Sultan Al-Qasimi, ruler of Sharjah from 1951 to 1965. It was part of the house known as Al-Bait Al-Gharbi - 'the Western House'.

The above three buildings represent almost wholly the extent of the conservation proposal of the Christof team; but what of the remainder of Salahadin? There remain other structures of significant interest ignored by Christof. The government of Sharjah, recognizing this fact, has extended Christof's proposals to include the whole of the Salahadin area (whole-heartedly supported by this author). A brief summary of the historical, cultural and architectural value of these buildings will attempt to vindicate this decision.

5.7iv The Marija Suq Area, Salahadin

Since the construction of Boorj Avenue severed the main alley of Sharjah Suq, the Marija section has witnessed a slow decline in the quality and standard of buildings and a gradual economic regression with businesses closing, leaving premises to fall into disrepair. Several factors have contributed to this. Boorj Avenue is a busy, wide dual carriageway that is at times, difficult for pedestrians to cross. This is particularly true at the junction with Corniche Road (see Fig. 5.27), which is precisely the point where the main suq alley is bisected. As there is no pedestrian crossing point located here (people would have to negotiate shrubs and flower beds to cross the central reservation) it is unlikely that people would naturally flow from Suq Saqr to Marija Suq, with the short but inconvenient detour (especially in the hot, humid, summer climate) to the Boorj that is required. Suq Saqr has - to its advantage - a large, if temporary and unplanned - car park on waste ground between the suq and the Corniche Road, used for the unloading of goods from trucks and lorries, making full use of the almost direct access to shops this affords. Marija Suq does not benefit from such an area. Suq Saqr also gains custom from a large, local population housed in a variety of built forms both old and new in close proximity to the suq. It also tends to sell products that are required by people on a more regular basis than those predominating in Marija Suq which, for the most part, sells more specialized and expensive items. Much of the local population of Salahadin has moved

away and property has been demolished, therefore the catchment of Marija Suq has, for several reasons, diminished. These are not easy problems to solve, but given forethought and consideration, the economic revitalization of Marija Suq could be attempted with comparatively little financial input.

5.7v Marija Suq. Economic Activities

From Fig. 5.39, two main patterns emerge: Firstly, the predominance of antique/handicraft/jewellery shops lining the main suq alley and secondly, the frequent occurrence of vacant/disused retail outlets, particularly in the southern half of the area. Indeed, 25% of all retail premises are vacant, numbering 43 in total (see Fig. 5.40). Of the remaining 75% of properties operating commercially, 39% consist of antique, handicraft/gift shops or jewellers/goldsmiths/silversmiths whose trades are closely allied to them (see Fig. 5.40c). Therefore the immediate problem is to attract businesses, particularly complementary activities, to either establish or relocate themselves in this area.

A major incentive for prospective businesses would be the creation of the Sharjah City Museum in the Naboodah House - South of the main suq area. This will attract many visitors either for research or tourism, but will inevitably provide new patrons for Marija Suq, particularly if the Naboodah House is developed as a key element of a global strategy and not in isolation. It has been previously stated that the Naboodah House could form a nucleus of cultural activities, with the Islamic School 'Al-Taimiah Al-Mahmoudiah' re-established in, or near, its former location opposite the Naboodah House, creating the boundaries of the ex-camel market area 'Al-Arsah'. Should this not be possible, then perhaps a use for the Al-Midfa House could

could be its conversion to an Islamic School, which would again attract people into the heart of the suq area. These developments would have to be thoroughly co-ordinated and planned so that visitors at one site are made fully aware of the cultural/historical significance of the others.

A simple, but effective solution to the problem of vacant premises would be to relocate businesses from Mahakham Road, Shuwaiheen (see Fig. 5.8) to Marija. As buildings in the former location are scheduled for demolition, similar premises could be offered at comparable rents and so revitalize the Marija Suq area. As there are 62 businesses along Mahakham Road, it is feasible that almost all could be accommodated if necessary, in the vacant properties of Marija Suq and Suq Saqr (43 in the former, 8 in the latter, 51 in total).

Access to Marija Suq for pedestrians must be improved. At the very least, a controlled pedestrian crossing or footbridge should be installed at the Northern end of Boorj Avenue, so coupling once more the two alleys of Marija Suq and Suq Saqr. A more elaborate and expensive, but complementary idea would be to construct bridges similar to those of the New Suq, Sharjah, which contain retail premises on each side (see Fig. 5.41) of the central pathway, thus creating one whole, linear suq as it was before the imposition of Boorj Avenue.

It would be impressive and admirable if the unique atmosphere of Marija Suq was preserved. Known locally as

'the Antiques Suq', commercial pursuits related to this core activity should be encouraged to remain, for nowhere else in Sharjah do they exist. Examples of these include the silversmith that weaves silver thread into the handle and cases of the traditional daggers - the 'Khanjar' - khanjar makers and repairers, the carving of local wooden doors, the selling and grading of tobaccos and 'hookah' pipes and the grading of pearls and semi-precious stones by traditional methods. Other such crafts could also be established here i.e. the transference of the clay-oven maker from a property West of Salahadin Road into the main suq area, and the reintroduction of the weaving of shawls (if the skills remain among older local residents), noted by both Palgrave (1862) and Lorimer (1908).

5.7vi Salahadin. An Appraisal

At micro-level; are the component structures of the main suq area worthy of conservation en mass? The following will attempt to argue its case:

As in Suq Saqr, individual commercial properties are not particularly noteworthy, but as a united entity they are a characteristic manifestation of Middle-Eastern cities; the suq or bazaar, the chief commercial artery of the city and venue for social and personal discourse.

It is the combination of commercial and social activities that renders the suq a unique phenomenon; one that is necessary to the vitality of the city as a whole, reflecting the well-being of its inhabitants. It would therefore be destructive to try to preserve individual buildings, for the functions of the area would be eventually lost as properties deteriorate and people relocate in more prestigious areas. A global conservation plan for the area should be given serious consideration if the priority of any scheme is to preserve and sustain the functions and processes of Salahadin as they have developed historically as well as the physical preservation of its buildings.

Consequently, there are several minor architectural features that would be preserved in any such scheme. Fig. 5.42 displays variations of air vents carved from gypsum mortar, inserted into the walls above the main door or shutter. Many of the doors to such commercial properties are original, though several have deteriorated badly.

Fig. 5.43 displays types of storage unit, witnessed as long ago as the mid-nineteenth century as Palgrave (1865) testifies:

"Instead of Arab warehouses [khans], in which goods and owner are alike on the ground level, or even a little below it, we find here regular shops, with raised seats, counters, shelves, much like the arrangements ordinary in Bombay or Madras," (41)

thus illustrating the continuity of trading methods.

The majority of buildings in the Salahadin area are constructed of coral stone (farush or hasa) and gypsum mortar (juss) and are amongst the oldest stone-built structures in the city. They have been subject to saline erosion in a similar fashion to the Suq Saqr area but once renovated, their maintenance must be assured by owners and enforced by law.

Finally, two more properties should at least be considered as part of the global conservation plan for the Salahadin area. These are the Taweel House (Bait Saeed Al-Taweel), and the Hamad Mohammed Al-Midfa House, shown in Fig. 5.44. They are located immediately south of the Naboodah House in a rather isolated position on Salahadin Road (see Fig. 5.27). They have been abandoned for many years and as a result of this neglect plus saline erosion are in a grave state of disrepair.

There remain however, two elements of these houses that are worthy of preservation. The first of these is a wind-tower (badgir), which displays some original and detailed masonry, especially on the supporting columns, seen in Fig. 5.45. The tower is fairly well preserved and is located above a room containing further elements of Indo-Persian masonry and woodwork.

The second element to survive is a fortified residential structure: a tapered, three-storey cuboid, crenellated at the summit for defensive purposes (see Fig. 5.46). Its importance is gained from its intrinsic Arabic architectural composition, as opposed to Persian or Indian more common in the Salahadin area. This feature lies parallel with the Mugsuba Tower, combining to defend the old core of the town. This structure finds similarity with examples in the Yemen, as discussed by Gazzard (1986):

"Some small towns and many villages are unwalled, thereby placing the obligation for defence upon the individual householder. Under such conditions the house became a personal fortress without window openings at ground level, often with embrasures above the entrance portal." (42)

Though most of the remainder of these houses is now rubble, these two elements alone warrant attention and would beneficially enhance any conservation zone in Salahadin.

5.7viii: The Salahadin Conservation Zone. A Summary

As this area is already subject to conservation proposals by government authorities, the following summary may serve only as comparison and extension, but may highlight facets not yet fully considered by these authorities.

The compact spatial distribution and historical, cultural and architectural significance of the Salahadin Zone, based principally around Marija Suq (see Fig. 5.27) designates the whole area as a nationwide priority for conservation and should be publicly proclaimed and protected as such as soon as possible. It is not simply a matter for the Sharjah City Government, but also for the Federal National Government to protect a vital component of the nation's urban heritage, and funds should be sought at both levels to achieve a satisfactory result. As plans for the Midfa and Naboodah Houses are already in progress, these should obviously continue until completion, but the remainder of the area should not be omitted.

Retail properties forming the main suq area must be preserved and renovated in situ to an acceptable standard to encourage present businesses to remain and attract others, particularly from Mahakham Road, Shuwaiheein. Local crafts should be developed and located in the suq, with the proposed Naboodah House Museum as a potential, additional retail outlet for their products. The key location of the Midfa House at the heart of the suq area bestows upon it a position of great importance and its future function must accommodate both cultural and commercial considerations, it must attract people into the area and yet retain its esteem and respect.

Its use as an Islamic school (should the re-establishment of Al-Taimiah Al-Mahmoudiah be impractical), or as a small classroom facility for visiting school children, students or other interested parties may fulfil these requirements.

The Mugsuba Tower and remains of the Taweel and Hamad Al-Midfa houses could be preserved as examples of defensive buildings and the Naboodah Mosque maintained, re-opened and re-used for its original purpose at the focus of the main suq alley. This small area of the old, urban core of Sharjah represents a 'medina' in miniature, incorporating many of the characteristic features of larger Middle-Eastern, Islamic cities (see Chapter 3): the Friday Mosque, Islamic School, the suq or bazaar, courtyard houses, defensive structures, narrow-winding alleys and open, market spaces. (See Fig. 5.47).

It should be preserved not simply as a tourist attraction, but reincorporated into the life of the city physically, economically and spiritually, and not regarded as an area to be avoided. Tourism in moderation may be a welcome addition, but it is the traditional functional and economic activities that must thrive for the benefit of the whole city, encouraging a recognition of, and pride in, an area of outstanding national heritage.

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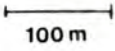
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FIG. 5·1: SHARJAH, 1968. (After Halcrow's)



Scale  100 m

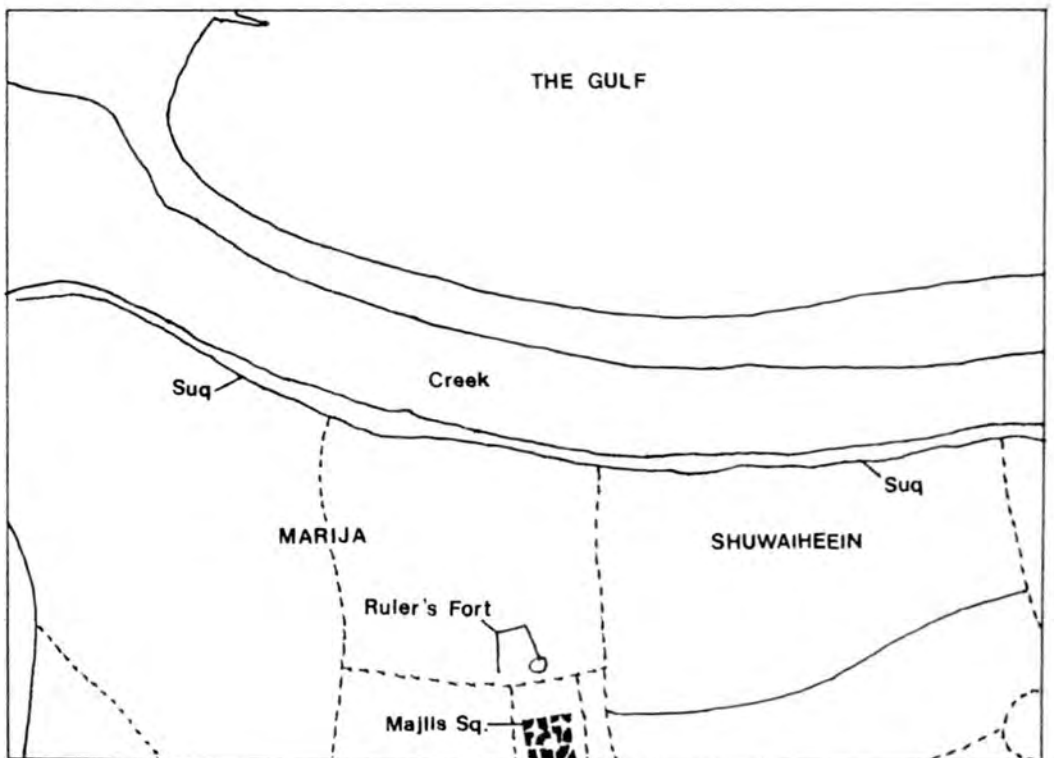
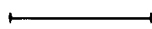
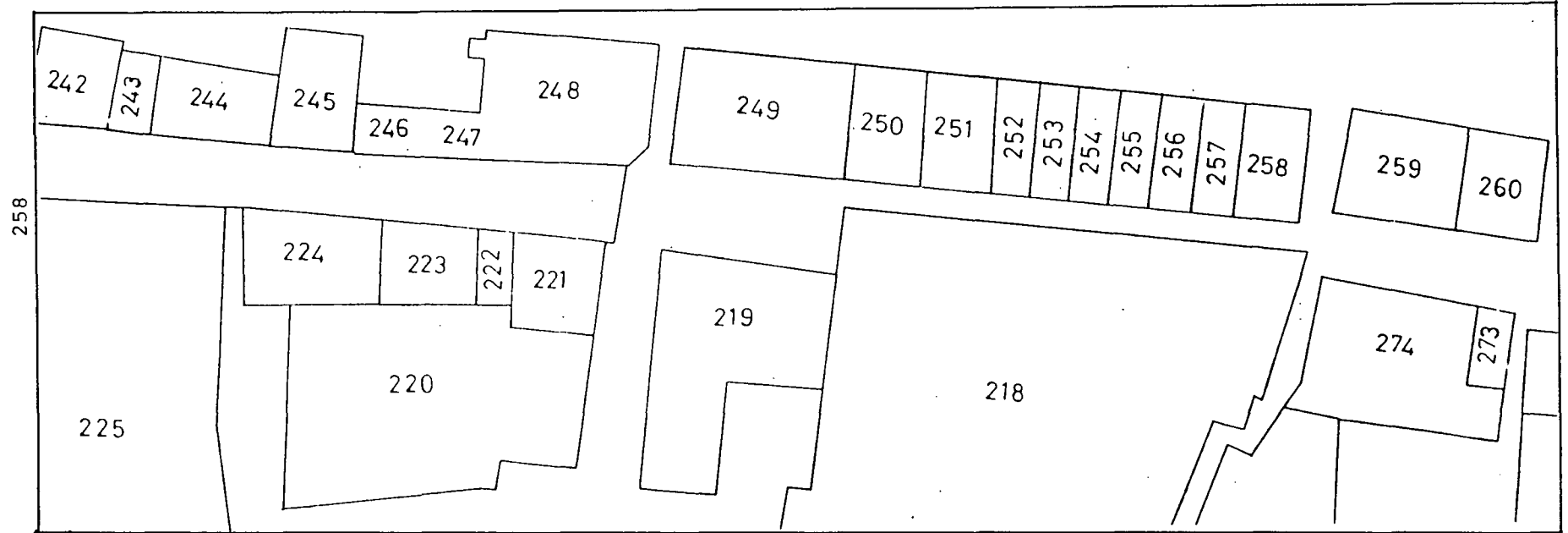


Fig. 5.2: Commercial Units: Suq Saqr, Shuwaiheein (after Sharjah Municipality)

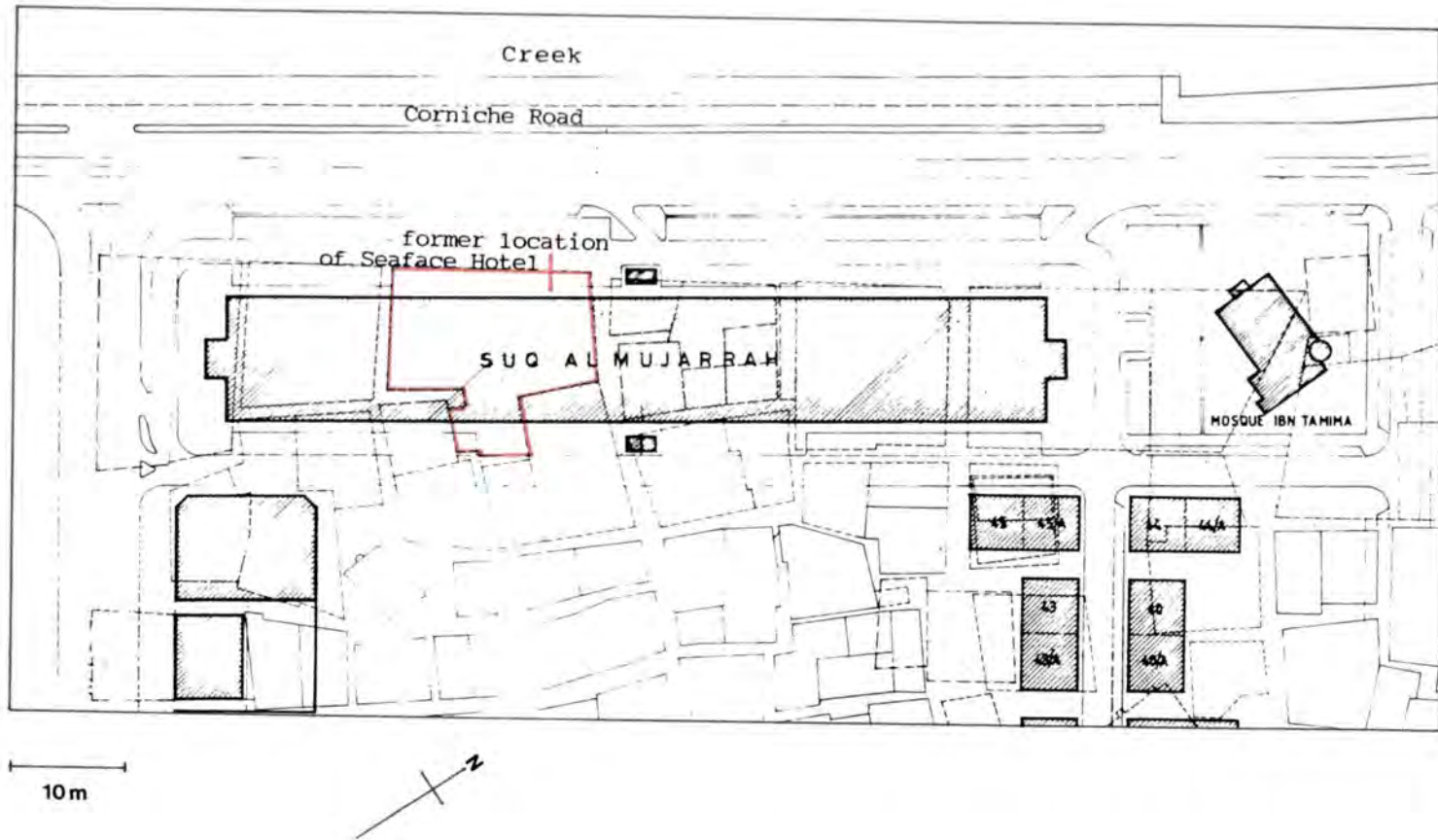
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Commercial units in the old suqs vary greatly in floor area. In the above example from the north end of Suq Saqr, the largest single unit is plot 249 and the smallest plot 222. Some of the larger plots may be subdivided into smaller commercial units.

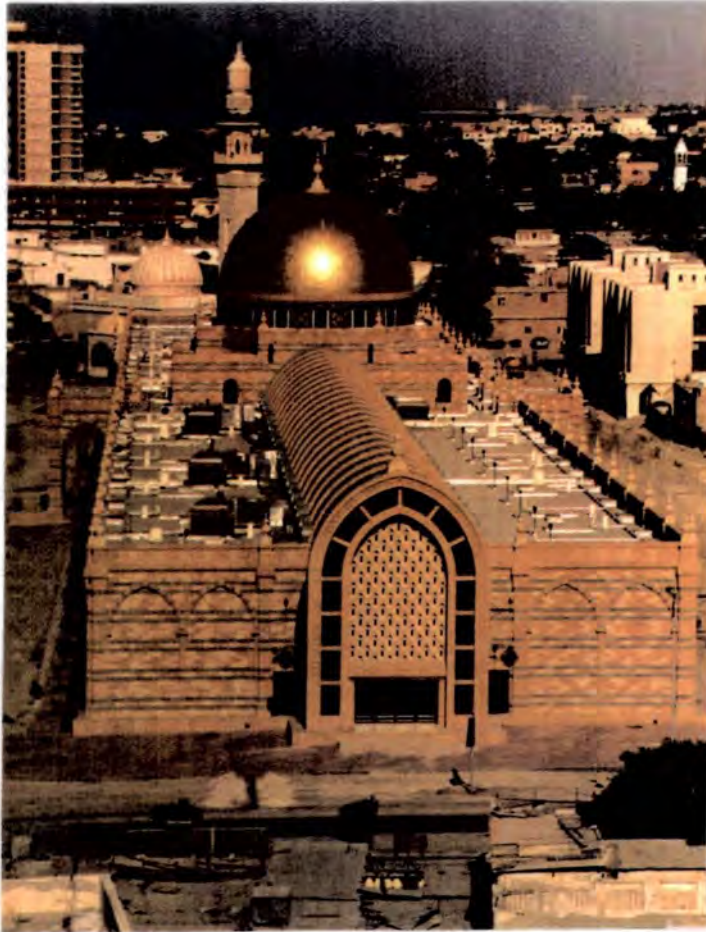
FIG 5.3: AL-MUJARRAH SUQ. LOCATION, (1987) (After Sharjah Municipality)

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The location of this newest of Sharjah's suqs is illustrated with reference to previous built forms, now demolished (shown in broken lines). The largest of these properties was once the residence of the British Political Agent, later to become the Seaface Hotel.

FIG. 5.4: SUQ AL-MUJARRAH, LOOKING NORTH EAST (1987)



This highly impressive example of modern, Islamic architecture is found in a prominent, central location of Mujarraah, superimposed upon the former path of the main suq alley in this area and upon former courtyard houses. Its main architectural and functional features reflects those of structures known as 'qaysarriyah'. One such building is alleged to have existed in Sharjah in the mid-nineteenth century, described by Palgrave (1865) in his narrative. The Ibn Tamima Mosque can be seen immediately to the North of the suq.

FIG. 5.5: THE POLITICAL AGENCY, SHARJAH (1970)
(After Sharjah Municipality)

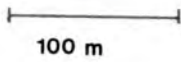


The residence of the British Political Agent in Sharjah was demolished to allow for the development of the site into the Suq Al-Mujarrah. At the time of the proposal, there was a pervasive desire to rid the town of any past colonial links and so, irrespective of architectural, cultural or historic importance, the building was destroyed. It was however, a fine example of an extensive, courtyard dwelling, so much so that after its demise as a political agency, its function was changed into that of the Seaface Hotel.

Fig. 5.6: The Urban Core of Sharjah, 1968 (After Halcrow's)



Scale:



Key:

----- Proposed Routes

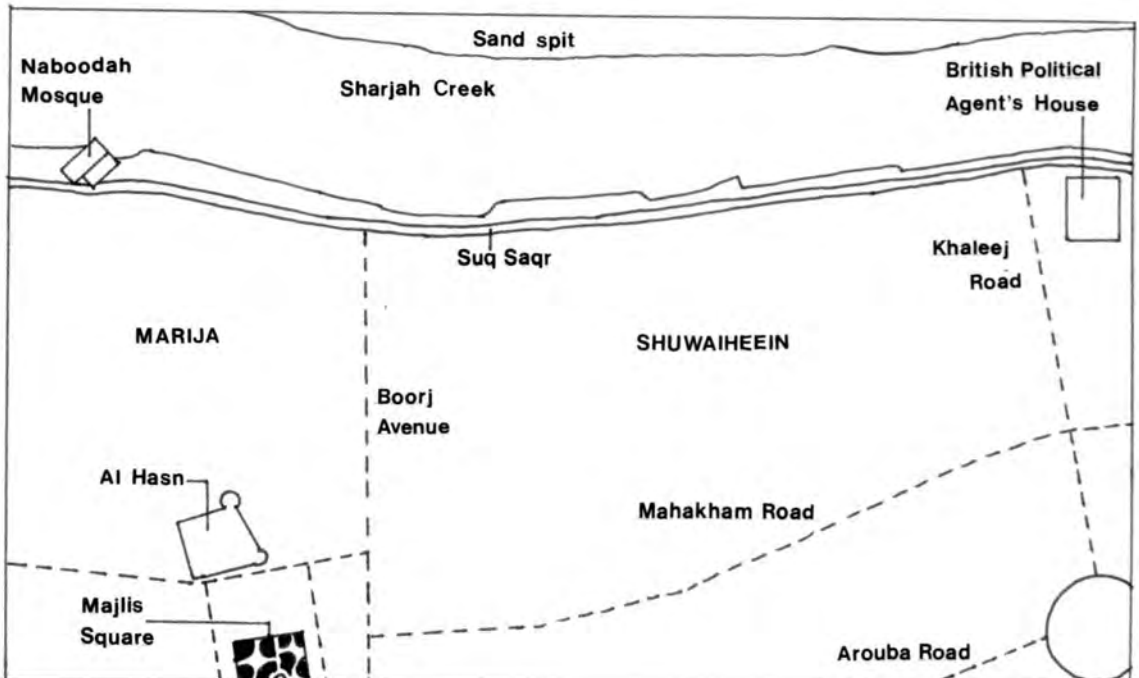


FIG. 5.7: 'AL-HASN', 1970 (After Hafeez)



This photograph of the former fortified royal palace of the ruling family of Sharjah was taken shortly before its demolition in the early 1970's. In its time, it was one of the finest buildings in the Emirates and the political centre of the town. The only feature to survive was a watch tower, unseen on this photograph.

FIG : 5.8: Shuwaiheein

Commercial and Residential Land Use Patterns

Key:

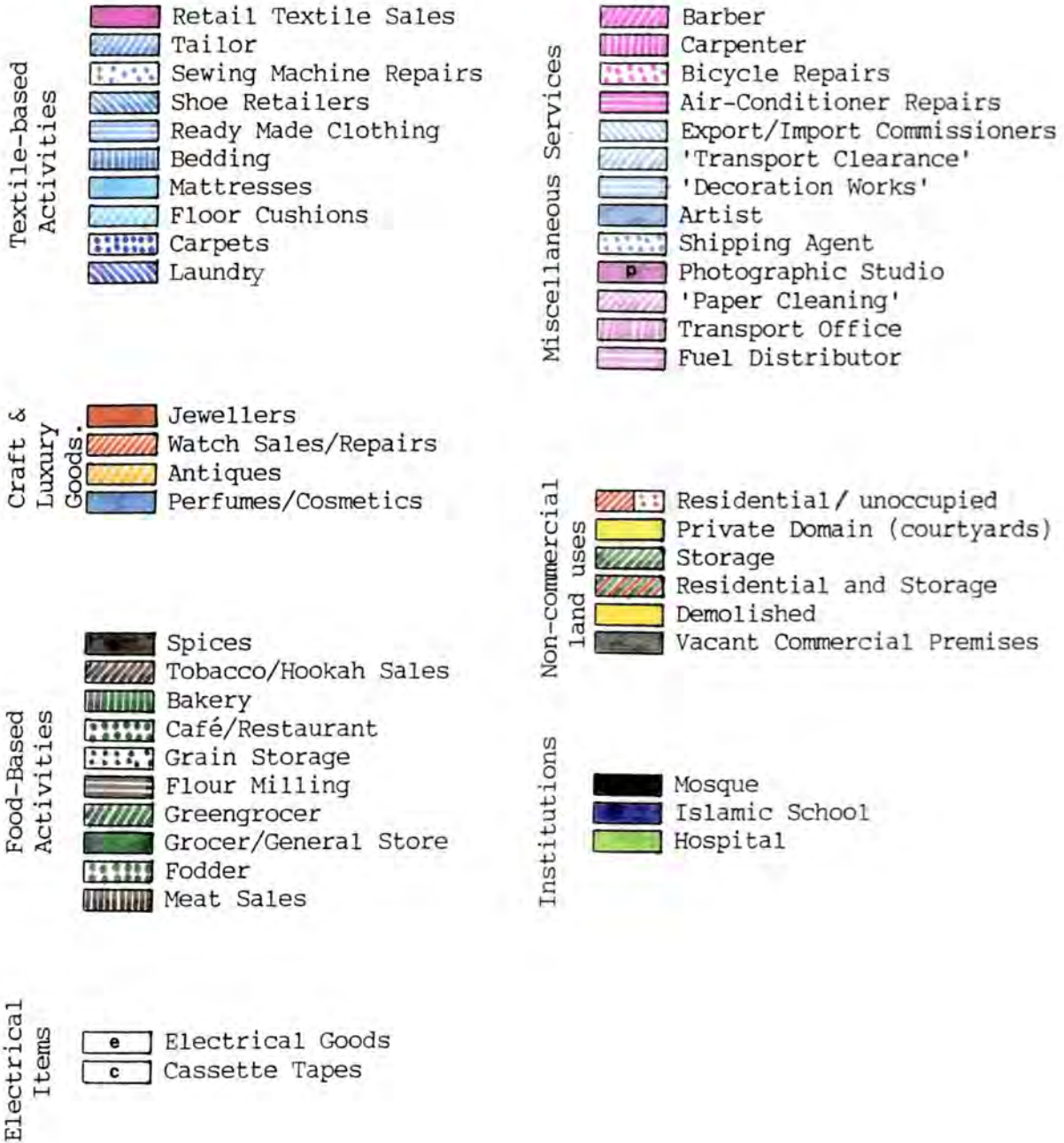


Fig. 5·8: Location of Maps Overleaf, Shuwaitheein.

