

**TOWNSCAPE TRANSFORMATIONS IN
DOCKLAND AREAS:**

CASE STUDIES IN THE U.K.

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S Y N O P S I S

The dockland redevelopment phenomenon, which first occurred in North America over twenty years ago, has become a significant aspect of urban change. Extensive redevelopment of decaying and moribund dockland sites first began in Britain during the 1970s, continued throughout the 'property boom' years of the 1980s and is still occurring - albeit at a much reduced rate - in the 1990s. However, while extensive research has been carried out on the social and economic aspects of dockland rejuvenation, very little is known about the physical or townscape aspects of this process. The present study addresses this gap in research.

The processes of recent townscape change are examined in three dockland areas - London, Cardiff and Bristol. In two of these areas redevelopment was initiated either partly or wholly by Urban Development Corporations, and in the third, redevelopment was initiated by a City Planning Authority.

First, there is an analysis of the roles of those who are responsible for creating the built environment, such as developers, architects, planning authorities, Urban Development Corporations and residents of dockland developments. Secondly, there is a discussion of how the decisions taken by these 'agents of townscape change' affect the physical forms that have resulted in docklands. Thirdly, the views of dockland residents on the cultural and symbolic significance of dockland townscapes are examined.

The principal data sources are the Development Control records held by Cardiff and Bristol City Planning Authorities, semi-structured interviews conducted with Urban Development Corporations, developers and architects, and extensive fieldwork. These data are supplemented by a questionnaire survey of dockland residents.

The main conclusion of the thesis is threefold. First, it is evident that Urban Development Corporations differ from planning authorities in their approaches to development control and design control. For example, whereas the London Docklands Development Corporation has an extremely flexible, laissez faire, approach to planning, Bristol CPA has adopted a far more through-going, interventionist approach. A second conclusion is that developers are primarily concerned with 'profit-maximisation', and if they consider design at all, it is of little overall importance. Developers of dockland sites are without exception national companies who employ 'external' rather than 'in-house' architects. Thirdly, it is evident that residents of docklands generally like both the architectural appearance of the developments in which they live, and in particular the layout and design of waterfront areas. In spite of this, many have difficulty in understanding the more deeply-rooted symbolic or semiotic meanings that are conveyed by some Post-Modern buildings.

To my parents

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Wotton-Under-Edge

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LIST OF ABBREVIATIONS

ABP	Associated British Ports
BDC	Bristol Development Corporation
BCDC	Black Country Development Corporation
CAP	Conservation Advisory Panel
CBDC	Cardiff Bay Development Corporation
CMDC	Central Manchester Development Corporation
CLES	Centre for Local Economic Strategies
CPA	City Planning Authority
CZWG	Campbell Zoogolovitch Wilkinson Gough (architects)
DCC	Docklands Consultative Committee
DF	Docklands Forum
DOE	Department of the Environment
EZ	Enterprise Zone

GLC Greater London Council

HM Halliday Meecham (architects)

HMA Holder Mathias Alcock (architects)

IDC Industrial Development Certificate

JDAG Joint Docklands Action Group

LAW Land Authority for Wales

LDC Leeds Development Corporation

LDDC London Docklands Development Corporation

LIGI London Indemnity and General Insurance Ltd

LPA Local Planning Authority

MDC Merseyside Development Corporation

NAO National Audit Office

PLA Port of London Authority

RFAC Royal Fine Arts Commission

RIBA Royal Institute of British Architects

- RTPI Royal Town Planning Institute
- SDC Sheffield Development Corporation
- TDC Tees^side Development Corporation
- TPDC Trafford Park Development Corporation
- TWDC Tyne and Wear Development Corporation
- UDA Urban Development Area
- UDC Urban Development Corporation
- UMRG Urban Morphology Research Group
- WDA Welsh Development Agency

CHAPTER ONE

INTRODUCTION

1.1 Introduction

Since the Second World War British townscapes have been subjected to considerable forces of change. Jones (1991, p.1) notes, for example, that in a period of less than half a century, parts of most town and city centres have been redeveloped at least once, and sometimes twice. This unprecedented process of renewal has been fuelled by increasing economies of scale in retailing, commerce and property ownership and by greater spatial freedom of information and capital. As a phenomenon within the commercial cores of urban areas, such renewal has been the subject of considerable research in recent years by students of the urban landscape (Whitehand, 1983; Whitehand and Whitehand, 1984; Freeman, 1986). However, the 'inner cities' that encircle commercial cores, though attracting a great deal of attention as areas of major social and economic change, have been subjected to comparatively little scholarly attention as physical forms. Some of the most dramatic changes within the inner areas of cities have been in waterfront, usually dockland, areas. Their photogenic qualities, and the controversies surrounding them, have assured them considerable media coverage. But the physical forms that are resulting in dockland areas have not been accorded systematic attention by academic researchers concerned primarily with the development of urban landscapes. The principal aim of the present study is to help fill this lacuna in our knowledge by subjecting to detailed investigation the physical or townscape aspects of urban waterfront rejuvenation.

1.2 Approaches

The approach to the urban landscape adopted in this

thesis stems largely from the geographical sub-discipline that is widely known as urban morphology. The historical origins of this branch of knowledge are rooted in the late nineteenth century central European tradition of urban morphogenetics, and it is from this basis that some of the conceptual foundations for current studies on the form of urban landscapes have evolved (Whitehand, 1987). This thesis focuses on three closely related townscape issues. These are first, the people and organisations responsible for urban development. Secondly, the relationship between the physical form of the urban area and the society creating it. Thirdly, the relationship between planning and 'actual' built form.

It was not until the beginning of the 1980s that geographers started to take an interest in the people and organisations responsible for creating the built environment. Harbingers of this upsurge of research by geographers on the 'agents of change' were the study by Johns (1971) of two Devon towns and Carter's (1970) 'decision-making' approach to town-plan analysis, although Whitehand (1991) notes that the latter was more concerned with the decision-making process, than with the actual 'decision-makers'. The more recent attempt by Gordon (1981, 1984) to produce an organisational framework in which both decision-making and decision-makers are considered, has generated further geographical interest. The Urban Morphology Research Group (UMRG) at the University of Birmingham has examined the role of 'direct' and 'indirect' agents of townscape change. Direct agents are those who are responsible for bringing about actual changes to the townscape, while indirect agents are those that 'control' or oversee these changes. Examples of direct agents are landowners, property developers and architects. Examples of indirect agents are planning officers, planning committees,

residents' societies and amenity societies. In the early- to mid-1980s, the greater part of the UMRG's work was concerned with commercial and retail areas. For example, a number of studies were conducted in the Midlands and the South-East by Whitehand (1983), Whitehand and Whitehand (1984), and Freeman (1986). Since 1986, however, the Group's work has focused upon townscape change in high-class, low density residential areas and conservation areas (Larkham, 1986; Whitehand, 1988; Pompa, 1988; Booth, 1989; Jones, 1991). The present study extends this research by focusing on the role of those who have determined the physical redevelopment and aesthetic appearance of dockland residential areas.

The second perspective in this thesis concerns docklands' aesthetic and symbolic significance. The idea that townscapes can reveal something of human intention or meaning stems originally from the work of art historians such as Ruskin (1819-1900) and linguists such as Saussure (1960). Saussure proposed that landscapes could be 'read' as 'texts' by those cognisant of the culture in which they were produced. A recent development of this perspective has been that of Duncan and Duncan (1988) who suggest that it may be possible to integrate literary theory and social theory to examine the text-like quality of urban townscapes. From this basically humanistic origin, landscape interpretation has flourished within two main methodological channels, namely semiology and poststructuralism (Hall, 1991, p.16). Both these approaches are often collected under the general term iconography which is concerned with the landscape as a 'sign', or communicative device, rather than as a text. It is an approach that has been recently revived by researchers such as Daniels and Cosgrove (1988), Domosh (1989) and Lowenthal (1985). The main criticism of both the humanistic and iconographic approaches to landscape interpretation is that they fail to consider the role of

residents or 'consumers' of the built environment. Goss (1988) recognises the absence of research on this issue, and suggests that interviews should be conducted with consumers to examine how they interpret the meaning of the built environment. This issue is taken up by the present study using a questionnaire survey to examine the views of dockland residents on a number of aesthetic, cultural and symbolic issues.

Finally, the relationship between planning and outcome is considered. It is widely recognised that governmental control over development has paid little attention to the appearance of the built environment (Punter, 1987; Whitehand, 1991). In the post-war era development control became more or less universal with the passage of the 1947 Town and Country Planning Act, and, in theory, all development came to be scrutinised for its design qualities. However, in reality design control remained very relaxed and generally supportive of building trends (Punter, 1990, p.5). At the beginning of the 1980s, Britain's planning system was 'deregulated' and Urban Development Corporations (UDCs) were established to oversee the redevelopment of some of Britain's most run-down inner-city areas. As a result of this change in the planning system UDCs acquired wide-ranging powers of development control. At the same time, however, the Government further relaxed all concepts of design control. In effect this has given UDCs a much 'freer rein' than city planning authorities (CPAs) to guide the course of development. It has also meant that the physical appearance of new developments, and especially their architectural styles have often received a low priority (Whitehand, 1991, p.20). An aim of the present study is to examine the effect that the deregulation of Britain's planning system has had upon the built form of dockland residential areas.

Having examined the broad approaches adopted by the thesis, the origins, and development of urban morphology are now examined to help place the present study in context.

1.3 Background to urban morphology

The historical development of urban morphology has been described by M.P. Conzen (1968) and Whitehand (1981, 1987). Whitehand (1987, p.250) suggests that there have been three principal 'national schools' of urban morphology; in central Europe, North America and the United Kingdom. Pompa (1988, p.3), notes that the oldest of these, the central European School, can be traced from the work of Schlüter (1899) through to more recent studies by Sabelberg (1984) and Krings (1984). Schlüter's idea that the urban landscape could be envisaged as a cultural equivalent to landforms in physical geography, was subsequently developed by scholars such as Geisler (1924), Hassinger (1927) and Martiny (1928). However, shortcomings of these studies were that they gave little attention to the 'processes' involved in the formation of townscapes. Bobek (1927) was the first scholar to recognise the importance of the relationship between townscape 'form' and townscape 'process'. In the post-war period, Bobek and Lichtenberger (1966), Lichtenberger (1977) and Sabelberg (1984) contributed to the further development of the central European tradition by carrying out detailed studies of a number of Austrian and Italian cities (Pompa, 1988, p.4).

The development of urban morphology as a field of knowledge in North America has been quite limited. It has been influenced by the work of both sociologists and economists. The influence of the work of Burgess (1925), Murphy (1935) and Hoyt (1933) has been particularly

significant. But there is also a cultural tradition, exemplified by the work of Leighly (1928), Rickert (1967) and Jakle (1983). Pompa (1988, p.4) notes that whereas the cultural tradition in urban morphology in North America has remained separate from both its European and North American counterparts, the socio-economic tradition has had more influence on urban geography as a whole.

Whitehand (1987, p.253) suggests that urban morphology in the United Kingdom has developed both from the German tradition, and from its own indigenous origins. According to Whitehand, the indigenous strand was initiated by the work of Fleure (1920) who examined the layouts of a number of European towns. It was developed further in the 1950s by Smailes who gathered information about the processes that shape the built forms of townscapes. Carter (1965) also carried out studies that recognised the importance of a historical perspective in explaining the development of urban form.

The German tradition, which was brought to the United Kingdom by Conzen, has greatly affected the development of urban morphology in this country (Whitehand, 1981). Although Conzen's academic background was heavily influenced by the work of Schlüter and Geisler, Conzen was the first person to use a 'morphogenetic' approach to examine the built form of several British towns. Thus, whereas Schlüter's studies involved a description of the built fabric of towns and cities, Conzen's detailed investigations of Ludlow, Alnwick and Newcastle Upon Tyne, included an analysis of the processes involved in the formation of these townscapes. Of the studies that Conzen conducted in Britain, his examination of Alnwick, Northumberland (1960) has undoubtedly received the most widespread academic

acclaim. Whitehand (1981, p.12), for example, suggests that the Alnwick study is "the major contribution to urban morphology in the English language in the post-war era". He lists its salient achievements under five heads. These are the formation of a basic framework of principles in urban morphology, the adoption of a thorough-going evolutionary approach, the identification of the 'plot' as the basic unit of the townscape, the combination of field investigation and documentary sources and their large-scale cartographic representation, and the conceptualisation of townscape development.

1.31 Development of Conzen's work

Many elements of Conzen's work have subsequently been developed by other, mainly British, geographers, who have tended to focus upon only one or two townscape components (Pompa, 1988, p.7). One example, is Slater's (1982) study of market places and burgage series. Conzenian analysis has also led to the development of other approaches that have been applied to areas outside of historical towns. Examples of these approaches are the development of fringe belt studies by Whitehand (1967, 1972), studies of the 'agents' who are responsible for bringing about changes to the townscape (Gordon, 1981; Whitehand, 1983, 1984), and the preparation of a framework for analytical work on the relationships between townscape change and economic and social processes.

Although Louis (1936) was the first person to identify the existence of fringe belts, it was Conzen who examined their wider importance in the context of his Alnwick study. Moreover, Whitehand (1987) has subsequently developed Conzen's work by adopting a more analytical method for

examining the cyclical nature of urban development. Whitehand has considered the processes involved in the formation of fringe belts (Whitehand, 1972), and has explicitly linked their development to building and economic cycles (Whitehand, 1972, 1987).

Whitehand's (1977) attempt to produce a basis for a historico-geographical theory of urban form, has led naturally to a consideration of the 'agents' who are responsible for bringing about changes to the urban landscape. Whitehand (1977) suggests that townscape change can be related to economic and social processes through inductive and deductive chains of reasoning. He notes that the most important of these chains are based on two processes: the diffusion of innovations and variations in construction activity. Whitehand proposes that both these processes are expressed visibly on the ground as a record of past events and enable a historico-geographical framework of analysis to be developed. Some of Whitehand's ideas have subsequently been used by members of the UMRG to examine processes such as the diffusion of architectural styles (Pompa, 1988, p.14).

Although Conzen has not developed a theoretical framework to examine the roles and provenance of direct and indirect agents, his work leads naturally to a consideration of planning practice and to the development of a theory of townscape management. These ideas are fundamental to the present study and as such merit closer examination.

Essentially, for Conzen, the past provides the key to the future. The idea of the townscape as the 'objectivation of the spirit of a society' is fundamental. The spirit of a

society is objectivated in the historico-geographical character of the townscape and becomes the genius loci. In Conzen's view this is an important environmental experience for the individual, even when it is received unconsciously. It enables individuals and groups to 'take root' in an area and to acquire a sense of continuity and place in history. Townscapes with a high degree of expressiveness of past societies exert a particularly strong educative and regenerative influence (Conzen, 1975, p.101). The Conzenian landscape can be likened to a stage on which successive societies work out their lives, each society learning from the experiments of its predecessors (Whitehand, 1989, p.12). Thus, far from being just a reflection of the requirements of the society currently occupying it, the urban landscape is a record of the succession of booms, slumps and innovation adoptions within a particular locality (Whitehand, 1987, pp.12-16). Viewed in this way, urban landscapes represent accumulated experience and a responsible society acts as the custodian of the urban landscape for future generations.

To a large extent, Conzen's ideas on townscape have been derived from his detailed studies of a variety of towns in Britain during the 1940s and 1950s. His first study to include a discussion of the importance of townscape preservation was the Survey of Whitby and the Surrounding Area (Conzen, 1958). Notable throughout the first part of Conzen's contribution to the Whitby volume are numerous references to buildings that have survived in the townscape and the importance of their continued preservation. In the second part he emphasises the importance of the townscape as a composite historical monument (Larkham, 1988, p.6). Conzen first refers to the concept of 'management' in a paper written in honour of G.H.J. Daysh (Conzen, 1966). According to Conzen, the key attribute of a townscape that

requires management is its 'historicity'. Historicity is made up of three main factors: the town plan, building fabric and land utilization. These are regarded as to some extent a hierarchy in which building forms are contained within plots or land-use units, which are in turn set in the framework of the town plan (Whitehand, 1989). These three form complexes, together with the site, combine to produce the smallest, morphologically homogeneous areas that are known as 'townscape cells'. Since the three form complexes change at different speeds, their patterns frequently differ. Thus, while the town plan is an extremely durable element, building form is less conservative as it is especially subject to processes of ageing, obsolescence and replacement. Whitehand (1989) notes that it is the hierarchy of these areal units which is "the geographical manifestation of the historical development of the townscape and [which] encapsulates its historicity". Conzen's approach, therefore, is essentially conservative. The emphasis is on the transformation, augmentation and conservation of what already exists.

Although the translation of this standpoint into a fully-fledged theory has hardly begun, there is wide recognition amongst academics of the importance of conserving the historical expressiveness or 'historicity' of townscapes. For example, Smith (1974) points out that humans have a strong need for 'orientation' in their lives, and that this basic requirement is met by historical areas that have a 'sense of permanence' and 'stability'. In a similar vein, Lowenthal (1985) proposes that 'heritage' is an important factor for most people; and Tuan (1977) suggests that we have 'a moral duty' to preserve and conserve our historic heritage. Unfortunately, the gulf between academic precepts and planning practice has often been too wide to avert major planning disasters. During the

1950s and 1960s, for example, Britain's planners adopted an approach that rejected the history of places and communities. As a result, large areas of Britain's inner-cities were comprehensively redeveloped, and communities were displaced. However, while it is widely recognised that the process of comprehensive redevelopment has created a variety of social and physical problems, the townscape aspects of this problem have scarcely been addressed.

1.4 The 'inner-city' problem

1.41 Comprehensive redevelopment of inner-city areas

The Government's decision to embark upon a programme of comprehensive development after the Second World War was in part dictated by the widespread destruction that had occurred in towns and cities. Although the centres of heavily bombed towns like Hull, Coventry and Plymouth had begun to be renewed almost immediately after the end of the war, most provincial towns had to wait until the late 1950s, by which time many were desperately anxious for private developers to appear (Ravetz, 1980, p.100). The drive for housing by the Conservative government of the early 1950s subsequently caused large suburban expansions. In 1954 slum clearance was resumed (much had formerly taken place in the 1930s). As a result of comprehensive redevelopment, central sites in large cities commanded high densities and land values. With the advent of new building technologies, a burst of activity in the construction of high-rise flats occurred. The fashion of high-rise building was also evident on council estates on the outskirts of cities.

Ward (1978) suggests that the process of comprehensive redevelopment that occurred in Britain's towns and cities

in the 1950s and 1960s stemmed from 'neophilia': the worship of newness for its own sake. During this period of great expansion and consumption people tried to produce as much wealth as possible. Harvey (1989, p.11) has coined the term 'high modernism' for the mode of living that resulted from this additional production and consumption of wealth. He suggests that because modern life is so suffused with 'the sense of the fleeting' it can have no respect for its own past. Thus, the transitoriness of modernism makes it difficult to preserve any sense of historical continuity. Much of the rebuilding of cities that took place in Britain during the 1950s exhibits characteristics of 'creative destruction': an ideology that suggests it is impossible to create 'a new world' without "destroying much that had gone before" (Harvey, 1989, p.16). In architecture, the ideas of the CIAM (1952), of Le Corbusier (1964, 1970), and of Mies van der Rohe (1970), were predominant in the struggle to revitalize war-torn or ageing cities. However, Huyssen (1984, p.14) argues that the architecture that resulted merely produced "impeccable images of power and prestige for publicity-conscious corporations and governments, while producing modernist housing projects for the working class that became symbols of alienation and dehumanization".

During the 1970s and 1980s further redevelopment of Britain's inner-cities took place. However, while earlier comprehensive redevelopment had resulted mainly from the extensive damage caused to the built fabric of towns and cities during the Second World War, this later phase of rebuilding occurred because of the problem of inner-city decline. Although the Government has tended to 'lump-together' the causes of the inner-city problem with the problems associated with dockland decline, in reality clear differences separate these two issues.

1.42 Causes of inner-city decay

Urban commentators attribute Britain's 'urban crisis' to a number of economic factors. Lawless (1981) suggests that the most important of these factors is the decline that occurred in Britain's manufacturing industry in the 1960s. Moreover, because of the industrial structure of inner-city cores, it was these areas that suffered the most noticeable effects of industrial decline. Thus, between 1971 and 1975, some inner areas, such as London, Birmingham, Manchester and Liverpool, lost up to 30 per cent of their manufacturing employment (Department of the Environment (DOE), 1975). Lawless (1981, pp.9-13) attributes the decline in manufacturing to three main factors. First, changes occurred in comparative manufacturing costs, so that industries were no longer attracted to inner-city sites. These changes included a reduction in the relative cost of transportation and communication in metropolitan areas, a growth in the number of industrial processes that required a high land-to-output ratio, and a shift in the manufacturing process from short to long production runs. Secondly, since the 1960s there has been a growing trend towards 'economic rationalisation', with an increasing proportion of manufacturing output being produced by a smaller number of national and international companies. This process has led to the closure of many small and uncompetitive firms, many of which were located in inner-city areas. Thirdly, as a result of the Government's regional policy in the 1960s and 1970s, many industries were encouraged to move from their traditional urban locations to peripheral 'green field' sites. Industrial-Development-Certificate (IDC) restrictions in London and Birmingham also made firms put up with unsuitable premises, or encouraged them to decentralize to 'assisted areas' where regional development grants and other government subsidies were available.

The decline of industrial activity within the inner city has created a variety of other conditions. For example, poverty has increased, housing conditions have worsened, and community and environmental deprivation have increased. Moreover, all of these "secondary aspects of urban malaise" (Lawless, 1981, p.13) were made considerably worse by the Government's decision in 1955 to control the outward expansion of cities, and to deflect growth elsewhere. However, because a disproportionate number of young and skilled workers migrated from inner-city areas to peripheral locations, an ageing and unskilled workforce tended to be left in situ. This type of socially and demographically skewed urban structure has until recently typified many inner-city areas.

A second characteristic of urban decay is the 'land problem'. By the beginning of the 1980s, the extent of derelict urban land in inner-city areas had increased considerably. Much of this land was owned by the Local Authority and other public agencies. In some cities, such as Liverpool, as much as 90 per cent of derelict land was in public ownership. However, because many of the then public sector industries, such as gas, and electricity, were unwilling either to rejuvenate the sites that they owned, or to sell them to the private sector, huge tracts of land failed to be utilised. By the early 1980s, however, this situation had changed greatly.

Following the introduction of the 1980 Local Government Planning and Land Act (DOE, 1980a), the Government was able to use new powers of compulsory purchase to obtain much of the land that was located in run-down dock and waterfront areas. Its rationale for obtaining this land was that its redevelopment would contribute significantly to the economic

and physical regeneration of the surrounding inner-city areas. Rapid change in dockland and waterfront areas is an international phenomenon resulting from the interaction of various economic, social and political forces operating on a variety of spatial scales.

1.5 Dockland decline

1.51 Erosion of the relationship between port and city

During the last thirty years many port-based industries and associated activities have retreated from their traditional waterfront locations. This change has come about mainly as a result of advances in maritime technology and changes in the nature of trade, which have slowly eroded the traditional ties between cities and ports. Thus, whereas ports tended to be established in close proximity to the centres of cities, this is no longer the case. In the mid-1950s for example, many 'outports' were established in North-West Europe, and a downstream migration of port facilities also occurred in cities such as London (Bird, 1963). The process of spatial and functional segregation between cities and ports greatly accelerated in the mid-1960s, and as a result the traditional structures of 'port-urban interface areas' were affected (Hayuth, 1988, p.52). Two parallel developments have also hastened the loosening of ties between the conventional seaport and the historical port city. On the one hand, there have been technological, logistical and organisational changes in the shipping industry and modernisation of port operations. On the other hand, there has been a transformation in the attitudes of the public towards coastal areas in general and urban waterfronts in particular. Hayuth's (1988) model of waterfront retreat provides a basis for the analyses of a range of ecological, socio-economic and technological

factors that have led to the loosening of ties between port and city, and have subsequently led to the creation of a derelict waterfront zone (Figure 1.1). Moreover, it is this waterfront zone, or what Hoyle (1988, p.15) calls the 'abandoned doorstep', that has attracted considerable interest from property developers, and has in effect fuelled the 1980s 'dockland phenomenon'.

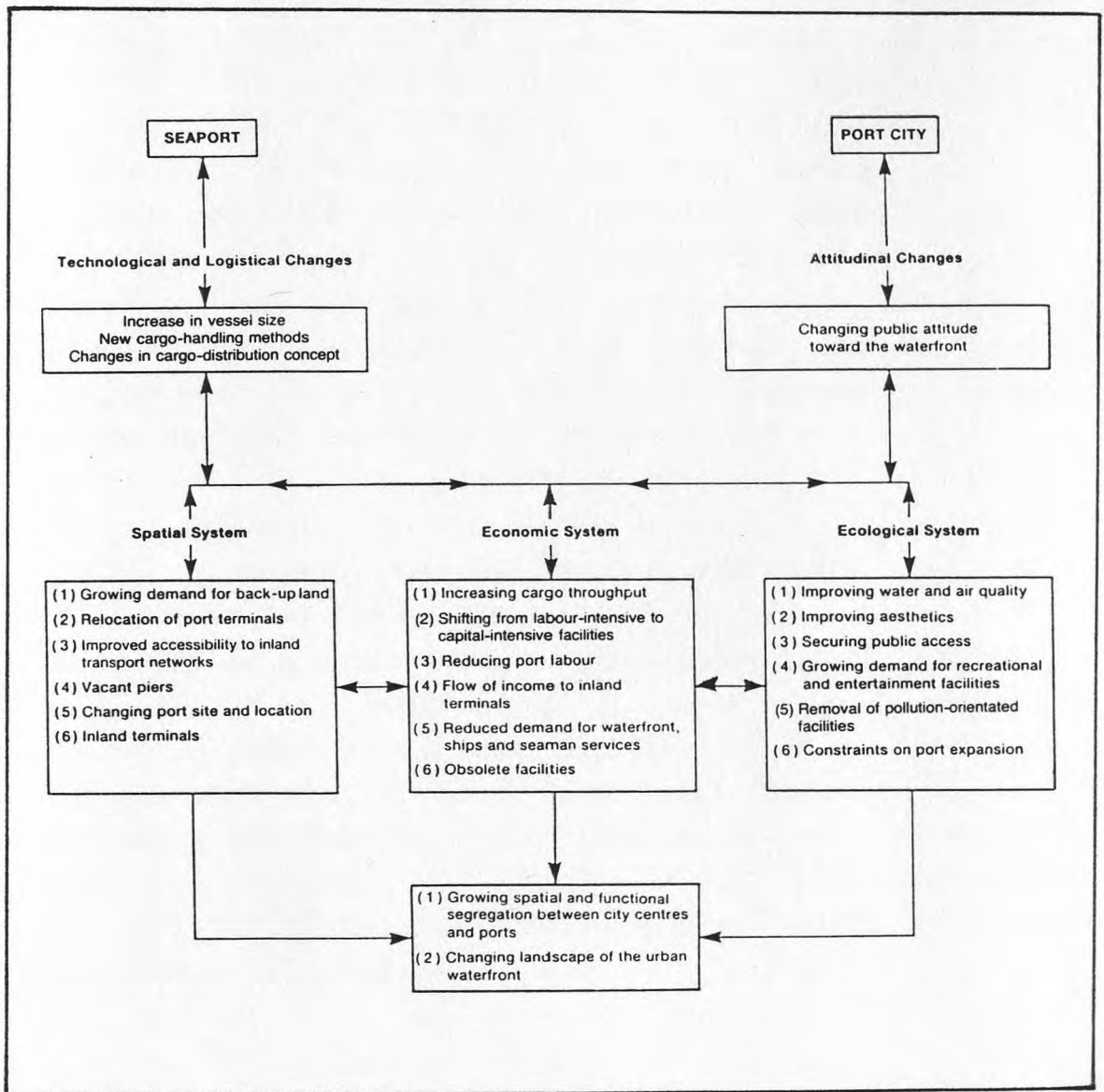


FIGURE 1.1 Trends and developments at the port-city interface (source: reproduced from Hayuth, 1988, p.54)

Since 1950, significant advances in maritime technology have led to dramatic changes in the siting of traditional port functions and the subsequent evolution of derelict land at the port-urban interface. One example of technological change is the increase in the size of oil tankers. Thus, whereas in 1967 only 9.6 per cent of the world's oil tankers and 1.7 per cent of the ore and bulk carriers exceeded 50,000 tons gross, by 1979 69.4 per cent of the oil tankers and 27.3 per cent of the ore and bulk carriers were above this size (Hayuth, 1982). These increases in the size and draft of ships mean that very few ports around the world are now able to accommodate oil and bulk carriers. Consequently, many older port terminals, such as Marseille, have been replaced by new purpose-built terminals, such as Fos, which can cater for the increased size of the carriers. Moreover, some of the world's largest oil carriers are unable to berth even in the newly constructed ports and are accommodated instead by 'off-shore' terminals (Bragaw, Marcus, Raffaele and Townley, 1975).

The advent of containerisation in many major ports has also influenced the traditional land-use configuration of the waterfront. One of the objectives of containerisation is to improve the 'turn-around' time of ships in ports and to increase cargo throughput (Hayuth, 1982). However, owing to the demands that containerisation places on total ground space area, new terminals have frequently been located downstream of original port areas. Thus, the ties between ports and cities in the area of general cargo trade have been substantially reduced.

The relocation of container terminals to in-land sites has also contributed to the physical re-structuring of waterfront areas. These locational changes have been caused

by four main factors: congested urban waterfronts, lack of port back-up space, high cost of land and labour in the vicinity of seaports and new logistical strategies of cargo distribution (Taff, 1978). New inland terminals, such as the one in Birmingham (West Midlands), are now also performing many traditional port functions, such as cargo consolidation, customs clearance and container marshalling (Hayuth, 1982).

Ecological changes at the waterfront also have an important bearing on the relationship between city centres and ports (Husain, 1988, p.15). Prior to the mid-1960s, public awareness of the various kinds of pollution caused by ports was relatively scanty, and the priority given to port activities was rarely challenged. However, this situation has changed considerably in recent years. During the 1970s, the public started to become more critical of port activities and the pollution that these activities caused. Active citizen groups, particularly in the United States, subsequently began to put pressure on port authorities to accelerate the process of vacating some of their traditional port sites in order to introduce waterfront renewal programmes. During this period, planning authorities also started to view urban waterfronts as major assets for the urban community and attempted to integrate them with other urban areas as a tourist attraction. The outcome of the public's attention is that ports are no longer given priority status in the allocation of urban waterfronts. Instead, they must now 'compete' for land with other commercial, residential and recreational functions. Moreover, since the advent of the Coastal Zone Management Act in 1972, USA waterfront development programmes must also fulfil the requirements of a strict policy which includes ecological, cultural, and aesthetic considerations.

The accelerated trend towards spatial segregation of ports and traditional waterfront areas is now common place in many advanced countries, and is becoming increasingly so in less developed parts of the world. However, the problems posed by the redevelopment of the 'abandoned doorstep' have been approached in a variety of ways and on many different scales. In some countries, including Britain and North America, the renovation of decaying dockland sites is perceived as a key element in the wider process of urban regeneration, and is increasingly recognised as part of the solution to the inner-city problem.

1.52 Government response to the inner-city problem

Since Mrs Thatcher came to power in 1981, inner-city policy has been dominated by a 'market-led' approach to urban regeneration. As noted previously, at the beginning of the 1980s the Conservative government devised an inner-city redevelopment strategy which sought to regenerate large tracts of semi-derelict industrial land located in waterfront areas. To accomplish its objectives, the Government designated a number of UDCs to purchase compulsorily much of the land that was owned by large public companies. Having purchased this land, UDCs subsequently 'prepared' it, and sold it to private property developers for redevelopment. Tweedale (1988, p.18) suggests, however, that the Government was extremely clever in developing this strategy, because it was able to shift much of the burden of the inner-city problem to the private sector.

Prior to the election of the Conservative government in 1979, inner-city policy was largely 'socially-orientated'. For example, the first programme of urban aid to be launched in Britain during the 1960s was derived from an American

theory called the 'culture of poverty' (see Townsend, 1974). This theory suggests that in some inner-city areas, residents and children born in certain circumstances are imbued with a negative outlook that encourages their early school leaving, early parentage, limited occupational skills, and hence general community deprivation. This theory has subsequently been criticised because it offers a too simplistic view of the causes of the inner-city problem (Lawless, 1981, p.6).

During the early 1970s, the Government attempted to identify the underlying causes of Britain's inner-city problem by conducting a number of inner-area studies. It concluded from these studies that inner-city deprivation was articulated by economic, social and political structures within society as a whole, and was not transmitted between generations (Lawless, 1981). Clear manifestations of its support for the inner areas emerged in the 1977 White Paper Policy for the Inner Cities (DOE, 1977). The Paper suggested that one of the most significant causes of dereliction was "the decline in the economic fortunes of the inner areas". In attempting to deal with this problem, the 1978 Inner Urban Areas Act (DOE, 1978) placed great emphasis on the creation of employment in the older urban cores (Lawless, 1981, p.8). Moreover, most subsequent strategies have adopted 'economic invigoration' as their key objective for regenerating inner-city areas.

In 1989, The Centre for Local Economic Strategies (CLES) began a study to monitor and assess the role of UDCs in property-led regeneration. One of CLES's preliminary conclusions was that UDCs had replaced the 'social' approach underlying the Government's Policy for the Inner Cities, with a business-orientated approach to regeneration. CLES

notes that "urban regeneration normally means a market-led strategy to lever-in private property investment to key 'downtown' and inner-city sites" (CLES, 1990, p.13). The Government's official rationale for using 'leverage' or 'pump-priming' methods to induce urban regeneration are summarised by Reginald Ward, the former Chief Executive of the London Docklands Development Corporation (LDDC):

"careful and constructive use of limited public sector investment can fuel inner-city regeneration, in contrast to the conventional view that it must always depend on heavy Government funding...The optimum returns are achieved by maintaining short-term high front end loading, falling sharply to a very low level of on-going funding support" (LDDC, 1985, p.14).

Despite the LDDC's insistence that pump-priming is a low cost and extremely efficient method of inducing regeneration, the LDDC has actually received massive government subsidisation (£1,134,000 by March 1991) and non-LDDC grant support. Tweedale (1988) suggests, moreover, that because the Government has conveniently chosen to 'lump-together' its plans for redeveloping Britain's inner-city sites with its strategy for rejuvenating derelict dockland areas, it has been able to manipulate public sector funds to fuel both restructuring processes. This observation is borne out by the fact that all of Britain's Urban Development Areas (UDAs) have substantial waterfront sites (docks, canals, riverside and even seaside) within their boundaries (CLES, 1990, p.23).

During the 1980s, a growing number of countries, including Australia, Japan and Singapore, joined the United States and Britain in the process of rejuvenating their derelict dockland sites. As a result, the 'waterfront

revitalisation movement' has now become an internationally recognised phenomenon.

1.6 Regeneration of dockland areas

1.61 International context

The problems of redundant older port areas and associated inner-city decline were first identified in North America during the late 1950s (Pinder, Hoyle and Husain, 1988, pp. 247-260). However, it was not until the 1960s, when a 'North American waterfront revitalisation movement' was established, that the first major redevelopment projects were initiated in cities such as San Francisco, Baltimore and Toronto (Tunbridge, 1988, p.70). During the 1970s, the need to resolve the dilemma of derelict docklands and neighbouring maritime quarters became widely acknowledged in Western Europe (Pinder and Rosing, 1988, pp.114-128). Subsequently, many of Europe's port cities, including Rotterdam and Marseille, embarked upon extensive redevelopment programmes to revitalise their 'blighted' waterfront areas (Hoyle, 1988).

The revitalisation of sea ports in North America has attracted widespread recognition. Boston, for example, started the preliminary phase of its waterfront renewal programme back in the 1950s and has subsequently attracted more than thirty years of Federal urban assistance to continue the revitalisation of its downtown peninsula and harbour area. In Canada, the revitalisation of Vancouver's waterfront merits special comment as it has experienced extensive activity. Tunbridge (1988, p.74) notes that unlike other leading ports such as Toronto, Quebec and Halifax, in which revitalisation has been contiguous, in

Vancouver it has occurred at a variety of locations, through different agencies and with distinct end products. The culmination of Vancouver's redevelopment activities came in 1986 with the staging of the Expo convention at its BC site in False Creek. This massive World Fair undoubtedly promoted a huge amount of international interest in the possibilities of waterfront revitalisation, and has acted as a catalyst for similar events that have subsequently been staged in other parts of the world (Ley and Olds, 1988).

The Dutch have made substantial efforts to avoid demand-led planning in the redevelopment of the world's largest port complex in Rotterdam. As a result of this strategy, a large part of the inner 'Waterstad' area has been set aside for reconstruction projects that are heavily subsidised by City funding (Pinder and Rosing, 1988, pp.121-125). Yet, despite their attempts to gear policies to 'social need', Dutch planners have been less successful in halting privately-funded commercial redevelopment in areas outside of the Waterstad. A salient feature of both port areas, however, is that the port's 'dynamism' has not been destroyed. Thus, maintenance standards have ensured that the docks have remained accessible at all times to inland waterway barges.

Major economic advances in the nations of the Far East have induced spectacular waterfront changes. For example, Hong Kong's harbour has undergone extensive redevelopment with many of its former port activities having been replaced by residential, commercial and public complexes (Bristow, 1988, pp.167-182). Moreover, Hong Kong's harbourfront revitalisation programme is often heralded as an outstanding example of the benefits that can be derived from

applying free-market economies to the process of land redevelopment.

1.62 Redevelopment of British docklands

In Britain, the first major waterfront redevelopment projects were commenced during 1981 in London and Liverpool. In 1987, five UDCs were set up, and a further four were declared in 1988-89 (DOE, 1988). (Table 1.1). Although nothing has been published by the DOE as to why ministers chose to designate UDCs in these areas, CLES (1990, p.20) recognise that all the areas share four characteristics. They contain large areas of industrial dereliction, show above average unemployment rates for their metropolitan areas, have vast stretches of land in public ownership, and contain sizeable stretches of waterfront (Figure 1.2).

Table 1.1 Urban Development Corporations in England and Wales

First generation 1981	London Docklands (LDDC) Merseyside (MDC)
Second generation 1987	Trafford Park (TPDC) Black Country (BCDC) Teeside (TDC) Tyne and Wear (TWDC) Cardiff Bay (CBDC)
Third generation 1988-89	Central Manchester (CMDC) Leeds (LDC) Sheffield (SDC) Bristol (BDC)

(Source: CLES, 1990, p.14)



FIGURE 1.2 Location of Urban Development Corporations in England and Wales (source: reproduced from CLES, 1990, p.15)

CLES (1990, p.22) suggest that four factors were important in determining where the boundaries of UDC areas were drawn. First, the DOE tried to exclude large areas of existing housing or 'social stress'. However, this was not always found to be possible, especially in London's Docklands and the Black Country where many residential communities were interspersed with potential development sites. Secondly, some UDCs were designated in areas of industrial dereliction, such as Tees⁵side and Leeds. However,

other UDCs were established in areas where there was a significant existing employment base, such as in Trafford Park and the Black Country. The consequence of incorporating many existing jobs and firms within UDAs was that UDCs have been faced with potential conflicts over land clearance, relocation and support for existing industry. A third factor in deciding where to declare UDCs was the amount of land in local authority ownership, or ownership of statutory bodies such as the Port Authorities, Gas Board or British Rail. In these circumstances, it has frequently been possible for UDCs to acquire large areas of potential redevelopment land by either 'vesting' or compulsory purchasing from the appropriate local authority or statutory body. Fourthly, the boundaries of all UDC areas were drawn to include parts of city (or urban) centres, or were located adjacent to them. CLES (1990, p.22) suggest that this decision was made by the DOE to ensure that UDCs were able to gain the advantage of proximity to central area property markets where redevelopment initiatives were already underway. Finally, each area includes either docks, canals, riverside or seaside. Possibly the most well known dockland redevelopment scheme in Britain is London Docklands. The London Docklands area encompasses a 20 square kilometre riverside portion of three East London Boroughs (Church, 1988, p.200). Since 1981, the LDDC has vested approximately 2,000 acres (809 hectares) of derelict dockland from the Port of London Authority (PLA). It has subsequently reclaimed much of this land and sold it to private developers for a variety of uses, including construction of luxury executive-style waterfront dwellings.

Several UDCs have plans for redeveloping stretches of canal that are located inside their designated areas. Sheffield Development Corporation (SDC) for example, is planning the rejuvenation of part of the canal basin in the

Lower Don Valley. Similarly, the Black Country Urban Development Corporation (BCDC), Central Manchester Urban Development Corporation (CMDC), and Leeds Development Corporation (LDC) have all announced their intention of initiating canalside schemes.

A number of projects are currently underway to replace riverside industries with mixed-use developments. For example, in Sunderland work has commenced on the 40 acre (16 hectare) St Peter's Riverside development at the mouth of the Wear. In Sheffield, the aim of the SDC is to regenerate the former industrial Lower Don Valley by providing a high quality development, a new city airport and a 'supertram' network. However, the project has already run into difficulty as the Cutler's Wharf scheme, which was to be developed by Shearwater Properties, has suffered seriously from property recession.

Those UDCs that are located in coastal areas, such as Tees^side and Merseyside, have generally capitalised upon the advantages of their locations. For example, Tees^side Development Corporation (TDC) was awarded £36m of UDC grant aid in 1991-92 to commence a number of projects, including the construction of a marina. The TDC has also revealed recent plans to construct a barrage at its Teesdale site. Liverpool has traditionally been one of the most depressed cities in Europe. However, since the Merseyside Development Corporation (MDC) was established in 1981, substantial redevelopment of the city's derelict land sites has taken place. In 1984 the MDC launched a strategy which resulted in three 'high profile' initiatives: the Albert Dock development, the International Garden Festival, and the International Tall Ships Race. In terms of major physical regeneration, the MDC has been quite successful.

Although some obvious similarities exist between UDC areas, there are notable differences between the locations of these areas within the United Kingdom. For example, whereas 10 UDCs are distributed throughout the regions of England, there is only one in Wales and none in Scotland. Important variations also exist within the UDC areas. CLES (1990, p.20) suggest that these differences occur as a result of the state of the local economy, the local property market, and commercial/retail markets, all of which affect the process of regeneration. Possibly the greatest differences between UDCs are between first/second generation, and third generation, or 'mini' UDCs. Generally, the first and second generation UDCs designated between 1981 and 1987 are much larger in acreage than the mini UDCs that were established in 1988 and 1989. For example, Tees^Side UDC covers an area of 12,004 acres (4,858 hectares), whereas Central Manchester UDC is only 462 acres (187 hectares) in size. It is also the case that the LDDC and the MDC, which are both first generation UDCs, were given far greater powers of planning control and government funding than any subsequent UDC.

1.7 Research Questions

The research questions posed by the present study concern the agents of change at work in the redevelopment of dockland residential areas, attitudes towards the aesthetic and symbolic value of these townscapes, and the relationship between planning theory on the one hand and the 'actual' built form of docklands on the other.

First, four questions are posed on the roles of those who are both directly and indirectly responsible for creating dockland townscapes.

- 1) Who or what is responsible for bringing about the redevelopment of dockland areas ?
- 2) How important, relative to one another, are the roles of various kinds of agents of change, such as developers, architects, CPAs, UDCs, and the house-buying public, and what are the relationships between them ?
- 3) What is the relationship between the location of dockland developments and the location of relevant decision-makers, and to what extent does this relationship have a bearing on the nature of the forms created ?
- 4) What attempts have been made to 'market' docklands' image to the public ? Which agents have been responsible for this marketing process ?

A recent development to have taken place within urban morphology is the use of urban landscapes as a means of interpreting the societies that create them. In this view the physical form of the urban area and the society creating it are synthesised: the urban landscape becomes a part of a 'new' social and cultural geography (Ley and Olds, 1988; Whitehand, 1991, 1992). The questions of central concern here focus on the aesthetic and symbolic significance of dockland townscapes.

- 1) Do developers and architects have a realistic notion of docklands' 'maritime heritage', and if so, how does this knowledge influence their design of residential areas ?
- 2) How successful are developers and architects in communicating the intended 'symbolic meaning' of dockland developments to residents ?

3) What are the attitudes of residents to the identities of dockland townscapes ?

4) To what extent is planning practice consistent with Conzen's standpoint on the cultural value of historical urban landscapes ?

Finally, three questions are posed on the relationship between planning and outcome. They are particularly relevant in the light of the deregulation that has occurred in Britain's planning system since the beginning of the 1980s.

1) What are the priorities of CPAs and UDCs as shown by their practice as distinct from their stated intentions ?

2) How do CPA design control policies differ from UDC design control policies ? How important is the interaction between developer and CPA and developer and UDC ?

3) To what extent has profit-maximisation influenced developers' redevelopment objectives ?

CHAPTER TWO

RESEARCH PROCEDURES AND STUDY AREAS

2.1 Introduction

In contrast to recent work by the UMRG at the University of Birmingham which has focused upon the redevelopment of existing residential areas in mature, low density suburbs (Pompa, 1988; Whitehand, 1991; Jones, 1991) this study focuses upon the redevelopment of mainly redundant sites of industry, warehousing and transportation that have gone through at least one cycle of urban use (Whitehand and Horn, 1990). A second difference between this study and previous research by the UMRG, concerns the application and the details of the research procedure. Well defined research procedures to obtain data on both the built forms of townscapes, and the morphological processes that shape townscape areas have been established (Whitehand, 1984; Larkham, 1986; Pompa, 1988; Jones, 1991). Three of the most common sources of information used by the UMRG are building applications, development control applications/ planning file data, and questionnaire surveys of agents of townscape change. Although this study makes extensive use of development control applications and planning file data, in addition three other sources of data have been utilised. These are LDDC development briefs/area frameworks, semi-structured interviews with UDCs, developers and architects, and a questionnaire survey of dockland residents.

2.2 Selection of study locations in England and Wales

Since the central purpose is to examine the second-cycle residential redevelopment of derelict or semi-derelict sites in docklands, it follows that study locations with the following basic characteristics are required:

- 1) In the study period all locations should have been the subject of substantial volumes of second cycle change.
- 2) The locations should have undergone redevelopment over similar time periods, so that they would have been affected by the same national economic and building cycles and the same national attitudes to housing types and styles.
- 3) Redevelopment should have taken place in locations with either a UDC or CPA so that the development control and design control roles of these different 'agents' of townscape change could be compared. To compare differences in the roles of UDCs, it was necessary to select an example of a first and second generation UDC.

Early in the study it was necessary to make a number of field visits to different dockland locations to ascertain those that met the basic requirements outlined above. In 1988, it was found that redevelopment had yet to commence in five UDC locations. These were Tees^Sside, Tyne and Wear, Manchester, Sheffield and the Black Country. It was decided that these UDCs were unsuitable for further detailed investigation.

The next stage in the selection process involved choosing study locations that had first and second generation UDCs and choosing a third location that had been redeveloped without UDC intervention. Three 'combinations' of possible study locations were considered. First, a northern and Midlands group comprising Merseyside, Trafford Park and Birmingham (non-UDC). Secondly, a southern group comprising London, Cardiff and Bristol (Bristol's 'mini' UDC has not been involved in the redevelopment of dockland sites). Thirdly, a combination from the North/Midlands

and the South, namely London, Trafford Park and Bristol or Merseyside, Cardiff and Birmingham. Following consideration of these three options, it was decided to choose the three southern locations (Figure 2.1). This decision was based on the following consideration. The southern locations are in an economically more favoured part of the country, and have been able to benefit more from the generally buoyant 1980s property market than the North and Midlands (Docklands Consultative Committee (DCC), 1990, p.75). Since a central aim of the thesis is to examine a number of different aspects of property redevelopment, it is important to select study locations that have access to an active property market.

