

Hard Surfacing of Front Gardens: Report on Desk Research

Prepared for:

**Ealing's Local Agenda 21 Pollution & Public Health Project Group
(working with Ealing's Energy & Built Environment and the Natural
Environment & Biodiversity Project Groups)**

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1. INTRODUCTION

1.1 Background

In the London Borough of Ealing (LBE) there is growing concern that the hard surfacing of front gardens to provide off-street parking is increasing, and that this is becoming a serious environmental problem as well as a social issue. Some of the damaging effects on the environment include the use of impermeable materials which increase rainwater run-off and heighten the flood risk; reduced CO₂ absorption through loss of vegetation contributing to global warming; loss of trees and vegetation leading to increased air pollution; and absorption of more solar heat from artificial and hard surfaces, contributing to global warming via heat island effects.

Alongside a general increase in car ownership and the conversion of older family-sized properties into smaller, multiple units, it is believed that the introduction of Controlled Parking Zones (CPZs), while welcome, is exacerbating the situation.

Following informal advice from professionals and a certain amount of observational and anecdotal evidence from residents, Ealing's Local Agenda 21 group decided to obtain funding for a research project to quantify the scale of the problem.

Funding was sought and obtained in 2003 by the LA21 Pollution & Public Health Project Group on the understanding that it will manage the project in conjunction with two other LA21 project groups - Energy & Built Environment and Natural Environment & Biodiversity - and Ealing Council's Sustainability Coordinator.

1.1.1 The regulations

Under Article 3 of the Town & Country Planning [General Permitted Development] Order 1995 (the GPDO), crossovers [i.e. alterations to the pavement and kerb to allow a vehicle to 'cross over' it] are allowed as "permitted development" and don't require planning permission except in conservation areas. Article 4 of the Order explains how such rights can be withdrawn. The mechanism for withdrawing "permitted development" rights is, therefore, known as an "Article 4 Direction". This can be used by the local planning authority to stop people hard surfacing their front gardens.

The number of conservation areas and the extent of an Article 4 Direction and enforcement of this differ widely by local authority, even within the City of London and other London boroughs (33 in total).

There are 26 conservation areas in the Borough of Ealing currently, but an Article 4 Direction is only applied to three of these at present:

- Brentham Garden Estate (Ealing)

- Hanger Hill (Haymills) Estate (Ealing)
- Hanger Hill Garden Estate (Acton)

Residents are supposed to make pavement crossover applications to Ealing Council [though they may not do so] and the application will normally be approved. In England there are no planning controls on what people can do to the surface of their front garden [apart from in conservation areas]. Thus, there is nothing to stop people, either with or without a crossover, concreting over their entire front garden. In some parts of the borough people alter the pavement and make a crossover without any authorisation at all.

It should also be noted that Ealing Council has had a policy of encouraging off-street parking for many years.

Information initially supplied indicated that more than 1,000 applications for pavement crossovers are made each year, of which about 50% are constructed by Ealing Council's contractor - Mouchel Parkman. The vast majority are accompanied by hard surfacing of some or all of the front garden.

Research was, therefore, required to establish whether the hard surfacing of front gardens has been identified as a growing problem and addressed elsewhere; to obtain some qualitative feedback from the relevant Council departments, in terms of perception and practice; to collect some independent quantitative data, through analysis of the number of applications and actual constructions of pavement crossovers in LBE in the past five years; and to carry out some on-site measurement of the extent and type of materials used for hard surfacing in different parts of the borough.

1.2 Research objectives

Overall, the aim of the research was to ascertain whether the hard surfacing of front gardens and concomitant applications for pavement crossovers in the LBE is increasing. In addition, there was a need to make an initial assessment of why this is happening.

A secondary objective of the research was to increase awareness of the situation at both local and national level, and to identify ways in which problems created by hard surfacing could be reduced or resolved. This could include a campaign for changes to the Town & Country Planning Act on permitted development of front and rear gardens, the front gardens element of which was put in motion by a letter from the Local Agenda Pollution & Public Health Project Group to local MPs in September 2002.

Because of budgetary constraints the research is being carried out in two phases, as described below. This report is only concerned with the results from the first phase.

Phase 1: Desk research

Specific objectives of Phase 1 were to:

- Carry out a review of published research to assess whether hard surfacing of front gardens has been identified as a problem and reported on elsewhere
- Ascertain whether other LAs/organisations have recognised that this is a growing problem and are doing anything about it
- Identify Government policy and initiatives
- Conduct interviews with relevant departments within Ealing Council (planning, transport, engineering, highways enforcement) and the sub-contractor Mouchel Parkman, to establish what procedures are followed, the statutory powers (UDP) and their perceptions of the problem
- Analyse the number of crossover applications made in the last five years and quantify the number that were constructed
- Identify whether any best practice guidelines are issued in conservation areas; what Article 4 covers
- Identify opportunity for obtaining funding
- Review of guidelines/best practice in use of sustainable materials

Phase 2: Measurement

Should there be sufficient funding, and depending on the findings of the desk research phase, it is intended that this will involve:

- On-site measurement of the extent of and type of material used for hard surfacing of front gardens in different parts of the borough – based on a representative sample of streets/wards
- Production of a photographic record of good and bad practice incorporating photos from the LA21 website
- A preliminary assessment of householders' motivations for hard surfacing front gardens and the choice of surface

1.3 Research method

The first phase of the research was carried out between August and December 2003.

On-line research was carried out to identify websites, organisations and published research reports that were relevant to the project. Contact was made with government departments, trade associations and other publishers (see the appendix for a complete list).

Email communication and telephone calls were carried out with some of the London LAs to follow up on website information.

A review was carried out of documentation supplied to the general public by Ealing environment and planning departments, and of the statistical data produced from the 2001 Census by the ONS.

Statistical analysis of crossover applications and constructions in Ealing was carried out on the electronic records held by Mouchel Parkman, the contractor responsible for constructing pavement crossovers. The records covered the period 1/04/99 – 17/12/03.

In addition, nine telephone and personal interviews were conducted in LBE. In Ealing Council seven interviews were carried out with appropriate officers in transport, planning, conservation and the call centre handling enquiries from residents in the borough. Interviews were also taken with two members of staff at Mouchel Parkman.

1.4 Use of the research

It is intended that the research findings will be used to:

- a) educate and motivate the community so that people are aware of the environmental damage created and select solutions which are sustainable, including the production of a draft leaflet to communicate the issues to householders, ultimately for widespread distribution, and
- b) if appropriate, seek statutory powers to control the extent of hard surfacing

2. EXECUTIVE SUMMARY

- In the London Borough of Ealing there is growing concern that the hard surfacing of front gardens to provide off-street parking is increasing and that this is becoming a serious environmental problem. The environmental problems range from increased rainwater run-off leading to an increased risk of flooding, reduced CO2 absorption with a resulting drop in air quality, to absorption of more solar heat from artificial surfaces leading to an increase in the local temperature and the loss of vegetation with adverse effects on plant and animal life. Accordingly funding was sought by the Ealing's LA21 Pollution & Public Health group for a research study to quantify the scale of the problem.
- The Town & Country Planning (GPD) Order 1995 allows pavement crossovers [alterations to the pavement and kerb to allow a vehicle to 'cross over' it] as 'permitted development' and these don't require planning permission except in conservation areas. Article 4 of the Order explains how such rights can be withdrawn. The mechanism for withdrawing "permitted development" rights is, therefore, known as an "Article 4 Direction".
- Information initially supplied had indicated that more than 1,000 applications for pavement crossovers in LBE are made each year, of which about 50% are constructed. It was decided that analysis of the number of applications and actual constructed crossovers in Ealing in the last five years would help to quantify the problem.
- In addition, the research was required to establish whether the hard surfacing of front gardens has been identified as an issue and addressed elsewhere, through a perusal of published literature and websites; and it was important to obtain some qualitative feedback from the Council officers in the relevant departments, in terms of their perception and practice.
- On-line research, telephone and personal interviews with seven officers in transport, planning, conservation and the call centre handling crossover applications and two of the Council contractors responsible for constructing the crossovers, and analysis of the crossover application data was conducted between August and December 2003.
- The search did not find any research conducted in this specific area. Reports identified that briefly touched on the topic were focused on broader issues, such as how residents and cars could share the road in harmony. Others concentrated on global issues as a result of climate change.
- Government policy to help achieve an urban renaissance is set out in '*The National Strategy for Neighbourhood Renewal*'. It does not address the issue of the loss of front gardens for off-street car parking.

- The *'Review of Permitted Development Rights'* published by the Office of the Deputy Prime Minister [ODPM] in September 2003 does not address the issue either, although it leaves the door open by recommending that further research be conducted to investigate the extent of the problem caused by the demolition of front garden walls to provide off-street parking. The report also recommends the removal of the entitlement to compensation when permitted development rights are removed through Article 4 Directions. This would involve changes to primary legislation and could take some time to implement.
- A number of local authorities in London recognise that the hard surfacing of front gardens is a growing problem and are aware that applications for pavement crossovers are increasing. None have conducted any monitoring exercises to measure the extent of the hard surfacing of front gardens.
- Many of the local authorities do offer guidance and advice on the use of sustainable materials and recommend that the hard surfacing be combined with some shrubs, plants and grass. Several give detailed information about the most suitable plants to use.
- In LBE the Council has had a policy of encouraging off-street parking for many years. The introduction of Controlled Parking Zones [CPZs] in various parts of the borough, though welcome, has contributed to the increase in off-street parking.
- There is an acceptance among the Council officers interviewed that little can be done to prevent parking in front gardens because of the increase in car ownership and CPZs, the conversion of family houses into multiple units and a general reduction in the number of car parking spaces available.
- People choose to hard surface their front gardens for a variety of reasons: assured parking, labour saving, convenience, minimum maintenance, disability access, reduction of vandalism or theft, safety for women in particular returning home late at night, sub-division of large houses into higher density, single units each requiring a parking space and the cost of purchasing parking permits.
- In LBE there are 26 conservation areas at present and some more are planned. However, only three of them (Brentham Garden Estate, Hanger Hill (Haymills) and Hanger Hill Garden Estate) are subject to an Article 4 Direction, which can withdraw the right to convert a front garden into a car park. In general Brentham has houses with front gardens that are too small to fit a car into anyway, whereas many of the houses in Hanger Hill (Haymills) have two drives and garages. There is pressure for more hard surfacing in the latter and keeping 50% of the front garden green - as

recommended in a Policy & Design Guide published by Ealing Council in 1998 - is being eroded.

- The Council officers interviewed indicated that the conservation officers (two people job sharing) have more work than they can handle and find it difficult to do more than fire fight. The Article 4 Directions for the three conservation areas all need to be updated and more are planned, but there isn't the resource to handle the workload.
- At the time the interviews took place the development control and policy functions in Ealing Council were split between two directorates. Officers felt that liaison and communications between the two was not as good as it should be, particularly at higher levels. This did cause major problems with information not being passed on.
- Enforcement where planning permission is turned down, where the front garden has been hard surfaced and there is no crossover, or reinstatement when a kerb crossover has been illegally constructed appears to be minimal. The cost of taking legal action is the main reason and a secondary one is lack of resource. The view is that it is not worth taking the risk on something that is likely to be overturned by a court or where the fine is derisory.
- The resident population of the London Borough of Ealing, as measured in the 2001 Census was 300,948 and there were 118,023 households. 32% of these households have no car or van and 22% have two or more cars or vans. The number of cars or vans needing a parking space in LBE in 2001 was 112,907, according to the ONS.
- In 2003-4 the cost of constructing a vehicle crossover in LBE starts at approximately £650. The number of pavement crossovers constructed by Ealing Council's contractors since April 1999 has not increased significantly, but it is suspected that there has been an increase in cars driving over the pavement without applying for a crossover in recent times. The price of a crossover construction increased in 2003. 674 crossovers were paid for and constructed in the year commencing 1/4/02 and there were 352 paid for and constructed between 1/4/03 and 17/12/03.
- Of the seven areas in LBE (Greenford, Ealing, Southall, Hanwell, Northolt, Acton and Perivale) Greenford has consistently had the highest number of constructed crossovers since April 2000. This is despite being the fourth largest in terms of population. In 2002/03 there were 158 paid for and constructed and between 1/4/03 and 17/12/03 105 have been paid for and constructed.
- A survey of roads in Perivale was carried out by LBE Highway maintenance and Mouchel Parkman in October and November 2003, to ascertain the need for and provision of existing vehicle crossings over

footways and verges (crossovers). In total 66 roads were surveyed and 2,470 premises with existing crossovers were counted in the Perivale area. A further 217 premises (9% of the total) were identified as having no crossover but requiring one because the front garden was being used for off-street parking.