Fig. 5·8a – Suq Saqr Area

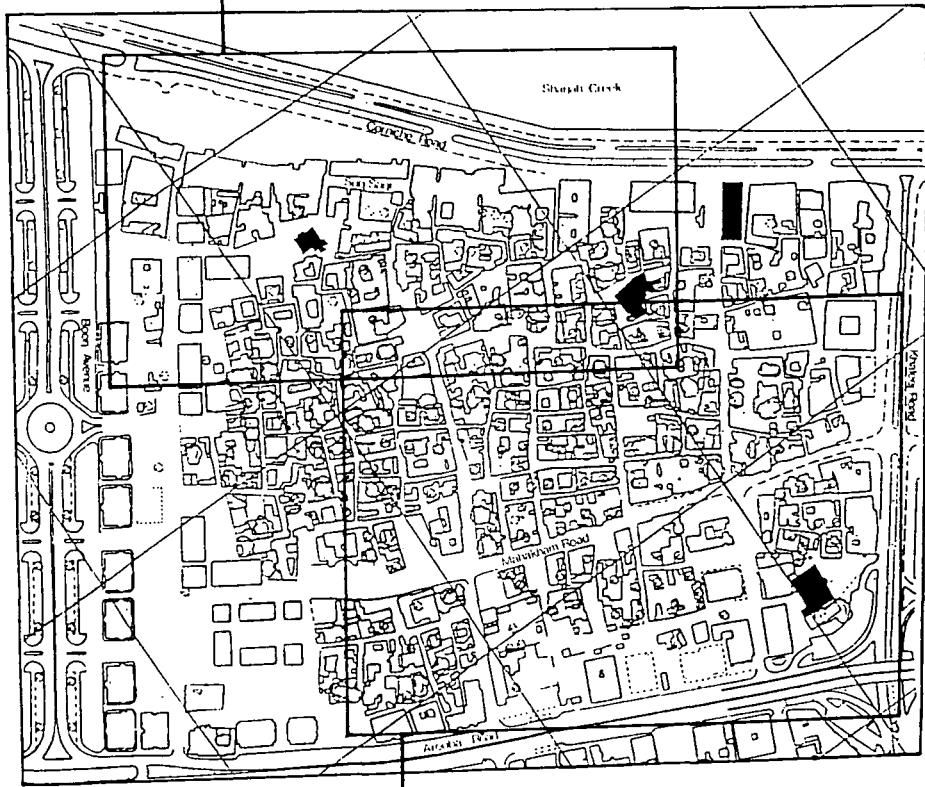
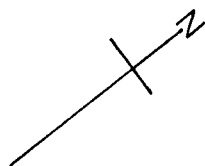


Fig. 5·8b – Mahakham Road Area



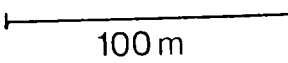
Scale:  100 m

Fig. 5.8a: Commercial Land Uses, Suq Saqr Area Shuwaiheein

Scale

100m

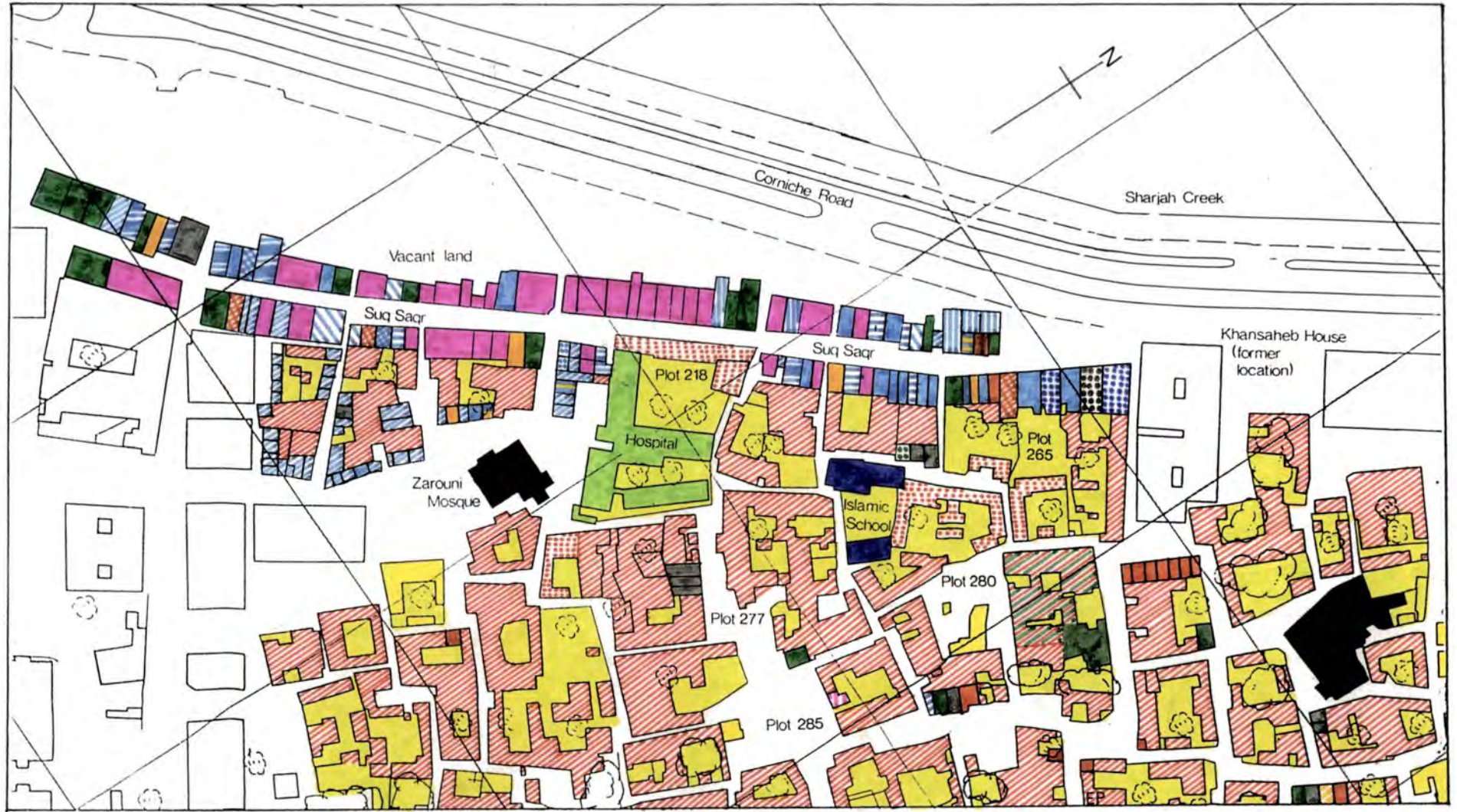


Fig. 5.8b: Commercial Land Uses, Mahakham Road Area - Shuwaiheein

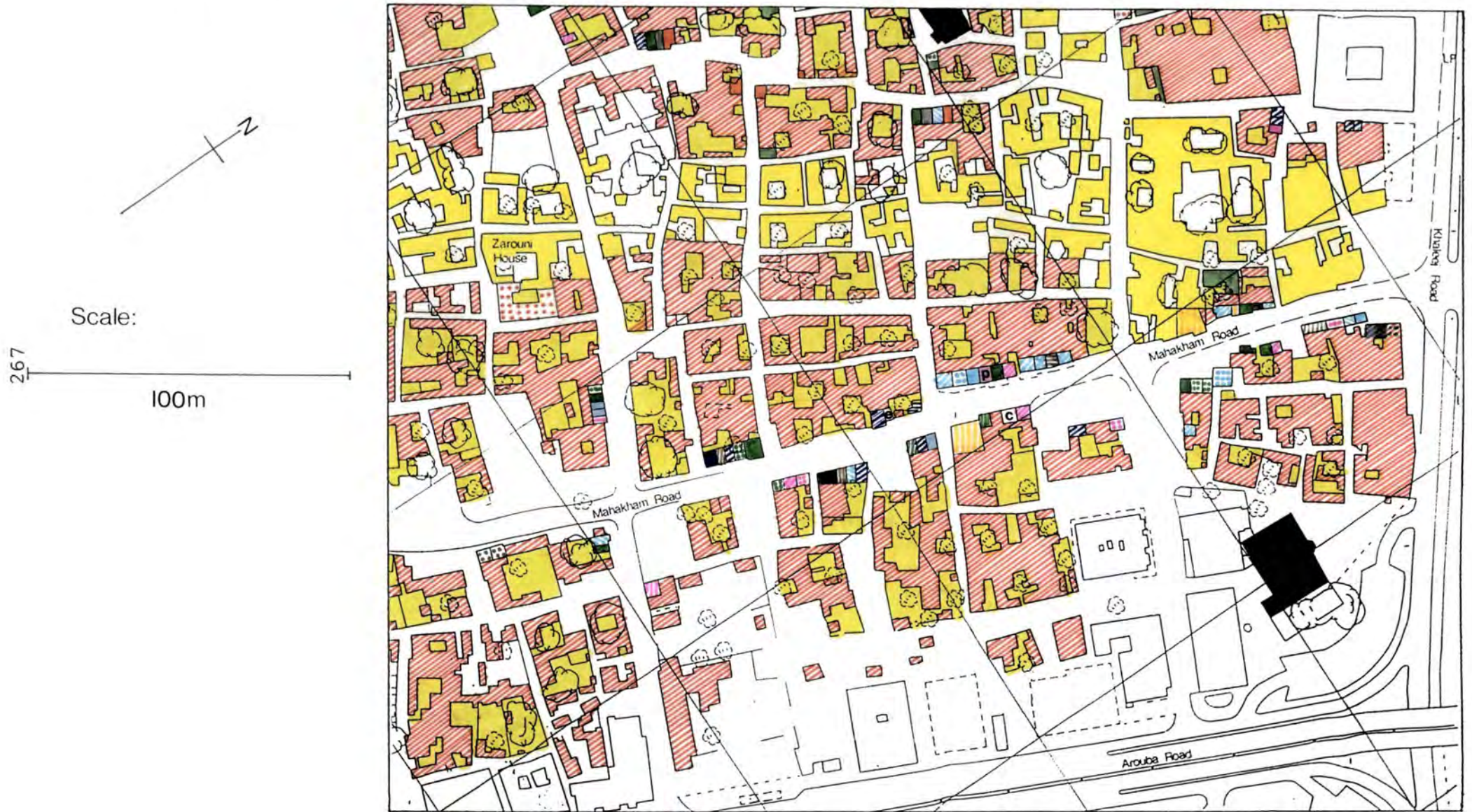
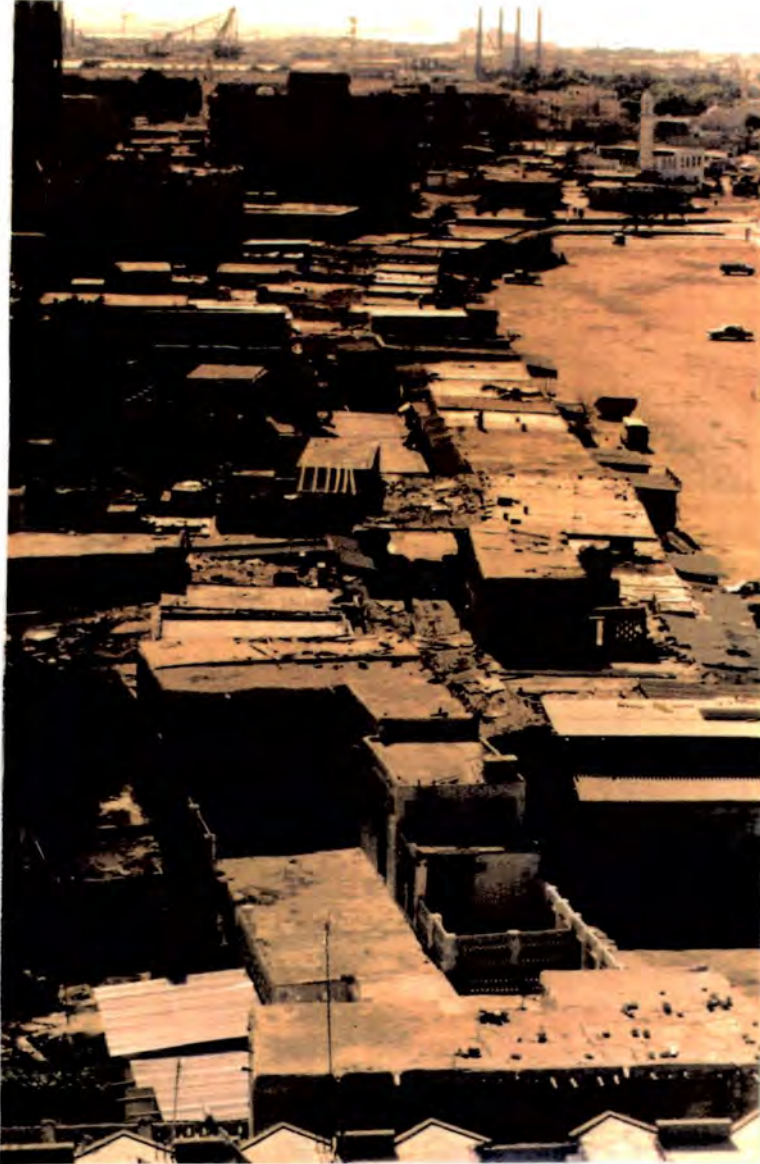


Fig. 5.9: Suq Saqr, Shuwaiheein, looking South-East (1987)



This photograph shows the main suq alley of the Suq Saqr which, at intervals, is shaded by a woven canopy of palm fronds and stems. It also shows the widest point of the suq - a distance of 7 m - opposite the two storeyed 'ghorfa' structure to the upper left centre of the photograph. A general feeling of dilapidation is reflected, with the discarding of waste materials onto the canopy.

Fig. 5.10, Suq Sagr: Northern Entrance (1987)



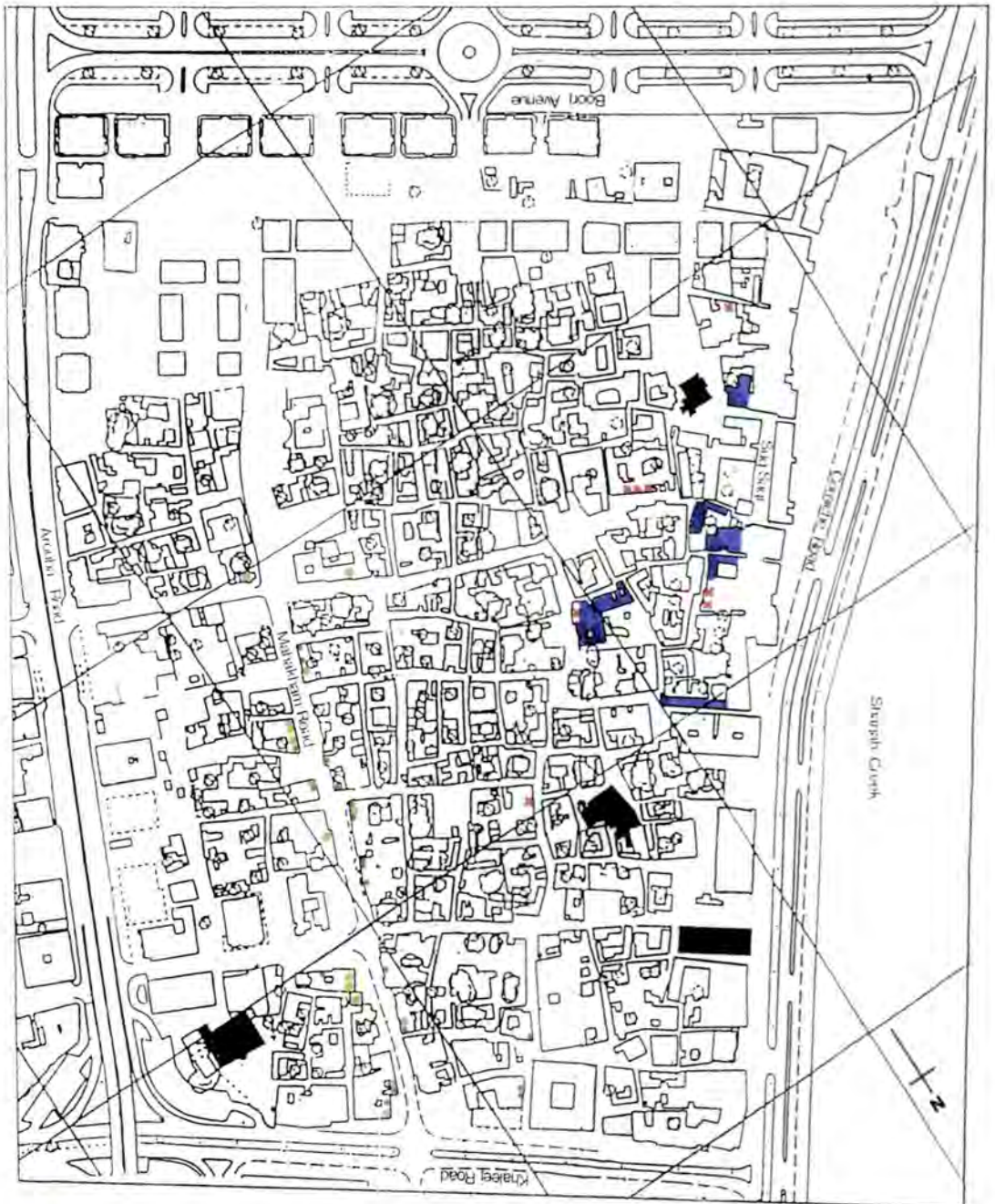
Dilapidated palm-frond canopies have been recently replaced inappropriately by the use of corrugated iron sheets which drain rain water directly onto the roofs of adjacent buildings, thus increasing their instability. The dominating tower blocks of Boorj Avenue can be seen on the horizon.


Fig. 5.11: Sug Sagr. Functions of Retail Premises
along main sug alley (1987)

	No.	% of total
Total Number of Retail Premises	103	100%
Textile/Clothing related activities (total)	57	55%
Breakdown of Textile/Clothing related activities:		
i) Textile Retailers	32	31%
ii) Tailoring	6	5.9%
iii) Ready-made Garments	6	5.9%
iv) Ready-made Garments/Perfumes	5	4.9%
v) Ready-made Garments/Shoes	1	1%
vi) Shoes	5	4.9%
vii) Bedding	2	1.9%

FIG. 5.12: SHUWAIHEEIN. THE SUGGESTED RELOCATION OF COMMERCIAL ACTIVITIES.

- *Textile related activities, South Shuwaiheein
- *Other activities, compatible with the functions of Suq Saqr.
- *Vacant commercial units, Suq Saqr area (Potential Relocation Sites)



 Properties suitable for conversion to commercial premises, Suq Saqr area.

Scale:  100 m

FIG. 5.13: MAHAKHAM ROAD. Functions of Retail Premises (1987)

	No.	% of total
a) Total Number of Retail Premises	69	100%
b) Textile-Related Activities:		
Floor Cushions and Mattresses	10	14.4%
Textile Retailers	1	1.5%
Ready-made Clothing	1	1.5%
Tailoring	8	11.6%
Total	20	29%

c) Other Compatible/Traditional Activities:

Café/Restaurant	6	8.7%
Spices and Flour Sales	3	4.3%
Bakery	2	2.9%
Laundry	3	4.3%
Carpet Sales	2	2.9%
Total	16	23.1%

Total b + c	36	52.22%
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FIG. 5.14 CONSTRUCTION MATERIALS, NORTH SHUWAIHEEIN (1987)
(Ground Floor Level)

Key:-



Coral Stones + Gypsum Mortar (no plaster)



Coral Stones + Gypsum Mortar + Gypsum Plaster



Coral Stones + Gypsum Mortar + Cement Plaster



Shell-based conglomerate bricks + Cement Mortar



Wood



Concrete Breeze-block



Decorative Cement Blocks + Cement Slabs



Demolished Properties.

Fig. 5.14: Construction Materials, Suq Saqr Area, Shuwaiheein

Scale

100m

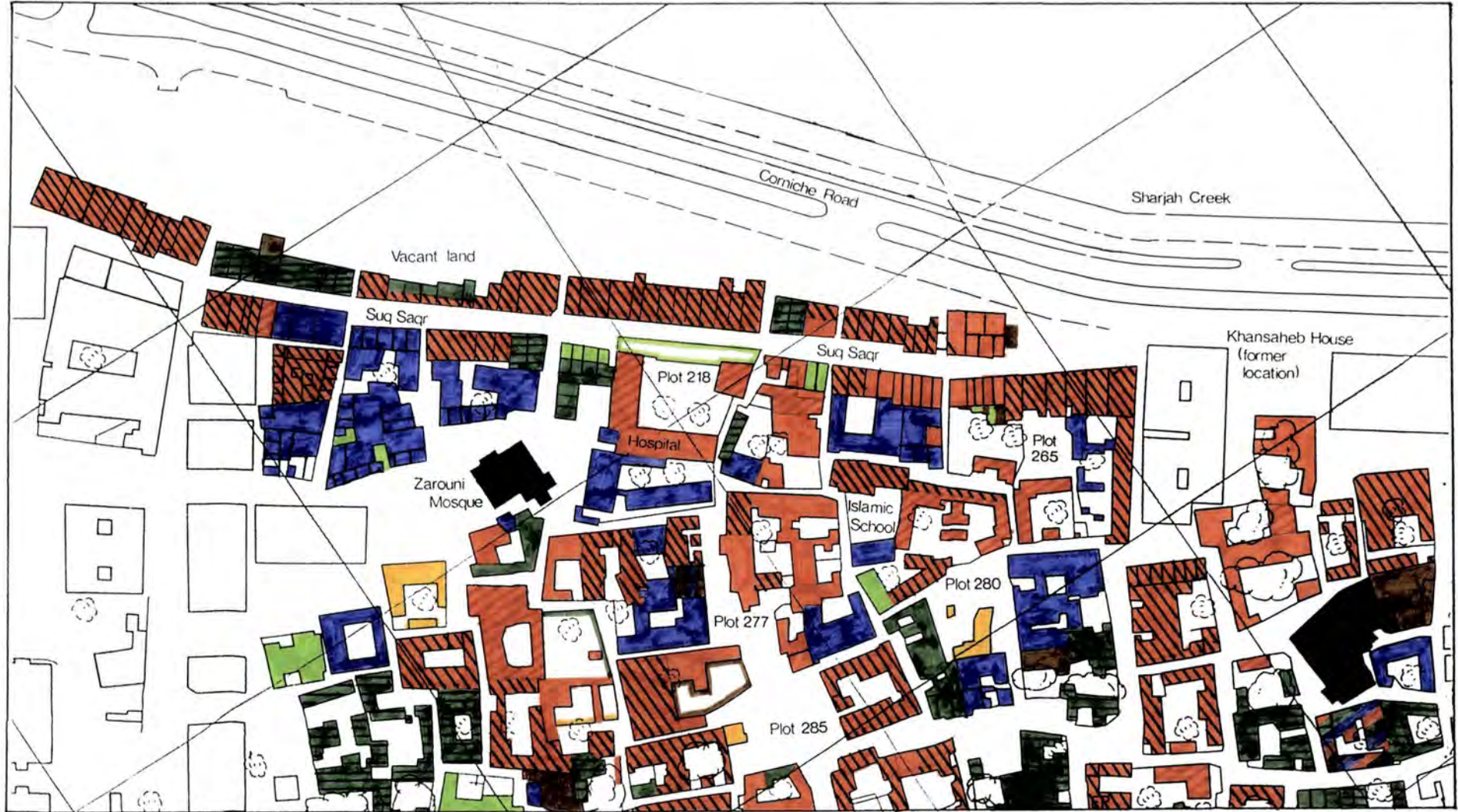
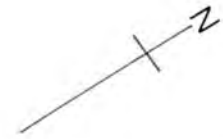


FIG. 5.15: EROSION/SALINITY LEVELS, NORTH SHUWAIHEEIN (1987)

Key:-

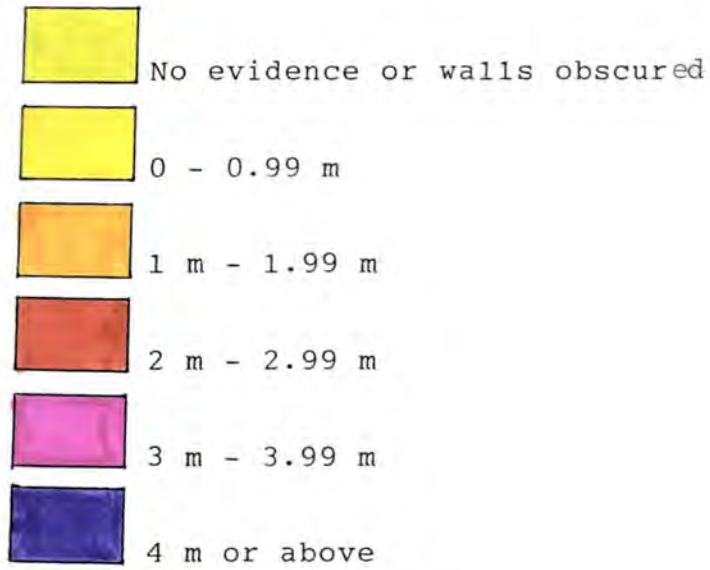


Fig. 5.15: Saline Erosion Levels - Suq Saqr Area, Shuwaiheein

Scale:

100m



Fig. 5.16: Decorative Screens (Za'arouni House, Shuwaiheein)
(1987)



An example of decorative screening in common use in the 1960's and 70's was a moulded form of concrete cement block which, when placed together, created a type of 'masherabiyyah'. This allowed occupants to look outside without being seen and encouraged the throughflow of air for ventilation and cooling. Such blocks, as above, could be used for other purposes such as ballustrades and internal divisions between rooms.

The diagram below illustrates conditions that must be met by each building to attain various categories within a given set of parameters.

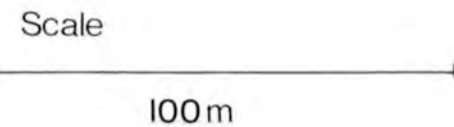
When such conditions are combined, a suitable rank can be accorded to each building.

These ranks are shown in Appendix 4.