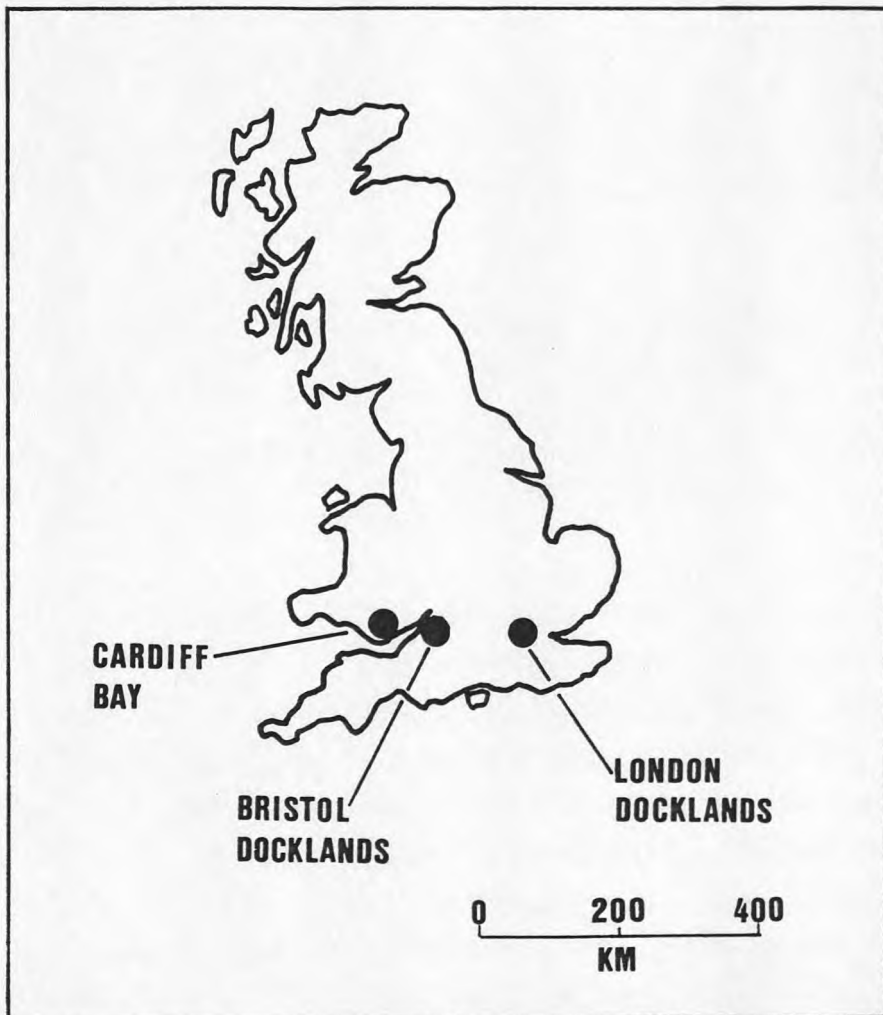


FIGURE 2.1 Study locations in England and Wales (source: adapted from CLES, 1990, p.15)

2.21 Selection of a study area in London Docklands

At 5,500 acres (2,226 hectares), London Docklands is the largest of the three study locations. The term 'London Docklands' refers to that part of East London which borders the River Thames and contains a number of distinct communities including Wapping, Rotherhithe, the Isle of Dogs, Silvertown and North Woolwich (Church, 1988, p.200). For present purposes the area is defined by the administrative boundary of the LDDC, which encloses riverside areas of Tower Hamlets, Newham and Southwark (Figure 2.2).

In 1981, the LDDC was designated the managing body of the Docklands UDA by the Secretary of State for the Environment using the powers contained in the 1980 Local Government Planning and Land Act (DOE, 1980a). Section 136 of this Act states that the LDDC's salient objectives are to:

"secure the regeneration of its area by bringing land and buildings into effective use, encouraging the development of existing and new industry and commerce, creating an attractive environment and ensuring that housing and social facilities are available to encourage people to live and work in the area."

Because of the size of its UDA the LDDC felt that it was not able to 'secure its regeneration' without first dividing the UDA into four planning areas. These areas are St Katharine's, Wapping, Limehouse and Poplar; Isle of Dogs and Leamouth; Royal Docks, Beckton, North Woolwich and Silvertown; and London Bridge, Bermondsey, Rotherhithe and Surrey Docks (Figure 2.3). Subsequently, the LDDC set up four area teams, one to oversee the development of each planning area.

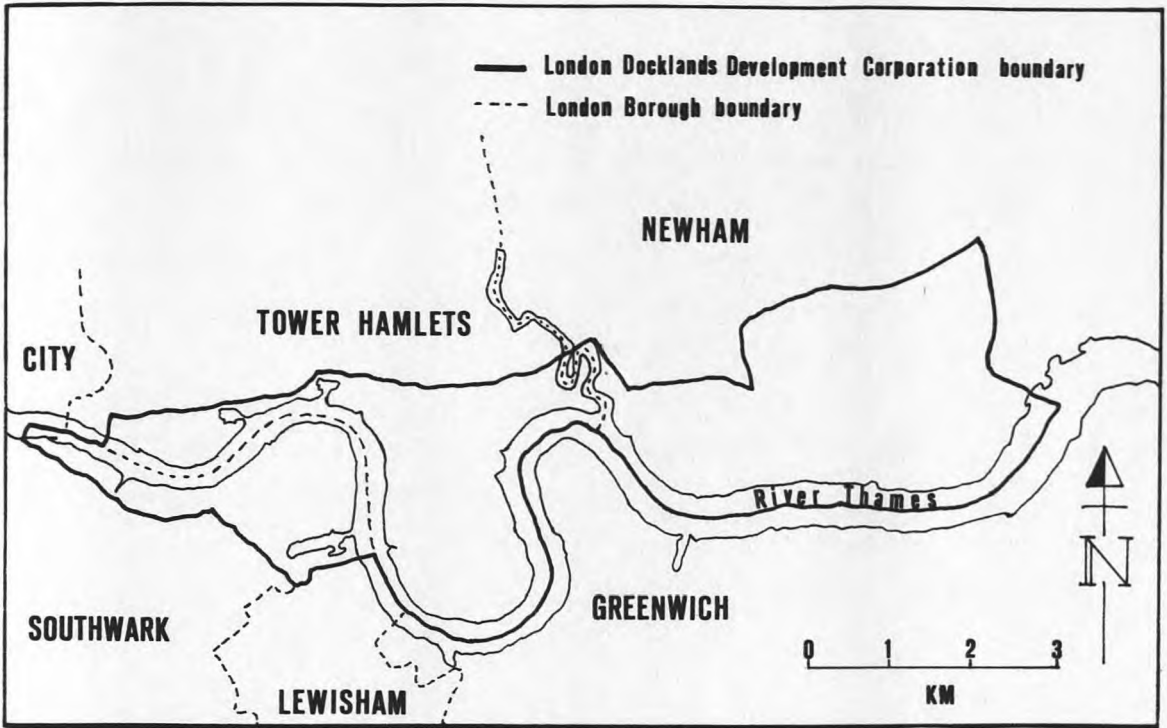


FIGURE 2.2 Location of Dockland Boroughs (source: based partly on Church, 1988, p.201)

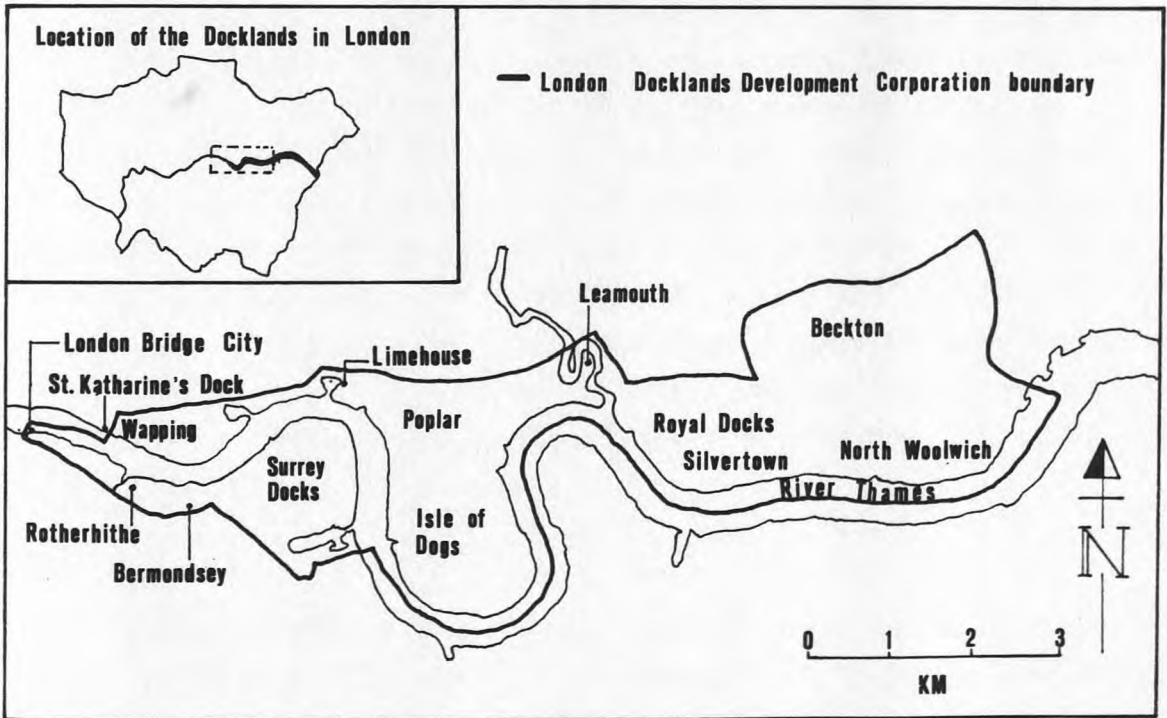


FIGURE 2.3 Location of London Docklands Development Corporation Planning Areas

To facilitate the selection of a suitable study area, a detailed field investigation was made of each of the LDDC's four designated planning areas. This investigation revealed three important facts. First, some areas, such as the Isle of Dogs and London Bridge City, had a predominantly commercial rather than residential composition. Secondly, a number of locations, such as the Royal Docks, Beckton, North Woolwich and Silvertown had not undergone substantial redevelopment by 1988. Thirdly, compared with the majority of residential areas that were examined, St Katharine's Dock and Wapping contained an unusually large number of expensive residential dwellings (e.g. studios costing more than £115,000 in 1989). Each of these planning areas will be briefly discussed.

As part of the Government's policy to attract industry to Docklands, an Enterprise Zone (EZ) was established on the Isle of Dogs. Each firm that has located in the EZ has benefited from two main incentives: a rate-free period until 1992, and low-cost ground rents of approximately £20 per square foot. As a result of the Government's actions, much of the Isle of Dogs is now a commercial area, dominated by the 10m sq. ft Canary Wharf development. Residential redevelopment has largely been confined to the area's riverside, although much more residential infilling is expected in future years to house the employees of London's '21st century city'. Due to the Isle of Dog's predominantly commercial, rather than residential composition, it was felt that it would not be a suitable ^{area} for further study.

Although the Royal Docks ceased operations in 1981, major redevelopment did not commence in this area until 1989. At the time of preliminary research, neither of the

schemes that were approved by the LDDC for 'the Royals' had yet commenced. These schemes are Rosehaugh Stanhope's £500 million, 264 acre (107 hectare) shopping and residential venture, and the Laing/ Von 'Londondome' arena project which also included plans for an exhibition hall, two hotels and 1,750 residential and business units. Although several redevelopment projects had already commenced in the Royal Docks and Beckton, these were mainly small (30-50 unit) 'crescent' and 'mews' schemes that were interspersed with existing dwellings and derelict land sites. North Woolwich and Silvertown also fall within the Royal Docks planning area (Figure 2.3). However, neither of these areas had undergone substantial redevelopment by 1988.

London Bridge, or more accurately London Bridge City, is predominantly a commercial area. It has over a million square feet of office space, plus shops, restaurants and a private hotel. London Bridge City has only a very small residential component and was therefore unsuitable for further research.

St Katharine's Dock and Wapping contain some of Docklands' most expensive residential units. For example, Bovis's President's Quay development at St Katharine's Dock, which is described by the London Property Guide (1989) as "a particularly stylish development" (p.279), boasts exceptionally high property prices to match its stylish image. A studio apartment in this development cost £117,000 in 1989, and a penthouse was priced at £750,000. Prices of the adjacent Miller's Wharf and Hermitage developments (Wapping) were even higher than those of President's Quay. In 1989, a Miller's Wharf studio apartment was priced at £275,000, and a penthouse at £1.5 million; a Hermitage studio cost £250,000, and a penthouse £1.75 million (London

Property Guide, 1989, p.280). A major concern about choosing Wapping and St Katharine's Dock as study areas was that their inclusion might prohibit a detailed comparison with other dockland areas in London, Cardiff and Bristol. Moreover, since an aim of the residents' questionnaire survey is to make this type of comparison, St Katharine's Dock and Wapping were considered to be unsuitable for detailed research.

Both Limehouse and Poplar were considered as potential study areas. However, the field survey showed that although a substantial amount of residential redevelopment was taking place in both areas, very little of this had been completed by 1988. Further, those developments that were occupied were generally converted warehouses, such as Free Trade Wharf and Keeper Wharf, rather than new housing developments.

It was found that Bermondsey, Rotherhithe and Surrey Docks contained a larger number of completed residential developments than any other part of the Docklands UDA. DCC statistics show, for example, that in Surrey Docks a total of 3587 dwellings had been started since 1981 (DCC, 1988). Described by the London Property Guide (1989) as "the affordable side of Docklands" (p.287), Surrey Docks and its surrounding area contain a large number of houses with gardens as opposed to warehouse flats. In contrast to St Katharine's Wharf, where a studio apartment cost £225,000 in 1989, in Surrey Docks a four bedroom house could be purchased for £145,000.

Bermondsey, Rotherhithe and Surrey Docks were all suitable study areas. Yet since it was necessary to select

only one area for further research, additional information was needed to facilitate this choice. An interview with Peter Swordy of the LDDC's Surrey Docks Team greatly assisted the selection process. First, Swordy confirmed that Surrey Docks, as opposed to Bermondsey and Rotherhithe, contained the largest area of residential redevelopment in the area south of the River Thames. Large parts of the original Surrey Docks complex had been infilled to provide cleared land for house building. Moreover, because much of the initial construction work had commenced during 1985 and 1986, Surrey Docks was one of the first areas of Docklands to complete the initial 'phase' of its regeneration programme. Secondly, Swordy gave his assurance that the LDDC would be willing to provide photocopies of development briefs for the majority of residential sites within the Surrey Docks UDA. The Surrey Docks' Area Team would also be willing to take part in further semi-structured interviews should this be necessary to obtain data that were not available from planning briefs. In the light of this interview it was concluded that Surrey Docks was a suitable study area, and that enough data were available to enable research to commence.

2.22 Selection of sites in Surrey Docks

The selection of sites in Surrey Docks has been influenced by the work of Yin (1989), and Punter (1988), who have examined the use of case studies in research. Both conclude that it is extremely difficult to justify the results of research that are based on only one case study, and it is therefore normal for researchers to use multiple studies (Punter, 1988, pp.55-56). Since this thesis relies heavily upon the use of case studies to examine the process of residential dockland redevelopment, it has been necessary to select more than one study site in each study area.

Following a detailed field investigation of Surrey Docks, it was decided to examine approximately ten per cent of the UDA.

The selection of study sites was based on three criteria. First, it was necessary to select sites that had been fully redeveloped. North Southwark was the first part of the redevelopment area to be rejuvenated, and therefore more residential units were finished here in 1988 than elsewhere. Many other areas of Southwark did not undergo redevelopment until several years later (Table 2.1).

Table 2.1 Residential development over 100 units at 1.11.88

Scheme	Developer	Units	Completion date
Norway Dock	Ideal Homes	180	1990
Columbia Wharf	ISLEF	160	1990
Lawrence Wharf	ISLEF	160	1990
Greenland Passage	ISLEF	80	1989
East Country Yard	Skillion	410	1991+
Lavender Wharf	Rosehaugh/ Barrett	350	1991+
Housing site 10	Roger Malcom	220	1991+

Source: K.F.R., 1990

Secondly, it was necessary to select similar types of housing developments so that comparisons could be made between study sites in London, Bristol and Cardiff. In Southwark, it was decided to limit the choice of sites to those in the northern end of the redevelopment area where the majority of houses and flats are privately owned. This is an important consideration because although Dockland redevelopment is heavily biased in favour of the private sector, some areas have been set aside by the LDDC for the construction of sheltered/housing association dwellings. Examples of these developments include Cherry Garden Pier which is a London Borough of Southwark scheme, Brunel Road which is 'fair rent' development, and Acorn Walk which is a fair rent refurbishment by Barrett.

Thirdly, it was necessary to select study sites for which the LDDC was willing to provide photocopies of planning applications and development briefs. This is an important consideration because the LDDC, exempt from the Local Government Access to Information Act 1985, does not grant public access to planning files that contain data on the development control process. Consequently, data that were obtained from planning applications and development briefs have been a particularly important source of information.

Three sites were found to satisfy the selection criteria. First, Surrey Waters, a 5.3 acre (2.1 hectare) development of 125 houses, 30 flats and 12 maisonettes. Secondly, Marlow Landings, a 5.7 acre (2.3 hectare) development of 122 houses and 24 flats. Thirdly, Wolfe Crescent, a 2 acre (0.8 hectare) development comprising 26 houses and 53 flats (Figure 2.4).

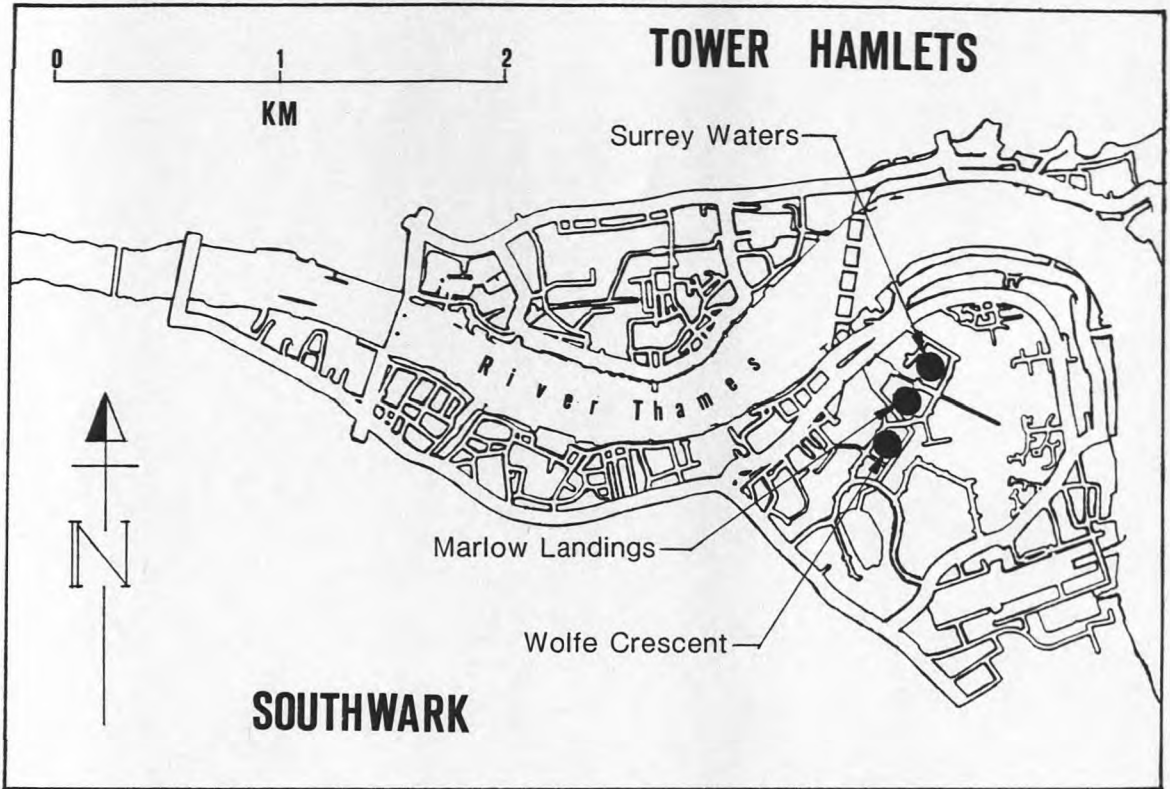


FIGURE 2.4 Location of London study sites

2.23 Selection of a study area in Cardiff docklands

The Cardiff docklands redevelopment was originally conceived in 1983. Two years later, the Labour-controlled County Council awarded a contract to Tarmac plc. to develop 89 acres (36 hectares) of wasteland adjacent to Bute East Dock (Figure 2.5). Plans for the scheme were later extended to cover the whole of Cardiff Bay, and in 1987, a second generation UDC (Cardiff Bay Development Corporation, (CBDC)) was established, with the consent of the County Council, to co-ordinate a two stage regeneration programme. This programme, known as the CBDC's Regeneration Strategy (1988), includes plans to build 6000 new dwellings and provide



FIGURE 2.5 Location of Atlantic Wharf, Cardiff (source: reproduced from Cardiff Bay Development Corporation, 1988)

30,000 jobs in manufacturing and service industry, modern businesses, offices, retail, leisure and recreation. In addition, the CBDC hope to construct a barrage that will produce a lake of over 494 acres (200 hectares), and a waterfront area of 12 kilometres.

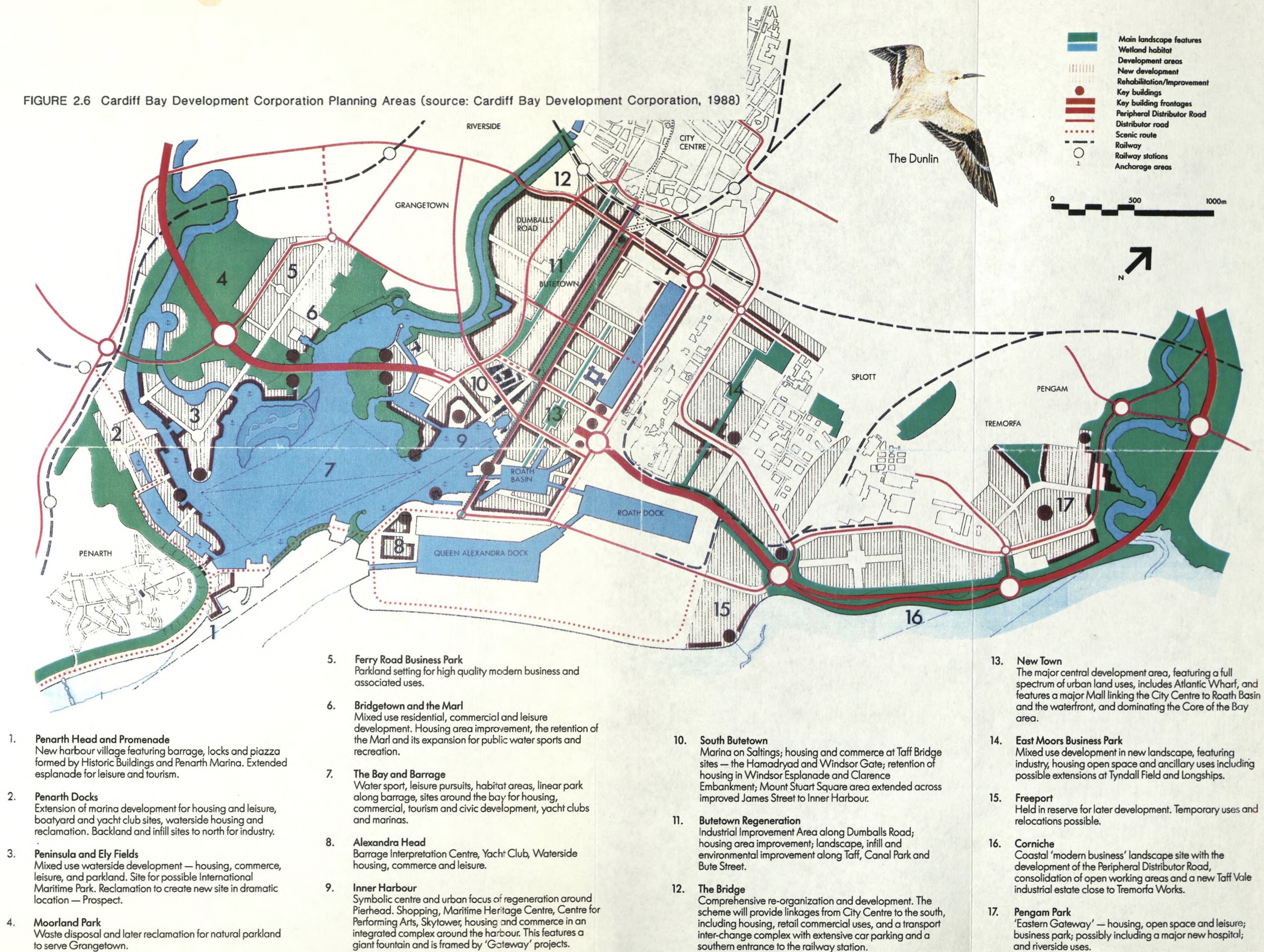
In 1988, the CBDC announced that its salient objective was to:

"establish Cardiff internationally as a superlative maritime city, which will stand comparison with any similar city in the world, enhancing the image and economic well-being of Cardiff and Wales as a whole (CBDC, 1988)."

To achieve this objective, the CBDC decided to divide its 2,800 acre (1,089 hectare) UDA into four manageable planning areas. These areas consist of the West, Bay, Core and East. Each development area was then subdivided into a numbered location, and assigned a 'theme usage' (Figure 2.6). For example, area number one in the West is Penarth Head/Promenade. Its location is Penarth, and its proposed 'theme use' is for an extension of Penarth Esplanade to the barrage, and the construction of a new harbour village at Barrage Head.

Although the CBDC's Regeneration Strategy is a fairly comprehensive planning document, containing detailed information on how the UDA should be redeveloped, the CBDC is not a planning authority. Thus, on sites where the CBDC does not own the land, formal planning powers remain with Cardiff CPA and the Vale of Glamorgan Borough Council. However, in the ground rules laid down by the Welsh Office, the two planning authorities are required to refer all applications in the CBDC area to the Corporation, and if they cannot agree with its recommendation, to submit the

FIGURE 2.6 Cardiff Bay Development Corporation Planning Areas (source: Cardiff Bay Development Corporation, 1988)



matter to the Secretary of State for Wales (Aldous, n.d., p.47). Essentially therefore, the CBDC acts as a non-statutory 'shadow' planning authority. However, in cases where the CBDC is the landowner of a site it is able to be more specific in its demands. Generally, this amounts to the preparation of development briefs setting out its requirements, and subsequently using these to attract developers. Interested developers are then likely to communicate directly with the CBDC before submitting a planning application to one of the two planning authorities (Frank Levers, CBDC, personal communication).

To facilitate the selection of an area for detailed study, a field investigation was made of the CBDC's four planning areas. This investigation revealed three facts. First, in 1988 some areas had either not started to be redeveloped, or were still in an early stage of redevelopment. Examples include the Penarth Docks marina, Alexandra Head waterfront housing and yacht club, the New Town Central Development Area, and the mall between the city centre and waterfront. Secondly, some areas were found to have a predominantly commercial or industrial composition. Examples include Moorland Park, Ferry Road Business Park, Inner Harbour, East Moors, Corniche industrial estate, Pengram Park, and Eastern Gateway business park (Figure 2.6). Thirdly, the Bay area had undergone greater residential redevelopment than any other area. Construction work at 'Atlantic Wharf' (Bute East Dock) was particularly advanced, and in December 1988 approximately 250 homes had been completed, and a further 280 were nearing completion (Figure 2.5).

Following communication with the Development Control Section of Cardiff CPA, it was decided that Atlantic Wharf

would be a suitable study area because of its advanced state of redevelopment. The CPA also agreed to allow access to relevant planning files and other development control data so that selection of study sites at Atlantic Wharf could be undertaken.

2.24 Selection of sites at Atlantic Wharf

To facilitate the compilation of representative case studies, it was decided to select three sites in the Atlantic Wharf study area. Selection of sites was based upon two main criteria. First, the sites were either fully redeveloped, or nearing completion of development in 1989. Secondly, all housing development was for the private sector, so that comparisons could be made with study sites in London and Bristol.

The following sites were found to satisfy the three selection criteria. First, a residential and commercial development comprising 98 dwellings and 14 shops on a 2.4 acre (1 hectare) site. Secondly, a warehouse conversion comprising 47 luxury one and two bedroom apartments. Thirdly, a residential redevelopment comprising 59 houses and flats on land located off Schooner Way (Figure 2.7).

2.25 Bristol City Docks redevelopment area

The Bristol docklands redevelopment was the first major waterfront regeneration project of its kind in Britain. In 1969, Bristol City Council commissioned Casson Conder and partners to conduct an investigation into the ways in which the Docks and surrounding areas could be utilised. The City Council also set up the Bristol City Docks Group in 1972 to

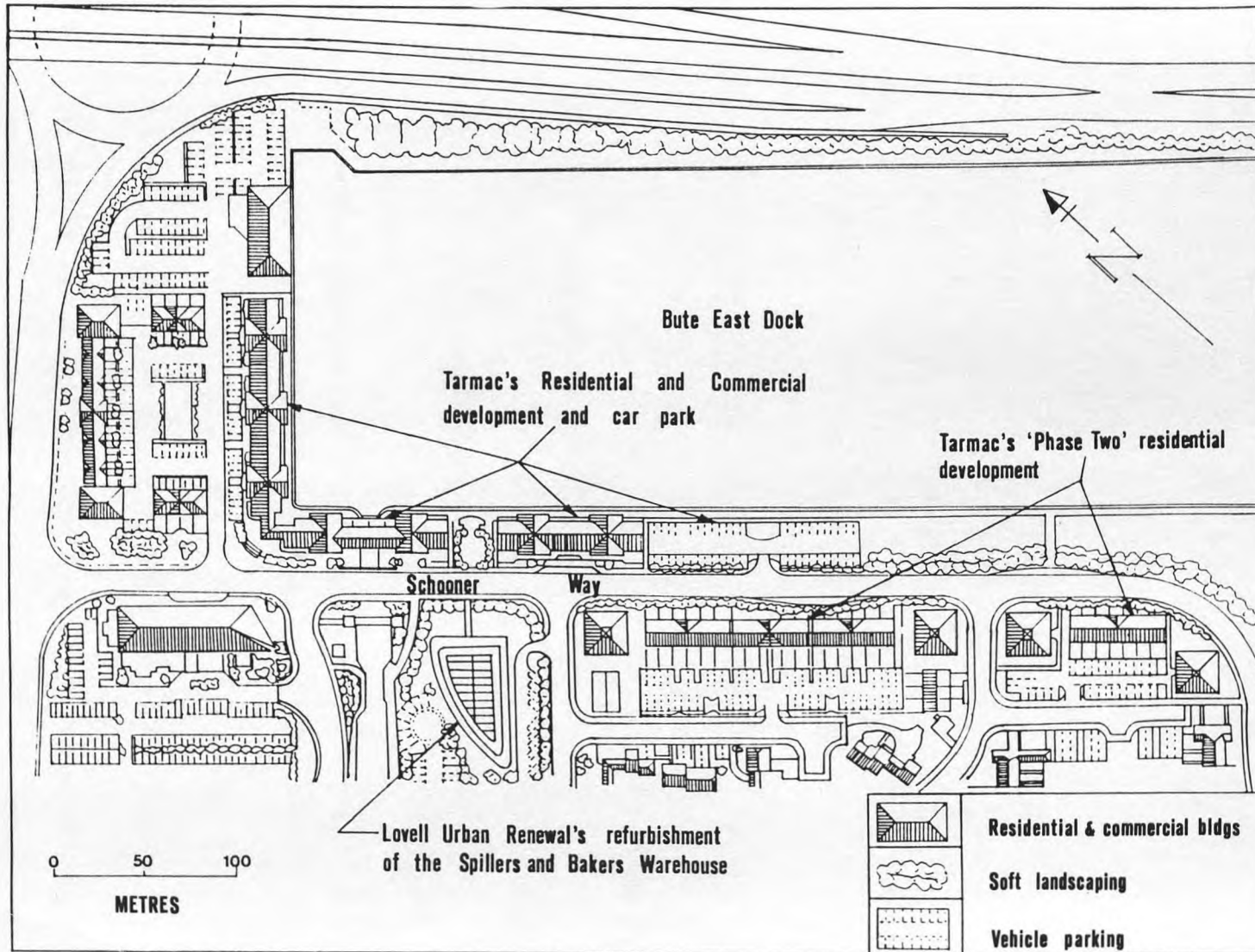


FIGURE 2.7 Location of Cardiff study sites (source: 1:1250 Master Plan, Tarmac East Bute Developments Ltd, Atlantic Wharf, Cardiff, provided by Holder Mathias Alcock architects, 1989)

provide a further evaluation of the redevelopment potential of the Dock area. In 1979, the Draft Local Plan for the City Docks area was published. Essentially, the Plan favoured an incremental approach to regeneration and stressed the importance of conservation. It also identified five potential residential redevelopment sites within the Bristol City Docks redevelopment area. These sites are Rownham Mead, Baltic Wharf, Merchant's Landing, Ferryman's Quay, and Buchanan's Wharf (Figure 2.8). To facilitate the selection of study sites that satisfied the criteria set out in Section 2.2, a detailed investigation was made of each of the five sites. Following discussions between the CPA and developers and architects the redevelopment of the City Docks commenced at the beginning of the 1980s.

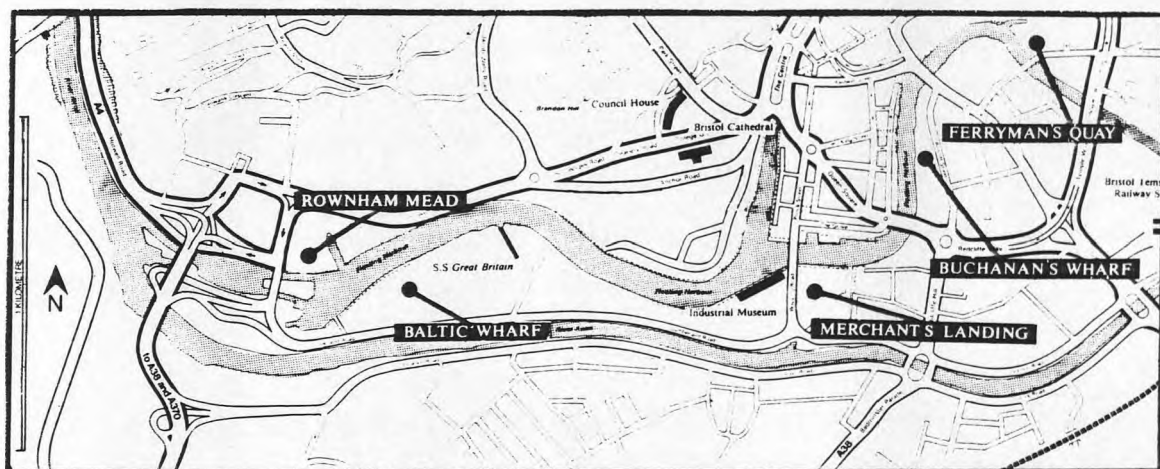


FIGURE 2.8 Bristol City Docks (source: adapted from Bristol City Council, n.d.)

2.26 Selection of study sites in Bristol City Docks

The field investigation revealed two important facts.

First, unlike London and Cardiff docklands, where redevelopment had not been completed in 1988, all five sites in Bristol had been fully redeveloped at the time of the investigation. Secondly, although Bristol CPA had originally intended that some council houses should be built in docklands, this plan was never implemented due to government cutbacks. With the exception of some council housing at Baltic Wharf, the majority of dockland residential units are privately owned. Because of this high incidence of private ownership, it would have been possible to compare any of Bristol's five redevelopment sites, with sites chosen in London and Cardiff.

Although the field investigation showed that all five sites were potentially suitable for detailed analysis, this was not possible because of the limited amount of time available for data collection. Following discussion with planning officers from Bristol CPA's Development Control Section, it was decided to select three sites for detailed investigation. These are Baltic Wharf, Buchanan's Wharf, and Merchant's Landing (Figure 2.8).

Baltic Wharf is located at the western end of Bristol's Floating Harbour. The development comprises seven south-facing courts of approximately 40 dwellings. The Buchanan's Wharf development which is located at the southern end of Redcliffe Back, comprises two refurbished grain warehouses, a nine-storey residential 'in-fill' block, and 99 new flats. The Bathurst Basin site (now known as Merchant's Landing) is located to the south of the Floating Harbour. The development comprises nine refurbished houses, and 121 new residential dwellings.



The two sites that were excluded from further investigation are Ferryman's Quay and Rownham Mead. Ferryman's Quay is situated close to Bristol City Centre and adjacent to the Floating Harbour. The development was built in 1986 by Lovell Urban Renewal. Ferryman's Quay was excluded from further research because it contains only 30 units, and this was considered to be too few dwellings for the purposes of a residential questionnaire survey. Rownham Mead (formerly Merchant's Dock), is the oldest of Bristol's five dockland schemes. It is located at the western end of the Floating Harbour adjacent to the Baltic Wharf development. Rownham Mead was excluded from detailed investigation because of the anticipated difficulty in obtaining accurate information from architects and developers of dockland projects. Even if it had been possible to locate the individuals who were involved in the Rownham Mead project, it is unlikely that they would have been able to provide precise information on a scheme that was built nearly ten years ago.

2.3 Research procedures

The aim of Sections 2.31-2.4 is twofold. First, to examine each of the five data sources used in this study. Secondly, to discuss briefly the qualitative and quantitative techniques used to analyse these data.

2.31 Development control applications and planning file data

The planning or development control application was introduced as a requirement of the 1947 Town and Country Planning Act. This Act forms part of a series of legislative moves following the Second World War. It was based upon the reports of Royal Commissions, and was seen as

a necessary response to damage that had occurred during the Second World War (Jones, 1991, p.51).

Since 1 April 1948, development control applications have been required for all physical developments, with the exception of minor alterations that are allowed by General Development Orders, some government/official structures, and areas removed from LPA control, such as those for which UDCs are responsible. In each case, the decision whether to grant or refuse planning permission lies either with the Council of each LPA/CPA, who receive advice from planning officers of the Council (Jones, 1991, p.54), or the Planning Board that advises UDCs on planning issues.

There are two basic types of application: outline and full. Pompa (1988, p.46) notes that whereas outline permission requires very limited information and is intended essentially to ascertain whether a proposed development is in principle acceptable to the LPA, detailed planning permission requires far more detailed proposals and plans. It is generally the case that an architect is involved in an application for full planning permission. An outline permission can be converted into a full permission by the submission of an application for the approval of reserved matters.

Once an application has been processed by the CPA, it is stored in a planning file along with the following documents:

- 1) Architectural drawings and notes attached to the application
- 2) Consultations with other internal departments of the CPA
- 3) Consultations with external bodies such as the Highways Authority

- 4) Notes on correspondence with amenity societies, residents' associations and conservation groups
- 5) Correspondence between the CPA, developer/architects and UDCs
- 6) The Planning Officer's observations on the case
- 7) The Planning Officer's report to the Planning Committee
- 8) The decision notice

Planning file data have been used extensively in this study. Detailed notes were taken on the contents of files and although this proved to be extremely time-consuming, it yielded a considerable amount of information on the decisions that were taken by planning officers and provided clues as to why these decisions were made. On the basis of these data, it was possible to compile relatively detailed histories of study sites in Bristol and Cardiff. However, because the LDDC does not allow public access to its planning files, it was not possible to obtain sufficient data from these sources to compile detailed histories of study sites in London. Consequently, it was necessary to use two alternative methods of data collection. First, data were collected from LDDC area frameworks and development briefs. Secondly, information was obtained from interviews with representatives of the LDDC. An interview was also conducted with a planning consultant from the CBDC to supplement data that were obtained from Cardiff CPA's planning files.

2.32 Area frameworks and development briefs

It is widely recognised that many of the LDDC's planning powers to promote physical, economic and social regeneration have been derived from the 1959 New Towns Act (Brownill, 1990, p.31) There are, however, important

differences, mainly in the extent of the substantial powers granted to the LDDC under the Act. First, the LDDC is able to decide on planning applications and determine what should and should not be built (Brownill, 1991, p.31). Secondly, the LDDC has very useful powers with respect to land acquisition. Since 1981, vesting orders, compulsory purchase orders and purchase by agreement have allowed it to build up a substantial 'land bank' inside its designated boundary. Thirdly, the LDDC, which is accountable only to Parliament, is able to use special development orders to give permission for development without consultation or planning enquiries (see DOE, 1980b/c, 1981). Ambrose (1986) summarises his views on the LDDC's planning powers:

"The LDDC has, in effect, expropriated land in large parcels and sold it on to builders at submarket prices. It has cleaned, drained and prepared the sites, it has taken development control into its own hands and it has built up demand with a glossy and aggressive sales drive" (p.239).

The LDDC's approach to planning is extremely flexible and, significantly, it has not produced any overall land-use plan. Moreover, Brownill (1990, p.53) notes that while the LDDC has produced annual corporate plans these are designed as a bid for government funding and are not intended to set out a 'coherent strategy' (LDDC, 1982a/1984/1988). The LDDC's salient redevelopment objectives are contained in documents called area frameworks. However, these are produced in the form of 'glossy' marketing brochures and do not provide any information on land use allocation or a statement of 'needs and policies' (Brownill, 1990, p.54). The LDDC's five area frameworks - for Limehouse, the Isle of Dogs, the Royal Docks, Leamouth and Greenland Dock, each concentrate on a different 'theme'. For example, the Isle of Dogs framework concentrates on design guidelines

proposed by Gordon Cullen (LDDC, 1982b). It suggests that because Wapping is closer to the City than any of the other redevelopment areas, it is suitable for luxury housing. In a similar vein, the framework for the Royal Docks suggests that this area should be marketed as a "waterfront city for the 21st century" (Brownill, 1990, p.54).

Area frameworks were examined to build-up a picture of the LDDC's redevelopment objectives for Docklands. However, to gain a better understanding of the LDDC's intentions and requirements as landowner and as planning authority for each study site, it was also necessary to consult detailed development briefs.

LDDC development briefs contain information on the following issues: site boundaries, site area, development form, design requirements, and roads and paths. They are issued to all developers who express an interest in rejuvenating sites in Docklands. Development briefs for the three study sites in Surrey Docks were examined (1985a, 1985g, 1986). Attached to them were the planning applications that developers had submitted to the LDDC, and also the planning officer's comments on the proposed developments. Relevant information contained in the briefs was recorded.

2.33 Interviews with the LDDC and CBDC

To obtain additional information on the LDDC's criteria for redeveloping sites in Southwark, an interview was conducted with Peter Swordy, a planning officer from the LDDC's area office in Southwark. Swordy answered questions on the following issues: the LDDC's role in the

redevelopment of Surrey Docks, the consultation procedure between the LDDC and amenity groups/residents' societies, the LDDC's appreciation of 'townscape management' concepts, and the LDDC's role as an 'agent of design control'.

Information obtained from the interview with Swordy was used to supplement data that were gathered from planning applications, area frameworks and development briefs. Collectively, these data were used to assemble detailed histories of the three study sites in the Surrey Docks area.

The site histories contain information on changes to the built fabric, details of the agents of change (developers, architects, CPAs and UDCs), and reasons for particular decisions (particularly by planning officers and UDC officers).

An interview was also conducted with Frank Levers, a planning consultant for the CBDC. Although it was possible to obtain a considerable amount of data from Cardiff CPA planning files, the interview with Levers helped to supplement these data. Levers answered questions on the following issues: the CBDC's role in the redevelopment of Cardiff Bay, the nature of the CBDC-CPA relationship, the nature of contact between the CBDC and developers, and the CBDC's views on development control.

2.34 Interviews with developers and architects

Planning records and development briefs provide a detailed source of information on many important aspects of the development process, but they have a number of

limitations. Although planning records and development briefs contain the views of individual planning officers, they offer only second-hand accounts of the views of architects and developers. They are silent on why a decision to make an application has been made. To obtain more accurate and detailed information, therefore, it was necessary to approach the architects and developers who were involved in the redevelopment of each study site. The architect is an important agent to question since he has an extensive knowledge of the decisions made concerning the types of proposed development, such as housing types, style of proposed changes, layout of the developments, and the extent to which the antecedent land-use pattern was taken into consideration when the design work on a new development was carried out. The developer is also a useful agent to interview as he is able to provide much information on issues that are not recorded in the planning files, such as why planning permission was sought in the first place.

Developers and architects of the study sites were asked to take part in 'semi-structured' interviews. Of a total of seven architects and six developers, five architects and five developers agreed to participate (Table 2.2). Of the architects that were not interviewed, Andrews Downie declined the interview, and the Ronald Toone Partnership were not approached on the request of Ideal Homes who were in the process of suing them at the time of research. The only developers that were not available for an interview were Redwood Homes and Development Ltd.

A list of questions was devised for each respondent to answer. This was specific to each interviewee, as not all questions were relevant in every case. Where applicable, developers were asked about the following factors: the

Table 2.2 Developers and architects interviewed for research purposes

Developers

Tarmac Homes
 Tarmac Properties
 Lovell Urban Renewal (Cardiff)
 Lovell Urban Renewal (Devizes)
 Ideal Homes

Architects

CZWG architects
 The Diamond Partnership
 The Architectural Practice
 Holder Mathias Alcock
 Halliday Meecham architects

Table 2.3 Response rates for questionnaire survey

Development	Number of questionnaires		
	Distributed	Returned	Per cent of total returned
Surrey Waters	78	31	40
Wolfe Crescent	70	28	40
Baltic Wharf	96	52	54
Merchant's Landing	77	55	71
Spillers & Bakers	36	16	44
Tarmac Phase Two	57	26	46

extent to which design is considered in the preparation of redevelopment strategies and planning applications, the selection of the architect and the nature of the developer-architect relationship, the nature of the contact between the developer and the CPA or UDC, the reasons for the decision to undertake a particular type of redevelopment, the involvement of any other agents, and general questions about the size and activities of the firm. The general form of the questions was as follows.

Questions for development firms:

- 1) When did you initially become involved in the acquisition of this site ?
- 2) Were you in competition with other developers for the acquisition of this site, and if so, which ones ?
- 3) What types of development work do you normally carry out ? (eg, refurbishment, new detached housing or flats)
- 4) Does your company use 'in-house' or 'external' architects ?
- 5) Were in-house or external architects used for this redevelopment project, and why were they chosen ?
- 6) Do you give your architects 'design briefs' ? If so, what do they contain ?
- 7) How did you instruct your architects to approach the interpretation of this area's 'maritime heritage' ?
- 8) How was the development's proximity to the waterfront interpreted ?
- 9) Has your company communicated with developers or architects of sites adjacent to the development ?
- 10) Has it been your company's intention to create an 'urban' as opposed to 'suburban' style living environment at this site ?
- 11) Do you use standard house types ? If so, were standard house types used for the development ?

- 12) Who was responsible for the selection of the particular architectural style chosen, and what was the basis for this decision ?
- 13) Did the LDDC/CBDC influence your company's development criteria for the site ?
- 14) How did the requirements of the LDDC/CBDC for the redevelopment of this site differ from those of the CPA ?
- 15) Did the CPA/UDC suggest any changes to the design of the scheme ? If so, what was the nature of these changes, and were they acted upon ?
- 16) Did you communicate with the Royal Fine Arts Commission about any aspect(s) of this development ?
- 17) How much provision has been made for low cost and rented accommodation ?
- 18) How has your company approached the 'marketing' of residential units at this site ?

Architects were asked questions on the following issues: the nature of the architect-developer relationship, the nature of contact between the architect and CPA/UDC, details of the design and layout of residential schemes. The general form of the questions asked was as follows.

Questions for architects:

- 1) How much involvement has your company had in the design of dwellings in docklands ?
- 2) For which developers do you predominantly work ?
- 3) Do you frequently communicate with CPAs/UDCs ?
- 4) In what way(s) has the LDDC/CBDC responded to the needs of docklands' indigenous population ?
- 5) In what way(s) has the LDDC/CBDC responded to the needs of newcomers to docklands ?
- 6) Has the LDDC's attitude to development control and design criteria changed significantly since 1981. If so, why ?
- 7) What factors do you normally discuss with property developers ?

- 8) Do developers frequently give you a design brief to work from ?
- 9) Do you often communicate with developers and/or architects who are redeveloping sites adjacent to the one that you are working on ?
- 10) How do you decide upon such matters as:
 - a) site layout
 - b) building materials
 - c) provision of open space ?
- 11) Upon what basis were you selected by the developer to carry out this scheme ?
- 12) Do you think that any of the following factors influenced the developer's decision to commission you for this scheme:
 - a) past performance
 - b) introduced with the site
 - c) location and local knowledge
 - d) personal contacts ?

Written notes were taken recording respondents' answers to these questions. It was decided not to use a tape recorder during the interviews, however, in case respondents found it intrusive.