- It is suspected that this example would be replicated across the borough should the same exercise be conducted in the other six areas. Perivale is the smallest in terms of population, thus the number of crossover constructions required but not in place is likely to be greater in the other areas.
- There is a lack of published information, best practice or advice on sustainable materials for the hard surfacing of front gardens. Most concentrate on 'green' building materials for the house rather than the garden. The information that is available is primarily produced by local authorities, some charities, community groups and garden city foundations.
- Local authorities, most often through LA21 groups, offer the most extensive advice on sustainable materials to use when laying hard surfaces for off-street parking. A charity for disadvantaged, disabled and older people, called Thrive, also offers comprehensive advice on the choice of materials to use, although the primary focus is on safety rather than sustainability.
- Funding for sustainability projects is obtained from a variety of sources including central and local government, the LGA, universities, European funds, local businesses (including press and media) and utility companies. Cross-authority funding and joint initiatives, where no single body is bearing all the cost, is the most effective.

7.1 Recommendations

- Because the electronic records for crossover applications are incomplete for 1999-2001 it is recommended that a manual count be carried out of all crossover applications held by Mouchel Parkman for this period.
- For the second phase of the research it is recommended that a sample of roads be selected in each of the Greenford, Ealing, Southall, Hanwell, Northolt and Acton areas and a count taken of the number of houses with vehicular access to the front garden but where there is no constructed kerbdrop. This could be carried out at the same time as the on-site measurement of front gardens that are hard surfaced.
- This would give more support to the perception that the number of applications for crossover constructions in Ealing has dropped in 2003-2004, and that the hard surfacing of front gardens is more widespread than the number of constructed crossovers would suggest.
- Representations are made to the ODPM about the findings of this research study.
- Consider conducting further research. Approach other local authorities in London to assess willingness to cooperate on a joint study to quantify the scale of the problem in the capital. This might also be a more effective way of obtaining funding.
- Follow up on the LA21 Co-ordinators in the London boroughs who responded to the email circulated by the Sustainability Co-ordinator at Ealing Council in 2003.
- Engage local media to publicise the findings of the research.

3. PUBLISHED RESEARCH

3.1 National and international research

An extensive review of published research in the UK and elsewhere has not identified any reports that have a specific focus on the hard surfacing of front gardens and the potential environmental implications of this. Most of the reports address global issues of sustainability and climate change rather than local, urban issues.

There is awareness among local authorities that the increase in off-street street parking is becoming an issue but no work appears to have been done to quantify the extent of garden losses.

This is despite the article in the Daily Telegraph, published in November 2002, which reported on the thousands of front gardens that are disappearing at a record rate as residents swap flower beds for a parking place outside their homes. Of the councils in London and other cities that were interviewed for the article, all reported significant increases in applications for vehicle crossovers and expected this to continue. Because of the importance of the motor car in our culture the onslaught on the appearance of towns, cities and suburbs is regarded as inevitable.

In December 2001 a Government Green Paper *'Planning: Delivering a Fundamental Change'* identified the need to improve the speed and predictability of the planning system and to update the General Permitted Development Order 1995 (the GPDO). In answer to this a study was undertaken on behalf of the Office of the Deputy Prime Minister [ODPM] to review the GPDO and any issues and problems associated with the current operation of permitted development rights. The report was published in September 2003, entitled:

'Review of Permitted Development Rights' – Nathaniel Lichfield in association with SJ Berwin Solicitors – on behalf of the ODPM

Permitted development rights are provided by the Town and Country Planning (General Permitted Development) Order 1995 (the GPDO) to allow certain types of development to proceed without the need for a planning application, since planning permission for them is deemed to be granted. Such rights have long played a role in reducing the number of planning applications for minor and uncontentious development and help reduce the regulatory burden of the planning system.

Wide consultation was involved in the study process covering all English local authorities and a range of other organisations using or affected by permitted development rights. The types of permitted development giving rise to most problems for both local authorities and affected parties are identified as being related to dwelling houses, telecommunications, agriculture, minor operations, temporary uses and changes of use.

Despite representations from some of the local authorities in London about the problems associated with forecourt parking, the issue of hard surfacing of front gardens is not addressed in the report other than to reaffirm that it is a permitted development right, except in conservation areas. Very few changes to primary or other legislation were recommended and the main focus was on tightening up of definitions and clarification of terminology. Some slight changes to Article 4 Directions were recommended and these are covered in detail in section 5 of this report.

One area identified as requiring further investigation before changes were made was:

"The need for control over demolition of front garden walls outside conservation areas"

There are a few reports that touch on the issue as part of a broader remit on neighbourhood renewal and regeneration and improving life for residents. The two main ones are:

1. 'Designing Streets for People' – revised 2002 –The Institution of Civil Engineers (ICE) in conjunction with the Urban Design Alliance (UDAL)

The Designing Streets for People Inquiry began in 1998 and a consultation draft report was published in 2000. The final report published in 2002 covers an investigation into the way we plan, design and manage our streets. It set out to answer the question – *"Can they be better managed and add more to the quality of life for those who use them, live in them or work in them?"*

The report identifies that:

"Vehicles – not people – are the focus of attention. Practice, regulations and standards have developed around accommodating and managing vehicles".

"We have not managed to balance the growth in traffic with people".

A couple of references are made to gardens but they are only provided as examples of the quality of the streetscape. No recommendation is given as to what, if anything, could be done about the particular problem.

- *"People who concrete their front gardens to provide off-street parking, thereby reducing the attractiveness of the street".*
- *"Unfortunately many streets are sterile and bleak, with features such as buildings with blank walls, high fences, and gardens converted into parking lots".*

The difficulty in obtaining adequate funding is also referred to:

"Capital funding is easier to obtain than revenue funding. Local Authorities have very limited funding resources; sometime too small even to enforce standards.

Highways maintenance has suffered from a long-term decline although the introduction of the Ten Year Transport Plan has improved the situation”.

The report does recommend a fundamental review of the philosophy and extent of the Highways Act and ancillary legislation affecting street and the public realm, but this is primarily to bring about people and their communities becoming the focus of the street rather than the vehicle.

2. ‘Returning roads to residents – a practical guide to improving your street’ - ICE in conjunction with UDAL

The sister report is primarily concerned with offering solutions on how to make streets more attractive, safer and more functional for residents by managing the car. It offers alternative ways of street parking, such as chevron and end-on parking, to release space and does cover the costs related to parking cars in the front garden.

It mentions that there are local authority powers to stop front gardens being used for parking and to stop people driving off the road without a dropped kerb. The Article 4 Direction is referred to:

“The local planning authority may establish an Article 4 direction taking away a resident’s normal permitted development rights. This can be used to stop people concreting over their front gardens. Excepting conservation areas, the direction must be confirmed by the Secretary of State”.

It also points out:

“If there is very little front garden parking, then preserving front gardens will be an easy option. However, if most of the front gardens have been surfaced over for car parking, then restoring them to lawns and flower beds will involve radical change”.

“Preserving front gardens as gardens may be the best route for the future of the street. If the residents agree that front gardens are an important part of the attractiveness of the street then controls can be introduced to protect them. If parking is a problem, then perhaps a more radical change is needed”.

The report concludes with advice on when to use front garden parking and to consider drainage carefully:

When to use front garden parking

- *Where there is an agreed scheme for a street*
- *Where clearing the street of parked cars will not encourage more through traffic, and higher vehicle speeds*
- *Where there is plenty of space in the front gardens*
- *Where it is impracticable to use any other solution*
- *Where there is money and time to do a good job*
- *Where it will not adversely affect the appearance of the street and result in the loss of trees and hedges*

- *Where it will not unwittingly reduce the number of parking spaces available to residents and visitors*
- *Where crossovers can be built without causing severe changes in the level and slope of the footway that would cause discomfort to pedestrians, pram pushers and wheelchair users.*

Use:

- *High-quality landscaping – with attractive materials and thoughtful design which will look attractive and wear well*
- *Soft landscaping, include trees and shrubs to create interest in the street and to help screen the vehicles*
- *Consider drainage carefully; either use a permeable surface such as crushed stone or gravel, which will allow rain to seep through or ensure that the new surface drains into a soakway. Few people realise the effect development has on local streams and rivers. Hard surfaces shed water far more quickly than grass or soil. The consequences can be that small local streams have to be lined with concrete to cope with the increased flow. Hard standing areas which drain onto the highway can add to the pollution of local streams and contribute to local flooding.*

Other reports which cover hard surfacing of front gardens to a limited extent include:

'CPZ Consultation Review 2000' – Ealing Friends of the Earth (EfoE)

In their response to this review Ealing Friends of the Earth did recommend:

"In conjunction with the introduction of CPZs the council needs to acquire statutory powers to prevent hard surfacing of front gardens. If this is not done there will be an immediate and damaging increase in hard surfacing in the Borough, with consequent adverse effects on run-off, flood potential and loss of green space".

'Sprawl Together Now' - American Rivers, the Natural Resources Defense Council, and Smart Growth America

A report published in 2002 found that the rapid expansion of pavement and developed land in metropolitan areas amounts to a one-two punch for the environment. The concrete eliminates fields and grasslands, which would have absorbed water and replenished underground aquifers; instead, water rushes off roads, roofs, driveways, and parking lots, picking up pollutants before flushing into rivers and streams. In Atlanta, Georgia, just one of the 18 metropolitan areas studied in the report, the amount of water lost because of urban sprawl could have supported the average annual household needs of between 1.5 and 3.6 million people.

'Fostering Sustainable Behavior: An introduction to community-based social marketing' – McKenzie-Mohr, Doug & Smith, William (1999)

This report provides advice on how to change people's behaviour on environmental issues. The website www.cbsm.com has a searchable

database of articles, case studies etc. related to fostering sustainable behaviour.

A list of other reports reviewed is shown in the appendix.

3.2 Local authority advice

In 2003 the Sustainability Co-ordinator in Ealing Council circulated an email to all LA21 officers in London boroughs, informing them of the research that the LA21 groups in Ealing were planning to carry out on the hard surfacing of front gardens. The aim was to establish whether any work had been carried out by other London boroughs in this specific area, including production of any leaflets/advice. The feedback was followed up with searches of local authority websites to identify what information was provided to residents, and supplemented with a review of the relevant trade associations and their publications.

Several local authorities do provide leaflets on keeping gardens green and give advice on suitable trees and shrubs to plant when considering off-street parking and some of the larger, more active boroughs were contacted by email and phone to obtain more details.

The Local Government Association (LGA) was formed in 1997 and represents the local authorities of England and Wales – just under 500 in total. It exists to promote better local government. According to the LGA the hard surfacing of gardens and resulting loss of lawns, trees and other natural habitat has not been identified as an issue in the Spending Review (SR) 2002 nor for SR 2004. It was unaware of any research in this particular area being carried out.

3.2.1 London

None of the LAs in London have conducted any monitoring exercises on the extent of the hard surfacing of gardens in their borough although there is an awareness that this is a growing problem. The consensus is that LAs are powerless to act since crossovers are a statutory right, apart from in conservation areas, main roads or dangerous locations (near a corner, school etc). There is an acceptance among some LA21 officers in London boroughs that the loss of front gardens is inevitable because of the increase in car ownership and implementation of parking control schemes. They can only offer encouragement and guidance and believe that education on sustainability and environmental issues, including use of permeable materials in conjunction with some planting (grass, shrubs and flowers) is the best way forward. Some do provide booklets with advice on how to keep gardens green.

Enfield

This borough received funding from the Government Office for London via the London Environmental Coordinators Forum to produce the '*Greening Your Home*' - a householders guide to sustainable design and construction. This was published in April 2002 and the funding enabled the guide to be made available for all London boroughs to adapt. Chapter 3 (out of 52) contains a section containing advice on '*Front Gardens and Off Street Parking*'.

Corporation of London

It has policies (REC 1-3 and ENV 5) relating to the loss of existing open space; to provide and encourage the provision of additional open space where this would enhance the character of the locality; and to have regard to nature conservation in the design and management of open space throughout the City. These policies have not been applied to individual gardens because the issue is not known to have come up. However, should housing estates in the City be subject to redevelopment they would apply.

Barnet

One of Barnet's LA21 partnerships has produced a leaflet for residents providing information and encouragement about keeping gardens green. Not available on the website.

Bexley

There is concern in Bexley about the loss of front gardens, which is believed to have accelerated in the last 5 years, with many streets losing about 90% of gardens to off-street parking. Apart from the implications for wildlife the total change of the urban scene and an increase in storm runoffs are causing real problems in some areas, according to the LA21 officer. Not much has been done other than to produce information for residents. In conjunction with the North West Countryside Project a small leaflet was initially produced which introduced a range of simple things people can do to improve their garden for wildlife and mentioned the loss of front gardens. This has been followed up by a 'Go Wild In The Garden' pack that is sent to anyone in the borough who returns the reply slip from the original leaflet. The pack brings together a range of current information on wildlife gardening from the Environment Agency, RSPB, LWT etc). Anyone who receives a pack receives a quarterly newsheet containing seasonal hints on what can be seen and done in the garden.

