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Foreword

Accessible Homes SPD (2010)

Foreword

Councillor Marilyn Ashton, Portfolio Holder for Planning, Development and Enterprise

Welcome to the Accessible Homes SPD

The Council is committed to improving the quality of life for residents in the Borough, including better access to a range and choice of housing that meets residents needs. Harrow is an attractive London borough with a vibrant and diverse population. It is critical that, when designing new homes, architects and developers ensure that they can be easily adapted to the individual needs and requirements of all its citizens. The reason for this is to ensure that people are able to remain in their homes irrespective of their individual requirements throughout their lives.

Experience has shown that accessible homes can easily be accommodated within new buildings in Harrow and within existing and more traditional forms of housing. Accessibility can easily be integrated into the design process and help to guide the evolution of new development projects from the outset.



Councillor Marilyn Ashton

Portfolio Holder for Planning,
Development & Enterprise

Background i

Accessible Homes SPD (2010)

i Background

- i.1** In April 2006 the Council adopted 'Accessible Homes' as a supplementary planning document (SPD) to give effect to Policy H18 (Accessible Homes) of the Harrow Unitary Development Plan. The Policy sought to make residential development (including conversions and changes of use to residential) accessible; the SPD supplemented the Policy by providing guidance and detail for the delivery of homes to Lifetime and Wheelchair Home Standards. The SPD was a material consideration in the determination of planning applications for housing development.
- i.2** On 27th September 2007, under the Direction of the Secretary of State, the Council deleted a number of policies, including Policy H18 (Accessible Homes), from the UDP. However other UDP policies were saved, some of which continue to support the principle of creating more inclusive environments and accessible homes for everyone. The Council wishes to reaffirm its commitment to achieving Lifetime and Wheelchair Home Standards by linking the SPD (with updates) to relevant saved policies of the UDP.
- i.3** In addition to the local planning changes, the consolidated London Plan (incorporating all earlier alterations) was republished in February 2008, and maintains a London wide requirement for all new housing to be built in accordance with Lifetime Home Standards and for ten per cent of new housing to be designed to be wheelchair accessible. It also promotes the creation of inclusive environments that can be safely and conveniently used by everyone and which are flexible enough to be used in different ways by different people.
- i.4** The revised SPD therefore supplements the saved policies of the Harrow Unitary Development Plan (2004), pending further progress on Harrow's Local Development Framework (which will eventually supersede the UDP) and in particular the Core Strategy document, and is in general conformity with the relevant provisions of the London Plan. In line with best current practice, the Council has also taken the opportunity to revise some detailed aspects of the design standards and to make some typographical and presentational changes, which are intended to better relate the SPD to other planning publications forming Harrow's new Local Development Framework.
- i.5** This revised SPD was the subject of public consultation between 16th October and 13th November 2008. Further revisions were made in light of the consultation responses and a supplement to deal with the implementation of Lifetime and Wheelchair Home Standards in conversions was also prepared. This second version of the revised SPD was the subject of a second round of public consultation in January and February 2010 and the outcome of the consultation, together with consequent changes to the document, were reported to the Local Development Framework Panel and the Cabinet in accordance with the Council's constitution. The Cabinet resolved to adopt the document as the 'Accessible Homes SPD (2010)' at its meeting on 18th March 2010. The SPD forms a part of the Harrow Local Development Framework and is a material consideration in the determination of relevant planning applications and appeals in the Borough.

