CHAPTER 9

Sustainability and Urban Conservation in Malta

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Introduction

Malta is a small island state which has been independent since 1964 and which joined the European Union in 2004. It has a very high population density and the continuous rise in the standard of living since World War II has resulted in a great expansion in urban development. Furthermore, during this period, the resident population within the historic village centres has declined continuously (Blouet, 1978). The increased pressure for development on virgin land, coupled with a desire to conserve the traditional dwellings in the historic centres, has lead to the initiation of a conservation programme within these urban conservation areas (UCA's). This has encouraged sustainable development by making effective use of existing housing stock, thereby reducing the need for new housing and, at the same time, conserving traditional housing for future generations. This is in line with various International UNESCO charters which state that the adequate re-use of historic buildings is essential in ensuring their continued conservation.

The drawing up of a Structure Plan for Malta (PSD, 1990), the Development Planning Act (1992) and the establishment of the Planning Authority (1992), which includes a specific unit for urban conservation, were instrumental in promoting the conservation and reuse of traditional dwellings as desirable up-market residences and this has considerably increased the available housing stock. The approval of the Structure Plan for the Maltese Islands brought about a revolution in the Maltese Planning System, which has been largely implemented by the Planning Authority and, since 2002 the Malta Environment and Planning Authority (MEPA). In particular, chapter fifteen of the Structure Plan deals with Conservation and contains eighteen policies, which form the basis of the conservation strategy currently in force. One of the principal goals of these policies was the establishment of Urban Conservation Areas. Prior to this, the Temporary Provisions Schemes had defined what are known as Village Cores and these were subsequently studied in greater detail by means of a process which was finally completed by the approval of the Local Plans, in which the Urban Conservation Areas, and more recently, the Design Priority Areas, have been defined and been given specific policies. Another key document, which has had considerable influence in steering change within Urban Conservation Areas, is the "Design Guidance for Development within UCA's" (PA, 1995). More general policies are given by the "Policy and Design Guidelines 2007" (MEPA, 2007). No description of these policy documents will be given here since they are all readily available online at: www.mepa.org.mt the MEPA website.

One of the first decisions taken by the Authority, soon after it was constituted, was the setting up of a Heritage Advisory Committee. The committee involvement in the development control process was gradually increased until by 1997 all applications falling within a UCA or village core boundary were being assessed by it. The committee not only examined the applications before giving its advice, but carried out site-inspections on approximately 30% of the applications referred to it.

Other organisational changes within the Authority that had a direct bearing on UCA's were the establishment of a UCA Team and a Development Control Commission (the deciding body for development planning applications at the time) specifically constituted to decide applications falling within UCA's.

In 2008 MEPA's development control procedures were reformed by the introduction of a number of processes aimed at streamlining the application processing. Prior to submission of a "full development application", any proposal was "screened" to give an indication of its compliance with development control policy. Prospective applicants and their architects received a "screening letter" in response to a planning proposal, outlining major concerns as well as suggestions for overcoming any conflict with policy. Initially, the screening process was meant to be a simple review of a planning proposal, however it was soon realised that the contents of any screening letter were binding and that anything not mentioned in the screening letter could not be brought up during the subsequent processing of the application. As a result screening letters, particularly with regards to proposals within UCA's, became detailed documents. It has been said that the screening process may discourage prospective applicants, but it is also true that they are presented with a clear picture of what to expect before they pay for a full development application.

Following this brief exposition of the history of MEPA's approach to the development of UCA's an assessment has been made of the results of the time and effort expended towards this aim. A number of enquiries have been considered and the analysis and results are presented here together with the conclusions reached. However before examining these results, it is pertinent to point out that conservation is a process that goes far beyond romantic antiquarianism, although this suggestion is often made. Our heritage is a valuable asset because it not only defines who and what the Maltese really are, but given its numerous unique features, it becomes a material asset that can make a positive contribution to economic prosperity and quality of life. Not only does heritage give us a sense of identity but it is one of the factors that persuade tourists to visit our islands. For it is our monuments: major and minor, that are the most attractive feature of our homeland. An example of this is the success of the museum called The Limestone Heritage (Zammit, 2002) which explains the traditional process of quarrying our building stone in what was formerly a disused quarry.