Brent

Planning Services produces an SPG 4 '*Parking in Front Gardens*' document downloadable from the website. It contains advice on when planning permission is needed for changes to the front garden for house outside conservation areas. It accepts that there is increasing pressure for off-street parking in parts of Brent and gives detailed advice about designing a forecourt area. This should allow an adequate amount of greenery and recommends a range of materials for the surface of the driveway. They include York stone, interlocking brick pavements, granite setts or cobbles, gravel, and blocks that allow grass to grow through. It further states that asphalt may be made acceptable by rolling a covering of suitable gravel, chipping or sand onto it. Concrete slabs, separated by a 0.8 metre grass strip, are suggested as an alternative. An SPG 19 entitled '*Sustainable Design, Construction & Pollution Control*' covers hard surfacing over large ground areas and advises that impermeable hard surfacing often causes flooding. It recommends that hard surfacing is incorporated with planting, suggests usage of paving blocks with gaps designed within them to allow plants to grow through and provides information about alternative products,

such as water-permeable paving which can be specified. The appendix provides a list of DIY companies and trade suppliers of suitable products. An SPG 3 '*Forming an Access onto a Road*' can also be obtained from the website.

Bromley

The hard surfacing of front gardens has been identified as a big planning issue in LBB but as it is usually 'permitted development' the view is that nothing can be done except where demolition is involved (e.g. in a conservation area) or where a crossover needs planning permission.

Camden

Camden's polarity of wealth and deprivation is extreme and is thought to be more marked than within any other council area in the country. Despite this there are 36 conservation areas covering over half the borough, subject to Article 4 Directions, that are stringently enforced. It also has over 5,500 listed buildings. Following flash floods in West Hampstead in 2002 the pollution projects team are looking at strengthening policies, possibly to require SUDS (sustainable urban drainage systems) to make surfaces more porous and hold more water longer), in new developments in some areas. Camden has adapted and produced its own version of the Enfield publication – *Greening Your Home* – and it has been split into 14 leaflets. One of these leaflets is entitled '*Improving Your Garden*' and can be downloaded from the Camden website.

Ealing

LBE produced a leaflet entitled '*Keeping Your Front Garden Alive*' in 1999. It offered advice on hard surfaces to use, appropriate trees, shrubs and plants, and recommended that hedges be renovated. This leaflet was issued to residents when they applied for a crossover or dropped kerb. It is now out of print. The Council apparently is also adapting for its own use (Planning Policy Guidance) the Enfield '*Greening Your Home*' guide. This was mentioned by one officer but others were unaware of it.

Enfield

The subject of front garden parking was raised in Enfield by the head of sustainability with no success because of residents' statutory rights. Enfield's guidance on crossovers does ask house owners to think about allocating some space to planting and 'greening' while designing their crossovers. The downloadable '*Greening Your Home*' guide (mentioned earlier) is produced for residents and chapter 3 provides advice on '*Front Gardens and Off Street Parking*', including the planting of suitable shrubs round the parking space, laying hard surface on a gradient to allow surface water to flow onto soft landscape areas, the laying of a drainage channel to prevent surface water being discharged across the public footway, and the separation of pedestrian access from vehicle access.

Haringey

Haringey was planning to cover forecourt parking in its Sustainable Urban Design SPG (January 2003). This was because of drainage issues and the potential negative visual effect of cars parked in front gardens. There were also concerns about the potential noise nuisance impact on adjoining ground floor flat occupants (depending on size of front garden and proximity of adjoining windows).

Royal Borough of Kensington & Chelsea

The North Kensington Environmental Forum has similar concerns about protecting front gardens from becoming parking lots and has produced a leaflet entitled '*Front Gardens Matter*'. This can be downloaded from the nkef.org.uk website.

Westminster

The City of Westminster is one of the most important urban areas in the country. Most of it is post-medieval and the UDP is very specific in relation to hardstandings, preservation of front gardens, listed buildings and conservation areas. A report was produced in February 2003, as part of the Government Review of the GPDO (see section 3), on problems with forecourt parking in the borough and the costs incurred in having to pay compensation to householders/businesses when planning permission is refused, or is subject to an Article 4 Direction. Westminster had made representations to the ODPM, prior to the production of the Permitted Development Rights Review, in the hope that the report would recommend the removal of permitted development rights for forecourt parking instead of the borough having to rely on Article 4 Directions (see section 5 for more details). However, more evidence was required from other boroughs to support the case. An SPG entitled '*Front Garden Parking – A Guide to Legislation and Design*' is provided for residents.

3.2.2 Outside London**Guildford**

The borough has a draft SPG on the hard surfacing of front gardens.

Nottingham

Off street parking is becoming more of an issue than it used to be but nothing has been actively done about it to date.

Angus

Has downloadable guide which offers advice on hard surfacing.

3.3 Other organisations

Thrive is a national horticultural society charity that exists to enable disadvantaged, disabled and older people to participate fully in the community. Its carryongardening website offers extensive advice on suburban gardens and choice of materials for hard surfacing.

Letchworth Garden City Heritage Foundation is the equivalent of a conservation area and has very stringent rules about what its residents can and can't do. The foundation offers extensive advice on best practice in urban gardens and off street parking and produces numerous community publications for residents.

Environ was created in 1993 by the merger of two independent charities: Leicester Ecology Trust and Leicester Environment City Trust. It is an independent charity offering information, advice and practical help to encourage individuals and organisations to take practical steps towards a more sustainable future. Articles which can be downloaded from its website include *'Make Gardens Grow'*, *'Green City'* and *'Green Power'*.

4. LONDON BOROUGH OF EALING

4.1 Population & car ownership

LBE is the third largest of the London boroughs in terms of population. The resident population of Ealing, as measured in the 2001 Census, was 300,948, of which 49% were male and 51% were female.

According to 1991 Census figures, issued by the ONS, its population was 281,800 and has risen continuously since then. The population has not grown quite as fast as the ONS predicted in its mid-year estimates for the year 2000 (an increase of 29,700 people, representing 10.5% total growth).

The population has actually increased by 19,148 people (6.8%). However, since 1991 there have been ward and boundary changes in LBE and this may account for the difference.

As well as the 23 electoral wards the borough can be roughly divided into seven areas, each of which is represented by an area committee. The seven areas in order of size are: Ealing, Southall, Acton, Greenford, Northolt, Hanwell and Perivale.

The table below shows the population for these areas, as measured in the 2001 Census.

Table 4a POPULATION BY AREA – CENSUS 2001

Area	Total	%
Ealing	78,792	26
Southall	64,470	21
Acton	53,689	18
Greenford	39,572	13
Northolt	26,308	9
Hanwell	25,396	8
Perivale	13,441	5
Total	300,948	100

Source: Census 2001, ONS Neighbourhood Statistics

According to ONS figures the 2001 Census recorded that there was a total of 118,023 households in Ealing and 99% of the population lived in households. The remainder lived in communal establishments.

Table 4b below shows the car ownership by household in 2001. 80,651 households in Ealing had one or more cars or vans in 2001 and this represents 68% overall. The smallest area in terms of population, Perivale, had the highest number of households with at least one car or van (77%) and Acton had the lowest (61%).

At ward level, Lady Margaret ward in Southall had the highest percentage of households with at least one car or van, 80% owned one or more (see appendix), whereas South Acton had the lowest - only 53% of households in this ward had at least one car or van.

Table 4b CAR OWNERSHIP BY AREA – CENSUS 2001

Area	Total Households	H/holds with 1+ car/van	% with 1+ car/van
Ealing	33,771	23,574	70
Southall	19,618	13,864	71
Acton	22,956	14,034	61
Greenford	14,994	11,003	73
Northolt	10,800	7,215	67
Hanwell	10,862	7,080	65
Perivale	5,006	3,865	77
Total *	118,023	80,651	68

Source: Census 2001, ONS Neighbourhood Statistics

37,372 (32%) of households had no car or van and 26,392 (22.4%) of them had 2 or more cars or vans.

There were 112,907 cars or vans recorded in the 2001 Census for Ealing (see appendix for more details), each requiring a parking space in the borough, and as car ownership continues to rise the figure in 2004 will be higher.

4.2 Unitary Development Plan (UDP)

Frequent references were made to the UDP by the officers in Ealing Council who were interviewed. It is the legal document for the borough and no planning decisions are made without reference to it.

As a result of several government initiatives and papers the original UDP produced in 1998 needed to be updated and modernised and a replacement UDP entitled 'New Plan for the Environment' was placed 'on first deposit' and

published on 1/2/02. A second deposit was issued on 18/10/02, together with some revisions to the original. It is expected that after consultation and a possible public enquiry to resolve differences of opinion, it will be formally adopted as the statutory UDP by October 2004. There are two volumes.

Volume 1 of the revised plan contains nine chapters, as follows:

- Chapter 1 Strategy
- Chapter 2 Environmental Resources & Waste
- Chapter 3 Green Space & the Natural Environment
- Chapter 4 Urban Design
- Chapter 5 Housing
- Chapter 6 Business
- Chapter 7 Shopping & Town Centres
- Chapter 8 Community Facilities
- Chapter 9 Transport

Of these only chapters 4, 5 and 9 contain sections that are relevant to the research, and these are reproduced below.

The second volume covers:

- Chapter 10 Sites and Areas

Map 8 in this volume shows the current conservation areas.

Chapter 4 of the new plan includes a section on conservation areas and declares that the intention is to create new and extended conservation areas in future (Section 4.3 of this report covers details of the areas proposed).

The following are pertinent extracts from the replacement UDP (second deposit):

4.8 Conservation Areas

1. *The Council will protect and enhance the character and appearance of Conservation areas and their settings.*
2. *New development, built or otherwise within or adjacent to the Conservation Area will be permitted provided that the historic and architectural context and the landscape or green setting of the area is well related to the existing character of the area. The Council also requires that any development proposal adheres to the Council's specific area guidelines.*
3. *The Council will refuse planning permission and conservation area consent for redevelopment of existing buildings unless the proposed replacement development will preserve or enhance the character of the conservation area. The Council will also, where appropriate, make Article 4 Directions, restricting development rights granted by the General Permitted Development Order.*
4. *It is the Council's intention to create new and extended conservation areas in the Borough, provided that certain criteria are met.*

Where groups of buildings, trees, and related open space create an important amenity, this is recognised through declaration as a conservation area. Within a Conservation Area, development must enhance the special character and appearance of the area and its settings, including the spaces, buildings and structures, landscape, green settings, historic features and views into the area. Demolition of buildings and cutting or felling of trees is controlled, and some Permitted Development Rights are restricted in order to safeguard the features that create the amenity of the Conservation Area.

The Council has and will continue to prepare design guidelines and publish proposals for the protection and enhancement of all conservation areas in consultation with local residents and the appropriate Conservation Area Advisory Panels, and more general design guidelines applicable to the Borough as a whole. The Council also requires all departments and statutory undertakers to have special regard to the character and appearance of conservation areas when carrying out works within them.

The new plan contains some conservation guidelines:

Table 4D

It is the Council's intention to create new and extended conservation areas in the Borough provided that the following criteria are met:

- 1. The area concerned must be the setting for one or more of the following:*
 - Listed buildings, or a group of good design from any period, especially where they create an attractive landscape*
 - Urban open spaces or historic village greens*
 - Features of historic or archaeological interest including industrial or transport heritage*
 - Landscape features including the water, trees, gardens of value for their plants, wildlife or the amenity of the surrounding area*
- 2. The area should have some cohesion or character worthy of preservation: and*
- 3. The benefits of preserving the character must be considered to be greater than the loss of certain permitted development rights.*
- 4. Having regard to the financial and resource limitations of such action.*

Chapter 5 contains a section on vehicle access, crossovers and front gardens. It also refers to the Ealing LA21 booklet 'Keeping Your Front Garden Alive' which is now out of print. This used to be provided to residents when they applied for a crossover by the Council's contractors, Mouchel Parkman.

5.9 Extensions and Alterations to Private Houses and Gardens

The Council will support proposals to extend or alter houses and gardens, including new vehicle access to the property, taking into consideration –

- 1. the effect of the proposal on the living conditions of neighbouring residents*
- 2. the architectural quality of the proposal and its relationship with the design of the existing property*
- 3. the streetscape, and the character of the area*
- 4. traffic safety.*

Vehicle access, crossovers and front gardens

In considering alterations to the street frontages of residential property, including proposals for vehicle access, the council will try to retain a reasonable front garden with some greenery, in order to prevent harm to the street scene. A planning application is usually required for a new vehicular access to flats and other property. However, it is only required for access to a single family house, where the street happens to be a trunk or classified road or the proposal could give rise to conditions considered dangerous to highway users. Permission will also be required if the house is in a conservation area and is covered by an Article 4 Direction.

Examples of situations where danger could occur include houses that are near a pedestrian crossing, a bend in the road, or at a junction. Pedestrian safety along the pavement outside the house could be prejudiced if there is a series of adjoining crossovers or a scheme that requires a wide access because of the number of vehicles proposed. These are likely to be refused.

Safe routes to school also need to be considered. School children in groups walking along the pavement are vulnerable highway users, as are people with disabilities. Map 13 indicates the main roads in the Borough where planning permission for an access will be required. Applicants with other addresses will be told if they need planning permission when they approach the Highway Authority for a crossover. When planning permission is required, the local authority will use Table 5H below to consider whether an application complies with policy 5.9.