Fig. 5.17: Graded Parameters for the Categorization of Buildings in Proposed Conservation Zones

Parameter Category	Architecture	Historical Value	Cultural Value	Structural Condition
A	Those buildings of greatest architectural merit i.e. those that contain major elements such as windtowers, upper storey terraces, decorative screens, internal carvings & decorative works. Buildings that form an architectural 'whole' or 'unit' from the early C20	Those buildings originally constructed between 1900 to 1930, or where the majority of the remaining building is from this period.	Those buildings of major cultural significance with respect to religious, traditional, or economic importance to the town. Those buildings continuing a traditional craft or function or those providing an acceptable standard of residential dwelling.	Those buildings largely constructed of original materials (coral stone + gypsum) in a state of repair that would need only minimal or superficial renovation.
B	Those buildings of significant architectural merit i.e. those containing traditional elements but with a greater proportion of later modifications and alterations. Such buildings may contain older elements copied in modern materials, but are key units in the structure of the medina.	Those buildings having part of their structure dating from 1900-1930, but with a significant proportion of their structure dating from between 1930-1960.	Those buildings of some cultural merit to a particular group of people/quarter or family that is worthy of preservation. Those buildings whose original functions no longer exist, but possess elements allowing potential re-introduction of that function.	Those buildings that with a significant amount of repair, irrespective of material of construction, could be restored to their original standard, if not their original function.
C	Buildings of little or no architectural merit in relation to traditional forms	Buildings constructed wholly since 1960	Those buildings of little or no cultural significance to the town	Those buildings that have suffered wholesale deterioration and would benefit only from recording, demolishing and rebuilding. Such buildings though unsound may be of high value in other categories

Fig. 5.18: Architectural Categories Suq Saqr Area, Shuwaiheein



Key:

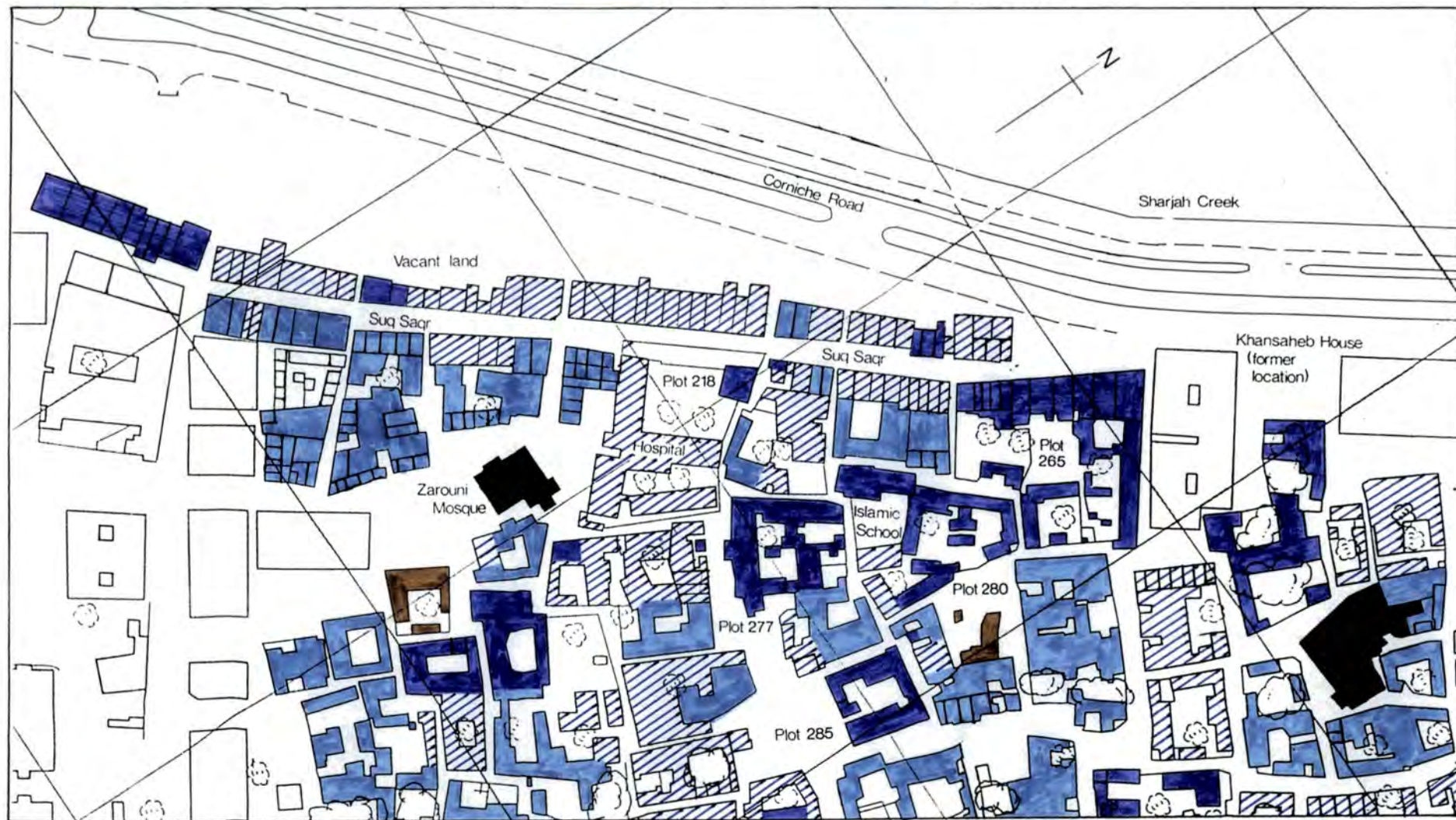


Fig. 5.19: Upper Storey Terraces (Ghorfa), Suq Saqr (1987)



The 'ghorfa' structures are located on the eastern side of the main alley at the northern end of Suq Saqr, Shuwaiheein. They form part of a cluster of similar buildings that constitute Plot 265. Of particular note in the above photograph is the presence of charcoal-stained, decorative, floral motifs of Persian origin, not witnessed elsewhere in Sharjah. Similar examples have been renovated as part of the conservation strategy recently completed in the Shaikh Saeed House, Dubai.

Fig. 5.20 Architectural Embellishments, Plot 265, Shuwaiheein
(1987)



The main architectural features are described fully in the main text, but other, minor details include original carved panels in gypsum plaster with carved 'masherabiyyah' above, to the rear of the main facade. The wooden balcony, though dilapidated, does show evidence of original timberwork and could be replaced relatively inexpensively. The whole structure retains evidence of original limewash that could be chemically analysed to find a match using local or imported materials.

FIG. 5.21: SUQ SAQR, SHUWAIHEEIN, looking South (1987)



The buildings of Plot 265 can be seen in the central foreground of this photograph. There are eleven commercial retail outlets occupying the ground floor premises of buildings on this plot, facing the main suq alley. This would be a regrettable loss if demolished, not only commercially, but to the life and vitality of the suq and its architecture.

FIG. 5.22: UPPER STOREY 'GHORFA' PLOT 218, SHUWAIHEEIN (1987)



This 'ghorfa' structure is found within the grounds of the local maternity/paediatric clinic - the Sarah Hosman Hospital - and was probably part of the original structure of the house in which the hospital is now located, the 'Bait Sirkal'. Its central, prominent location on the main suq alley, accredits its status of the highest value.

Fig. 5.23: Aerial View of Plot 280, Shuwaiheein (1987)



Plot 280 is a complete residential courtyard structure composed of sections in various states of repair. The unoccupied premises are used as an ad hoc animal pen, the trees used as grazing for herds of goats. The main entrance to the house can be seen to the right centre of the photograph.

FIG. 5.24: PLOT 280. MAIN ENTRANCE (1990)

This noteworthy entrance contains the following elements; a fluted, semi-circular archway over an original, rectangular wooden doorway. This is surmounted by a carved, flower-vase decoration around an air-vent. There is also an inscription from the Holy Qur'an carved in a panel above the arch, to the sides of which are Persian-style motifs carved into the plaster at the corners of the rectangular portico which forms the exterior of the entrance portal.

Fig. 5.25: Windtower or 'badgir'; Plot 277, Shuwaiheein (1987)



FIG. 5.26: THE PROPOSED SUQ SAQR CONSERVATION ZONE,
NORTH SHUWAIHEEIN (1987)

Key:



Buildings of Rank 1)



Buildings of Rank 2)



Buildings of Rank 3)




Buildings of Rank 4)

) Details of ranks
) can be found in
) Appendix 4

==== Limits of Zone

Optional Areas

Fig. 5.26: Proposed Suq Saqr Conservation Zone, Shuwaiheein

Scale:  100 m

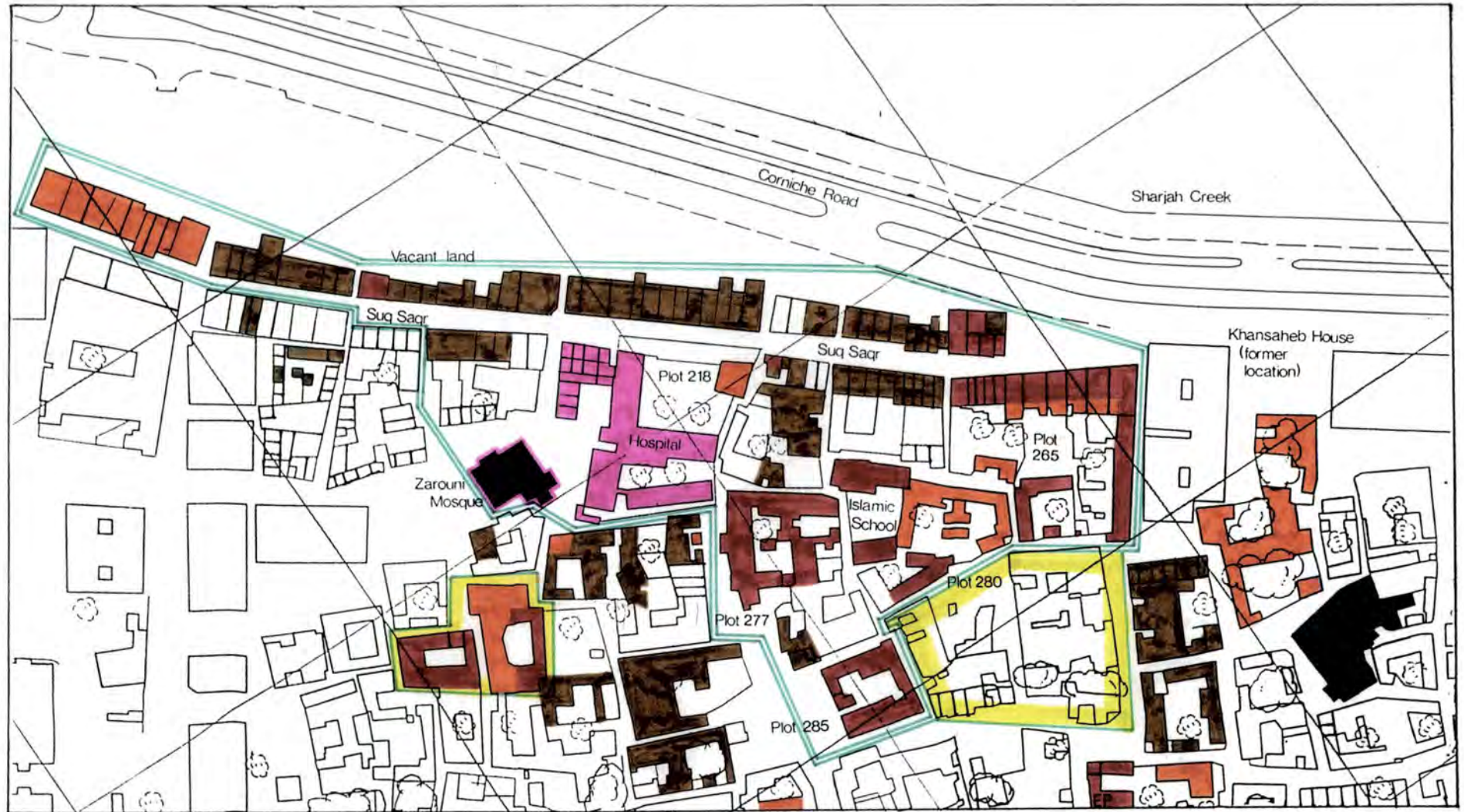


Fig. 5.27: The Proposed Salahadin Conservation Zone

Scale  50m

Key:  Limits of Zone

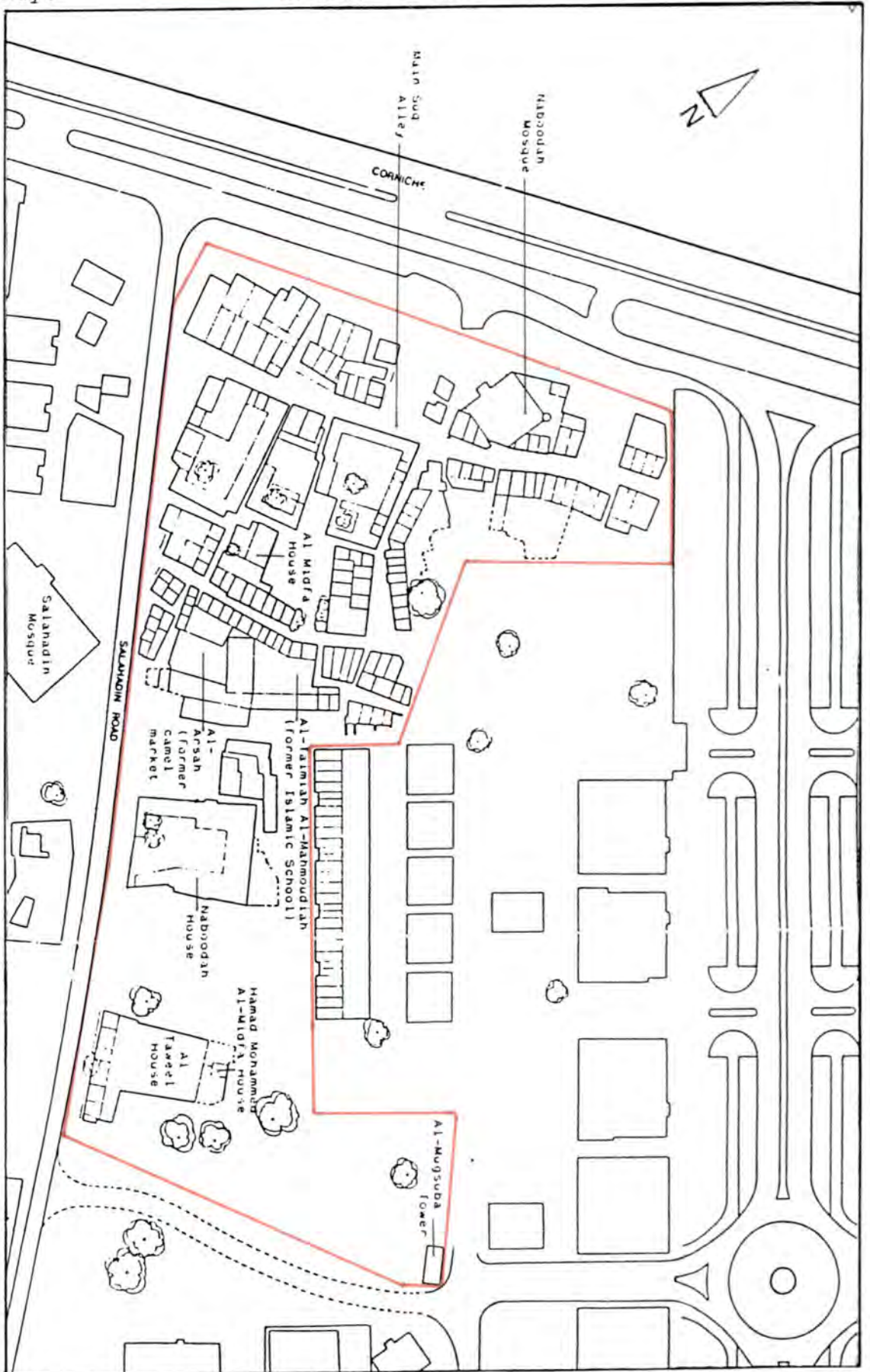


FIG. 5.28: AL-MIDFA HOUSE, SALAHADIN ZONE, MARIJA (1987)



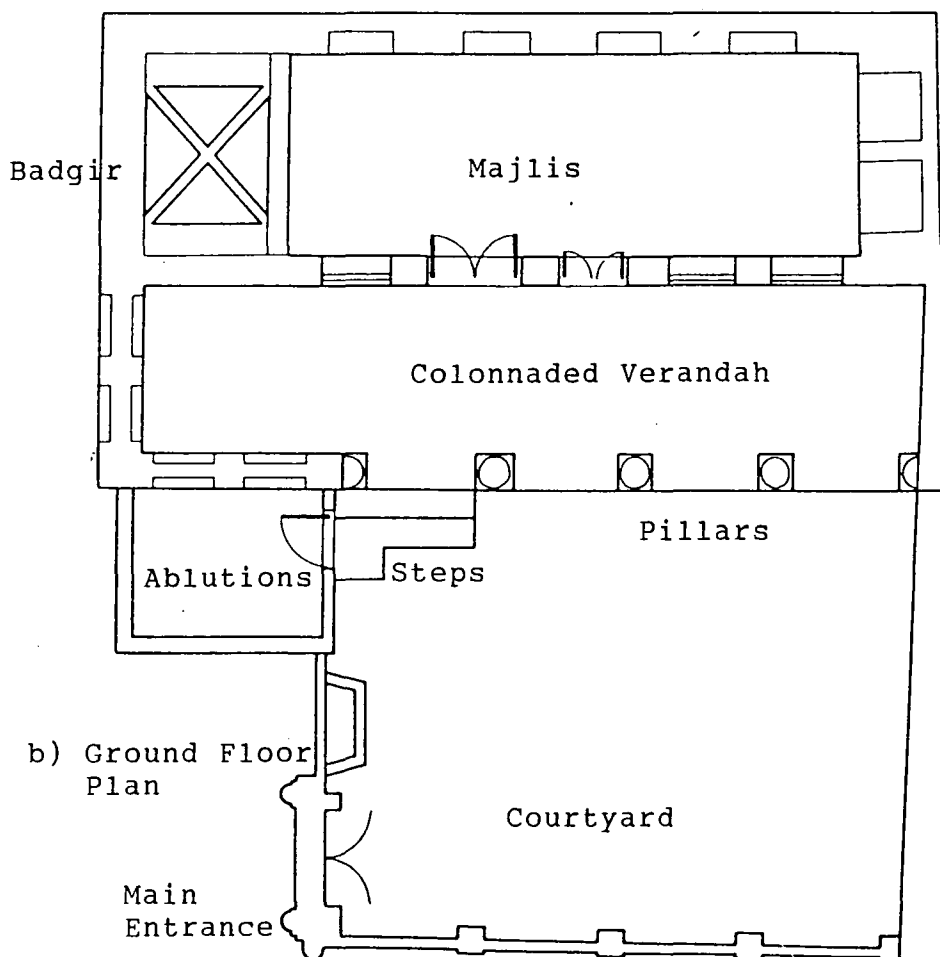
With its unique cylindrical windtower, the Al-Midfa House is a unique feature of Sharjah's urban heritage. It was originally used as the mens' majlis for the Al-Midfa family, then converted for use as the Sharjah Tourist Centre before its disuse in the mid 1980's. It can be clearly seen how the house fits into the labyrinth of alleyways in this area.

Fig. 5.29 Al-Midfa House, Salahadin.
(After Christof et.al)

(1987)



a) Interior Elevation of Courtyard Wall facing West.



b) Ground Floor Plan

Scale 1:50

Fig. 5.30: Entrance, Al-Midfa House, Salahadin (1987)



Fig. 5.31: Al-Naboodah House. Ground Floor Plan (1987)
(after Christof)

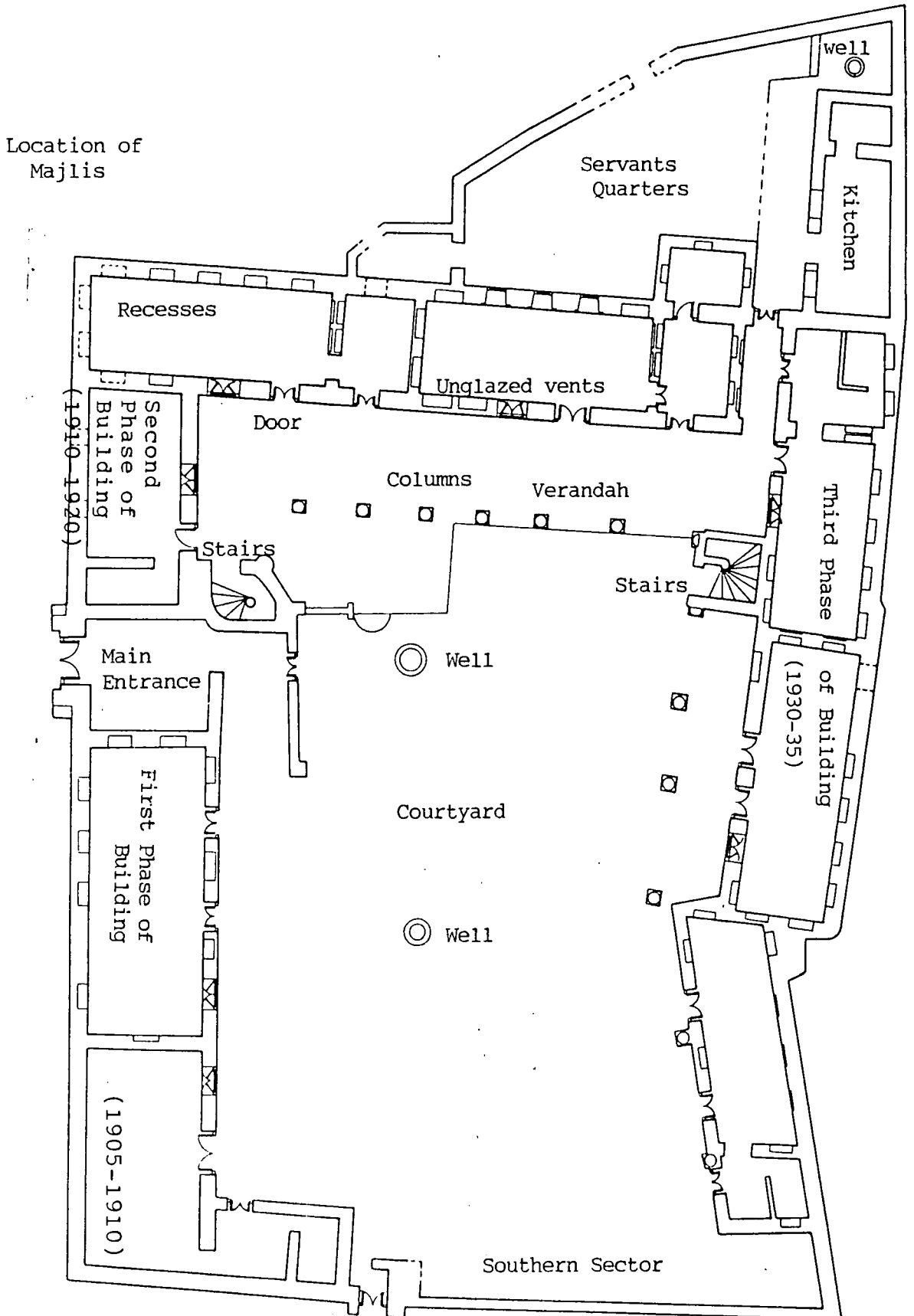


FIG. 5.32: AL-NABOODAH HOUSE, COURTYARD INTERIOR (1987)
(Western Section)



As well as the intricately carved screen above the unglazed window to the right, in the foreground is seen the location of a former well, now filled in with rubble. This section is the oldest part of the house.

Fig. 5.33: Al-Naboodah House, Northern Colonnade (1987)



The Ionic Columns constructed from whole teak trunks were imported ready-carved from India. Note also the decorative plaster work of Indo-Persian origin on vents of the ghorfa behind.

Fig. 5.34: Al-Naboodah House: Constructional Weakness (1987)



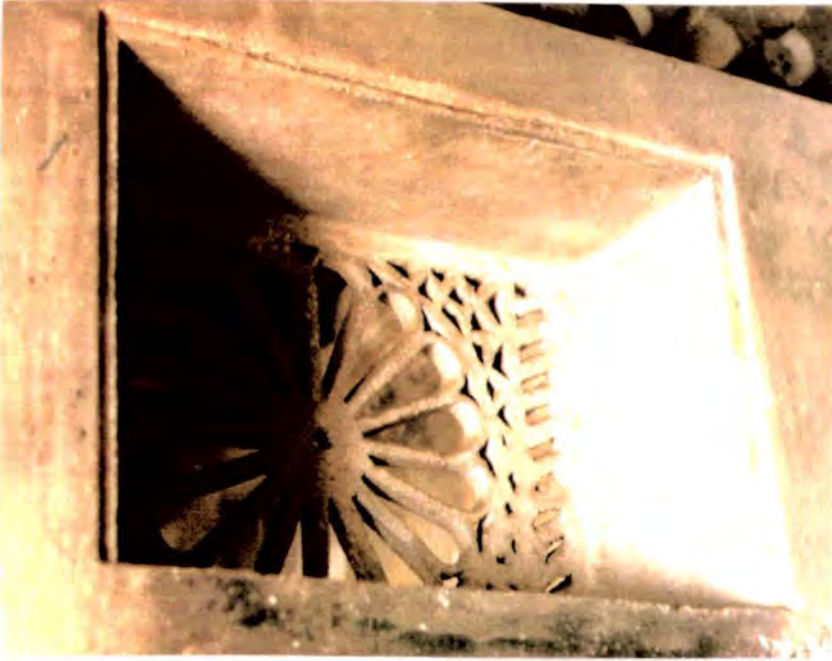
The instability of building a wall around a column already in place is quite clearly illustrated here. There is severe cracking of the wall along the length of the column causing severe weakness throughout its depth.

Fig. 5.35. Al-Naboodah House. First Floor, Eastern Section (1987)



Note the intrusion of capitals through the roof from columns below. These are pierced in readiness for the insertion of vertical structural supports for further building at first floor level, possibly a temporary canopy.

Fig. 5.36: Al-Naboodah House, Interior Carvings. (1987)



These carvings, used as ventilation screens are an integral feature of the Naboodah House. They are carved from a gypsum-based plaster, similar to the mortar used to cement coral blocks in main structural walls. A high level of skill is demanded to produce masonry of such high quality in such a delicate material.

FIG. 5.37: THE MUGSUBA TOWER, SALAHADIN (1987)



FIG. 5.38: MUGSUBA TOWER, INTERIOR (1987)



FIG : 5.39: Salahadin**Commercial and Residential Land Use Patterns**

Key:

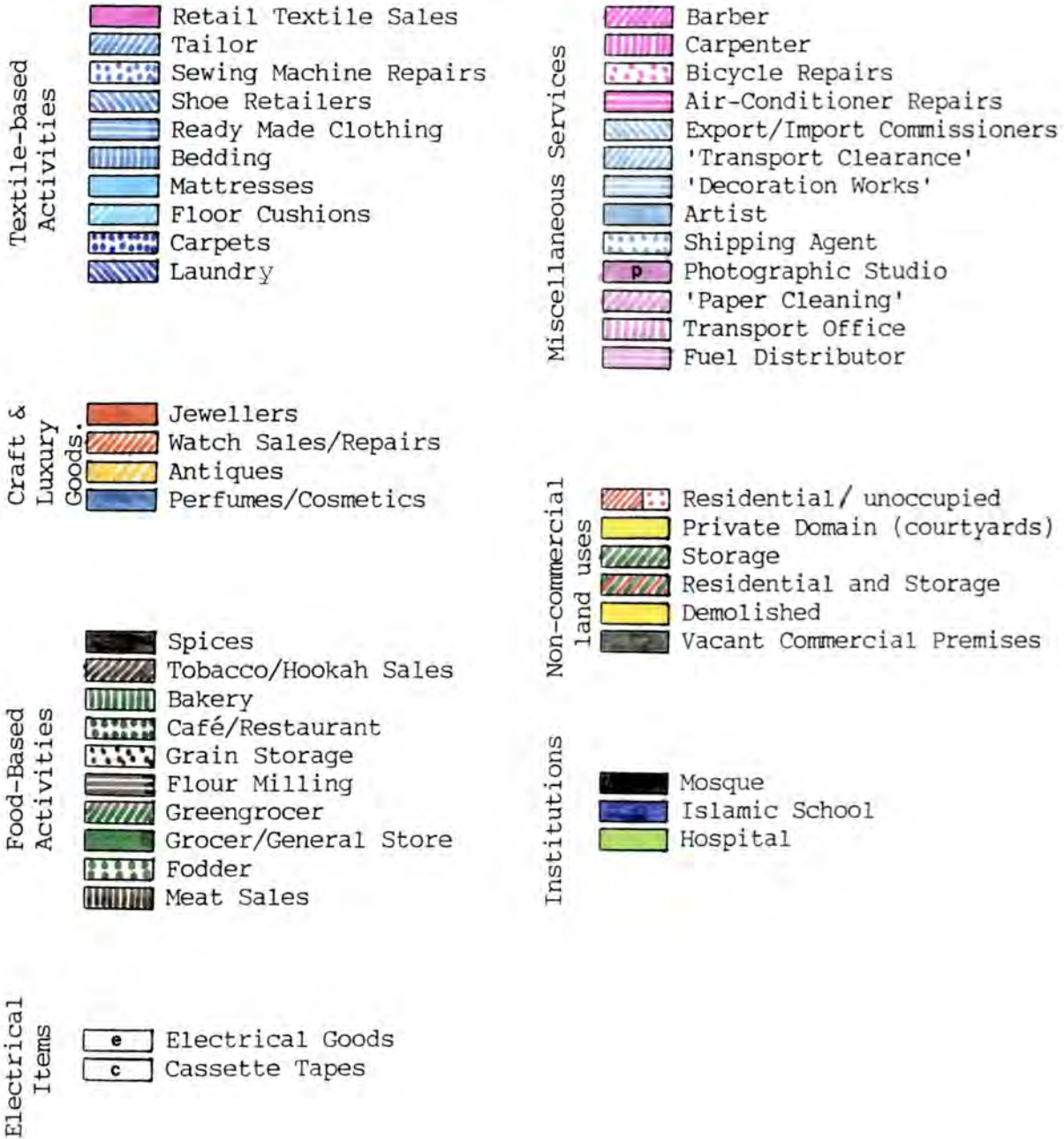


Fig. 5-39 : Commercial Land Uses, Salahadin Area.