Sustainability Issues

The disappearance of buildings and entire areas within settlements represents not only a loss of historic monuments and context, but also a detriment to the culture of a society. This is a situation that is both ecologically and economically unacceptable, particularly within the fragile microcosm of the Maltese context. The relative isolation of islands generally means that rates of change were formerly slow and sustainable. However the globalisation of economy, transport and communications has accelerated these rates of change to beyond the limits of sustainability. (Mallia, 2005) Rapid and widespread demolition of buildings erodes the traditions and culture of a people by removing the long-established context in which they developed at rates which are detrimental to their conservation. Figures 1 and 2 illustrate the dramatic change of the traditional 19th Century Neo-Classical townscape of Malta which was totally obliterated during the late 20th century.

Urban Conservation is also directly related to the issue of sustainable inert waste generation. The small land area of the Maltese Islands - a mere 320 sq. km - has meant that the disposal of waste has never been easy. In particular, trends in building development, which began after World War II, have generated tonnes of inert building rubble from demolished buildings. Initially disused quarries all over the island were used to dispose of this waste, but the ever increasing amount of building waste generated by more powerful and efficient machines soon filled all of them. A waste disposal site was designated at the North of the Island and in thirty years this has grown to be a mountain nearly 100 metres high (E.U. 2002) and covering an area of some 40 hectares. Gas emissions from this site affect a fair portion of the island. Unfortunately over 70% of this mountain is composed of inert solid building waste and the greater part of this comes from demolished buildings. The rehabilitation of the existing site would take over twenty years. Figure 3 illustrates the scale of the landfill and figure 4 shows that the area it covers is equivalent to that of a small settlement on Malta. It is clear that rate of increase in rubble is not sustainable and that a reduction in the number of buildings demolished each year would have a direct result in the reduction of the growth of this environmental hazard.



Figure 1: The 'Chalet' area of Sliema: the Neo-Classical townscape of Malta. (circa 1900)

Figure 2: The same view in the late 20th century: an unsustainable rate of change.





Figure 3: The land fill 'mountain', 70% of which is inert building waste.

Figure 4: Satellite photo of Malta showing the land fill (within a circle).



Conservation and reuse of existing building stock also drastically reduces the need for the extraction of new limestone. This non-renewable resource is the principal traditional building material and, given the limited size of the Maltese Islands, is a precious resource which needs to be quarried in a sustainable manner. The reuse of old building stone has gained popularity in recent years but only in restoration projects.

Geographical Outline of the Maltese Islands

On a clear day, the low lying islands (Bonanno, 1997) of the Maltese Archipelago are (probably) visible from southern Sicily (Dennis, 1972). The Maltese Archipelago is composed of two principal islands: Malta and Gozo and a number of minor islands which include Comino, Cominotto and Filfla. Situated at Lat. 36deg N and Long. 14deg 20min E, the islands are nearly at the centre of the Mediterranean Sea. To the west of the Islands, the Mediterranean is at its narrowest and therefore since earliest times Malta's fine harbours were of great benefit to seafarers. Throughout the ages, the strategic importance of the islands has made them attractive to conquerors wishing to rule the sea and colonisers wishing to control trade. Although they form a sovereign state, the islands are surprisingly small and the limited land area has always posed a grave limitation to the development of the islands.

Other restrictive factors, which formed part of the criticism levelled by the commission sent by the Order of St John to examine the islands in 1524 prior to their acceptance of the islands as their new base in 1530 (Vella, 1980), included a lack of permanent rivers or other water source and a severe lack of trees. The soil is very shallow, which limited the crops that could be grown, and indeed the islands were dependent on subsidised grain imports from Sicily for their survival. In view of the frequent pirate raids on the islands, fishing was a hazardous activity and furthermore much of the land near the coast could not be exploited fully. Furthermore, the islands have no commercially exploitable natural resources. These factors must have made the loss of Rhodes much more poignant to the Knights.

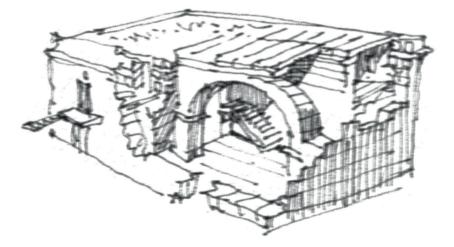
It is not surprising that the population of the islands remained relatively low until recent times. An estimate of 10,000 has been made for the year 1420 (Wettinger, 1969), however it has also been pointed out that there were several disastrous pirate raids during which as many as 3,000 persons were carried off into slavery, which represents some 30% of the population. Indeed, following the 1551 raid on Gozo, some 5000 persons were taken into captivity and few if any ever returned (Fiorini, 1986). The population rose to some 20,000 during the early days of the Order's rule and by 1675 it had reached some 60,000 (Fiorini, 1983). At this time, the security of the island had been greatly improved by the Order's fortification network however, repeated plague epidemics kept the population down (De Piro, 1833). Indeed the population only reached the 200,000 mark at the beginning of the