Introduction 1

Accessible Homes SPD (2010)

1 Introduction

Purpose

- 1.1** Government legislation requires Harrow Council to ensure that new residential developments meet the needs of most householders. The design features in this document provide a home which is flexible enough to meet whatever comes along in life: pregnancy and young children, carrying heavy loads, debilitating illness, or the limitations of getting older. Harrow Council is fully committed to the principle of producing well-designed homes and therefore will not support development applications for new homes that potentially involve major adaptation to meet the needs of most householders.
- 1.2** The aim of this guide is to highlight the most important principles in designing accessible homes and is particularly aimed at architects, developers and builders of a range of residential developments. Produced as a Supplementary Planning Document (SPD), this guide seeks to illustrate the best ways to achieve well-designed accessible homes that seamlessly integrate with the surrounding area by illustrating examples of homes that are 'universal' in their appeal and application.
- 1.3** When designing new homes, including those provided by the subdivision or conversion of existing buildings, the following requirements must be considered:
- **Part M of the Building Regulations**
 - Schedule 1 (Part M) of the Building Regulations (2000), as amended by the Building (Amendment) Regulations (2003), sets out the minimum requirements needed to achieve building regulations approval in relation to access and use of buildings. Some (but not all) of the Lifetime Home principles have been incorporated into Part M of the Building Regulations; an overview of the relationship between the Part M requirements and the Lifetime Home Standards is provided at:
 - www.lifetimehomes.org.uk
 - **The Code for Sustainable Homes**
 - Category 7 (Health & Wellbeing) of the Code for Sustainable Homes allocates credit for compliance with all Lifetime Home principles applicable to the dwelling being assessed. Compliance with the Lifetime Home principles is a mandatory element for the achievement of Code Level 6. The Code for Sustainable Homes Technical Guide (2008) sets out the specifications and applicability of the Lifetime Homes principles required under the Code. The guide can be viewed at:
 - http://www.planningportal.gov.uk/uploads/code_for_sustainable_homes_techguide.pdf

- **Lifetime & Wheelchair Home Standards**

Lifetime Home Standards comprise a set of 16 design criteria that help to make a home more accessible for everyone and which, moreover, builds-in sufficient flexibility to allow the home to be adapted to meet the changing needs of a household over a life cycle. Wheelchair Home Standards comprise a suite of additional, more detailed criteria needed to make a home suitable for occupation by a person in a wheelchair (with or without adaptation to meet a user's specific needs). The Lifetime and Wheelchair Home Standards design criteria are reproduced at Chapter 4 of this SPD.

1.4 In short, Part M of the Building Regulations is the statutory minimum requirement for creating accessible homes. The Code for Sustainable Homes is a mechanism for rating the sustainability of new development; the provision of Lifetime Homes is just one of a range of ways credit can be attained under the Code (although Lifetime Homes is mandatory to achieve the highest level under the Code). The provision of Lifetime and Wheelchair Homes is a material planning consideration; the London Plan requires all new housing to be built to Lifetime Homes standards and 10% to be wheelchair accessible or easily adaptable for residents who are wheelchair users.

Planning Applications

1.5 Lifetime Home Standards involve only minor additions to Part M of the Building Regulations and can be achieved without significantly increasing building costs ⁽¹⁾ or adversely impacting upon the achievement of higher density development. In line with the London Plan, the Council will require all new homes, whether new-build, conversion or change of use, to achieve the relevant Lifetime Homes design criteria.

Scope of this Supplementary Planning Document

1.6 This SPD, properly applied, will assist all those involved in the design and planning of new homes to create adaptable, accessible accommodation for everyone in the community. Its scope is the home and the curtilage of the home. Developments that create new public realm should extend the Accessible Home principles to the wider environment, to embrace the emerging concept of the 'Lifetime neighbourhood'. Accessible public transport plays an important role in providing access to opportunities, goods and services. The provision of accessible walking routes is essential, in particular for those who may not have the ability to readily use other modes of public or private transport, and as part of the creation of more legible environments which give people the confidence to make more journeys on foot.