Table 5H

Where planning permission is required for vehicular access to residential property, the Council will seek to:

- retain front walls or hedges and existing trees with adequate visibility for vehicle movement*
- ensure that the area of hard standing is minimised by using porous surfaces and leaving adequate space for water to drain to existing trees, shrubs and hedges*

Permission will normally be refused where the access would be:

- i) likely to cause danger to highway users including children and people with disabilities on the pavement*
- ii) to a garden too small to accommodate a car space 4.8m in length between the house and gateway*
- iii) too wide thus causing a danger to pedestrians as well as having an adverse effect on the appearance of the street. The cumulative effect of adjoining wide crossovers will also be taken into account. The usual width of an access is 2.4m; and*
- iv) on a line which would require the loss of a street tree or would cause damage to its root system.*

Conversely hard surfaces over front gardens and the loss of front walls can create a very unattractive space on each side of the road. Where even a low hedge or wall is retained, the sense of enclosure gives some additional security to the front of the house.

It is suggested that whether or not planning permission is needed, the character of an area depends on the actions of individual householders and the builder or

landscape architect. It is important to use the right materials and to put in appropriate planting. This can make a significant environmental impact on the street scene. The LA21 Natural Environment & Biodiversity Group leaflet on 'Keeping Your Front Garden Alive' provides useful guidance to residents.

Chapter 9 contains a reference to the Council's encouragement of residential developments that provide less than the maximum parking requirement.

9.8 Low Car Housing

Residential development, which provides less than the maximum parking requirement will be encouraged where there is evidence that car ownership and use will be low enough to justify the proposal. It is expected that this type of proposal will be appropriate where the following considerations apply in the following areas:

- *Town centres*
- *Within 200m of stations*
- *CPZs where there is a legal agreement preventing residents from having permits*
- *Other areas where on-street parking is subject to control.*

4.3 Conservation areas

Ealing Planning Services produce a leaflet on Conservation Areas, based on the 1998 UDP policies. References to Article 4 Directions are as follows:

In some conservation areas, even minor alterations such as small extensions and replacement doors and windows can adversely affect the visual quality of the area. In such areas the council can impose additional controls to restrict works that would normally be allowed as 'permitted development' by the use of Article 4 directions, with the effect that planning permission could be required for all extensions, porches, door and window replacement, vehicular hardstandings, walls, fences and access.

There are 26 Conservation Areas in the London Borough of Ealing at present, but only three of them are subject to an Article 4 Direction.

Following considerable pressure from local residents, a Conservation Area Review was instigated in January 2003 (the last one was undertaken in 1997). Four new Conservation Areas are proposed in a consultation document issued in July 2003. This document also recommends extensions to eight of the existing areas (see table 4c below).

The powers of a local planning authority to designate new Conservation Areas are set out in Section 69 of the Planning (Listed Buildings and Conservation Areas) Act 1990. Following their designation, the Council has a duty to produce and publish proposals for the preservation and enhancement of its conservation areas.

Table 4c shows the current Conservation Areas.

Table 4c **CURRENT CONSERVATION AREAS**

Acton Green	Hanger Hill Garden Estate *
Acton Park **	Hanger Hill (Haymills) Estate *
Acton Town Centre **	Hanwell Village Green **
Bedford Park **	Hanwell Cemeteries
Brentham Garden Estate *	Hanwell Clock Tower
Churchfields, Hanwell	Haven Green
Canalside	Mill Hill Park
Creffield	Montpelier Park **
Cuckoo Estate	Mount Park **
Ealing Green	Northolt Village Green
Ealing Common **	Norwood Green
Ealing Town Centre **	Old Oak Lane
Grange & White Ledges	St Marks Church and Canal

* Article 4 Direction

** Proposed extensions

An Article 4 Direction is only applied to the following three Conservation Areas in LBE:

- Brentham Garden Estate (Ealing)
- Hanger Hill (Haymills) Estate (Ealing)
- Hanger Hill Garden Estate (Acton)

1

1. Brentham Garden Estate

The Brentham Garden Estate was the prototype for Hampstead Garden Suburb. It originally started as a co-partnership village in the first part of the 20th Century and the area developed from the formal Edwardian terraced houses to the informal cottage style houses by Parker and Unwin, the

¹ The proposed new Conservation Areas were assessed by the Conservation Officers (two people job-sharing) and put forward because they met the selection criteria enshrined in Table 4D of section 4.8 of the written UDP (see section 4.2 of this report). They are currently under further investigation, in consultation with the householders and local amenity groups concerned and some amendments are expected. The outcome, however, is not expected to change that much. The proposed new areas are:

- The Cricket Ground Area: (Corfton Rd, the Cricket Ground and parts of Woodville Gdns, Park View Rd and Hillcrest Rd).
- St Stephens' Area: (The church, and buildings fronting the island, North Ave and part of The Avenue).
- Brunswick Estate: (Clarendon Rd, Brunswick Gdns, Sandall Rd and parts of Lynwood Gdns & Brunswick Rd).
- Holy Cross Area: (the two churches, and their immediate surroundings in Ferrymead Gdns and Oldfield Lane).

architects involved in the low density rural-type housing in countryside type settings known as the "Garden City Movement". It was designated a Conservation Area in 1969.

Hardstandings for vehicles in front gardens are not permitted. However, in Brentham there is little scope for parking in front gardens because the gardens, in many cases, are not big enough.

Residents are actively encouraged to report unauthorised work to the Brentham Society, the conservation advisory panel (residents) or to Ealing Council.

2. Hanger Hill (Haymills) Estate

The Haymills Estate at Hanger Hill was built on the grounds of Hanger Hill House, the home of the Woods family, who owned land on both sides of Hanger Lane from about 1775. The house was the headquarters of the Hanger Hill golf club until it was sold to Haymills Ltd in 1926. Building work started in 1928 and much of the estate was completed before the 1939 – 45 war. The Haymills Estate is notable for the mix of architectural styles, as well as for the overall quality of house design and landscaping.

The conservation area was designated in June 1996 and an Article 4 (2) Direction restricting certain permitted development rights came into force in September 1997.

Planning permission is required for the provision of a hardstanding on the road frontage, including the paving over of front gardens.

Ealing Council also recommends that no more than 50% of the front garden be hard surfaced in their Policy & Design Guide, produced in 1998.

3. Hanger Hill Garden Estate

The land on which the Hanger Hill Garden Estate was built was used for flying (Acton Aerodrome) and aircraft manufacture between 1909 and 1920. Development land was acquired in 1925, and development of the Estate started in 1928 and was completed by 1936. The special quality of the estate derives from the quality of its half timbered 'mock Tudor' style and its formal landscaped setting.

The Conservation Area was designated in 1969 and an Article 4 Direction was made in 1976. The Article 4 Direction includes restrictions on hardstandings and crossovers:

4.3.1 Home zones

The Five Roads Forum in West Ealing was set up as a Home Zone in 2001 to represent the needs of residents in five roads, comprising Hastings Road, Hartington Road, Broughton Road, Denmark Road and Arden Road. The residents in this neighbourhood established a formal association to campaign for a traffic and parking management scheme to address the problems they were experiencing.

Home Zones are an attempt to strike a balance between vehicular traffic and everyone else who uses the street. They work through the physical alteration of streets and roads in the area. These alterations force motorists to drive with greater care and at lower speeds.

They should not be confused with conservation areas and are not subject to an Article 4 Direction, nor do they cover the issue of hard surfacing of front gardens to provide off-street parking.

4.4 Why gardens are converted

Little published information was available on why gardens are converted from grass to hard surfaces, other than for off-street parking. There is tacit acceptance by the majority of local authorities that the primary reason is to provide off-street parking and most of their leaflets focus on offering advice on the use of sustainable materials, allowing sufficient drainage and mixed planting.

The information in this section has been primarily obtained from interviews with officers in Ealing Council, from data compiled and published by the LA21 groups and from a few other publications.

Most, but not all, of the front gardens in Ealing are converted to provide off-street parking, and with the inexorable increase in car ownership, single person households and reduction in the number of parking spaces available the trend is set to continue.

Reasons for the conversion from grass to hard surfaces can include:

- Labour saving – dislike of mowing grass, trimming bushes, pruning trees or weeding
- Cleanliness – no desire to tramp mud, dirt or water into the house in the winter
- Convenience – preference for parking outside home rather than driving around trying to find a parking space with small children, heavy shopping etc
- Minimum maintenance – once the hard surface has been laid little work is required to keep the area tidy
- Disability access
- Reduction of vandalism or theft of vehicles when parked off-road

- Safety – women in particular and the elderly want to be able to park close to front door if arriving home late at night
- Sub-division of large houses into higher density, single units each requiring a parking space
- Cost of purchasing parking permits

In some areas, according to an estate agent, it can also increase the value of a property if off-road parking is provided, both for flats and houses.

In a minority of cases the front garden is hard surfaced for other reasons, i.e. it is not used for off-street parking or there is no vehicle access. In addition to those already mentioned above other reasons are:

- Inability to maintain garden – elderly, unwell, disabled
- Fear of subsidence – from large tree roots etc., particularly in older properties
- Fashion – vogue for pebbles and decking; TV garden makeover programmes; more people travelling abroad and wishing to copy the 'Mediterranean look' at home
- Water saving – encouraged by water companies in drought years
- Lack of knowledge of low-maintenance alternatives
- Fear of theft – trees, shrubs and pot plants are stolen
- Safety – walking on hard, flat surfaces is safer for disabled, elderly and ill
- Promotion of contractor services – leaflets flooding through letterbox

4.5 Procedure for crossover applications

There is a standard procedure when a resident calls Ealing Council call centre to ask about how to apply for a kerb crossover. The caller details are entered electronically into an Easylink system which is linked to Mouchel Parkman (the crossover contractor) and there are pre-printed forms depending on the nature of the enquiry, e.g. a request for a quotation, extension to an existing one etc. As soon as the call is finished the form is emailed to the Crossing Administrator at Mouchel Parkman. Crossover constructions were outsourced to Mouchel Parkman in 1994 and the contractor sends out all the application forms.

Residents can also obtain a copy of the crossover application form from Ealing Council's Environment reception at Perceval House. Occasionally they bypass both methods and contact Mouchel Parkman directly, either in person or on the phone.

The call centre only gives out the basic information that is contained in the application form, e.g. what the costs start at (£650.00) and the sliding scale depending on the width of the pavement, whether there is a grass verge involved, or whether a tree, lamp post or fire hydrant has to be moved etc. The caller is also informed that a deposit of £50.00 is required to process the

application. This deposit is put towards the final cost of construction. Any other queries are referred to the Crossing Administrator at Mouchel Parkman.

The call centre can send out planning application forms if requested but this is normally handled directly by the contractor. It does not often handle commercial crossover applications because companies generally know the procedure and tend to go directly to Mouchel Parkman.

The view of Ealing Council officers is that crossover applications have gone up steadily over the years and have not increased significantly recently. According to Mouchel Parkman applications from the Southall area are perceived to have gone up slightly in the last two months or so, but the increase is not thought to be significant (CPZs were introduced in parts of Southall on 7th November 2003).

According to the call centre enquiries for crossover applications are believed to be running at about 900 a year at present, i.e. 2003-2004.

The view of the Highway department concurs with this - that crossover applications have not shown a massive increase in the last five years – they are believed to have remained about 500-600 a year, with minor fluctuations each year. The reason given for this is that a permit to park the car in the road only costs £45.00 a year, compared with an average cost of £800.00 to the household for the construction of a pavement crossover.

With the exception of the Home Zone (five roads forum) in West Ealing, the introduction of CPZs in LBE is believed to have freed the streets of cars, despite an overall decrease in parking spaces.

“A lot of the streets have freed up because of the metered zones which provide adequate space to park in them. Even if you have two or three cars you can park”.

The Home Zone in West Ealing was found to be difficult initially in terms of matching the volume of cars and the number of spaces available. However, this issue has been resolved.

One of the reasons for the recent introduction of CPZs in Southall was that the streets in this area were very congested.

There is awareness that there are plenty of residents who don't apply for a crossover when they should (car driven over the pavement) and that others illegally construct their own. According to the Highway department officers it is not the responsibility of Mouchel Parkman to report back to the Council examples of these practices. This is the responsibility of the Highway Enforcement team and it is down to their discretion as to what action is taken.

Feedback on crossover applications and the number constructed is provided by the contractor to the Highway department on a monthly basis. The proportion constructed is believed to be between 60 - 65% of all applications.

The contractor does not get involved in the hard surfacing of front gardens and it recommends that this be in place before the pavement crossover is constructed. No advice is given on any materials.

The Council's criteria permitting the crossover construction are that the front garden or area to be used for parking must be at least 4.2 metres in depth from the rear of the public highway (pavement) to the front of the house or nearest building, or 3.8 metres if the frontage of the property is over 6.5 metres wide.