20th century, at a time when emigration to North Africa was reaching its peak (Attard, 2003). During the 20th century improvements to health, hygiene and medicine have lead to a doubling of the population which now stands at just over 400,000. This makes the Maltese Islands one of the most densely populated countries in the world.

Essential Characteristics of Maltese Vernacular Architecture

The essential characteristic of Maltese architecture is the use of the local limestone to construct every part of the building with the exception of doors – as shown in figure 5 (Tonna, 1992). This is because the islands have never had trees tall enough to enable their use as structural materials. The morphology and elements of the Maltese vernacular, as well as their nomenclature are largely derived from Arab traditional architecture (DeLucca, 1985). The mashrabiyya is one traditional element (Fathy, 1986) which was translated from timber into stone in Maltese vernacular architecture. The most surprising aspect of this building technology is the fact that even the roofs were made of long stone slabs supported on corbels (Mahoney 1988). This method of construction is not unique since similar stone roof slabs are also widely found in the Nabatean cities of the Hauran in Syria and Jordan, such as Umm al-Jimal (DeVries, 1993).

Figure 5: The all stone Maltese building technique (Tonna, 1992)



These cities were largely abandoned after the earthquake of 747 C.E., whereas the earliest building in Malta cannot be dated before the 14th century C.E. and thus it is still uncertain how the particular technology was transferred to Malta (Hughes, 1956). The roofing system is composed of a series of stone slabs supported on projecting corbels to

permit a greater span, which can reach a maximum of three metres (Tonna, 1998). These corbels are known as kileb in Maltese and the word is said to derive from the Arabic verb 'to strengthen' (Serracino-Inglott, 1985).



Figure 6: The Maltese streetscape: unified by the ubiquitous use of limestone

Despite an absence of drawings, the evolution of Maltese domestic buildings can be deduced by careful examination of early notarial documents (Wettinger, 2006), some of which describe the one-floor dwellings in some detail. Generally, the typical dwelling had the following characteristics as illustrated in figure 7 (Mallia, 2002):

- Entrance from the street directly into the courtyard through a covered passageway known as a sqifa (قضي المنابع), which did not permit passers-by to look directly into the courtyard.
- A series of independent rooms (مَعْصَرِعْ), each of which was accessed directly from the courtyard and which had no windows onto the street. This is a typical Mediterranean feature.
- All rooms are constructed in the traditional manner described above and the principal room generally faces south or south-east.
- A principal room, called the majlis (سرليوه), generally provided with low stone benches at the perimeter, called dokkena (قن أسط), which also served as beds at night.

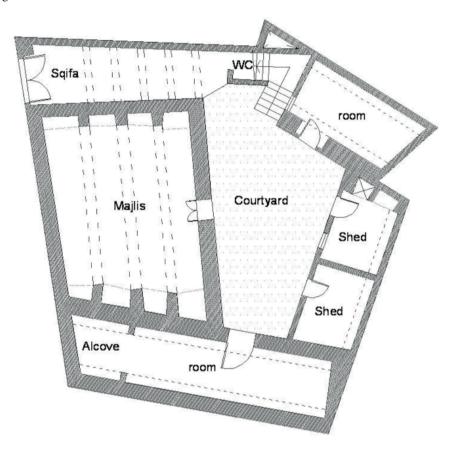


Figure 7: The traditional Maltese House

Gradually, more European characteristics were incorporated into the buildings, in particular the addition of an upper level, possibly owing to a lack of space (Mahoney, 1996). Staircases, which were originally open to the skies became covered and more monumental. The addition of an open loggia overlooking the courtyard at first floor enabled the inhabitants to continue the tradition of sleeping outside in the summer (Mallia, 2002). This replaced the older tradition of building a reed 'arish ($\xi \gg \langle x \rangle$) on the roof (DeLucca, 1993). Façades, too, became more ornamental and elements of late Sicilian Gothic and Italian Renaissance found their way into the city's streetscape (Braun, 1944).