1 Research for the Joseph Rowntree Foundation indicates that most features have no additional costs and that all of the design criteria could be achieved for between £100 and £300 for a five person, 3-bedroom house

Planning Policy 2

Accessible Homes SPD (2010)

2 Planning Policy

Background

- 2.1** This revised supplementary planning document updates the original which was first adopted by the Council, following consultation with the public and stakeholders, in April 2006. That version sought to give effect to Policy H18 of the Harrow Unitary Development Plan (2004) and the (then) London Plan Policy 3A.4 by providing detailed, practical advice to developers and others in relation to the Council's expectations about the standard of Lifetime Homes and Wheelchair Homes to be incorporated within residential development schemes in the Borough.
- 2.2** This SPD is intended to give greater guidance to householders and developers on how to incorporate Lifetime Home Standards and Wheelchair Home Standards into all developments. This SPD revises the earlier version adopted in 2006, to ensure it better reflects changes in practice, and also gives further guidance on how the Council intends to implement the saved policies of the Harrow Unitary Development Plan (2004) pursuant to Policy 3A.5 of the consolidated London Plan (2008), since the Secretary of State deleted the accessible homes policy (H18) from the UDP during 2007.
- 2.3** Section 38(2) of the Planning and Compulsory Purchase Act 2004 states that, in Greater London, the development plan is the spatial development strategy and the approved development plan documents. For the time being the saved policies of the Harrow Unitary Development Plan (2004) and the London Plan constitute the development plan document for Harrow. Section 38(6) states that, if regard is to be had to the development plan for the purpose of any determination made under the planning Acts, the determination must be made in accordance with the plan unless material considerations indicate otherwise.

The London Plan

- 2.4** The London Plan is the spatial development strategy for Greater London and was first adopted in 2004. In February 2008 the London Plan was republished, consolidated with alterations adopted since 2004.
- 2.5** The London Plan identifies a shortage in London of both Lifetime Homes and wheelchair accessible housing (*Improving housing choice*: paras. 3.27 and 3.28). Policy 3A.5 of the London Plan (2008) requires, amongst other things, that all new housing is built to 'Lifetime Homes' standards and that 10% of new housing be designed to be wheelchair accessible, or easily adaptable for residents who are wheelchair users.

London Plan Policy 3A.5: Housing choice

Boroughs should take steps to identify the full range of housing needs within their area. DPD policies should seek to ensure that:

- new developments offer a range of housing choices, in terms of the mix of housing sizes and types, taking account of the housing requirements of different groups
- all new housing is built to 'Lifetime Homes' standards
- ten per cent of new housing is designed to be wheelchair accessible or easily adaptable for residents who are wheelchair users

In undertaking an assessment of housing needs, a borough should consult fully and ensure that the assessment includes the full range of different communities within the borough, such as black and minority ethnic communities, disabled people and older people and households with specialist or different requirements, and that such communities are consulted on how policy is derived from the needs assessment.

- 2.6** Beyond individual homes, the London Plan also seeks to improve the accessibility of the wider environment. Policy 4B.5 of the London Plan requires development to achieve the highest standards of accessibility and to incorporate the principles of inclusive design in the consideration of planning applications and the preparation of master plans & area planning frameworks.

Mayor of London Supplementary Planning Guidance and Best Practice Guidance

- 2.7** The Mayor of London's supplementary planning guidance 'Accessible London: achieving an inclusive environment' (2004) supplements a number of London Plan policies including those relating to housing choice and the creation of an inclusive environment. The SPG incorporates a total of 28 implementation points. Implementation Point 12 (Lifetime Homes) and Implementation Point 13 (Wheelchair Housing) confirms that the London Plan requirements apply to all housing developments, including changes of use and conversions, and to both market and affordable housing.
- 2.8** The Mayor of London's best practice guidance 'Wheelchair accessible housing' (2007) provides advice on designing homes that can be easily adapted for residents who are wheelchair users. Much of the advice is incorporated into this SPD.

Accessible London SPG Implementation Point 12: Lifetime Homes

The Mayor will and boroughs should seek to ensure that all residential units in new housing developments are designed to Lifetime Home standards. These standards should be applied to all new housing, including conversions and refurbishments, and including blocks of flats, for both social housing and private sector housing, and should cater for a varying number of occupants.