Residents are required to fill in the following details on the crossover application form:

- Name, address and telephone number.
- Application date
- Property status (house, maisonette, flat, house to flats, rented, council housing, on major road)
- Obstructions (street tree, lamp column, bollard/manhole, telegraph pole)
- Width required [2.4m, 3m, 3.6m, 4.2m, 4.8m or if an extension(s)]

The form is due to be redesigned.

When the Crossing Administrator at Mouchel Parkman receives the crossover application there are a number of factors, which determine whether or not it can be constructed without planning permission. Planning permission is required before the crossover can be constructed in the following cases:

- property is on a main road
- a block of flats/conversion into flats
- in a conservation area with an Article 4 Direction
- a commercial premises
- in a drain corridor (corridor alongside the kerb to maintain vegetation)

If necessary, a planning application form is sent to the resident and this has to be returned to Ealing Council's planning department for a decision as to whether a crossover will be permitted. Other factors, which might affect the decision on whether planning permission is required, include the crossover being in a dangerous location, requiring a telegraph pole to be moved, tree to be cut down or directly above underground public utility apparatus.

If no planning permission is required the application is responded to by Mouchel Parkman within 3 weeks with a quotation and requires that the deposit of £50 (mentioned earlier) be paid if the householder wishes to proceed. The full amount has to be paid in advance and the crossover is normally constructed four weeks later.

As a general rule the approximate costs of constructing a car crossover in 2003-2004 range from:

- an average 2.4 metre wide crossover - £650
- an average 3.0 metre wide crossover - £750
- an average 3.6 metre wide crossover - £850
- an average 4.2 metre wide crossover - £950
- an average 4.8 metre wide crossover - £1,050

The costs are based on an average pavement width of 2.1 metres constructed using paving stones. However, additional costs would be incurred when there is any pavement obstruction such as a tree, street lamp, or existing utility equipment such as a manhole, cabinet or similar apparatus.

For registered disabled people, the cost of constructing a crossover can be met by a Disabled Facilities Grant or by Ealing Council's Home Improvement Agency.

Only two types of crossovers are constructed – paving stones which are not permeable or bitumous Artificial Stone Paving (ASP) which is moulded from batched materials. Whichever is used is chosen to match the pavement. The contractor also tends to renew the surrounding paving stones when a crossover is constructed.

The perception among Mouchel Parkman's staff is that illegal crossovers are growing and this is particularly noticeable in Southall since the introduction of CPZs. One contractor commented:

"What I find most irritating is when the front gardens are too small and cars have two wheels on the pavement!"

On occasion Mouchel Parkman do take photos of illegal crossovers and pass them through the Ealing Council call centre to the Highway Enforcement officers. However, there is not much feedback:

"Feedback is minimal from the enforcement officers – there are 15 people in the division".

No systematic research has been conducted into the extent of illegal crossovers across the whole borough of Ealing. However, some research was recently carried out in the Perivale area to assess the extent of illegal vehicle crossings over footways and verges, i.e. usage of the front garden for parking without a crossover having been constructed. This is covered in section 4.8.

4.6 Crossover applications requiring planning permission

There are two conservation officers in a part-time job share (amounting to 1.4 people) and fifty percent of their job remit ranges from having to handle applications for listed buildings, development in conservation areas, local listed buildings to some design issues in planning applications. Reviewing Article 4 Directions, devising design guides for LBE conservation areas and streetscape audits account for the other fifty percent. Officers indicated that there have problems keeping up with the workload.

“There is such an enormous amount of work even carrying forward one policy item like the conservation review – just one area and we haven’t touched the design guides which all need updating and the article 4 direction review too”.

Because of the unusual situation within Ealing Council (at the time of interview) whereby the development control and policy functions are split between two Directorates officers felt that liaison and communication between the two are not as good as it should be, particularly at higher levels. This can cause major problems because things are missed and information is not passed on.

Conservation is in the Planning and Surveying Services Directorate which handles most of the planning applications and negotiations and developing policy whereas the overall policy is managed by the Transport & Planning Policy Directorate.

There are many applications for hard surfacing of front gardens in the Hanger Hill (Haymills) Estate and despite the fact that this is a conservation area subject to an Article 4 Direction they are seldom turned down because most of the houses are detached, with large gardens. As long as the policy of 50% of the front garden remaining green is adhered to it is not felt that the application can be turned down (see Appendix 8.4.2). But it is being eroded.

We need a better policy really because this 50% is a very hard line to hold. The local residents want us to hold that line and we often feel, as planning officers, that we can’t support this if there are other extenuating circumstances – their neighbours etc”.

There are fewer applications in Hanger Hill Garden and Brentham estates because the gardens are much smaller and it wouldn’t be possible to get a car in them anyway. Nevertheless, it will be interesting to see what happens in future since it was announced in December that CPZs are being introduced in the Brentham Garden Estate in the next few months.

One officer’s view is that the Article 4 Direction is out of date for the Hanger Hill Garden Estate because it only mentions vehicle hardstandings and does not cover other forms of hardstandings. There are increasing cases of residents on this estate laying down some form of hardstanding, because they don’t like mowing grass, trimming bushes or pruning trees. They go ahead without applying for planning permission and when their neighbours or the residents’ association report them the planning officers feel that they

cannot always control this because it is not specifically covered by the Article 4 Direction. In some of these instances the matter is referred to the enforcement officers, who are part of the Planning and Surveying Services Directorate.

According to the same source there are 4-5 enforcement officers, made up of full and part time posts.

The enforcement officers obtain a report and then send off a letter to the resident concerned and, if possible, make a visit. The planning officers are sometimes powerless to do anything about the situation because when there are examples of other houses in the road having already carried out identical work ultimately they do not feel they can control it and have to almost turn a blind eye.

The officer also further felt that the Article 4 Direction needs to be updated for both of the other two conservation areas – Hanger Hill (Haymills) and Brentham to address this issue.

It was admitted that, at the end of the day, legal enforcement comes down to money. As public servants officers have to take a judgement as to what can be won and the view is that with limited resources it is not worth taking a risk on something that is likely to be overturned by a court and incur costs against the Council. Even when residents have been taken to court the fine has been derisory.

"In the end you get to a point at which you can't refuse it. It's one thing having policies but in the end you know that if its going to be refused and go to appeal and you have costs against you then there is a line and it might be undesirable but it may not be refusable".

A planning application incurs a fee of £110 per household and overall there are about 4,500 applications a year mainly for the conservation areas (not many of these are for hard surfacing). The fee doesn't reflect the true cost but is charged in order to keep the number of applications to a manageable level, as there is no prospect of obtaining more staff to help with the workload.

If residents have constructed a kerbdrop without permission, they are encouraged to apply for planning permission. If this is refused then the Council should reinstate the kerb. Appealing against this can take months. Seldom is the kerb reinstated because the decision is generally based on whether it is worth the time and the money to take action. More often than not the case is closed without any action being taken. None of the officers were aware of anyone being taken to court and there was little enforcement, unless it was seen to be setting a precedent.

All of the planning officers interviewed agreed that there is and will continue to be an increase in the number of front gardens being converted to provide

off-street parking because there were just not enough car parking spaces to go around.

“Some roads are going that way – the loss of all trees and green. It’s a worry. This issue is something that residents are worried about and they can see it coming”.

The increase in the hard surfacing of front gardens was felt to be inevitable and there was little that could be done about it.

“You can’t really do anything about it – if you don’t provide people with places to park then they are always going to do this I suppose”.

4.7 Statistical analysis of crossover constructions and applications

The figures in table 4d show the actual 'paid for' crossovers for the past four and a half years, i.e. until 17th December 2003. The definition of 'paid for' had to be used instead of constructed because this was known to be accurate. These figures have been taken from electronic records supplied by Mouchel Parkman and have been consistently entered since the contract started on 1st April 1999. It is also known that not all completed applications for crossovers were input into these electronic records for the first two years. The majority of enquiries (without an application form) are not included in the electronic records, although there are some discrepancies. It should also be noted that the figures for the period 1/4/03 – 17/12/03 only represent eight months of the year because they are based on 'paid for' and there is a time lag of about 6 weeks between payment and construction.

It is, therefore, not possible to assess whether total enquiries and/or applications have increased over time, or whether the proportion of constructed crossovers has increased or decreased recently.

Table 4d 'PAID FOR' CROSSOVER CONSTRUCTIONS 1999-2003

Year	1/4/99 – 31/3/00		1/4/00 – 31/3/01		1/4/01– 31/3/02		1/4/02 – 31/3/03		1/4/03 – 17/12/03	
	No	%	No	%	No	%	No	%	No	%
Ealing	130	18	104	17	82	12	120	18	55	16
Southall	158	22	121	19	147	22	129	19	85	24
Acton	81	11	52	8	37	6	66	10	32	9
Greenford	139	20	171	27	194	29	158	23	105	30
Hanwell	42	6	38	6	36	5	40	6	17	5
Northolt	86	12	62	10	82	12	83	12	29	8
Perivale	75	11	78	12	84	13	78	12	29	8
Total	711		626		662		674		352	

Source: Mouchel Parkman records - December 2003

The view of the Mouchel Parkman staff interviewed is that the number of 'paid for' crossovers has dropped since the price of constructing a kerbdrop was increased in 2003.

For the period 1/4/02 – 31/3/03 there were 844 crossover applications, of which 80% were paid for constructions (these figures are thought to be reasonably accurate although the proportion constructed seems on the high side). The number of 'paid for' crossover constructions was 352 for the period from April to December 2003, 62% of the total applications (564) and

this does represent a drop from the previous year. However the finding is inconclusive since it only represents nine months of data.

Although Greenford is the fourth largest area in terms of population it has consistently had the highest number of crossover constructions since April 2000. With the exception of Perivale (which has a much smaller population) this area has the highest proportion of households in Ealing with at least one car or van (see section 4.1).

Within the budget it was not possible to carry out further analysis of the paper records to compare them with the electronic records. It is suspected that applications/enquiries are higher than the electronic records indicate.

4.8 Perivale research

A survey of roads in Perivale was carried out by LBE Highway maintenance and Mouchel Parkman in October and November 2003, to ascertain the need for and provision of existing vehicle crossings over footways and verges (crossovers).

The purpose was to identify the actual number of crossovers installed and the need for such facilities where they are not currently provided.

In total 66 roads were surveyed and 2,470 premises with existing crossovers were counted in the Perivale area. A further 217 premises (i.e. 8% of the total) were identified as having no crossover at all. A constructed crossover was required because the front garden was being used for off-street parking.

Section 184 of the Highways Act 1980 allows the highway authority to take action on an occupier of premises (adjoining or having access to a highway maintainable at public expenses) who habitually takes or allows mechanically propelled vehicles across the kerbed footway or verge. Such action can include the construction of a vehicular crossing of the footway or verge, or imposing such reasonable conditions on the use of the footway or verge.

The report was sent to the Perivale Area Committee and recommended that a letter be sent to occupiers of the premises where the need for a crossover had been identified. The letter would inform them that the Council was aware that a motor vehicle was being parked in the front garden without consent and would point out that this was illegal until such time that the Council granted consent. It would ask them to apply for a crossover at their expense to be constructed by the Council. Should action then not be taken Environmental Services would be approached to take the appropriate enforcement action.

5. GOVERNMENT POLICY

Government policy to help achieve an urban renaissance is promoted in papers such as *'Planning for the Communities of the Future'*, *'A Better Quality of Life'*, the Urban Task Force's *'Towards an Urban Renaissance'*, *'The National Strategy for Neighbourhood Renewal'* and the *'London Project'*. However none of them directly address the issue of the loss of front gardens to provide off-street parking for vehicles. There appears to be a tacit acceptance that with growing dependence on motorised transport and ever-higher levels of car ownership, combined with competing demands for space the conversion of front gardens into car parks is inevitable and will get worse, in London in particular.

According to ICE in their *'2002 Designing Streets for People Report'*, vehicles, rather than people are the focus of attention, and *"practice, regulations and standards have developed around accommodating vehicles"*. The report, which was compiled from a mix of interviews with local authorities and extensive evidence provided by practitioners and academics involved in the field, further states that: *"we have not managed to balance the growth in traffic with people"* and *"the right of way has prevailed over other rights"*. *"The rights of people who own or occupy property adjacent to the highway have in practice been subordinate to the right of people to pass and re-pass in vehicles"*.

The Government is arguably guilty of putting out mixed messages, e.g. widening the M25 while at the same time encouraging the extension of bus lanes and cycle paths.

Even the Government review of the General Permitted Development Order (GPDO) undertaken by the ODPM in 2003 has not taken the issue fully on board, despite representations from some of the local authorities in London. The review involved consultation with all English local authorities and a range of other organisations using or affected by 'permitted development rights'. One of the purposes of the review was:

"Consideration was given to how far permitted development rights encourage or hinder development consistent with Government policy aims, in which sustainability has emerged as the overriding theme".

Its recommendations have aimed to take account of the future direction of government policy and have addressed or made reference to the implications of higher density residential development. Very few changes are recommended, mainly tightening up of definitions and clarification of terminology. The proposals involve relatively few changes to primary or other legislation.

It does recommend, however, that further research be conducted to assess the extent of the problem caused by the demolition of front garden walls to provide off-street parking.