Zaltman and Burger (1975, pp.305-307) discuss the advantages and disadvantages of using interviews as a method of research. They conclude that there are four main advantages. First, virtually all types of people can be reached using this method. Secondly, verbal communication with respondents is more spontaneous than formal, written communication, and it enables delicate matters to be handled more pleasantly. The interviewer can adapt his technique to reassure the respondent, and build up a 'permissive, warm atmosphere'. Thirdly, it is possible to obtain an intensive coverage of the subject by asking 'probing' questions. Fourthly, although the interviewer can act as a source of error, he can also be valuable in clarifying the meaning of questions to the respondent. Zaltman and Burger suggest

that there are also four disadvantages to using interviews. First, interviews are likely to be expensive in terms of energy and money. Secondly, although the interviewer acts as an invaluable aid in obtaining information, he may also be a source of bias. It is inevitable that the respondent will be stimulated by the interviewer's presence. Thirdly, the 'human side' of the interview may present special problems. It is difficult to ensure that the stimuli presented to each respondent are identical. Also, to encourage frank and honest discussion, the interviewer may assure the respondent of anonymity. However, the physical presence of the interviewer is likely to cast suspicion on this guarantee. Fourthly, data obtained by the interviewer are subject to distortion and mis-interpretation.

Zaltman and Burger (1975, p.305) also discuss the relative merits of using semi-structured interviews, as opposed to either structured or unstructured interviews. They suggest that highly structured interviews are a poor method of obtaining information because they impose too many constraints on the respondent. On the other hand, unstructured interviews are a unsuitable method of data collection because they are too subjective and statistically unrepresentative. They conclude that partially structured interviews, that are guided by an interview schedule but also allow the respondent freedom to discuss an issue, are the most suitable of the three methods of data collection.

2.35 Residential questionnaire survey

Research on the consumption of 'images' or 'signs' was first conducted by Bourdieu and Baudrillard during the 1960s. Subsequently, semiology, or 'the study of signs' has been widely adopted by urban geographers, such as Daniels

and Cosgrove (1988) who suggest that townscapes are able to emit 'signs' that can be 'read' by the public. Cherry (1991) notes that unlike the Modern city, which was technically rational, austere and functional, the Post-Modern city has a far less 'rigid' structure. Moreover, it is the Post-Modern city, characterised by its vernacular tradition, local history and specialised spatial designs, that is able to emit the most readily identifiable 'signs'.

Crilley (1989, unpaginated) suggests that although there is a need to examine the cultural meanings that particular groups attach to dockland townscapes, very little research has yet been undertaken in this field. The questionnaire survey conducted in this thesis goes some way towards filling this lacuna in our present knowledge. Residents were asked to answer detailed questions on the following semiological issues: the architectural design of the development in which they lived, the development's historical maritime association, the visual attractiveness of the development's waterfront location, and the development's 'visual relationship' with other buildings/physical features. Additionally, residents were asked to answer questions on the following more general issues: the year in which they moved to docklands, reasons for moving to docklands, their ages, and number of children. These questions were included to obtain an accurate measure of the demographic and social composition of docklands' population.

Two dockland sites in each study area were included in the questionnaire survey (Table 2.3). In total, 414 questionnaires were distributed by hand to residents of the selected developments. A stamped, self-addressed envelope was enclosed for the return of the completed questionnaire.

Distribution of questionnaires was carried out using a 'systematic random' method of sampling (Zaltman and Burger, 1975, p.393). This means that the first delivery address was chosen at random, and then questionnaires were distributed to households at regular intervals. This interval was calculated by dividing the total 'population' of each development by the desired sample size. In each case, it was necessary to ensure that at least 30 dwellings were included in the survey. The reason for this is that 30 is the minimum sample size to approximate to a statistical normal distribution curve (Silk, 1979, pp.81-88).

The questionnaire survey proved relatively successful. 208 questionnaires were returned by residents, which gives a response rate of 50 per cent. The main drawback of using the questionnaire was that it was impossible to ensure that residents answered all questions. In some cases questions were missed out altogether or not answered fully.

Zaltman and Burger (1975, p.253) also discuss the advantages and disadvantages of using questionnaires as a method of data collection. The advantages are as follows. First, questionnaires can be used to reach a large and widely scattered sample population. Secondly, the technique is more objective than other methods because its stimuli are standardised and identical from one respondent to another. Thirdly, no interviewer is present to create social pressure. Fourthly, because respondents are able to choose when they answer the questionnaire, they can take time in answering questions. The disadvantages of using this method can be summarised under three heads. First, the researcher has little control over the data collection process. Secondly, the researcher is unable to control the identity of the respondent, the people he consults, the

order in which questions are asked, or the final sample represented. Thirdly, each respondent interprets questions in his own way. Therefore, without an interviewer present to clarify misunderstood items, the variation can be substantial.

2.4 Analysis

Two basic approaches to the analysis of data were utilised. First, much of the data concerning the broad characteristics of the nature of change, the agents of change, and development control data were analysed qualitatively. Secondly, a large proportion of questionnaire data were examined quantitatively. There are a number of advantages and disadvantages of both approaches.

Qualitative assessment proved to be the most satisfactory approach for the analysis of interview data, information from planning files, area frameworks and development briefs. Moreover, since townscape change is basically the product of many individual decisions (Pompa, 1988, p.63), it is often more appropriate to analyse these decisions in detail rather than compile aggregated data on agents and types of change. An in-depth examination of the processes involved in the redevelopment of docklands was carried out using case studies of detailed site histories. Pompa (1988, p.63) suggests that the main disadvantage of this type of qualitative assessment, apart from its complexity, is that quite tentative generalisations sometimes have to be made from relatively few, often very individual case histories. However, Yin (1989) and Punter (1988), suggest that the case study approach is in fact an extremely satisfactory research method, and that in general its advantages far outweigh its disadvantages.

CHAPTER THREE

HISTORY OF STUDY SITES

3.1 Introduction

The aim of this chapter is to examine the planning history of study sites in London, Cardiff and Bristol docklands prior to the initiation of their second cycle of redevelopment. To place this analysis in context, however, it is first necessary to examine the general history of each study area.

3.2 Outline history of the Surrey Docks

The Surrey Docks, which extend over 2.5 miles from London Bridge City in the West, to Greenland Dock on the Rotherhithe Peninsula (see Figure 2.4), have developed from a small dry dock which was thought to have been constructed in c.1600 for small ship building and repairs to the King's fleet. A second dry dock was constructed in 1696, and a third in 1720 (Touchstone Associates, 1987, p.8).

As a result of the marriage settlement between Elizabeth Howland and the Marquis of Tavistock in 1695, the property on the south bank of the River Thames above Deptford passed to the Russell family. On Sunday the 15 February 1695 a Bill empowering the Russell family to raise and layout money for the building of a wet dock near to the original dry dock was given its first reading by Parliament. The Bill was subsequently passed, and the Great Howland Wet Dock was completed in 1696. The Dock, used for ship repairing and as a safe haven for shipping, was, until 1802, the largest of its kind in London (Oram, 1970).

In 1806 the Howland Dock was sold to a William Ritchie for the unloading of timber and grain shipments. A year later, the Commercial Dock Company was formed. In 1864, an amalgamation took place between the Commercial Dock Company and the Grand Surrey Canal Company. The latter, which was established in 1801, owned approximately half of the entire Surrey Docks complex, including the three sites considered by the present study. The new Surrey Commercial Dock Company operated the whole docks complex until the Port of London Authority (PLA) took over in 1909 (Touchstone Associates, 1987, p.12).

During the mid-1800s, the timber trade in the Surrey Docks was mostly in softwood from the Baltic (Sweden, Norway, Finland and Russia) and from Canada (Quebec, Montreal, New Brunswick and Nova Scotia). By the 1890s, the Surrey Commercial Dock Company was handling 600,000 tons of timber and firewood a year, and some twenty million pieces of timber were stored in the docks at one time (Touchstone Associates, 1987, p. 13). During the period 1905-1940, the docks' softwood trade was gradually replaced by 'finished' timber imports and the handling of provisions. However, in spite of the introduction of mechanical handling in the post-war period, the Surrey Docks became overloaded and as a result trade declined. By the end of the 1960s, the docks were a shadow of their former selves, with small ships moving general cargoes. Finally, with the development of the packaged timber trade, the Surrey Docks became financially unviable and as a result the trade moved to Tilbury. The docks closed in 1965.

3.21 History of the Surrey Docks study sites : 1886-1965

The three residential developments considered by the present study are located on the site of former timber sheds and infilled basins within the Surrey Docks complex.

Marlow Landings occupies the site of the Baltic Yard timber and gantry sheds which are first identified in a print of the docks published in 1884 (Figure 3.1). The sheds were used for the piling and storage of heavy logs. However, due to an increase in the size of ships in the 1890s, many of the larger vessels could no longer enter the Surrey Docks. This factor, coupled with the decrease in demand for the open storage of softwood, meant that gantry sheds were no longer required. Thus, when some of the sheds were destroyed by enemy attack during World War One, their replacement was not thought necessary (Oram, 1970).

By the 1920s, the need for more deep water berths had become apparent. Although there was still some demand for ponded space, it was possible to clear the Canada, Quebec and Centre Ponds (Figure 3.1) by transferring stocks of rafted timber to the West India Export Dock. In 1926 the latter two ponds were amalgamated to form the new 14.5 acre Quebec Dock which was adjoined by Centre Yard. This site, which is now occupied by the Wolfe Crescent housing scheme, was originally used as a timber store for both Centre Pond and Quebec Dock (Figure 3.2).

In 1930 work on re-constructing the Lavender Dock, and closing the Lavender Entrance began (Figure 3.2). The expansion programme involved the construction of 324 new sheds, removal of the Globe, Lavender and Acorn Ponds and

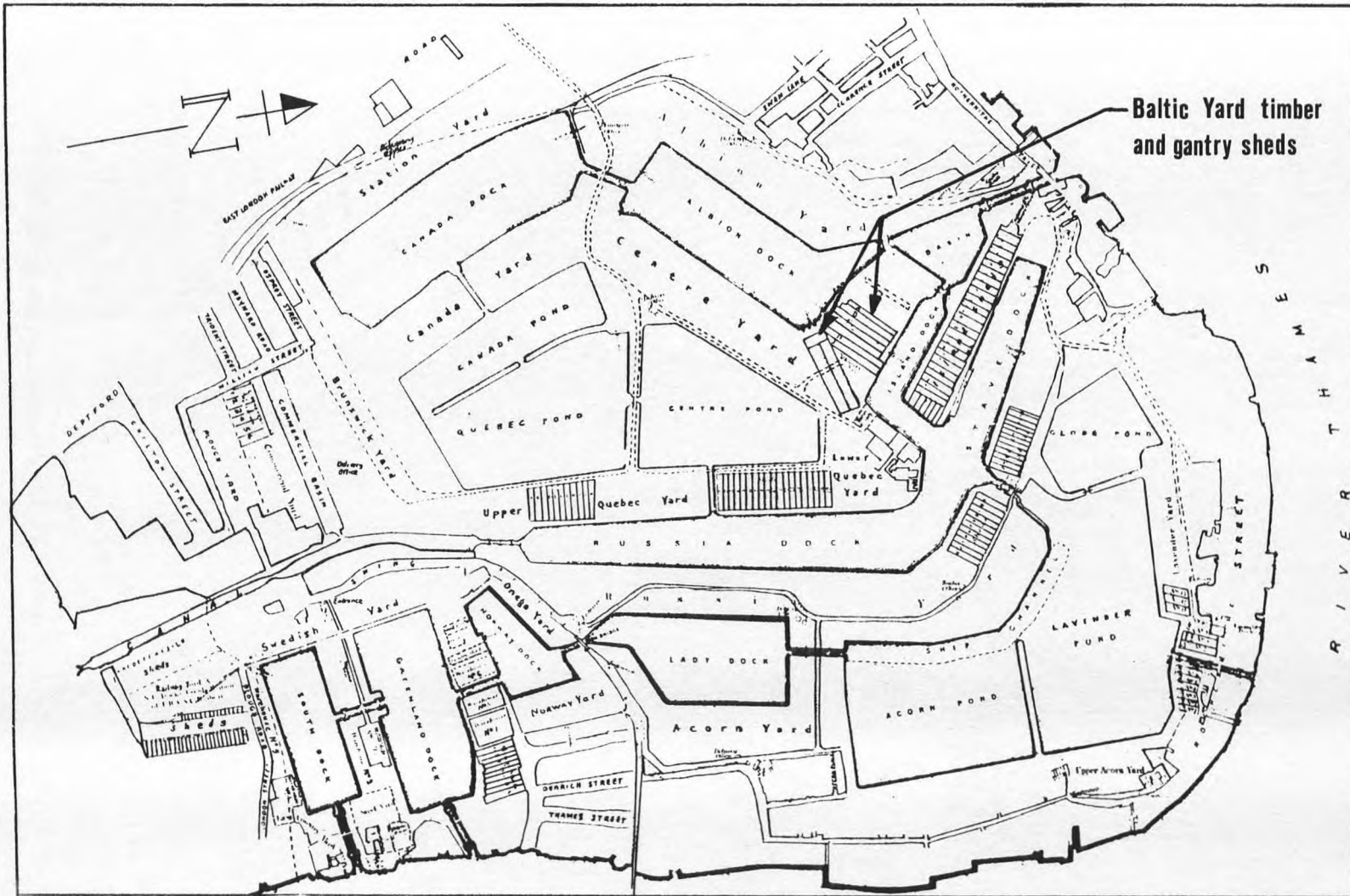


FIGURE 3.1 Baltic Yard timber and gantry sheds: site of the Marlow Landings development, Surrey Docks, London (source: adapted from a plan of the Surrey Commercial Docks, 1884)

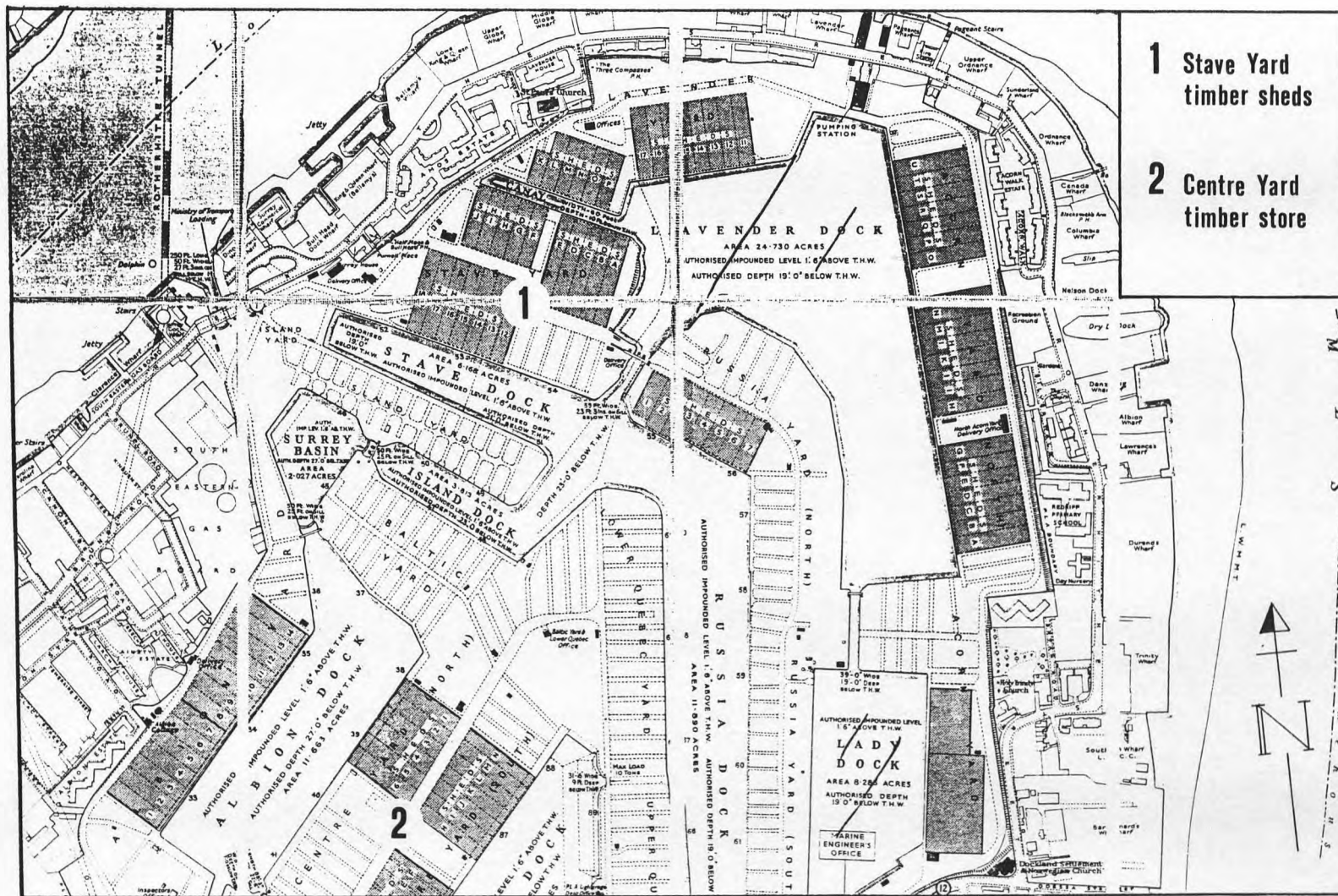


FIGURE 3.2 Centre Yard timber store: site of the Wolfe Crescent development, and Stave Yard timber sheds: site of the Surrey Waters development, Surrey Docks, London (source: reproduced from a plan of the Surrey Commercial Docks, n.d.)

cutting of a new barge entrance through the site of the former Globe Pond. Stave Yard - which is now the site of the Surrey Waters housing development - was one of the sites chosen for the construction of new sheds to house 'finished' timber (Figure 3.2). Finished timber was imported ready for builders' use, as compared with the floated timber of earlier years.

During the Second World War, many of Surrey Docks' timber sheds were destroyed by bombing. Two of the most devastating of these air assaults took place on the 6 and 7 September 1940, when 300 enemy planes wiped out 350,000 tons of timber (Touchstone Associates, 1987, p.16). Some of the 57 sheds that were destroyed at Baltic Yard and Stave Yard were subsequently replaced and used for timber storage until the docks closed in 1965.

3.22 Planning history of the Surrey Docks redevelopment area: 1965-1984

Following the closure of the Surrey Docks, the PLA immediately began the process of infilling the disused basins, and by the time that they sold the complex to the London Borough of Southwark in 1970, three major dock basins - Quebec Dock, Lady Dock and Norway Dock - had already been filled. Southwark Council subsequently continued the infilling process using first the rubble from the demolition of London Bridge, and later rubbish from building sites in central London. Two water areas were, however, left untouched - these are Canada Water, and Surrey Basin. The latter forms a natural boundary between the Marlow Landings and Surrey Waters study sites (see Figure 3.2).

The Docklands Joint Committee (DJC) was set up on the 1 January 1974 to plan the development of Docklands. The Committee was made up of representatives from the Greater London Council (GLC), the five East London Borough Authorities, the Docklands Forum (DF) and the Joint Docklands Action Group (JDAG). In 1976 the DJC prepared the London Docklands Strategic Plan which identified the Surrey Docks as a suitable site for a major International Trade Mart that would host regular exhibitions and create thousands of long-term jobs for Southwark residents. However, because the Government would not guarantee investment in the scheme, Southwark's plans had to be abolished (Rotherhithe Community Planning Centre, 1986, p.16).

With the collapse of the Trade Mart proposals, Southwark Borough Authority was confronted with the problem of finding a new redevelopment project. It subsequently examined a number of other possibilities and chose one called the Lysander scheme - a large mixed use development comprising shops, offices, light industry and a hotel. Southwark also drew up plans for housing, businesses and leisure facilities on the site.

By the time that the LDDC came to office in 1981, the Council had already spent over £35 million on 50 projects including filling in the docks, laying new sewers, building 281 houses, and constructing 10 industrial estates (Rotherhithe Community Planning Centre, 1986, p.17). Initially, the LDDC supported Southwark Borough Authority's proposal for the Lysander scheme. However, in 1982 it decided to withdraw its support, and as a result the project collapsed. In November 1983 the redevelopment site was vested in the Corporation.

The LDDC prepared a development framework for the Southwark Area outlining its plans for redeveloping the vested Lysander site. Although the Development Corporation had originally intended to clear and prepare the site itself, it subsequently decided to pay Taylor Woodrow £10 million to carry out the necessary work on its behalf (Rotherhithe Community Planning Centre, 1986, p.17).

By 1984, the majority of site preparation work had been completed, and most of the land was parcelled up for private redevelopment. The LDDC then began to prepare development briefs for those sites that it intended to offer for early release. Between 1984 and 1986, the LDDC put a large number of these sites - including the ones considered by the present study - out to limited competitive tender. This is an arrangement whereby the Development Corporation invites agents to submit outline planning proposals for the redevelopment of a site. The LDDC subsequently reviews these proposals and chooses a scheme that best suits its redevelopment criteria. Having selected a developer, it then requests that a formal planning application is made. The applications that were made by Costain Homes, Lovell Farrow and Lovell Urban Renewal for the redevelopment of the Surrey Waters, Marlow Landings and Wolfe Crescent sites are considered in detail in Chapters 4 and 5.

3.3 Outline history of Cardiff Docks

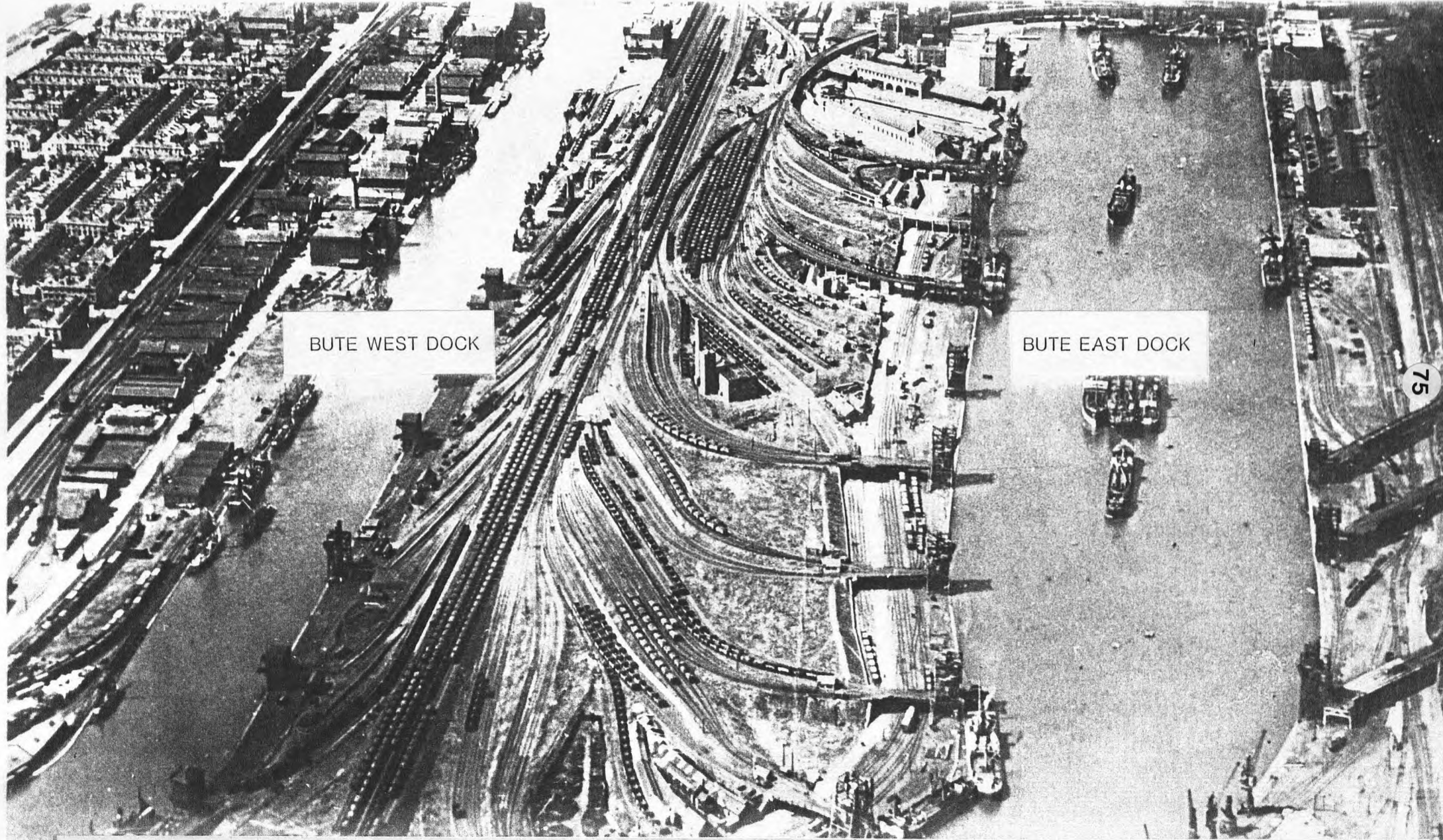
Since the late nineteenth century, South Cardiff, and particularly the docklands area, has been the main location for the city's heavy industry. Cardiff Docks were the main export outlet for the South Wales coalfield, and Cardiff has been called a 'coal metropolis'. Growth was accommodated by the construction of a series of enclosed docks - the Bute

West Dock (1839), the Bute East Dock (1855-9), the Roath Dock (1887) and the Queen Alexandra Dock (1907). Whereas in 1806 Cardiff was exporting 10,000 tons of coal a year, by 1913, this figure had risen to 10.5 million tons (Hilling, 1988, p.25).

Dereliction and disuse began with the decline in coal exports in the inter-war period. From a 1938 total of 6.8 million tons, Cardiff's trade declined to 3.4 million tons in 1948 and 2.0 million tons in 1958. Coal exports ceased in 1963 (Hilling, 1988, p.31). With the redevelopment of some of the dock area previously devoted to coal handling, new trade was attracted, but the closure of the East Moors steel works in 1978 removed a substantial part of the port's remaining traffic. Moreover, with recent changes in the direction of British trade, Cardiff now suffers from being on the 'wrong side' of the country (Hilling, 1985). The Bute West Dock was subsequently closed in 1964 and has since been filled in, and the Bute East Dock - around which much of the recent urban regeneration has centred - ceased operations in 1970 (Plates 3(1) and 3(2)).

3.31 Planning history of the Cardiff Bay redevelopment area: 1976-1986

The need for a concerted response to the economic and physical decline of the area surrounding the Docks was first recognised in a report by the City Planning Officer to the City Council in October 1976. The report revealed three main problems in the area. First, extensive dereliction, leading to the sterilisation of land. Secondly, a poor physical environment. Thirdly, poor access to the area. The report recommended a comprehensive and co-ordinated approach to land reclamation, improvement of access, and a



BUTE WEST DOCK

BUTE EAST DOCK

75

PLATE 3(1). Bute West Dock (1839-1964) and Bute East Dock (1855-1970), Cardiff (photograph provided by South Glamorgan County Council, n.d.)



PLATE 3(2). Infilled Bute West Dock, Cardiff (photograph provided by South Glamorgan County Council, n.d.)

rationalisation of land use so as to create parcels of land suitable for development (Thomas, Imrie, Griffiths, 1986, p.7).

At the end of the 1970s, Cardiff City Council and the Welsh Development Agency (WDA) decided to take some action to regenerate the 165 acre (67 hectare) docklands area. An early policy response was the declaration, by the City Council, of the North Docklands Industrial Development Area in 1979. In 1980 this policy was incorporated into the East Moors Local Plan which aimed to provide a firm planning framework for public and private investment in the area and the creation of a modern industrial zone with developable and properly serviced land. The East Moors Plan also recognised the recreational potential of Bute East Dock (Thomas, Imrie, Griffiths, 1986, p. 8).

Informal interest in the redevelopment of land in the vicinity of Bute East Dock came to the attention of the City Council in the autumn of 1982. This led to the preparation of revised planning proposals for the area and the City Council's approval both of a consultation document and an amendment to the 1980 East Moors Plan. The most important amendment to be made concerned the redevelopment of the site for residential, as opposed to commercial uses. However, it was intended that existing industries in the Tyndall and Herbert Street areas (Figure 3.3) should be allowed to remain.

On 8 October 1983, South Glamorgan County Council sent an outline planning application (83/1282) to Cardiff CPA for the comprehensive redevelopment of land at north docklands. The CPA considered the application and realised that it

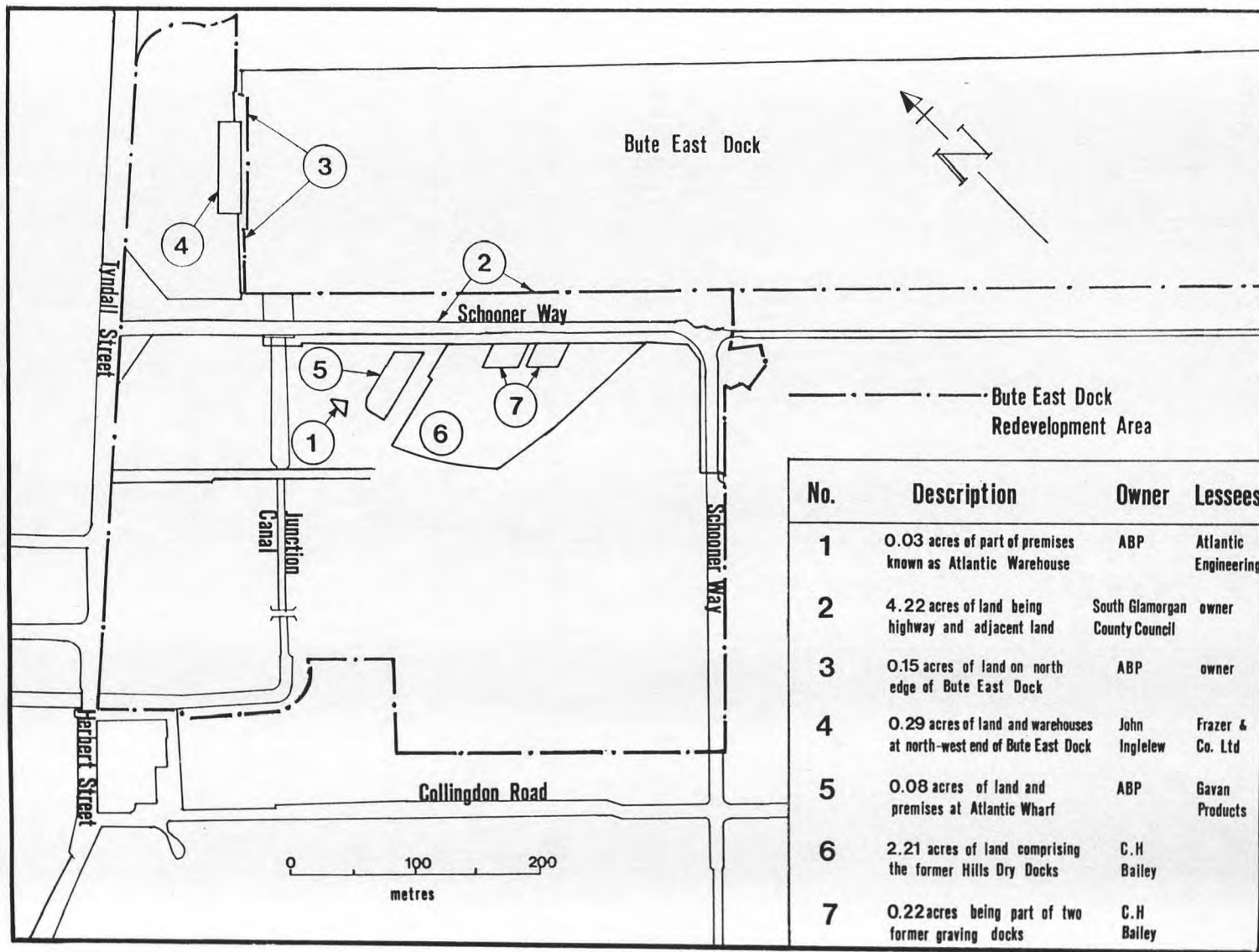


FIGURE 3.3 Bute East Dock, Cardiff, showing land uses prior to the redevelopment of the site (source: adapted from Associated British Ports, 1984)

would conflict with the provisions of the South Glamorgan Structure Plan which had been approved by the Secretary of State for Wales in 1981 and aimed to promote industrial regeneration and improve the County's waterfront strip. Fortunately, both Councils realised that a far more diversified and 'inter-mixed' land use strategy was required than that encouraged in the Structure Plan, and the CPA determined that the application would be advertised as a 'departure', and to the extent that the proposals materially conflicted with the policies of the Structure Plan it would be referred to the Secretary of State for Wales. On the 21 July 1983, the County Council resolved that:

"Both Councils are aware of their roles in promoting a new development framework for docklands in order to allow the private sector the opportunity of providing a diversified and inter-mixed land use pattern" (Cardiff City Planning Authority, (1985a), Development Control File no:83/1282).

The County and City Councils subsequently invited developers to submit comprehensive redevelopment proposals for the Bute East Dock site. On the basis of the content of the submissions from Sir Robert McAlpine and Sons, The Heron Corporation, Project Management Wales and Tarmac, both Councils agreed that Tarmac's proposal was the most suitable. As part of their strategy to assist the successful applicant, the County Council agreed to support Tarmac's application to the Welsh Office for an Urban Development Grant (Peter Cope, South Glamorgan County Planning Officer, personal communication).

On 29 November 1983, the City Council's Planning and Development Committee resolved that outline planning permission should be granted for a range of uses in north docklands on condition that the major landowners in the

area, namely the Land Authority for Wales (LAW) and Associated British Ports (ABP) had signed an agreement under Section 52 of the Town and Country Planning Act 1971. However, this agreement was not readily forthcoming for two reasons. First, ABP did not want to sign the agreement until Tarmac had contracted to buy their land. However, Tarmac were unable to confirm their position until they were certain that the redevelopment site would be vested in LAW. Secondly, because Tarmac's planning proposals were at variance with the the CPA's Structure Plan, the CPA was uncertain of the Secretary of State's reaction to LAW's application for a compulsory purchase order. This being the case, the CPA was unwilling to give Tarmac the reassurance that they required. The implications of this complicated planning situation were that if the CPA agreed to LAW's request, and issued planning permission, but the compulsory purchase orders were not confirmed by the Secretary of State, then the landowners within the area of the application would have enjoyed the benefit of outline permission for a whole range of uses, but would not have been subject to the obligations of a Section 52 Agreement. Thus, individual owners would have been able to maximize their potential interests by seeking detailed permission for the most attractive and profitable initiatives (Cardiff City Planning Authority, (1985a), Development Control File no:83/1282).

Fortunately for the CPA, the Secretary of State did support LAW's application, and as a result the CPA granted South Glamorgan County Council outline planning permission on 19 March 1985. The Section 52 Agreement was subsequently signed in November 1985, and the majority of the redevelopment site was compulsorily purchased by LAW. However, before Tarmac plc. were able to purchase any of this 'vested' land, 31 industries had to be relocated. It

was therefore not until mid-1986 when all of the site's former occupants had been displaced that Tarmac could commence the first of their seven planned phases of redevelopment (Cardiff City Planning Authority, (1985b/c), Development Control File no:83/1282).

The sites considered by the present study form part of the 89 acre (36 hectare) Bute East Dock redevelopment area (Figure 3.3). The area is bounded by Tyndall Street in the North, Collingdon Road in the West, and by the filled in basin of Bute East Docks and dock wall in the South and East respectively. As Atlantic Wharf's 'lead developer', Tarmac have been able to choose which sites they redevelop, and which they sell to other developers. This situation is different from that in London and Bristol where developers have usually either tendered for a site or entered a design competition. Two of the sites examined by the study were redeveloped by Tarmac, and the third was redeveloped by Lovell Urban Renewal who purchased it from Tarmac in 1987.

3.32 History of Atlantic Wharf study sites

(i) Tarmac's residential and commercial development

This 4.22 acre (1.70 hectare) site originally comprised an adopted public highway (Schooner Way), a strip of land owned by ABP, and warehouses and land that were leased to a Cardiff company called Frazer and Co. Ltd (Figure 3.3). Although the East Moors Plan envisaged that this site would be unaffected by the residential redevelopment of Bute East Dock, Tarmac's plans for comprehensive redevelopment were at variance with this suggestion. In response to the difficulties of carrying through the scheme, LAW compulsorily acquired the land needed for redevelopment, and

subsequently sold it to Tarmac (Thomas, Imrie, Griffiths, 1986, p.10). Paragraph 4 of the Compulsory Purchase Order's Statement of Reasons (LAW, 1984) suggested that Schooner Way should be diverted to allow for 'improvement' and that part of the remaining land should be utilised for 'alternative purposes'. Tarmac's redevelopment of this site in December 1987 for a residential and commercial scheme constitutes this alternative use (Plate 3(3)).

(ii) Spillers and Bakers warehouse

In 1890 Messrs Spillers of Cardiff and Messrs William Baker and Sons amalgamated to form the company of Spillers and Bakers Ltd. In 1893 the company built a new warehouse on their existing site at the northern end of Bute East Dock. Although few records have been discovered of the building's history it is known that it was used as a milling factory and bakery at ground floor level with storage above (The Company of Designers Plc., 1988).

The six storey Spillers and Bakers building has a very unusual triangular plan-form. This is explained by it having originally been sandwiched between existing buildings on one side and a curved railway line on the other (Plate 3(4)). The warehouse and its operation continued until the late 1960s when the Spillers and Bakers company moved out leaving the building empty. Part of the building's ground floor was subsequently occupied by Atlantic Engineering (Figure 3.3) - a small general engineering company who later moved to Roath Dock, Cardiff as a result of LAW's compulsory purchase of the site in 1985 (Adrian Edwards, property manager, CBDC, personal communication). In July 1987, Lovell Urban Renewal purchased the unlisted warehouse from Tarmac Provincial Properties Ltd. It is rumoured they paid £94, 000



PLATE 3(3). Tarmac's residential and commercial development, Atlantic Wharf, Cardiff: built on the site of a public highway, land owned by Associated British Ports and a warehouse owned by Frazer and Co. Ltd (photograph, the author, 1990)



PLATE 3(4). Spillers and Bakers warehouse (1893-1987), Atlantic Wharf, Cardiff, prior to refurbishment (reproduced from Lovell, n.d.)

for it as a shell - ironically what it cost Spillers and Bakers to build in 1893.

Although the Section 52 Planning Agreement made no detailed recommendations on how the Spillers and Bakers building should be refurbished, it did suggest that the warehouse's character should be 'respected', and that where possible its original stone exterior should be 'retained and enhanced'. These objectives are reiterated in the Architectural Practice's publicity document (unpublished, n.d.), which states that:

"The building is special both in terms of its unusual design and for its place in Cardiff's Dockland Industrial Heritage - we felt that not only must the building be saved but any refurbishment must respect the fabric and be carried out in such a way as to retain as much as possible of the original design."

In 1987, Lovell Urban Renewal obtained planning permission from Cardiff CPA to convert the building into 47 luxury flats.

(iii) Tarmac's Phase Two residential development

This site forms part of the Bute East Dock redevelopment area that was compulsorily purchased by LAW in 1985. Prior to its redevelopment, the site was occupied by an engineering company - Gavan Products - and two former dry docks. The land was owned by ABP and C.F. Bailey plc. (Figure 3.3). Until recently, ABP kept detailed files of the site's pre-1984 planning history. Unfortunately, these files were considered a fire risk and have since been destroyed (Ken Shapley, surveyor, ABP, personal communication). Separate files containing data on Tarmac's

planned residential redevelopment of this site were, however, retained by Cardiff CPA. This information has been used to compile a case history of the site which is considered in Chapter 4 (Plate 3(5)).

3.4 Outline History of Bristol Docks

The history of Bristol's docklands can be traced back to the thirteenth century when extensive overseas trade was conducted with France. Bristol was also prominent in pioneering the exploration of the 'New World' and in developing Britain's overseas trade. By the middle of the eighteenth century, it had become heavily involved in the slave trade. The city enjoyed a golden age until, at the end of the century, public opposition to the continued trade led to economic decline and the docks of Liverpool and Glasgow overtook Bristol in tonnage. An additional problem was that Bristol had a tidal harbour which could only handle ships of a limited size. Despite improvements to the harbour, a great decline occurred when iron and steel-hulled ships could not be accommodated. The City Council saw a future elsewhere and in 1884 rival docks which had been established at Avonmouth were purchased by the City Council. These docks gradually took over the vast majority of the port's activities. By the late 1960s it was clear that the old quays were no longer adequate for modern freight handling requirements, and as a result the area suffered widespread economic decline (Bristol City Council, n.d.).

3.41 Planning history of Bristol City Docks

In the late 1960s, plans were drawn up by the majority Conservative group of Bristol City Council to close Bristol Docks (Punter, 1990, p.158). These plans were announced in



PLATE 3(5). Tarmac's Phase Two Schooner Way residential development: built on the site of an engineering company (Gavan Products) and dry docks (photograph, the author, 1990)

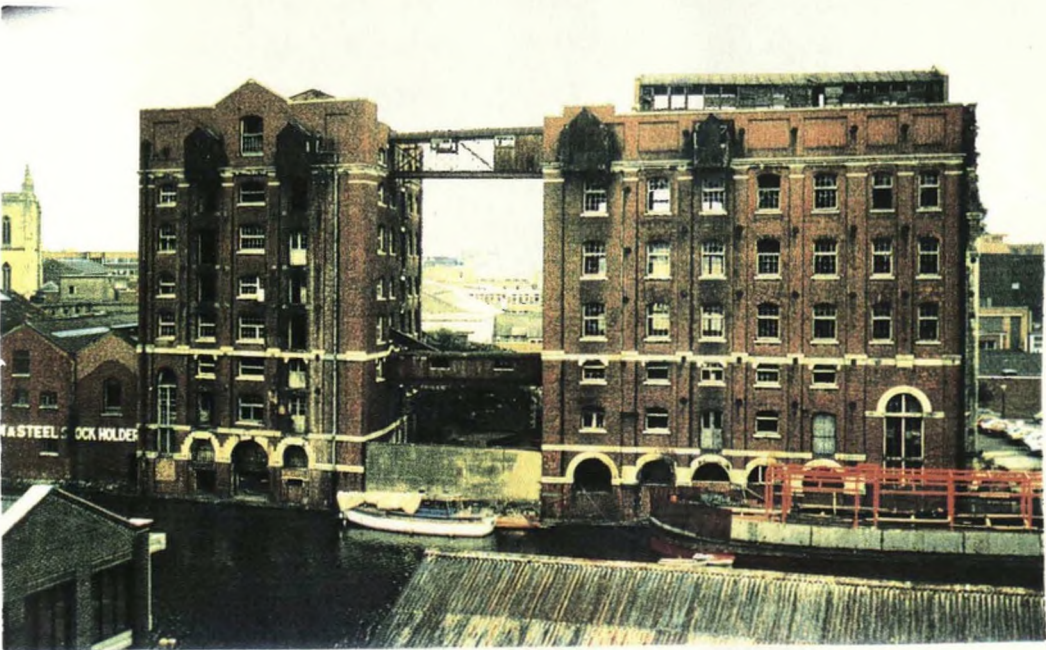


PLATE 3(6). Buchanan's Wharf (1884-1985), Bristol Docks, prior to refurbishment (reproduced from Lovell, n.d.)

the Council's Civic News in August 1969. Public reaction to the City's proposals was extremely swift, and a powerful liaison of amenity groups was formed to fight the plans (Punter, 1990, p.159). Although key amendments to the Bristol City Docks Bill were subsequently made to prevent any reduction in the water area, the Bill was not scheduled to take effect until 1 January 1980. This situation did not satisfy protestors who demanded a master plan for the Docks. The City Council therefore decided to commission Casson Conder and Partners to develop a plan that could act as a basis for the consideration of planning applications (see Casson Conder and Partners, 1975).

Casson worked to a detailed brief that was prepared by the City planners between 1969 and 1972. The Casson report included ambitious proposals for large scale office and recreational developments, a marina, maritime museum, swimming pool, sports centre, car parks, bus station, law courts and a hotel (Punter, 1990, p.159). The report also recommended that 30 key buildings or structures should be retained and that a list of design factors for each large site should be prepared.

The Casson report attracted considerable public debate, and in 1972 the Bristol City Docks Group was formed to put forward alternative proposals. These took the form of a series of reports produced between 1974 and 1977 (see Bristol City Council 1974, 1975a/b). Punter (1990, p.161) notes that the quality of these reports were so outstanding that "their analysis and prognosis will remain relevant for the foreseeable future". Some of the Group's most detailed work was carried out by James Bruges who predicted that valuable space would be wasted if Casson's proposals were adopted. Bruges also emphasised that it was necessary to

create an active street life and encourage diverse land use in the Docks. Thus, while the City Docks Group supported Casson's recommendations on the conservation of buildings, they took the emphasis upon docklands' heritage much further by suggesting the importance of traditional forms, mixed use, social balance and recreational and cultural potential (Punter, 1990, p. 163).

When, in 1974, the City Council considered the Casson proposals it accepted their broad outline and resolved "to make the fullest use of the water areas for recreational purposes" and "to encourage development of selected sites" (Bristol City Council, 1974). However, the City Council also stated that no development was to proceed in the City Docks until a local plan had been prepared. In order to prepare both a local plan and a structure plan, the Council set up a City Docks Working Group composed of officers from Council departments. A Joint Sub-Committee was also established with the aim of bringing together the interests of both the City and County Councils. In 1977, the Docks Study Group produced an Opportunities Report (Bristol City Council 1977a). The Report stressed that high architectural standards were necessary if the task of redeveloping docklands was to be a success.

From the Opportunities Report the Draft District Plan emerged in June 1979 (Punter, 1990, p.166). The Plan contained detailed schemes of environmental improvement, local authority recommendations on infrastructure and development, and site by site assessments of redevelopment potential (Bristol City Council, 1979). It was subsequently adopted by the City Council in 1980 but could not be approved until a structure plan was prepared.

3.42 History of Bristol dockland study sites

(i) Buchanan's Wharf

The site of Buchanan's Wharf was first occupied as a flour mill by William Baker in 1852. A second large mill and warehouse was added to the premises in 1862. In 1882 the original mill was destroyed by fire and in its place two Victorian red Cattybrook mills were erected in 1884 (Plate 3(6)). When new flour mills were opened in Avonmouth in 1934 the buildings were acquired by the port of Bristol Authority and used for the storage of commodities. The warehouses were originally flanked by a mill building, but this was raised by the blitz in 1941 (Figure 3.4).

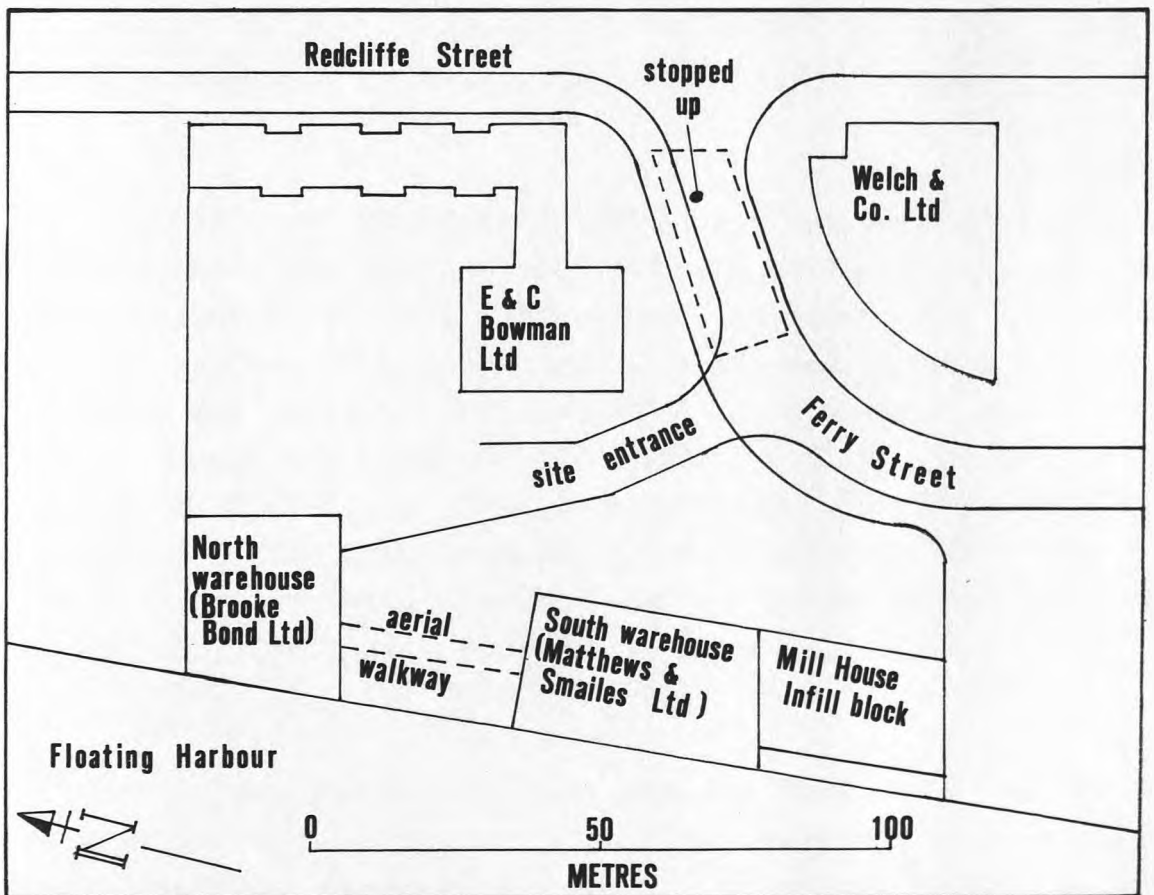


FIGURE 3.4 Buchanan's Wharf, Bristol Docks, prior to redevelopment (source: adapted from a photocopy of the site, provided by Bristol City Planning Authority, n.d.)