The monumental baroque buildings, which were built in Mdina following the earthquake of 1693, have completely different characteristics and are built in accordance with the norms of the period (Schembri, 2000). Thus arches and vaults replace the traditional

roofing techniques (Farrugia 1999), however the more humble dwellings continued to be built in the traditional manner. These differences are reflected in the streetscapes which one experiences as one walks around the city since there is a sharp contrast between the extrovert baroque main streets and the introverted mediaeval quarters. However, despite the obvious disparity in styles, the use of the same limestone as the only building material gives a harmonious character to the city (England and Thake, 1999).

Data Collection and Analysis

Background

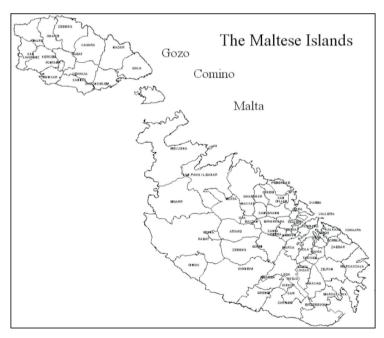
Since its inception, various studies (PA, 1999; Agius-Scicluna, 2001; PA, 2001; Mallia, 2002), publications and programmes have been initiated by the Planning Authority and these have encouraged and assisted people to take up the challenge of restoring a traditional dwelling and converting it into a modern residence. Amongst others, these include:

- the establishment of a Heritage Advisory Committee to advise on the conservation of traditional dwellings;
- the setting up of an UCA team specifically to deal with development applications within historic cores;
- the definition of UCA boundaries for over 60 historic settlements;
- the publication of Guidelines for development control with UCA's, (PA, 1995);
- the publication of explanatory information in both English and Maltese written specifically for people wishing to restore a property within a UCA;
- the setting up of a 'restoration grant schemes', aimed at providing grants for the restoration of traditional timber balconies and, post-2008, domestic restoration projects by private individuals (investi f'darek).

The philosophy behind these publications and the policy thrust followed was that "Conservation must never be regarded as a negative process, or as mere antiquarianism. Responsibility towards the historical environment goes beyond simply preventing destruction, essential though it is. It involves actively caring for the heritage, maintaining it in good physical condition making it readily accessible for study, enjoyment, recreation and tourism. Above all it means ensuring that to the fullest possible extent, the heritage remains in active use as an integral part of the living and working community, a material asset that makes a positive contribution to economic prosperity and quality of life." (CE, 1998)

The data sets examined are those covering the years 1993 - 2013. The data for 1993 is scanty and somewhat unreliable while that for 2013 is necessarily incomplete since not all applications submitted in that year have been determined yet. However it is felt that enough data is available to make a reliable assessment on which to base the conclusions which this paper will propose. For the range of years considered, the datasets compiled are the total number of applications, the number of applications falling within a UCA and the locality of these applications, the number of applications involving demolition of the site and the locality of these applications. The analysis carried out is based on various percentages, which express the various criteria being considered for comparison. Results are categorised by the local councils of Malta which are illustrated in Figure 8.

Figure 8: The Maltese Islands and administrative divisions (Local Councils) (source MEPA)



Data Analysis

The first question asked is whether the UCA's are decaying, crumbling and retrograde areas? Whether there is any interest in development within UCA's. Furthermore one may wish to enquire whether the development-control policies and guidelines for UCA's act as a stimulus or disincentive for their vitalisation.

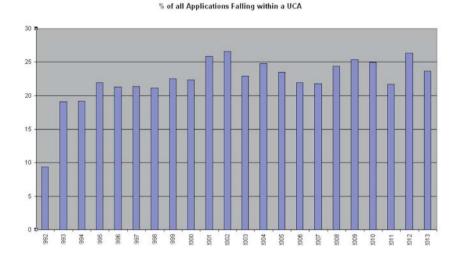


Figure 9: Percentage of all Planning Applications falling within UCA's

The graph in figure 9 shows the percentage of all applications in a particular calendar year which fall within a UCA. It will be seen that on average approximately 22% of all full development applications submitted to MEPA fall within a UCA. Until 1995, the percentage of applications was smaller and this is because the UCA's were still in the process of being designated. More surprising is the unusually high percentage sustained in 2002 which was just over 26.5%. A more detailed analysis of the full development applications submitted for the installation of domestic satellite dishes. The amendment to the Development Notification Ordnance in May 2005 put an end to this surge in applications because the installation of satellite dishes was redefined as permitted development, which does not need a full development permit. This unexpected number can be more readily understood if one considers that this was the first time that the price of satellite receivers fell to the extent that it was possible for a considerable portion of the Maltese public to watch the world cup football matches from Korea on satellite in the comfort of their own homes.