One recommended change to Article 4 Directions might encourage Ealing Council planning enforcement to take action when planning laws are flouted.

*18. **Article 4 Directions:** Improve the effectiveness of the Directions by removing the right to compensation where planning permission is refused after permitted development rights are withdrawn;*

Other recommended amendments to Article 4 Directions were:

- a) *Providing best practice guidance on the preparation of Article 4 Directions*
- b) *Restricting through the GPDO the permitted development rights most commonly removed by Article 4 Direction, but with local relaxation possible through local development orders*
- c) *Consider the need for a new type of Article 4 Direction not requiring Secretary of State approval and to apply to development outside conservation areas where rapid response is needed e.g. rural leisure plots.*

Further points worthy of note include:

Chapter 5

Part 1: Development within the curtilage of a dwelling house

5.7 *Class F permits a hard surface for any purpose incidental to the enjoyment of the dwelling house as such within the curtilage.*

ISSUES

A high proportion of the responding LAs indicated that Part 1 permitted development gave rise to some problems.

F It is not possible to control the extent of 'hard surface', with permitted development rights used to provide off-street, front garden parking to the detriment of the street scene and biodiversity;

The report found that Part 1 was far too complicated and that classes (A-H) were too loosely defined. It recommended that:

"The principal change is that Part 1 should be rationalised from 8 classes to 2 with a new Class A for development attached to a dwelling house and Class B for development within the curtilage of a dwelling house".

Chapter 6

Part 2: Minor Operations

6.2 *Class A allows the erection, construction, maintenance, improvement or alteration of a gate, fence, wall or other means of enclosure, unless within the curtilage of or surrounding a listed building, or if the height of a new means of enclosure and adjacent to a highway exceeds 1 metre, or 2 metres otherwise.*

6.3 *Class B permits the formation, laying out and construction of a means of access to a highway which is not a trunk road or a classified road, where*

that access is required in connection with development permitted by any Class other than Part 1.

ISSUES

6.5 Responses from both LAs and users highlight that the implications of Part 2 for streetscape and the amenity and urban design of residential areas in particular can be significant and sometimes detrimental.

- *The absence of any definition for 'highway' and 'adjacent to a highway'*

The recommended change was to define 'adjacent to the high way' for the purposes of Part 2 to mean land within 3 metres from the back edge of the highway, as defined in Annexe 9, and clarify that this applies to means of enclosure running parallel to the highway as well as those 'end on' to it. The 1 metre height limit would apply to these areas.

- *Adverse impacts on the character of areas from front gardens being paved over and walls/fences removed, unless an Article 4 Direction is imposed*

The recommended change for this was to clarify that alterations involving demolishing and replacing a whole wall/enclosure, or creation of a gap in a front wall etc. to provide a means of access is not permitted development under Classes A & B adjacent to a highway in conservation areas.

- *Uncertainty as to whether Part 2 includes creating a means of vehicular access over the footpath of a highway, or whether this element requires planning permission*

The recommended change was to clarify that Class B gives permitted development rights for creating a means of access across a public pavement, as part of the highway.

Sections 35.21 – 35.25 relate in part to off-street parking.

Front Garden Walls

35.21 *Demolition of front garden walls to leave lengthy gaps for car parking and the loss of green areas harm the character of conservation areas and other areas, as well as reducing on-street parking. The problem arises to varying degrees across the country but mainly in inner city areas with parking pressures. Article 4(2) directions can be effectively used to control this in conservation areas, but in a few cases have been deterred by compensation concerns and no cases were found of these directions being used for this purpose outside conservation areas, largely due to resource problems (see Case Study 11, Annexe 7). In order to support aims to improve the built environment, deletion of Class B is therefore proposed (as previously proposed by the Government).*

35.22 *This change would also avoid the need for Article 4 Directions and the compensation risk with them. The view of consultees was that this would not necessarily lead to a major, immediate increase in the number of planning applications, as such proposals tend to be incremental and infrequent, and refusals would gradually educate the public. However, a supporting policy in*

the development plan would be needed to resist subsequent planning applications or appeals for such demolition.

35.23 However, this will only provide control in conservation areas. The evidence of widespread problems outside such areas is less strong, largely because permitted development works such as this are not recorded and many local authorities' main focus in this regard is on conservation areas. However, investigations with local authorities indicate that the loss of front garden walls outside conservation areas is a problem for some inner city authorities. Where one or two adjoining properties remove front walls, this can cause an unsightly gap and begin to lower the general character and quality of a street, and encourage others to follow. It does not appear unreasonable to seek to protect the quality of areas outside conservation areas in this way to avoid deteriorating residential environments.

35.24 A case is seen for amending the Demolition Direction in Circular 10/95 to make demolition of front garden walls generally fall within the definition of development; outside conservation areas, such demolition could then be permitted only where demolition, without replacement, of front walls and other means of enclosure to front gardens is proposed. However, there is insufficient evidence that this is a widespread and serious problem and, because many areas are not affected, this change may be more than necessary to address concerns. There are, however, many areas where this is not an issue and there is a risk of increasing numbers of planning applications for minor changes to walls that do not cause problems.

35.25 On balance, no recommendation for increased controls outside conservation areas is proposed, but should be considered after further investigation on the extent of the problem.

6 SUSTAINABLE MATERIALS

There is a lack of published information, best practice or advice on sustainable materials for the hard surfacing of front gardens in the public domain. Publications tend to concentrate on sustainable and eco-friendly materials for buildings and paved public areas and the residential garden is ignored. The Building Research Establishment (BRE) produces an 'EcoHomes' guide and this covers best practice, guidelines and environmental ratings of all materials and services used inside the home but does not give advice on materials for use in the garden.

The information that is available comes primarily from local authorities, some charities, garden city foundations, conservation areas, the Institute of Civil Engineers (ICE), the Urban Design Alliance (UDA) and trade associations representing the manufacturers of sustainable materials.

Local authorities, most often through the LA21 groups, offer the most extensive advice on sustainable materials to use when laying hard surfaces for off-street parking.

Thrive (see section 2) also offers comprehensive advice on choice of materials for hard surfacing of suburban gardens and some of it is reproduced below. However, it should be noted that it is a charity that exists to enable disadvantaged, disabled and older people to participate fully in the community. Hence its primary focus is on safety, rather than sustainability.

Interpave – the Precast Concrete Paving & Kerb Association – represents the leading manufacturers of concrete block paving, flags and kerbs. It acts to maintain the highest standards of product quality and to expand the use of these materials through education, technical and marketing campaigns. The organisation has recently merged with Interlay – the association of block paving contractors.

The Construction Industry Research & Information Association (CIRIA), with the help of Interpave and other organisations are the driving force in the development of an independent guide to the design, construction and maintenance of SUDS schemes.

Interpave provides a detailed guide to the design, construction and maintenance of concrete block permeable pavements. A key component of sustainable urban drainage systems (SUDS), permeable paving is making an important contribution to stormwater and pollution control.

The guide is aimed at planners, designers, engineers and other decision-makers to assist them in the design, construction and maintenance of concrete block permeable pavements. Its products are used by most local authorities.

There is a section in the guide covering the use of materials and best practice in residential areas with specific reference to the increase in hard landscaping, roads, driveways and parking areas which has dramatically reduced the capacity for natural, sustainable drainage.

There is consensus across local authorities in London on the information provided about sustainable materials to use when hard surfacing the garden. In many cases they have adapted the Enfield '*Greening Your Home*' version, which was funded by The Government Office for London for this very purpose (see section 3). Ealing Council is also planning to adapt the Enfield guide.

Suggestions and advice given include:

Materials for the driveway

- Use porous or permeable materials for the car-parking surface.
- York stone, interlocking brick pavements, granite setts or cobbles, gravel, and blocks that allow grass to grow through. The choice of materials should be in keeping with those used for the building itself.
- Use paving blocks with gaps to allow plants to grow through.
- Asphalt which may be made acceptable by rolling a covering of suitable gravel, chipping or sand onto it.
- Concrete slabs, separated by a 0.8 metre grass strip, are an alternative.
- Keep pedestrian access separate from vehicle access.

Planting

- Planting should be used to reduce the visual impact of parked vehicles.
- Existing mature landscapes should be retained and any damage should be repaired.
- Planting should be geared to low maintenance.
- Shrubs that are particularly suitable for front gardens include: Laurustinus (*Viburnum tinus*), Forsythia, Lavender, Fishbone Cotoneaster, Mock Orange (*Philadelphus Coronarius*), Firethorn (*Pyraecantha*) and Honeysuckle.
- Trees include: Golden Robina, Mountain Ash (*Sorbus*), Common Almond, Crab Apple (*Malus*) and Hawthorn (*Crataegus*).
- Retain hedges as much as possible.

Drainage

- A cut off drainage channel should be incorporated into the design to stop surface water from discharging across the public footway.
- Use a permeable surface, such as crushed stone or gravel that allows rain to seep through.
- Lay hard surface on a gradient to allow surface water to flow onto soft landscape areas rather than storm drains.

The charity, Thrive, offers the following advice to people who are considering the hard surfacing of their garden:

“The most important aspect of access in and around the garden is the surface underfoot. Too many accidents occur in the garden because of uneven or slippery paths.

The table below summarises the good points and limitations of the wide range of materials that can be used for hard surfacing. It is taken from the Thrive website.

Table 6a **MATERIALS THAT CAN BE USED FOR HARD SURFACES**

Material	Good Points	Limitations
In-situ concrete	Excellent, firm surface if well-laid. Very flexible and can be moulded to any shape.	Not porous, thus levels and drains must be planned carefully. Poor aesthetic appearance if used on its own over large surfaces.
Tarmac (asphalt)	Very firm surface if well-laid. Good grip after rain. Non-reflective in bright sunshine.	Can be cracked by roots and perennial weeds. Must be laid within well-defined edges at correct thickness, or breaks up easily. Damage from frost-heaving common – later patching up may be necessary.
Paving	Very wide range of types available: concrete paving slabs, stone or reconstituted stone pavers, interlocking, hexagonal or round pavers, simulated brick or pattern-pave slabs.	Many older slabs and those with smooth-ground finish too slippery for semi-ambulant people, especially when wet. Not as flexible as brick and may crack under weight of vehicles.
Brick	Wide availability of shape, texture, colour and price. Extremely versatile, durable, minimal maintenance. Provides good, firm, non-slip surface if type suitable for paving is chosen & well laid. Porous.	Quality & performance varies with type of brick. Rough stocks and common household bricks not suitable because not frost-resistant. Poor drainage also encourages frost damage.
Gravel	Cheap, readily available, very flexible, easy to lay, good informal appearance & colour range, never slippery and drains easily. Easy to take up and relay. Noisy to walk on which can be good deterrent to burglars.	Unsuitable for wheelchairs and painful to fall on. Some maintenance is needed (raking, weeding, removal of dead leaves). ‘Walks’ easily onto lawns and indoors.
Wood (used in the form of railway sleepers, decking or transverse sawn log sections)	Attractive, rustic appearance, natural material. Redwood, cedar, cypress, second-hand timber and railway sleepers last longest, especially if laid on sound bed with perforated polythene sheeting beneath.	Short life, even when mature, unwarped, pressure-treated timber used – particularly in damp, poorly ventilated sites. Can be treacherously slimy and slippery in wet or icy weather. Risk of splinters.
Crazy paving	Cheap, useful way of using old, paving slabs, odd bits of stone. Gives even, firm surface if well laid.	Easy to lay badly using poor materials on poor foundations & breaks up easily. Must have good edging or deteriorates rapidly.
Cobbles	Attractive, informal appearance, whether set random, coursed, in patterns or in loose piles. Cheap – where materials are at hand. Minimal maintenance.	Can be slippery. Very uneven if poorly laid or laid with cobbles raised above concrete. Generally unsuitable for most physically disabled people.
Hoggin (fine gravel or chippings)	Informal appearance, very flexible, good grip when evenly-laid. Cheap if available nearby.	Must be laid on very well prepared and compacted (yet well drained) base. Ruts easily with wheelchair

[scalpings], set into binder matrix of clay)		use. 'Walks' indoors and can be muddy. Clay difficult to work with, particularly when compacting.
Bark	Can form a relatively hard surface if laid onto firm foundations and maintained well. Grip properties, porous and non-reflective. Soft in the event of accidents.	Once laid, takes time to consolidate and then may rut easily beneath narrow wheels on slopes and corners. Expensive, regular topping up needed. Short life, decomposes eventually. Some risk of honey fungus infection.
Epoxy-bonded resin aggregate	A non-slip, decorative surface applied to smooth materials such as concrete. Very safe, excellent grip and drainage properties.	Expensive. Takes 24 hours to harden.

7. ENVIRONMENTAL ISSUES

The table below summarises the problems and the detrimental effects on the environment that can be caused by the hard surfacing of front gardens. It has been derived from a variety of sources.