Accessible London SPG Implementation Point 13: Wheelchair Housing

In all housing developments, including conversions and changes of use, the Mayor will and boroughs should seek to ensure that 10 per cent of the units are designed to be wheelchair accessible, or easily adaptable for residents who are wheelchair users. This percentage should be applied to both market and affordable housing, should be evenly distributed throughout the development, and cater for a varying number of occupants.

Consultation draft replacement London Plan (2009)

- 2.9** Following an earlier consultation in his proposals for a new London Plan [footnote: Planning for a Better London (2008)], the Mayor of London published a draft replacement London Plan in October 2009. The replacement Plan will be considered by a Planning Inspector at an examination in public during 2010 and, subject to any resulting changes and Ministerial consideration, is expected to be adopted during 2011. Policy 3.8 *Housing choice* of the consultation draft Plan confirms the Mayor of London's commitment to accessible housing by restating the existing London Plan requirement that LDFs should require all housing to be built to Lifetime Home Standards and for ten per cent of housing to be designed to be wheelchair accessible, or easily adaptable for residents who are wheelchair users.
- 2.10** The Mayor of London has also consulted upon a draft Housing Design Guide and has confirmed his intention to produce revised SPGs (on housing and accessibility) to follow the adoption of the replacement London Plan. When produced and insofar as their content is relevant to the Lifetime and Wheelchair Homes Standards, these may also be referred to alongside this SPD.

Harrow's Local Development Framework

- 2.11** The Harrow Local Development Framework will eventually replace the Harrow Unitary Development Plan (2004). The Framework will comprise a Core Strategy and a number of other development plan documents as well as supplementary planning documents. Details of the Local Development Framework for Harrow can be viewed via the Council's website: www.harrow.gov.uk.
- 2.12** For a period of six weeks during the winter of 2009/10 the Council consulted on its preferred option for the Harrow Core Strategy. In conjunction with proposals included in the consultation draft replacement London Plan, the preferred option document seeks the designation of a Harrow & Wealdstone Intensification Area to deliver new homes, retail growth and employment renewal on strategic previously developed sites within the central area. The preferred option also envisaged redevelopment within the Borough's network of district local centres and on identified previously developed sites elsewhere, whilst open space would continue to be protected and the character of more suburban areas would be safeguarded. Eight strategic objectives for the Core Strategy were developed and, within the housing objective, the document sought to contribute to the creation of sustainable communities by ensuring that new development meets accessible homes standards and promotes the creation of lifetime neighbourhoods.

- 2.13** The next stage for the Harrow Core Strategy is a further stage of consultation, known as the 'pre submission' stage. The document will then be submitted to the Planning Inspectorate for an examination in public. The Planning Inspector's recommendations are binding upon the Council and, once adopted, the Core Strategy and its policies will be a material consideration in the determination of planning applications in Harrow.

Harrow's Unitary Development Plan (2004)