Incidentally, this high figure also shows that the UCA's are inhabited by a vibrant population that is up to date with the latest technological development ... a far cry from the suggestions of muzew [museum] or presepju [diorama] that are sometimes heard regarding the effects of the UCA development control policies. In fact the survival and success of these areas is the result of their ability to meet society's current needs which preserving the traditional characteristics which give a sense of familiarity to the localities.

It also highlights the attention which is required in analysing such raw data.

The next enquiry was what percentage of applications falling within UCA's were granted permission for the demolition of the existing building. The rationale behind this query was to ascertain the general condition of the buildings within UCA's and whether the inhabitants of the UCA's were anxious to sell their property to speculators in order to get rich quickly. It is considered that the total demolition of an existing building is not a conservative process but a destructive one, which not only causes a considerable change in the urban fabric and density but also contributes negatively to the ever increasing volume of inert waste which these islands are generating.

Figure 10 shows that the graph indicates that an almost steady 12% as the average of the permitted demolitions within all the UCA's over the study period. The data for 2013 is not complete because a considerable number of 2013 applications are still being processed and have not yet been decided. Exceptions were 2003, 2004 and 2006 when the figure shot up to over 14%. One cannot blame the requests for satellite dishes from the previous year for this upsurge; since these did not generally involve demolition(!) However, the highest percentage of demolitions approved within UCA's occurred in 2012, when this amounted to 14.63% ... the reasons for this increase must be sought elsewhere - and the advent of a general election may have had a significant bearing.

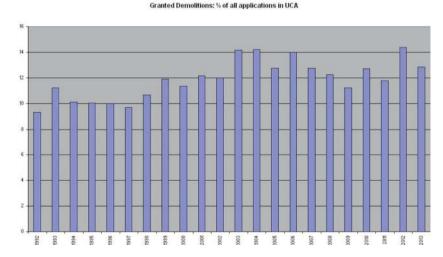


Figure 10: Percentage demolitions within Urban Conservation Areas each year

Consideration of the corollary of this statistic indicates that the rest of the applications within UCA's are either refused permissions or approvals for other – hopefully more conservative – modes of development. It may be argued that the relatively low percentages of permitted demolitions within UCA's would tend to indicate that there is a considerable amount of conservative development going on, even though the demolition of a single building often has a considerable impact on the streetscape. In this regard it is pertinent to point out that the Authority's policies tend to accept a degree of sensitive change especially where such a change would extend the building's useful life. This approach results in wider benefits through urban regeneration and the improved economic viability of an area, as well as a reduction in the volume of inert waste generated.

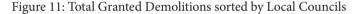
The success of these policies can be seen in particular UCA's where the property is advertised in estate agents' brochures as 'converted' or 'ripe for conversion'. A worrying development in recent years is the wording of application descriptions to disguise the true nature of the development. Since the 2008 reform, the approval of the total demolition of a building means that a third party appeal can be made against a permit. Application descriptions are now couched in vague terms which avoid the use of the word 'demolition', even though a cursory glance at the drawings indicates quite clearly that the greater part of the existing building is being razed to the ground. It is hoped that this loophole will be closed by ensuring that the application description reflects the spirit, not just the letter, of the intended development.

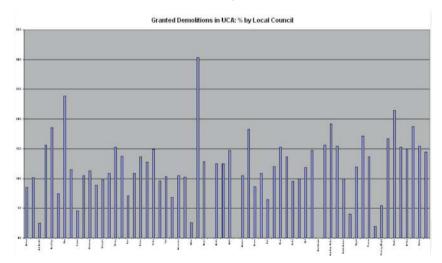
The numbers of permitted demolitions were re-analysed by local council in order to understand which UCA's were under the greatest re-development pressures as shown in Figure 11. The graph indicates that the UCA of the village of Mellieha has an extremely high rate of demolitions permitted with respect to the number of applications submitted. A reason for this could be the very small number of applications submitted in what is actually one of the more recent settlements in Malta. The UCA's of Dingli, B'Bugia, Xewkija, St Paul's Bay, Nadur and Zebbug (Gozo) also have a relatively high rate of demolition. These UCA's are under the greatest pressure for re-development and some of these localities may come as a surprise to some. However, greater incentive may be necessary to induce less destructive change in these localities before their essential character is lost forever.