Table 7a **EFFECTS ON THE ENVIRONMENT**

Aspects of hard surfacing which cause problem(s)	Problem caused	End result (s)
Impermeability	Increased rain water run-off → increased fluctuations in amount of water going into storm drains and thence to local streams and rivers	Increased risk of flooding, especially flash flooding Erosion and damage to riverbanks and hence to their habitats
	Increased rain water run-off → picking up oil and heavy metals from hard surfaces beside and close to roads, plus pesticides, herbicides and other chemicals used in gardens	Increased levels of pollution of local watercourses → detrimental effects on water quality and on wildlife.
	Reduced amount of rainwater percolating through soil	Reduction in water purification and removal of pollutants from ground water by soil percolation processes. Soil drying out → building subsidence
Artificial and hard	Absorb more solar heat	Increases the local temperature → 'heat island' effects → exacerbating predicted effects of global warming: <ul style="list-style-type: none"> worse air quality increased energy consumption for air conditioning and cooling proliferation of microbes and diseases-bearing organisms e.g. malaria mosquitoes.
	Absorb less noise	Increased noise from traffic and other sources, especially for people living at ground floor level
	Don't absorb dust	Increased air pollution [particulates]
	Don't absorb dirt and spills	Dirtier environment → unappealing to community
Use for parking	Increased numbers of crossovers in pavement	Increased corrugation of pavements makes walking more difficult, especially for those with disabilities, the elderly and those with small children. Also more difficult for two people to walk and talk together side by side.
	Cars being driven across and reversed across the pavement	Risk to pedestrians especially children
	Loss of visibility – parked cars are higher and more solid than garden vegetation	More dangerous pedestrian environment especially for children [whom we are trying to encourage to walk to school etc.]
	Parked cars also may overhang pavement	

	Net addition to car parking spaces [probably]	Contributes to generating greater volumes of traffic, contrary to Government policies to reduce traffic.
	Loss of on-street parking [created by presence of crossovers]	Reduces the control that authorities have over parking.
Loss of vegetation	Reduced CO ₂ absorption	Contribution to global warming [see above for predicted effects].
	Loss of habitat for wildlife [both above and below ground level]	Adverse effect on plant and animal life [i.e. biodiversity]
	Loss of street trees removed to accommodate pavement crossovers	Adverse effect on levels of air pollution due to loss of absorption; contribution to global warming
	Loss of grass verges removed to accommodate pavement crossovers	Adverse effect on plant and animal life; contribution to global warming; increased run-off etc. as above; loss of aesthetic appeal
Appearance/ Aesthetics	Replacement of soft green areas with cars and hard unattractive surfaces	Reduced aesthetic appeal, character, visual appearance and attractiveness of the urban environment and its traditional architecture. Adverse effect on house prices when whole street has been converted.
Loss of boundary structures [hedges, fencing etc.]	No barriers to wind	Increased levels of dust and hence air pollution [particulates]
	Loss of demarcation	Adverse effect on neighbour relations, community in general

Sources: original MP letter; Ealing Natural Environment & Biodiversity Group discussion; feedback from Environment Coordinators in other London boroughs [preliminary]; miscellaneous other sources and feedback.

8. FUNDING OPPORTUNITIES FOR LA21 & SUSTAINABILITY PROJECTS

One of the recommendations in this report is to conduct further research to support the findings of the desk research phase, and to broaden it out to include all local authorities in London, including the Corporation of London. Several of the LA21 officers contacted in 2003 expressed an interest in the research aims and by pooling resources and sharing experiences across boroughs it is believed that the case for obtaining funding, from Central Government, the Association of London Government (ALG) or from the EU, for instance, would be considerably strengthened. This would have the added advantage of making the research findings more robust statistically.

Funding is obtained from a variety of sources. For some of the LA21 projects carried out in England the money came from a combination of local authorities and sponsorship from local businesses, community groups, universities, European funds and the Local Government Association (LGA). Multi-funding, joint initiatives and cases where more than one LA work together (cross authority) appears to make the process easier and carry more weight.

The involvement of local businesses, including utilities (possibly with a vested interest) in the outcome is effective. For example, the local press, other media or printer paying for production of advertising leaflets, or utility companies paying for a project, which may involve use of their services.

Smaller agencies and community groups are more likely to contribute if they feel that they will not be bearing all of the costs.

Examples of the way in which some projects have been funded are shown below.

Turning the Tide – raising awareness in Leicester and the East Midlands (LA21 project). Strategic partnership approach to environmental awareness raising with heavy media involvement. The partnership is funded by contributions from each LA, and business related partners of £5,000 per partner (including media partners). Environ was lead partner and each campaign is sponsored by relevant external sponsors to cover the cost of producing leaflets and posters.

Community-based Sustainability Indicators as a Tool for Participation in Southwark (LA21 project). Seeks to engage local communities in two regeneration areas of Southwark in urban sustainability processes by developing sustainability indicators. Funded by European Commission DGX1 Life Programme. Borough of Southwark provided matched funding.

Nottingham Green Partnership

NGP is a multi-sector group that develops and carries out a wide range of projects to promote sustainability and raise awareness of issues with local

orgs and individuals (LA21 project). The City Council provides an annual budget and this is supplemented by sponsorship and other grants.

Citizens' Network

The Dublin City 21 Citizens' Network brings together individuals and groups interested in Local Agenda 21 to promote LA21, to raise awareness and to develop and implement projects around the key identified areas of transport, waste and housing in the city. Funding is project based, with money raised to cover initiatives and projects as they occur. Most of the Network's revenue comes from the Department of the Environment Partnership Award, with support in cash and kind from Dublin Corporation. Other revenue is generated from small corporate donations or sponsorship.

Environmental Thermometer (LA21 project)

A set of local sustainability indicators make up Den Haag's Environmental Thermometer. They are used to assess the effectiveness of local policies towards sustainability and to visually chart progress towards, or movement away from, the City's sustainability targets. Most of the work involved in the Environmental Thermometer project is funded by the local authority and Den Haag's public utilities, as part of their commitment to LA 21.

Action 2020 - Middlesbrough's Local Agenda 21

Middlesbrough has built on its work as one of four Environment Cities (others are Peterborough, Leeds and Leicester) in the UK to develop its Local Agenda 21 plans. Along with the three others it introduced a series of measures to encourage a *partnership* approach to the environment and sustainable development. Funding was provided by Middlesbrough Environment City (MEC) and £3-4k raised in sponsorship.

"Blueprint for Leicester"

The aim of Leicester's LA21 process is to involve the widest possible range of people and organisations in creating a shared 'vision' for a more sustainable city.

The Importance of Residential Areas (ICE)

The report suggests that the best approach is multi-funding – an extension of the collaborative working principle with many agencies. To limit funding sources to a specific department in a local authority is thought to be a mistake. Smaller agencies, local businesses and community groups are more likely to contribute if they feel that they will not be bearing all of the costs.

It also provides a checklist of potential funding sources:

- Central government: transport grants for major projects and safety
- Unitary and county council funds
- District council funds
- Property developer contributions
- Housing funds

- European and central government regeneration funds
- Parish council and community groups
- Local businesses
- Householders
- Other groups that use the street, people who park cars for example

Association of London Government (ALG)

The ALG distributed grants to voluntary organisations in London amounting to just over £8 million in 2003. There are two funds that this project might be fit into - an innovation fund and a short term, one off, short term grant with no deadline.

Improvement & Development Agency for local government (I&DeA)

The I&DeA has developed the concept of [lead funding](#), which the Government is now piloting with three voluntary sector organisations. This approach will enable a greater proportion of public services to be provided by third sector organisations. The London Borough of Tower Hamlets has been introduced to the lead funder concept.

Appendices

- 9.1 Websites & sources
- 9.2 Publications
- 9.3 Population statistics
- 9.4 Conservation areas in Ealing

9.1 Websites & sources

Organisation	Website	Relevance
Association of London Government (ALG) 59 Southwark St London SE1 0AL	www.alg.gov.uk	ALG distributed grants to voluntary organisations in London amounting to just over £8 million in 2003. Report on 'LSPs and Neighbourhood Renewal'
Barnet	www.barnet.gov.uk	One LA21 partnership has produced leaflet providing information about keeping gardens green
Bexley	www.bexley.gov.uk	'Go Wild in Garden' pack produced for residents
Brent	www.brent.gov.uk	SPG 4 on 'Parking in Front Gardens'
Building Research Establishment (BRE)	www.bre.co.uk	Urban Nature Conservation report
Camden Camden Town Hall Argyle Street London WC1H 8EQ	www.camden.gov.uk	Leaflet provided on 'Improving Your Garden'
Commission for Architecture & the Built Environment (CABE)	www.cabe.org.uk	
Community Based Social Marketing	www.cbsm.com	The Fostering Sustainable Behaviour website was developed to assist individuals who design programmes to promote sustainable behaviour
Construction Industry Research & Information Association (CIRIA)	www.ciria.org	CIRIA in conjunction with Interpave and other organisations are the driving force in development of an independent guide to the design, construction and maintenance of SUDS (sustainable drainage systems) schemes
Convention of Scottish Local Authorities (COSLA)	www.cosla.gov.uk	Part sponsor of 'Climate Change in Local Communities'
Corporation of London	www.cityoflondon.gov.uk	
Dept of Environment & Rural Affairs (DEFRA)	www.defra.gov.uk	
Dept of Environmental Protection	www.dep.state.fl.us	Responsible for conservation and management of natural resources
Dept of Trade & Industry (DTI)	www.dti.gov.uk	
Dept of the Environment, Transport and the Regions (DETR)	www.detr.gov.uk	Environmental assessment and sustainable development
Ealing Council Perceval House, 14-16 Uxbridge Road Ealing W5 2HL	www.ealing.gov.uk	
Ealing Five Roads Forum	www.fiveroadsforum.org	West Ealing Home Zone
Ealing Friends of the Earth (EfoE)	www.ealingfoe.org.uk	CPZ Consultation Review response by EfoE – December 2000
Enfield	www.enfield.gov.uk	Produces 'Greening Your Home' guide
Environment Agency (Wales) Rio House, Waterside Drive, Aztec West, Almondsbury Bristol BS32 4UD	www.environment-agency.gov.uk	
Environmental Campaigns (ENCAMS)	www.encams.org	Charity
Environ	www.environ.org.uk	Publications include 'Make Gardens Grow', 'Green City' and 'Green Power'
Environmental Campaigns (ENCAMS)	www.encams.org	Several case stories giving examples of work into sustainable communities carried out with help of SCP officers
Greater London Authority (GLA)	www.london.gov.uk	
Guildford	www.guildford.gov.uk	Draft SPG on hard surfacing of front gardens
Government Office for London (GOL)	www.go-regions.gs.gov.uk	
Haringey	www.haringey.gov.uk	SPG in 2003 produced on forecourt parking
Improvement & Development Agency (I&DeA)	www.idea.gov.uk	'Neighbourhood Blueprint' report jointly produced by IDeA and Encams

Organisation	Website	Relevance
Institution of Chemical Engineers (ICE)	www.ice.org.uk	Two reports produced in conjunction with UDAL – 'Designing Streets for People' and 'Returning Roads to Residents' Now merged with Interpave
Interlay: The Association of Block Paving Contractors	www.interlay.org.uk	
International Council for Local Environmental Initiatives (ICLEI)	www.cities21.com	Association of local governments dedicated to the prevention & solution of local, regional, and global environmental problems through local action.
Interpave: The Precast Concrete Paving & Kerb Association	www.interpave.org www.paving.org.uk	Provides design, specification and advice on construction materials for paving and kerbs and front gardens. Newsletter on developments
Letchworth Garden City Heritage Foundation	www.lgchf.com	Offers extensive advice on gardens and off street parking and produces numerous community publications
Local Government Association (LGA) Local Government House, Smith Square, London SW1P 3HZ	www.lga.gov.uk	LGA exists to promote better local government working to put councils at heart of the drive to improve public services
London Development Agency (LDA)	www.lda.gov.uk	
London Environmental Education Forum (LEEF) Room 421, 43 Marsham St, London SW1P 3PY	www.leef.org.uk	Network organisation to promote and facilitate delivery of environmental education in London
London 21 Sustainability Network	www.london21.org	Has section on community growing and gardens
London Sustainability Exchange	www.lsx.org.uk	
National Statistics	www.statistics.gov.uk/neighbourhood	Census 2001 data accessible at LA or electoral ward level
North Kensington Environmental Forum	www.rbkc.gov.uk	'Front Gardens Matter' leaflet produced for Royal Borough of Kensington & Chelsea
Nottingham	www.nottingham.gov.uk	
Office of Deputy Prime Minister (ODPM) Thrive – national horticultural charity	www.odpm.gov.uk www.thrive.org.uk www.carryongardening.org.uk	'Review of Permitted Development Rights' and 'The National Strategy for Neighbourhood Renewal' Its carryongardening website offers extensive advice on suburban gardens and choice of materials for hard surfacing.
Transport for London (TfL)	www.tfl.gov.uk	
The Urban Design Alliance (UDAL)	www.udal.org.uk	Foundation members are The Civic Trust, The Landscape Institute, ICE, RIBA, Royal Institution of Chartered Surveyors, Royal Town Planning Institute and the Urban Design Group
UK Climate Impacts Programme (UKCIP) Union House 12-16 St Michael's St Oxford OX1 2DU	www.ukcip.org.uk	Report on 'Gardening in the Global Greenhouse'
Welsh Local Government Association	www.wlga.gov.uk	
Westminster	www.westminster.gov.uk	UDP covers hardstandings, front gardens in the borough. SPG on 'Front Garden Parking – a guide to legislation and design' provided for residents
Press		
Elsevier Publications Elsevier Science Molenwerf 1 1014 AG Amsterdam, Netherlands	www.elsevier.co.uk	
Grist Magazine	www.gristmagazine.com	Urban Sprawl - article originally published in LA Times
Independent	www.independent.co.uk	Article on 'What is killing our sparrows?' – May 2000 - mentions front gardens turned into car ports
Observer	www.observer.guardian.co.uk	Article on 'Turn the tables on parking nightmare'

9.2 Publications

All of the publications shown below have been reviewed but do not cover the issue of hard surfacing of front gardens.