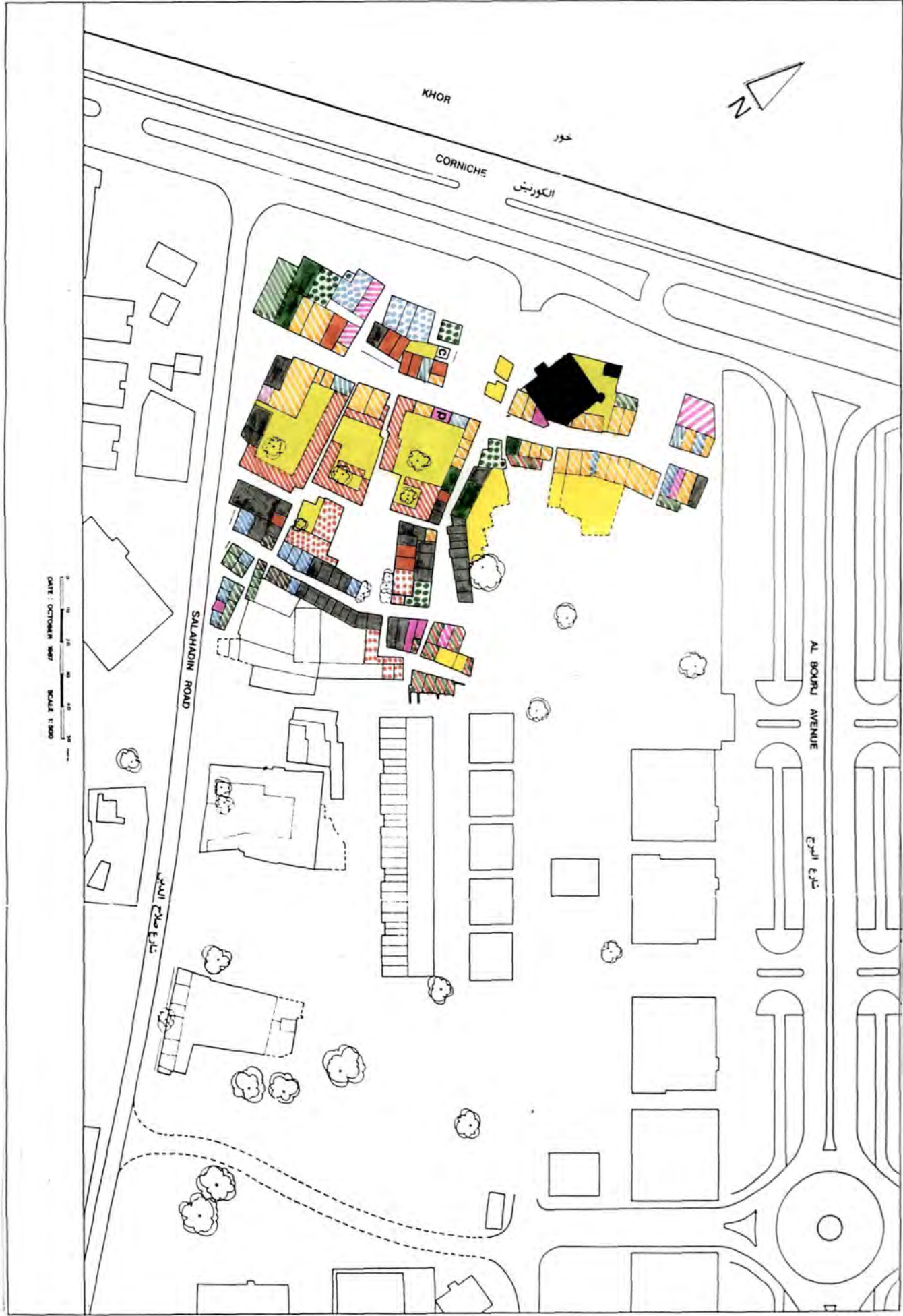


Fig. 5.40: Commercial Land Uses; Marija Suq, Salahadin (1987)

a)

	Total No.	%
Retail/Storage Premises	171	100%
Occupied Retail/Storage Premises	128	74.85%
Unoccupied Retail/Storage Premises	43	25.15%

b)

Type of Shop Unit	No.		No. as a % of <u>all</u> Retail/Storage Premises		No. as a % of <u>occupied</u> Retail/ Storage Premises	
Antiques/Handicrafts	37	47	21.64%	27.49%	28.9%	36.71%
Jewellers/Goldsmiths	10		5.85%		7.81%	
Tailors	14	17	8.19%	9.94%	10.94%	13.28%
Ready-Made Clothing Retailers	3		1.75%		2.34%	
Tobacco Sellers	4		2.34%		3.13%	
Watch Repairs	3		1.75%		2.34%	
Shipping Services	4		2.34%		3.13%	
Restaurants/Cafés	5		2.92%		3.19%	
Grocers/General St.	7		4.1%		5.47%	
Storage	21		12.28%		16.41%	

Fig. 5.40: Commercial Land Use of Occupied Retail Outlets,
Marija Sug, Salahadin

c)

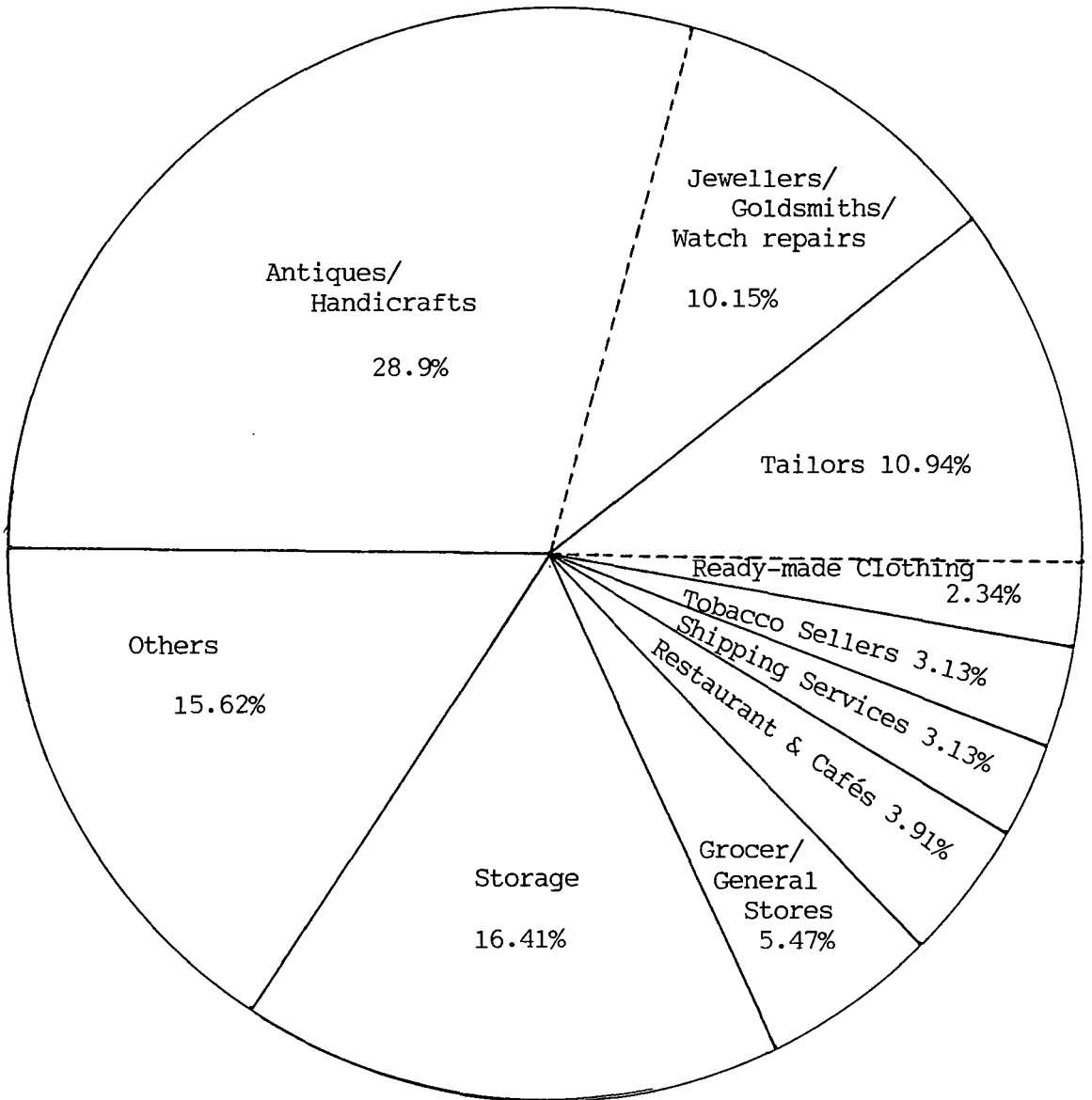


FIG. 5.41: NEW SUQ, SHARJAH (1990)



Sharjah city is noted particularly for its wealth of highly original and controversial design of suqs. The New Suq consists of two barrel-vaulted alleys connected by pedestrian bridges containing retail units on each side. A similar, if less ornate, proposal could be employed to connect Suq Saqr and Marija Suq at the western end of Boorj Avenue. One of the bridges can be seen on the photograph above.

FIG. 5.42: MARIJA SUQ, SALAHADIN. VENTILATION HOLES (1987)



FIG. 5.43: TOBACCO SELLERS' SHOP/STORAGE UNIT (1987)



The grading and selling of tobacco by traditional methods continues today. Goods are stored at floor level, with furniture kept to the basic minimum. Importers and sellers of the 'nargeelah' or 'hookah pipe' are located in the immediate vicinity.

FIG. 5.44: THE SAID AL-TAWEEL AND HAMAD AL-MIDFA HOUSES
SALAHADIN



This photograph illustrates the two main elements remaining of these houses: the windtower and three-storey, crenellated tower. Sadly, a large proportion of the houses has deteriorated into rubble, but an image of their former grandeur can be gained from the two elements above.

The windtower structure is all that remains of the Hamad Al-Midfa House and the crenellated tower is the remaining section of the Said Al-Taweel House.

FIG. 5.45: THE HAMAD AL-MIDFA HOUSE, DETAIL OF WINDTOWER

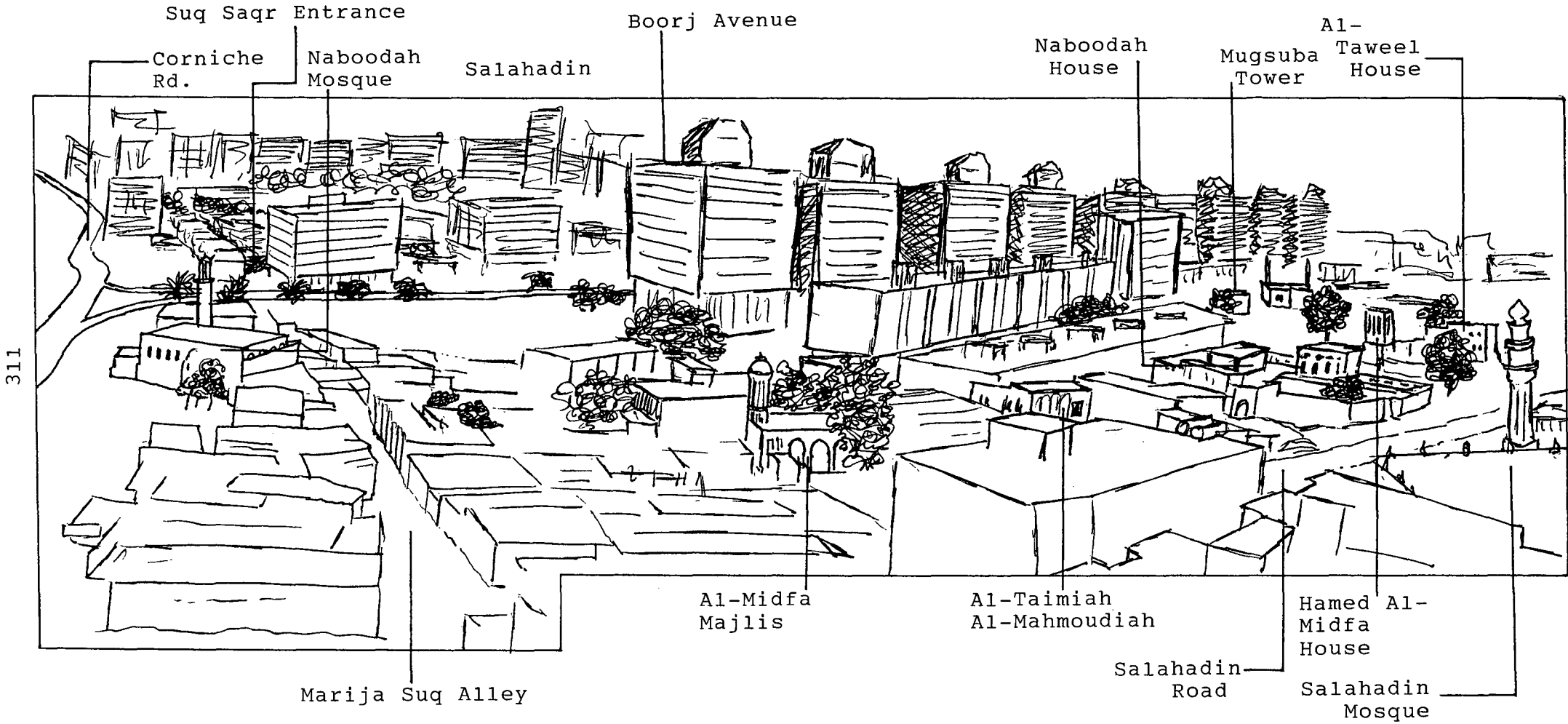


Illustrated here are unique architectural details on columns of the windtower. A stepped spiral is carved into the gypsum of the main support column. A double-chamfered curve is placed above a decorative panel to the left, this pattern being repeated on all faces of the tower.

FIG. 5.46: THE Taweel House: A Fortified Residential Structure



FIG. 5.47: THE PROPOSED SALAHADIN CONSERVATION ZONE, MARIJA (1990) (Key to photograph overleaf)



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CHAPTER 6

THE MARIJA CONSERVATION ZONE

(Residential Structures)

6.1: Introductory Statement

Like the proposed Suq Saqr Conservation Zone the residential structures contained within South-West Marija have been completely overlooked as potential candidates for preservation. The following study will attempt to illustrate why this area should be accorded the same status as Salahadin and encourage authorities responsible to extend their conservation work to this zone.

The proposed Marija Conservation Zone differs from the two previous zones in that the built forms therein are residential structures dating from the first half of the twentieth century, as opposed to the chiefly commercial functions of Suq Saqr and Salahadin. The Marija Zone is located in the South-West section of the more extensive area generally known as 'Marija' (see Fig. 6.1) and is the part of the old urban core of the city that has been neglected and therefore overlooked as a potential conservation scheme.

The main built forms of the Marija Zone are courtyard houses constructed between 1910 to 1960 in materials similar to those of Salahadin and Suq Saqr i.e. coral blocks, gypsum mortar, lime-based plasters and 'chandal' or palm-trunk roofs, but this study is not intended as a general examination of courtyard houses, rather to illustrate the indigenous architectural forms, illuminating buildings of note and to

suggest which properties should be preserved and how this could be implemented.

It must be stated however, that many of the most substantial and better maintained properties in Marija remain occupied and access to them was denied. Thus, illustrations provided here tend to represent properties that have suffered from neglect since their abandonment at various times in the past decade and may not be the most superior structures of the zone.

It is hoped this study will demonstrate why this part of Marija should be designated as a conservation zone. It will show the variety of residential structures and therefore the ingenuity of local craftsmen in their - often successful - attempts to ameliorate the harsh climate and to maintain an Islamic lifestyle in the built form of a house. It will highlight their significance to the nation's domestic architectural heritage and illustrate how indigenous architectural forms can be adapted for modern usage. It will also examine the circulation structure of passages, culs-de-sac and alleyways common to medinas and show how this will survive if the residential structure of the Marija Zone are preserved.

To what extent then, do these structures represent those of a typical Islamic medina? In what ways do they differ and which elements justify their inclusion in a conservation project? The following examination will attempt to answer these questions.

6.2 A Classification of Buildings: Marija Zone

Using identical parameters to those of the Suq Saqr survey, a composite map can be constructed to formulate a conservation zone in Marija. Once more, it must be stated that realistically, not all buildings can be preserved and substantive justification must be offered for those recommended as part of the scheme.

6.2i Materials of Construction

a) Barasti (Known locally as 'douon' or 'den')

Lorimer, in his survey of Sharjah in 1902, stated the following:

"Good, masonry buildings are numerous, but the bulk of the town consists of date-branch huts; the streets are a labyrinth of narrow crooked lanes winding between the date-mat walls of the courtyards." (1)

Here are mentioned the two most common forms of construction materials used throughout the nineteenth and twentieth centuries until cement and concrete began to invade during the decades of the latter twentieth century. Masonry - that is coral rag, locally collected and cemented with a gypsum/lime-based mortar - would represent the residences of the richer, merchant families of the town, while the more flimsy, less expensive date-branch structures would house the poorly paid manual workers. 'Barasti' is the general term for a method and type of building that consists of the inter-weaving of

sundried, palm-leaf strips between palm-trunk supports, connected at joints by course rope. Such buildings are also referred to as 'arish'. This style of building could be found in Sharjah medina into the early 1970's, as Fig. 6.2 shows. Barasti structures could be quite elaborate, containing elements more usually associated with masonry buildings of a similar age. A surviving example reconstructed in Al-Fahidi Museum, Dubai (see Fig. 6.3) displays an effective wind-tower (badgir) constructed from wood, sack cloth and palm-fronds which is extremely effective in the ventilation of the room below.

A barasti dwelling such as this could form but one element of a courtyard arrangement, housing one branch of an extended family. Such courtyards can be seen on Fig. 6.2 with a surrounding barasti wall demarcating the physical extent of the property and providing further privacy for the family. There are no barasti structures surviving in the Sharjah medina. The only example remaining is found beside the Khaled Lagoon and is known as the 'People's Cafeteria'.

This is a highly successful attempt to recreate the atmosphere of a traditional cafeteria using a barasti structure (see Fig. 6.4) and an idea that could be incorporated into a conservation scheme.

b) Masonry

The most common materials used in the construction of buildings in the nineteenth and early twentieth centuries were a conglomerate of two main elements; large irregular blocks of petrified coral, locally called 'farush' or 'hasa' and a gypsum-based mortar containing shell fragments and lime, known as 'juss'. These elements can be seen clearly in Fig. 6.5. In Dubai, as Rogers (1982) states:

"Construction of the houses
relied on the beam and column
principle." (2) (see Fig. 6.6)

but with a mixture of red clay and manure called 'sarooj' to cement 'farush' blocks in place of 'juss' on columns. There were also pebble and rock fragments (known as 'hasa') incorporated into the conglomerate (3). Wooden poles were laid laterally to support beams and vertically through pillars to prevent the distortion of columns and increase the overall stability of the structure. A gypsum-based plaster was applied to both interior and exterior wall surfaces as a binding and coating agent sometimes whitened with locally manufactured lime-wash. Foundations for walls were typically one metre deep and two metres wide (3), although this could vary (depending on the size and type of building), containing 'sarooj' and stones. It is stated that the mixture was stronger than gypsum and better than cement, as it does not increase the thermal conductivity of the masonry.

Lewcock (1978) has witnessed another variation on foundational structure:

"mortar manufactured from lime, wherever available, was preferred for the foundations and the corners of buildings. Gypsum mortar was then used for pointing the joints of face stonework or brickwork." (5)

Wulff (1966) provides a description of the construction of the foundations in similar properties in Iran. He concludes by stating:

"Within three to four weeks [of them being laid] these foundations have sufficiently set to begin building the walls. In due course, the lime-mud-stone mixture becomes as hard as rock." (6)

Wulff's comparison is interesting, as many of the builders of Sharjah's older properties were either immigrants from Iran, or their direct descendants, likely to have brought skills, described above, with them, applying them to the construction of Sharjah's houses.

Whether lime or clay based foundation, the unifying element is that all components of masonry building were locally available in large quantities (with the notable exception of wood) and were used extensively in all the towns of the southern Gulf coastline.

The combination of 'farush' and 'juss' is the predominant construction material in the proposed Marija Conservation Zone (see Fig. 6.7). In many dwellings it is combined with other materials, particularly a rendering of cement plaster administered at a later date as an attempt to remedy the erosion of 'juss'.

The effects of this will be discussed shortly. Another common material is shelly cement brick with concrete cement mortar, used to reinforce crumbling gypsum/coral structures, as in Fig. 6.8. Such materials suffer from erosion by saline solutions, but contrary to farush/juss structures, the bricks are eroded leaving mortar protruding. Concrete breeze-block constitute the remainder of construction materials in the Marija Zone.

Buildings constructed of farush/juss (coral/gypsum) are generally those of greatest antiquity (1910-1930) those of breeze-block the most recent, with the shell-brick structures as an intermediate phase. The vertical expansion of dwellings was often initiated several years after the ground floor accommodation had been completed, depending on the growth and development of the extended family and economic welfare of the family unit. Therefore, it is not uncommon to observe an upper storey of shell-brick or breeze-block superimposed upon a much earlier level of farush/juss. Structures erected in this early phase of construction are well scattered throughout south-west Marija, but form a particular concentration in an area centred upon the Al-Mananah Mosque (see Fig. 6.7). Shell-brick and breeze-block buildings dominate the periphery of this zone and extend beyond the scope of this survey to the East and South, where no farush/juss is found.

6.2ii Salinity Levels

Though such measurements can only provide a very approximate guide to the effects of subterranean saline erosion (the infiltration of chemical salts by capillary action into the foundations and walls of buildings), the height to which this has penetrated exterior walls can provide an illuminating if synoptic, indication of the physical structure of the building.

On Fig. 6.9, recorded salinity levels of exterior walls in residential premises of South-West Marija can be seen. There is a broad correspondence with high salinity levels and material of construction. Farush/juss structures tend to be more susceptible, with the highest concentration of severe saline erosion centred upon the Mananah Mosque. This would not be entirely unexpected, as this nucleus of properties are amongst the oldest surviving buildings in Sharjah and have been abandoned for many years. Occupied premises of a similar age have received regular maintenance and therefore survived in a more stable condition. An excellent example of this is the Khalid bin Ibrahim House, a large, two-storeyed, multiple courtyard house where salinity levels are generally below one metre high, the exception being the northern corner where this rises to two metres. Though this may be considered high, when compared to unoccupied plots such as the Hassan Al-Farsi House, where walls are affected four metres above ground level, the contrast is immediately apparent.

6.2iii Architectural Merit

There are two major architectural features that dominate the urban landscape of the Sharjah medina: the windtower (badgir or locally, barjil) and the first floor terrace (ghorfa). These two features are relatively abundant in Marija, once more roughly concentrated on an area around the Mananah Mosque (see Fig. 6.10). Badgir vary both in the quality and variety of construction. Each one is unique, but some have suffered from decay and erosion more than others. An illustration of this can be seen in Figs. 6.11 and 6.12. There are similar patterns exhibited by 'ghorfa' structures, examples of which will be discussed in various case-studies.

Numerous other minor architectural features combine to create an idiosyncratic urban landscape, reflecting the skill and artistry of the original masons and craftsmen. Their proficiency is even more admirable, when it is considered that:

"to this day no drawings are prepared for the building of an ordinary house. The common practice is that owner and builder 'draw' the plan on the actual site by marking the walls with powdered lime or gypsum." (7)

An example of such minor features is a form of buttress, supporting a length of wall (as in Fig. 6.13) or at specific corners of the exterior (see Fig. 6.8). These buttresses were constructed of the same farush/juss of the walls but tapered at the summit to provide stability for the supported structure.

6.3 A Grading of Built Forms

The proposed Marija Conservation Zone is illustrated on Fig. 6.14. It displays the four ranks of buildings, details of which can be found in Fig. 5.17 and Appendix 4'. A discussion of these ranks with reference to the Marija Zone will now follow.

It will suggest prioritization of individual and/or collective built forms with respect to a series of factors: financial limitations being a major influence on any decision made.

6.3i First Rank Buildings

First Rank Buildings (coloured red on Fig. 6.14) should receive maximum priority according to the factors listed on Pages 227-232. There are comparatively fewer buildings of this category in Marija compared to Shuwaiheein, due principally to widespread, advanced saline erosion, but those surviving in sound state are particularly outstanding buildings not only for the area, but for Sharjah city as a whole. Eminent among these is the Khalid bin Ibrahim House, probably the largest surviving residential structure of the pre-oil era and certainly a rare example in either Marija or Shuwaiheein of a double courtyard. Due to its continued occupation, examination could only be superficial, but nevertheless revealing. At its north-eastern corner (which incidentally is the most eroded section as Fig. 6.9 confirms) is a retail outlet known as the 'Shaheen Tailors'. An oblique aerial view of the house can be seen in Fig. 6.15. Though the Naboodah House in Salahadin has been designated as the location for

the Sharjah City Museum, the Khalid bin Ibrahim House is arguably, a superior structure. The building remains whole, unlike the Naboodah House where the southern section has been demolished. The Khalid bin Ibrahim House reflects a progression of building styles and methods from the earliest phase of construction (1910-1930) to the most recent. The result is a two-storey courtyard house containing many features that are now a rarity in the U.A.E. At the south-east corner is a simple form of windtower. It allows cooling breezes to enter only from North or South and does not display the central, diagonal division of the more common form of tower seen in Sharjah. More accurately, this resembles a form of 'windscoop' or 'badkaash', more usually inserted into the exterior wall of upper storey rooms, as Fig. 6.16 shows. Such features are incorporated into the northern wall of the Khalid bin Ibrahim House, ventilating the small, upper storey room towards the north-west corner. The upper storey of the house consists firstly of a series of flat roof 'patio' type areas surrounded by high walls, pierced by moulded decorative 'modesty screens' (masherabiyyah) and by the inclusion of gaps regularly spaced at brick joints. Such moulded bricks are also used in the construction of ballustrades, as in the south west corner of the courtyard and are known as 'shorbaak' (8). The unmoulded bricks are made of a variation of the 'juss' mixture used to bind farush at lower levels and indicates a sophistication in building methods, cement used as a binding agent.

Secondly, there are a series of at least three, possibly four, upper storey rooms or 'ghorfa'. Each room is shaded by a colonnaded verandah and ventilated by screened or shuttered windows controlling the throughflow of air. There is a variety of ventilation methods employed in the building, as Fig. 6.17 demonstrates. The main entrance of the house is situated immediately below the badkaash at the south-east corner (see Fig. 6.18).

The basically sound structure and plenitude of the building affords it maximum priority in the conservation zone. Comparatively little effort or money would be required to restore it to its original condition and it could be adapted for a variety of uses, should the authorities wish to do so. Other First Rank buildings should be considered in a similar light.

6.3ii Second Rank Buildings

By far, the majority of buildings in the proposed Marija Zone are in the Second Rank (coloured terracotta in Fig. 6.14) i.e. they are of greatest historical, architectural and cultural merit, but are structurally weak due to increased erosion through lack of maintenance. Most of the properties in this category have been abandoned, therefore deterioration and dilapidation are widespread. However, as its classification indicates, these buildings contain notable structural and decorative features, justifying consideration for their conservation.