Trend Analysis and Implications

The analysis of the data under study has revealed that there is a lively interest in the development of UCA's in the Maltese Islands indicated by the percentage of fulldevelopment applications affecting sites within them. This means that the historic cores of our settlements are being subjected to considerable transformation and this is probably the surest proof that they are still alive and inhabited by an active portion of our society, who has either taken a conscious decision to move into a historic setting or has always lived there and not wished to move away. At this point one should mention that the ingress of new people into an existing community should not be considered as a negative trend. New inhabitants quite often occupy properties which have been vacant for some time and only they, it seems, have the courage to take on the conversion and conservation of these dilapidated properties.

Terms such as gentrification are simplistic in that they imply that people are being forced out of their homes by richer outsiders. However, these definitions ignore the concept of social mobility in which people may choose to move to a new locality if they wish to and they also have the right to buy and sell their property. Moreover, population movements, whether at the macro or micro level, have occurred continuously throughout history and these have contributed to the evolution of societies rather than their decay. This is particularly relevant at a time when Malta is receiving large numbers of immigrants who are slowly but surely changing the population structure. Decay is only said to occur when the population of an area ages and is not renewed. Like the abandoned village of "Hal Millieri", such a settlement is doomed to die.





The type of applications being submitted indicate that not only is there a considerable amount of development taking place within UCA's but that on the whole a considerable portion of this development is of a conservative nature. This means that the existing historic fabric of the UCA's is being modernised and reused but that the essential characteristics are being retained. This implies that not only the intensity but also the rate of change within UCA's are being controlled by MEPA's policies and that these controls are not stifling requests for sensitive developments in many UCA's. However, there are a number of UCA's where development pressures are such as to endanger the character of the area because a high demolition rate implies a fast rate of change and a considerable increase in the intensity of development. For some areas, the knell has already sounded and it may be pointless to attempt to conserve at this late hour. However, many positive results of current UCA development control policy can be noted if only one takes the time to look for them.

Many buildings in numerous UCA's have been rehabilitated, although it appears that some UCA's are more fashionable than others and this increased 'desirability' has lead directly to increased conservation, possibly as a result of the higher prices that property can command in these localities. MEPA's direct intervention, as in the Valletta Air-Conditioning Unit Exercise has lead to the removal of a considerable number of unsightly air conditioning units from the facades as well as the upgrading of a number of shop fronts. Such proactive intervention has led to a significant improvement in the ambiance of a number of streets. Perhaps the most surprising observation in the data presented is the increase in the number of applications in Valletta. This is considered to be a positive process. Despite the more rigid development control criteria in place for the UNESCO World Heritage Site, Valletta is attracting more attention and therefore the regeneration process of the city is a reality.

Conclusion

Analysis of the number and quality of approved planning applications lodged over a number of years has enabled the formulation of a statistical picture of the actual effectiveness of the development control process with regards to UCA's.

The results indicate that not only has interest in UCA's grown over the years, but that this has resulted in the rehabilitation and sustainable re-use of a considerable number of existing properties, some of which were formerly derelict and abandoned. The restoration carried out has saved traditional heritage from certain destruction and conserved it for present and future enjoyment. It has encouraged tourism and renewed social life by internal-growth and migration into former 'no-go' areas of the island. Conservation, as opposed to demolition, will reduce the generation of building waste and the consumption of fresh non-renewable building materials to sustainable levels.

Malta's UCA's continue to be areas of special character that still attract people to live within them. The inhabitants of the UCA's are a dynamic population that renews itself by both migration as well as internal growth. The requests for development attest to the continued interest that manifests itself within these historic localities. Public consciousness has evolved over the years and the ideas behind heritage conservation and the reuse of the existing historic fabric have achieved wide esteem. However, the balance is always dynamic and the function of Development Control is to remain vigilant and curb excessively destructive and short sighted schemes in favour of more balanced long-term conservative plans in which the proposals are commensurate with urban regeneration and the achievement of higher environmental standards. The experience, which the Authority has gained over the years, now forms a compendium of possible solutions which are often suggested to would be developers, either before an application is submitted or during the application process itself. A measure of sustainability would appear to have been achieved and this is comforting.

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Notes

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