'The London Project' – available from no 10 website - PMs Strategy Unit

'English Nature's Habitat Restoration Project' – English Nature

'Recognising Residents Achievements in Neighbourhood Renewal' – ODPM

'Achieving Quality Streetscapes' – CABE 2002 - out of print

'Local Strategic Partnerships and Neighbourhood Renewal in London'
(11/6/03) – ALG & GLE

'Neighbourhood Blueprint' – jointly produced by I&DeA and Encams (sold out and second print run planned)

'Gardening in the Global Greenhouse' – UKCIP 2002

'Climate Change and local communities' – UKCIP, LGA, I&DeA, COSLA, DEFRA, WLGA, ODPM and the Scottish Executive (LBE has copy)

'Urban Nature Conservation' – BRE

'London's Warming – the impact of climate change on London' – the London Climate Change Partnership (LBE has copy)

'Spending Review 2002' – ALG

'London Supporting People Shadow Strategy' - ALG

9.3 Population statistics

Table 9a shows the population of Ealing recorded from the 2001 Census, within the 23 wards. These figures were taken from the ONS Neighbourhood Statistics Service. Population growth in Ealing between 1991 and 2001 was not evenly distributed and the greatest growth recorded was in the Southall area. Growth was estimated to be over 21% between 1991 and 2000. However, it is no longer possible to make comparisons because of the recent ward and boundary changes.

Table 9a POPULATION OF EALING BY WARD – 2001 CENSUS

Ealing	Total	%
Ealing total	78,792	26.1
- Cleveland	14,179	4.7
- Ealing Broadway	12,634	4.2
- Ealing Common	12,804	4.2
- Hanger Hill	14,010	4.6
- Northfield	12,477	4.1
- Walpole	12,688	4.2
Southall total	64,470	21.4
- Dormers Wells	13,073	4.3
- Southall Broadway	13,049	4.3
- Southall Green	12,895	4.3
- Lady Margaret	12,806	4.2
- Norwood Green	12,647	4.2
Acton total	53,689	17.8
- Acton Central	13,442	4.5
- East Acton	14,448	4.8
- South Acton	13,318	4.4
- Southfield	12,481	4.1
Greenford total	39,572	13.1
- Greenford Broadway	13,297	4.4
- Greenford Green	12,466	4.1
- North Greenford	13,809	4.6
Northolt total	26,308	8.7
- Northolt Mandeville	12,888	4.3
- Northolt West End	13,420	4.4
Hanwell total	25,396	8.4
- Elthorne	12,328	4.1
- Hobbayne	13,068	4.3
Perivale total	13,441	4.5
Total	300,948	100

Source: Census 2001, ONS Neighbourhood Statistics

Population projections suggest that future growth in LBE will rise sharply. It is estimated that by 2006 the annual growth on the previous year will be 2.9%, according to a report produced by Strategy, Planning and Partnerships, LBE 2001.

22% of all households in LBE have two or more cars or vans and 31% were single person households, according to the 2001 Census.

Table 9b HOUSEHOLD STATISTICS IN EALING - 2001

Ealing	%
Single person households	30.6
Pensioners living alone	12.0
Other all pensioner households	5.1
Owner occupied	63.0
Rented from Council	11.8
Rented from Housing Association or registered social landlord	7.1
Private rented or living rent free	18.1
Have no car or van	31.7
Have 2 or more cars or vans	22.4
Total households	118,023

Source: 2001 Census, ONS

The number of properties in LBE counted in the 2001 Census was 119,436 and flats accounted for 42.5% of all property types.

Table 9c TYPE OF PROPERTY IN EALING - 2001

Ealing	Total	%
Detached	5,255	4.4
Semi-detached	27,948	23.4
Terraced	35,424	29.6
Flat	50,809	42.5
All property types	119,436	100

Sources: 2001 Census, ONS, The Land Registry 2001

68% of all households in the London borough of Ealing have at least one car or van and 112,907 vehicles were counted in the 2001 Census.

70% of households in the Ealing area have one or more cars or vans, a total of 32,677 vehicles (29% of the total recorded). Although Perivale has the smallest number of households in the borough, a greater percentage of them own at least one car or van, 77%, in contrast to 61% of households in Acton.

At ward level Lady Margaret has the highest percentage of households with a car or van (80%), and South Acton has the lowest (53% of households).

Table 9d HOUSEHOLD CAR/VAN OWNERSHIP BY WARD – 2001 CENSUS

LB Ealing	Total households	% with car/van	Total cars/vans
Ealing total	33,771	70	32,677
- Cleveland	5,729	69	5,426
- Ealing Broadway	5,685	67	5,415
- Ealing Common	5,627	67	5,350
- Hanger Hill	6,009	75	6,408
- Northfield	5,341	71	5,050
- Walpole	5,380	69	5,028
Southall total	19,618	69	20,448
- Dormers Wells	4,261	66	4,131
- Southall Broadway	3,593	68	3,509
- Southall Green	3,814	71	3,868
- Lady Margaret	3,895	80	4,714
- Norwood Green	4,055	69	4,226
Acton total	22,956	71	18,604
- Acton Central	5,590	62	4,679
- East Acton	5,664	61	4,639
- South Acton	5,866	53	4,063
- Southfield	5,836	68	5,223
Greenford total	14,994	73	15,821
- Greenford Broadway	5,361	67	5,008
- Greenford Green	4,892	75	5,386
- North Greenford	4,741	78	5,427
Northolt total	10,800	67	9,995
- Northolt Mandeville	5,283	69	5,102
- Northolt West End	5,517	65	4,893
Hanwell total	10,862	65	9,672
- Elthorne	5,550	63	4,690
- Hobbayne	5,312	67	4,982
Perivale total	5,006	67	5,579
Total	118,023	68	112,907

Source: Census 2001, ONS Neighbourhood Statistics

9.4 Conservation areas in Ealing

9.4.1 Brentham Garden Estate

The Brentham Garden Estate was the prototype for Hampstead Garden Suburb. It originally started as a co-partnership village in the first part of the 20th Century and the area developed from the formal Edwardian terraced houses to the informal cottage style houses by Parker and Unwin, the architects involved in the low density rural-type housing in countryside type settings known as the "Garden City Movement". It was designated a Conservation Area in 1969.

After designating a Conservation Area the local planning authority is required by section 277 of the Town & Country Planning Act to consider its policies and proposals to protect and enhance the special character of the area. In 1976 an Article 4 Direction was made which withdrew certain permitted development rights.

The pertinent development rights subject to an Article 4 Direction for this estate are:

- The construction of a hardstanding for vehicles in the gardens of properties
- The formation, layout and construction of an access to the highway
- A garage, car port or any other means of housing a motor vehicle

Hardstandings for vehicles in front gardens are not permitted. Sections B12 and B13 of the Policy & Design Guide produced in May 1988 state:

B.12 Parking In Front Gardens

*The Council will encourage the retention of a traditional garden appearance and **the formation of hardstandings for vehicles in front gardens will not be permitted.***

Reason

The majority of front gardens in Brentham are very small, and cannot accommodate vehicles without a considerable loss of vegetation, especially along the frontage, which would result in an unsightly, patchy appearance detracting from the attractive appearance of the Estate.

B.13 Garages

The erection of garages will normally be permitted only where they can be sited at the rear or to the side of dwelling houses so as not to project forward of the adjoining buildings and where design, materials, and scale are consistent with the character of the locality.

Reason

*Although the Council is opposed to parking in front gardens, **it is in favour of encouraging off street parking where this can be accommodated**, without detriment to the character and appearance of the area. Garages of an inappropriate design disrupt the street scene and the rear view of the properties.*

The formation of other hard surfaces in front gardens is also firmly discouraged. Further guidance notes are issued to encourage the use of environmentally sustainable solutions.

Parking in front gardens/means of enclosure

The formation of other hard surfaces in front gardens is firmly discouraged, this includes the excessive use of gravel, crazy paving etc. Traditional surfaces and planting will accordingly be encouraged. The traditional method of enclosing gardens and part of the original design concept was to use hedges, and the replacement of hedges with other means of enclosure will not normally be allowed. Where replacement of a hedge becomes necessary the most suitable species is privet which is the most commonly found species in Brentham: other species which might be appropriate include Box, Holly or Yew. Cypress hedges, particularly Leylandii, are not appropriate.

In Brentham there is not much scope for parking in front gardens because the gardens, in many cases, are not big enough.

Residents are actively encouraged to report unauthorised work to the Brentham Society, the conservation advisory panel [residents] or to Ealing Council.

9.4.2 Hanger Hill (Haymills) Estate

The Haymills Estate at Hanger Hill was built on the grounds of Hanger Hill House, the home of the Woods family, who owned land on both sides of Hanger Lane from about 1775. The house was the headquarters of the Hanger Hill golf club until it was sold to Haymills Ltd in 1926. Building work started in 1928 and much of the estate was completed before the 1939 – 45 war. The Haymills Estate is notable for the mix of architectural styles, as well as for the overall quality of house design and landscaping.

The conservation area was designated in June 1996 and an Article 4 (2) Direction restricting certain permitted development rights came into force in September 1997. The designation report stated that:

The layout relates well to the hillside site, giving extensive views from within the estate over the surrounding landscape. The estate is an interesting mix of a commercial development on a large scale in which modern movement houses, flats and public buildings are combined. Many of the houses are relatively conventional in design but with interesting details; it is as a "mixed" thirties group with interspersed modern designs that the estate derives its importance.

The Article 4(2) Direction covers hardstandings and front gardens, as follows:

Planning permission is also required for the following development mainly affecting the street frontage of properties. This does not mean that the Council will necessarily refuse permission, but it does enable it to exercise greater control in protecting the character and appearance of the conservation area.

- c) *the provision of a hardstanding on the road frontage, including the paving over of front gardens.*

In a brochure published in 1997 by LBE Planning Services the following advice is provided:

16. Front Gardens and Vehicle Hardstandings

Planning permission is needed for the provision of a hard standing in the front garden, or the paving over of a front garden.

The estate derives part of its character from enclosed and planted front gardens. The majority of properties were built with an attached or integral garage, and consequently most properties already have vehicular access to the highway. The provision of additional access ways, and hardstandings over the entire frontage, poses a threat to the estate.

It is preferable that no more than 50% of the front garden should be hard surfaced, with the remainder of the front garden area planted and/or grassed. Hardstandings should be surfaced in attractive as well as practical materials. Brick paviours or concrete setts are preferred to plain concrete or tarmac.

9.4.3 Hanger Hill Garden Estate

The land on which the Hanger Hill Garden Estate was built on was used for flying (Acton Aerodrome) and aircraft manufacture between 1909 and 1920. Development land was acquired in 1925, and development of the Estate started in 1928 and was completed by 1936. The special quality of the estate derives from the quality of its half timbered 'mock Tudor' style and its formal landscaped setting.

The Conservation Area was designated in 1969 and an Article 4 Direction was made in 1976. This limited certain permitted development rights of owners and occupiers, in order to maintain design standards and to protect the character and appearance of the Conservation Area.

The Article 4 Direction includes restrictions on hardstandings and crossovers:

The Council have made an Article 4 direction covering all properties, including houses and flats in the conservation area. Planning permission is required for the following development. This does not mean that the Council will necessarily refuse permission, but it does enable it to exercise greater control in protecting the character and appearance of the conservation area.

- c) *the formation of a vehicle hardstanding within the curtilage of a dwelling house*
- d) *the erection of walls, gates, fences or other means of enclosure fronting onto a highway*
- e) *the formation of an access to a highway*

In a brochure published in 1997 by LBE Planning Services the following advice is provided:

15. Forecourts and Front Gardens

The formation of hardstandings and crossovers for vehicle parking and the paving over of front gardens, will not be permitted as the loss of front gardens would seriously erode the visual qualities of the streetscape. Bin stores should not be located in front gardens, but should be kept at the side or back of houses out of view from the street. Many of the front gardens on the estate are attractively kept, with a mixture of grass and shrub planting with the occasional small ornamental tree, and this approach is encouraged.