In 1971 the City Docks, including these buildings, passed into City Council ownership following the decline of commercial shipping. The buildings had become vacant in the late 1960s and gradually became derelict. Following the threat of demolition by commercial redevelopment pressures, the two warehouses were listed in 1975. The Bristol City Docks Local Plan prepared between 1976 and 1980 designated the area for residential use, and refurbishment was encouraged. Two housing associations, the Bristol Churches and Knightstone, submitted refurbishment schemes for the south and north blocks respectively in 1979/80. Yet due to cut-backs in public spending, it was not possible to support these schemes. Although it had been the intention of the Local Plan to encourage a balanced housing mix of one-third private sector, one-third public sector and one-third 'fair-rent' housing in the City Docks, this too was to be frustrated by the Government's restraint on public sector spending (Bristol City Planning Authority, (1985a))

In 1983 the Buchanan's Wharf site was marketed by the City Council. The particulars included planning requirements for residential use and a waterfront walkway. The marketing did not produce an encouraging response and in June 1984 the Planning and Traffic Committee were asked whether they would modify their policies to allow some office content along Redcliffe Street to make the package more commercially attractive. The Committee declined to make any adjustments, and instead encouraged more vigorous re-marketing and the suggestion of historic building grant aid.

On 13 September 1984, the Planning Committee considered five planning applications for the refurbishment of the warehouses and associated residential redevelopment of the Buchanan's Wharf site. Of the submissions from Robert



PLATE 3(7). Entrance to the Floating Harbour, Bathurst Basin, Bristol Docks (photograph, John Horn, 1991)



PLATE 3(8). Restored polychrome brick façade of the Byzantine warehouse, Bathurst Parade, Merchant's Landing, Bristol Docks (photograph, John Horn, 1991)

Malcolm Ltd, the Avec French Partnership, Regalian, Gable House Properties and Rendell Partnership Developments, the Planning Committee decided that Rendell's redevelopment proposals were the most attractive (Bristol City Planning Authority, (1985a)).

(ii) Merchant's Landing

The Merchant's Landing housing development is located on the site of a former millpond where the River Malago joined the River Avon. This basin was intended as an alternative shipping entrance to Bristol's Floating Harbour (Benbrook, 1989, p.47). (Plate 3(7)). In 1974, Bristol CPA identified Bathurst Basin as an 'early release site' and the City Docks Joint Study Team began to produce an outline brief for its redevelopment. At the time of the brief's completion in 1977, the site consisted of a Public House, vacant transit sheds, houses, a bonded warehouse, a warehouse used for storing oil seed (known locally as the Byzantine warehouse (Plate 3(8)), and a NCP car park (Roger Pratt, Ideal Homes, personal communication). (Figure 3.5). Although the CPA subsequently accepted that both the bonded warehouse and transit sheds could be demolished, they insisted that the Byzantine warehouse's polychrome brick façade should be retained (Bristol City Council, 1977b).

Between 1974 and 1980, the London Indemnity and General Insurance Ltd (LIGI) submitted a total of five planning applications to Bristol CPA to redevelop the Bathurst Basin site for residential and light industrial purposes. All of the planning applications were refused permission, and an appeal to the Secretary of State in May 1978 was also dismissed. The CPA gave a variety of reasons for refusing the applications, although an underlying difficulty appeared

to be LIGI's financial instability. In 1976, the company had gone into receivership and a consortium of 40 companies (led by the Prudential) agreed to underwrite LIGI's operation. Although the final application that the company made in 1977 was a joint venture with the Prudential, this too was refused planning permission on the grounds that it was 'premature' and not in conformity with the development brief (Bristol City Planning Authority, (1988b), Development Control File no: 1493L/88c). As a result the site was sold

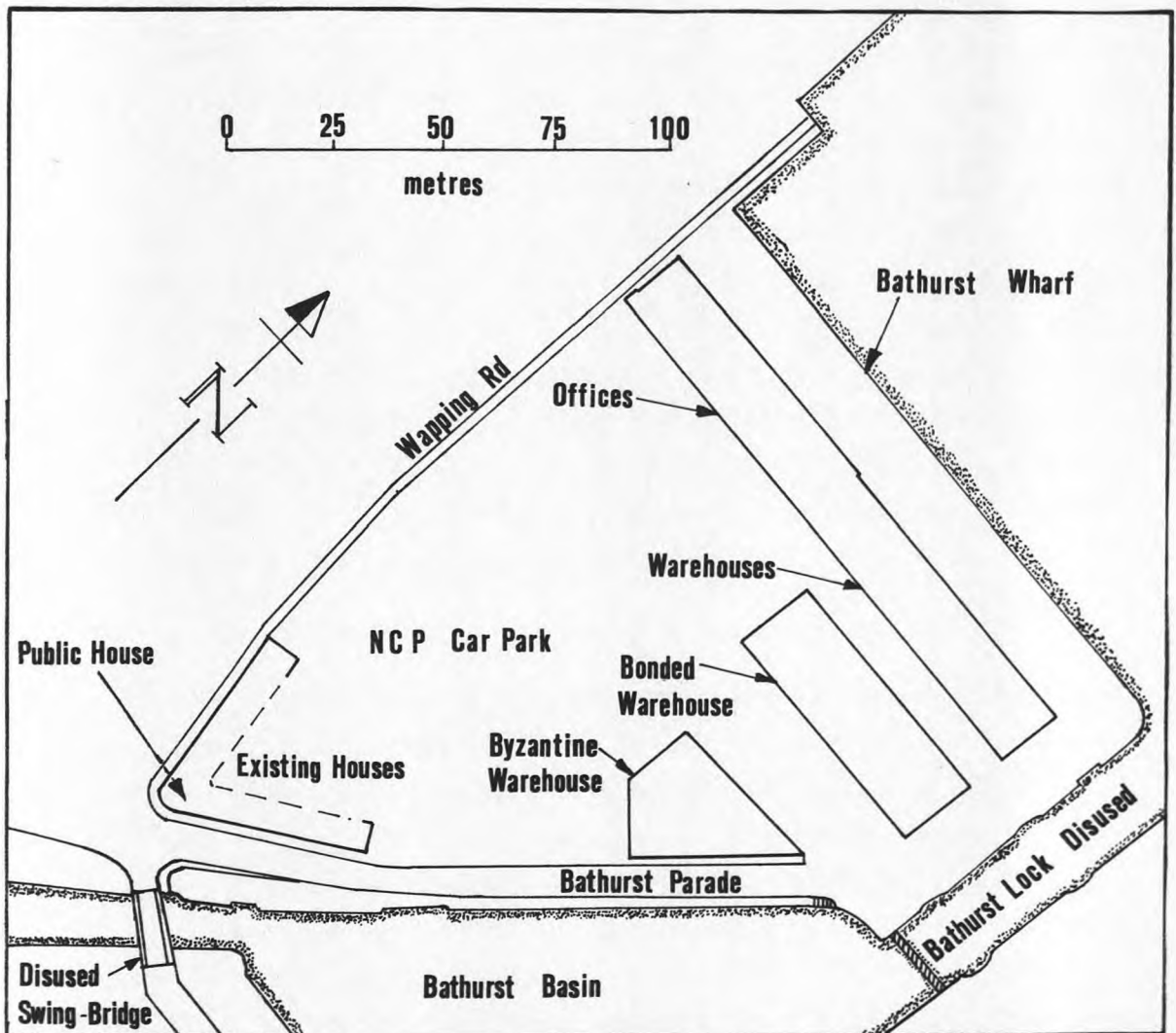


FIGURE 3.5 Bathurst Basin, Bristol Docks, prior to redevelopment (source: adapted from a plan of Bathurst Basin, provided by Ideal Homes Ltd, n.d.)

on, and in 1979 the CPA initiated new discussions with Comben Homes Ltd (now Ideal) who were to subsequently carry out a two phase commercial and residential redevelopment of the site.

(iii) Baltic Wharf

The Baltic Wharf development is located on the site of a former timber yard that has a long historical association with the timber trade of the Baltic coast. Baltic Wharf was the first of a number of wharfs that were specially constructed in Bristol's Floating Harbour during the first quarter of the nineteenth century. Most of the timber that was imported here was used for the shipbuilding industry. However, because the timber yards did not project far enough into the Floating Harbour to allow ships to berth against the wharf faces, a great deal of trade was lost to other better-fitted ports. In spite of this design fault, trade continued on the site until after the Second World War, and even when timber was no longer brought into the docks by ship, timber companies were still trading from Baltic Wharf in the 1970s (Bristol City Planning Authority, (1984c), Development Control File no: 4370p/83c).

The Baltic Wharf site was originally identified for public housing development. In 1978 the CPA's Housing Committee launched a design competition, and by 1979 they had chosen a suitable scheme of 200 houses, each with a view of the dock and a 'good sized' garden (Punter, 1990, p. 199). Phase one of the proposed Baltic Wharf Housing development was subsequently included in the Housing Department's approved Building Programme of 1980/1, but was never implemented due to the curtailment of the Housing Investment Programme. The Local Government Planning and

Land Act, 1980 (1980a) encouraged the Secretary of State for the Environment to advise Bristol CPA to dispose of sites, such as Baltic Wharf, where land was not being used. The City Valuer's report to the Land and Administration Committee in 1981 expressed the view that unless preventive steps were taken, it was a virtual certainty that the Baltic Wharf site would be the subject of a DOE 'instruction to sell', and it was therefore probable that housing development on an unconditional basis would be brought about. It recommended that the CPA should seek to achieve a low-cost private housing scheme on the site (Bristol City Planning Authority (1984c), Development Control File no: 4370p/83c).

In March 1982, the Revised Bristol City Docks Local Plan set out the development principles for the Baltic Wharf site (Bristol City Council, 1982a) Paragraph 2.4 states:

"the [Baltic Wharf] site is suitable for residential use because of its high environmental potential; its relative proximity to other residential areas (Hotwells and Southville); its early availability and the demand for 'inner-city' housing."

A month after the Local Plan was published, Bristol CPA's Planning Committee also approved a planning brief entitled Baltic Wharf Housing: Development Principles (Bristol City Council 1982b). The brief was used as the basis for a design competition to find a suitable developer for the site (Figure 3.6). Four companies were chosen to submit a scheme in accordance with the brief, and of these applications F.Rendell and Sons Ltd were subsequently selected as the successful applicant.

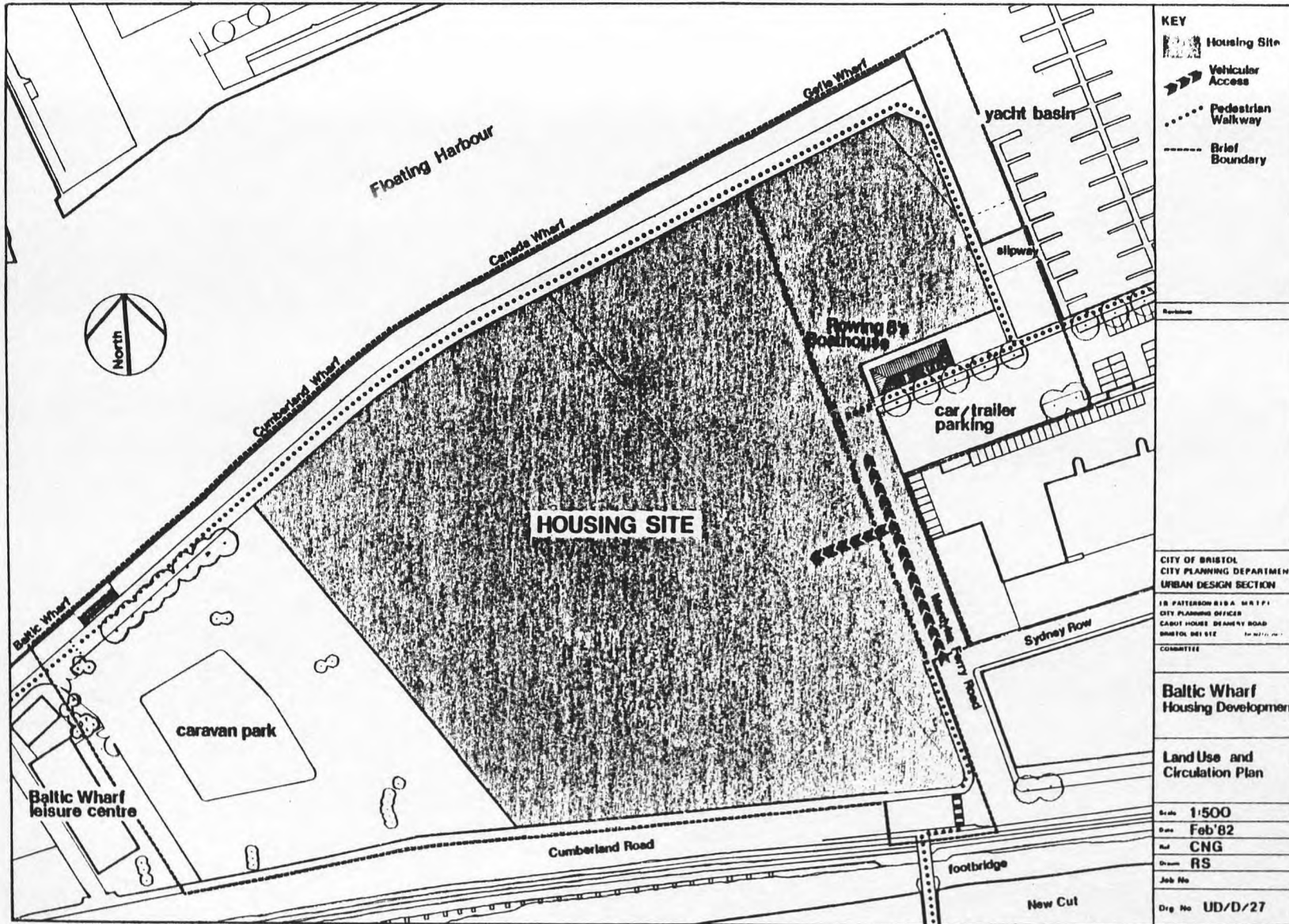


FIGURE 3.6 Baltic Wharf redevelopment site, Bristol Docks (source: adapted from Bristol City Council, 1982b)

3.5 Summary

This chapter has examined the history of each study area prior to the start of its second cycle of redevelopment. It is evident that these areas shared a number of similarities: they were run-down, had semi-derelict townscapes, large ownership units and, in the case of London and Cardiff, required a UDC to initiate redevelopment. Subsequent chapters focus on the process of regeneration, the 'agents' who are responsible for bringing about this second cycle, and the residents who live in recently rejuvenated dockland areas.

CHAPTER FOUR

**TOWNSCAPE AESTHETICS AND DESIGN
CONTROL**

4.1 Introduction

The aim of this chapter is twofold. First, to examine CPA and UDC policies on townscape aesthetics and issues of design control. Secondly, to examine the implications of these policies, especially how they differ between CPAs and UDCs. To achieve this aim, three sources of data are utilised: semi-structured interviews with the LDDC and CBDC, CPA planning files, and LDDC development briefs.

4.2 What is aesthetic control ?

The Oxford English dictionary defines 'aesthetics' as:

"pertaining to things perceptible by the senses, things material (as opposed to things thinkable or immaterial)."

The word 'aesthetic' is derived from Greek, but was later used in the eighteenth century by Baumgarten (1750-1758) to mean 'criticism of taste'. Kant (1724-1804), on the other hand, used the term in a metaphysical sense to mean 'the science which treats of the conditions of sensuous perception'. Aesthetics was first used in the English language in about 1800 with Baumgarten's definition receiving the most widespread acceptance. Despite the fact that the word's etymological derivation is actually closer to Kant's metaphysical definition, 'aesthetics' has recently acquired a 'sentimental meaning', and is commonly used to denote 'an ideal of beauty'.

Design control or 'aesthetic control', is a term which has generally escaped definition by British town planners,

who have tended to attach different interpretations to its meaning. Punter (1990), however, has devoted an in-depth analysis to the term's contemporary usage and has suggested that some American town planners have recently renounced the term's sensuous or esoteric definition, and now favour the word's association with 'perception'. Punter defines aesthetics as:

"that aspect of the regulation of development that seeks to control the physical attributes and uses of new buildings, and the spaces between them, so as to ensure a rewarding sensuous experience for the public who use the environment thus created" (p.2).

Punter's holistic definition of aesthetics also embraces a wide variety of factors which form part of the 'public realm'. Thus, he visualises urban design as that which is concerned with the totality of the urban area including buildings, space, street furniture, plants, micro-climate, movement (traffic), social use and activities.

In contrast to Punter's 'all embracing' definition of aesthetic control, the Government has generally adopted a much narrower, idiosyncratic interpretation of the term. This may be attributed, in part at least, to the way in which government policies on design control have evolved since the end of the Second World War.

4.21 Central Government's policies on aesthetic control

In 1947 the first Statutory Act was introduced to ensure that all development was scrutinised for its design

qualities. Nevertheless design control remained very relaxed. Punter (1990) suggests that this occurred because planning departments did not have the staff or skills to exercise selective control on design, and while City architects frequently made comments on planning applications, "these did not amount to much" (p.5).

During the 1960s and early 1970s, the scale of development rapidly started to change, and pressure for city centre redevelopment in particular became fierce. In order to plan such large scale projects, developers found it necessary to devise architectural models which incorporated the knowledge of city engineers, architects and planning officers.

By the late 1960s, the public had first started to become aware of the major changes that were occurring in the development industry, and they subsequently started to question the activities of the planning profession. However, following the 1974 oil crisis, planners were given a natural 'breathing space' to reassess their own objectives, and as a result of this re-appraisal, planning committees were encouraged to think more carefully about their attitudes to design control.

After 1975, the Government drew up a series of reports on the planning system which emphasised its determination to prevent planners and their committees from intervening in design. Circular 22/80 (DOE, 1980d) in particular, which contains a specific indictment of aesthetic control, has been described by Punter (1990, p.6), as the first of the Conservative government's 'onslaughts' on the practice of planning in Britain. However, more onslaughts were shortly

to follow. In 1981, the Government designated, in London and Liverpool, the first of 11 UDCs. The LDDC, has undoubtedly set new standards in promoting policies that encourage rapid, market-orientated redevelopment of derelict sites. Moreover, unlike CPAs which are dissuaded from refusing planning permission solely on the basis of a development's design, UDCs have far more extensive design control powers. Section 27 of the DOE's Planning Policy Guidance, General Policy and Principles (1988a), states that CPAs have extremely limited powers of aesthetic control.

"Matters of detailed design have long been an unnecessary source of contention and delay in the planning system. Aesthetics is an extremely subjective matter. Planning authorities should not impose their tastes on developers simply because they believe them to be superior."

Conversely, UDCs have more flexible roles as design control agents. For example, John Pickup, CBDC's planning director, has repeatedly stressed that the strength of the CBDC lies in its ability to "have a say on the quality of development" (Pickup, 1986 quoted in Johnston, 1987, p.7) The LPAs under the Government's general development control guidelines, are unable to do this. Clearly, therefore, CPAs and UDCs have different statutory obligations to fulfill as agents of design control.

The aim of Sections 4.3-4.7 is twofold. First, to examine the design control policies of the LDDC, CBDC and Bristol and Cardiff CPAs. Secondly, to assess the differences between the UDCs' and CPAs' implementation of these policies.

4.3 The LDDC's strategy for redevelopment

Since the LDDC was designated in 1981, its policies on aesthetic issues have been severely criticised by the planning world, academics and the general public. One of the LDDC's most vociferous critics is Bandini (1985, p.39), who suggests that the Corporation has placed too much emphasis upon Docklands' visual dimension, and has erroneously neglected other equally important aesthetic aspects, such as 'function', 'place' and 'space'. Buchanan (1988) also criticises the LDDC's shortcomings in terms of its policies on aesthetic design.

"Though urban design has recently come a long way in Docklands, it has still to make that essential marriage with infrastructural master-planning to create a rich, coherent and contiguous public realm. There is still a tendency to build up local incident rather than work on and down from the whole, while circulation and purely visual considerations are still given more attention than achieving a really rich functional and experiential mix."

According to Healey (1985, p.16) the LDDC's preoccupation with the 'visual dimension', has occurred largely as a result of Gordon Cullen's appointment in 1981 as the LDDC's urban designer. For Cullen, 'townscape' is the 'art of relationship' and represents the overall experience and conception of the city. These ideas are clearly expressed in the LDDC's Isle of Dogs: A Guide to the Design and Development Opportunities (1982), which attaches a great deal of importance to the exploitation of Docklands' existing visual relationships, such as those that exist between Greenwich, the water's edge, and the City of London. The Design Guide also suggests that these visual aspects of Docklands can be abstracted into an 'analytical plan'. This plan forms the basis of a 'proposed townscape structure',

which encompasses three major 'visual and dramatic sequences'. The three sequences are associated with the community, water basins, and the scenic or tourist route.

Crilley (1989) criticises the LDDC's assumptions about the importance of the visual dimension. He suggests that the LDDC has shown a considerable lack of interest in those conceptual and physical dimensions which are usually associated with the urban scale. He also accuses the LDDC of forfeiting basic planning principles and adopting a "flexible framework and permissive design guidelines". His reaction to the LDDC's unsuccessful attempts to produce 'cohesive unity' in the Isle of Dogs is particularly scathing:

"Even in the LDDC's own terms it takes a leap of imagination to claim that the Isle of Dogs has any coherence, instead what exists is more akin to a collage city in which a glut of buildings using different styles, materials and technologies have been jumbled together in a chaotic ensemble."

Punter's definition of aesthetics is at variance with the LDDC's Design Guide. Thus, whereas Punter pays close attention to the relationship between townscape elements, the LDDC's framework aims to create a succession of "self-contained moves, each of which points to a new synthesis of the whole area" (LDDC, 1982, p.49). Unfortunately, the LDDC's decision to create self-contained areas is likely to mean that Dockland townscapes will lack a sufficient degree of unity to ensure their continued aesthetic and social success.

As well as having received criticism by academics, the LDDC has also been repeatedly criticised by planners and the National Audit Office (NAO, 1988). For example, Malcolm Smith, a planner from the Southwark Borough Planning Authority, said that he agreed with the accusation of Crilley (1989) that the LDDC did not have any formal policy on redevelopment, and he endorsed the view that the LDDC operated "an urban non-design strategy" (Malcolm Smith, personal communication). The NAO has criticised the LDDC for not having prepared a comprehensive statement of its redevelopment objectives. Moreover, the LDDC is the only UDC not to have met this important statutory obligation.

Suprisingly perhaps, the LDDC's Chief Executive, Reginald Ward, has not defended the Corporation's attempt to devise a co-ordinated redevelopment strategy. In 1987, The Los Angeles Times recorded Ward's suggestion that: "Docklands is a 'happening', a happy coincidence of opportunity and accident". This statement reinforces the criticism that has been levelled at the LDDC's policies on aesthetic design.

4.4 The CBDC's and Cardiff CPA's redevelopment plans

The approaches taken by the CBDC and CPA to the redevelopment of derelict dockland sites in the Capital of Wales are different from the 'non design' strategy of the LDDC. In the wake of what many felt was a disastrous attempt by the LDDC to plan the rejuvenation of a large area of London's Docklands, speculation was rife as to the implications that a UDC would have for the redevelopment of Cardiff's 'Bay' area. In December 1986, Nicholas Edwards, the Secretary of State for Wales summarised the CBDC's

objectives for development in his introductory speech.

"Whatever happens, it is essential that the (Cardiff) docks do not go the same way as the London docks where basins have been filled, virtually all the historic warehouses have been demolished and where the London Docklands Development Corporation (LDDC) seems to have sought speed of development no matter what the social or architectural consequences" (Edwards, 1986).

Johnston (1987, p.7) notes that Edwards also emphasised that the CBDC's policy for redevelopment would be based upon "firm and consistent control", and that it was determined to achieve "the very highest world-wide standards in architecture and design".

In spite of the Secretary of State's announcement that the CBDC's Redevelopment Strategy (1988) was firmly based upon clear planning objectives, a fundamental difference exists between the LDDC's and CBDC's statutory planning powers. Unlike the LDDC, which is the planning authority for its UDA, the CBDC is not the planning authority for the Cardiff Bay redevelopment area. This means that although the CBDC has prepared comprehensive redevelopment plans, it has limited statutory powers to implement these objectives. Every planning application for development inside the Cardiff Bay redevelopment area is submitted first to Cardiff CPA, who subsequently passes it to the CBDC for its comments. If the CBDC feels that it is necessary for alterations to be made, it will inform the CPA of its view. The CPA then decides whether to accept the CBDC's recommendations. If the CBDC and CPA are unable to reach an agreement over whether an applicant should receive planning permission, the CBDC is able to ask the Secretary of State for Wales to intervene on its behalf. Although to date the CBDC has not exercised this right of 'veto', on occasions the CPA has supported

developers' pre-1988 Section 52 Planning Agreements, and in so doing has effectively overruled the CBDC's suggestions for change.

In 1988, the CBDC's Regeneration Strategy, which was prepared by Llewelyn-Davies Planning and its group of satellite consultants, was approved and adopted by the Corporation. Subsequently, the CBDC working, with Cardiff CPA and South Glamorgan County Council, started to prepare a series of 'area planning briefs' and 'policies for urban quality'. These guidelines have been incorporated into detailed recommendations for the future development of specific sites and neighbourhoods. The policies for urban quality are intended to provide guidance for the preparation of 'site development briefs' and design guidelines for individual developers and their professional advisers when they prepare applications for developments within the designated area.

The CBDC likes to stress that its urban design policies are 'robust' rather than 'prescriptive'. Its design guidelines shows recognition of six main aesthetic issues.

- 1) production of consistency in the design and use of materials, and the ensurance of variety through an imaginative use of a limited number of themes
- 2) careful definition and design of streets
- 3) production of a 'dynamic' living environment that includes a mix of uses and activities in any one neighbourhood
- 4) awareness of historical precedent
- 5) provision of 'access systems' that are seen as an integral part of the urban design
- 6) recognition of the importance of ease of choice and ease of movement

Unlike the LDDC's Design Guide, the CBDC's Redevelopment Strategy does not place sole emphasis upon the importance of the visual dimension. Instead, the CBDC has adopted a strategy which explicitly refers to several key elements subsequently included in Punter's definition of aesthetic control. In particular, it places emphasis upon the design of streets and the provision of a through flow of vehicles and pedestrians via 'access systems'. The CBDC's Redevelopment Strategy also promotes the importance of 'function', and relationships between townscape elements, which are aspects lacking in the LDDC's plans for redevelopment.

Although the CBDC's Redevelopment Strategy is a very definite outline of what the Development Corporation hopes to achieve in the Bay, it conceals the fact that the CBDC has also considered other approaches to the rejuvenation of the area which are based upon the rapid acquisition of land and benefit from public investment in the area. In an unpublished report (n.d.) the CBDC suggest that:

"in the final analysis it cannot be denied that a far more effective method of control would be for the Development Corporation to have a controlling interest in development land... whilst acquisition by agreement will obviously be attempted in each case, compulsion will be necessary to ensure fast, orderly site assembly and the retention of betterment."

Thus, while the CBDC has officially adopted a redevelopment policy emphasising the importance of aesthetic control, it is evident that it would like to adopt an approach to regeneration that is similar to the LDDC.

4.5 Bristol CPA's design control policies

When in 1988 Bristol obtained a 'mini' UDC, the redevelopment of its derelict dockland sites was already nearing completion. Moreover, the fact that Bristol CPA has been able to implement such a large scale rejuvenation programme without the necessity of UDC intervention, raises important questions both about the nature of the planning authority's design control policies, and the Government's decision to designate a UDC in Bristol.

During the mid-1980s Bristol CPA started to develop a reputation for strong planning control, enlightened redevelopment, and imaginative conservation (Punter, 1990). However, this has not always been the case. In 1985, a Planning Difficulties report was prepared by the Bristol Property Agents, and Bristol Chamber of Commerce and Industry, focusing on the problems that had occurred as a result of various 'attitudinal' difficulties with Bristol CPA. These difficulties included the slow processing of applications, poor pre-submission advice by planning officers, poor conservation requirements and Section 52 Agreements, inadequate consideration of economic viability, inadequate written policy and design advice and strategic guidance. The essential contention of the Planning Difficulties report was that the City's requirements were too onerous, particularly with regard to conservation and 'the market place'.

Partly as a result of the Planning Difficulties report, and partly as a response to the pressing need for strategic guidance for investment in, and development of, the central area, changes have subsequently occurred in the CPA's planning system. These changes have resulted in the CPA's

operation of a far more co-ordinated regime of development control and design control. Planning officers have been instructed to draw up a more integrated framework of policies, improve their performance standards, and issue development briefs and planning guidance to developers who ask for this attention.

Despite these changes in the CPA's policies, in 1987 the Conservative government announced its intention of designating a UDC in Bristol. The Secretary of State gave four reasons for the establishment of the UDC. These are Bristol's high proportion of derelict and disused land, high incidence of vacant buildings, fragmented ownership, and poor internal accessibility by road. The Chairman of Bristol's Planning Committee instantly voiced his disapproval of the Government's plans, saying that the UDC was regarded as an "unwarranted intrusion into democratic Local Government and development powers" (Bristol City Council, 1988). Moreover, it was widely acknowledged by Bristol's planners that the Government's main reason for wanting to designate a UDC was to take away the Labour Council's credit for regenerating large areas of the city (including docklands) without the necessity of the Government's support (Punter, 1990, p.293). Despite the City Council's general opposition to the Bristol Development Corporation (BDC), the Government was determined to go ahead with its formation.

During the latter part of the 1980s, Bristol CPA began to review its policy on aesthetic control. Punter (1990, p.367) summarises the philosophy of senior planning officers on this issue:

"Developers are out to maximise their profits and are not to be trusted: it is the public duty of planning officers to extract the most

public benefit out of development as possible including good design and additional facilities and amenities where necessary: Bristol is a place which can afford to be choosy about the development it takes and given its existing qualities must insist upon the very best...The same kind of attitude extends to architects."

It is interesting to note, however, that this philosophy has not always predominated amongst planning officers. Case studies of two redevelopment sites in Bristol Docks will serve to illustrate this point.

4.6 Case studies of dockland redevelopments

Case studies are used to study the roles of the LDDC, CBDC and Bristol and Cardiff CPAs as design control agents. Two detailed cases of residential redevelopment in Surrey Docks have been compiled using data obtained from interviews, and LDDC development briefs. The studies are based upon two planning applications that were submitted to the LDDC by Costain Homes and Lovell Farrow in 1984 and 1985. Data obtained from Cardiff CPA planning files have been used to compile detailed case studies of two planning applications that were submitted in 1987 by Tarmac Provincial Properties Ltd, and Lovell Urban Renewal. Together with interview data, the information used to compile these case studies has enabled important inferences to be made both about the nature of the CBDC's and CPAs' redevelopment strategies, and the extent to which these policies show agents' sensitivity to design. Finally, two detailed planning applications submitted by Rendell Partnership Developments and Comben Homes are used to examine the role of Bristol CPA as an agent of design control.

4.61 Surrey Docks

(i) The Surrey Waters Site

In September 1984, the LDDC issued a development brief for this 6.6 acre (2.6 hectare) site, in the Surrey Docks area of Southwark (Figure 4.1). The fundamental aim of the brief was to set out the LDDC's "intentions and requirements as the landowner and planning authority for the site" (LDDC, 1985a). The document also offered additional information on the LDDC's requirements for the form, density, mix, affordability and design of the new development. Having prepared this document, the housing site was then made open to a limited competitive tender for a combined residential and industrial development. The LDDC frequently uses this type of competitive tendering arrangement to attract a developer and their chosen architects to submit an outline of their proposed development for a particular site. The LDDC disclosed that of the six developers that were interested in housing and industrial site 3, it had decided to select Costain Homes to submit an application for outline planning permission (Peter Swordy, LDDC, personal communication).

In light of the LDDC's development brief, Costain Homes submitted an application on 7 January 1985. The proposal sought full planning permission for the construction of 153 dwellings, consisting of 131 houses and 24 flats. These units were to be laid out in an irregular sequence of 'staggered terraces' around and within the site (LDDC, 1985b). Costain Homes also submitted two additional applications for the redevelopment of the adjacent industrial site.

The LDDC requested that the developer made two amendments to their original application. First, it was proposed that the development's south-western corner was altered so that a clear 'visual link' could be forged with Surrey Water. Secondly, the Development Corporation suggested that an amendment was necessary to the development's frontage so that a 'clearer relationship' could be attained with the frontage of the adjacent development-Marlow Landings. The LDDC's brief states that the overall effect of these changes would be to 'stitch together' housing sites 3 and 4 along one main access leading up to Surrey Waters whilst still retaining the 'essential differences' in characteristics of the two schemes (LDDC, 1985c). (Plate 4(1)).

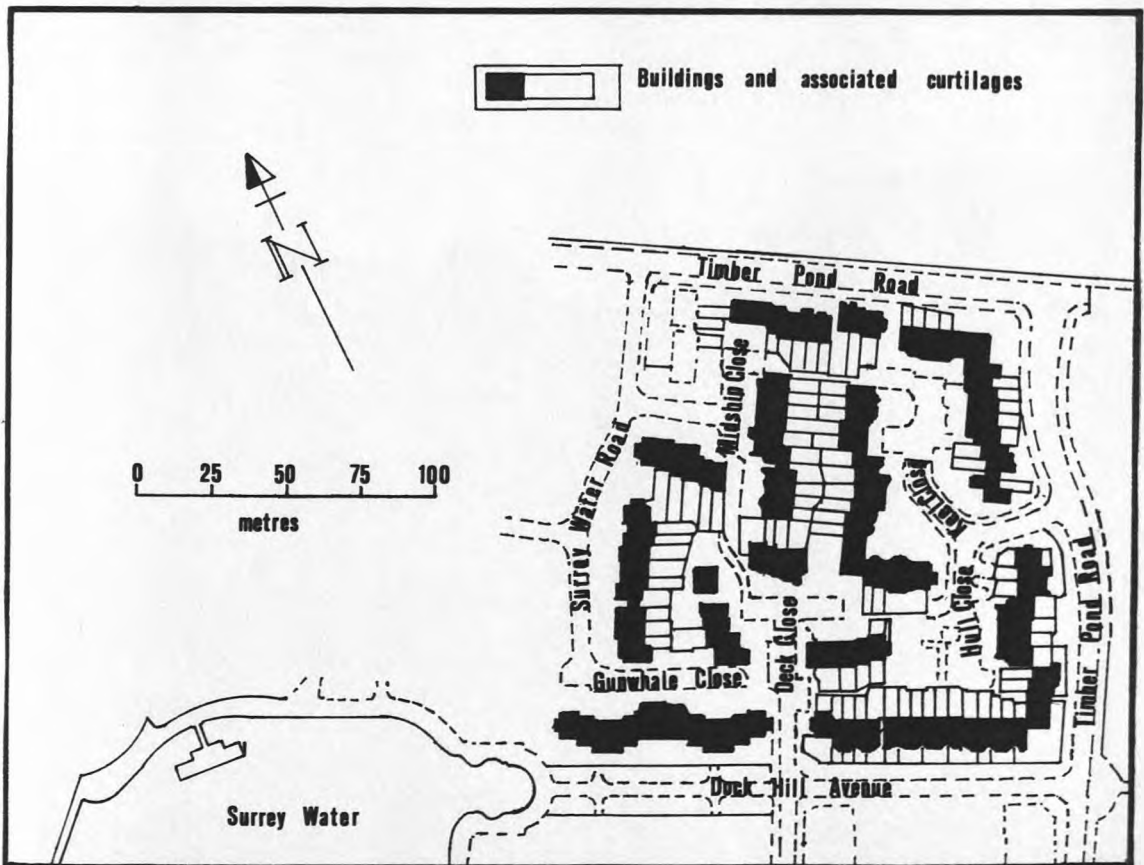


FIGURE 4.1 Plan of the Surrey Waters development, Surrey Docks, London (source: adapted from the London Docklands Development Corporation, 1988)



PLATE 4(1). Dock Hill Avenue, Surrey Docks, London, separating the Marlow Landings and Surrey Waters developments (photograph, the author, 1989)



PLATE 4(2). Lowered roof-line of the middle section of Surrey Waters housing block "F", Surrey Docks, London; the developers' response to a request by the London Docklands Development Corporation in 1984 to create a "clearer relationship" with the adjacent Marlow Landings development (photograph, the author, 1989)

Since it was not a requirement of the development brief that developers should pay special attention to the relationship between the residential development and waterfront, it is surprising that the LDDC decided to criticise Costain Homes for not having fully exploited this connection. It is also surprising, since the LDDC wanted to encourage a "considerable diversity in housing layout and design" (LDDC, 1985d), that it should criticise Costain Homes for using different architectural styles and building forms from those of the adjacent housing development. Instead the LDDC tried to encourage the developers to 'stitch together' their scheme with that of Lovell Urban Renewal's, and consequently avoid what might be described as an 'aesthetic mismatch'.

The only consultee to Costain Homes' application was the London Borough of Southwark's Highway Engineer who made a total of six suggestions, including amendments to the courts, parking provision, and layout of garages (LDDC, 1985e). The LDDC subsequently assured the engineer that his comments would be noted, and went on to grant Costain Homes reserved matters planning permission, saying that: "overall, the layout and design satisfactorily meets the criteria of the Corporation's brief" (LDDC, 1985f). However, given the highly 'flexible' details included in the development brief, it was relatively easy for the developer to satisfy the Development Corporation's planning requirements.

(ii) The Marlow Landings site

On 4 December 1984, Lovell Farrow (now Lovell Urban Renewal) applied to the LDDC for full planning permission for the erection of 122 houses and 24 flats on this 7.4 acre (3 hectare) site (Figure 4.2). The LDDC recorded the following

observations on Lovell's application:

"The scheme presents a generally formal layout which promises to provide a pleasantly contrasted scheme to that proposed for Housing site 3 to the north also presented to the committee. A certain degree of variety in density and massing is proposed from one part of the site to another in terms of terraced, semi-detached and flatted accommodation" (LDDC, 1985g, emphasis added).

On 8 January 1985 and 4 February 1985, the LDDC requested that two amendments were made to the original application. However, neither the LDDC nor Lovell's architects (Andrews Downie and Partners) were willing to disclose what these amendments were.

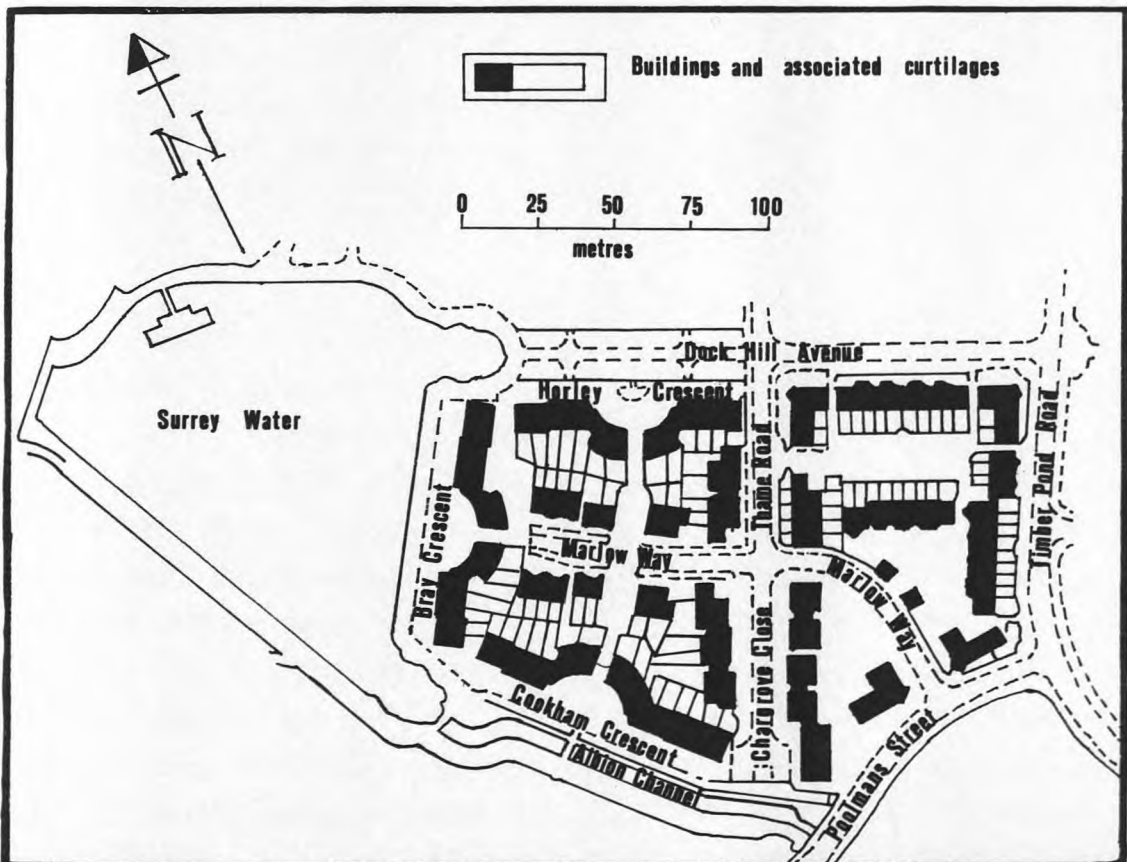


FIGURE 4.2 Plan of the Marlow Landings development, Surrey Docks, London (source: adapted from the London Docklands Development Corporation, 1988)

On 19 February 1985, Lovell Farrow obtained planning permission for their application. The LDDC concluded its report on the development by saying that: "overall this is a very satisfactory scheme and meets the planning/design criteria of the LDDC brief" (LDDC, 1985h).

(iii) Discussion

Detailed examination of these two case studies allows three conclusions to be drawn about the LDDC's role as an agent of design control. First, the development briefs that were prepared for these sites reflect the LDDC's highly 'flexible' attitude towards the rejuvenation of derelict land. The Surrey Waters brief contains a number of extremely vague statements about the LDDC's redevelopment criteria for this site, such as "the site is sufficiently large and its surroundings sufficiently varied to accommodate a wide range of dwelling types and price levels". In a similar vein, the LDDC's advice on 'development design' is equally vague and suggests that it had made no attempt to promote consistent design standards.

Secondly, although the LDDC regularly communicated with developers about aesthetic issues, there is little evidence that its recommendations led to significant design improvements. For example, while Costain Homes' architects agreed to make two major alterations to the design of the Surrey Waters development, these failed to improve either the overall appearance or layout of the scheme. First, on 12 April 1985, Costain Homes agreed to revise the elevations of the middle units of their Block 'F' housing in order to satisfy the LDDC's request that they 'recognise' the crescent shaped courtyards of the adjacent development; secondly, they agreed to alter the layout of their 'end' housing plots

in order to emphasise the development's relationship with Surrey Water. As a result of the LDDC's requests, the developer lowered the roofs of three houses in the middle of Block 'F' (Plate 4(2) and Figure 4.3), and enclosed the houses at the end of the row with a brick wall (Plate 4(3)). Yet while Costain Homes managed to improve the relationship between the mid-section of their development and the adjacent scheme, they simultaneously destroyed a second important relationship with the waterfront, which they had already recognised.

Thirdly, as the statutory planning authority for the London Docklands redevelopment area, the LDDC has significant powers to ensure that its recommendations are carried out by developers. Moreover, unlike CPAs that are dissuaded from making decisions about design issues, the LDDC is able to request that developers satisfy its aesthetic, as well as development control requirements. Unfortunately, because the LDDC has chosen to promote 'redevelopment at any cost', it has paid insufficient respect to design control, and has tended to assess retrospectively the implications of its actions.

An interview was conducted with Mr Peter Swordy from the LDDC's Southwark office to discuss the LDDC's policies on redevelopment and aesthetic control. It has been possible to draw three conclusions from the replies that were given. First, it is evident that the LDDC has a 'flexible' approach to development control. Not only has it failed to prepare a local plan of its own, but it has also refused to adopt the Borough Authorities' statutory plans for redevelopment. Instead, the LDDC has prepared development briefs which are intended to provide developers with a 'planning framework'. All applications for planning



FIGURE 4.3 Front elevation of housing block "F", Surrey Waters, London, showing lowered roof-line of middle section (source: adapted from 1:200 block elevation drawing, Diamond Partnership architects, 1985)



PLATE 4(3). Enclosure of end plots of Surrey Waters housing block "F", Surrey Docks, London, with a brick wall; the developers' response to a request by the London Docklands Development Corporation in 1984 to create a "clearer visual link" with Surrey Water (photograph, the author, 1989)

permission are submitted to the LDDC, who then decides whether the applicant should be granted planning permission. Secondly, Swordy felt that the LDDC's role as an agent of design control was similar to that of a CPA. He stressed that the LDDC undertook extensive consultation with developers before they prepared a planning proposal. He pointed out that it was then common for the Development Corporation to request "a second round of fine-tuning" before finally granting planning permission. Finally, although the LDDC has obtained much of its redevelopment land through compulsory purchase, it prefers to see this as a 'last resort', rather than as a desirable land acquisition method. Despite denouncing compulsory purchase measures, however, the LDDC strongly believes that land-ownership is the key to 'land-control', and that it would have been unable to achieve such rapid redevelopment of Docklands had it not been able to obtain sites in this way.

4.62 Atlantic Wharf

(i) Tarmac's residential and commercial site

On 3 August 1987, Tarmac Provincial Properties Ltd applied to Cardiff CPA with the intention of securing 'reserved matters' planning permission for the construction of 98 residential units and 14 small shop units with parking and infrastructure on this 4.22 acre (1.70 hectare) redevelopment site (see Figure 2.8). This application followed the granting of outline planning permission (application no. 83/1282) for the redevelopment of the entire Bute East site in 1985.

The CPA registered no objections to Tarmac's proposal and recommended that subject to the CBDC's comments,

planning permission should be granted. The CPA's appointed case officer for the scheme made the following observations:

"The blocks create a sense of enclosure around the courtyard and present varied and interesting frontages to the dockside, Schooner Way and Tyndall Street. The dockside elevation continues the arcade and colonnaded character of the adjoining Bonded warehouse which is a Grade 2 listed building which has been refurbished for office use, and presents a lively and complimentary design to the dockside area; provision is also made for access from the courtyard and Schooner Way through the buildings to the dockside. The development is of a high standard of design with varying fenestrations and roof lines and contrasting materials and attention to detailed architectural features. Provision is also made for a focal point within the design by a 'link feature' between 2 of the dockside housing blocks" (Cardiff CPA, 1987d).

Despite both the CPA's general support for Tarmac's application, and the case officer's recognition that the proposal was of a high aesthetic standard, the CBDC was strongly opposed to several important design aspects of the scheme. Moreover, following discussion with Tarmac, the CBDC requested that they present details of their proposed redevelopment scheme to the RFAC. This they did on 1 October 1987 in the presence of a CPA planning officer who lent his support to the application.

The RFAC was chosen by the CBDC to judge the aesthetic appropriateness of the application, as the CBDC had not yet been able to set-up its own in-house architectural review board. Unfortunately for Tarmac, the RFAC did not like four major aspects of the scheme's design, and following a short introduction, in which the panel expressed its views on the importance of the Atlantic Wharf redevelopment, it then went on to list these criticisms. First, the

development paid "insufficient respect to the Spillers building" (subject of a later application, no. 87/1491). Secondly, its architectural design detail was "unacceptably poor for such an important site". Thirdly, the scheme's fenestration was too complicated. Finally, the scheme would have benefited from the use of a more restricted number of materials (Letter from RFAC to Cardiff CPA, 2 October 1987, Development Control File no. 87/1459).

The RFAC's objections to Tarmac's use of building materials and choice of fenestration are in sharp contrast to the views held by the planning authority. In fact, the CPA had commended Tarmac's selection of varying fenestration, and contrasting materials (Cardiff CPA, 1987d). It is therefore apparent that the RFAC and CPA have different opinions of what constitutes 'good design'.