6.3iia) The Mukhtar House (Plot 199, Marija)

The Mukhtar House (Bait Mukhtar) is located immediately south of the Al-Mananah Mosque at the centre of the proposed Marija Conservation Zone (see Fig. 6.14). It is not one of the most splendid of Sharjah's oldest houses, yet it retains a unique atmosphere and idiosyncrasy difficult to quantify. The original occupiers/owners (Mukhtar bin Hassan Al-Yousuf) were probably not as wealthy as the Naboodah or Midfa families as the Mukhtar House consists of only one storey, except for the room containing the rectangular wind-tower which descends to first-floor level (see Fig. 6.19). The plan of the house (Figs. 6.20 and 6.21) attempts to recreate its original morphology although the South-West section has collapsed and has been included as accurately as current physical evidence allows. The introverted form of the courtyard house satisfied two fundamental requirements.

Its high, blank, exterior walls with very few opening especially at ground floor level, helped to ameliorate the effects of the hot, dusty climate by providing shade and preventing dust being blown into the house. Its construction was of a form that was easily defensible. It also fulfilled the religious requirements of Islam by providing a secure, private domain for the women of the household (who could lead their lives out of the public glare) and for the children. Men usually met in a part of the house specifically designated for the receiving of male guests. It was located in such a way that the private domain of the house could not be seen directly by male visitors.

These concepts are summarized concisely by Fethi and Roaf (1986):

"An over-riding consideration in the design of such houses was the socio-religious need for privacy which coincided with the concomitant need for introverted plan form in response to the severely hot, dry climate." (8)

The exterior of the Mukhtar House reflects the introversion of courtyard forms with ventilation holes the only punctures in an otherwise uniformly bleak facade. The ends of chandal poles indicate roof levels. The only exterior opening other than vents are those of upper storey unglazed windows in the South-West corner (see Fig. 6.19) and the main entrance.

The latter demarcated the threshold between public and private domains. The door, symbolic of this divide, was often high decorated:

"The symbolic importance of the house's entrance is often emphasized by the construction of highly decorated doorways. A heavy entrance door is a common feature emphasizing the sharp line between the external public and internal private." (10)

or, as Belkacem (1982) prefers:

"These thresholds constitute at the same time a means of access and filter, establishing a sequence of penetration." (11)

The door of the Mukhtar House is solid wood with decorative metal studs, though not richly carved or painted. It contains a smaller door inset into one of the larger panels, thus having the effect of keeping out sand at ground level and forcing visitors to stoop on entry, thus deflecting their gaze from the private courtyard ahead. Unlike most courtyard dwellings, the entrance portal here is not right-angled to prevent this, but its narrowness allowed easy screening, probably by palm-leaf curtain. However, without this it would be unlikely that male visitors could see directly into the courtyard, for immediately upon entry, a door to the left affords access to the male guest room or 'majlis'.

6.3iib) The Majlis

"The allocation of separate space to men and women within the house is deep-rooted in the social values of the Arabs." (12)

The physical inculcation of this concept is the designation of a meeting room for exclusive use by men, known as the 'majlis'. It is a fundamental element of the built form

of the Islamic courtyard house, and was usually separated from the more private areas of the house which were the domain of women (the 'harim'). This detachment was enforced by placing entry to the majlis at a location

"adjacent and directly accessible to the entrance lobby." (13)

The majlis was the most important room in the house for, being the only public domain:

"the men's guest room is a symbol of the economic status of the household and is furnished with the precious possessions of the family, therefore it is generally the most decorated room of the house." (14)

Akbar (1982, see Appendix 5) details some of the physical characteristics and social functions of the men's reception room, and the Mukhtar House reflects some of these observations. The main entry to the majlis is located immediately to the left upon entry to the house (see Fig. 6.20). The double doorway is placed above a sunken 'step', allowing space for the removal of shoes before entry to the 'majlis'. The room is approximately 5 m long, 3 m wide and 2.2 m high, with a ceiling of regular, wooden planks and battens laid across the width. It is safe to assume these planks are underpinned to chandal poles, as the latter penetrate the exterior walls at ceiling level (see Fig. 6.19). There are no vents or windows on exterior wall surfaces, but two, unglazed windows on the interior, barred and shuttered face the courtyard. This arrangement is unusual, as it is uncommon for such large openings to face the private domain of the courtyard. It could be that vegetation planted in

the courtyard afforded ample screening, or that observation was difficult as windows were not at ground floor level, but at a point above head height when sitting in conversation. Shutters could also be closed when visitors were in attendance.

There are recesses placed at intervals around the majlis (see Fig. 6.20) used for the display of the 'precious possessions of the family.' (15). Another door provides access to a flat, raised, concrete area and the toilet/bathroom adjacent to the majlis. The plan of the latter is repeated at first floor level for:

"it is common for the ground floor rooms to be duplicated on the floor above since it was customary to use the ground floor in cool weather and the first floor in summer." (16)

Several features reinforce this pattern in the Mukhtar House. The majlis is the only room extended to first floor level, emphasizing its importance as a mark of prestige for the family. In contrast to the dark, shaded, lower winter majlis, the upper, summer majlis is a much lighter, better ventilated and higher (2.6 m). There are six unglazed shuttered windows at floor level, providing maximum ventilation for visitors, though none of these allow direct observation of the interior courtyard. There are also five recesses for the display of ornaments. An internal, eleven-step staircase located in the entrance lobby leads to the upper majlis (see Fig. 6.22), although alternative access could possibly be gained via step ladder placed outside the main door to the upper entrance at first floor level (see Fig. 6.19). The existence of this large, unglazed vent is otherwise

difficult to justify. Significantly, a raised, semi-circular platform is located next to the upper majlis entrance, used as a place to prepare and wash food, the drainage channel leading from it providing a conduit for waste water. Another possible explanation is offered by Coles and Jackson (1975), who state that there was a

"traditional use of roofs of houses for preserving food by drying." (17)

Fig. 6.22 affords insight into the technological methods used in staircase construction.

6.3ii c) The 'Badgir'

The upper majlis contains one of the most significant elements of the Sharjah medina skyline: the 'badgir' or wind-tower, at the northern end of the room. The basic shape of this particular badgir is rectangular. This is uncommon in Sharjah; a regular square plan being more usual (see Fig. 6.23). The function of 'badgir' are well documented but briefly: wind blowing from any direction is channelled by one of the vents down to the room below. The consequent lowering of pressure on the opposite side creates suction, forcing air up the opposite vent, thus creating a draught at the base of the tower (see Fig. 6.24). Such devices were effective ventilators of the rooms they served and were:

"cheap and efficient enough to be widely incorporated into many buildings." (18)

although they should not be considered as cooling devices because as Roaf (1980) argues:

"air is not necessarily cooled, but provides draught, therefore sweat is able to evaporate from the skin and keep cool." (19)

Roaf's (1980) observations were made of buildings in Iran, from where the windtower was introduced into Sharjah via Persian immigrants. The Persian ancestry of the native Sharjah population is reflected in other elements of the Mukhtar House, and is indeed so in almost all the remaining masonry dwellings of the Sharjah medina.

6.3iid) Other Architectural Embellishments

These elements are specifically concentrated in the eastern section of the Mukhtar House which formed the 'harim' and kitchen areas, and was thus the exclusive domain of the family and its servants. The largest room formed the main family room, doubling as a women's meeting room when necessary. The presence of a verandah prevented direct observation into the room from the mens' majlis. The family room contains some of the most attractive architectural elements, notably the ogee curves spanning decorative capitals surmounting solid, plastered columns (see Fig. 6.25), finely carved plaster panels above vents and doorways, dogtooth architrave and a variety of regularly shaped ventilation holes (see Fig. 6.26). The carved gypsum panels here are amongst the best witnessed by the author in Sharjah and indicate the great skill of local craftsmen, for as Lewcock (1978) remarks:

"the use of gypsum plaster is laborious and demanding, requiring one labourer to sift, and another to stir the wet mixture for long periods so that its rapid-setting powers are 'killed' and it becomes possible to mould and carve it over several days." (20)

The quality of carving at the Mukhtar House, may provide insight into the original owner-occupiers for, as Gazzard (1986) states:

"Often.....a craftman's or designer's family can be identified by the detailing and aesthetic quality of the carving." (21)

The house's proximity to the Al-Mananah Mosque and other units of high historical and architectural value bestow upon it status as a key element of the Marija Conservation Zone, for as Beaumont, Blake and Wagstaff (1976) state:

"The renowned urban ethos of the Islamic town was derived as much from the subtle juxtaposition of buildings as from their merit as individual structures." (22)

6.3iii Third Rank Buildings

The location of the Al-Mananah Mosque, Mukhtar House and the surrounding residential structures constitute a nucleus of First and Second Rank buildings in various states of repair. Priority has been suggested to those of the former group, but there are units worthy of consideration, containing more recent elements and reflecting a continuity of tradition and dependence upon established built forms developed in the Islamic urban environment until the advent of the oil-based economy. Third Rank buildings provide this perpetuation, and an example from the proposed Marija Conservation Zone will now be examined as an illustration of this concept.

6.3iiia) The Habib House

The Habib House lies North-East of the Al-Mananah Mosque in a residential block of six properties sharing common boundary walls, each unit being a courtyard structure (see Fig. 6.27). Plot 262 and parts of Plot 264 have been demolished recently, leaving unsightly gaping holes in a once cohesive block. Very few such structures from the early twentieth century survive in Sharjah, so the Habib House is worthy of further analysis and will provide interesting comparison with the Mukhtar House.

The northern half of the interior is quite distinct from the southern section of the courtyard, in that both lower and upper storeys date from the 1960's, while parallel storeys in the southern part date from the earliest period of masonry building surviving in Sharjah (1910-1930). It is this manifest division that renders this property unique in that both halves differ greatly superficially, yet contain almost identical components on closer inspection, illustrating perfectly the continuity of building tradition throughout this century. The contrasting categorization (see Fig. 6.14) highlights this dichotomy.

An examination of the ground floor plan (see Fig. 6.28) illustrates both similarities and differences. Rooms both North and South are approximately the same width (determined by the length of roof poles), vary little in length and are entered via doorway under a colonnaded terrace. Akbar (1972) has noted that:

"In traditional houses the rooms are always elongated, - rooms have the same area though the function is different." (23).

The more modern, northern half is constructed almost entirely from breeze-block or concrete and contains facilities for the incorporation of modern air-conditioning units into walls, supplementing the cooling effect of breezes through high-level windows and vents. The southern half is of massive construction:

"Dynamite failed to penetrate a Sharjah house during a feud many years ago." (24)

This is exemplified by the dimensions of the farush/juss pillars supporting the roof of the colonnade (see Fig. 6.29).

The rooms of the southern and western sections of the house contain recesses as in Fig. 6.30.

In contrast, rooms of the northern half of the Habib House are higher and lighter, containing barred windows facing the courtyard. Concrete brick pillars are approximately 0.4 m square and more regular in form than those described above. The roof is less dense, being constructed of a layer of regularly spaced planks and battens as opposed to the more irregular chandal. However, the modernity of the building materials does not necessarily result in a more efficient thermal regulation of rooms, for as Dunham (1960) states:

"The materials from which the house is made can be chosen to have a large 'thermal inertia' so that it provides an interior air temperature close to the daily mean at all times of the day." (25)

Farush/juss walls significantly delay the transfer of heat from exterior to interior surfaces, as Moore (1980) recognises:

"The thick, exterior walls and roofs slowly absorb heat from direct solar radiation, both diffusing and delaying its impact on interior spaces." (26)

Conversely, concrete is an excellent conductor of heat and a poor temperature regulator. Thus, on the northern side of the house interior temperatures would rise rapidly, quickly becoming uncomfortable and thus requiring electrical means of air conditioning. This fundamental contrast is repeated in roof construction, where as Danby (1980) states

"Thermally, the traditional roof is much superior." (27)

An example of the constructional techniques used in roof building is given by Wulff (1966) (see Appendix 6) and witnessed in the Habib House, particularly in the first floor rooms (see Fig. 6.31) where local techniques can be seen at first hand.

The roof was limewashed, for as Danby (1980) discovered:

"by painting the horizontal surface of a traditional mud roof with limewash..
...it was found that the difference to the internal air temperature.....was 10°C" (28)

No such methods are found on the northern half of the building where layers of mud and concrete alternate over heavy, wooden beams, transferring heat by osmosis to the rooms below.

6.3iiiib) The Courtyard

The courtyard space itself is a vital element in thermal regulation. Commenting on observations in Makkah, Saudi Arabia, Fadan (1980) recognizes a three-fold classification of courtyard houses:

- i) the simple plan, one courtyard house
- ii) the compound plan, two-courtyard house and
- iii) the complex plan, two-courtyard house (29)

though there are two separate parts in each type of house (male and female domains). He continues, stating that the horizontal expansion of a courtyard house on a plot is due to family growth. In Sharjah, almost all houses are of simple plan, with expansion - both horizontal and vertical - determined by the numerical growth of the extended family.

Al-Azzawi (1986) commenting on similar structures in Baghdad, provides an accurate definition of courtyards such as those found in Sharjah, being:

"an internal, enclosed space, open to the sky with habitable rooms and spaces and ancillary areas grouped around it and looking inwards towards it for daylight and natural ventilation and communicating with it directly." (30)

Fethi and Roaf (1980) note that

"The size of the courtyard effects the efficiency of its performance as a heat regulator." (31)

and Al-Azzawi (1986), recognising this fact states that to be of greatest micro-climatic benefit,

"the length and width of a courtyard should be smaller than its height." (32)

However, Akbar (1982) suggests factors other than climatic regulation are considered in the proportions of courtyards in Riyadh:

"The relationships between area and height differ according to region and the degree of affluence of buildings." (33)

In Sharjah's courtyard houses, factors described by the above authors are evident. The Habib House is of simple plan, constructed at various stages of the twentieth century as the family expanded. It broadly conforms to Al-Azzawi's (1986) definition, and on inspection of ground floor plans (see Fig. 6.28) and exterior elevations (up to 7 m high) its length and width are certainly smaller than its height, creating an effective micro-climate within the house. However, not all courtyards in Sharjah conform to this generalization, one such exception being the Mukhtar House, where both length and width of the courtyard are significantly greater than the height.

6.3iiiic) First Floor Rooms

At first floor level, the Habib House consists basically of two main rooms placed at the South-West and North-East corners and reflects the contrasting materials and architectural styles of ground floor rooms. The first floor rooms are locally termed 'ghorfa' and were used as sleeping accommodation in summer months. An upper floor majlis for summer use would be in the form of a ghorfa. The only other reference to the term 'ghorfa' is by King (1977) in his article on the Architecture of Eastern Arabia (34) where he states that 'rooms are normally called 'ghurfa'; although this reference does not specifically mention first floor location or seasonal use. 'Ghorfa' tend to replicate the dimensions of rooms immediately below and usually contain structural elements to ameliorate the summer climate, when such rooms are more commonly used.

6.3iiid) Summary

The self-contained dwelling unit of the Habib House is typical of the style of courtyard house erected in Sharjah during the twentieth century, but unique in that its two quite distinctive halves represent two phases of building, thus showing a continuity of technology and climatic adaptation in quite different materials. Its position as part of a residential 'island' also affords it defensive qualities and aids in climatic control as only two exterior walls are ever exposed to the direct heat of the sun. Its general state of repair, especially of the more modern, northern half should encourage its preservation: proportionately less money would be required for renovation and its upgrading to

habitable standard would be achieved quickly. Its position with respect to other properties of the zone bestows upon it key status in the circulation system of the area, being at the junction of three main routeways.

6.3 iv The Circulation System

Fig. 6.32 illustrates the intricate and secondary nature of the original circulation system of alleys and culs-de-sac in Marija. Many properties not included have been demolished at various times in the past, accounting for the large number of open spaces at points A to J, though some are original public areas.

It is immediately apparent that clusters of dwellings within the optional, yellow shaded areas (i.e. those not considered for preservation) are key elements in the circulation system, especially Area J. This poses a dilemma: should these properties be demolished, thus sacrificing the network of paths and alleyways surrounding them, or should their merits be reassessed to discover whether their preservation would enhance any proposed conservation zone? Area H poses fewer problems as properties formerly located here have been demolished and the area is not a major element of the circulation system. Major alleyways are shown on Fig. 6.32, though none of these are linked to the main suq alley, due to its demolition in this area.

6.3v Optional Zones

Optional zones within the proposed conservation area are those containing properties of no significant historical, architectural or cultural value to the city, but the land they occupy could be utilized for the positive enhancement of the zone. This could be done by relocating important buildings from more isolated positions into the urban fabric of Marija. Some examples of mosques (Khan, Layyah) now in danger of collapse would benefit from this reintegration. Defensive structures would add an otherwise absent element to the zone, but also houses of significant value to the city of comparative youth could be rebuilt in the optional zones, on condition they complement rather than detract from the traditional forms of the zone. An example of such a structure representative of several in less historic parts of Sharjah is that of the courtyard house at Plot 311, Shuwaiheein, known as the Za'arouni House.

6.3vi The Za'arouni House

This house is named after its last occupant, Mohammed Abbass Za'arouni, but is now unoccupied, bordering the demolition zone in South Shuwaiheein (see Fig. 5.8). Indeed one half of the compound courtyard dwelling has already been demolished, but the structure remaining is a self-contained unit, typical of those erected in Sharjah during the 1960's/70's, representing an expansion of a large family residence, possibly allowing further separation of male and female occupants, as suggested by Fadan (1978) (35).

Plans of the house (see Figs. 6.33 and 6.34) show the typical central courtyard with multi-purpose rooms at ground level and the men's majlis with direct entry from the entrance lobby, which is once more, not right-angled. A further entrance, west of the house would have provided access to its once contiguous neighbour as the now exterior walls suggest (see Fig. 6.40).

Roofs are constructed exclusively from regular, wooden planks and battens overlain with concrete except for a small section which is a remnant of its once adjacent older neighbour, now left hanging in the south-west corner (see Fig. 6.35).

At first floor level, more traditional features are found. Immediately apparent are the two badgir, constructed in cement but to traditional design. Moulded screens of cement, shaped 'louvre' fashion, allowing a throughflow of cooling air, are placed around the upper floor. (see Fig. 6.36).

Badkaash at first floor level rooms complement the functions of badgir as does the rather unique feature of long narrow, opening roof sections between the southern faces of badgir and the exterior South walls. Ventilation is enhanced in the summer sleeping rooms by the above three methods, often used in combination. It is likely that food was prepared at first floor level in summer, due to the presence of a recessed drainage basin in the south-west corner, reminiscent of a similar feature in the Mukhtar House.

The simple, rather stark appearance and small size of rooms in this section of the house suggests use by servants.

The Za'arouni House, through its profusion of traditional architectural elements and general sound state of repair would positively enhance the Marija or Suq Saqr Conservation Zones in either of their optional areas. It displays the continuity of building techniques and architectural forms with an added insight into the social history of the period, immediately preceding the oil based economy. Its residential function particularly complements other built-forms in the Marija Zone, which can be seen fully in Fig. 6.37.

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**FIG. 6.1: SHARJAH CITY
PROPOSED CONSERVATION
ZONES:**



Sharjah Creek

Shuwaiheein Area

Suq Saqr Zone

Salahadin Zone

Marija Area

Marija Zone

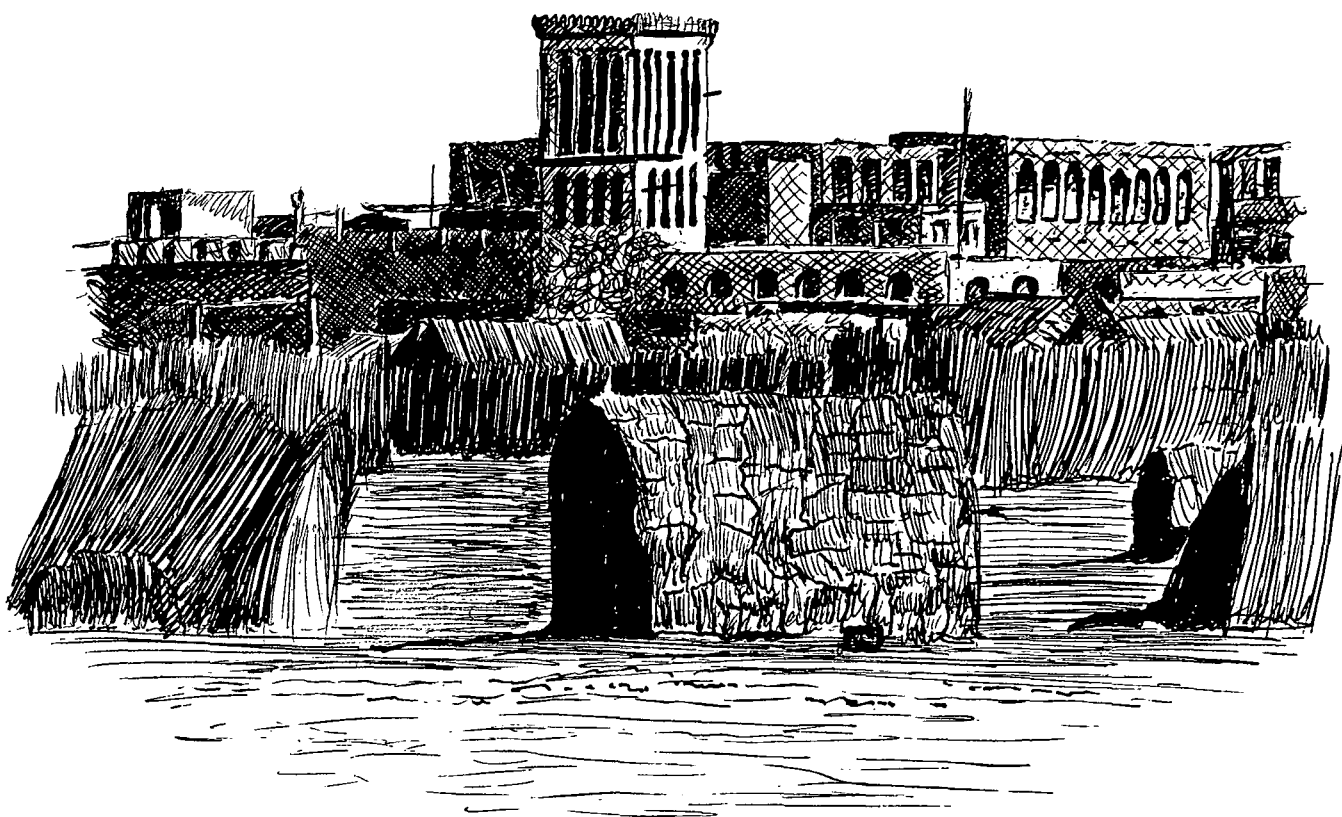
Arabian Gulf

Khaled Lagoon



Scale 1:25,000

FIG. 6.2: BARASTI DWELLINGS, MARIJA, 1950
(Sketch after a photograph by Codrai, 1950)



Seen here are barasti dwellings along the southern edge of Sharjah town. Such dwellings were used in summer, when people would move from the larger, permanent coral-stone structures behind to the cooler conditions barastis afforded.

There were however, permanently inhabited barastis at the time of Palgrave (1863) and Lorimer (1902), housing the impoverished pearl-divers and fishermen near to the shoreline of Sharjah Creek.

No such dwellings now exist.

FIG. 6.3: BARASTI DWELLING, AL-FAHIDI MUSEUM, DUBAI (1987)



The lattice weave of the palm-frond walls allowed cooling breezes to enter and ventilate the interior and where larger gaps were left between woven strands, light could be controlled. These lattices also served as a screen, protecting female occupants who could observe outside activity without being seen. This barasti also contains separate living and sleeping quarters; the latter at the rear of the structure under the pitched roof. There are also screened areas separating kitchen and washing/toilet facilities.

Fig. 6.4: Peoples' Cafeteria, Sharjah (1990)



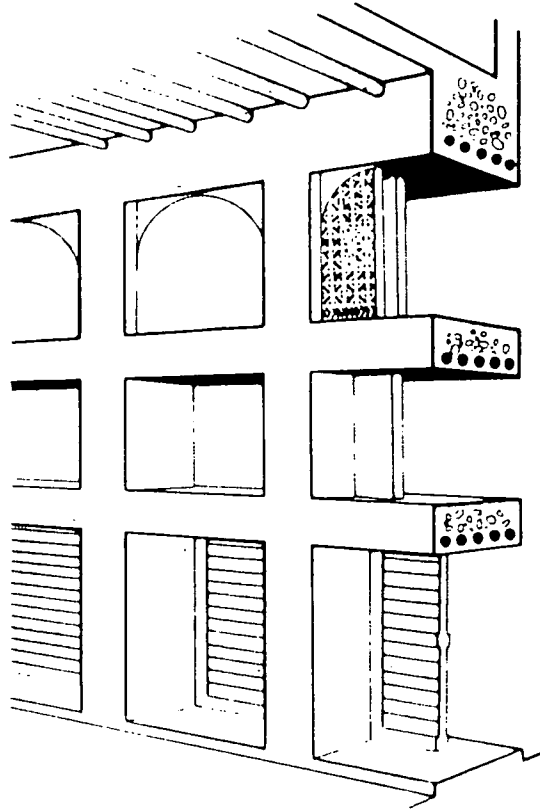
The cafeteria is the only barasti structure remaining in Sharjah city. Its popularity especially among U.A.E. residents, and its method of construction suggest that additional similar structures could be incorporated into the conservation zones of either Salahadin or Marija in the optional areas.

Fig. 6.5: Construction Materials of Early Twentieth Century Dwellings, Sharjah (1987)



Illustrated here are the two main construction materials used in the older properties of the Sharjah medina. Large, irregular coral blocks known as 'farush' are cemented by a gypsum-based mortar known as 'juss'. The latter would contain pebbles and shell fragments and was easily eroded. Sometimes, an internal core of rubble known as 'hasa' would be sandwiched between two layers as above, but this is not common in Sharjah.

Fig 6.6: 'Pier and Panel' Construction (after Clarke) (1981)



'Pier and panel' or 'beam and column' buildings consisted of a series of solid farush/jus pillars with horizontal beams to prevent pillars deflecting. Both pillars and beams could be strengthened by wooden poles. The intervening gaps could be used as storage spaces, decorative shelving, carved ventilation screens (masherabiyyah) or transformed into windscoops (badkaash).

FIG. 6.7: Construction Materials, Marija Area (1987)
(Ground Floor Level)

Key:



Coral Stones + Gypsum Mortar (no plaster)



Coral Stones + Gypsum Mortar + Gypsum Plaster



Coral Stones + Gypsum Mortar + Cement Plaster



Shell-based conglomerate bricks + Cement Mortar



Wood



Concrete Breeze-block



Decorative Cement Blocks + Cement Slabs

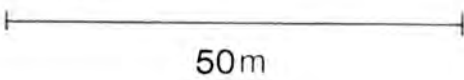


Demolished Properties.

Fig. 6.7: Construction Materials, Marija Area



Scale



50m

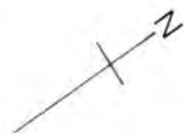


Fig. 6.8: Masonry Construction, Marija (1987)



This dwelling, built by Hussain Sajwani and demolished in November 1990, was composed of several masonry types. To the left is original farush/juss wall at first rendered with gypsum plaster and later by cement. The exacerbation of erosion by the latter has resulted in severe deterioration of the wall at base levels. To the right, the original wall has been replaced by shell-bricks and cement. The former are more friable and recede in a concave manner as they are eroded to leave protruding mortar between. The far corner is supported by an original buttress in farush/juss (coral/gypsum), and the upper storey screens composed of moulded 'louvre' style concrete blocks. There are original carved screens on the 'ghorfa' structure above the buttress.