- 2.14** Pending the adoption of the Core Strategy and other development plan documents, many of the policies of the Harrow Unitary Development Plan (2004) remain in force as the basis for deciding planning applications. It is therefore imperative that, for the time being, developers and others also have regard to the 'saved' policies of the adopted Unitary Development Plan when formulating their proposals.
- 2.15** Saved UDP Policy D4 expects development to achieve a high standard of design and layout. The policy sets out a range of criteria to be taken into account when considering planning applications which includes, specifically (e) layout, access & movement. The supporting text to the policy (paragraphs 4.14-4.20) emphasises the importance of permeability and the development of inclusive environments for pedestrians, cyclists and public transport users. As well as providing accessible homes, those proposing development should also demonstrate through their design and access statement how the proposal would relate to/improve layout, access and movement in the surrounding area.
- 2.16** Saved UDP Policy C16 seeks to ensure that buildings, as well as public spaces, are accessible to all. It goes on to state that development proposals should be adequately designed to accommodate the needs of all users. As with Policy D4, the intention of the policy is further elaborated in the supporting text to Policy C16 (paragraphs 9.55-9.57). Specifically the following two paragraphs are highlighted:
- *"9.56 The intention of this policy is to ensure that, as far as is reasonable, through the planning system, new housing (irrespective of whether it is initially occupied by a disabled person or not) will contribute to meeting the needs of disabled people and enable them to live independently in the community. If an increasing proportion of the general housing stock is designed to a standard which makes this possible, it will allow disabled people more choice of housing. Equally it will make it increasingly unnecessary for people to move or restrict their visits to neighbours if they become less mobile and will therefore reduce public expenditure on costly adaptations when people become disabled..."*
 - *"9.57 People who use wheelchairs are as varied in their housing needs as the rest of the population. Very little existing housing, or new conversions, is suitable for people who permanently use a wheelchair. This policy will help to redress this historic imbalance and give disabled people a choice of housing of different types and tenures and enable more people to remain in their homes if they become disabled. It is important that all new housing developments are built to a standard which make them adaptable and capable of use by people who use wheelchairs".*
- 2.17** This SPD therefore gives effect to UDP Policies D4 and, in particular, C16 by implementing Lifetime and Wheelchair Home Standards in Harrow.

Application of Lifetime and Wheelchair Home Standards

- 2.18** In line with the London Plan Policy 3A.5 and the Mayor's supplementary planning guidance 'Accessible London: achieving an inclusive environment', the Council will apply the relevant Lifetime and Wheelchair Home Standards to all residential development in the Borough, whether new build, conversion or change of use.
- 2.19** Not all of the Lifetime Homes design criteria will apply to all developments, but to qualify as a Lifetime Home a development must apply all relevant criteria; the 16 Lifetime Homes design criteria and their applicability to forms of development are set out at section 4 of this document. Not all criteria are relevant to all development, for example, criteria 1, 2, 9 & 12 would not be relevant to a development of one and two bedroom flats (not split level) with no car parking in a town centre location, but the flats would need to achieve all other design criteria to count as Lifetime Homes. By contrast, criterion 5 would not be relevant to an-infill development of a three-bedroom dwellinghouse in an established suburb, with parking provision in the front garden, but again all other design criteria would need to be met for it to be regarded as a Lifetime Home.
- 2.20** To qualify as a Wheelchair Home the house or flat must comply with all relevant Lifetime Home Standards and, in addition, must achieve all relevant Wheelchair Home Standards. Therefore 10% of all new housing, whether new build, conversion or change of use, must achieve the relevant Wheelchair Home Standards set out in this SPD.

Relationship with Parking Standards

- 2.21** The London Plan and Harrow's UDP set out a range of parking standards for residential development. The standards are maximum and, in appropriate circumstances, this will lead to developments with levels of parking provision equivalent to less than one space per home and in some instances no general car parking provision. However, in line with the approach set out in the London Plan, developments should make provision for disabled people with at least one accessible on or off street car parking bay designated for use by disabled people, even if no general parking is proposed. All developments with associated off street car parking should have at least two bays for use by disabled people.
- 2.22** The requirement for accessible parking for disabled people does not mean that all homes require a car parking space. Although Lifetime Home Standards 1 & 2 prescribe the form and distance of a car parking space in relation to the home, this should not be interpreted as meaning that Lifetime Homes *require* a car parking space. Where no car parking is to be provided, neither criterion 1 nor 2 will be relevant to the achievement of Lifetime Home status. By contrast one accessible parking space will be required for each Wheelchair Home, including development that would otherwise car free.