The RFAC's observations also provoked a 'heated' reaction from Tarmac, who felt that the Commission should not have become involved in the processing of their application. In a letter to the CPA, Tarmac made three observations that are of particular note. First, they pointed out that prior to 1 October, the CBDC had not indicated any criticism of the scheme. Secondly, they commented that their perception of the CBDC's role in the development of south Cardiff was that of "dynamic catalyst and comprehensive strategist", and not as a competent planning authority. Thirdly, they felt particularly annoyed that they had not been given the chance to respond to the RFAC's criticism before the CBDC held a board meeting on Sunday 11 October. Tarmac also expressed grave concern that the RFAC was asking them to make so many alterations to their planning application and again asked whether the CPA would intervene on their behalf (Letter from Tarmac to

Cardiff CPA, 29 October 1987, Development Control File no. 87/1459).

Although the CPA agreed to liaise with the CBDC, the Corporation refused to alter its original recommendation that revisions were necessary to the design and layout of Tarmac's planning application. The CBDC concluded its decision by saying:

"In summary, our Board had strong reservations about the quality of design of a new building immediately south of a new dock feeder canal, and located immediately to the east of the Spiller's building...I wish to make the Board's position clear: they are determined to maintain their right to require quality of design and construction in all matters of planning within the Designated Area. Nethertheless, there is difficulty in this particular case because the Tarmac proposals were initiated prior to the establishment of the Corporation, and because they received an Urban Development Grant" (Letter from Barry Lane, Chief Executive of the CBDC, to Cardiff CPA, 6 November 1987, emphasis added, Development Control File no. 87/1459).

The 'difficulty' to which the CBDC refers in this letter stems from the fact that Tarmac had already obtained outline planning consent for the comprehensive redevelopment of the site, two years before the CBDC was established in 1987 (see Chapter Three). Moreover, Tarmac had also received £9 million of public sector funding via the Welsh Office to help them prepare land for redevelopment purposes. In the light of this situation, Tarmac perhaps justifiably felt that they should not be expected to refrain from redeveloping the site while the newly established UDC, and its external architectural body (the RFAC), scrutinised their reserved matters planning application for design faults.

Tarmac's architects for the development project - Holder, Mathias Alcock (HMA) - were also perplexed by the CBDC's criticism of their work, and subsequently responded to its complaints by drafting a list of six observations:

First, they pointed out that it would be impossible to carry out the CBDC's request to reduce the height of the proposed development and extend it along the dock edge, because this would prevent the servicing of the building's shopping units and take up space that had been set aside for a car park (Plate 4(4)). Secondly, HMA felt that the building's dockside elevation did not lend itself to a substantial height reduction. Moreover, if this reduction were effected, it would mean that "the building's gables would appear squat and out of proportion, with the remainder of the structure and its colonnade would appear extremely heavy and cumbersome" (Figure 4.4). Thirdly, they argued that the development's relationship with the curved façade and south façade of the Spillers and Bakers warehouse was elevationally correct. Fourthly, they said that the fenestration appeared complicated due to the fact that wire balconies had been placed in front of it. The idea behind the provision of balconies was to reduce the 'clash' between the balustrading lines and the glazing bars (Figure 4.4). Furthermore, glazing bars had to be fitted to the larger windows to allow sufficient openings for cleaning. However, they added that the fenestration of the smaller windows would be reviewed (Plate 4(5)). Fifthly, they pointed out that the external materials were subject to approval of reserved matters, and would be reviewed in the light of the RFAC's comments. Finally, they acknowledged the RFAC's comments on their choice of brick colours for the dockside block. However, they continued to defend the choice of brick and render materials (Letter from HMA to Cardiff CPA, n.d., Development Control File no. 87/1459).



PLATE 4(4). Car park used by residents, employees and clients of Tarmac's residential and commercial development, Atlantic Wharf, Cardiff (photograph, the author, 1992)

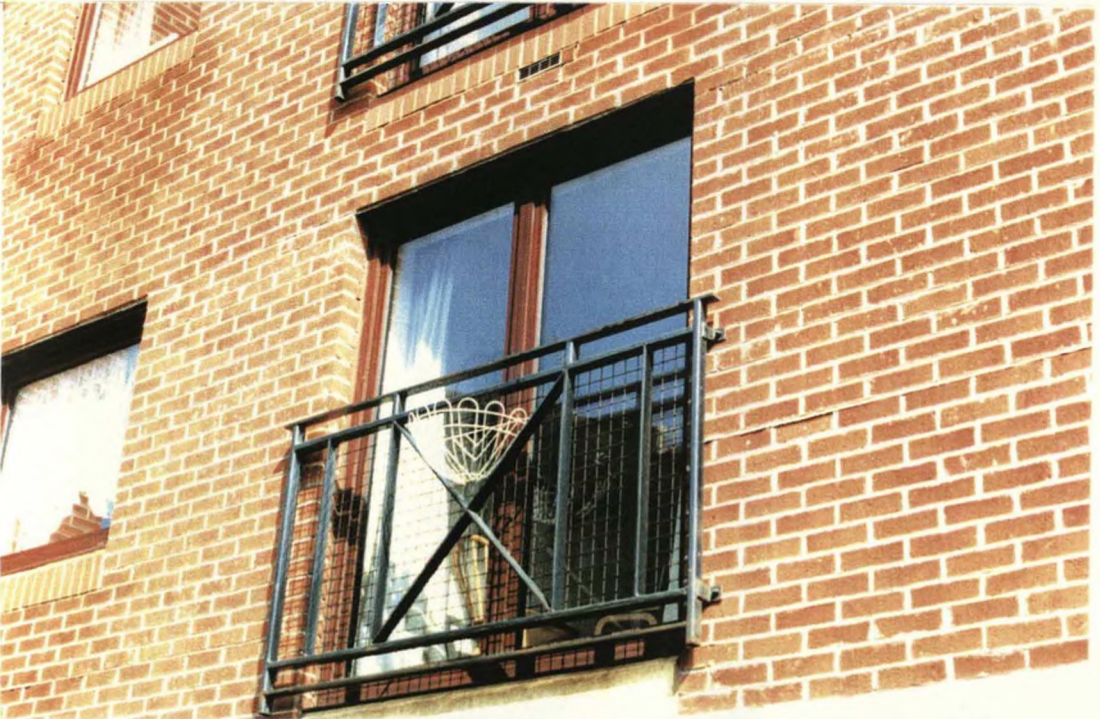


PLATE 4(5). Tarmac's residential and commercial development, Atlantic Wharf, Cardiff, showing differences between the fenestration of large and small windows (photograph, the author, 1992)

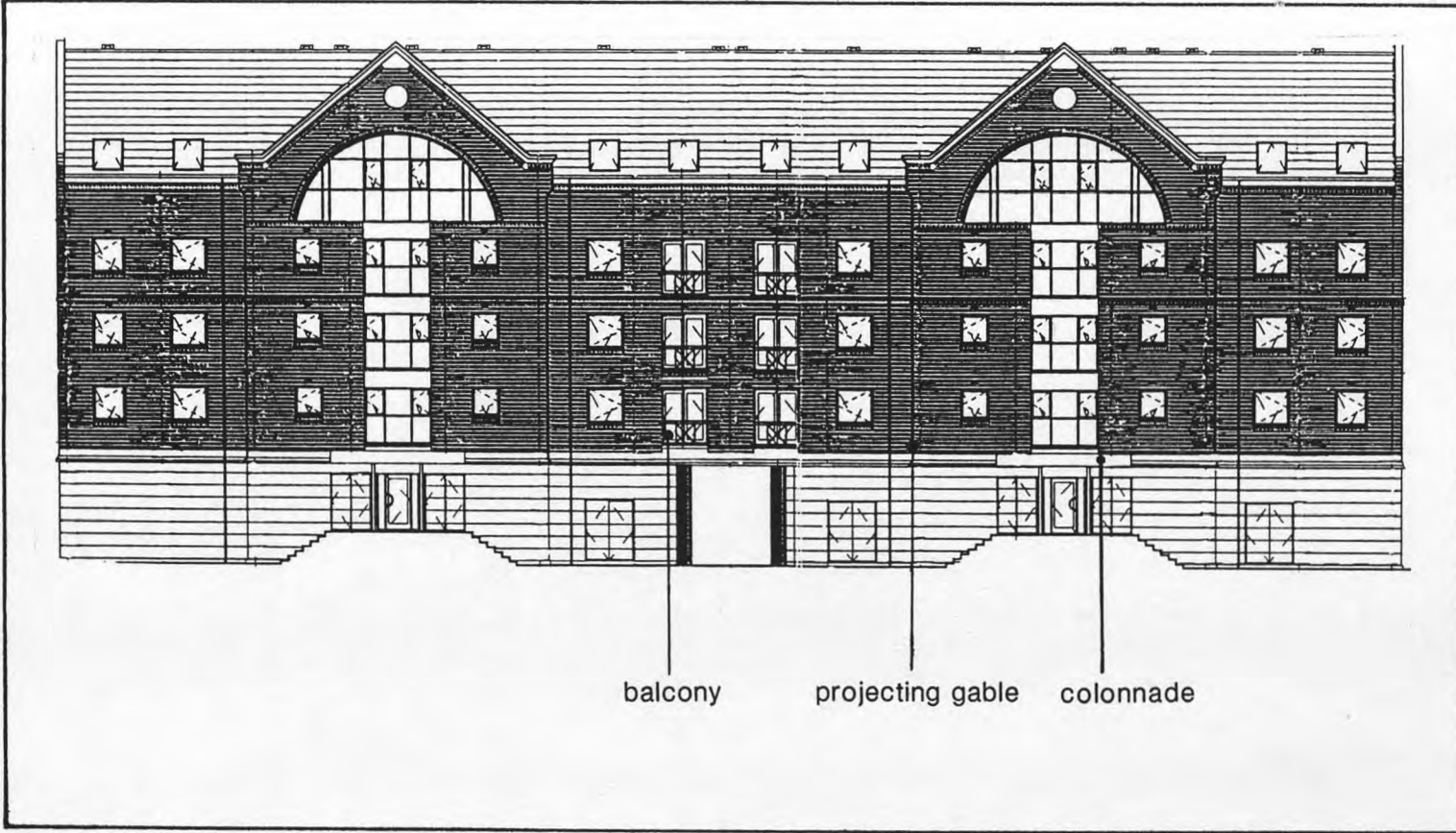


FIGURE 4.4 Front elevation of Tarmac's residential and commercial development, Atlantic Wharf, Cardiff, showing gable, colonnade and balcony (source: adapted from block elevation drawing (no scale), Holder Mathias Alcock architects, 1987)

It is evident that two problems would have arisen if the RFAC's practical design solutions had been implemented. First, insufficient service access would have hindered deliveries to the waterside retail units. Secondly, residents of the newly constructed flats would have been unable to clean their windows ! Thus, while the RFAC tried to enforce stringent standards of aesthetic control, it unwittingly overlooked two important elements of the development's layout and design.

At the RFAC's meeting of 25 November 1987, acknowledgement was made of HMA's observations. In particular, it was felt the scheme would benefit from the alterations that the architects had suggested in terms of simplified fenestration and building materials, although no further mention was made of the other amendments that the RFAC had originally requested. The RFAC's main criticism was that the entire development still failed to convey a 'suitable response' to the Spillers and Bakers warehouse (Cardiff CPA, 1987e).

By offering to amend some of their layout and design details, Tarmac superficially appeared to acknowledge the RFAC's criticisms. However, written correspondence reveals that Tarmac still felt very bitter about the CBDC's and RFAC's intervention. This resentment is particularly obvious in the following letter, in which Tarmac openly challenge the CBDC's role as an agent of design control:

"It was a surprise to me that in the exercise of its consultative role in result of planning applications within the area, the Development Corporation should choose to ignore the principles of Development Control enshrined in Circulars 40/80 and 69/85 issued by the Welsh Office and apparently set itself up as either

the arbiter of taste or the judge of aesthetic or artistic standards whether by delegating that role to the Royal Fine Arts Commission or otherwise" (letter from Tarmac to the CBDC, 4 November 1987, Development Control File no. 87/1459).

Not content with criticising the CBDC's role, Tarmac also decided to write to the CPA to make a number of equally scathing comments:

"That this could happen to us as a result of the creation by a Conservative government of an organisation which is believed to be devoted to attracting private sector investment is beyond belief...we fully understand the situation in which the Cardiff City Council now finds itself as a Planning Authority in danger of losing its powers if it does not do exactly what the Development Corporation tells it. Were this not so, I am sure that the Planning Authority would have no difficulty in approving without delay our Planning Application for the Dockside housing" (Letter from Tarmac to Cardiff CPA, 25 November 1987, emphasis added, Development Control File no. 87/1459).

Tarmac's correspondence with the CBDC and CPA reveals their misunderstanding of two important facts. First, although the CBDC had appeared to set itself up as 'an arbiter of taste', its recommendations on aesthetic issues did not replace the CPA's statutory development control powers. Secondly, there is no evidence that the planning authority was being 'threatened' by the CBDC, and that it was likely to lose its planning powers as a result of anything that the CBDC could do or say.

On 3 December 1987, Tarmac wrote to the RFAC saying that they felt the Commission was wrong to criticise their application simply because the proposed development failed

to pay 'sufficient respect' to the adjacent Spillers and Bakers warehouse. Tarmac pointed out that their architects had considered the importance of this relationship, but that this was only one of several strategic relationships that was pin-pointed. They suggested, for example, that emphasis had also been placed upon the visual association between the proposed development and the feeder canal, development north of the dock feeder (Plate 4(6)), dockside edge (Plate 4(7)), and the Bonded warehouse (Plate 4(8)).

On 8 December 1987, Tarmac wrote to the CPA and reiterated the contents of their earlier letter to the RFAC. On this occasion, however, they concluded that unless consent was granted within a week they would submit a duplicate application, and then pursue the application to appeal. Larkham (1990), notes that it is fairly common for developers to exert this kind of 'moral blackmail', and that it is a problem with which the DOE is forced to contend.

Eight days after the CPA received Tarmac's written 'threat', Tarmac were granted planning permission for their application, and an appeal to the Secretary of State was consequently avoided (Cardiff CPA, 1987f). If the CPA had decided not to grant Tarmac planning permission, and an appeal had been lodged, the CPA would have found itself in an embarrassing situation whereby it had favoured a scheme that developers were threatening to take to appeal on grounds of non-determination. Since the RFAC had been relatively successful in ensuring that Tarmac adopted its recommendations, the CBDC decided not to intervene further.

The construction of Tarmac's waterside development has now been completed. Three major alterations were made in



PLATE 4(6). Relationship between Tarmac's residential and commercial development, Atlantic Wharf, Cardiff, the Feeder canal, and development north of the canal (photograph, the author, 1992)



PLATE 4(7). Relationship between Tarmac's residential and commercial development, Atlantic Wharf, Cardiff, and Bute East Dock (photograph, the author, 1992)



PLATE 4(8). Relationship between Tarmac's residential and commercial development, Atlantic Wharf, Cardiff, and the Bonded warehouse (photograph, the author, 1992)

order to comply with the RFAC's recommendation that the development's relationship with the Spillers and Bakers warehouse was adequately recognised. First, circular motifs were included in the building's pediment (Plates 4(9) and 4(10)). Secondly, 'slate-coloured' brick bands were added to the building's walls (Plates 4(11) and 4(12)). Thirdly, the development was re-aligned so that its Schooner's Way entrance was at right angles to the Spillers and Bakers warehouse (Plate 4(13)).

(ii) Spillers and Bakers warehouse conversion

In 1987 Lovell Urban Renewal applied to Cardiff CPA for planning permission for the conversion of the six-storey warehouse to provide 47 executive one and two bedroom apartments and a fitness room. The Spillers and Bakers warehouse, which is one of only three retained buildings on the Atlantic Wharf redevelopment site, is situated opposite Tarmac's residential and commercial redevelopment (Cardiff CPA, 1987g) (see Figure 4.4). Although the warehouse is not a listed building, both the CPA and the CBDC agreed that it should be refurbished in such a way as to retain as much of its original design as possible.

The RFAC subsequently invited Lovell Urban Renewal to present the details of their planning application no. 87/1491 (Letter from the RFAC to Lovell Urban Renewal, 16 September 1987, Development Control File no. 87/1459). As an outcome of their discussions, Lovell decided to accept four of the RFAC's recommendations. First, to retain the building's façade, and to clean its brick and stonework. Secondly, to open-up some of the warehouse's disused windows. Thirdly, to add glazing bars and transoms to the new windows in the building. Fourthly, to reclaim the



PLATE 4(9). Circular motif added to the pediment of Tarmac's residential and commercial development, Atlantic Wharf, Cardiff; the developers' response to a request by the Royal Fine Arts Commission (acting on behalf of the Cardiff Bay Development Corporation) in 1987 to "recognise" the round windows of the adjacent Spillers and Bakers warehouse (photograph, the author, 1992)



PLATE 4(10). Spillers and Bakers warehouse, Atlantic Wharf, Cardiff, showing circular windows (photograph, the author, 1992)

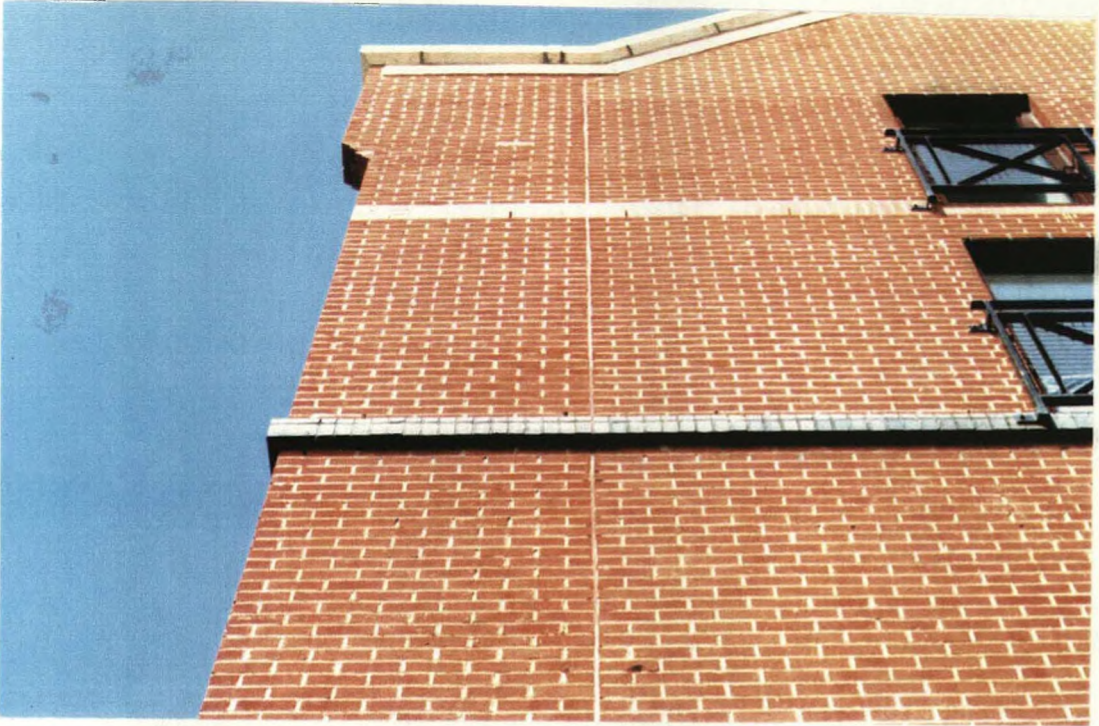


PLATE 4(11). "Slate coloured" brick bands added to the walls of Tarmac's residential and commercial development, Atlantic Wharf, Cardiff; the developers' response to a request by the Royal Fine Arts Commission (acting on behalf of the Cardiff Bay Development Corporation) in 1987 to "recognise" the brick bands of the adjacent Spillers and Bakers warehouse (photograph, the author, 1992)



PLATE 4(12). Spillers and Bakers warehouse, Atlantic Wharf, Cardiff, showing brick bands (photograph, the author, 1992)

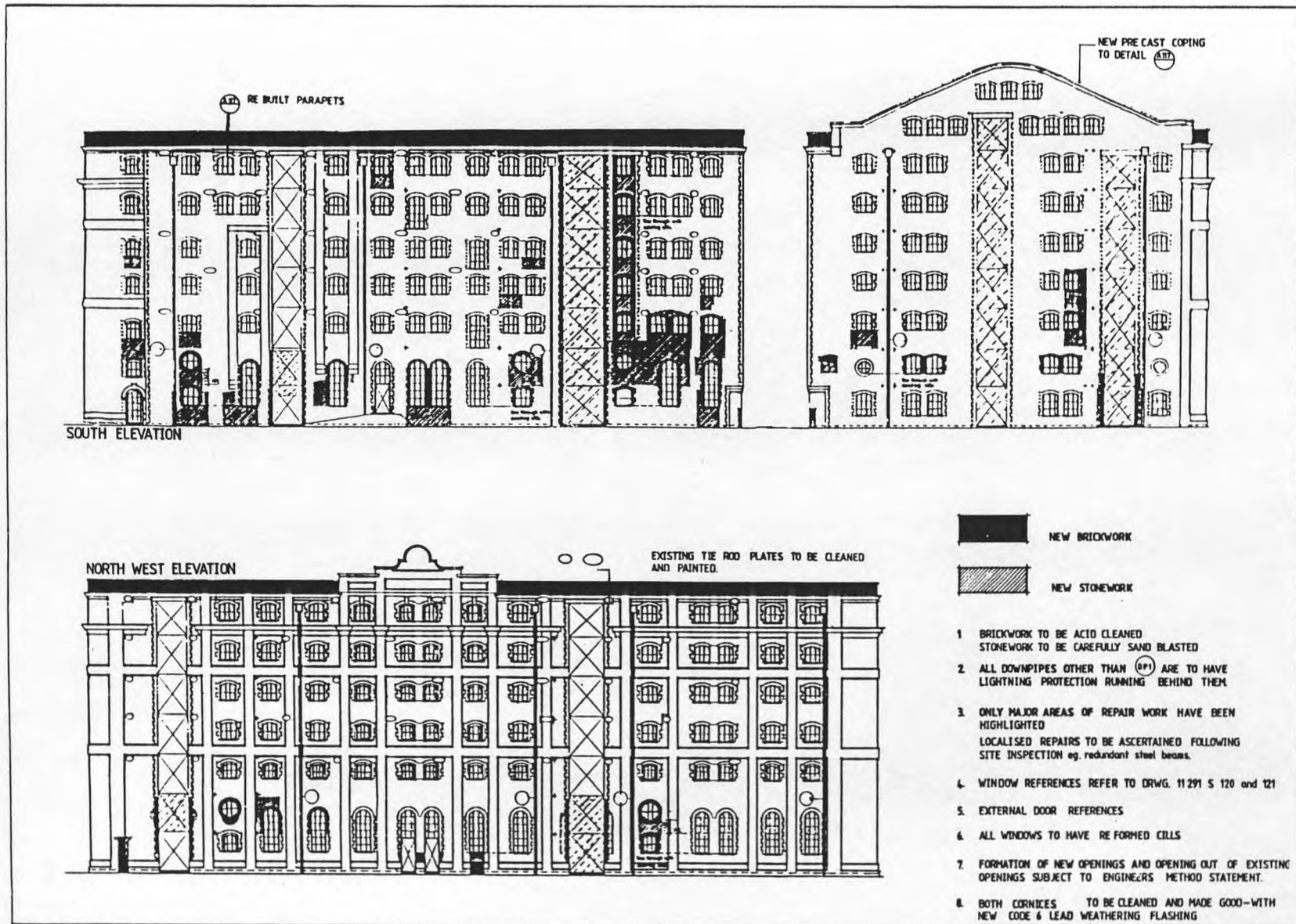


FIGURE 4.5 Elevations of the Spillers and Bakers warehouse, Atlantic Wharf, Cardiff, showing architects' proposals for external alterations and cleaning of building (source: adapted from block elevation drawings, provided by the Architectural Practice, n.d.)

stone and red engineering brickwork in order to match the development's existing materials (Figure 4.5). Additionally, Lovell proposed to convert the centre of the building by providing a glazed atrium space (Figure 4.6), and to add a large roof structure that could be converted to apartments with terraces (Plate 4(14) and Figure 4.5).

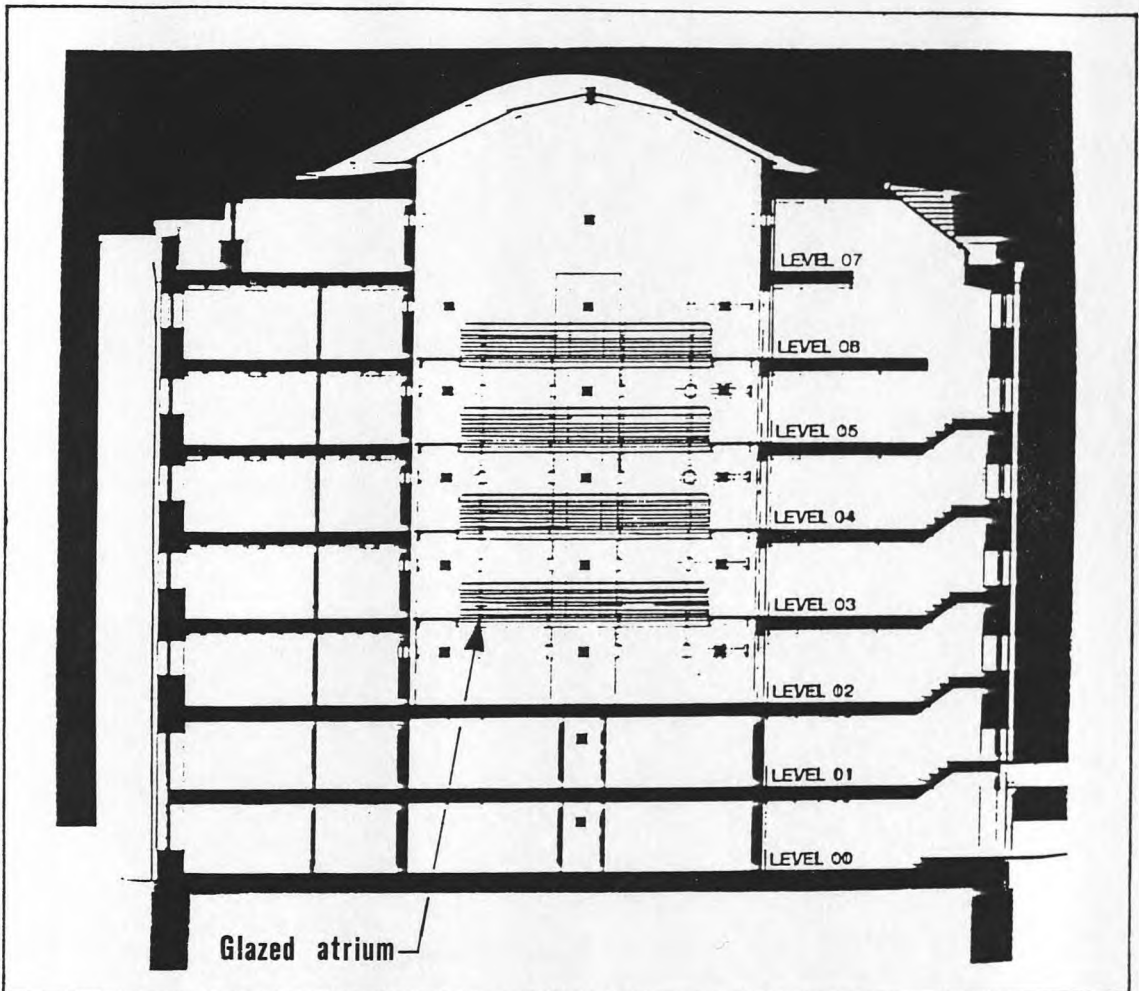


FIGURE 4.6 Cross-section of the Spillers and Bakers warehouse, Atlantic Wharf, Cardiff, showing glazed atrium (source: reproduced from cross-section of drawing provided by the Architectural Practice, n.d.)

By the 2 November 1987, the RFAC had assessed Lovell's application, and informed Cardiff CPA of its main observations. The CBDC announced that it "would see no



PLATE 4(13). Re-alignment of Tarmac's residential and commercial development, Atlantic Wharf, Cardiff; the developers' response to a request by the Royal Fine Arts Commission (acting on behalf of the Cardiff Bay Development Corporation) in 1987 to "recognise" the entrance of the Spillers and Bakers warehouse (photograph, the author, 1992)



PLATE 4(14). Refurbished Spillers and Bakers warehouse, Atlantic Wharf, Cardiff, showing attic-roof extension (photograph, the author, 1990)

objection to the CPA approving, in principle, the refurbishment of the Spillers and Bakers building for residential purposes". However, this would be subject to the approval of the revised design details and materials by the CBDC (Letter from CBDC to Cardiff CPA, 2 October 1987).

The RFAC's revised design details included suggestions on two main points. First, it criticised Lovell's addition of an attic-roof to the building, suggesting that the developers were trying to appendage "an 18th century attic to a 19th century building". Secondly, it expressed strong reservations about the inclusion of a glass atrium in the refurbished building. The Commission felt that the atrium would not give rise to a "sufficiently humane space for housing development". It also commented that the warehouse's "complicated fenestration, inappropriate balconies and roofing form", all required "some attention".

Lovell's architects (HMA), considered the RFAC's comments and decided to implement the major alterations that had been agreed. On 10 November 1987, Lovell Urban Renewal were granted planning consent by the CPA (Peter Lawrence, HMA's project architect for the Spillers and Bakers warehouse, personal communication).

Although Lovell acknowledged the RFAC's recommendations, the conversion of the warehouse did not proceed as the RFAC and the CBDC had originally hoped. One major point of contention was that the developer's rationale for including the '18th century attic' had little to do with aesthetic considerations, and every thing to do with profit maximisation (Peter Lawrence, The Architectural Practice, personal communication). Thus, when Lovell heard that the

CPA's attempt to 'spot-list' the warehouse had been unsuccessful, they realised that they would be eligible to pay VAT on their conversion work, which they would not have paid if the building had been listed (Peter Lawrence, former HMA architect, personal communication). Lovell argued that it would be necessary to recoup at least part of this financial loss by ensuring that the attic-roof conversion went ahead. The CPA lent its support to this initiative, and urged Lovell to continue with the conversion. Some of the other criticisms made by the RFAC were also 'overlooked' by Lovell. Thus, despite the fact that the RFAC disliked the proposal to include a mansard roof, its encouragement to consider a Modern or Victorian 'solution', was ignored. The building's atrium was also inserted in its proposed form, despite the RFAC's suggestion that its appearance was unsatisfactory (Peter Lawrence, personal communication).

Lovell said that Cardiff CPA had supported their planning application because if they had decided not to go-ahead with the warehouse conversion, it would have been difficult to find another developer who was willing to carry out the necessary work (Mr Thomas, Lovell Urban Renewal, personal communications). Tarmac had already made it clear to the CPA that they did not wish to renovate the Spillers and Bakers warehouse, and that they would rather "bull-doze the site" (Allan Williams, Tarmac Properties, personal communication). Recognising the limited profitability of the venture, the CPA was anxious that the RFAC and CBDC did not increase the likelihood of Lovell reconsidering their application. This being the case, Lovell were able to disregard many of the recommendations that were made to them by the RFAC (Peter Gamble, HMA architects, personal communication). Furthermore, the CBDC decided that it would not challenge the planning authority's

decision to grant Lovell planning consent, and subsequently refrained from asking the Secretary of State to intervene on its behalf.

Despite the CBDC's reservations about the success of the conversion, Lovell went on to win the 1990 'What House Award' for their luxury conversion of the Spillers and Bakers warehouse.

(iii) Discussion

From the analysis of these cases it is possible to make two inferences about the roles of the RFAC, CBDC and Cardiff CPA as agents of design control. First, the RFAC and CBDC expressed different views to the CPA on the quality of Tarmac's residential and commercial redevelopment and the Spillers and Bakers warehouse conversion. Punter (1990) notes that "almost everyone has an opinion of what is good and bad architecture, how well a new building fits into a place, and whether or not it makes a positive or negative contribution to the city". The RFAC's and CPA's contrasting views on design control support Punter's view that the judgement of aesthetic issues is highly subjective. Secondly, a major difference exists between the CBDC's and the CPA's formal roles as agents of design control. Since 1975, the majority of planning authorities have attempted to exert control over the design of new developments. However, they have largely been prevented from doing so by the issue of government circulars, such as 22/80, (DOE, 1980d), which have provided a 'specific indictment' of aesthetic control (Punter, 1990, p.6). Although CPAs have largely been dissuaded from judging the merits of a planning application solely on the grounds of design, the Government has encouraged UDCs to voice their opinions on aesthetic issues.

Although the CBDC is not the planning authority for the Cardiff Bay area, it has tried to ensure that the design of Atlantic Wharf is of a high standard. Moreover, the RFAC has assisted the CBDC by making 'professional' observations on the quality of applications, and has been reasonably successful in ensuring that its recommendations were adopted by developers.

4.63 Bristol City Docks

(i) Buchanan's Wharf site

In 1984, five developers submitted planning applications to Bristol CPA to carry out the redevelopment of the Buchanan's Wharf site, which comprised two Listed red brick warehouses linked by aerial walkways, and some disused sheds and garage premises (Bristol CPA, 1984d). (Plate 4(15) and Figure 3.4).

The Planning Department decided that the proposals by a firm of developers called Rendell Partnership Developments to refurbish the two derelict warehouses and construct 99 new dwellings were the most attractive (Figure 4.7). A written note included in the file of the CPA's Head of Urban Design, indicates the criteria used by the planning officers to assess the suitability of each application:

"Some good schemes did not have the right financial backing, and some good developers did not have the right scheme. Bringing the two sides together could result in a successful outcome" (Bristol CPA, 1984d).

While it was added that Rendell's scheme generally accorded with the CPA's 'planning requirements', the Head of the

Design Section had a number of reservations about the scheme's architectural suitability. First, it was noted that the architectural sketch drawings showed a "gross disregard for the planning briefs prepared for the area". Unfortunately, these drawings were not included in the file. Secondly, it was suggested that the development's architectural style was "out of character with Bristol Vernacular in general and the City Docks in particular" (Plate 4(16)). Finally, it was noted that the 'blanket treatment' of the site with its 'pattern' layout was indicative of the complete misunderstanding of the historic pattern of the area (Bristol CPA, 1984d). Despite these criticisms Rendell obtained planning permission seven months later, and proceeded to carry out the planned redevelopment without having to make any major alterations to the scheme (Bristol CPA, 1984e).

Because the City Council had estimated that the cost of renovating the warehouses would be approximately nine per cent higher than the predicted sales value of the completed scheme, it was necessary for Rendell to apply to English Heritage for a development grant. Although a sum of £150,000 was requested, English Heritage decided that its budget could not be stretched above £100,000 (Bristol CPA, 1984d).

A financial 'arrangement' was subsequently made between Rendell, the funding body (The Bristol and West Housing Association), and the City. Rendell were to recover the cost of the development scheme and expenses incurred from carrying out on-site work, plus an additional ten per cent return. It was agreed that any further profits (up to £65,000) would then be paid to the City, and the remainder would be shared equally between the City, Rendell and the Housing Association. Punter (1990), notes that while the

estimated value of sales at Buchanan's Wharf was £4.2 million, in reality a revenue of £8.9 million was generated. Further, because of the nature of the 'open book' arrangement between the parties, the City Council was able to obtain a substantial sum of money when the development proved more successful than it was originally envisaged. The scheme's financial profitability also made it possible for Rendell to re-pay the full amount of their grant from English Heritage.

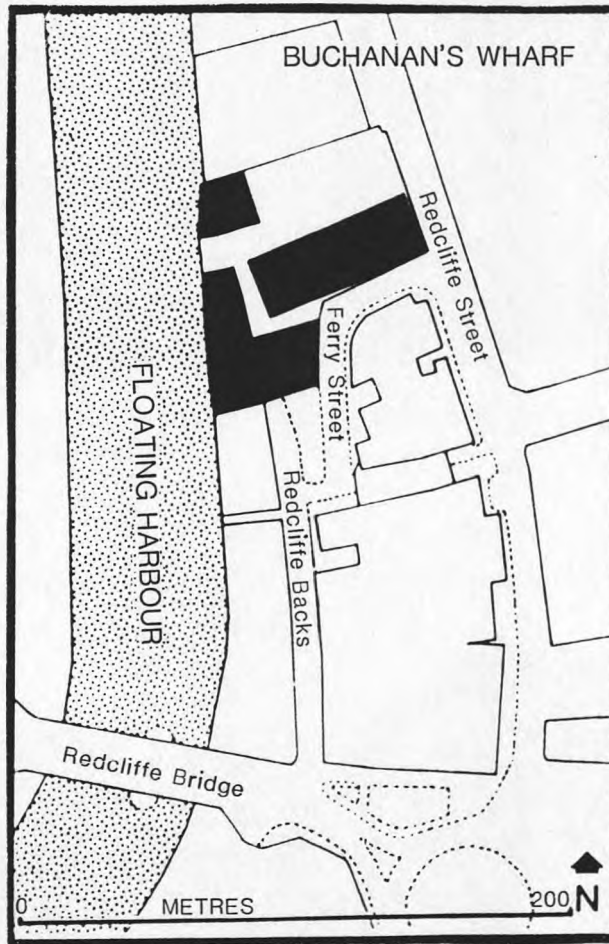


FIGURE 4.7 Plan of the Buchanan's wharf development, Bristol Docks (source: Bristol City Planning Authority, n.d.)



PLATE 4(15). Refurbished Buchanan's warehouses, Bristol Docks (photograph, John Horn, 1991)

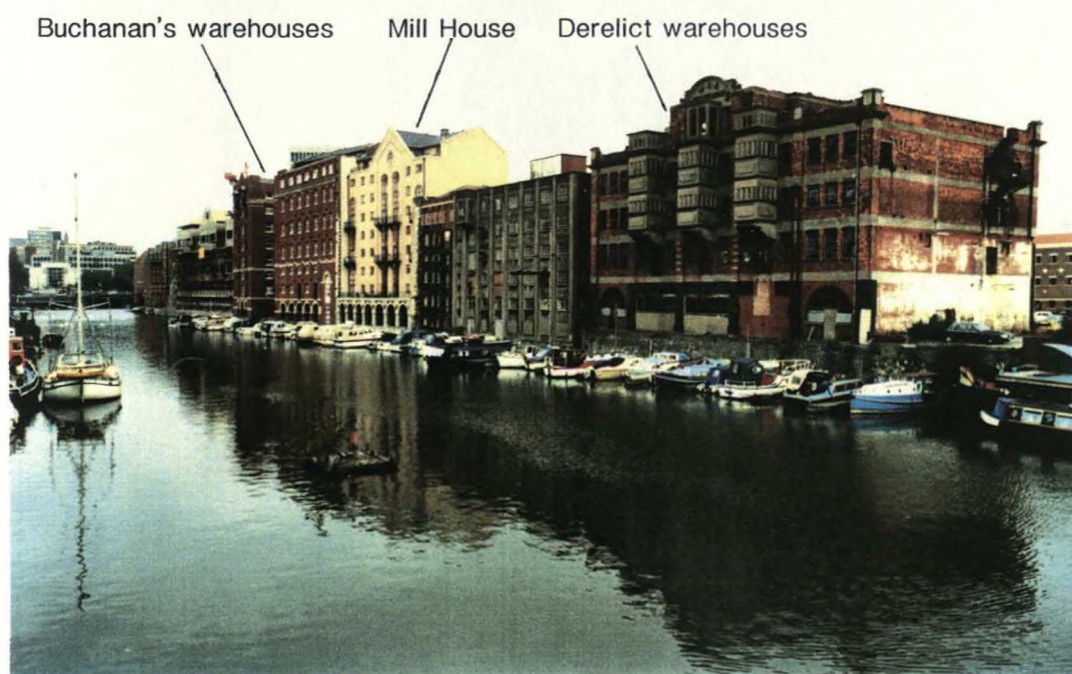


PLATE 4(16). Architectural relationship between the façades of the refurbished Buchanan's warehouses, Buchanan's Mill House (infill block) and derelict warehouses, Bristol Docks (photograph, John Horn, 1991)

(ii) The Merchant's Landing development (Bathurst Basin)

On 5 March 1980 a meeting took place between Bristol CPA, a potential developer of the Bathurst Basin site (Comben Homes) and their architects. As a result of these discussions, on 1 April 1980 Comben Homes (later to become Ideal Homes) submitted an application to the CPA for full planning permission to construct 121 flats and maisonettes, a restaurant and a mini store. Comben also agreed to restore the façade of the Byzantine warehouse (see Plate 3(8)) and the exteriors of eleven existing vacant residential properties (Bristol CPA, 1980f). (Plate 4(17) and Figure 4.8).

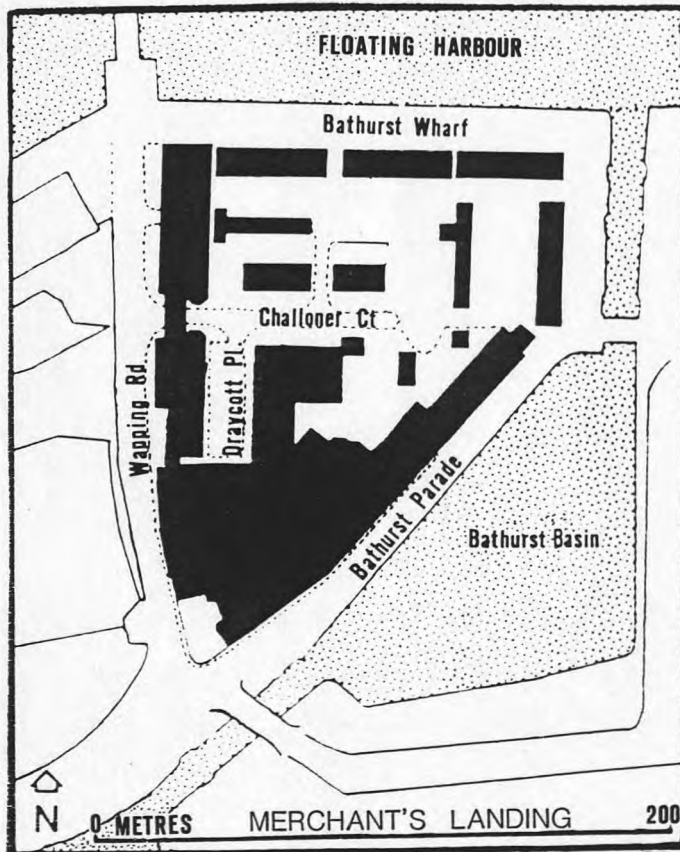


FIGURE 4.8 Plan of the Merchant's Landing development, Bristol Docks (source: Bristol City Council, n.d.)

On 23 May 1980, Comben's proposal was presented to the Bristol Conservation Advisory Panel (CAP). The CAP did not object to any major elements of the scheme, and announced that the application was "most welcome" (Bristol CPA, 1980f). Bristol CPA also agreed in principle with the application, although it pointed out that several revisions would be necessary. In particular, it felt that Comben's architectural treatment of the Byzantine warehouse required attention and that a more 'logical' approach was needed to match the warehouse's original brick façade with bricks that had been salvaged from the demolition of other buildings. The CPA also suggested that Comben should create more 'interest' in the design of their garage courts and mews buildings (Plate 4(18)). On 27 June 1980, Bristol's Visual and Environmental Group agreed with the CAP's assessment of the scheme's suitability (Bristol CPA, 1980f).

On 2 July 1980, The Secretary of State granted Comben Listed Building Consent for the demolition of the Bonded warehouse, demolition of the rear of the Byzantine warehouse and the refurbishment of nos 1-4 Wapping Road (Bristol CPA, 1980g). Bristol CPA also granted full planning permission for the construction of the residential and commercial component of Comben's scheme (Bristol CPA, 1980g).

Despite having obtained full planning consent to build a restaurant, mini store and six maisonettes behind the façade of the Byzantine warehouse, Comben subsequently wrote to the CPA requesting alterations to this planning proposal (Letter from Comben Homes to Bristol CPA, 7 October 1981, Development Control File no. 3324L/81c). They now wished to construct four squash courts, changing rooms and four maisonettes. Perhaps suprisingly, both the CPA and Bristol's Civic Society agreed to Comben's request, and planning



PLATE 4(17). Refurbished façades of nos 4-9 Bathurst Parade, Merchant's Landing, Bristol Docks (photograph, the author, 1992)



PLATE 4(18). Challoner Court garages, Merchant's Landing, Bristol Docks (photograph, the author, 1990)

permission was subsequently granted on 24 November 1981. The construction of the development commenced in 1982 (Bristol CPA, 1981h).

Although Comben had told the CPA that they intended to offer the squash courts to the residents of Merchant's Landing on a 'time-share' basis, in 1986 they sold the squash courts to Redwood Homes and Development Ltd. In October 1987, the new developer wrote to the CPA saying that:

"It would seem from the reports we have received that there is likely to be a severe noise problem for the flats if the squash courts are ever opened for full time use, not to mention an equally serious parking problem" (Letter from D. Bruce, Redwood Homes and Development Ltd, to Bristol CPA, Development Control File no. 1493L/88c).

The following April, Redwood Homes applied to the CPA for permission to convert the squash courts into five maisonettes at ground and first floor levels (Plate 4(19)). They also wished to provide parking in the area to the rear of the warehouse. The CPA subsequently advertised the planning proposal for public consultation until the 6 July 1988. Of the seven letters that were received from local residents, two supported the proposal, three raised 'specific queries', one objected to the application, and one supported the change in principle but held 'detailed reservations' about six issues. The CPA also asked the Merchant's Landing Residents Association whether they were in favour of the conversion. The Association replied that the development met with their approval (Bristol CPA, 1988i).



PLATE 4(19). Conversion of squash courts, Merchant's Landing, Bristol Docks, to provide 5 maisonettes (photograph, the author, 1990)



PLATE 4(20). Bridge spanning Bathurst Basin, Merchant's Landing, Bristol Docks (photograph, the author, 1990)

Bristol CPA's Planning and Transport Committee were less satisfied than the Merchant's Landings Residents' Association with the planning application. Their first criticism was that the closure of the squash courts would mean a loss of a useful recreational facility. Secondly, they felt that the fenestration of the new development would need to be reviewed in order to alleviate the problem of 'overlooking' of no. 18 Merchant's Landing (Figure 4.9). Finally, they noted that the applicant's proposal did not include the provision of gardens, and it therefore failed to comply with residential environmental performance standards. They added, however, that because of the site's existing constraints it would be possible to view this aspect of the application as a 'special case'. The Planning Committee concluded that:

"Whilst the scheme does not comply fully with normal guidelines it has tackled the problem of accommodating residential use of the squash courts in an imaginative and attractive way" (Bristol CPA, Development Control File no.1493L/88c).

On agreement that they would fit a stained glass window to the part of their development that overlooked no. 18 Merchant's Landing, Redwood Homes and Development Ltd were granted both listed building consent and planning permission by the Planning Committee to carry out their proposed conversion work (Bristol CPA, 1988i).