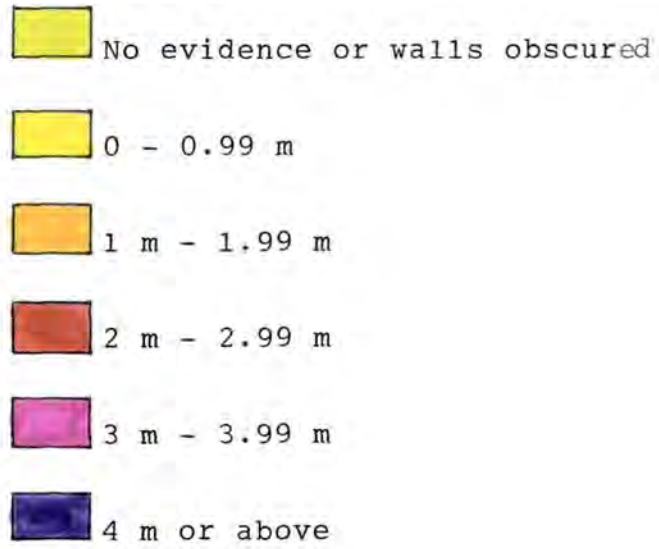
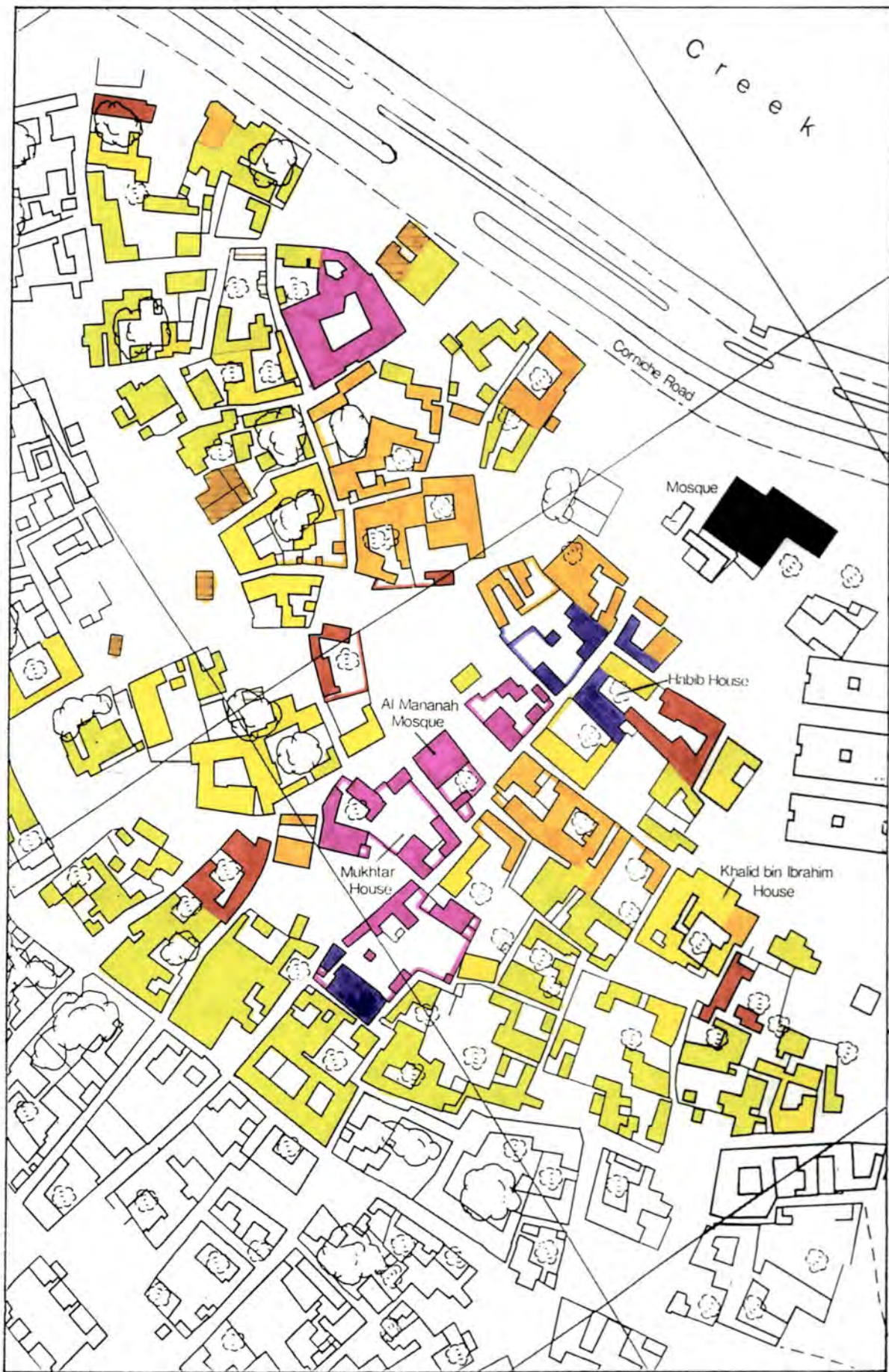
FIG. 6.9: Erosion/Salinity Levels, Marija Area (1987)**Key:**

Fig. 6.9: Saline Erosion Levels - Marija Area



Scale



FIG. 6.10: ARCHITECTURAL CATEGORIES, MARIJA (1987)

Key:





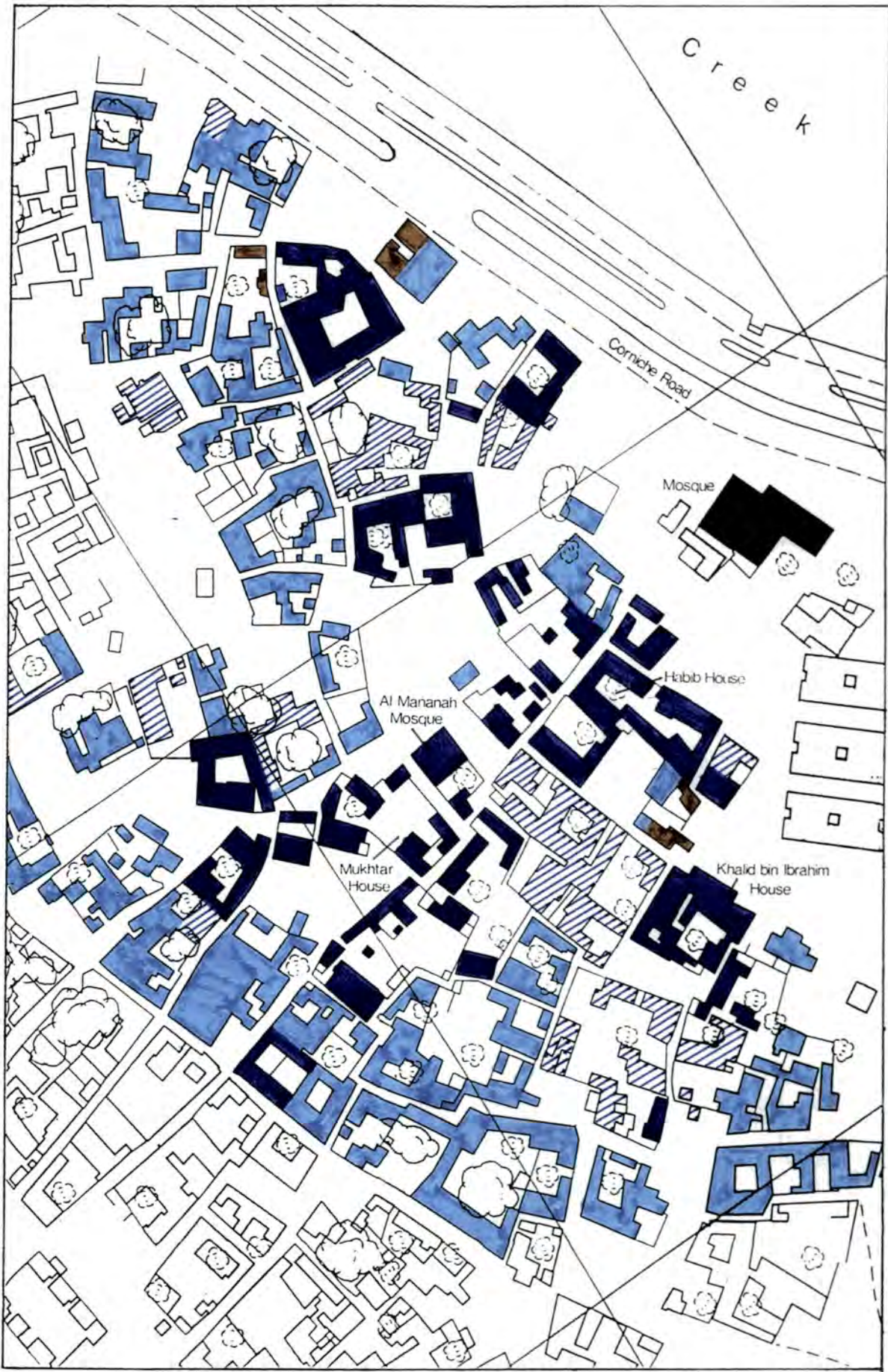
	Category A)	
	Category B)	
	Category C	)	Details of categories
	Property demolished	)	can be found on Fig.
			5.17

Fig. 6.10: Architectural Categories, Marija Area



Scale

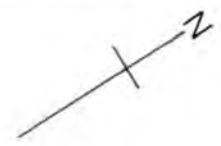
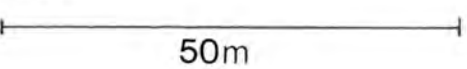
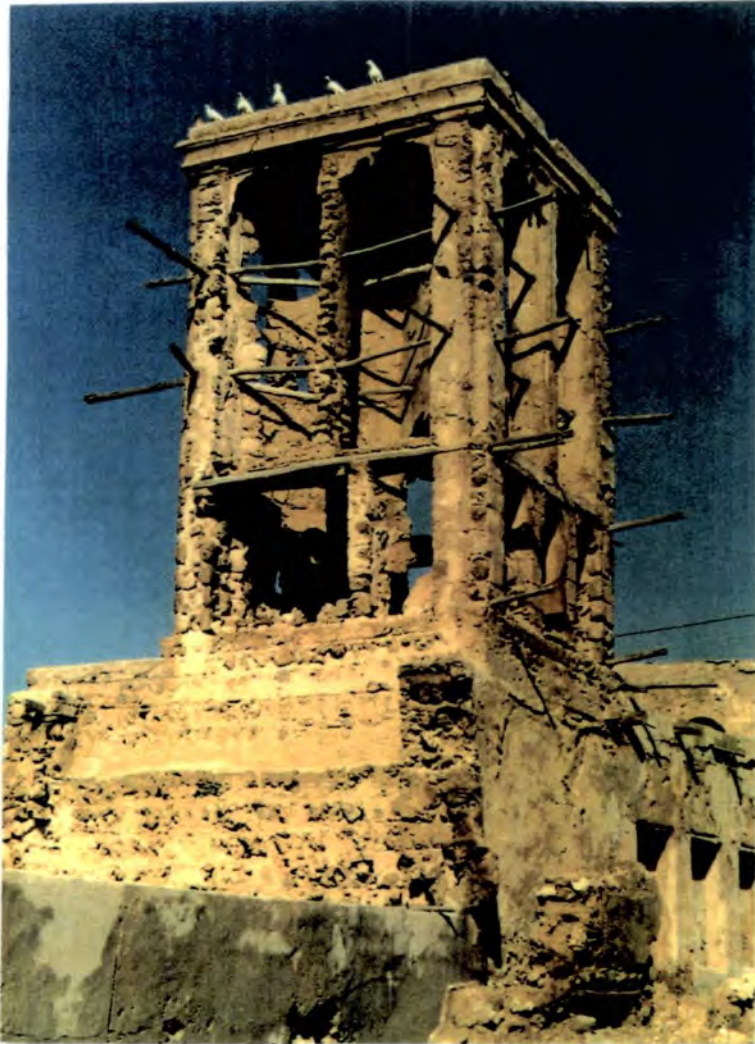


FIG. 6.11: WINDTOWER. HABIB BIN HASSAN AL-YOUSEF HOUSE (1987)



This shows a wind-tower typical of the Marija skyline, well-maintained and physically sound. There is but minimal damage to the crenellations and superficial fading of limewash.

FIG. 6.12: WINDTOWER, HOUSE OF HASSAN AL-FARSI, MARIJA (1987)



This example of a severely eroded windtower at the Hassan Al-Farsi House is in imminent danger of collapse. Sadly, if it is to be preserved, the only practical solution is to photograph, survey, record and rebuild as close to the original structure as possible,

Fig. 6.13: Wall buttresses. Habib Al-Hussain Sajwani House
Marija (1987)




Such buttresses were constructed to give support to the wall which, in this example, can be seen leaning markedly. Buttresses were constructed of the same farush/juss of walls and coated with gypsum plaster.

FIG. 6.14: The Proposed Marija Conservation Zone**Key**

	Buildings of Rank 1)
)
	Buildings of Rank 2)
)
	Buildings of Rank 3)
)
	Buildings of Rank 4)
)
	Buildings of Rank 5)

Details of ranks
can be found in
Appendix 4

 Limits of Zone


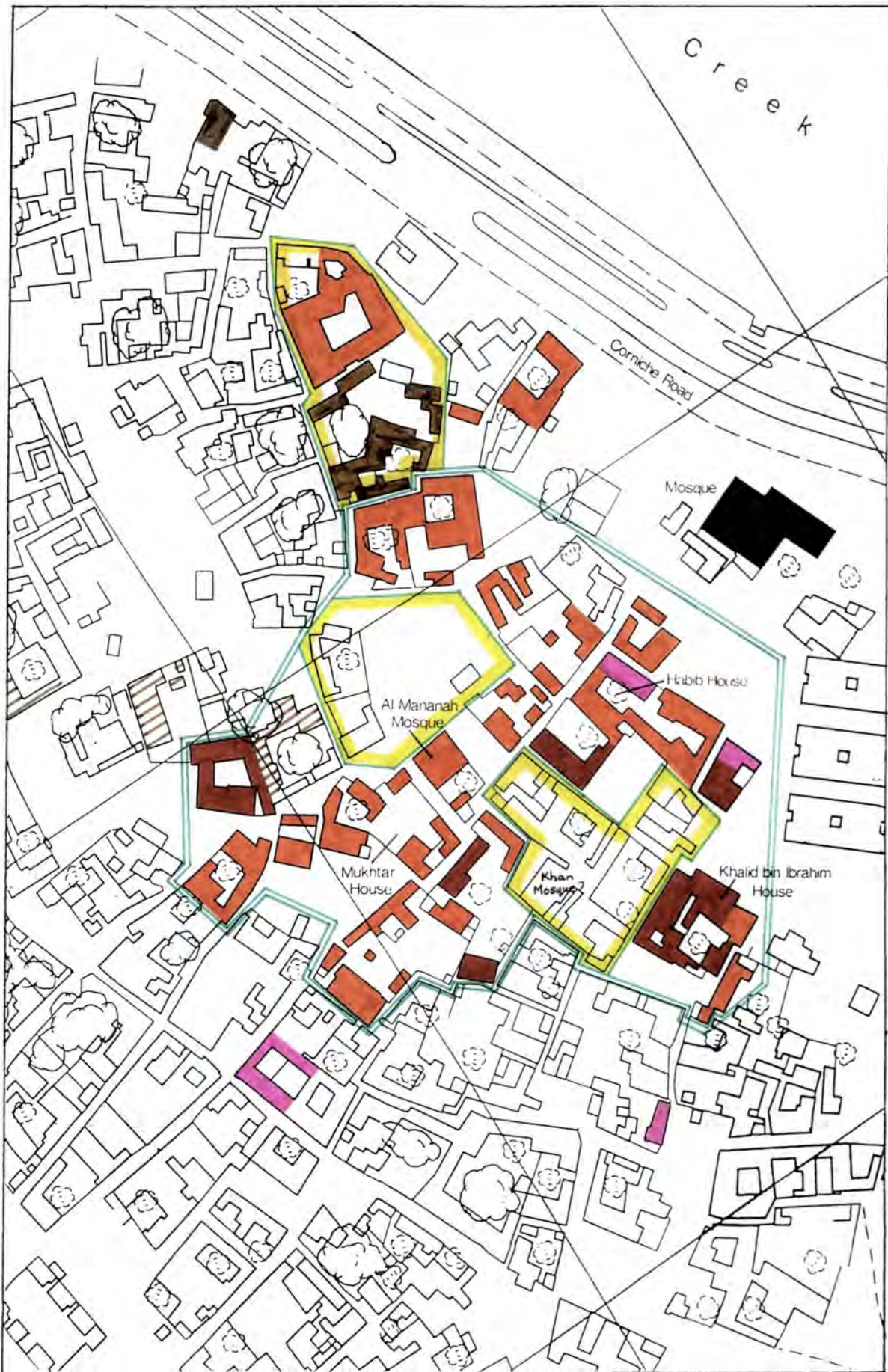
 Optional Areas

Fig. 6.14: The Proposed Marija Conservation Zone



Scale:

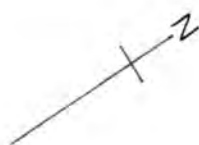
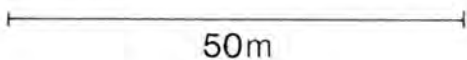
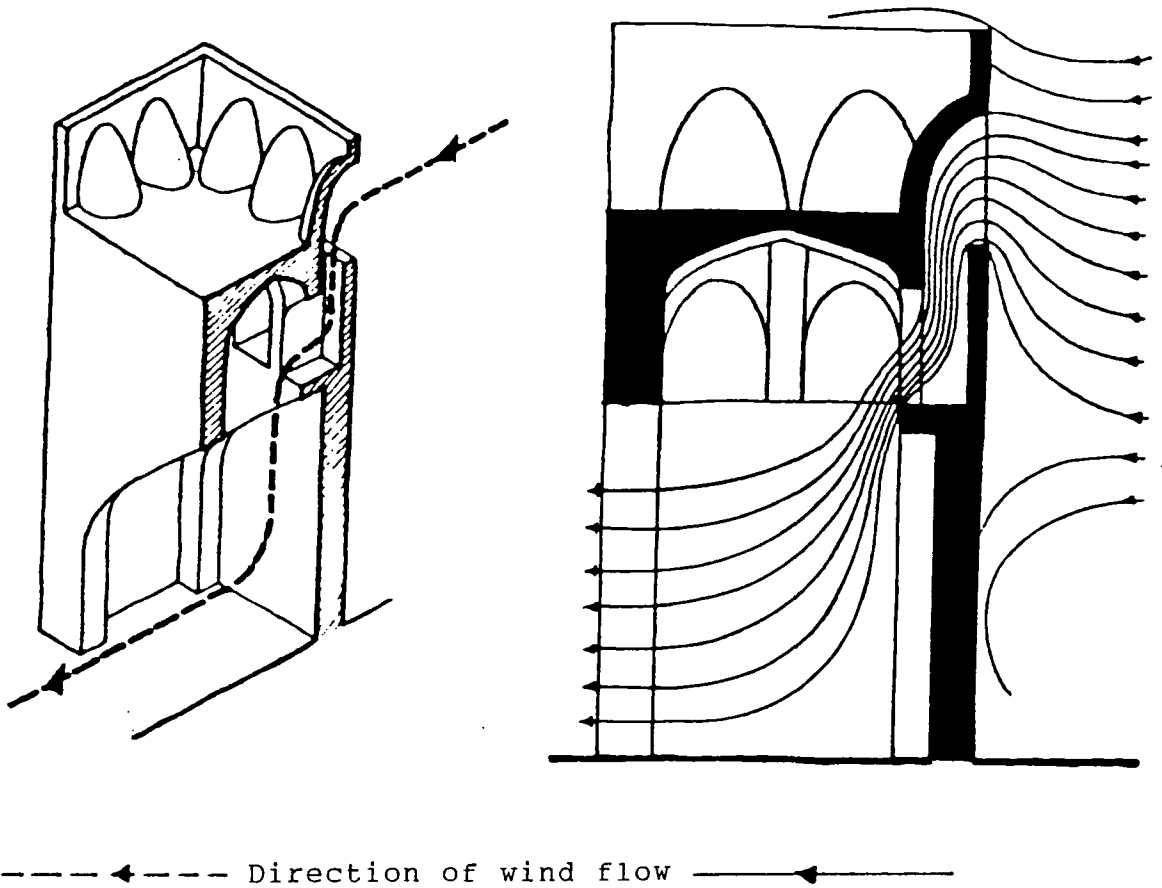


Fig. 6.15: The Khalid bin Ibrahim House, Marija (1987)



To the left is a simple form of windtower or windscoop ('badkaash'). Note the distinction of building materials separating the lower and upper storeys. A retail outlet known as the Shaheen Tailors occupies the north-east corner.

Fig. 6.16: The Windscoop or 'badkaash' (after Danby) (1980)



Though more elaborate than examples in Sharjah, the principle of the windscoop remains the same. Wind blowing into an open vent in the wall is deflected down to the room below to give ventilation and therefore, a cooling effect. Such badkaash may be located at regular intervals along the wall to ventilate the whole room, unlike the more limited capacity of the windtower.

Fig. 6.17: The Khalid Bin Ibrahim House: Ventilation Methods
(1987)



Several methods of ventilation are employed in this property. At the centre of the photograph are a series of vertical slits above head height to allow cooling of second storey rooms. To the left of these are an original circular vent and a rectangular hole to allow the insertion of a modern air-conditioning unit. Above the drainpipe is a windscoop or 'badkaash' and to the left of this, the main windtower and pierced, plaster screens on the upper storey. Gaps are left between bricks on the upper terrace to give ventilation at floor level.

FIG. 6.18: MAIN ENTRANCE, KHALID BIN IBRAHIM HOUSE, MARIJA
(1987)

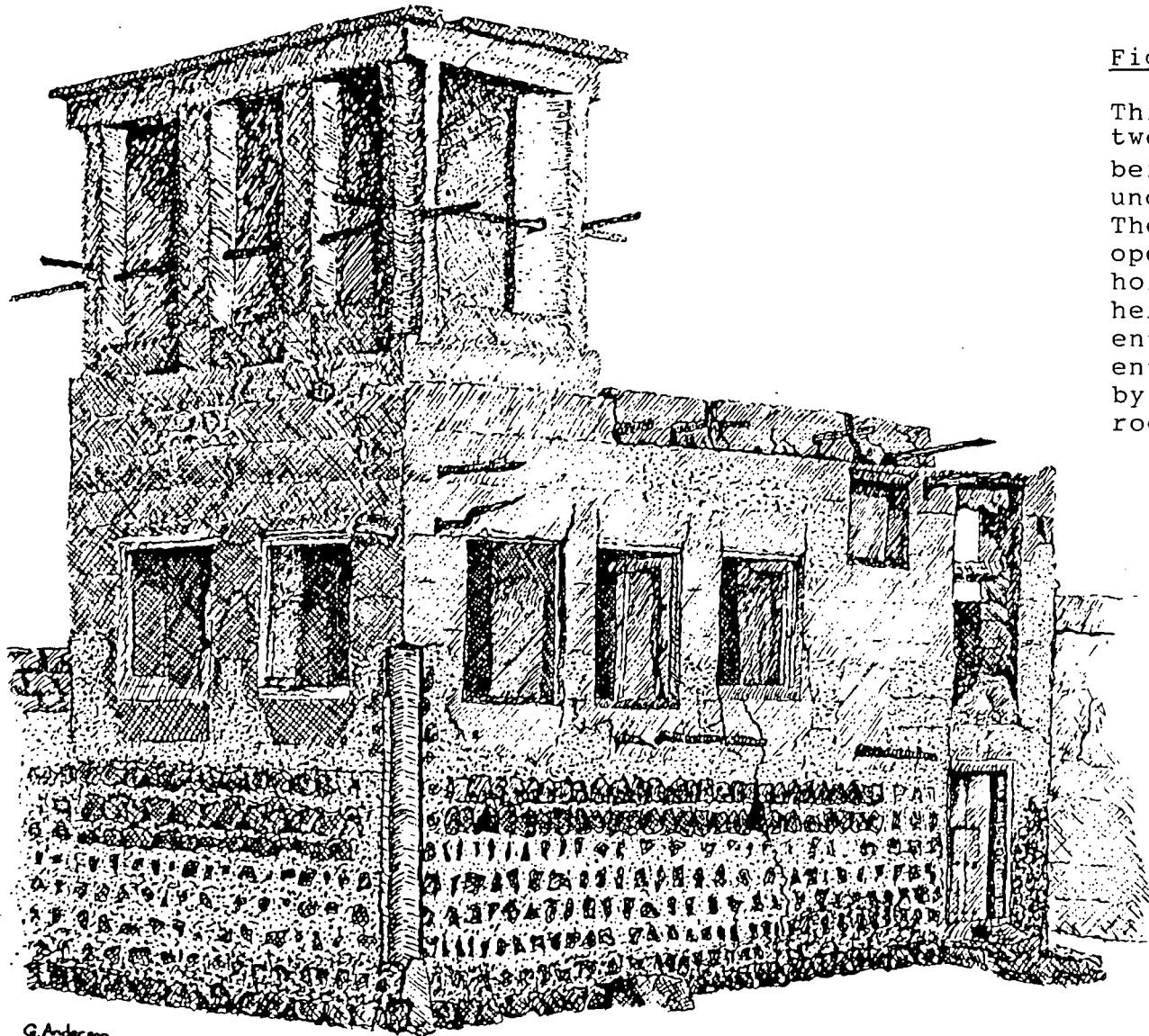


The door is original, carved from teak wood and decorated with a series of metal studs. There is an inset door placed 0.3 m from the ground to prevent dust blowing into the reception area. Above the door is a circular vent inside a plaster panel with decorated corners.

The original gypsum plaster remains, but is severely cracked and spalled. A crude, ineffective remedy of cement plaster has been applied, exacerbating erosion.

Fig.6.19: The Mukhtar House, Marija

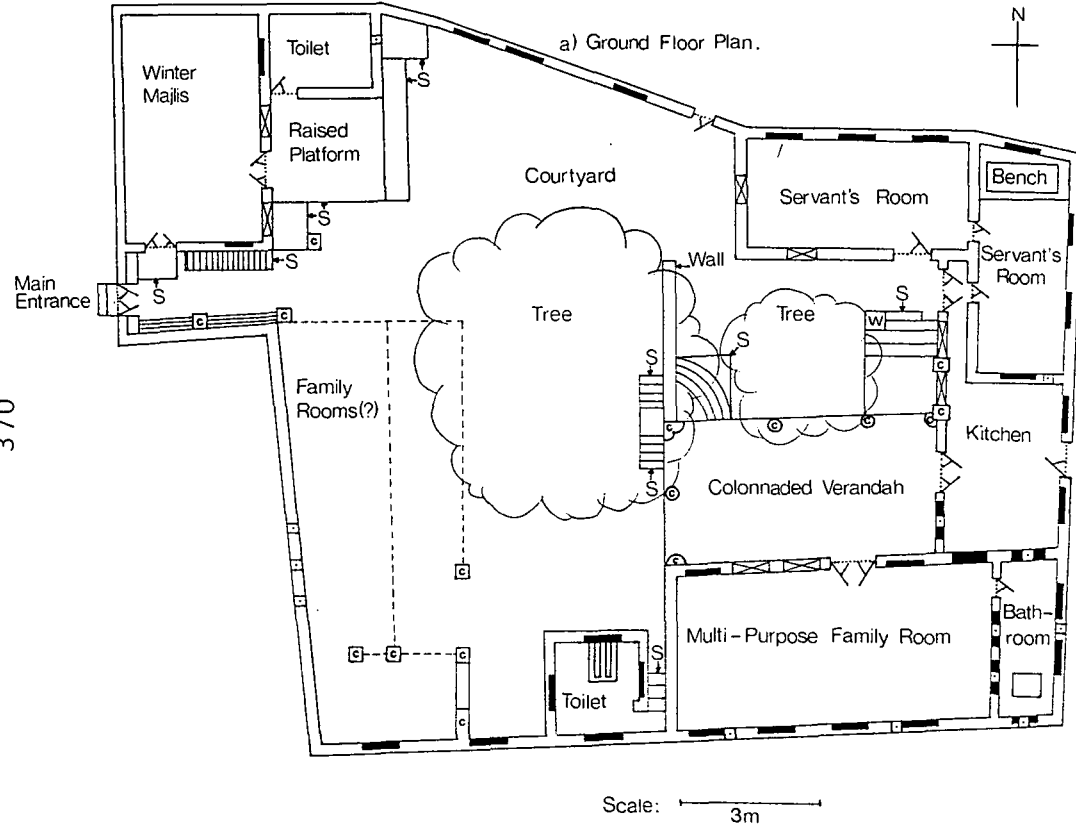
This illustration shows the only two storey section of this house, being the summer 'majlis' located under the rectangular windtower. The unglazed windows are the only openings except for ventilation holes and the main entrance, seen here to the right. Above the entrance, a further opening allows entry to the upper storey, possibly by ladder. Chandal poles depict roof level of the winter majlis.



G. Anderson.

Bait Mukhtar, Marija, Sharjah.

Fig. 6·20 & 6·21
The Mukhtar House, Marija.



b) First Floor Plan,
(Above winter majlis only).