Conservation Areas and Listed Buildings

- 2.23** The Council has a responsibility, in making planning decisions, to pay special attention to the preservation or enhancement of conservation areas and to the preservation of listed buildings or their settings. Where proposals relate to a conservation area and/or listed building, or are likely to impact the setting of a conservation area and/or listed building, design solutions that are sensitive to both the building and the surrounding area are required. Development in conservation areas and works to listed buildings must accord with Planning Policy Guidance Note 15: Planning and the Historic Environment (1994) and saved policies D11, D12, D14, D15 and D16 of the Harrow Unitary Development Plan (2004).
- 2.24** It is anticipated that, in most cases and with thoughtful design & layout, compliance with standards set out in this SPD need not conflict with the protection of conservation areas and listed buildings. However the Council recognises that there may be occasions where compliance with the standards may be incompatible with conservation objectives and in these circumstances non-compliance with some or all of the relevant design criteria may be acceptable provided that the reasons for non-compliance are clearly documented in the Design & Access Statement and that, insofar as practicable, it can be shown that the development follows the principles of creating a more inclusive environment.
- 2.25** English Heritage, in partnership with the Heritage Lottery Fund, has set out principles of design inclusivity within the historic environment in its publication '*Easy Access to Historic Buildings*' (2004). When developments involve the wider public realm of the historic environment, the related English Heritage publication '*Easy Access to Historic Landscapes*' (2005) may also be of use.

Design & Access Statements 3

Accessible Homes SPD (2010)

3 Design & Access Statements

- 3.1** It is now a requirement that planning applications for most types of development be accompanied by a Design and Access Statement. The only exceptions are applications for householder developments not within conservation areas, changes of use not involving extensions or external alterations, and engineering or mining operations. The Council has issued separate guidance on the preparation of Design & Access Statements which can be viewed via Harrow's website (<http://www.harrow.gov.uk>). The purpose of this section is to elaborate on the required content in relation to Lifetime and Wheelchair Homes Standards.
- 3.2** The Design and Access Statement should document what has been done from the start to ensure buildings, facilities, and services are accessible to disabled and non-disabled people alike. Statements are now central to the planning application process and Harrow Council is empowered to formally address detailed access issues as a key principle for granting planning permission. When submitted as part of a housing scheme they should demonstrate compliance with the relevant Lifetime Home Standards and the additional requirements of Wheelchair Home Standards. The Design and Access Statement will also need to clearly demonstrate the principles of good design throughout the following stages:
- **Pre-Planning stage** - see section 2 of this document.
 - **Planning Application stage** - compliance with all 16 Lifetime Home Standards and Wheelchair Home Standards as appropriate. Plans submitted should be clearly labelled to highlight the individual features and the range of standards used in designing the scheme. For applications to be considered, plans should provide clear details of all dimensions and materials.
 - **Building Control stage⁽¹⁾** - should contain the same detail submitted with the planning application but should reflect any changes that were required to achieve planning consent.
- 3.3** Where a planning permission is granted, the Design and Access Statement will be listed alongside the plans as part of the approved documents for the scheme. Failure to carry out the development in accordance with the approved plans & documents constitutes a breach of planning control which may lead to formal enforcement proceedings (and could inhibit the sale of the units until the matter is resolved).

1 Part M of the Building Regulations 2000 deals with access to and use of buildings. See paragraph 1.3 of this document for a brief explanation of the relationship between the Accessible Homes Standards and Part M of the Building Regulations.

Designing Accessible Residential Developments 4

Accessible Homes SPD (2010)

4 Designing Accessible Residential Developments

Design and Layout

- 4.1** The overall design and layout of a residential development plays an important role in creating communities that are safe, easy to navigate and accessible. The Council therefore welcomes developments that create more inclusive environments by providing convenient walking and cycling routes, are nearby to local services and amenities, as well as within easy reach of public transport services.
- 4.2** Wheelchair Standard Homes should be located within developments so as to maximise convenience of accessibility to the occupier but, in order to prevent the formation of ghettos and discourage targeted hate crime, should not be grouped together or appear distinctive as a Wheelchair Home from the outside. Within blocks of flats for example, wheelchair units should be well located for access to communal lifts but the units should not have a notably different appearance within the communal corridors and should not be grouped together within a single part of the building or development.
- 4.3** Wheelchair Standard Homes should be made available for private sale as well as affordable housing. There are now a number of websites that specialise in marketing homes that have been built or adapted to be wheelchair accessible; effective marketing to disabled or older people who would benefit from the more accessible layout provided by a Wheelchair Standard Home can help to ensure the saleability of the units as well as matching the supply of such units to those who can most benefit from them. Specific targeting of this client group can also help to raise general awareness about the availability of new accessible homes.