(iii) Discussion

From the examination of the Buchanan's Wharf and Merchant's Landing case studies, three inferences may be drawn about Bristol CPA's role as an agent of design control. First, it is difficult to generalise about the circumstances in which the CPA ask developers to make

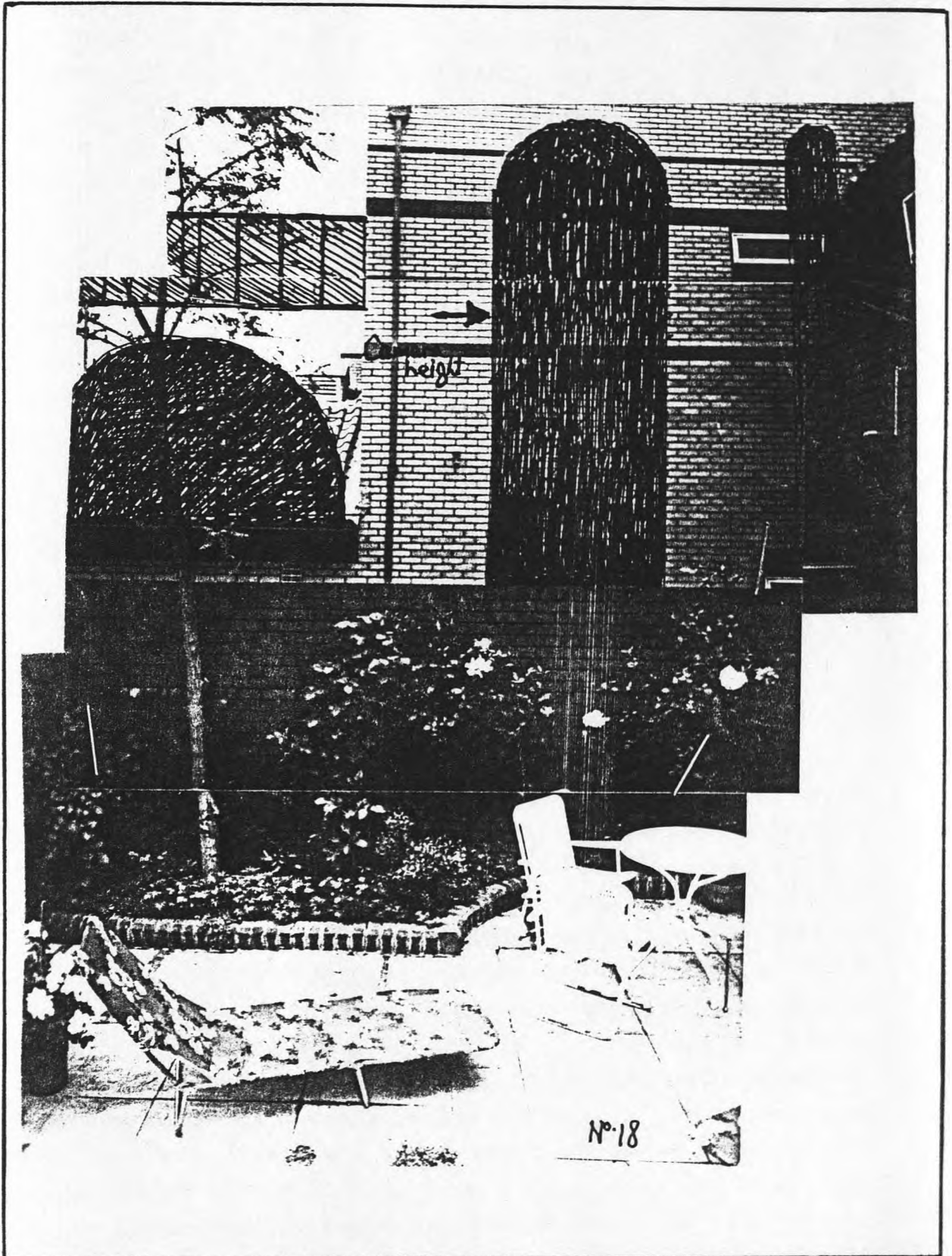


FIGURE 4.9 Bristol City Planning Department's sketch drawing of a stained glass window added to Redwood Homes and Development Ltd's maisonette conversion to alleviate overlooking of no.18 Bathurst Parade, Merchant's Landing, Bristol Docks (source: Bristol City Planning Authority, n.d.)

revisions to their applications, before granting planning permission. In the case of the application by Rendell, although Bristol CPA's Urban Design Section were clearly dissatisfied with several aspects of the proposed scheme, they did not request Rendell to make any major alterations to their plans. This is particularly surprising since both the Buchanan's warehouses are listed buildings. In the case of the Merchant's Landing application, however, protracted discussions between LIGI and the CPA, failed to convince the planning authority of the suitability of the developer's proposals. Over a six year period, LIGI submitted five unsuccessful planning applications to the CPA. The company also made an appeal to the Secretary of State, but this too was unsuccessful. However, when in 1980, Comben applied to the CPA for planning permission to develop the site they were granted consent in under two months. Both the CPA and the CAP agreed that Comben's application was extremely welcome, and neither considered that it was necessary for the developers to make any major amendments to their original planning proposal.

Although the CPA was satisfied with Comben's original application, the redevelopment of the site did not progress in the way that the planners had envisaged. Complications arose over five issues. These were: parking provision, the construction of a bridge across Bathurst Basin, the problem of dust from the adjacent coal-yard, construction of a teashop and public toilets, and noise from the use of the squash courts (Bristol CPA, 1988i). Essentially, Comben tried to renege on the parts of their planning agreement entailing building a tea shop and toilets on the waterfront, pedestrianising the front of Bathurst Parade and building a public bridge (Plate 4(20)). Thus, while it is unlikely that the CPA could have foreseen all the problems that it was to encounter with Comben's redevelopment plans, it is ironic

(given the effort that the CPA expended in stopping LIGI from redeveloping the site) that it should decide to grant Comben planning consent without first making a much more thorough investigation of potential redevelopment difficulties. Thus, had the CPA taken more time in scrutinizing the design of Comben's scheme, it is possible that it could have recognised and discussed some of these difficulties before Comben commenced redeveloping the site. It is this type of difficulty with the CPA's development control procedure that led to the publication in 1985 of the Planning Difficulties report by the Bristol Property Agents and Bristol Chamber of Commerce and Industry. This report highlighted many of the CPA's shortcomings, such as poor pre-submission advice, late interventions of senior officers, onerous conservation requirements, inadequate consideration of economic viability, and poor design advice/strategic guidance.

A second inference is that the publication of the City Docks Local Plan in 1982, significantly influenced the type of advice that the CPA gave developers on the design and layout of new waterfront developments. Prior to the Local Plan, the CPA had commonly referred to the Draft District Plan for guidance on aesthetic issues. However, the information that the Draft District Plan provided was far less comprehensive than that of the Local Plan which was published two years later.

Thirdly, it may be concluded that while the CPA was relatively successful in ensuring that developers carried out amendments to planning applications, it simultaneously over-looked many other design improvements that it could have asked developers to make. For example, Comben's redevelopment of Merchant's Landing failed to gain the

support of those people who moved there to live. It is probable that with more fore-thought by the CPA many of the development's design faults could have been alleviated.

4.7 Comparison of the roles of the LDDC, CBDC and Bristol and Cardiff CPAs as agents of design control

CLES (1990, p.39) suggests that:

"the overall aim of UDCs is to attract private investment. For this to be successful two things are essential; marketing and leverage. The purpose of marketing is to change the image of the area; the aim of leverage is to provide incentives (land, infrastructure, grants) for the private sector."

CLES adds that the preparation of a redevelopment strategy is important if a UDC is to be able to promote successfully its marketing and leverage strategies.

Despite CLES's suggestion that UDCs require a coherent strategy in order to co-ordinate their plans for development, in the ten years since its designation the LDDC has not prepared such a document. Moreover, under Section 140 of the 1980 Local Government Planning and Land Act, UDCs are supposed to prepare 'a code of consultation' with the relevant local authorities. Although most UDCs have drawn up and agreed a code within approximately twelve months of their date of designation, the LDDC has yet to agree with the five East London Borough Authorities about its code of consultation (CLES 1990, p.28).

The DF has described the LDDC as a body that "plans by precedent rather than by principle" (Ben Kochan, personal

communication). Interviews that were conducted with Peter Swordy from the LDDC's Southwark office, and personal communication with John Barnes from the DCC, have helped to confirm Kochan's view. The LDDC has relied almost exclusively upon development briefs to provide developers and architects with a 'planning framework' for their applications, and Swordy admitted that the LDDC's approach to both design control and development control was indeed 'flexible' (see also DCC, 1990).

Although during 1989 the LDDC started to communicate more freely with planning officers from the Borough Authorities, Southwark and Newham have still refused to nominate candidates to sit on the LDDC's Board. Furthermore, Southwark's continued dissatisfaction with the LDDC's policies was made public when in 1989 it prepared a particularly scathing document entitled Broken Promises which emphasised the LDDC's consistent tendency of not honouring its promises to both the local authority and residents of the borough.

Since the LDDC is exempt from the 1985 Access to Information Act, it has decided not to let researchers use planning file data. It has therefore been possible to use only planning applications and development briefs to compile case study histories of redevelopment sites in Southwark. Moreover, it was found that development briefs frequently contain very little factual guidance on the standards that the LDDC expects developers to achieve in the rejuvenation of these sites, and some developers have often failed to submit applications that are worthy of planning permission. In cases where the LDDC has asked developers to make amendments to their applications, it was found that these

revisions were no guarantee that the scheme's layout or design would be substantially improved.

In summary, it may be concluded that the LDDC is not a discerning agent of development control or design control. Since 1981, the LDDC has granted planning permission for many residential developments in Docklands that have attracted severe criticism from both the residents of London's East End and the five Borough Planning Authorities. Planners and architects have also severely criticised the LDDC's design control policies for placing too much emphasis upon Docklands' visual dimension, and not enough on other aspects, such as use of existing space, and relationships between townscape elements. Finally, it may be concluded that unless the LDDC prepares a coherent redevelopment strategy, that pays close attention to design aspects, it is unlikely that it will be able to overcome many of the problems that it has faced during the first ten years of its operation.

The NAO has repeatedly criticised the Government's decision to designate five second generation UDCs in 1987, without having first examined the "achievements and difficulties that were faced by the first generation UDCs in London and Merseyside" (NAO, 1988). When the CBDC was established, Nicholas Edwards (the Secretary of State for Wales) announced that one of the CBDC's first tasks would be to prepare a redevelopment strategy that set out its policies for rejuvenating the 2,800 acre (1,089 hectare) UDA (Edwards, 1986 quoted in Johnston, 1987, p.7). The CBDC also stressed that it aimed to use high standards of design control to ensure that Cardiff Bay was transformed into 'a superlative maritime city' (CBDC, 1988).

To determine how successful the CBDC has been in implementing its design control policies, interviews were conducted with two of its planning officers. It may be concluded from these interviews that while the respondents showed some understanding of the content of the CBDC's Regeneration Strategy, neither was able to describe its design objectives in detail. Phrases such as "quality development" and "excellent architectural standards" were used loosely by both respondents.

Using data that were extracted from Cardiff CPA's planning files, it has been possible to assess both how often the CBDC has intervened in the design control process, and how successful it has been in bringing about changes to applications that were submitted to the CPA for planning approval. First, it may be inferred that the CBDC (unlike the LDDC), has tried to impose stringent design control standards. However, the CBDC's attempts have been curtailed to some extent by its limited statutory powers as an agent of development control. Secondly, the CBDC's views on design have sometimes differed from the views of the CPA. This has caused some delays in the granting of planning consent. Despite these differences in opinions, the CBDC has been relatively successful in ensuring that developers carry out some of its recommended revisions to planning applications.

Although the CBDC was designated six years after the LDDC, the CBDC has approached the task of redeveloping Cardiff Bay in a much more professional and coherent manner than the LDDC has tackled the task of rejuvenating its derelict waterfront sites. However, due to the CBDC's position as a non-statutory plan making body, its attempts to bring about changes to proposed developments are

sometimes curtailed by Cardiff CPA. On balance, the CBDC has been far more critical than the LDDC of applications that are submitted for planning permission, and it has tried much harder than the LDDC to ensure that high design standards are recognised as a 'hallmark' of new dockland development.

Using data collected from Bristol CPA's planning files, it has been possible to examine whether differences exist between the CPA's policies on design control, and the policies of London's and Cardiff's UDCs. From this analysis, two conclusions were drawn. First, Bristol CPA is shown to be a poor judge of the suitability of developers. Thus, although it chose to wait nearly six years before selecting a developer for Merchant's Landing, the chosen developer then proceeded to cause the CPA a list of so-called 'unenvisioned' problems. It may be argued that the CPA should have been able to 'iron-out' the majority of these problems before the applicants were granted planning consent. Secondly, it was possible to detect a significant difference in the CPA's attitude towards design control following the publication in 1982 of the City Docks Local Plan. Moreover, Punter (1992, p.51) notes that the CPA has further improved its 'attitude' towards aesthetic issues in the latter half of the 1980s, and that these changes have now started to reap rewards. He attributes this improvement to the publication in 1985 of the Planning Difficulties report, and subsequent designation in 1988 of the BDC (Bristol City Council, 1988a/b). It may be concluded therefore that while Bristol CPA's recent success in regenerating its dockland sites is to be applauded, the City has in effect learned a valuable lesson from its earlier 'mistakes'.

CHAPTER FIVE

DEVELOPERS AND ARCHITECTS

5.1 The roles of developers and architects

In this chapter the focus of attention shifts from the CPAs and UDCs to the developers and architects, sometimes referred to as 'direct' agents of townscape change (Pompa, 1988, p.121).

Recent research by the UMRG has emphasised the importance of agents of townscape change when studied as a whole. These agents fall into various categories and form a chain, or web, of decision-making which begins with the initiator and ends with the builder and sub-contractors (Larkham, 1986, p.3).

Whitehand (1983, p.494) suggests that the roles of initiators are particularly crucial since not only do they set in motion a train of events that leads to changes in the 'physical fabric', but they also exercise a major influence over the choice of other firms and organisations that participate in the later stages of the development process. Initiators of change can be divided into two basic categories; site owners and tenants or lessees (Pompa, 1988, p.144). These groups can be further divided into individuals, institutions and firms, trusts and associations, and firms professionally involved in development.

The 'individuals' category includes all named individuals for whom there is no indication of professional involvement in any aspect of the development process. Institutions and firms can be privately- or publicly-owned

bodies who are using or proposing to use the site for their own purposes. Trusts and associations include charitable institutions aiming to provide housing for the aged. The final category is that of development agencies. Firms professionally involved in development include developers, builders, architectural practices and estate agents (Pompa, 1988, p.146).

Architects have an important role to play in the decision-making process. Not only do they determine the form and style of changes to the urban built fabric, but they also play a large part in selecting consultants and specialised contractors. Although architects are commonly considered as a homogenous group, in reality they comprise several distinct categories. Large firms of developers sometimes have 'in-house' or company architects who carry out design work. However, developers also employ 'external' architects, who are either a sole practice or a large professional architectural group. Other categories of architects include architectural consultants, firms offering 'planning services', architectural assistants, members of the Society of Architectural and Allied Technicians, chartered surveyors, estate agents and valuers (Larkham, 1986, p.47).

Because architects are sometimes confusingly referred to as 'agents' in planning applications, the term 'plan depositor' is sometimes used to describe architects who submit planning applications on behalf of their clients (Pompa, 1988). Yet because not all architects are plan depositors, care must be exercised in using this term.

5.2 Provenance and type of agents

Recent work, especially that of Whitehand (1983, 1984), suggests that the two most significant characteristics of agents of change are their provenance and type. Whitehand notes that while provenance is not important per se, it does indicate the types of decisions that may be expected from those agents. For example, decisions made by local agents may result in different types and styles of alterations or additions to the building stock than decisions taken by agents based far from the site of the proposed change.

"It seems inescapable...that boardroom decisions taken in the metropolis against a background of national scale operations would have produced different results from those taken by local individuals with a field of vision ending abruptly at the edge of their town's sphere of influence" (Whitehand, 1984, p.4).

National firms based outside the study areas may therefore be insensitive to local circumstances and traditions, and "the extent to which firms have local roots and are imbued with a sense of place takes on a special significance" (Whitehand and Whitehand, 1984, p.245). Moreover, Larkham (1986) suggests that a 'sense of place' is usually seen as an individual response to a familiar locality, and would therefore be expected to be more pronounced in local agents. Taking Larkham's argument one stage further, Freeman (1986) notes that the places of origin of agents of change may be useful as a guide to explaining the characteristics of changes to the physical fabric, particularly with respect to the innovation and diffusion of architectural styles.

The provenance of agents may also in part reflect the type of agent. Larkham (1986) suggests that there is a tendency for large national companies to be based in London, and therefore London-based agents may have a large impact on local townscape change. He also notes that residential developments tend to be more the province of regional agents, and that small projects are often initiated by owner-occupiers. Large projects are commonly left to local authorities or major housebuilders.

5.3 Provenance and type of developers and architects involved in the redevelopment of study sites

5.31 Introduction

Using planning applications as a source of data, this section examines the provenance and type of developers and architects of dockland redevelopment sites. Planning applications that were registered with the LDDC, Cardiff CPA and Bristol CPA show that six initiators, and seven architectural firms were involved in the residential redevelopment of the study sites.

5.32 Developers and architects of study sites in London

There were two developers and three architects of residential schemes in the Surrey Docks study area (see Figure 2.4). These were Lovell Urban Renewal (Wolfe Crescent), Lovell Farrow (Marlow Landings) and Costain Homes (Surrey Waters). The architects of these developments were Campbell Zoogolovitch Wilkinson Gough (CZWG), Andrews Downie, and the Diamond Partnership respectively.

Lovell Urban Renewal and Rendell Partnership Developments form part of the Lovell Partnerships division of Y.P. Lovell Holdings. Nationally, Lovell Urban Renewal and Rendell Partnership Developments have twelve regional offices in the North West, Midlands, Wales, East Anglia, London, West and South.

Lovell Urban Renewal's Wolfe Crescent scheme was a partnership venture with Woolwich Homes and the LDDC (Figure 5.1).

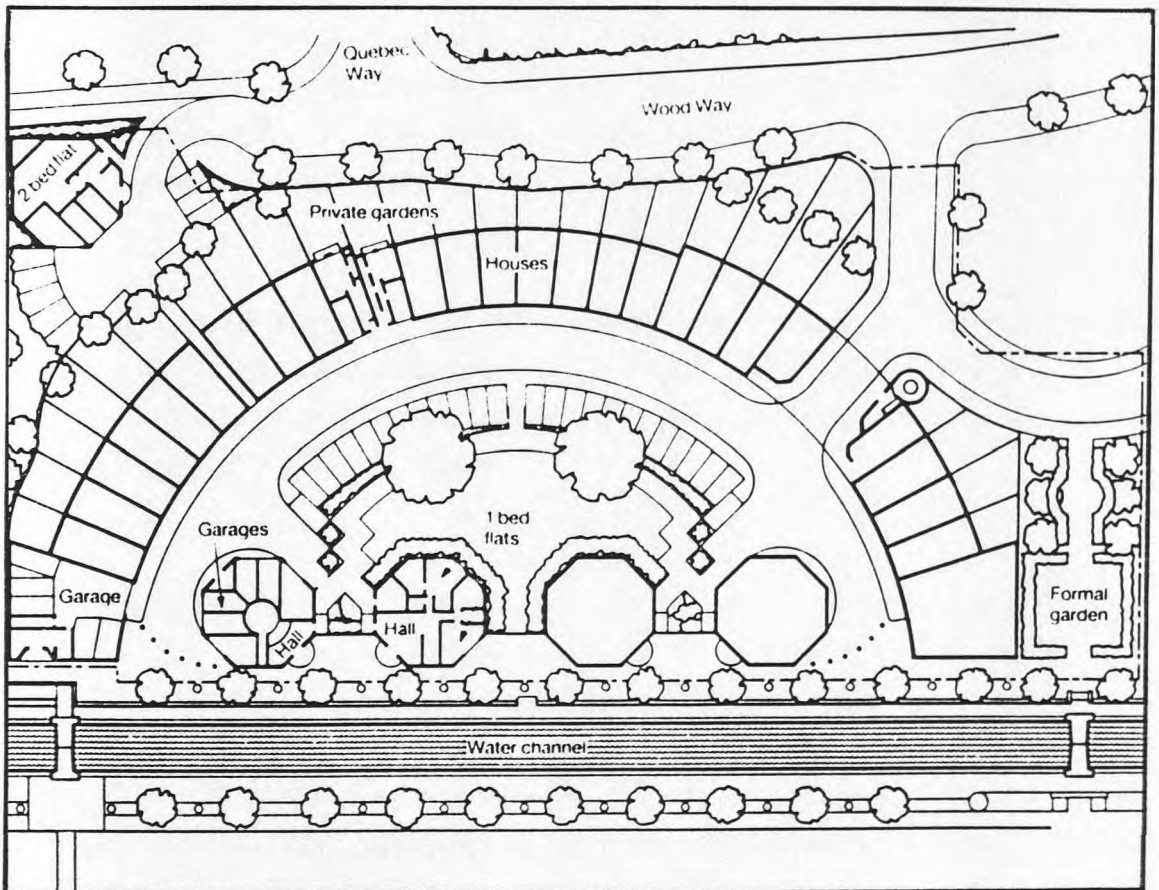


FIGURE 5.1 Plan of the Wolfe Crescent development, Surrey Docks, London (source: Manser, 1989, p.50)

Of the 79 studio flats and apartments that were built, 22 units were taken up by a housing association for a shared equity ownership. This type of ownership arrangement is favoured by the LDDC for providing rented accommodation. Lovell Farrow's Marlow Landings development was also a partnership venture. However, in this case the LDDC was not one of the partners. The Farrow development company was subsequently purchased by the Lovell Partnerships division.

Costain Homes, which is based in Marlow (Bucks), is a division of the Costain Group Plc. Costain is a leading British Construction Group operating in the areas of commercial and residential property, engineering, and mining. The company also has international interests in Australia, the U.S.A. and Spain. Costain Homes were the developers of the Surrey Waters residential scheme.

The architects for the three residential developments were the plan depositors. All three practices are based in London, although the Diamond Partnership also has offices in Wolverhampton and Belfast.

5.33 Developers and architects of study sites in Cardiff

In 1983, Tarmac plc. established Tarmac East Bute Developments Ltd to act as its management company for the Atlantic Wharf redevelopment site. Three divisions of Tarmac plc. were responsible for implementing the holding company's redevelopment objectives. Initially, Tarmac Construction cleared the semi-derelict redevelopment site and installed basic services. Subsequently, Tarmac Homes and Tarmac Provincial Properties Ltd carried out the refurbishment of the site's three remaining warehouses, and

constructed 700 new build homes, a technology campus, mixed commercial development and new County Hall. Tarmac Homes (Bristol & West Ltd) is based at Worle (Avon), and Tarmac Provincial Property Developments is based in London.

Lovell Urban Renewal's Cardiff-based division were also involved in the redevelopment of part of the Atlantic Wharf site. In 1987, Lovell Urban Renewal undertook the conversion of the Spillers and Bakers warehouse.

Both Tarmac Homes and Lovell Urban Renewal commissioned HMA as their architects for these two redevelopment projects. HMA are based at Atlantic Wharf, Cardiff. The project architect for the Spillers and Bakers warehouse, Duncan Lawrence, subsequently left HMA to work first for MWT architects in Devizes, and then the Architectural Practice in Bath.

5.34 Developers and architects of study sites in Bristol

The Baltic Wharf housing development (Figure 5.2) was the result of a partnership venture between Rendell Partnership Developments (Western division), the Bristol and West Housing Association and Nationwide Housing Trust. Because it was the Housing Association and Housing Trust who provided finance for the £7 million development, Rendell did not obtain any legal interests in the land. Upon completion of the scheme, Bristol County Council conveyed the freehold interest of the development at the agreed purchase price to individual purchasers. Halliday Meecham (HM) architects acted as Rendell's plan depositor for the scheme. The architects were originally based in Wilmslow (Cheshire), but have subsequently moved to Alderley Edge (near Manchester).

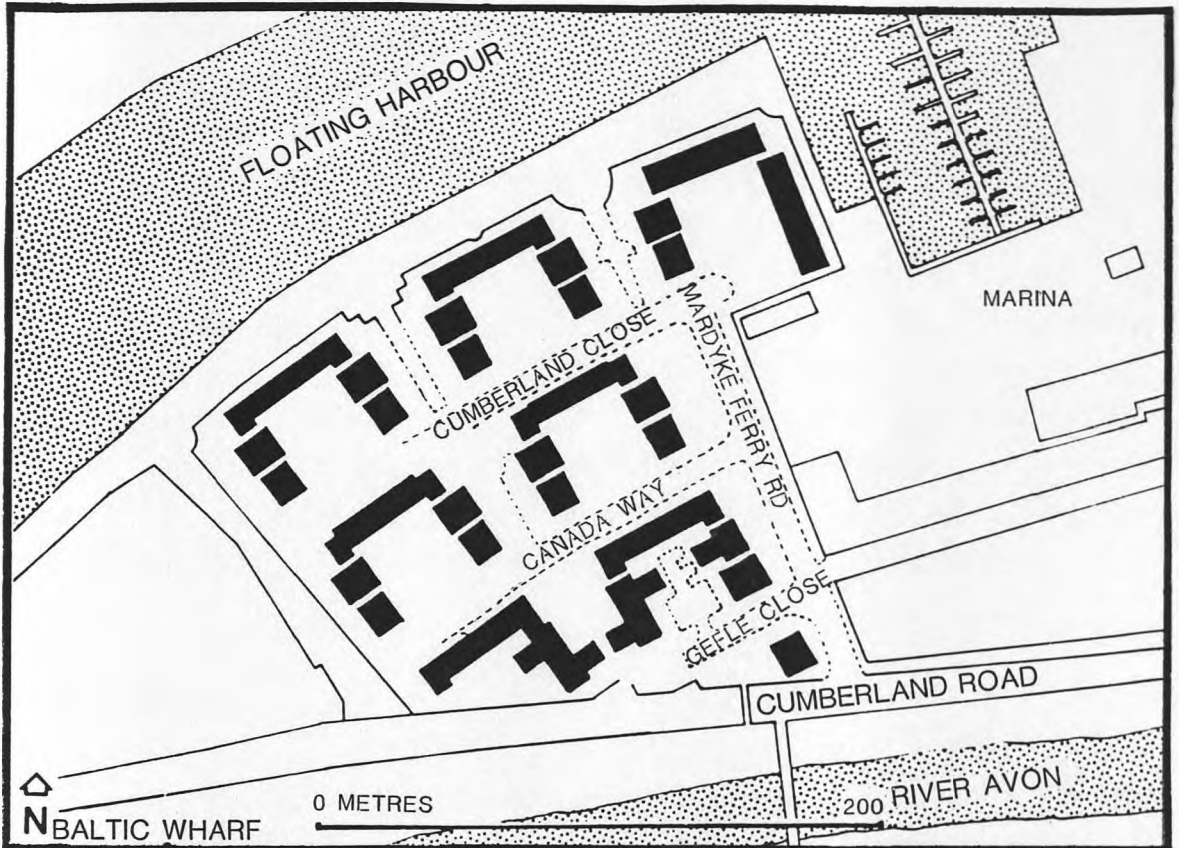


FIGURE 5.2 Plan of the Baltic Wharf development, Bristol Docks (source: Bristol City Council, n.d.)

Rendell Partnership Developments, who undertook a joint venture with the Bristol and West Housing Association to redevelop and refurbish buildings at the Buchanan's Wharf site, also commissioned HM as their project architects for the development.

In 1980, Comben Homes (Western Ltd), who were based in Wellington (Somerset), applied to Bristol CPA for full planning permission to redevelop the Bathurst Basin site. However, the Comben group subsequently became part of Ideal Homes (Western) which is owned by Trafalgar House plc. Thus, while initial negotiations for the redevelopment of

the site took place between a regional, non-local developer - Comben Homes - and Bristol CPA, at a later stage in the redevelopment process it was a Bristol-based national developer - Ideal Homes - who took over the construction of units. Moreover, the redevelopment objectives of Ideal Homes were also influenced by the initiatives of its holding company - Trafalger House plc. - who are a national property developer with a head office in London. Thus, considerable changes took place in both the provenance and type of agents responsible for the redevelopment of the site. The architects for the scheme were the Ronald Toone partnership who are based in Great Yarmouth (Norfolk).

5.35 Summary

Analysis of these data enable two general observations to be made about the provenance and type of developers and architects who were involved in the redevelopment of study sites. First, with the exception of Comben Homes, who were subsequently taken over by Ideal Homes, the initiators of redevelopment were national development companies. Each of these companies had several regional divisions that specialised in different aspects of the redevelopment process. It was found that Tarmac Homes built residential units, Lovell Urban Renewal specialised in inner-city regeneration projects, and Rendell Partnerships undertook joint redevelopment ventures. Some developers, such as Tarmac plc., also established independent development companies to manage large redevelopment projects. Secondly, it is evident that while developers were able to carry out every aspect of the redevelopment process, they did not use in-house architects to design their projects. All developers of study sites had commissioned external architectural practices.

The fact that developers of dockland sites are predominantly national firms who often employ non-local architectural practices, raises a number of important questions about their sensitivity to design and their respect for docklands' 'sense of place'. The aim of Sections 5.4-5.45 is to examine these, and other related issues concerning developers' and architects' roles in the process of residential dockland redevelopment. These issues include the aspects of design considered by developers and architects in the preparation of planning applications, the criteria used by developers to select architects, the content of developers' design briefs, and developers' and architects' sensitivity to docklands' maritime heritage. All the developers and architects of dockland study sites considered in Chapter Four were asked to participate in a semi-structured interview. However, two architects and a developer - Andrews Downie, the Ronald Toone Partnership and Redwood Homes and Development Ltd - were not available for comment.

5.4 Consideration of design by developers and architects

5.41 Introduction

The relationship between developers and architects is particularly significant for the townscape because these agents have a very strong influence over the appearance of buildings. Despite the importance of the decisions taken by developers and architects, however, Whitehand (1991) suggests that aesthetic considerations are often sacrificed by them in their pursuit of 'speed and efficiency'. While developers and architects are in a position to make important decisions about design, they do not necessarily attach a great deal of importance to making these decisions.

5.42 Replies by developers and architects of sites in London

Both Lovell Urban Renewal and Costain Homes received a development brief from the LDDC outlining salient design issues. The LDDC brief on the Surrey Waters site states that developers should encourage "considerable diversity in housing layout and design" (LDDC, 1985d). It also states that attention should be devoted to the site's waterside location, road frontage and important corners, junctions and entrances. The LDDC's only specific stipulation was that devices such as arcades should be used. The briefs for the Marlow Landings and Wolfe Crescent sites are very similar in terms of design content to the Surrey Waters brief.

Many developers have tried to obtain planning permission for high density residential schemes. The reason for this is that high density developments generally ensure that developers make the maximum profit from a scheme. Although both Peter Wright of Costain Homes, and Ian Piper of Lovell Urban Renewal, said that profit maximisation was not their main objective, the architects who had worked for these firms said they had used courtyard housing arrangements to increase the density of the Surrey Waters and Marlow Landings developments. For example, Alan Pitt, an architect for the Diamond Partnership, said that he had managed to increase both the "density and community spirit" of the Surrey Waters development simply by using a courtyard housing arrangement. Moreover, a publicity report that was obtained from Andrews Downie emphasised that they had tried to create a "truly urban scene" for their Marlow Landings housing development by combining classical architecture with a crescent layout and a courtyard housing arrangement (Andrews Downie, 1987). (Plate 5(1)).



PLATE 5(1). Use of a "crescent" lay-out by Andrews Downie architects in 1988, at Marlow Landings, Surrey Docks, London, to create a "truly urban scene" (photograph, the author, 1989)

Lovell Urban Renewal and Costain Homes were found to have different policies on the use of standard housing designs. Unlike Costain Homes, Lovell Urban Renewal do not use standard house types. Lovell's policy is particularly evident from their design of the Wolfe Crescent development, but much less evident in the case of their Marlow Landings scheme. The design of Wolfe Crescent is based upon 'theatrical imagery' (Jay Stuart, CZWG architects, personal communication). Its octagonal towers represent 'players' on a stage (Plate 5(2)), and these players are surrounded by 'raised curtains' (precast lintels on the windows and semi-circular garage door openings) (Plate 5(3)). The 'stage set' has been completed by the addition of tower blocks with Einstein domes. In contrast to Wolfe Crescent's elaborate design theme, Marlow Landings is similar in architectural appearance and layout to the 'standard housing' scheme (Surrey Waters) of Costain Homes (Plates 5(4a) and 5(4b)). This similarity is suprising given the differences in Lovell's and Costain's policies.

5.43 Replies given by developers and architects of sites in Cardiff

Unlike Costain Homes and Lovell Urban Renewal, who denied that profit maximisation was their main reason for becoming involved in the residential redevelopment of dockland sites, both Sue Millington of Tarmac Properties and Steven Williams of Tarmac Homes admitted that Tarmac's design criteria were less important than their economic objectives. Millington said that it was the CPA's and CBDC's job to ensure that Tarmac's planning applications were of a satisfactory design standard, and she did not feel that such a responsibility should rest with either the developer or the architect of a project. Both respondents commented that the style of dwellings Tarmac Homes had



PLATE 5(2). Wolfe Crescent's octagonal towers, intended by Piers Gough (architect) to represent "players on a stage" (Jay Stuart of Campbell Zoogolovitch Wilkinson Gough, architects, personal communication). (Photograph, the author, 1989)



PLATE 5(3). Wolfe Crescent's pre-cast lintels, Surrey Docks, London, intended by Piers Gough (architect) to represent "raised curtains" (Jay Stuart of Campbell Zoogolovitch Wilkinson Gough, architects, personal communication). (Photograph, the author, 1989)

(a).



(b).



PLATE 5(4). Architectural similarities between (a) Lovell Urban Renewal's Marlow Landings development and (b) Costain Homes' Surrey Waters development, Surrey Docks, London (photographs, the author, 1989)

constructed at Atlantic Wharf were heavily influenced by 'consumer demand'. They stressed that 'the market' was the single most important factor in determining building types and styles.

Tarmac Homes commissioned HMA to design residential dwellings at Atlantic Wharf. Peter Gamble, an architect for HMA, said that their fundamental design objective was to create "an urban sense of place" at Atlantic Wharf by using 'hard' architectural styling. He pointed out that the CBDC and a number of amenity societies, including Cardiff 2000, had criticised the first phase of development at Atlantic Wharf for being too 'domestic' and 'suburban' in appearance (Plate 5(5)). Subsequently, HMA had tried to satisfy the CBDC's recommendations by using "harder Regency-style architecture" for the second phase of Tarmac's waterside development (Plate 5(6)).

HMA were also commissioned by Lovell Urban Renewal to carry out the conversion into residential units of the Spillers and Bakers warehouse. Duncan Lawrence, the project architect responsible for this scheme, spoke about his role in renovating the building. He said that his fundamental objective was to "save the building using the smallest possible amount of external alteration". However, to ensure that the conversion was profitable, it was necessary to add an 'attic roof' extension to the building. It was this extension that the CBDC subsequently criticised, saying that it was aesthetically inappropriate to add an "18th century attic to a 19th century building" (see Figure 4.6). Despite the CBDC's criticism, Lovell insisted that the extension should be added. Lawrence's observation suggests that Lovell Urban Renewal attached greater importance to



PLATE 5(5). Tarmac's Phase One residential development, Atlantic Wharf, Cardiff, criticised by the Cardiff Bay Development Corporation for being "too domestic" and "suburban" in appearance (Peter Gamble, Holder Mathias Alcock, architects, personal communication). (Photograph, the author, 1992)



PLATE 5(6). Tarmac's Phase Two residential development, Atlantic Wharf, Cardiff; the developers' response to a request by the Cardiff Bay Development Corporation to create a "harder Regency-style architectural development" (Peter Gamble, Holder Mathias Alcock architects, personal communication). (Photograph, the author, 1989)

profit maximisation than they did to aesthetic considerations.

5.44 Replies given by developers and architects of sites in Bristol

Roger Pratt of Ideal Homes said that Bristol CPA had considerably constrained the design objectives of Comben Homes (now Ideal Homes) for the Merchant's Landing development. The CPA had wanted Comben to adopt "a very traditional treatment of the area", and this had curtailed their discussions with the Ronald Toone Partnership about their use of 'modern' or 'innovative' design. He added that, although the resulting design of the development was disappointing, he did not feel that Comben were responsible for this poor standard.

Alan Parry-Davies of the HM practice was one of Lovell Urban Renewal's architects for the Baltic Wharf and Buchanan's Wharf developments. Parry-Davies described Baltic Wharf as a "soft, domestic-style courtyard development" (Plate 5(7)). He felt that although HM could have improved the visual appearance of Baltic Wharf by using 'harder' style building materials and a revised layout, these difficulties had not been foreseen at the time. The decision to use a courtyard layout at Baltic Wharf was based on two factors. First, it increased the scheme's density. Secondly, it provided a simple design solution (Plate 5(8)). HM were responsible for designing both the Buchanan's Wharf warehouse conversion and the 99 residential units to the rear of the building. In an unpublished company article HM (n.d.) summarise their design philosophy for this scheme:



PLATE 5(7). Lovell Urban Renewal's Baltic Wharf development, Bristol Docks, described by Allan Parry-Davies of Halliday Meecham architects as a "soft, domestic-style courtyard development" (photograph, the author, 1990)



PLATE 5(8). Courtyard housing, Baltic Wharf, Bristol Docks (photograph, the author, 1990)

"The design philosophy for the refurbishment of the warehouses [at Buchanan's Wharf] was to restore them to their original splendour and ensure that conversion to residential use had minimum impact on the form and character of the buildings...The design approach to the new buildings was to achieve a character and style that was sympathetic to the existing warehouses and appropriate to the dockside location."

5.45 Summary

Three inferences can be drawn about the approaches that developers and architects have taken towards design. First, developers and architects felt it was more appropriate to use 'hard', as opposed to soft, or 'domestic' architectural styles for dockland residential developments. For example, Parry-Davies regarded Baltic Wharf as unsuccessful architecturally because its appearance was reminiscent of a suburban housing development. He felt that this was inappropriate to the 'context' of docklands, which he envisaged as having an 'urban' theme. Similarly, both HMA and Andrews Downie had wanted to create 'urban-style' living environments at Atlantic Wharf and Marlow Landings. However, the process of UDC and CPA design intervention that was considered in Chapter Four has also played a significant role in determining developers' and architects' attitudes towards aesthetic issues. Thus, whereas developers and architects of sites in London Docklands experienced relatively little in the way of design intervention from the LDDC, the CBDC exerted far greater pressure on developers to amend the architectural style of residential units at Atlantic Wharf. Moreover, Tarmac's decision to change the appearance of their second phase of Atlantic Wharf housing in favour of harder architectural styling stemmed largely from the CBDC's intervention in this matter.

Secondly, architects and developers have shown a definite preference for using courtyard housing designs. Architects gave two reasons for this: courtyards increased the density of development, and, by dividing a development into a number of separate courts, they made it easier for each court to take on a separate identity.

Finally, it was found that developers were more concerned with the maximisation of profit than they were with aesthetic issues. Devices used by developers to maximise profits included standard housing, which is much cheaper to build than individually designed housing, and high density courtyard layouts. However, not all developers were willing to admit that their redevelopment objectives were heavily influenced by economic factors. For example, Wright of Costain Homes, and Piper of Lovell Urban Renewal, were reluctant to discuss their companies' policies on profit maximisation.

5.5 Developers' reasons for the choice of architects

5.51 Introduction

Although the selection and engagement of an architect is usually the first link made in the web of decision-making, planning records give little information on the relationship between initiator and architect, or the selection process by which the architect is chosen (Larkham, 1986, p.6). Pompa's (1988) research on the roles of developers and their relationships with other direct agents sheds some light on these issues. His first finding was that large developers were more likely to use in-house architects as opposed to external practices. He also concluded that the use of in-house and external architects was not mutually

exclusive. A number of the larger developers that had in-house architects, stated that they also employed external architectural practices for particular developments. Unfortunately, he found that the reasons for this were not clear. Finally, he found that the most common reason for a developer to choose a particular architect was the quality of the work done in the past by that agent. The applicability of Pompa's findings on the roles of developers and architects in south Birmingham deserve consideration.

5.52 Replies given by developers and architects of sites in London

Stuart of CZWG said that in 1987 Lovell Urban Renewal had launched a design competition to select an architect for the Wolfe Crescent site. Subsequently CZWG had submitted plan drawings of their proposed residential scheme to Lovell Urban Renewal, and on the basis of these plans Lovell had selected them as project architects. The LDDC then granted Lovell Urban Renewal planning permission to go ahead with the redevelopment.

Whilst not wishing to doubt the accuracy of Stuart's reply, Manser (1989, p.48) has given a different interpretation of the reasons why CZWG were chosen by Lovell for this particular scheme. He notes that:

"Barry Shore, in the newly created post of head of urban design for the LDDC, was formerly area director for Surrey Docks. He is pleased the CZWG scheme has worked so well as he recommended that the practice should be on Lovell Urban Renewal's shortlist."

If Manser's suggestion is correct, it appears that the LDDC was in part responsible for influencing Lovell Urban Renewal's decision to commission CZWG.

Pitt of The Diamond Partnership said that two factors had influenced the decision by Costain Homes to commission them for the Surrey Waters scheme. First, because they had worked for Costain Homes on several previous occasions, Costain were aware of the style of their work. Secondly, The Diamond Partnership had a detailed knowledge of the redevelopment area.

Andrews Downie, the architects for Marlow Landings, were unavailable to comment on the reasons why Lovell Urban Renewal had commissioned them for this particular redevelopment project.

Both Thomas and Piper of Lovell Urban Renewal were questioned about their use of in-house and external architects. They replied that although their company did not use in-house architects to design dockland housing schemes, the Lovell Homes division of the holding company - Y. J. Lovell - did sometimes use their Internal Construction Services Department. Lovell Urban Renewal do not use in-house architects because they specialise in non-standardised housing designs. It is Lovell Urban Renewal's policy to commission external architects to design unique dockland residential schemes.

Wright of Costain Homes said that it was extremely rare for his company to use in-house architects. The reason for this is that Costain Homes prefer to use non-standard

housing designs for their dockland residential projects because these are more likely to gain either UDC or CPA planning approval.

5.53 Replies given by developers and architects of sites in Cardiff

Williams of Tarmac Homes said that they had selected the Cardiff-based HMA architects to design their residential development because they thought a Welsh architectural practice could "swing their application through planning". Because of the CPA's parochial attitude, Williams thought it was more likely that a Welsh firm would be able to secure planning permission. He added that HMA were well known architects, and they were suitable for dealing with redevelopment projects up to a value of £10 million.

Lawrence of the Architectural Practice and Gamble of HMA explained that Tarmac Homes had commissioned them for the Atlantic Wharf project because they had 'come with the site'. HMA were then 'passed' to Lovell Urban Renewal when Lovell subsequently purchased the Spillers and Bakers warehouse from Tarmac.

5.54 Replies given by architects and developers of sites in Bristol

Pratt of Ideal Homes said that they had commissioned the Ronald Toone Architectural Practice on several occasions and were satisfied with the standard of their work. They subsequently commissioned Ronald Toone for the Merchant's Landing housing project, but were much less satisfied with their designs for this scheme. At the time of the interview

with Pratt, Ideal Homes were in the process of suing the Ronald Toone Partnership. However, Pratt would not disclose the cause of their disagreement.

Parry-Davies of HM architects said that in 1983 Rendell Partnership Developments had informed them that a prestigious waterfront redevelopment opportunity was available in Bristol, and that they were considering entering a developer-architect 'competition' for the site. HM had worked for the Lovell Group on several previous occasions and the developers were keen to attract their interest in this scheme. HM subsequently submitted a draft proposal for the Baltic Wharf site to Bristol CPA and gained the planning authority's support. HM also entered design competitions for the Buchanan's Wharf and Ferryman's Quay sites and were successful in gaining the CPA's planning approval on both occasions.

5.55 Summary

Three inferences can be drawn concerning developers' reasons for commissioning architects. First, developers did not use in-house architects to design any of their dockland redevelopment schemes. Therefore Pompa's (1988, p.180) observation that the majority of large developers employ in-house architects is not true in this case. It was found that the LDDC and Bristol CPA had launched design competitions for the redevelopment of dockland sites and developers were expected to prepare joint applications with architects to enter these competitions. Both HM and CZWG said that the LDDC and Bristol CPA had expected developers to use well known architects to design dockland residential schemes. They felt that if a developer had employed an in-house architect they would not have gained the CPA's or

UDC's support. Therefore, it may be inferred that developers frequently employ external architects because they feel CPAs and UDCs expect them to do so.

Secondly, developers often re-employed architects who produced a consistently high standard of work. This finding supports Pompa's (1988, p.193) observation. For example, Costain Homes had commissioned the Diamond Partnership on several previous occasions before asking them to design their Surrey Waters scheme. In a similar vein, Lovell Urban Renewal employed HM because of their excellent design standards, and Rendell commissioned the Ronald Toone Partnership because of their previously satisfactory work. Whitehand (1984) examines this type of 'standing' relationship between initiator and architect, and concludes that if a firm's services have proved satisfactory in the past, the expectation is that they will do so again, whereas employment of a new firm or practice may be a risk. It is therefore likely that developers and architects will form standing relationships when architects produce consistently good work.

Thirdly, not all developers spent time choosing architects for a particular project, but simply used the architects who were already involved on the site. For example, Lovell Urban Renewal employed HMA because they were 'passed' to them by Tarmac. This finding suggests two facts: either developers do not carefully consider the importance of design, or they are willing to rely on the professional experience of architects who are already involved at a site.

5.6 Use of design briefs

5.61 Introduction

Design briefs are prepared by developers to provide architects with information on design specifications, such as housing types, sizes and densities, and more detailed issues such as style and finish (Pompa, 1988, p.183). However, not all developers give design briefs to their architects. Although Pompa (1988) found that 81 per cent of the developers he interviewed had prepared briefs, a much lower percentage of developers in the present study were found to have done so.

5.62 Replies given by developers and architects of sites in London

Stuart of CZWG said that it was Piers Gough's decision to give Wolfe Crescent a theatrical theme. CZWG did not receive a brief from Lovell Urban Renewal. Stuart added that while verbal discussions had taken place between themselves and Lovell to finalise issues, such as use of building materials, it was CZWG and not Lovell who were responsible for making major decisions on the final design and layout of the scheme.

Pitt of the Diamond Partnership said that the decision to use a courtyard layout for the Surrey Waters development had been taken jointly with Costain Homes. However, apart from verbal discussions about this issue, Costain did not significantly influence any other design decisions.

5.63 Replies given by developers and architects of sites in Cardiff

Although neither Williams of Tarmac Homes, nor Millington of Tarmac Properties, had given their architects - HMA - a design brief, both said that HMA had been fairly rigidly constrained by Tarmac's guidance on design. This view was confirmed by Gamble, who said that Tarmac Homes had insisted that they use totally unsuitable standard building materials to keep construction costs to a minimum.

Unlike Tarmac Homes, Lovell Urban Renewal did not use standard housing styles and standard building materials for the second phase of the Atlantic Wharf development. HMA were therefore able to exert greater control over the design of residential units for Lovell than they were for Tarmac. HMA were also given considerable scope for carrying out the design of the Spillers and Bakers warehouse conversion. However, it was Lovell's decision to include the attic roof extension that led to the CBDC's severe criticism of the building's appearance.

5.64 Replies given by developers and architects of sites in Bristol

HMA were the only architects to be interviewed who had received a written design brief from their clients. Lovell Urban Renewal prepared a detailed statement of their design objectives for the Baltic Wharf and Buchanan's Wharf developments. Parry-Davies said that these briefs had provided them with detailed specifications on the use of building materials, house sizes, building densities etc.

Pratt of Ideal Homes said that they had not given the Ronald Toone Partnership a detailed brief on the design of the Merchant's Landing development. Their only stipulation was that the existing fabric of the Hotwells area should be respected in their design of the scheme.

5.65 Summary

Two inferences can be drawn about developers' use of design briefs. First, although all the architects had communicated either verbally or in writing with their clients about design issues, only one architect had received a written brief. Issues that were frequently discussed included use of building materials, layout, and style of the development. Secondly, the extent to which developers imposed constraints on their architects' design initiatives also varied considerably. For example, whereas Tarmac Homes gave HMA very little scope to use their professional design skills, Lovell Urban Renewal granted CZWG considerable flexibility. This finding is at variance with Pompa's (1988, p.259) conclusion that it is the developer, rather than the architect, who takes basic decisions on the characteristics of a development. In the present study, responsibility for design was found to be more evenly divided between developers and architects.

5.7 Use of symbolic imagery by developers and architects

5.71 Introduction

Conzen (1975) argues that historical townscapes embody not only the efforts and aspirations of the people occupying them at present, but also those of their predecessors. Such townscapes contain the accumulated experience of past

generations and exert an educative and regenerative influence on residents and visitors. But, if townscapes undergo wide-scale destruction, as many have in docklands as a result of comprehensive clearance, much of their historical expressiveness or historicity is destroyed. Moreover, developers who have subsequently undertaken the redevelopment of dockland sites have encountered serious difficulties in making docklands attractive to both potential residents and commercial users.

One way in which developers and architects have tried to attract people to docklands is through a process called 'imagineering'. Essentially, 'imagineering' is a deliberate attempt to empty docklands of its former meaning, and subsequently to transfer, reconstitute and re-present it in a partial and distorted form as a whole new place. However, the process of replacing docklands' negative stigma with more respectable images can only be successful if the 'consumers' of dockland imagery are able to 'read' the images or signs that developers and architects produce. Albertson (1988) suggests that one way in which developers and architects are able to communicate with consumers is through the use of aesthetic symbols that are capable of indicating social standing. Moreover, Crilley (1989) suggests that Post-Modern architecture acts as one such symbol to the sizeable number of middle-class people who have been attracted to docklands, and who possess the necessary 'cultural capital' to appreciate this form of architecture. Other examples of aesthetic symbols include replica statues of lighthouses, murals of maritime scenes (Plate 5(9)), mock hoist towers, maritime trails (Plate 5(10)), and place names with a maritime theme.