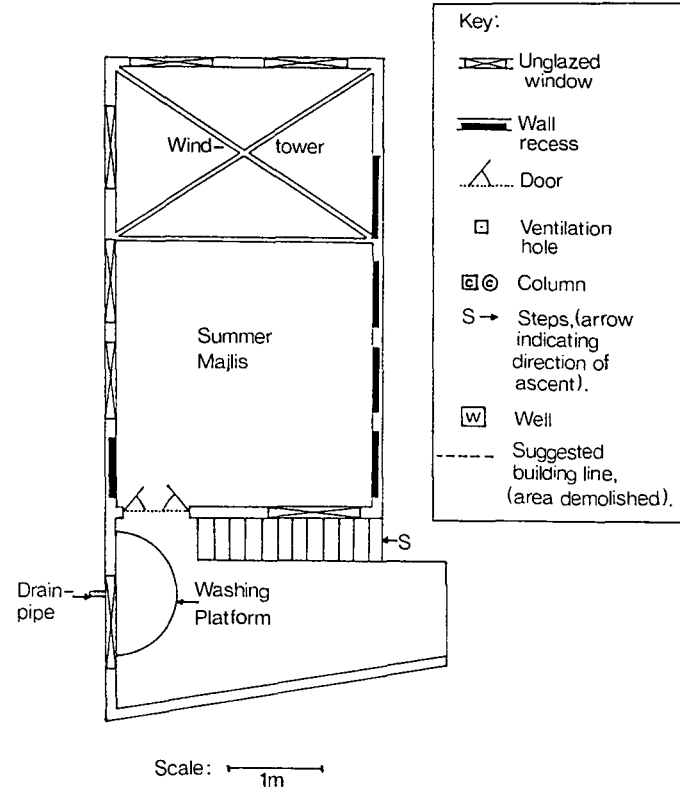


Fig. 6.22: The Mukhtar House: Staircase to upper majlis (1987)



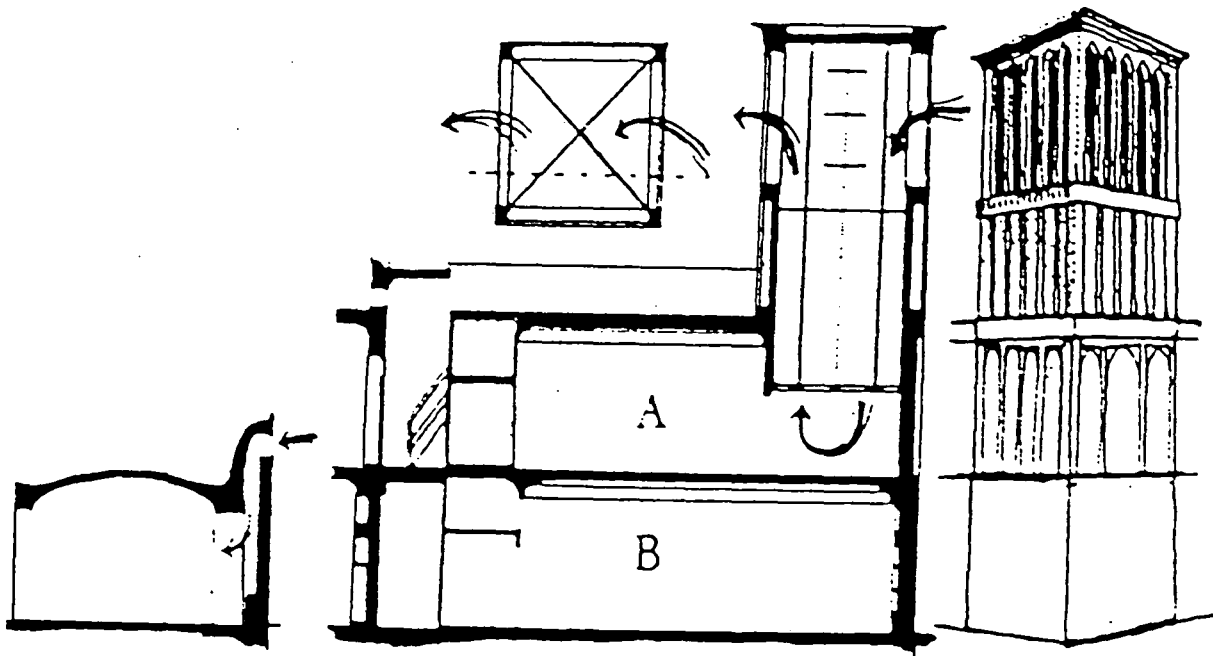
This photograph shows the solid construction of staircases using coral rag, gypsum and wood. 'Chandal' (mangrove) poles are inserted at the desired angle of ascent and buttressed at floor level. Steps are chiselled from the gypsum mortar around the blocks that form the core of each step. Chandal poles can also be seen forming the roof to the right of the stairs.

Fig. 6.23: Windtower vent interior, Mukhtar House, Marija (1987)



The badgir is divided internally diagonally and illustrates well the techniques employed in the construction of badgir in Sharjah. Chandal poles provide the structural framework and strength with farush/juss cemented between poles and a gypsum plaster coating the internal division of the vent. The flat roof of the badgir is constructed from layers of farush/juss, interwoven palm-leaf strips and stems and finally coated with a thin limewash.

FIG. 6.24: THE WINDTOWER OR 'BADGIR' (After Petherbridge 1978)



A common form of wind-tower, characteristic of Iran and the Gulf and neighboring areas, consists of a tall structure with vertical openings in all directions, and with internal walls arranged diagonally (see plan to the left of the tower; the section is taken along the dotted line), so that any breeze entering it is forced downwards and up again before it can escape. This creates a circulation of air in room A, which is used in summer. Room B is used in winter. The section on the left shows a simple form of wind-scoop ventilating a ground-floor room at Herat, Afghanistan and is similar to those witnessed at various locations in Sharjah

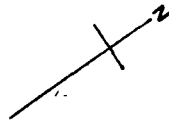
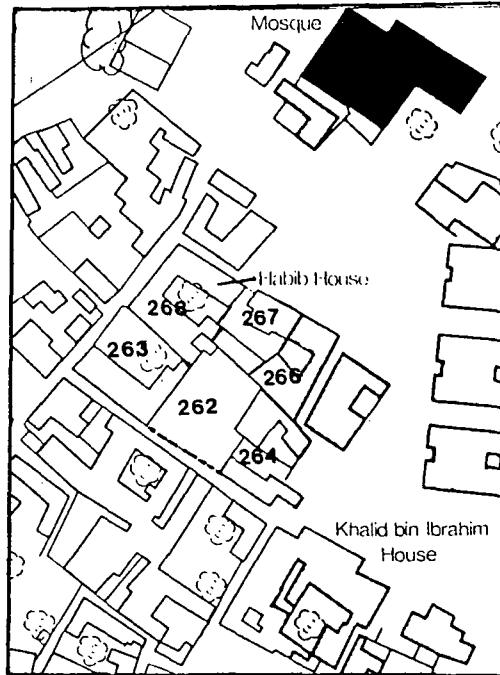
Fig. 6.25: Mukhtar House, Decorative arches and columns (1987)




Fig. 6.26: Mukhtar House. Decorative Features (1987)



Fig. 6.27: Residential block, Marija (1987)



Scale:  25 m

Key:

----- Demolished
268 Plot Numbers

Fig. 6-28

Habib House, Marija.
Ground Floor Plan.

Key:

M.P.R. Multipurpose Room

Unglazed Vent

Door

Recess

Column

Step

Scale 1m

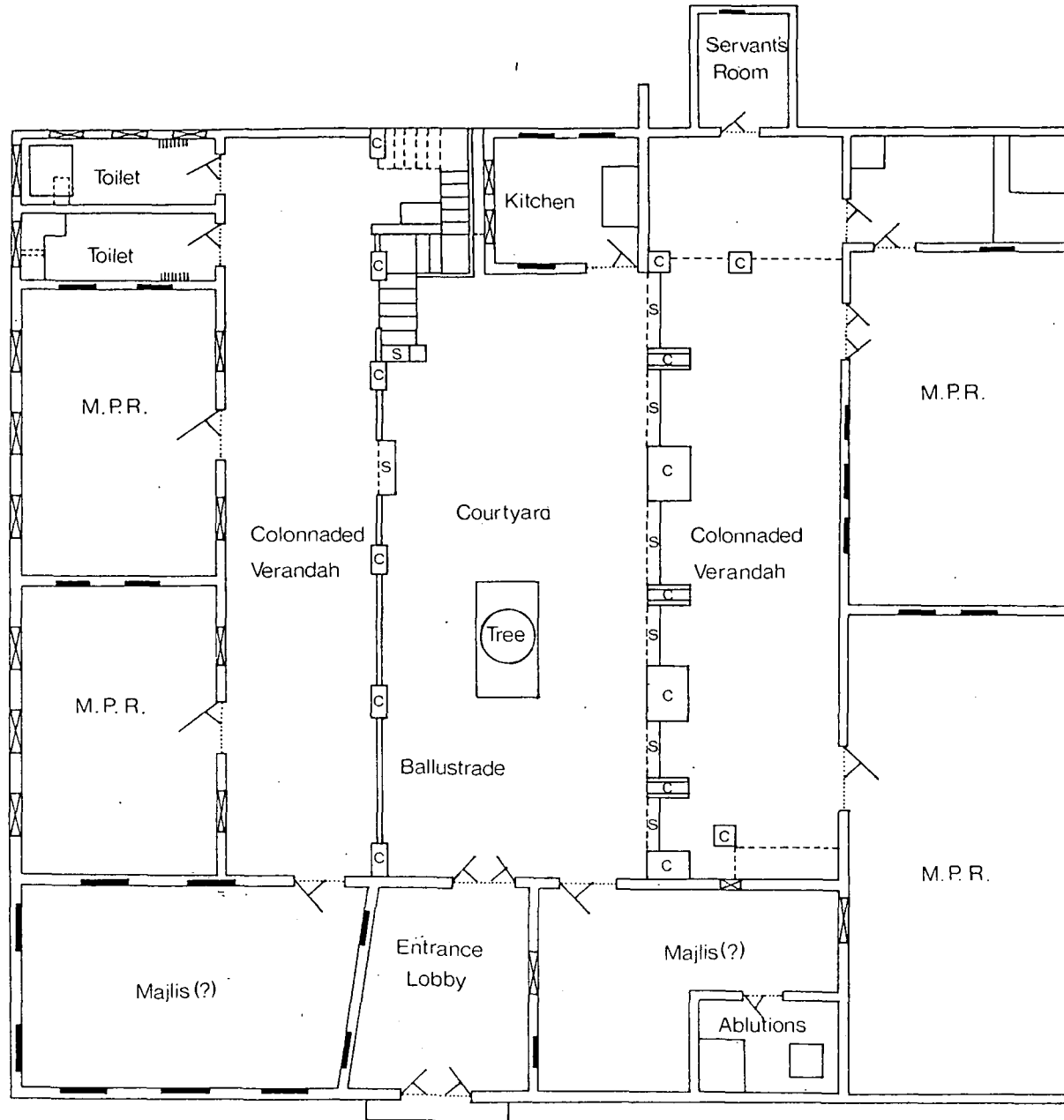


Fig. 6.29: The Habib House, Southern Colonnade (1987)



Immediately apparent is the contrast in width of the original coral/gypsum pillars (at centre) compared to the more modern concrete pillars at either side. These were inserted at a later date to give extra support to a roof that was bowing under its own weight.

FIG. 6.30: HABIB HOUSE. INTERNAL RECESSES, SOUTHERN ROOMS
(1987)



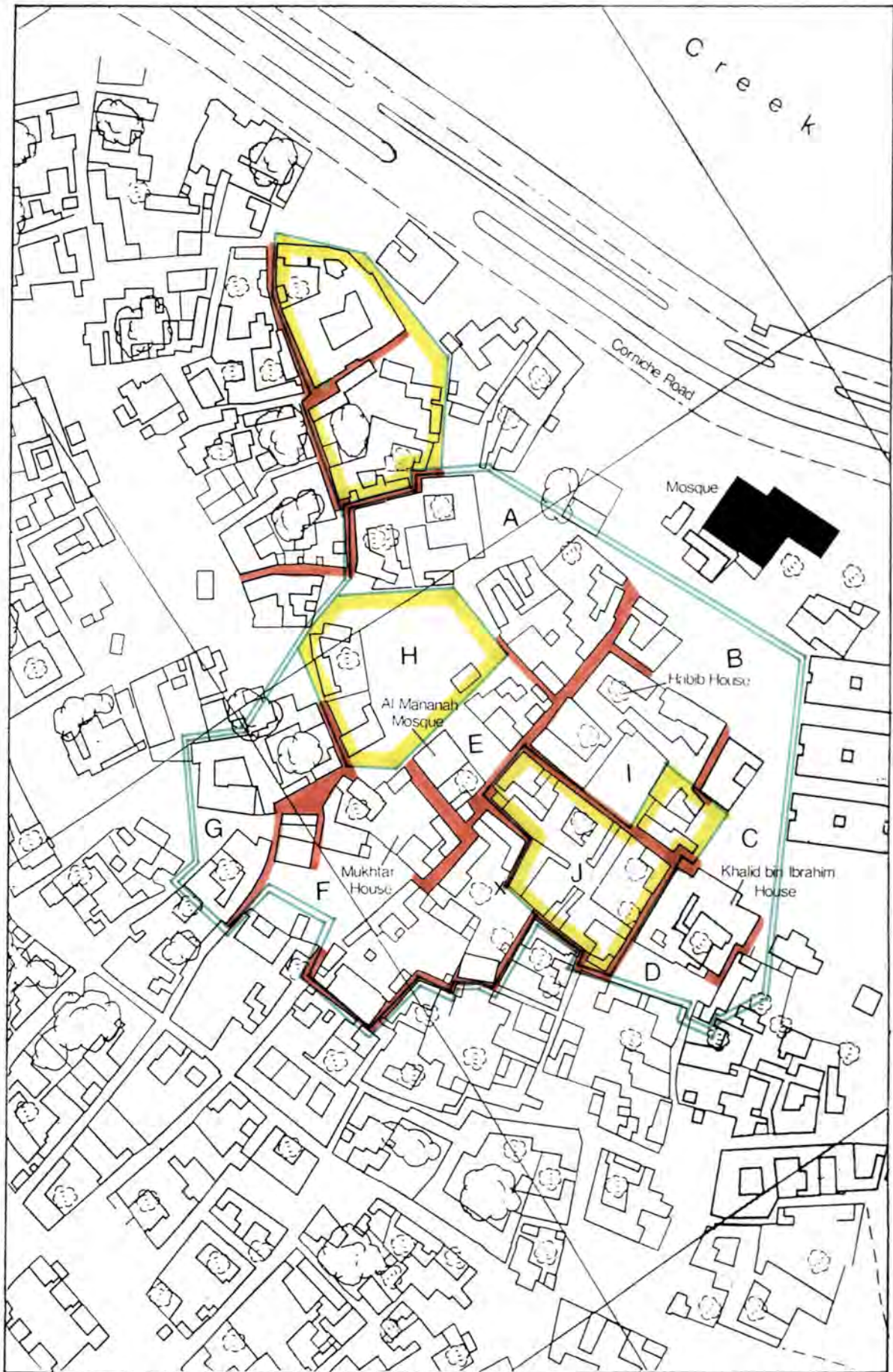
A round arch panel surmounts a square. Above is a carved, scalloped decoration in gypsum stucco at roof level surrounding the whole room.

FIG. 6.31: THE HABIB HOUSE. ROOF CONSTRUCTION, SOUTHERN SECTION (1987)



Chandal poles spaced at regular intervals are coated with a layer of red oxide for decoration and inserted into the wall above a roof-level band of dog-tooth, carved stucco. Sturdy strips of palm-leaf are cross-hatched above the poles, providing a supportive net for layers of densely woven palm-leaf matting and mud.

Fig 6.32: Alleyways, Culs-de-sac and Open Spaces
Marija Area

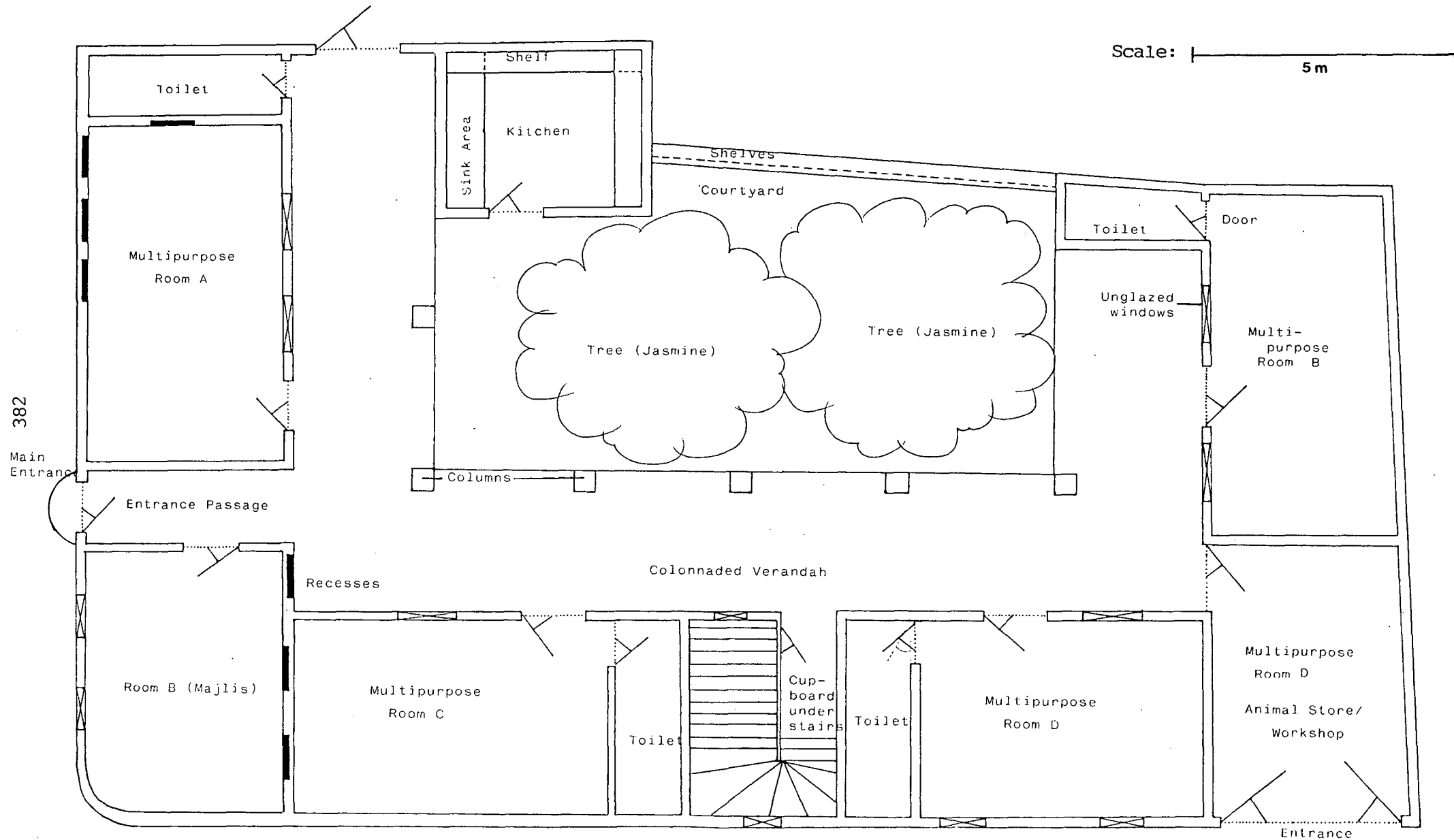


Marija Conservation Zone ———
 Optional Areas ———
 Alleyways ———
 Open Spaces A - J

50 m

There is a definite progression of alleyways, the main alley traversing the zone in a North/South direction with subsidiary alleys providing access to surrounding properties. Culs-de-sac are not common, but do exist as at point X.

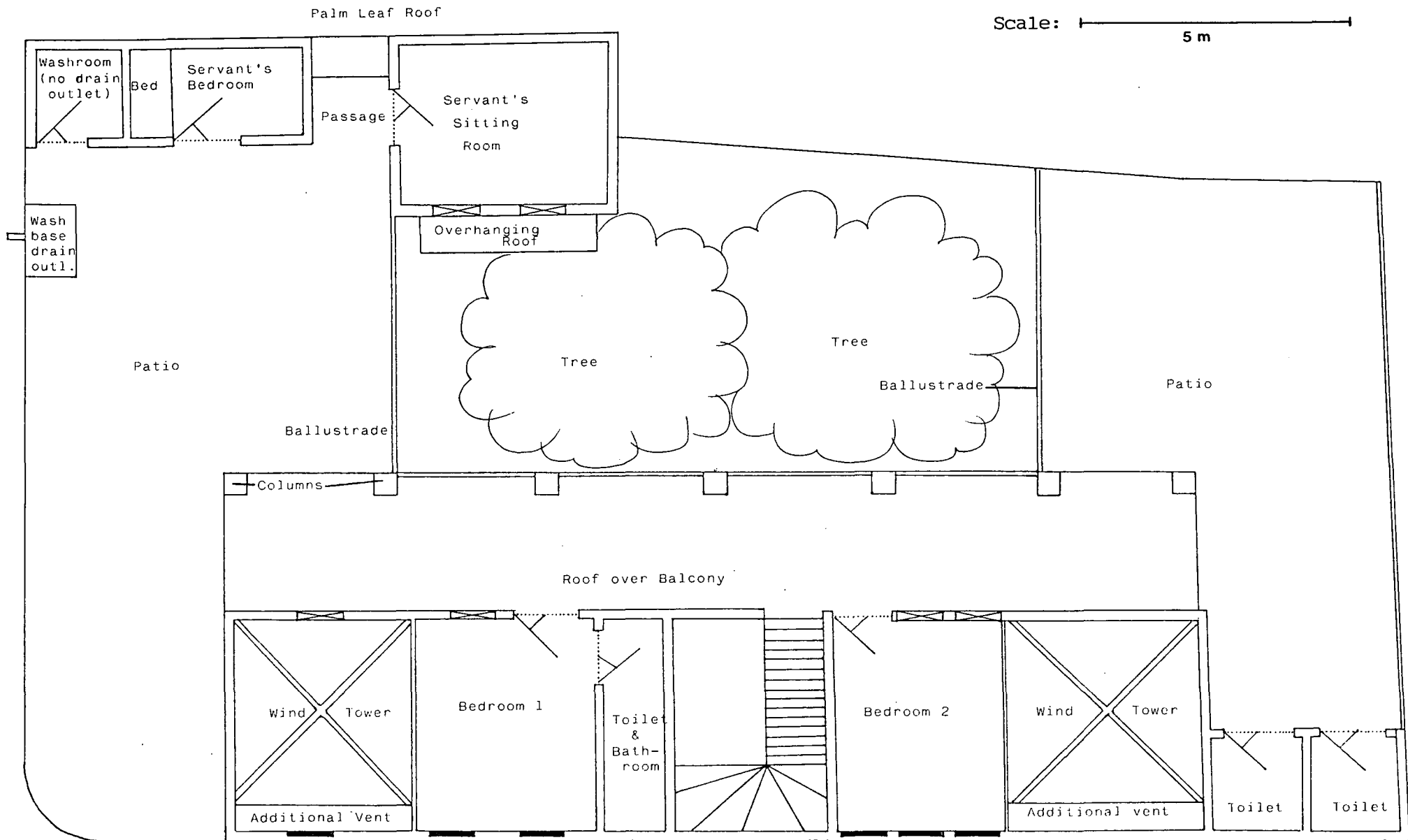
FIG. 6.33: ZAROUNI HOUSE: GROUND FLOOR PLAN



382

Main Entrance

FIG. 6.34: ZAROUNI HOUSE. FIRST FLOOR PLAN




Scale:  5 m

Fig. 6.35: Za'arouni House, Shuwaiheein. Western Elevation (1985)



The Western elevation clearly shows features normally found on internal surfaces. Its western section once stood on the spot from where the photograph was taken, but has since been demolished. The matting roof to the right is testimony to this.

Fig. 6.36: Za'arouni House; Courtyard Interior at First Floor Level



FIG. 6.37: THE PROPOSED MARIJA CONSERVATION ZONE (1990)



Illustrated in this aerial view, looking South are all the main elements of the Proposed Marija Conservation Zone.

In the centre foreground is the Habib House, to the right of which is the Hassan Al-Farsi windtower. Above this is the Al-Mananah Mosque, which is located immediately in front of the Mukhtar House. The windtower of the Habib bin Hasan Al-Yousef House can be seen in the distance at centre.

CHAPTER 7

PROBLEMS OF CONSERVATION

7.1 The Problems

As has been mentioned frequently previously, many of the structures suggested for conservation have suffered from erosion and decay since their abandonment. Upon permanently leaving a property, deterioration begins with the collapse of the roof. With its maintenance halted, infrequent but heavy winter rains are allowed to penetrate and weaken the layers of lime and gypsum and to rot the palm frond matting. Collapse of the roof occurs soon after regular maintenance stops, especially if wooden elements are attacked by insects, exacerbating and compounding erosion. Once the roof has collapsed, the tops of the walls are then fully exposed to weathering. Soft, friable gypsum and lime-based mortars are easily weathered by wind and rain, exposing coral-blocks fully, before the wall eventually collapses. This deterioration from upper levels is intensified as it meets equally, if not greater, destructive processes from lower levels. Saline solutions found naturally in the groundwater resources of the Arabian Gulf coast are major corrosive elements, whose effects have been encouraged by a generally rising water table caused by inadequate water supplies, drainage and sewerage systems, greater demands on water supplies from a rapidly growing population and, in the case of Sharjah, from a deliberate policy of dredging the creek as part of the creek-side wharf development, thus raising the water table by almost 1 m .

These problems are not exclusive to Sharjah, and have been witnessed in many towns along this coast, as Lewcock (1982) describes:

"during the last fifty years the widespread provision of tapped water supplies, combined with inadequate drainage facilities in expanding urban communities has often led to a high water table, aggravated after rain, which has introduced this problem for the first time. With the water table at ground level the capillary attraction up into the hitherto dry porous materials of the masonry above ground is considerable, reaching....4 or 5 m and in extreme cases up to 10 m above ground." (1)

Fig. 7.1 illustrates this concept well.

Unfortunately, attempts to repair the damage caused by saline erosion has inadvertantly encouraged the very process it was designed to rectify. Mixtures of cement have been applied to severely eroded areas of walls but the alkaline salts present in the cement 'react with the acids in rain water or rising damp to produce huge amounts of salts and efflorescence, corrosion and disintegration.' (2) Cement also encourages the condensation of moisture within the walls, thus intensifying erosion.

However, it is not only the abandonment of a building or its lack of adequate maintenance that has aggravated the situation but, in a more general sense, the increase in subterranean water levels as a result of dredging Sharjah creek and the predominance of cesspit drainage systems which can leak into the surrounding substrata, especially when flooding is caused by the occasional heavy rains. This

problem must also be attended to if buildings are to be restored and upgraded in a conservation scheme.

The routing of major dual carriageways through the old Sharjah medina will inevitably have had a detrimental effect upon surrounding older properties as a result of constant traffic vibration and upheaval caused by the building of surrounding tower blocks, particularly when excavating foundations. Therefore, should any conservation zone be designated, strict controls will have to be imposed on developments in juxtaposition to the zone (s) itself to minimize damage from construction work, as Bokhari (1982) states:

"But in order to keep the traditional centre viable, the planner has to make sure that any new developments or buildings will not efface the features and tissue of the centre. In addition to preserving and restoring new developments should be allowed only when it is absolutely necessary, and always by integrating old and new." (3)

However, physical and planning problems can only be addressed if there is the desire among decision-makers to preserve their unique urban heritage. Sadly, it has been pervasive in past years for the older areas to be regarded as undesirable with ruined, dilapidated, spatially extensive, low-level buildings occupying extremely valuable land at the heart of the city. It is a fact that the dominant attitude amongst owners of such buildings is to gain as much compensation from the government as possible for the demolition of their property and use funds to construct high-rise, high density residential or office blocks that will produce vast

profit from rents in a relatively short time. Such events have been witnessed in many cities of the Gulf, but it is the landowners and local government that must be targetted in any attempt to reverse or reassess their decisions and desires by proving that conservation schemes can be economically viable and that appropriate changes of use of buildings does not only preserve the urban fabric, but enhance the city as a whole whilst also providing the profits so keenly sought.