PLATE 5(9). Mural of a maritime scene, Lovell Urban Renewal's Ferrara Quay development, Swansea (photograph provided by Halliday Meecham architects, n.d.)



PLATE 5(10). Maritime trail, Lovell Urban Renewal's Ferrara Quay development, Swansea (photograph provided by Halliday Meecham architects, n.d.)

5.72 Use of symbolic imagery by developers and architects: London study sites

None of the architects or developers of study sites in the London study area said that they had specifically used symbolic architecture to recreate their development's historical association with Surrey Docks. For example, Stuart of CZWG said that Wolfe Crescent had a theatrical, rather than a maritime theme, and although they had used round windows in the development, these did not have any special nautical connotation, such as 'ship portholes' (Plate 5(11)). He added that CZWG frequently used round windows in their developments. Similarly, Pitt of The Diamond Partnership said that they had not used symbolic architecture to emphasise Surrey Waters' historic association with the area's working docks. He added that since a large proportion of the development did not directly overlook the waterfront (Surrey Water), they felt that a maritime design theme was inappropriate. Information obtained from Andrews Downie architects also suggests that they had not considered using symbolic maritime architecture for their Marlow Landings development. Field work observations reveal, however, that a mirror glass window was added to the part of the development that overlooks Surrey Water. This may have been intended to draw attention to the development's relationship with the edge of the dock (Plate 5(12)). Unfortunately, because Andrews Downie declined to be interviewed, it was not possible to determine why they had decided to use the reflective glass.

Lovell Urban Renewal and Costain Homes were questioned about their use of symbolic imagery. Neither said they had considered using it for the Wolfe Crescent, Marlow Landings or Surrey Waters developments.

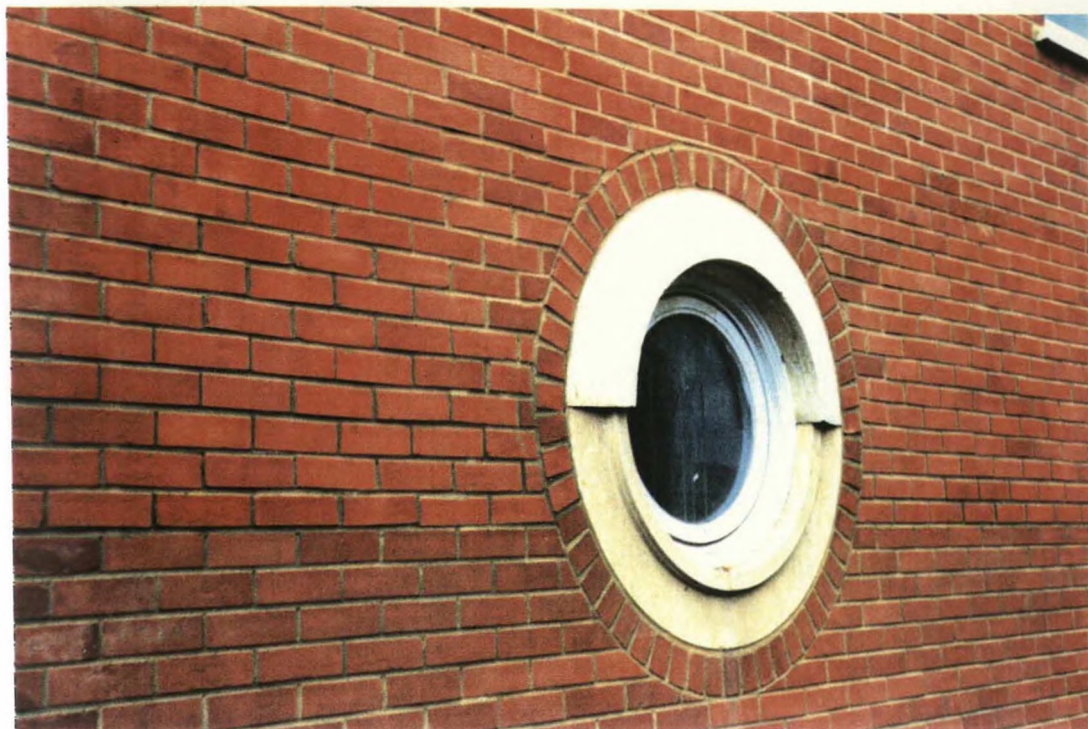


PLATE 5(11). Circular window added to the Wolfe Crescent development, Surrey Docks, London (photograph, the author, 1990)



PLATE 5(12). Mirror glass window added to Lovell Urban Renewal's Marlow Landings development, Surrey Docks, London (photograph, the author, 1990)

5.73 Use of symbolic imagery by developers and architects: Cardiff study sites

Developers and architects of sites at Atlantic Wharf did not feel that Cardiff's industrial legacy was worthy of special architectural treatment. For example, Gamble said that HMA had not used symbolic maritime architecture for Tarmac's Phase Two housing development because it would have been difficult to make a positive statement about Cardiff Bay's history as a coal handling port. Apart from the site's three remaining warehouses, the area had been completely cleared prior to the start of on-site construction work. This being the case, he felt that any attempt that HMA could have made to evoke symbolically the dock's former history would have been misleading.

Despite Gamble's negative remarks about Atlantic Wharf's maritime history, data obtained from Tarmac's Section 52 Planning Agreement show that architects were expected to consider the dock's history in their design of units for the redevelopment site. Paragraph 3.1 of the Agreement (1985) states that:

"The site's maritime history and geographical relevance will be exploited in the architectural 'language' of the buildings, and the spaces between and around buildings. The development, in keeping with its surroundings will maintain an urban scale with a high density of development, particularly fronting the dock."

Lawrence of The Architectural Practice reiterated Gamble's suggestion that it would have been difficult to evoke architecturally Cardiff Dock's maritime history. He said that he had not attempted to do so with the Spillers and Bakers warehouse.

Both Millington and Williams, of Tarmac Properties, and Tarmac Homes disagreed that an area's history could be evoked by the use of symbolic architecture. Millington was particularly dismissive of the term 'maritime architecture', saying that it was probably a "green issue" and something she certainly would not request an architect to consider using. It is likely, in the light of Millington's comments, that she may have dissuaded HMA from including the maritime references referred to in the Section 52 Planning Agreement.

5.74 Use of symbolic imagery by developers and architects: Bristol study sites

Parry-Davies of HM was the only architect to be interviewed who had used symbolic maritime features. HM used both mock hoist towers and a promenade walkway to emphasise Baltic Wharf's historical association with the docks. The mock towers (Plate 5(13)) are replicas of grain lifting towers that were once used in the docks, and the promenade walkway is intended to draw attention to the waterfront (Plate 5(14)). HM also included a dockside walkway in the design of their Buchanan's Wharf development. Despite Parry-Davies's admission that they were aware of the importance of Bristol's maritime legacy, the developer of these sites (Lovell Urban Renewal) said that they had not considered using a specifically maritime theme for any of the developments.

Pratt of Ideal Homes pointed out that they had included a dockside walkway in their design of the Merchant's Landing development. However, because Bristol CPA had requested that they use a relatively 'conservative' approach to design, they did not ask their architects (the Ronald Toone Partnership) to consider the use of symbolic architecture.



PLATE 5(13). Mock "hoist-towers" added to Lovell Urban Renewal's Baltic Wharf development, Bristol Docks (photograph, the author, 1990)



PLATE 5(14). Promenade walkway, Baltic Wharf, Bristol Docks (photograph, the author, 1989)

5.75 Summary

With the exception of HM architects, developers and architects did not use symbolic architecture to express docklands' historical significance. Moreover, while some developers and architects made claims about the 'historic appeal' of their developments, little evidence exists to support these claims. For example, the suggestion by Comben Homes (now Ideal Homes) that Merchant's Landing "reflects the character of Bristol's 19th century waterfront" (Rendell, 1984, p.2) was found to be totally ill-founded.

The suggestion that Bristol City Docks is "a pastiche of a merchant past" (Masie, 1985) was found to apply broadly to all the study sites in all the study areas. Docklands is in reality little more than a plethora of images that do not represent literal statements about the former docks, but are simply stereotypes of the past. To paraphrase Jameson (1985, p.22), docklands is a schizophrenia of Post-Modernism (with schizophrenia defined as the breakdown of the link between signifiers) that has produced a retreat from reality and the disappearance of a sense of history. Reality has been transformed into image, and time has been fragmented into a series of perpetual presents. By 'selling an image' to its consumers, the LDDC, CBDC and to some extent Bristol CPA have convinced people that docklands has a great deal of historical significance. Research has shown that most developers and architects have not attempted to re-create this historical significance architecturally. Thus, if consumers are able to see a historical significance in docklands' images, it is because they have been 'induced' to do so, and perhaps more importantly, because they want to 'read' a particular image. For example, CZWG's round windows are not symbolic of portholes, but they could quite easily be envisaged as

portholes by those who have been 'sold' the idea that Wolfe Crescent has a maritime association.

A number of developers and architects felt that they could not have successfully used symbolic architecture to attract potential house buyers to docklands. For example, Gamble stated that Cardiff's historical connection with the coal-exporting industry could not have been portrayed as a 'positive image'. Moreover, Millington and Williams said that it was not Tarmac's policy to use symbolic architecture.

In summary, it was found that with the exception of HM architects, agents did not use symbolic devices to evoke docklands' maritime association. However, it was very common for developments to be given 'sea-faring' names, such as Baltic Wharf, Atlantic Wharf, Merchant's Landing, and Surrey Waters. It is apparent that although some agents felt that symbolic architecture was an inappropriate way of attracting people to docklands, others felt that dockland redevelopment areas simply did not have a worthwhile symbolic significance. Finally, there is little evidence to suggest that agents have used symbolism as a method of recreating a 'sense of place' in docklands. This latter observation is discussed in greater detail in subsequent chapters.

5.8 Conclusion

Analysis of type of initiators and architects has demonstrated some clear patterns. It was found that without exception architects were large, external practices. In-house, or company architects were not used for dockland

projects. In all cases architects were also plan depositors. Developers were found to be the initiators of redevelopment. However, Rendell Partnership Developments were unique in having carried out joint ventures with housing associations, housing trusts and other developers.

In terms of provenance, it was found that all the agents of Dockland sites in London were also located in London. This finding lends support to Larkham's (1986) observation that many national developers have head offices in London and that these agents have a considerable influence in shaping the built fabric of the surrounding area. With the exception of Comben Homes, which were subsequently purchased by Ideal Homes, developers of sites in Cardiff and Bristol were also national developers.

Information obtained from interviews with developers and architects has enabled a number of important conclusions to be drawn. It was found that developers and architects varied considerably in their approaches to design. Thus, whereas some developers, such as Lovell Urban Renewal, allowed their architects extreme flexibility to design residential units, others, such as Tarmac Homes, considerably constrained their architects' designs. A major reason for developers imposing design constraints on their architects was profit maximisation. A number of developers used courtyard housing arrangements and standardised housing because of the cost implications.

With the exception of HM architects, none of the architects received a written design brief from their clients. However, all developers communicated with

architects about major design issues. These issues included use of building materials, layout, and style.

Developers gave several reasons for their choice of architects, the most frequent of which was that a firm had produced a consistently high standard of work. An exception was Lovell Urban Renewal (Cardiff) who simply used the architects that 'came with the site', and did not question HMA's specific suitability for the Atlantic Wharf project. Tarmac Homes also commissioned HMA, but for a different reason - they thought that it would be easier for a Welsh architectural practice to obtain planning permission in Cardiff.

There is no evidence to suggest that architects who were based close to a site of redevelopment, such as CZWG or HMA, paid any more attention to detailed design issues, than non-local architects, such as the Ronald Toone Partnership. Thus, Whitehand and Whitehand's (1984) finding that local agents are more sensitive to aesthetic issues than non-local agents does not apply to the present study.

Finally, it was found that developers and architects rarely used symbolic architecture or symbolic devices to recreate docklands' maritime legacy. Indeed, several agents, including HMA, the Diamond Partnership and CZWG felt that symbolic imagery would not have improved the visual appearance of their development. HM were unique in having included several 'maritime references', including mock hoist towers and statues, in their design of the Baltic Wharf scheme. These devices were intended to draw attention to Baltic Wharf's historical function as a grain loading dock. It was found that several agents who did not use symbolic

architecture had in fact named their developments after sea ports or sea-faring activities. A possible explanation for this might be that agents had wanted to draw attention to their development's maritime association, but at the same time did not feel that this could be achieved using symbolic architecture. Thus, while Gamble stated that Cardiff's history as a coal-exporting centre was too unattractive to be recreated symbolically, the development was given a name that has a maritime association - Atlantic Wharf.

CHAPTER SIX

THE STANDPOINTS OF RESIDENTS

6.1 Introduction

In this chapter the focus of attention shifts from the architects and developers to the residents of docklands. Although much current research focuses on the means that individuals use to obtain information about their surroundings, very little is known about whether individuals are able to use this information to assemble coherent images of the built environment. An aim of this chapter is to explore whether residents of docklands are able to 'read' or interpret the symbolic images that have been produced by those responsible for creating the built environment, and whether these images have given them a 'sense of place' or 'belonging'. Two related issues are also explored. These are first, whether media advertising and 'imagineering' has influenced people's decisions to move to docklands; and secondly, whether residents feel that dockland developments and their waterfront areas are aesthetically attractive.

6.2 Social and demographic composition of dockland residents

Crilley (1989) notes that:

"the nature of new residents in the docklands [is] a major lacuna in our understanding of the transformation of the area...we simply do not know precisely from which social strata new docklands' residents are drawn."

Given the absence of data on this issue, it is appropriate to consider briefly the broad social and demographic characteristics of respondents who took part in the questionnaire survey (Table 6.1).

Table 6.1 Social and demographic characteristics of respondents

Development	No. of respondents	Modal age group	No. with children
Surrey Waters	32	25-35	15
Wolfe Crescent	28	25-35	8
Baltic Wharf	48	25-35	12
Merchant's Landing	55	45-65	31
Spillers and Bakers warehouse	16	25-35	5
Tarmac Phase Two	27	25-35	7

Table 6.2 No. of respondents and first year of occupation of flat/house

Development	No. of respondents		Year of occupancy
	Flat	House	
Surrey Waters	6	24	1988
Wolfe Crescent	23	4	1989
Baltic Wharf	28	12	1985
Merchant's Landing	8	42	1986
Spillers and Bakers warehouse	16	N/A	1990
Tarmac Phase Two	11	12	1990

Four main characteristics of the respondents (Tables 6.1 and 6.2) are evident. First, with the exception of those from Merchant's Landing, a large number of replies were received from people aged between 25 and 35 years. Secondly, more respondents (106) were childless, than had children (78). Thirdly, people most frequently moved to docklands in 1985-1986 in the case of Bristol, 1988-1989 in the case of London, and in 1990 in the case of Cardiff. Fourthly, replies were received from roughly equal numbers of flat owners and house owners. The remaining replies were from occupants of maisonettes and bedsits.

6.3 Reasons why people moved to docklands

6.31 Introduction

In Chapter Five it was suggested that a process called 'imagineering' has been used to replace docklands' negative image with more respectable images that can be understood by consumers who are 'culturally aware'. The aim of Section 6.32 is to examine how the LDDC has used both 'imagineering' and media advertising to influence people to live in Docklands.

6.32 The LDDC's marketing campaign

Within two years of the election of the Conservative government in 1979, the first UDCs were established in Liverpool and London. The LDDC quickly realised that if its regeneration programme was to be a success it needed to cater for the needs of the new middle-class sector of the population who were looking to Docklands as a possible place to live. This relatively affluent group of professional and managerial workers had been raised on the cultural

discontents with Modernism in the late 1960s, and as a result had rejected the idea of living in areas that did not embody their concerns with "accessibility, taste, tone, aesthetic appreciation and symbolic and cultural capital" (Harvey, 1987). It was therefore largely left to the LDDC to convince this 'new bourgeoisie' that Docklands was both an attractive and accessible place to live. To achieve its objective the LDDC commissioned Gold, Greenless and Trott to launch a massive £2,147,000 national advertising campaign (see Burgess, 1990, pp.139-161).

Burgess and Wood (1988) examine how the LDDC's media campaign has encoded a new identity for Docklands through a television and poster campaign that used crows in the guise of popular British T.V. characters and programmes; Jimmy Saville and Alan Whicker; Minder and the Fall and Rise of Reginald Perrin. Burgess (1990, p.144) summarises the salient features of the characters used in the campaign:

"[the characters] symbolised an imaginery East End [that was] already encoded in other television discourses and [which] proved to be a powerful way of creating a new identity for what had previously been a plurality of communities - a 'Docklands' identity which resonated with both outsiders and local people."

To examine whether the LDDC had successfully 'marketed' a new Docklands' image, Burgess and Wood (1988) interviewed 62 entrepreneurs who had moved to the Isle of Dogs during 1981-1984 when the campaign was running. They discovered that many local business people liked the advertisements, and that some related to the characters through their connection with popular entertainment. They concluded that "the majority of interviewees felt that advertising and

promotional activities of the LDDC [were] important in supporting their own location decision" (p.102).

The LDDC's advertising campaign was also directed at potential residents. Yet as Crilley (1989) states:

"the array of media images has been so diverse that they can be interpreted as a landscape in themselves, a media panorama, providing us to a large extent with a fabricated Docklands reality."

The underlying focus of the LDDC's campaign was to market Docklands as a 'differentiated product' - a unique place with idiosyncratic qualities that set it apart from its residential and commercial competitors. To a large extent this has not relied solely upon claims stressing the physical qualities of location ("only ten minutes from the City", "exceptionally placed" or "why move to the middle of nowhere when you can move to the centre of London?") but has been increasingly supplemented by emphasising Docklands' aesthetic and affective attributes - its 'sense of place'. The LDDC has also presented potential residents less with a picture of 'what is' and more with a picture of 'what is in the making' (a 21st century city at "the heart of tomorrow"). Crilley (1989) describes the way in which the LDDC has marketed this new vision of Docklands:

"Through a whole network of channels, residents have been invited/lured to go east to this transitional, frontier land of promise where life can be lived on a space-time edge in the brave new world of Docklands. Essentially the task before the LDDC was plain: to transform a vacuum of industrial waste strewn with the 'dead labour' of a mercantile industrial era into an imaginable living community."

6.33 CBDC and Bristol CPA marketing initiatives

Since neither the CBDC nor Bristol CPA received as much government funding as the LDDC, they were unable to undertake such extensive media campaigns. However, the CBDC used some of the £73 million it received in government aid between 1989-1991 (CLES, 1990) to promote a number of its most important 'flagship' projects (CBDC, 1988). The CBDC relied heavily upon the consultants - Llew^elyn-Davies Planning - to produce its Regeneration Strategy and publicity campaign (CBDC, 1988). One of the key components of this Strategy was to attract support for a controversial barrage scheme involving the construction of an inland lake and associated residential, commercial and retail development (Lane, n.d., p.26). Bristol's UDC received only a fraction of the grant aid obtained by Cardiff and London UDCs (£22 million to date). Moreover, since the BDC was designated after Bristol's main dockland area had already been redeveloped, its involvement in promoting the rejuvenation project was extremely small. In the absence of government support for advertising, Bristol CPA relied extensively upon individual site developers to market their own dockland housing schemes. Yet judging from the popularity of the redevelopment venture, developers were relatively successful in carrying out the CPA's proposal.

6.34 Questionnaire survey results

The aim of this part of the questionnaire survey was twofold. First, to examine why residents had moved to docklands to live; and secondly, to assess whether the LDDC's, and to a lesser extent the CBDC's and Bristol CPA's, media campaigns had influenced residents' decisions to move.

6.35 Surrey Waters and Wolfe Crescent residents

Table 6.3 shows that availability of 'affordable' property influenced people's decisions to move to Docklands. Other influential factors were employment and attraction of living in Docklands. Several respondents commented that Docklands' accessibility to 'the City' was also a key factor in their decisions either to rent or to buy a flat in this location. One response was "[Surrey Waters'] relative closeness to Central London is important".

Table 6.3 Reasons why people moved to Surrey Waters and Wolfe Crescent

Reason	Times mentioned
Affordable property	29
Employment	15
Attraction of living in Docklands	15
Leaving parental home	11
Retirement	2

Although 15 respondents said that they had moved to their present addresses because they felt that Docklands was an attractive place to live, those who made a detailed comment on this issue pointed out that it was the visual appearance of their properties, rather than the general appearance of developments, that had initially attracted them to this area. Typical responses included:

"I liked the property...it was unusual and original."

"Our flat was the most attractive and affordable of all the Dockland developments we saw."

"I was fed up with conversions and their poor quality in North London."

These findings suggest that although the LDDC's media campaign may have increased both people's aesthetic awareness of Docklands and its accessibility to the City, other factors, such as the price of property, had also influenced respondents' decisions to either rent or buy a dwelling in this area. Therefore, it is likely that respondents would have been aware of the LDDC's 'affordable homes for sale policy', which enabled many people to buy a house in Docklands for a substantially reduced price.

The LDDC originally launched its affordable homes policy to assist local people to buy houses in Docklands. Until the end of 1988, the LDDC fixed a small percentage of its properties at what it considered to be an 'affordable' price - £40,000 or less. It subsequently came to light that the LDDC's scheme was being abused. People from outside the area were found to be giving local addresses to qualify for the 'cheap homes', and tenants were selling their rent books to speculators (DCC, 1990, p.50). Moreover, because a £40,000 home was not affordable to the majority of residents in any of the Dockland boroughs, it was inevitable that non-local residents would be the ones who could afford to move to Docklands to live.

The average price of a home in Docklands is now at least twice the LDDC's £40,000 for an affordable home. Nevertheless, because residential developments in Surrey Docks are still less expensive than many developments north of the River Thames, they appeal to a fairly wide sector of the housing market (K.F.R., 1990, p.19). This fact is

illustrated by the questionnaire survey which shows that many respondents had moved to Docklands because it was a relatively 'affordable' place to live.

6.36 Baltic Wharf and Merchant's Landing residents

Table 6.4 confirms that 'the attraction of living in docklands' had influenced more than half the respondents to move to their present addresses. A further 25 per cent had moved because of their jobs. However, less than five per cent had moved to dockland because of the price of property.

Table 6.4 Reasons why people moved to Baltic Wharf and Merchant's Landing

Reason	Times mentioned
Attraction of living in docklands	72
Employment	32
Retirement	11
Price of property	7
Opportunity from council	6
Leaving parental home	4

These findings suggest three things. First, although Bristol CPA did not launch a media campaign to attract potential residents to docklands, people still moved there to live. Individuals must therefore have learned about the redevelopment scheme through other sources of information, for example, developers' promotional literature, independent media coverage or their own observations. Secondly, docklands' close proximity to Bristol City Centre was seen as a definite advantage to those who worked in this area, or

who regularly commuted to work from Temple Meads railway station. Typical comments on this issue included:

"I needed easy access to Bristol centre for work."

"[Merchant's Landing] is near Temple Meads."

Thirdly, the majority of respondents did not move to their present addresses because property was relatively cheap to rent or buy. Unlike in London Docklands where property prices are less expensive than in many other areas of the city, this is not the case in Bristol. Although 30 council flats were set aside for the elderly at Baltic Wharf to meet some of Bristol City Council's 'social mix objectives', Punter (1990, p.199) notes that this was a short lived objective as many of those who acquired the lower cost housing took advantage of rapidly inflating values and sold to new comers.

6.37 Spillers and Bakers warehouse and Tarmac Phase Two residents

The reasons given by respondents for deciding to move to Atlantic Wharf are similar to the reasons given by residents for moving to Bristol docklands (Table 6.5). 45 per cent of the total said that they had been attracted by the idea of living in docklands, and one third said that they had moved because of their jobs. The price of property at Atlantic Wharf was not a significant factor.

A number of respondents made specific comments on their reasons for moving. For example, two Spillers and Bakers warehouse residents said that they had purchased their flats because they liked the building's architectural appearance.

However, none of the Phase Two residents commented specifically on the architectural appearance of their dwellings. Several respondents said that Atlantic Wharf's accessibility to the City Centre was important because they either worked in Cardiff or because they commuted to other parts of the country. A typical response on this issue was "[Atlantic Wharf] is very accessible to Cardiff Central station". No detailed comments were made on the affordability of property in docklands.

Table 6.5 Reasons why people moved to the Spillers and Bakers warehouse and Phase Two development

Reason	Times mentioned
Attraction of living in docklands	20
Employment	14
Affordable or rented property	6
Leaving parental home	4
Retirement	0

6.38 'Other' reasons why people moved to dockland areas

Residents were asked whether any other factors had influenced their decisions to move to docklands. Two reasons that were frequently mentioned included 'divorce' and 'accessibility to leisure interests'. A large number of individuals moved to their present addresses following the break-up of their marriages. Several respondents commented that they had moved out of a large 'family home' and had needed to purchase a smaller house or flat. Because of the widespread availability of this type of accommodation in docklands they had decided to settle there. Several people also said they had moved because they wanted to live near a range of leisure and social amenities, such as London's

'West End', and central pubs, clubs, theatres, museums and art galleries.

6.39 Summary

Analysis of the reasons that residents gave for moving to docklands demonstrate some clear patterns. First, although some respondents moved to London Docklands because they considered it to be 'an attractive place to live', this was of secondary importance compared with the availability of 'affordable' property in this area of London. Secondly, respondents from Bristol and Cardiff most frequently cited the 'attraction of living in docklands' as reasons for moving to their present addresses. Thirdly, residents often wanted to live in docklands because it was accessible to where they worked, or because it was near a main-line railway station. Fourthly, respondents commonly cited divorce or accessibility to leisure and recreational activities as reasons for moving to dockland areas. Finally, it was found that while the LDDC's media campaign may have influenced some respondents' perceptions of Docklands' accessibility to the 'City' and 'West End', there is little evidence to suggest that it increased their awareness of the attractiveness of Docklands as a place to live.

6.4 Post-Modern architecture and symbolic imagery

6.41 Introduction

The main difference between Modern and Post-Modern architecture is that while the former rejected the past, Post-Modernism shows a concern with meaning, continuity and symbolism.

"Post-Modern architecture has a double coding [it combines] Modern techniques and something else (usually traditional building) in order to communicate with the public and a concerned minority, usually architects" (Jencks, 1987, p.38).

The suggestion that architecture has a capacity to communicate with consumers about symbolic meaning and social values was first recognised by Saussure (1960) who proposed that architecture acted as a cultural manifestation or 'signifier'. In terms of urban semiotics, the 'vehicles of signification' are the objects of urban space. Thus, streets, squares, buildings and façades can be envisaged as both physical objects and emitters of social discourse (Gottdiener and Lagopoulos, 1986). Lynch's work the Image of the City (1960) is perhaps the best known study to use a semiotic method of interpretation.

A major criticism of semiology is its tendency to consider spatial systems of signification independently of their social contexts. Because of this shortcoming, many academics prefer to use a socio-semiotic method of analysis which allows a distinction to be drawn between the sender's message and the message received (Gottdiener, 1983; Goss, 1988). For example, Domosh's (1989) study of the symbolic value of the New York skyscraper shows that there is a considerable diversity as to how individuals interpret the building's semiotic value. Goss (1988) also suggests that the towering office block has a different meaning for the various groups who view it: from those who own it; to those who produce it; from those who run it; to those that use it; and to those who look up at it. The interpretation of meaning, therefore, depends upon one's position in the production-consumption hierarchy.

Although it is widely recognised that socio-semiotics can be used to unravel Post-Modernism's multi-coded symbolic structure, Burgess (1990, p.140) notes that geographers have been unwilling to undertake empirical research on the consumers of Post-Modern meanings. As a result, the commentator has remained in a dominant position of telling readers what landscapes mean for the people who purchase and live in them. For example, although Crilley (1989) notes that "Post-Modern developments are little more than a pastiche of complex and often contradictory codes", he does not advocate how a research programme should be conducted on the consumers of these developments. Similarly, Mills (1988) carries out detailed interviews with the architects who designed the gentrified landscapes of Fairview Slopes in Vancouver, but does not interview the residents of these developments. Goss (1988) recognises the absence of research on this issue, and suggests that interviews should be conducted with consumers to examine how they interpret Post-Modernism's cultural and symbolic meanings. He suggests that:

"We must realize the complexity of a multicode space and study it in its everyday usage (through interviews literary and historic texts) by everyday people who may be 'reading' or 'writing' different languages in the built environment" (p.398).

An aim of Sections 6.42-6.45 is to examine an important aspect of the 'agent-consumer' relationship. That is, whether agents have designed developments that consumers find architecturally and aesthetically attractive.

It was suggested in Chapter Five that developers and architects sometimes use Post-Modern architecture and

aesthetic symbols to communicate the historical significance of an area to dockland residents. For example, Piers Gough and Julian Wickham have included references to 'distant seafaring images' (Crilley, 1989) in their design of the Jacob's Island and Horsleydown Square developments in London docklands. Other examples of developments that include maritime references are Russia Court (London Docklands) which uses 'seaside architecture', long balconies, curved façades and stepped sections to recreate the memory of a 1930s coastal resort; and Greenland Passage (London Docklands) which has been marketed as "a unique Danish riverside development conceived in the British tradition" (Islef U.K. Ltd, 1989). Outside London, Swansea's Ferrara Quay development is perhaps the best example of a scheme that is inspired by maritime influences (Plates 5(9) and 5(10)).

With the exception of HM architects, the agents considered in the present study have not used any specific features to evoke docklands' maritime heritage. Moreover, HMA and Duncan Lawrence who designed developments in Cardiff docklands particularly avoided using maritime references because they did not want to emphasise Cardiff's former industrial association with the coal-exporting industry. It is also apparent that while Piers Gough did use a design theme for the Wolfe Crescent development, this had a theatrical rather than a maritime association.

A second aim of Sections 6.42-6.45 is to assess whether agents have successfully communicated the intended symbolic meaning of dockland schemes to residents.

6.42 Surrey Waters and Wolfe Crescent

(i) Residents' views on architecture and aesthetic design

Respondents were asked first, whether they were satisfied with the architectural appearance of the Surrey Waters and Wolfe Crescent developments (Plates 5(4b) and 5(2)); and secondly, whether they were satisfied with the the visual appearance of the waterfront and canalfront areas (Tables 6.6 and 6.7).

In general the responses to the questionnaire suggest that respondents were either extremely satisfied or reasonably satisfied with the architectural appearance of Surrey Waters and Wolfe Crescent. The majority (90 per cent) were also fairly satisfied with the visual appearance of the waterfront and canalfront (Plates 6(1) and 6(2)).

Although a number of academics, including Berman (1982) and Kieran (1987), suggest that consumers may have difficulty in understanding Post-Modernism's multi-faceted, and often contradictory images, there is very little evidence to suggest that respondents encountered this problem. Most liked the architectural appearance of the developments, and only one person did not have a definite opinion on whether a waterfront or canalfront area was visually attractive. Therefore, if the suggestion made by Berman and Kieran had been correct, it is unlikely that so many consumers would have expressed positive views on the appearance of the developments and their waterfront/canalfront.

Table 6.6 Residents' views on the architectural appearance of Surrey Waters and Wolfe Crescent

	No. of replies	
	Surrey Waters	Wolfe Crescent
Extremely satisfied	10	17
Reasonably satisfied	22	10
Not satisfied	1	1

Table 6.7 Replies to the question "Do you think the waterfront/canalfront at Surrey Waters/Wolfe Crescent is visually attractive ?"

	No. of replies	
	Surrey Waters	Wolfe Crescent
Yes	28	27
No	4	1
Don't know	1	0



PLATE 6(1). Waterfront, Surrey Waters, Surrey Docks, London, considered to be "visually attractive" by the majority of questionnaire respondents (photograph, the author, 1989)



PLATE 6(2). Canalfront, Wolfe Crescent, Surrey Docks, London, considered to be "visually attractive" by the majority of questionnaire respondents (photograph, the author, 1989)

Respondents were also asked to comment on two additional issues. First, whether the architectural appearance of the developments could be improved, and if so how these changes should be made. Secondly, whether the waterfront and canalfront could be made to look more aesthetically attractive, and if so, what changes were necessary. Forty-six respondents suggested that improvements could be made to both the developments and their waterfronts. These included better landscaping, increase in size of properties, better roads, more parking provision, larger gardens, and more 'open space'. Suggested improvements to the waterfront and canalfront included better landscaping, more flora and fauna, and removal of litter.

Although the LDDC provided developers with clear guidance on how they should landscape both the Surrey Waters and Wolfe Crescent developments, respondents' comments on this issue suggest that developers did not comply with the LDDC's recommendations. Paragraph 5.07 of the LDDC's brief on Surrey Waters states that:

"A high standard of hard and soft landscape design will be expected. A sum of at least £300 must be allowed per dwelling exclusive of top soil for soft landscape. Planting will be required to be replaced if it dies or is removed within three years of completion of the development."

But several respondents said that they were dissatisfied with the site's landscaping and maintenance. A typical comment on this issue was "Nobody has bothered to maintain any of the plants or netting outside my house - they look appalling" (Plate 6(3)).



PLATE 6(3). "Soft landscaping", Surrey Waters, Surrey Docks, London, disliked by the majority of questionnaire respondents (photograph, the author, 1989)

The LDDC also made detailed recommendations on road design and parking provision. Paragraphs 5.06 and 5.04 of the Surrey Waters brief state that:

"Concrete or brick paviers and granite setts should be used for all roads and pavements within the site. With imaginative landscape design these materials can be instrumental in creating a more interesting street scene and in reducing vehicle speeds."

and

"At least one off street parking space must be provided for each dwelling plus one space per 10 dwelling for visitors."

However, a number of respondents were clearly dissatisfied with these aspects of the scheme. For example, one described Surrey Waters' roads as "totally inadequate", and another said that parking was often "impossible".

It is also apparent from respondents' comments, that Lovell Urban Renewal and Costain Homes took advantage of the LDDC's relatively lenient recommendations on house and garden sizes to maximise the amount of profit they made from each scheme. Paragraphs 5.08 and 5.15 of the brief state that:

"All houses must have private gardens at the rear of a size adequate for family use. No absolute requirements are made over size, shape or orientation, but each garden must be capable of satisfactory outdoor use."

and

"Dwellings should, as a minimum, meet the requirements of the Registered House Builder's Handbook issued by the NHBC, as well as complying with all current legislation."

Commonly, however, respondents said that they were disappointed with the size of their properties and gardens. The developers were also accused of 'profiteering' and 'cost-cutting'. Typical comments on this issue were "They [Costains] squeezed in as many small, but expensive, houses as possible".

The LDDC's recommendations on the design of waterfronts and canalfronts were also fairly unspecific. For example, paragraph 4.05 of its brief for Surrey Waters states that:

"The water channels and cycleways/footpaths will be generously landscaped and will help to achieve a strong visual framework...the waterside areas of this site require particular attention."

However, apart from suggesting that waterfronts could be better landscaped, and that litter should be removed, respondents were generally satisfied with the visual appearance of these areas. Typical comments on this issue were:

"The waterfront would look nicer with more greenery."

"Litter and floating debris should be removed from the dock."

Apparently Costain Homes and Lovell Urban Renewal ignored many of the LDDC's planning recommendations. The LDDC also failed to enforce the conditions set out in its planning consent to developers. The result of these shortcomings was that residents were dissatisfied with several important aesthetic aspects of the developments and their waterfront areas.

(ii) Residents' interpretations of symbolic imagery

The architects who designed Wolfe Crescent and Surrey Waters adopted different approaches to the use of architectural symbolism. Whereas Piers Gough chose a theatrical theme for the Wolfe Crescent development, the Diamond Partnership did not intend their Surrey Waters development to have any special symbolic significance (Chapter 5). Neither practice used symbolic imagery to communicate Docklands' maritime history to residents. The aim of this part of the questionnaire survey was twofold. First, to assess whether residents were aware that the developments did not have a symbolic maritime association. Secondly, to assess whether Piers Gough had been able to communicate the theatrical theme of the Wolfe Crescent development to residents.

The opinions of respondents were fairly divided on whether Surrey Waters and Wolfe Crescent reflected London Docklands' maritime past. Fifty-five per cent thought that the developments did exhibit this symbolic association, although only two respondents (both from Wolfe Crescent) said that it was highly evident (Table 6.8). These findings suggest that architects were not very successful in communicating the intended meaning of their developments to residents.

Wolfe Crescent respondents were asked three additional questions to see if they recognised the development's theatrical association. Of the 26 respondents, only four thought that Wolfe Crescent had a theatrical design theme (Table 6.9), two recognised that the development's crescent shape was designed to look like a stage, and 11 thought that its crenellated garage and window surrounds were symbolic of

Table 6.8 Replies to the question "Do you think the Surrey Waters/Wolfe Crescent development reflects London Docklands' maritime history ?"

	Surrey Waters	Wolfe Crescent
Very Much	0	2
Reasonably	21	10
Not at all	9	16

Table 6.9 Replies to the question "Do you think the architect who designed Wolfe Crescent has used a theatrical theme for the development ?"

	No. of replies
Yes	4
No	19
Don't know	3

stage curtains (Plate 5(3)). However, 16 respondents thought that the development's circular windows (Plate 5(11)) were symbolic of portholes that are found in ships, indicating that they had incorrectly 'de-coded' a maritime association. It may be inferred from these answers that consumers were unable to 'read' the development's theatrical imagery.

6.43 Baltic Wharf and Merchant's Landing

(i) Residents' views on architecture and aesthetic design

Residents were asked whether they were satisfied with the architectural appearance of the Baltic Wharf and Merchant's Landing developments (Plates 5(7) and 4(18)). They were also asked whether they thought the developments' waterfront areas were visually attractive (Tables 6.10 and 6.11).

It was found that although Baltic Wharf respondents were generally more satisfied than Merchant's Landing respondents with the architectural appearance of their dwellings, very few disliked the appearance of either development. The majority (94 per cent) were also satisfied with the overall appearance of the waterfront areas (Plates 6(4a) and 6(4b)).

The questionnaire also investigated residents' views on whether the aesthetic quality of the developments could be improved. Common criticisms of the design and layout of Baltic Wharf were that it was too 'boxy' or 'common' and that developers had tried to squeeze too many dwellings into a relatively small redevelopment area. A number of

Table 6.10 Residents' views on the architectural appearance of Baltic Wharf and Merchant's Landing

	No. of replies	
	Baltic Wharf	Merchant's Landing
Extremely satisfied	28	21
Reasonably satisfied	14	32
Not satisfied	1	2

Table 6.11 Replies to the question "Do you think the waterfront at Baltic Wharf/Merchant's Landing is visually attractive?"

	No. of replies	
	Baltic Wharf	Merchant's Landing
Yes	44	51
No	3	4
Don't know	0	3

(a).



(b).



PLATE 6(4). Waterfronts at (a) Baltic Wharf and (b) Merchant's Landing, Bristol Docks, considered to be "visually attractive" by the majority of questionnaire respondents (photographs, the author, 1989)

individuals suggested that balconies, garages and gardens were all too small, and that the courtyard layout was unsatisfactory. Several also said that inadequate parking provision was a problem. Typical comments on these issues included:

"Balconies should have been provided instead of purely decorative 'safety rails': it is silly not to be able to sit outside in this location."

"It would be nice if courtyards differed more."

"The flats are too close to each other - there should have been more space between each block."

"The design allows for little contact with neighbours - high walls, fences, and too little space for each house."

"[Baltic Wharf] is too boxy - it looks like a Tesco building."

Common criticisms of Baltic Wharf's waterfront were that it was poorly landscaped and inadequately maintained. Several people noted that the area was strewn with litter and that it had been repeatedly vandalised. Typical comments included:

"The water should be kept flowing and clear of rubbish."

"Tubs of flowers are needed to enhance the waterfront's appearance."

Although only 38 per cent of Merchant's Landing respondents said that they were extremely satisfied with the architectural appearance of the development, very few made detailed suggestions on how improvements could be made. However, two issues that did concern residents were the design of the development's alleyways (Plate 6(5)), and inappropriate use of building materials. Two responses on



PLATE 6(5). Alleyway, Merchant's Landing, Bristol Docks, considered to be a security risk by several questionnaire respondents (photograph, the author, 1990)



PLATE 6(6). Façade of the General Hospital, criticised by several Merchant's Landing questionnaire respondents for its unattractive appearance (photograph, the author, 1992)

this issue were:

"[the development's] narrow alley ways and archways are attractive, but they are also a security risk."

"The use of more traditional materials and design for the flats would have improved the development's relationship with the historical dock."

Several respondents also suggested how the visual appearance of the waterfront could be improved. These included the removal of litter and debris from the dock, better landscaping, planting of shrubs and flowers, removal of dog fowl, better provision of dockside seating and renovation of derelict buildings opposite the development (Plate 6(6)). Typical responses on this issue were:

"Bristol City Council should pick up litter on a regular basis - I have seen them only once in the last five years."

"The façade of the General Hospital [opposite] should be improved."

"Residents have placed large tubs of flowers outside their houses, but vandalism has caused us and others to remove them. The Friday and Saturday night 'boozers' are the cause of the damage."

These findings suggest that while some relatively minor changes, such as the removal of litter and dog fowl, would improve the visual appearance of the waterfronts, more substantial changes are necessary to dramatically improve the attractiveness of these areas. However, as it is now over six years since the developments were completed, developers are not responsible for additional landscaping or maintenance work. It is therefore unlikely that residents' recommendations will be carried out.

(ii) Residents' interpretations of symbolic imagery

HM, who designed Baltic Wharf, are the only architects considered by the present study to have used symbolic imagery to evoke docklands' historical maritime connection. The aim of this part of the questionnaire survey was first, to assess whether Baltic Wharf respondents had identified these detailed symbolic references; and secondly, to examine whether they felt these features successfully embodied Baltic Wharf's historical maritime association. To assess whether residents from Merchant's Landing were aware that the development did not have any special symbolic maritime association, they were asked to give their views on the development's connection with Bristol's sea-faring past (Table 6.12).

Table 6.12 shows that many respondents had 'mis-read' Baltic Wharf's and Merchant's Landings' symbolic imagery. 31 per cent of Baltic Wharf respondents failed to identify the development's maritime design theme. 40 per cent of Merchant's Landing respondents incorrectly assumed that the scheme included detailed references to Bristol's maritime past.

Respondents were also asked for their views on the use of symbolic architecture and symbolic devices. Table 6.13 confirms that the majority of respondents thought that Baltic Wharf's promenade walkway (Plate 5(14)) and 'sea-faring' name enhanced the development's maritime character. However, other factors, such as its 'seaside' architecture and mock hoist towers (Plate 5(13)), were seen as less important. These findings suggest that while respondents had a general understanding of the development's design theme, many failed to identify its detailed symbolic imagery.

Table 6.12 Replies to the question "Do you think the Baltic Wharf/Merchant's Landing development reflects Bristol's maritime history ?"

	No. of replies	
	Baltic Wharf	Merchant's Landing
Very much	4	1
Reasonably	29	22
Not at all	15	32
Don't know	1	0

Table 6.13 Features contributing to Baltic Wharf's maritime character

	No. of replies
Inclusion of promenade walkway	37
The development's 'sea-faring' name	23
Erection of statues with a maritime theme	19
Erection of 'mock towers' used for loading grain	10
Use of architectural building styles that remind residents of a seaside resort	7

To comply with Bristol CPA's plans for the redevelopment of the Merchant's Landing site, Ideal Homes were required to construct a 'promenade-style' walkway (visible in Plate 3(8)). Thus, while the scheme's architects - the Ronald Toone Partnership - did not intend to draw attention to the development's maritime association, the CPA ensured that the scheme acquired at least one maritime characteristic. Moreover, the results of the questionnaire survey suggest that the majority of respondents agreed with the CPA's view that the walkway significantly enhanced the development's maritime character (Table 6.14). However, fewer respondents thought that Merchant's Landings' sea-faring association was emphasised by the development's name (Table 6.14). A typical comment on this issue was "Naming the development Merchant's Landing was purely a marketing exercise".

Table 6.14 Replies to the question "Do either of the following features contribute to Merchant's Landings' maritime character?"

	No. of replies
Inclusion of a promenade walkway	47
Naming the development Merchant's Landing	18

The results of this part of the questionnaire survey show that HM were moderately successful in communicating Baltic Wharf's maritime design theme to residents - 67 per cent of respondents said that the development reflected Bristol's maritime past. Consumers were less able to 'read' HMA's detailed symbolic references, suggesting that these 'signs' did not emit a coherent discourse on the development's historical association with the grain-

exporting industry. Moreover, although Merchant's Landing does not contain any specific examples of symbolic maritime imagery, 49 per cent of respondents felt that the development was a reasonable reflection of Bristol's seafaring legacy. This suggests that many residents did not have a clear understanding of the development's 'intended meaning'.

6.44 Spillers and Bakers warehouse and Tarmac Phase Two development

(i) Residents' views on architecture and aesthetic design

Residents were asked whether they were satisfied with the architectural appearance of the Spillers and Bakers warehouse and Tarmac Phase Two development (Plates 4(14) and 5(6)). In addition they were asked whether they thought the Bute East Dock waterfront was visually attractive (Tables 6.15 and 6.16).

Tables 6.15 and 6.16 confirm that although the Spillers and Bakers warehouse respondents were generally more satisfied than Phase Two respondents with the architectural appearance of their dwellings, very few people actually disliked the appearance of either development. Respondents were generally less satisfied with the visual appearance of the waterfront - 23 per cent said that it was unattractive.

Respondents were also asked whether they felt the aesthetic quality of the developments and waterfronts could be improved. Many said that they could. Factors most commonly mentioned were the inadequate relationships between new buildings at Atlantic Wharf and the site's remaining

Table 6.15 Residents' views on the architectural appearance of the Spillers and Bakers warehouse and Tarmac Phase Two development

	No. of replies	
	Spillers and Bakers warehouse	Phase Two development
Extremely satisfied	10	5
Reasonably satisfied	6	19
Not satisfied	0	3

Table 6.16 Replies to the question "Do you think the waterfront at Bute East Dock is visually attractive?"

	No. of replies	
	Spillers and Bakers warehouse	Phase Two development
Yes	11	17
No	3	6
Don't know	0	3

historical buildings, the high building density of new dwellings, and inadequate communal areas. All of these issues are considered in the Section 52 Planning Agreement for the Atlantic Wharf site. Paragraph 3.1 makes the following recommendation on building density.

"The development, in keeping with its surroundings, will maintain an urban scale with a high density of development particularly fronting onto the dock."

However, several respondents expressed dissatisfaction with this aspect of the scheme. A typical remark was "Too many buildings have been packed into a small space".

The Section 52 Agreement also notes that the relationship between the site's new buildings and those remaining should be carefully considered:

"The general character of the three remaining warehouses will be retained and enhanced by the surrounding development which will reflect the size and elevations of the buildings."

However, several respondents suggested that this relationship had not received sufficient attention. One stated that: "The design of the development bears no relationship to the history of the location or the remaining historic building. The developers should have given greater emphasis to a nostalgic influence".

Finally, the Section 52 Planning Agreement makes the following recommendation on the issue of open space:

"Adequate provision [should be] provided for public open space throughout the scheme."

Again respondents' comments on this issue suggest that many were disappointed with this aspect of the scheme. A typical comment was "There is a real need for more open space/green areas."

Respondents also suggested that three improvements were necessary to increase the visual attractiveness of the waterfront. These included the removal of floating debris from the dock, better landscaping and better maintenance of footpaths. Typical responses were:

"The water is filthy and should be cleaned."

"The accumulation of debris has spoiled the waterfront's aesthetic value."

The Section 52 Agreement makes no detailed recommendations on how the waterfront should be landscaped. However, many respondents were disappointed that the entire area had been 'hard' landscaped and that no trees and shrubs were planted (Plate 6(7)). Since the Section 52 Agreement makes no recommendation as to whether the dock or waterfront should be cleaned, it is unlikely that respondents' suggestions on this issue will be carried out in the foreseeable future.

These findings show that many respondents held definite views on how the aesthetic quality of the Atlantic Wharf scheme could be improved. Moreover, these opinions were frequently found to be at variance with the views held by both planners and developers.



PLATE 6(7). Waterfront, Bute East Dock, Cardiff, criticised by many questionnaire respondents for its inadequate "soft landscaping" (photograph, the author, 1992)

(ii) Residents' views on architectural symbolism

An aim of this part of the questionnaire survey was to assess whether respondents were aware that developers and architects had not used symbolic imagery to evoke the developments' historic maritime association (Table 6.17).

Table 6.17 Replies to the question "Do you think the Spillers and Bakers warehouse/Tarmac Phase Two development reflects Cardiff's industrial maritime heritage ?"