How are all of the above, inter-related problems to be addressed and solved? Ironically, it is not the structural problems that are the main impediments to conservation in Sharjah, for research has been conducted in neighbouring emirates and schemes completed proving that such buildings can be successfully restored. Limited funds are available for isolated conservation proposals on both local and national levels, which could be extended if there was a shift in emphasis towards conservation in a more tangible and substantial way. It is the human element that is the prime restriction behind any large-scale conservation plan. One which, at the moment is preventing restoration and encouraging demolition. There are however, glimmers of hope.

7.2 Physical Restoration

Lewcock (1982) offers a series of possible counter-active measures, grouped broadly into two categories: preventative and curative. In the former group, he suggests that the most effective measures are those that reduce the

level of the water table, such as an efficient water supply, sewerage and drainage systems using strong pipes and water-tight seals. He also includes a series of 'special seepage drains to drain the water table to a lower level'. (4)

Whether such large-scale measures would be feasible in the areas of Sharjah designated for conservation would be debatable.

It would appear for the town of Sharjah, that curative measures are more appropriate. As all older buildings suffer from rising damp and saline erosion to some degree, it is essential that all receive some form of damp-proofing. This can be done primarily by 'the introduction of a damp-proof membrane just above ground level.' (5). This is inserted by either injection of a waterproof fluid into the wall which is then distributed by gravity and capillary action, or by the placing of a waterproof material in a horizontal barrier just above ground level via a series of saw-cuts through the wall. Unfortunately, as the gypsum mortars are extremely porous, large amounts of damp-proof fluid would be required, perhaps even the excavation and lining of walls to prevent fluid loss, thus increasing cost considerably.

Other repairs must be completed with care and consideration, which may not necessarily be the least expensive. Walls impregnated with salts must be leached thoroughly. This can be done using tanks of fresh water, or as in the case of the Sheikh Saeed House in Dubai:

"It is said that the original construction process began with the salvaging of coral stones from the Creek and washing their salt content away in pouring rain." (6)

Once leached, walls must be left to dry before re-applying mortars and plasters to the original formula. The personal knowledge and skills of the original inhabitants, craftsmen and masons of Sharjah's old houses must be sought, for it is they alone that can supply details such as the precise ratio of constituent elements in mortars and plasters and they who can advise on building technique and finishes. It is also an effective way of involving the wider community in vital conservation work.

The use of cement to repair crumbling walls must be halted immediately and any such material removed from walls which must then be treated as above, cement being replaced by plasters to the original formula. Care must also be taken when leaching walls, for as Crowder (1986) has commented of construction in Oman:

"A problem may arise in some areas as a result of changes in ground wetness during or after building....leading to ground movements....potentially a similar problem could arise if watering were to leach away salts or gypsum from a heavily contaminated soil." (7)

In many cases, buildings may benefit best from a complete reconstruction programme, involving thorough survey, recording, demolition and rebuilding stages. There have been indications that lack of original materials may prevent this on a large scale, but if stones were used from the newly demolished building, an adequate amount should remain. There are

several areas on Sharjah's beaches where suitable coral stones can be found and once leached, could be used to supplement wall construction. Failing this, another suggestion may be to incorporate ideas implemented by the British R.A.F. during the 1930's construction of their fort/rest house (see Fig. 1.2viii) now in the district of Qasimia, Sharjah. As the local coral stones and gypsum were deemed unsuitable for the construction of the R.A.F. base, large blocks of sandstone were imported from the Gulf island of Abu Musa (part of Sharjah Emirate) and shaped into regular blocks providing a more solid and sturdy appearance, which remains almost without decay to the present day, except for the dilapidated appearance its abandonment has created. Though the appearance of buildings may be slightly altered, they would certainly be stronger, less susceptible to erosion, easier to maintain and constructed of a material indigenous to the Emirate, if not the immediate locality.

Continuing this process one step further, in Muscat, Oman, Taylor-Woodrow-Wyatt Co. Limited, have aided in the restoration of the old city walls by formulating a type of material similar in texture and appearance to the original stones, but of a more durable nature using a variety of materials not necessarily found in the region. The result is an almost perfect reproduction of the original material, but with the benefit of greater resistance to erosion. (8)

7.3 Influence of Attitude

The numerous examples of preserved buildings throughout the Gulf region prove that conservation is possible. Techniques already evolved and implemented could be applied in Sharjah, indeed it is sad testimony that all other Emirates have some buildings deliberately preserved and used as museums, cultural centres or for their original purpose, Sharjah has but one watch-tower, remnant of a once fine fort of which it was once an integral part, demolished in submission to a dual carriageway.

Upon questioning several local people on their views of conservation, one is greeted with a mixture of disbelief, perplexity and gentle derision. What is dominant is the perception that land occupied by older buildings at the urban centre is of great economic value and potential. Fortunately for Sharjah, there have been isolated but influential voices raised of late, persuading gently yet forcefully for a more pro-conservation stance. Their argument reinforces the opinions of several respected Middle-Eastern academics, who have witnessed repeated phases of demolition in urban centres, only to be deeply regretted by the ruling authorities at a later more enlightened time.

Sharjah recently experienced a severe financial predicament triggered by the slump in oil prices in 1986. It is estimated that Sharjah's debt burden was as much as \$920 million (9) which caused great political instability within the Emirate. The situation was resolved, with the debt being rescheduled, but this event did stimulate

discussion on the dependence on oil revenues to sustain growth and the need for diversification to reduce this dependency. One such scheme that could be introduced is the renewal of tourism into the Emirate, and an area in which preserved older quarters of the city could perform a vital role. Tourism, especially from Germany and Austria, was once a common feature in Sharjah and contributed to the wealth of the city in a variety of ways. However, the general economic slump of the late 1980's and the banning of alcohol sales in the Emirate in 1985 decreased the number of visitors significantly, with several hotels experiencing less than 50% occupancy at the height of the tourist season (October - March).

In many locations across the Middle-East, tourism has been exploited as a valuable source of income, particularly in the Maghreb countries, without sacrificing the urban heritage for roads and tower-blocks. Indeed, the old cores of Tunis, Monastir and Rabat have received deserved and significant attention and financial input to transform them from insalubrious, decaying areas to economically successful zones, integrated into the fabric of the city. Schaflitzel, (1980), has witnessed such transformations and remarks:

"maintenance of quarters of interest to tourism and the arrangement of routes through the old towns is regarded as an economically profitable investment in nearly all cities with a historic background." (10)

Amongst his observations, particularly of Tunis, he believes it to be necessary 'to raise the socio-economic

level of the inhabitants' (11), and to extend this further, perhaps a total change of building uses to meet the demands of a modern society:

"We must find a synthesis between the given historic substance and the demands of our times in order to create new structures which will have a future". (12)

The prevalent attitude towards traditional houses, as noted by Rogers (1982) ('The traditional houses are now considered too large and inflexible to be economic') (13), is opposed by Danby (1980), who insists that:

"The economic assumptions that building systems on a large scale are, by definition, bound to be cheaper pro rata than smaller scale operations based on traditional craft methods has been found to be untrue when total costs are taken into consideration". (14)

Here is presented the crux of the matter.

7.4 The Conservation Dilemma

There are two competing interests for the same piece of land. Current attitudes favour the erection of modern, multi-storey office and residential structures at the heart of the city. This would be at the expense of significant areas of older residential and commercial units built in the first half of the twentieth century, forming a unique, indigenous, idiosyncratic architectural heritage of national importance. Here then is Sharjah's urban conservation dilemma. Should the pervasive desire for modernity and profit be allowed to destroy an irreplaceable part of a

nation's history? Conversely, (as is widely perceived locally), should a group of rather dilapidated, superficially insignificant buildings be allowed to dominate future planning and deny competitive business opportunities at the heart of the city? The argument is deepening, but need there necessarily be a distinct choice between the two conflicting ideas? Cannot a suitable compromise be formulated that would gain global respect, international acclaim and also satisfy the aspirations of all locally concerned parties? It is suggested that with careful, tasteful and co-ordinated planning, individual older buildings can be preserved with a change of use (if necessary) that will provide economic gain for the owner and/or government, be attractive to tourists (thus improving the local economy) and provide a stimulating, comforting and economically integrated unit of the city. Several of the buildings studied above could, with forethought be transformed for purposes such as libraries, cultural centres, schools (both Islamic and secular), tourist accommodation, offices as well as the traditional craft activities of the suqs if people can be made aware of the vast economic and cultural benefits to be gained; and see further than the short-term financial gain from yet another tower block with increased maintenance costs as time passes.

The enlightened attitude of the ruler of Sharjah, His Highness Dr. Sheikh Sultan bin Mohammed Al-Qasimi, was noted as far back as 1978:

"Sheikh Sultan combines a firm belief in progress with a staunch determination to keep the traditions of the past." (15)

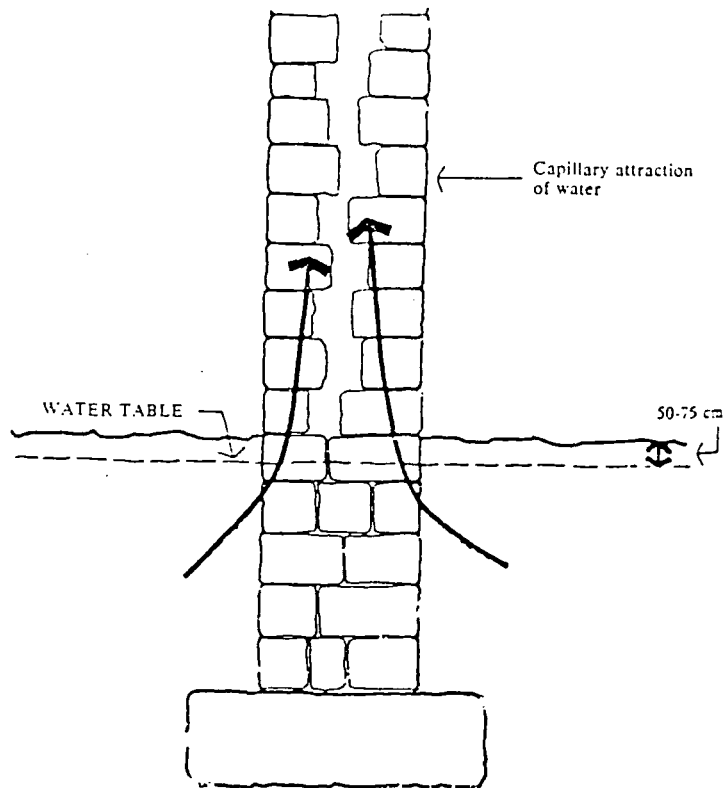
It is hoped that his 'staunch determination' is enough to convince developers and landowners that the urban cultural heritage of the nation should not be sacrificed for short-term profit, when with vision, long term profits could accrue with the added benefit of knowing they have contributed to preserving the work and aspirations of their forefathers in a renovated, integrated and vital component of the urban organism: the heart of the city.

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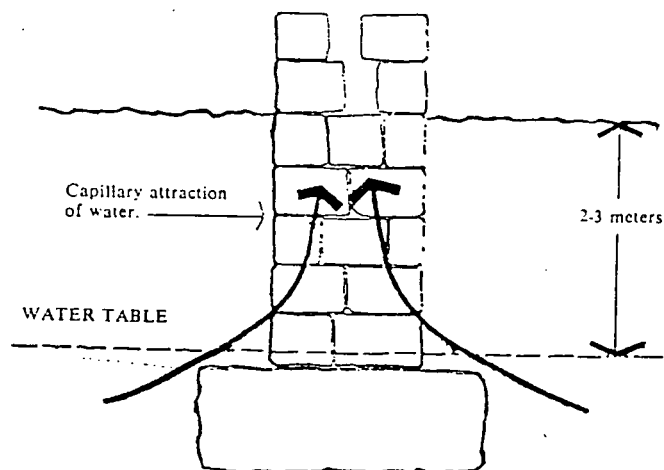
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Fig. 7.1: The Process of Saline Erosion. (After Lewcock).



Situation before c: 1965 in the old city of Cairo, capillary attraction seldom led water to above ground level where drying out of salts in water would produce expanding crystals which would destroy masonry.



Situation c: 1975-1980 in old city high water table means increasing height of capillary attraction from $1\frac{1}{2}$ metres upwards above ground level. Resulting salts are destroying masonry, mortar and plaster.

CHAPTER 8CONCLUSIONSHARJAH 1991 REVISITED: THE BALANCE SHEET TO DATE

It has been shown how and why the vernacular urban structure of Sharjah city should be preserved as an integrated, economically viable unit of the urban fabric. This is not merely a nostalgic vision, but a programme that could be pragmatically applied, (given full support and adequate resourcing), to several Gulf cities occupying similar geographical locations that may have experienced extensive demolition in older areas and anti-conservationist attitudes among decision-makers. Within the U.A.E., the cities of Dubai, Al-Ain and towns of Umm-al-Qaiwain, Jazirat al-Hamra, Ras al-Khaimah, Khor Fakkan and Fujairah, together with several villages of the interior, immediately spring to mind as examples that would benefit from such a survey and appraisal. Extending this further, the historic urban centres of Oman such as Muscat, Salalah, Nizwa, Sur and Sohar, Al-Manamah in Bahrain, Hufuf and Hayl in Saudi Arabia and the former Qawasim settlements on the Iranian littoral of the Gulf, (Lingeh, Luft and Qishm), could all retain elements of their historic urban cores in co-ordinated progressively phased and well-researched conservation programmes to the positive enhancement of the cultural heritage of the Gulf, should governing authorities be persuaded to do so. It is in this capacity that Sharjah could lead, by illustrating how successful such schemes

can be implemented, not only as a method of preserving the nation's history, but also as an economic renaissance for the buildings involved.

In January, 1991, a further visit was made to Sharjah to assess developments made since 1987. Initially, the reaction was one of shock, for when driving down the Corniche Road, the amount of new buildings erected gave a false impression of the complete erasure of the old, urban core, with a swathe of tower-blocks punctuating the once uniform, low-level skyline. However, upon closer inspection, the detail was certainly far more encouraging (see Fig.6.37). Lawless (1980) (1), talked of a 'balance sheet', with respect to a general survey of conservation schemes witnessed throughout the Middle East. On Fig. 8.1 is presented a summary of findings discovered in Sharjah in 1991, formulating a conservation 'balance sheet' for the city.

It can be seen that so far, there is much to be applauded as very few of the areas and individual buildings surveyed have suffered detrimentally as a result of redevelopment schemes. Indeed, when comparison is made with other Gulf cities, Sharjah's experience is exemplary. It has been noted previously of the complete demolition of old properties in Abu-Dhabi, but in cities such as Kuwait (even before the Gulf War), Ajman and Doha very few buildings of the pre-oil era survive. Dubai is preserving individual structures in a highly commendable manner, but only in Sharjah are there schemes to preserve areas of the vernacular, urban structure. The area of Salahadin has already received much attention.

The Municipality, under the authority of the Ruler of Sharjah, H. H. Dr. Sheikh Sultan bin Mohammed Al-Qasimi, is physically inculcating proposals recommended by various parties invited to the city during the mid-1980's. This can be seen on Fig. 5.47. There is also a proposal to renovate the whole area of Al-Khan as a 'tourist village', housing traditional craft activities in preserved coral-stone and gypsum houses of former pearl merchants, though this proposal remains in its infancy. Such ideas should be extended to include the proposed Shuwaiheein and Marija Conservation Zones, (see Figs. 5.26 and 6.14) for these areas contain some of the finest buildings of the old core and are, at present, overlooked by authorities. It may be that only a few of the suggestions outlined in this thesis could be implemented successfully, and in this case proposals already under consideration could be amended, i.e. specific buildings could be dismantled from the areas above to be resurrected at a new site at Al-Khan village.

Several key items have emerged as work on this thesis has progressed, which require attention if attitudes towards conservation are to change.

Paramount among these is the prevalence of native Sharjans, particularly landowners, to pressurize authorities to redevelop economically lucrative land in the city core, at the expense of historic buildings. This is the major conservation dilemma facing not only Sharjah, but almost every other historic city of the Gulf. The choice of how to utilize a unit of land can only be made when all historically relevant facts about buildings erected upon it are known.

Subsequently, this leads to the next key item; that of the education of the local population to appreciate rather than deprecate, their unique urban heritage. The current perception of old buildings being irrelevant and superfluous to modern society must change to one more conducive to their preservation and re-use, integrated once more into the urban fabric. This can only occur if knowledge of these structures is permeated through the education system, to become a component of school, college and university syllabi, inviting more informed decisions to be made about the future role of older buildings in the city.

If the unique, urban geographical history of the Gulf is to be preserved, schemes such as those already instigated in Sharjah and those outlined above in this thesis, need to be applied throughout the whole area. Unless action is taken soon, very little will be left to preserve and texts such as this will provide one of the few tangible records of the remarkable fortitude, ingenuity and craftsmanship of a generation attuned to their environment, before the alien technology of the West became life-supporting. Respect for the past should nurture tolerance in the future and hopefully, the urban heritage will be one of the first recipients of a new-found approach to past appropriate technologies, possibly adapting them for modern use in conservation zones proudly elevated to the forefront of urban planning. The dilemma of land use in older city cores should rarely arise if educated and informed decisions are made, combining respect for the past with the demands of the future in sympathetic, coordinated and integrated conservation zones.

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Fig. 8.1: Conservation in Sharjah: A Balance Sheet

ENHANCEMENTS:

1. The whole of 'Salahadin' area designated as a conservation zone; including the Al-Midfa Houses, Naboodah House and Mosque, Marija Suq, Mugsuba Tower, Al-Taimiah Al-Mahmoudiah and Taweel House.

2. Al-Khan being considered for conservation as a 'tourist village.

3. Zarouni Mosque remains but.....

4. Al-Mananah Mosque remains but.....

5. Mukhtar House remains but.....

6. Habib House inhabited and unaltered.

7. Most of Suq Saqr area surviving....

8. R.A.F. Fort remains but.....

9. Layyah Mosque remains but.....

DETRACTIONS:

1. New tower blocks constructed the entrance of Suq Saqr and overlooking Salahadin.

2. All properties along Mahakham Road either demolished or razed by fire.

3. Za'arouni House demolished.

4. rendered completely in yellow concrete, original vents now glazed and supports removed.

5. rendered in yellow concrete, original bars and shutters removed, minaret extended with wooden tower.

6. Windtower vents boarded over with corrugated iron, walls rendered with concrete. House inhabited.

7. although isolated properties demolished and main suq alley spanned with corrugated iron.

8. slowly decaying through neglect.

9. unused and neglected.

10. No conservation proposals for Suq Saqr or Marija (residential) areas.

The statements above list the main features witnessed between 1987 and 1991 either enhancing or detracting from the conservation of buildings in the old urban core of Sharjah city.

APPENDIX 1The Tribal Structure of Sharjah Town (After Hawley, 1970)

Hawley states that the native tribal structure of Sharjah is as follows. Most of them are part of the 'Ghafiri' tribal faction, which was one of two such groups (the other being Hinawi) to inhabit Oman during the nineteenth and early twentieth centuries.

- i) Abadilah (Ghafiri, Hanbali Sunni)
- ii) Al-Ali (related to an Iranian tribe. They are Ghafiri and Wahabbi Sunni).
- iii) Huwala (related to a tribe on the South Iran coast. They are Maliki and Shafi Sunnis).
- iv) Al bu Mahair (part of the Maharah family in Ras al-Khaimah).
- v) Marar (mostly pearl divers, they are of the Hinawi faction and are Maliki Sunnis).
- vi) Matarish
- vii) Naim (Ghafiri faction, Hanbali Sunnis)
- viii) Qawasim (a family rather than a tribe which gave its general name to tribes allied to it in the eighteenth and nineteenth centuries).
- ix) Shawaihiyin (descended from the Bani Ka'ab of Oman. They are of the Ghafiri faction, Hanbali Sunnis and gave their name to the area of old Sharjah now referred to as Shuwaiheein).
- x) Tanaij (divided between Sharjah and Ras al-Khaimah. They are of the Ghafiri faction and are Hanbali Sunnis).

APPENDIX 2

The segregation of activities witnessed by Samuel V. Noe in the city of Lahore, Pakistan (1980).

Commercial areas of the Islamic city:

Bazaars are segregated by commodity. These have a hierarchy of location ranging outward from the jami as follows:

1. Candles, incense and perfumes
2. Books and bookbinding (leatherworkers)
3. The kaisariye (covered and enclosed, and containing textiles, precious items, clothing and some bulk goods)
4. Slippers
5. Tailors, carpets and tapestries
6. Jewelers (if not in the kaisariye)
7. Meat and foods
8. Carpenters, locksmiths and copperworkers
9. (At the gates) blacksmiths, wool, saddles and baskets
10. (Outside the walls) tanners, potters, produce

The bazaars or souks were often arranged around the periphery of caravanserais, madrassas or other institutions.

Notes.

Sjoberg describes the pre-industrial city as containing 'the' main market at the centre of the city near the major religious structure. This implies a somewhat exclusive concentration which differs from the patterns described above.

Commercial areas of Lahore: Specialized bazaars take the form of linear clusters ranged along primary streets. Their traditional distribution still exists although there has been some migration over the years. Mixed bazaars serve most residential quarters.

APPENDIX 3

Classification of planning zones in the Tunis Medina (after Lawless)

After carrying out a general socio-economic survey of the medina and investigating the extent of deterioration in the urban fabric, the P.T.C. team made a number of major proposals. They recommended that the entire medina together with the two rbatts should be declared a secteur de sauvegarder. Within this area they identified three zones based on the value and quality of the architectural heritage (see below).

1. Zones monumentales à protéger: those quarters where important concentrations of major monuments are located - principally the western section of the medina. They propose that no modification of the external architecture of the buildings or of their internal structure be permitted in future; traditional structures should be restored and modern architectural intrusions gradually removed.
2. Zones de protection de la morphologie traditionnelle: those quarters containing few prestigious monuments and of only modest architectural value. They emphasise the need to preserve the traditional morphology - the courtyard house and the pedestrian street pattern - but permit limited modification and partial renovation of structures.
3. Zones d'environnement: areas bordering the medina where it is suggested that construction must not conflict with the architecture and morphology of the historic city.

APPENDIX 4

A Grading of buildings amalgamating parameters in Fig. 5.17

Rank 1

These are buildings that are of the greatest architectural or cultural merit, are of the greatest antiquity (pre 1930) and are structurally sound i.e. they display comparatively few signs of erosion and would therefore require minimal restoration.

Rank 2

These buildings as above, are of the greatest architectural and cultural merit and are of greatest antiquity, but suffer from more advanced levels of erosion, requiring greater reconstructional attention and financial input.

Rank 3

These buildings are once more, of great architectural or cultural merit and are more structurally sound but are of lesser antiquity (post-1930).

Rank 4

These buildings are of the greatest historical value (pre 1930) but individually are of less architectural or cultural merit. They are also of weaker structural composition, requiring large scale restoration and repair.

Rank 5 (Marija Zone only)

Buildings of less architectural or cultural merit, of greatest antiquity and more physically sound.

The above Ranks are used to categorize buildings worthy of and/or suitable for preservation as part of a conservation programme for Sharjah city in the Shuwaiheein and Marija areas. Plans of such programmes, illustrating the above Ranks can be seen in Figs. 5.26 and 6.14.

APPENDIX 5A general description of the mens' reception room in courtyard houses of Riyadh, Saudi Arabia. (after Akbar 1982)

The men's reception rooms tends to be located adjacent and directly accessible to the entrance lobby. Every house would have at least one reception hall, and it has to be large enough to entertain visitors. In some houses, there may be no separate guest room, but the father or grandfather's room, often located near the entrance, serves as the reception room. Sometimes it has a separate w.c. and stair which leads onto a roof terrace, where guests can sleep on a summer night. Some of them have a special place for making tea or coffee, usually situated in one of the corners and surrounded by cupboards structured into the walls. It is a symbol of the economic status of the family, and it is generally the most decorated room in the house. The guest room is used for recreation, relaxation and discussion. According to the Islamic custom, guests have to be seated as one group, in an arrangement that allows each one to see and hear the others. The floor of the guest room is often divided into two levels, the one into which one enters and slips off one's shoes is lower than the level used for seating. In some cases there is a special hall near the reception entrance for exchanging dishes, particularly used for parties. The reception room is usually elongated and parallel to the street.

APPENDIX 6

A description of roof construction witnessed in Iran by H.E.Wulff (1966). A similar method has been employed along the southern Gulf coast in the early twentieth century.

The roof type mainly in use on the Iranian Plateau, particularly on the slopes of the Zagros mountains, is the flat roof. Ceiling joists are placed on top of the walls and for the open porch over heavy beams supported by columns. Ceiling boards are placed over the joists, or instead, light ceiling battens are nailed across them and are covered with braided reed mats. A mixture of mud, straw, and some lime, well worked and rather soft, is spread over the ceiling boards or reed mats respectively in many thin layers. Each layer is given some time to dry after which it is compacted with a rolling stone. The spreading of these layers is continued until the roof reaches a thickness of about 10 inches in Fárs and Isfahán, and about 20 to 25 inches in Ázarbaiján, where the mud-lime mixture, however, contains a much larger proportion of straw. Great care is taken during the spreading process that the roof is divided into sections 10 to 12 feet wide by molding the mud mixture into channels, slightly depressed in the middle of the roof and deepening towards the edges, where they end in wooden spouts. After each rain the roof has to be compacted with the stone roller; otherwise, it would develop cracks while drying. The stone roller remains on the roof. Snow has to be removed immediately, since melting snow penetrates faster than rain. Apart from these maintenance precautions, the mud roofs serve a good purpose in keeping the rooms cool in summer and warm in winter. During the construction of the roof ample salt is strewn on the mats and mixed with the mud to keep insects, in particular white ants and borers, away.

GLOSSARY

aba (plural: aba'at)	:	cloak
arish (or arishah)	:	house built of palm fronds
askari (sing.: askar)	:	guard
badgir	:	wind-tower
badkaash	:	wind scoop
bait	:	house
barasti	:	house built of palm fronds
barjil	:	wind-tower
bazaar	:	market
bedesten	:	central and most secure part of market area
Bedu	:	collective name for nomadic, camel breeding, desert tribes of Arabia (Bedu is plural, Bedui singular [Bedouin is an English corruption, a double plural])
beem	:	small fragments contained in 'hasa'
bimaristan	:	'place of the sick person' infirmary (Persian)
Caravanserai	:	storage and lodging facilities for merchants, usually on overland routes.
chandal	:	type of wood used in roof construction
den	:	locally - term for 'barasti'
dhow	:	type of boat (word of Indian origin rarely used by Arabs)
douon	:	see 'den'
durbar	:	meeting
falaj	:	underground water channel
farush	:	coral stones
funduq	:	warehouse, inn (also 'khan' 'wekala')
ghorfa	:	first floor room, used as summer living or sleeping quarters
Hadhr	:	permanently settled peoples, usually in coastal towns
hammam	:	bath house
harim	:	women's quarters
hasa	:	rubble used in well construction locally synonymous with 'farush'
hasn	:	palace, royal residence
jami'masjid	:	congregational mosque (see masjid i' Juma)
juss	:	gypsum-based mortar, used in house construction
keysareeyah	:	central and most secure part of market area (see also 'qaysariyyah' and 'bedesten')

khaimah	:	tent
khaliij/khaleej	:	the Gulf
khan	:	storage and lodging facilities for merchants (see also 'funduq' 'wekala')
khanjar	:	dagger
khorr	:	estuary, inlet of sea
kubla	:	direction of prayer
kulliye	:	urban complex centred on mosque including educational, charitable and medical facilities (Turkish)
madrasa	:	collegiate mosque or school
majlis	:	men's reception and meeting room
maristan	:	infirmary (Persian)
masherabiyah	:	screen or grill of carved wood or plaster
masjid	:	district mosque
masjid-i-Juma	:	congregational mosque (literally Friday Mosque)
maydan	:	open market space and/or ceremonial area
medina	:	literally 'city' (Arabic), but can be synonymous with older, central urban core in English texts.
mihrab	:	niche (concave or flat) indicating kubla.
minaret	:	tower on mosque used for calling prayer
mutawa	:	wise and religious man, can be synonymous with religious school.
ogee	:	a wave-like moulding having an inner and outer curve like the letter 's': a pointed arch each side of which is formed of a concave and a convex curve
qasr	:	fort, castle
qaysariyyah	:	see 'keysareeyah'
qiblah	:	see 'kubla'
ras	:	point, headland
sabkha	:	salt/mud flats
sarooj	:	a building material composed of Iranian red clay, manure and water
senam	:	pre-Islamic buildings of Persian origin used for idol-worship
shamal	:	North (also, local word for North-wind)
shorbaak	:	carved safety ballustrades
suq	:	market (Arabic)
wali	:	governor
wekala	:	see 'khan' and 'funduq'

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