	No. of replies	
	Spillers and Bakers warehouse	Phase Two development
Very much	4	0
Reasonably	9	13
Not at all	3	14

Table 6.17 shows that respondents held fairly diverse views on this issue. Whereas several thought that the Spillers and Bakers warehouse strongly reflected Cardiff's maritime heritage, none of the Phase Two respondents agreed with this view, and over half said that the development did not have any significant maritime connection. It would seem therefore that the majority of respondents were unaware that the architect who designed the Spillers and Bakers warehouse conversion - Duncan Lawrence - had decided against using a maritime design theme. Approximately half of the Phase Two respondents thought that HMA had not used symbolic maritime imagery. This suggests that HMA were more successful than Duncan Lawrence in conveying the intended meaning of their development to respondents.

6.45 Summary

Two clear patterns have emerged from an analysis of the relationship between agents and consumers. First, it was found that while the majority of respondents were satisfied with the architectural appearance of the developments, few were able to understand their symbolic significance. For example, although 96 per cent of Wolfe Crescent respondents said that they were either extremely satisfied or reasonably satisfied with the architectural appearance of the scheme, only 15 per cent were able to identify its theatrical design theme. Similarly, while 96 per cent of individuals were at least reasonably satisfied with the architectural appearance of Merchant's Landing, 49 per cent incorrectly assumed that the development had a symbolic maritime association. This finding suggests that many consumers were able to read only one of Post-Modernism's doubly-coded strands of meaning - its superficial or explicit meaning. The second of these strands - its implicit or symbolic meaning - was mainly either ignored or misunderstood by the majority of people. Thus, if agents are to be more effective in conveying the symbolic meaning of their developments to 'consumers', it is necessary that they improve the clarity of the 'signs' they produce.

Secondly, many respondents held firm views on how the aesthetic quality of residential developments and waterfronts could be improved. Common criticisms were that the layouts of the developments were poor, building densities were too high, and that parking and communal areas were inadequate. Generally it was felt that developers had tried to maximise their profit from each development while giving little thought to the needs of residents. Many respondents said they were also disappointed that developers had paid so little attention to the layout and design of

dockland waterfront areas. Most felt that the visual quality of these areas could be substantially improved by landscaping and removal of litter.

6.5 Docklands' 'sense of place'

6.51 Introduction

The idea of the townscape as the 'objectivation of the spirit of a society' can be traced back to the work of German philosophers in the 1930s but first appeared in Geography in the work of Schwind (1951). The spirit of a society is objectivated in the historico-geographical character of the townscape and becomes the genius loci. In Conzen's (1966) view, it is the genius loci that enables individuals and groups to 'take root' in an area and acquire a sense of the historical dimension of human existence (Whitehand, 1988, p.146). Various studies in environmental psychology, and particularly those of Smith (1974, 1975), support Conzen's argument. Smith suggests that there is a human need for visual stimuli to provide 'orientation' - the observer's awareness of his own location in a given environment. These needs can be met by historical areas that have survived relatively unchanged, and which provide symbols of stability. Lord Clarke (1969) also argues that individuals must feel "that [they] belong somewhere in space and time", and that it is a natural reaction to look both forward and back in an attempt to find "a sense of permanence".

Although Conzen's ideas have not been developed into a working theory of townscape management, there is evidence that a thorough understanding of the historical and spatial structures of townscapes is necessary. Two examples serve

to illustrate this point. The process of comprehensive redevelopment that took place in Britain during the 1950s and 1960s led to the displacement of many long-established inner-city communities. Unfortunately, practically no consideration was given to the fact that these communities were historically and functionally interrelated with their physical surroundings. In other words, Britain turned its back on its genius loci (Whitehand, 1987, p.147). During the 1980s, a similar pattern of comprehensive redevelopment has occurred in many inner-city areas. However, while in this case it is mainly former dockland sites that have been rejuvenated, the process of regeneration and its effect on existing communities has been much the same as before.

Although the process of comprehensive redevelopment is clearly at variance with Conzen's ideals of townscape conservation, there is general agreement that historical townscapes are of greater educational and cultural value to residents than Modern townscapes. However, Jencks (1987) suggests that it is not just historical townscapes which possess this educational and regenerative influence, but also Post-Modern townscapes. According to Jencks, Post-Modernism has a "rich cultural and contextual meaning" which is popular with those that have rejected Modernism's "rationality and austerity". Taking this argument one stage further, Krier (1984, p.91) suggests that Post-Modernism is popular with docklands' residents because it "helps 'rehumanise' [these areas] by consciously designing small-scale, medium density developments that rekindle the intimacy of an older social world".

Residents' views on the cultural value of Post-Modern townscapes was examined in greater detail by the questionnaire survey.

6.52 Residents' views on docklands' sense of place

The notion of 'sense of place' is not readily explored by direct questioning of members of the public. Indirect means, such as a battery of questions on various aspects of the concept, are preferable. However, since the questionnaire survey covered so many issues and it was important not to reduce the number of respondents by presenting them with an unduly long questionnaire, it was not practicable to include a variety of questions relating to this one concept. Instead a single direct question was posed on the more readily appreciated, but strongly related, notion of the extent to which places were 'soulless'. Responses to a question on whether docklands were 'soulless' places in which to live are provided in Tables 6.18-6.20.

The survey revealed that only 27 per cent of all respondents felt that docklands were 'soulless' areas in which to live. Moreover, several of those who made additional comments on this issue suggested that docklands resembled "village communities". Others suggested that docklands were friendly places to live provided that individuals made an effort to communicate with other residents. Typical responses were:

"If people come here [Baltic Wharf] to shut themselves away then they will make it soulless like anywhere else."

"The problem with all urban areas is that people do not work where they live so residences are empty during the day."

"It [Baltic Wharf] is a village community - and you also have to make an effort to communicate with others."

"Many residents moved in within a short period of time. It [Merchant's Landing] has a friendly village atmosphere."

Table 6.18 Replies to the question "Is Surrey Waters/Wolfe Crescent a 'soulless' living environment ?"

	No. of replies	
	Surrey Waters	Wolfe Crescent
Agree	5	4
Disagree	20	21
Don't know	5	3

Table 6.19 Replies to the question "Is Baltic Wharf/Merchant's Landing a 'soulless' living environment ?"

	No. of replies	
	Baltic Wharf	Merchant's Landing
Agree	11	6
Disagree	30	46
Don't know	2	2

Table 6.20 Replies to the question "Is Atlantic Wharf a 'soulless' living environment ?"

	No. of replies	
	Spillers and Bakers warehouse	Phase Two development
Agree	6	5
Disagree	9	16
Don't know	1	2

"It is what you make of it. I have much soul, others do not."

Although the majority of respondents disagreed that docklands were soulless living environments, this is not a view shared by Crilley (1989) and Frampton (1985). Crilley suggests that docklands' community atmospheres are created through an 'imagineering' process that recaptures only the "feeling and ambience of the past rather than their genuine histographic sentiment". Thus, for Crilley docklands are contrived urban environments that lack a 'spirit of convivialism'. Frampton (1985, pp. 16-30) agrees with this view. He suggests that Post-Modernism does not restore a sense of place, but merely caters for the needs of a consumer society who feed-off its "nostalgic historicism and ersatz and kitsch" meanings. Indeed, it is possible that respondents were influenced by the process described by Crilley and Frampton, and that their views on docklands' community spirit had little to do with Conzen's intended meaning of 'sense of place' which is concerned with the historico-geographical character of the townscape and its genius loci. Unfortunately, it is difficult to ascertain from the present study how respondents interpreted the word 'soulless'. Further research - possibly involving interviews with residents - is needed to determine whether the notions of 'community spirit' and 'sense of place' are valuable concepts to apply in the context of dockland residential areas.

6.6 Conservation of dockland townscapes

6.61 Introduction

The final issue to be examined by the questionnaire

survey is that of townscape management. Conzen's ideas on the importance of townscape management were first presented in a paper entitled 'Historical townscapes in Britain: a problem in applied Geography' (1966). In this paper, Conzen suggests that the key attribute of a townscape that requires management is its historical expressiveness or historicity which is made up of three major factors. These are town plan, building fabric and land utilisation. These elements are regarded as to some extent comprising a hierarchy in which the building forms are contained within the plots or land-use units, which are in turn set in the framework of the town plan (Whitehand, 1988, p.146).

A number of recent studies have suggested that townscape change is constrained to a considerable degree by the existing built fabric, and that at any given time the town plan and building form combine to create a morphological frame within which further development usually takes place (Conzen, 1975; Freeman, 1986; Whitehand, 1984; Larkham, 1988). However, during periods of comprehensive redevelopment, the morphological frame exerts very little control over development, and as a result building plots are amalgamated and building fabric is destroyed (Larkham, 1988, p.17). This pattern of widespread destruction is common in docklands where it has often been impractical to preserve derelict and semi-derelict industrial buildings and warehouses by restoring these buildings to their original state and use. Instead, buildings have frequently been conserved, which enables some changes to be made to both their physical structure and function. A number of researchers, including Lewis (1975) argue that conservation is preferable to preservation because it enables the townscape's 'aesthetic texture' to be retained without precluding a change in the use of the building. Similarly, Smith (1975) suggests that because people rarely make a

connection between the visual appearance of a building and its function, it is unnecessary to preserve buildings in toto.

There is not general agreement, however, that by conservation and façadism the 'patina of age' or 'aura of history' of townscapes can be adequately maintained (Larkham, 1988). The aim of the final part of the questionnaire survey was to examine the issue of townscape management in greater detail by assessing respondents' views on the conservation of docklands' remaining buildings and warehouse façades.

6.62 Survey results

The study areas considered by the questionnaire survey have retained very little of their existing physical fabric. For example, only three of Atlantic Wharf's original warehouses have been refurbished, and at Merchant's Landing only the façade of the Byzantine warehouse and nine townhouses in Bathurst Parade have been restored. The London study sites had undergone complete redevelopment.

Merchant's Landing respondents were asked whether they were satisfied with the restoration of the Byzantine warehouse's façade (Plate 3(8)). Table 6.21 confirms that the majority - 97 per cent - were either reasonably satisfied or extremely satisfied with this aspect of the building. Table 6.22 shows that the majority - 98 per cent - were also either extremely satisfied or reasonably satisfied with the restoration of townhouses in Bathurst Parade (Plate 4(17)). The survey revealed that 94 per cent of respondents were generally satisfied with the

Table 6.21 Replies to the question "How satisfied are you with the restoration of the warehouse façade in Bathurst Parade ?"

No. of replies	
Extremely satisfied	38
Reasonably satisfied	18
Not satisfied	2

Table 6.22 Replies to the question "How satisfied are you with the restoration of townhouses in Bathurst Parade ?"

No. of replies	
Extremely satisfied	40
Reasonably satisfied	14
Not satisfied	1

Table 6.23 Replies to the question "How satisfied are you with the restoration of the Spillers and Bakers warehouse's stone and brick façade ?"

No. of replies	
Extremely satisfied	10
Reasonably satisfied	5
Not satisfied	1

restoration of the Spillers and Bakers warehouse (Table 6.23).

Several respondents suggested that the renovation of these buildings could have been improved in two ways. First, by removing the attic roof extension from the Spillers and Bakers warehouse (Plate 4(14)). Secondly, by making the rear of the Byzantine warehouse more visually attractive (Plate 4(19)). Typical views were:

"The addition of the top floor [attic roof extension] is not at all 'sympathetic' with the rest of the building."

"The back of the Byzantine block (of which my flat is part) is not visually attractive."

"The rear aspect of the Byzantine warehouse is very drab."

In light of the disagreement that occurred between Lovell Urban Renewal and the CBDC over the addition of the attic roof extension, it is significant that residents particularly disliked this feature. It is also interesting that while the majority of respondents were satisfied with the restoration of the Byzantine warehouse's façade, several thought that the building's rear aspect was unattractive.

It may be inferred from these findings that respondents did not make a connection between the visual appearance of buildings and their functions. Although none of the buildings in the study areas had been preserved (ie. restored to their original state and use), respondents did not comment specifically on this point. Generally, respondents were also satisfied with the conservation of docklands' remaining historic buildings. A possible

explanation of this finding is that buildings such as the Spillers and Bakers warehouse have helped residents to establish a kind of 'stability zone' (Toffler, 1970) or continuum between past and present. These buildings act as 'landmarks' or 'nostalgic reminders' of less complicated and possibly more secure times.

6.7 Conclusion

It is possible to draw six main conclusions from the results of the questionnaire survey. The first of these concerns the broad social and demographic structure of docklands' populations. It was found that respondents were typified by two main characteristics: they were between 25 and 35 years of age, and many had no children. Replies were received from roughly equal numbers of house and flat owners.

The second conclusion concerns why people chose to live in docklands, and whether their decisions to move had been influenced by advertising and media campaigns that promoted an 'attractive image' of docklands. It was found that although the LDDC had spent in excess of £2 million on a national advertising campaign, this 'imagineering' process had only a limited influence on people's decisions to move to London's Docklands. Of far greater importance was the affordability of property in this area of the city. The survey also revealed that although the CBDC and Bristol CPA had spent less on advertising than the LDDC, more respondents had moved to Cardiff and Bristol docklands because they perceived that these areas were attractive places to live. Additionally, some respondents from Cardiff and Bristol had relocated to docklands because of their jobs, and many respondents from all areas said that

divorce and/or accessibility to leisure and social activities had influenced their decisions to move. Thus, while the 'imagineering' process is of some importance, its role in influencing people to move to dockland areas is evidently less important than Crilley (1989) suggests.

The third conclusion concerns respondents' views on the design and layout of dockland developments and their waterfront areas. It was found that while the majority of respondents were satisfied with both of these aspects, some felt that developers could have made a number of improvements. Several respondents complained that houses and flats were too small. Others said that the provision of car parking spaces and gardens were both insufficient, and that the landscaping and upkeep of waterfront areas were extremely disappointing. Respondents made a number of practical suggestions on how these shortcomings could be rectified, including the removal of litter from waterfront areas, cleaning footpaths and dock basins, planting more trees and shrubs and introducing neighbourhood watch schemes to reduce the incidence of vandalism to cars and properties. Although some respondents said they were dissatisfied with the architectural appearance of dockland developments, few gave detailed accounts of the type of changes that they felt were necessary to improve each scheme. Respondents may have experienced some difficulty in answering this part of the question.

The fourth conclusion concerns whether respondents were able to understand the symbolic significance of dockland developments. It was apparent that many could not. For example, although Halliday Meecham intended the Baltic Wharf development to evoke Bristol docklands' maritime association, 31 per cent of respondents failed to recognise

this symbolic meaning. Respondents were also confused by other aspects of the schemes' symbolic meanings. For example, nearly all of the Wolfe Crescent respondents incorrectly assumed that the development's round windows were symbolic of ship port holes. In a similar vein, 85 per cent failed to recognise that Wolfe Crescent's main architectural influence was derived from theatrical imagery. These findings show that those responsible for creating docklands' built environment had generally failed to convey the intended meaning of dockland developments to residents.

The fifth conclusion concerns 'sense of place' in dockland areas. Some difficulty was encountered in using the questionnaire survey to explore this Conzenian concept in dockland residential areas and although 73 per cent of respondents said that docklands were not 'soulless' living areas, further research is needed to give a meaningful interpretation of this result.

Finally, it is possible to comment on residents' views on the conservation of docklands' heritage. It was evident that the majority of respondents were satisfied with the appearance of buildings that had been conserved. One possible interpretation of this finding is that historic buildings act as 'stability zones' for residents who derive a feeling of belonging or 'historical dimension' from their existence.

CHAPTER SEVEN

CONCLUSION

7.1 Introduction

Four issues are considered in this final chapter. First, the problems encountered in the research are reviewed. Secondly, the findings of the study, as detailed in Chapters Three, Four, Five and Six, are discussed. Thirdly, the implications of these findings are examined. Finally, observations are made on possible directions for future research.

7.2 Research problems

Physical changes to the built fabric can be identified from sources such as maps and planning applications, and from direct observation of intact structures. The reasons for these changes are more difficult to identify. In terms of research procedures, the study has shown that the detailed examination of the roles of those responsible for creating the built townscape and the relating of these to townscape changes is a worthwhile, though sometimes problematic procedure. In particular, the interpretation of qualitative questionnaire survey data and information obtained from interviews with agents has proved both difficult and time-consuming. However, as Pompa (1988, p.269) suggests, this is true of any investigation of decision-making processes.

At a more detailed level, planning file data have provided a fairly useful source of information on the roles of CPAs, developers and architects. A drawback of using planning files, however, is that invariably some records are missing, not filled in properly, or even in rare cases, destroyed. In the case of London, the LDDC was not willing

to allow its files to be used for research purposes. It was therefore particularly important in this case to interview planning officers from both the Development Corporation and Southwark Borough Authority to obtain sufficient information on development control activities. Semi-structured interviews were also conducted with developers and architects, providing an invaluable insight into the decision-making roles of these agents. From a practical aspect, however, this research method could probably be improved by using a tape machine to record detailed replies to questions, despite the inhibitions of respondents that might be engendered. The questionnaire survey was relatively successful, demonstrating that residents are interested in expressing their views on the physical quality of dockland townscapes. Fifty per cent of those who were asked to take part in the survey returned the questionnaire. Two difficulties were, however, encountered. The first concerns the meaningful interpretation of such large quantities of qualitative data. The second is that this approach is not suitable for examining fairly complex issues, such as whether dockland townscapes enable residents to 'take root' in an area, and whether people derive a 'sense of place' from docklands' remaining historical buildings. Investigation of these important Conzenian notions should perhaps be the subject of future research.

7.3 Summary of research findings

In Section 1.7 a number of research questions were outlined. The answers to some of these questions have been provided within individual chapters. In other cases questions have been addressed less directly. It is evident, however, that some of these findings are strongly inter-related. The aim of Sections 7.31-7.35 is to summarise and integrate these research findings.

7.31 Urban regeneration, UDCs and CPAs

'Urban regeneration' was a phrase first coined in the late 1970s, apparently borrowed from urban development projects in North America (CLES, 1990, p.13). These projects had as their underlying aim the attraction of private sector developers into run-down urban cores, using public sector finance and government support as 'levers'. In U.K. terms, urban regeneration has come to mean "any sort of urban redevelopment of derelict areas or buildings, undertaken primarily by the private property developers" (CLES, 1990, p.13).

The spread of industrial dereliction and the restructuring of the economic base of inner-city industrial areas in the U.K. in the 1970s led to a diagnosis from the Conservatives that service sector based commercial property development and private investment were "the only saviours for the inner-city" (Ambrose, 1986). Indeed, inner-city problems were seen by the Government in the 1980s as partly due to a 'loss of confidence' of the private property investors in urban areas (CLES, 1990, p.13). In the early 1980s, Michael Heseltine, Secretary of State for the Environment, argued that if investors could be encouraged 'back in', inner-city problems would be alleviated. He suggested that the reason the private sector was not investing in inner-cities was because such investment was actively discouraged by local authorities.

The 1980 Local Government Planning and Land Act, which led to the setting up of the first UDCs in London and Liverpool in 1981, dealt with relaxing planning controls, setting up inducements for private capital and controlling public spending. Large sums of public money were channelled

to the LDDC and MDC so that they could purchase and prepare their UDAs. Both UDCs also received a budget for 'pump-priming' private investment. This enabled them to offer developers and builders a range of incentives, including low ground rents and 200 year leases. These incentives were necessary because developers and financiers were unused to redevelopment projects of this size. Prior to the redevelopment of docklands, most had only been involved in relatively small-scale, piecemeal redevelopments such as those on the fringes of the central business districts.

Because of the success of the LDDC and MDC, the Government decided to designate five more UDCs in 1987, and a further four in 1988-89. Yet unlike their first generation counterparts, these second and third generation UDCs did not acquire statutory development control powers to regenerate their UDAs (CLES, 1990, p.14).

The physical characteristics of the three dockland areas examined in this thesis are broadly similar. At the beginning of the 1970s each area had completed its first cycle of urban usage. The areas were run-down, had low existing use values, large ownership units and derelict townscapes. In the case of London and Cardiff docklands, the LDDC and CBDC were largely responsible for initiating a second cycle of urban regeneration. However, in Bristol it has been the CPA's job to both initiate and control the redevelopment of the City Docks.

The overall aim of UDCs is to attract private investment. In order to achieve this they use both marketing and leverage. The LDDC's strategy for redeveloping Docklands was to acquire the dock area from the five East London

Borough Authorities and PLA, reclaim it and sell it to private developers. Out of 2,500 acres (1012 hectares) of developable land, the LDDC acquired nearly 2,000 acres (809 hectares) through vesting orders and CPOs. It also attracted approximately £4 billion of private investment (CLES, 1990, p.75). The CBDC adopted a similar approach to redevelopment. Its remit was to put Cardiff on the international map as a 'superlative maritime city'. To achieve this objective it received approximately £73 million of public-sector money, and also attracted £34 million of private investment (CLES, 1990, p.65; Tweedale, 1988, p.193). In purely economic terms, therefore, the redevelopment of both areas has been a success. However, in reality, evaluating the success of dockland regeneration is not this simple. Clark (1988), for example, warns against narrow evaluations that are conventionally based upon quantities and speed of development, rising land values or profits, jobs created, amount of heritage protected or vitality generated. He also suggests the need to emphasise what opportunities have been foregone in the regeneration programme.

The present study has shown that in terms of the physical or townscape aspects of regeneration, the LDDC has foregone the opportunity of creating a high quality residential environment. This view is supported by professional organisations such as the Royal Town Planning Institute (RTPI) and the RIBA, who have complained about Docklands' lack of coherent planning and design, and have referred to the area as "a missed opportunity" (RIBA, quoted in CLES, 1990). The LDDC has paid virtually no regard to the 1976 London Docklands Strategic Plan or the Local Plans since prepared by the Boroughs. It has also encouraged speculative private-sector housing, and a totally flexible, laissez-faire attitude towards design control.

When the CBDC was established in April 1987, South Glamorgan County Council and Cardiff City Council had already drawn up a £50 million scheme which involved turning 100 acres (41 hectares) of derelict dockland into industry and housing development. Tarmac plc. had also secured £9 million in the form of an urban development grant, and had started to rejuvenate part of the Atlantic Wharf site. Although the CBDC is committed to achieving "firm and consistent [planning] control" (Edwards, 1986), it is not the planning authority for the Cardiff Bay UDA. Essentially, it has worked alongside the CPA as a 'shadow' planning body and has provided design guidelines for developers intending to redevelop sites within the UDA. This study has shown that while its Redevelopment Strategy is basically market-oriented, the CBDC has encouraged high design standards and has also ensured that "Cardiff docks [have not gone] the same way as London docks" (Edwards, 1986).

Unlike the LDDC and CBDC, who have pursued demand-led approaches towards redevelopment, Bristol CPA has adopted an interventionist or 'forward' planning approach based on the long-term benefits of rejuvenation. In fact, the central thrust of the development industry's criticisms of Bristol's plans for redevelopment is that they have slowed the pace of redevelopment too much, and that they have inadvertently failed to attract large-scale commercial development. However, in terms of the townscape, the CPA's approach to design control has reaped considerable rewards. This view is supported by Punter (1992, p.73), who notes that:

"Design control has changed the scale, content, form, conservation elements and architectural quality of schemes for the better. In places, especially where listed buildings have been restored as part of the scheme, the new ensemble creates a genuine excellence."

It is clear that Bristol CPA's Design Section have shaped docklands' architecture to a considerable degree. They have also influenced the choice of building materials and the layout of developments. Perhaps, most importantly, the principles of their design control policies have been derived from an analysis of locality, and the specific character of sites.

7.32 Relationships between agents of townscape change

An analysis of the planning history of docklands reveals that there is a complex interaction of competing interests at work. They include Central Government in the shape of the LDDC and CBDC, applicants, land owners, developers, architects, the planning system in the form of the Borough Authorities and CPAs, residents of dockland developments, and amenity groups and societies.

A number of clear relationships between agents of change was identified. In all cases, the initiators of development were large, national development companies. These companies normally had a head office in London and regional offices throughout Britain. Most initiators had strong 'standing' relationships with external architectural practices. Occasionally, however, architects were recommended to developers by the planning authority or UDC, or were already involved on the site. Developers did not use their own in-house or company architects for dockland projects. The reason for this is that developers felt they were more likely to obtain planning permission if they commissioned well-known external practices. This differs from Pompa's (1988) finding in residential south Birmingham that large developers regularly employ in-house architects.

The relationships between UDCs and CPAs were found to be complex. The LDDC was set up against the wishes of the Boroughs of Newham, Tower Hamlets and Southwark. They petitioned the House of Lords in 1980, but the Select Committee recommended the establishment of the LDDC because they thought a 'single-minded' agency was needed to cope with the scale of dereliction facing the area. Major disagreements occurred over planning when the LDDC objected to the Borough Authorities' Local Plans. There were also disagreements over luxury housing schemes. However, unlike the second and third generation UDCs, Southwark Borough Authority does not have an agency agreement with the LDDC for processing planning applications. This means that on occasions the LDDC has determined applications before Southwark has been able to give its observations on a particular scheme. Relationships with the LDDC improved slightly in 1988 when the Corporation announced that it would spend £70 million on social housing schemes. Then in 1990 it became apparent that it would be unable to fund these schemes, and relationships have since deteriorated.

In the case of Cardiff, South Glamorgan County Council, Cardiff CPA and the Vale of Glamorgan Borough Council have all broadly supported the CBDC and have all nominated members to serve on its Board. Although the CBDC has an agency agreement with the CPA, it is able to ask the Secretary of State for Wales to intervene on its behalf if an agreement cannot be reached over planning permission. To date the CBDC has not exercised this right of 'veto'. Although the CBDC has prepared a series of area planning briefs and policies for urban quality, these are not statutory planning documents.

Although a third generation or mini UDC was established in Bristol in December 1988, at the time of data collection for this thesis, the BDC had not issued any plans for redeveloping the dockland part of its UDA.

The relationships between developers and planners demonstrate some clear patterns. Developers of sites in London received written development briefs from the LDDC. Verbal discussions were also conducted between both parties before an application for planning permission was made. Developers of sites in Cardiff also received written development briefs. However, these were prepared by Cardiff CPA rather than the CBDC. Prior to the submission of a planning application, regular meetings were held between the developer, CPA and CBDC. But, the CBDC rarely communicated directly with the developer once a formal application had been made. Instead, it contacted the CPA if it wanted to make any observations or comments on an application, and then the CPA passed this information on to the developer. Developers of sites in Bristol did not receive written development briefs from the CPA. Nevertheless, verbal negotiation, both before the submission of an application and during its processing was important.

It can be argued that the discussion and negotiation between planners and developers that was evident in the study areas should have aided the creation of redevelopments that were satisfactory in townscape terms. In practice, this was only found to be true to a limited extent. Pompa (1988, p.265) suggests that it is because planning authorities have so few powers relating to townscape matters that this problem arises. The present study has shown, however, that although the LDDC has far greater design control powers than CPAs, it rarely uses these to

influence the design and style of buildings. This is because the LDDC is committed to removing any obstacles, including rigid design conditions, that may deter investment in Docklands. Essentially, the LDDC has taken development control and design control into its own hands and has ensured that it meets the development industry's 'check-list' of needs.

Although it is evident that the CBDC has tried to shape the aesthetic quality of the Atlantic Wharf redevelopment, this has proved difficult for two reasons. First, Tarmac, the project's lead developer, tried to maximise the extent of the most profitable land uses. Negotiations between Tarmac and the County Council were evidently quite difficult at times, and despite securing the £9 million urban development grant, Tarmac were still unwilling to build either low-cost starter homes or community facilities. Secondly, although the CBDC has made recommendations on the design, layout and composition of proposed developments, because it is not a planning authority, the decision whether to grant or to refuse planning permission has remained the responsibility of Cardiff CPA.

Bristol differs from London and Cardiff in that the CPA has initiated and managed the regeneration of the docks, without intervention from a UDC. Punter (1992, p.75) suggests that left to their own devices, the developers of dockland sites in Bristol would have produced "banal anyplace architecture or the current design clichés and styling already applied elsewhere". However, because of the efforts made by Bristol CPA's Design Section, he notes that "a genuine sense of identity and coherence has been successfully restored to the City Docks". To some extent Punter's findings are supported by the present study. It

has only been since the mid-1980s, however, that planners have adopted such a vigorous approach towards design control. In the 1970s and early 1980s the City chose several unsuitable developers for key dockland rejuvenation schemes. This caused an inevitable delay in the implementation of its dockland redevelopment programme, and it was not until the publication of the Local Plan in 1982 and Planning Difficulties report in 1985 that any significant improvements were recorded.

7.33 Layout, and design of developments

The layout and design of redevelopments in the study areas demonstrate two similarities. First, courtyard layouts were regularly used by developers on account of their low-cost and, by current standards, aesthetic attractiveness. Layouts utilizing straight or curved culs-de-sac were rejected by some planners, who felt that they did not contribute sufficiently to docklands' 'community' image. Secondly, standardised housing was popular because of its cheapness compared to bespoke designs. Sometimes developers used computer-aided design systems to create individual buildings from standard designs. However, this was only done if there were doubts about obtaining planning permission. It is evident, therefore, that developers aimed to maximise profits from redevelopment projects, and that if design was considered at all, it was a very low priority.

Several groups of agents of change - developers, architects, CPAs, UDCs, as well as the residents of docklands - were responsible for decisions on the design and style of developments. The real decision-making on this issue was most frequently made either by the developer or the architect. This was a decision based mainly on

marketing, and the type of design that could be sold to the public. Although Larkham (1986) suggests that the provenance of agents can sometimes influence the type of decisions that are made, this did not apply in the cases examined in the present study. It was found that styles that resulted from decisions made by developers who were located close to the site of redevelopment were not different from those that resulted from decisions made by developers who were located far from the site of proposed change. However, this is explained partly by the fact that developers were national companies who had regional offices in areas of dockland redevelopment. None of the developers were small companies who had 'local roots' or who were imbued with a 'sense of place' for the areas they redeveloped (Whitehand and Whitehand, 1984, p.245).

In terms of the types and designs of dwellings, the responsibility for decision-making was found to lie mainly with the developer who then gave this information to the architect either verbally or in writing. Detailed design briefs were rarely used. This differs from Pompa's (1988) finding in south Birmingham that developers frequently used design briefs to give their architects information on the layout and style of developments and on the use of building materials. It is not clear, however, why this difference exists.

Pompa (1988, p.262) suggests that the likes and dislikes of the house-buying public also have some influence on the type and design of dwellings. In the case of docklands, developers and UDCs assessed the sort of dwellings they thought would appeal to the middle-class sector of the house-buying public. They then built up demand using an elaborate media advertising campaign.

People subsequently reacted to this either by purchasing or not. It follows, therefore, that while the buying public are rarely innovators, they are indirectly in a position to affect the aesthetic qualities of development.

7.34 Architecture

The rejuvenation of Britain's decaying and moribund dockland sites has presented developers and their architects with unprecedented architectural opportunities. Because many dockland sites were comprehensively cleared prior to redevelopment, agents were not constrained by the rigid bounds of an existing 'morphological frame' (Conzen, 1960, p.16). Also, the 1980 Local Government Planning and Land Act that led to the setting up of UDCs, represented an important shift away from rigid planning control, leaving agents relatively free to pursue 'flexible' redevelopment initiatives. It is mainly due to these changes in planning and economic conditions that a proliferation of Post-Modern styles has occurred in docklands.

This study has focused predominantly on the aesthetic, symbolic and cultural significance of Post-Modern townscapes, from the point of view of architects and dockland residents. Inherent in the characteristics of Post-Modernism offered by Jencks (1987) is a focus upon responsiveness to cultural context through a process of encoding the built environment. Jencks's approach is grounded in semiotics whereby architects communicate by using formal 'signifiers', such as materials and enclosures, to articulate 'signifieds' or ways of life. Hence, Jencks claims that Post-Modernism has a 'doubly-coded' strand of meaning that allows it to communicate with both the public, and a 'concerned minority'. To some extent, Jencks's ideas

are supported by this study. A number of developments were found to exhibit the type of double-coding or dual meaning that has been described. For example, Wolfe Crescent and Baltic Wharf both have symbolic or implicit meanings. The first symbolises a theatrical stage-set, and the second contains references to Bristol's maritime past. However, interviews with architects revealed that none of the other developments had a symbolic, or semiotic, meaning.

Goss (1988) has called for a detailed investigation of the relationship between the 'producers' and 'consumers' of the built environment. This call has been addressed by the present study. Several academics, including Bourdieu (1984, p.230), have suggested that people belonging to the same social class share a set of similar interpretations of the built environment. This was not supported by the questionnaire survey which showed that docklands' residents interpreted the symbolic meaning of Post-Modern buildings in different ways. For example, although Wolfe Crescent has no implicit maritime association, this was only recognised by half the respondents - the remaining fifty per cent felt that the development did reflect London Docklands' maritime past. This finding suggests that a break down in communication had occurred between the architect - Piers Gough - who was trying to convey a message about his development's theatrical significance, and many of the residents, who received a quite different message about its symbolic meaning. In a similar vein, 31 per cent of respondents failed to recognise that Baltic Wharf had a symbolic connection with Bristol's sea-faring past. Again, this suggests that the architects of the Baltic Wharf development - Halliday Meecham - were not very successful in communicating the symbolic meaning of their scheme to residents.

A second Post-Modern characteristic conspicuous in docklands is 'contextualism' and attempts to connect with the regional setting. An essential component of the critique of Modernism is its disregard for the existing 'urban context' and its tendency to emphasise objects in isolation of "the tissue knitting them together" (Crilley, 1989). Consequently, the ability to respond to and mediate local surroundings is paramount in the Post-Modernist scheme of things. While it is evident that developers and architects showed little genuine regard for docklands' history, some realised that their success in docklands depended partly on their ability to "mesh with the popularity of urban conservation" (Relph, 1987). Docklands' plethora of listed warehouses has provided developers with one such opportunity to stress the sympathetic, and sensitive character of their conversions to residential use.

Following the losses sustained during the Second World War and a lax conservation policy throughout the 1970s, in which wharves were generally considered to be 'blots on the landscape', rehabilitation and renewal of warehouses has recently increased. Although Venturi (1986) criticises the architectural merit of warehouse conversions, evidence from the study areas suggests that residents generally liked the architectural appearance of the Spillers and Bakers warehouse and Byzantine warehouse. A possible explanation of this finding is that these buildings helped residents to establish a kind of 'stability zone' (Toffler, 1970) or continuum between docklands' past and present. Further research is needed to assess the validity of this conclusion.

It was found that the majority of residents also liked the architectural appearance of new dockland developments.

The questionnaire survey showed that over ninety per cent of respondents were either extremely satisfied or reasonably satisfied with the appearance of the developments in which they lived. However, there is a gulf between residents' views on docklands' architecture, and the views of both academics and design professionals. Referring to Bristol's docklands, Punter (1992, p.75) notes, for example, that:

"It is important to establish the general satisfaction of the lay person with the new architecture in the docks and their recognition that it has restored a sense of identity and coherence in long derelict areas. But there are professional criticisms. Those who have written extensively about the quality of Bristol's contemporary housing and office architecture display a healthy tolerance and self-consciously contradictory evaluations, but many architects echo the most negative perceptions of such buildings as 'lead custard on bilious brick'".

Crilley (1989) suggests that a further Post-Modern concern, 'imagineering', or what Hannay (1985, pp.70-79) calls the "deification of visual context", helps explain why Post-Modern architecture is so popular with residents of docklands. Essentially, docklands' popular perception as a "brutal, ugly and desolate industrial graveyard" (Crilley, 1989) has been reversed by 'imagineering' which manipulates architecture and produces a new meaning for the landscape. The present study has shown, however, that while the LDDC has spent over £2 million in advertising Docklands' newly transformed image to potential house-buyers, its media advertising or 'imagineering campaign' has not been as successful as it might have hoped. The questionnaire survey showed that 'the attraction of living in Docklands' had influenced only a quarter of the respondents to move to their present addresses. More commonly, respondents said that the 'affordability' of property in Docklands or their

'jobs' were important factors. In the case of the Cardiff and Bristol study areas, it was found that while the CBDC and Bristol CPA had spent less money than the LDDC in promoting an 'attractive image' for docklands, more questionnaire respondents said that the attraction of living in docklands had influenced their decisions to move. These findings show that the 'imagineering' process is not as important in promoting docklands' aesthetic attributes as Crilley suggests.

7.35 Docklands' 'sense of place'

According to Smith (1974, p.903), urban areas that contain a considerable number of cultural and historical landmarks enable people to identify with a particular space or place. This identity or 'sense of place' is psychologically necessary to provide a 'cultural memory' (Lewis, 1975, p.20), which is expressed most acutely in the form of buildings. However, the whole townscape contributes to an individual's or society's perception of the built environment, and of the society which created it (Jones, 1991, p.17).

The value of historical townscapes to this cultural memory is embodied in Conzen's concept of 'objectivation of the spirit'. Like Conzen, Larkham (1990, p.349) suggests that over time, the operation of a number of formative processes leads to the townscape becoming a record of the achievements and aspirations of successive generations. Moreover, it is because the processes and rates of change are different in each place that unique townscapes, each with their own 'sense of place' or genius loci develop (Conzen, 1966, p.57).

Evidence from the study areas shows that few of docklands' traditional buildings have been retained. Yet according to Conzen, it is these buildings that exert an 'educative and regenerative' influence on residents (Conzen, 1966, p.58). It can be argued, therefore, that the comprehensive clearance of dockland sites has destroyed the unique 'sense of place' or 'genius loci' of these areas. It has also deprived residents of a sense of orientation and permanence in space and time. Unfortunately, Conzen's concept of the 'objectivation of the spirit' is difficult to test empirically. The questionnaire survey showed that residents were satisfied with the conservation of docklands' remaining buildings. However, as suggested earlier, it is not clear whether these historic buildings have helped residents to 'take root' in docklands or whether they have imbued them with a common sense of identity, place or neighbourhood.

7.4 Implications of research findings

7.4.1 Impact of UDCs and CPAs on the inner-city problem

Urban redevelopment, typified by dockland schemes, is the conventional response of capitalist governments to the inner-city problem. This response is one of physical redevelopment rather than one which aims to address the social processes which have created the problem in the first place. Tweedale (1988) notes:

"social processes which have created the inner-city problem are not in the interests of capital, but the restructuring of the urban environment in specific forms clearly facilitates capital accumulation" (Tweedale, 1988, p.188).

The redevelopment of dockland sites has generated significant debate and controversy over the issue of capital distribution. A key issue has been the extent to which redevelopment has involved the moving of investment from the 'primary circuit' of capital (manufacturing and distribution) into the 'secondary circuit' of fixed property assets (speculative property). Moreover, it is the extent to which these changes are underwritten by major public investment, and subsequent profit extracted by developers, property companies and funding institutions that has been at the heart of the debate. This study has shown that dockland redevelopment is a particularly lucrative form of investment for developers because the risk involved in such ventures has been underwritten by the state - either in the form of UDC grants covering unprofitable aspects of schemes, or through public-private partnership arrangements. It is a myth that 'the market' has regenerated UDC areas. In London and in Cardiff, the state has 'primed the pump' by putting forward grants to cover aspects of schemes which were unprofitable, such as the clearance and servicing of industrial land. Private developers were then able to invest large sums of capital to develop dockland sites. In Bristol, a number of key dockland sites were redeveloped jointly by the City Council and developers who worked on an 'open book' financial basis to share both risks and profits.

This type of relationship between the public and private sector helps explain the similarities in land uses between different schemes across international boundaries, since only the most profitable developments are constructed. Although local factors, such as the ability of CPAs and community groups to persuade developers to include community facilities and cheaper housing may alter some of the details of individual schemes, in general these represent 'planning gains', and in many cases are actually funded by local

authorities themselves. For example, Cardiff's new County Hall was built by the County Council in an attempt to attract further investment to the Atlantic Wharf development. The overall result of these development pressures and compromises is the typical dockland redevelopment comprising new houses for sale, warehouses converted into luxury apartments, retail units and leisure facilities. It is these similarities between dockland redevelopment schemes that have led researchers to draw parallels between several dockland schemes in Britain and America, including Cardiff and Baltimore (Tweedale, 1988, p.185), and Merseyside and Boston (Desfor, Goldrick and Merrens, 1988, p.92).

In terms of the residential sector, it is apparent that dockland redevelopment has reinforced the division between those who can afford new waterfront dwellings, and those who are in housing need. This finding is supported by CLES (1990, p.45):

"UDCs argue that they are not housing authorities with responsibilities to the homeless. Nevertheless by concentrating public resources on, and utilising key sites for up-market homes, the overall effect is that housing investment is steered towards the better off, more mobile members of the community."

In the case of the London Docklands, where there is a particular shortage of housing land, 95 per cent of the total 30,000 new homes planned are for sale. Not surprisingly, this has created considerable friction with the local authorities. A similar situation has arisen in Cardiff, where of the 6,000 new homes planned by the CBDC, only 1,500 are intended for social housing. In Bristol, the CPA has tried to provide social housing developments in

docklands, but its efforts have largely fallen foul of the Conservative government's housing policies. Punter (1992) notes, for example, that when the Conservatives took over the City Council as the largest party in 1983 (for one year only) the Baltic Wharf housing site, which had been set aside for council housing, was sold to the private sector. In this respect it is the the Local Government who is to blame for failing to provide social housing and a broader community in the docks.

In short, the renovation of decaying dockland sites is often perceived as a key element in the wider processes of urban renewal. The Conservative government has supported this pattern by mediating in the transfer of capital between primary and secondary circuits and by underwriting the risk involved in dockland redevelopment initiatives. Yet whereas waterfront redevelopment was "the flavour of the decade" (Hoyle, 1988, p.16) during the 1980s, the impetus for market-led, subsidised redevelopment has now started to change (Healey, 1992, p.411). There is a growing realisation that each location requires its own unique development solutions, both in terms of geographical and economic relationships between land and water uses, and in terms of the timing of changes and innovations in the context of the wider economic, political and social climate in which they are set.

7.42 Limitations of market-led development and strategic planning

The recent recession in the property market has revealed the limitations of 'placing too many eggs in the basket of market-led development'. It is evident that too much has depended on key sites and on investment by large

developers. Moreover, now that developers such as Kentish Homes and Olympia and York have gone bankrupt, UDCs have been faced with the difficult task of attracting new investment to re-initiate development. It is estimated that in London Docklands alone, there are approximately 3,000 units of empty housing (CLES, 1990, p.15). The property recession has also created a major financial crisis for UDCs. Both the LDDC and CBDC bought land at the height of the 1980s property boom which they intended to service using money they obtained through land sales receipts. However, their land disposals have declined drastically since 1990, and it is now uncertain whether they will be able to carry out their original objectives.

The criticism made by CLES (1990, p.55) that UDC redevelopment strategies concentrate too much on property development, and not enough on the broader issue of economic regeneration, is supported by the present study. The LDDC has used area planning briefs to co-ordinate the redevelopment of its UDA. In practice, however, its attempts have not been very successful. In terms of strategic planning, the LDDC has failed to co-ordinate transport investment with residential and office development. It also has a poor record regarding, development control and design control. In the case of the latter, it has placed too much emphasis upon Docklands' visual dimension whilst ignoring other important aesthetic aspects, such as 'function' and 'sense of place' (Buchanan, 1988; Crilley, 1989). To some extent the CBDC has learned from the LDDC's mistakes. For example, whereas the LDDC has not produced a written statement of its redevelopment objectives, the CBDC has prepared a comprehensive rejuvenation strategy. The CBDC's area planning briefs and policies for urban quality have also provided additional guidance for developers. In terms of design, the CBDC's

policies are far more comprehensive than those of the LDDC. Rather than concentrating exclusively on the visual aspects of aesthetics, the CBDC has also considered factors such as relationships between townscape elements, awareness of historical precedent, and the design of streets and roads. Unfortunately, since it is not the planning authority for its UDA, the CBDC has often experienced some difficulty in implementing these objectives. The main criticism of both the LDDC's and CBDC's 'area-based' development strategies is that by focusing on the more marketable or 'flagship' sites, they have done little to assist the regeneration of the whole docklands region. What is needed is a much more broadly defined approach that takes into account the economic and social aspects of the regeneration process. To a certain extent, Bristol CPA's approach to regeneration has provided this.

Bristol's regeneration initiative, conceived by the CPA in the early 1970s, was at first slow to attract private sector interest. Moreover, this situation did not improve much during the early 1980s. In recent years, however, the CPA has begun to adopt a more consistent approach towards development control and aesthetic issues. Its policies are now beginning to reap rewards. Punter (1992, p.51) notes, for example, that "the scale, content, form, conservation elements and architectural quality of schemes [in docklands]" have all been vastly improved by the CPA's firm approach to design control. The CPA has also 'pump-primed' substantial private-sector investment in docklands using only the minimum of public sector funds. By 1983, it had attracted approximately £30 million of development from just £250,000 of public money. This is a greater gearing ratio than that achieved by the LDDC who attracted approximately £9 million of private sector investment for every £1 million of public money invested.

Bristol CPA's success in regenerating its derelict docklands shows the value of good forward planning and strong urban design policies. It also demonstrates that local authorities are quite capable of being an effective vehicle for urban redevelopment. UDCs have not undermined planning, if anything they have highlighted the need for it. It may be argued that the future of London and Cardiff docklands depends largely on whether the LDDC and CBDC are prepared to replace their current area-based planning strategies with a more formal approach to land use planning.

7.43 Dockland townscapes

In townscape terms, the difficulties presented by the redevelopment of dockland sites are considerable. Comprehensive clearance has destroyed many of docklands' first cycle buildings. It has also robbed each area of its unique historical character, or historicity. The present study has shown that the rejuvenation of dockland areas has been carried out by large national developers who are unequivocally profit-motivated and who give little consideration to the physical appearance of redevelopment schemes. These developers have relied heavily on media advertising to cultivate an 'image' of docklands that attests to the tastes of potential middle-class residents - a 'brave new world' where people can live, work and play. In short, developers have viewed docklands as "vehicles for making money" (Tibbalds, 1990), and they have used Post-Modern designs as their repositories of symbolic capital or what Harvey (1987) calls the "clothing of flexible accumulation".

The questionnaire survey has revealed that those currently living in docklands find Post-Modern architecture

visually attractive. However, many design professionals are uneasy about whether future generations will share this view. According to Healey (1992, p.412), there are signs that the planning profession has started to "adapt to the concerns of the 1990s", which include agendas about the environment and how to manage it, and new ways of thinking about the relation of state and market and state and citizen. If this is true, then we must question whether current design preferences are creating "coherent, appropriate and appealing [dockland] environments" (Pinder, Hoyle and Husain, 1988, p.257), which future generations are likely to consider valuable additions to the urban mosaic. This, and several related issues, should form the subject of future research.

7.5 Directions for research

While it is evident that the majority of those living in docklands have definite views on the visual quality of townscapes, further research is needed to explore residents' interpretations of docklands' cultural and aesthetic significance. In particular, two ideas need to be investigated. First, whether historic buildings help people to 'take root' in an area, and whether they imbue them with a 'sense of place' or belonging. Secondly, whether townscapes with a high degree of historical expressiveness or historicity contribute to an area's 'community spirit'. In terms of the symbolic significance of townscapes, it is evident that residents frequently misinterpret the meaning that architects intend them to 'read'. For example, residents sometimes feel that buildings have a symbolic meaning that does not exist, or they fail to notice a clearly intended symbolic meaning, such as a maritime theme, or in the case of Wolfe Crescent, that of a theatrical stage set. Further research is needed to examine why this break-

down in communication occurs between 'producers' and 'consumers'.

A further avenue of potential research concerns the agents of townscape change. The collapse of the property market that occurred during the late 1980s has led to changes in the roles of agents of townscape change and the relationships that exist between these agents. The decline in demand for waterside properties has meant that many national developers and firms of architects have gone bankrupt, and others seem set to follow. UDCs have also had to revise their plans for redevelopment as they are no longer able to attract sufficient private investment. Residents too have suffered as a result of the spiralling cost of mortgages and increasing house repossessions. In short, the 'docklands' bubble has burst' and the gloomy picture now emerging is not what was predicted a decade ago. In terms of future research, it is important that this changing pattern of dockland rejuvenation is evaluated and that its implications for the built form of dockland townscapes is assessed.

Finally, on a methodological point, it is vital that geographers adopt a more inter-disciplinary approach to townscape research in general and that of waterfront regeneration in particular. At present, geographers - along with economists, planners and architects - are pursuing largely separate strands of research on the built environment. Nevertheless, considerable scope exists for integrating these different strands and for gaining a much clearer understanding of the physical, social and economic aspects of urban regeneration. It is hoped that future research will bring us a step nearer to fulfilling this objective.

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