What is a Lifetime Home?

- 4.4** A Lifetime Home is a home built around 16 specific design standards. It is a home that promotes high levels of comfort; one that is flexible, adaptable and accessible.
- 4.5** Features such as step-free entry and wider doors allow people with pushchairs to gain easy, uninterrupted entry. Built-in removable ceiling and wall panels become invaluable for lift installation when climbing the stairs is no longer viable. Likewise many wheelchair users can comfortably enjoy a Lifetime Home, gain access to the upstairs and easily have a 'wet room' shower installed without the need for disruptive or costly alterations.
- 4.6** Lifetime Homes are:
- **NOT** oversized dwellings. Using attention to detail, a Lifetime Home need not exceed average sizes or impede narrow frontage or high density development.
 - **NOT** necessarily more costly to build. Lifetime Home standards can be incorporated with little or no extra cost, provided the concept is taken on board at the stage of project inception and is applied to the whole development.
 - **NOT** difficult to achieve. A full understanding of the concept, together with creative design, results in well designed Lifetime Homes. Lifetime Home Standards can be applied to virtually all housing types.
 - **NOT** 'special needs' homes. Their flexible design takes into account the needs of a diverse range of people, whilst enabling those with moderate to severe mobility impairments to choose or remain living in mainstream housing.
 - **NOT** Wheelchair Standard Homes. Lifetime Homes are designed for easy retrospective adaptation, at minimal cost. The Council recognises that a Lifetime Home will not meet the individual housing needs of everyone in society.
 - **NOT** unattractive. They can be designed tastefully, are attractive to a wider range of people and will rarely remain unoccupied.
 - **NOT** all ramps and handrails. A Lifetime Home is like any other home. Intrusive adaptations are unnecessary in Lifetime Homes as access and flexibility are built-in from the start.

(Information taken from Designing Lifetime Homes and Costing Lifetime Homes - Joseph Rowntree Foundation, 1997)

Lifetime Home Standards

- 4.7** The following Lifetime Home Standards (LHS) are taken from Appendix 4 of the Mayor of London's SPG (2004). The standards must be applied, as relevant to the development, for homes within the development to be classed 'Lifetime Homes'. Detailed design specification for each of the Standards are provided on the website <http://www.lifetimehomes.org.uk>.
- 4.8** **LHS 1 Where there is car parking adjacent to the home, it should be capable of enlargement to attain a width of 3.3m.**
- Apply to all homes that are to be 'Lifetime Homes' where car parking is proposed adjacent to the home.
 - Detail any parking provision on the application drawings.
 - See <http://www.lifetimehomes.org.uk/pages/criteria1.html>
- 4.9** **LHS 2 The distance from the car parking space to the home should be kept to a minimum and should be level or gently sloping.**
- Apply to all homes that are to be 'Lifetime Homes' where car parking is proposed within the curtilage of the development (but not adjacent to the home).
 - Detail any parking provision on the application drawings. Explain how the distance from the home and any slope have been kept to a minimum in the Design & Access Statement.
 - See <http://www.lifetimehomes.org.uk/pages/criteria2.html>
- 4.10** **LHS 3 The approach to all entrances should be level or gently sloping.**
- Apply to all homes that are to be 'Lifetime Homes' (all entrances not just the main entrance).
 - Show the approach to all entrances in cross-section on the application drawings. Where unavoidable, the gradient of any slope should be justified in the Design & Access Statement.
 - See <http://www.lifetimehomes.org.uk/pages/criteria3.html>
- 4.11** **LHS 4 All entrances should be illuminated, have level access over the threshold and have a covered main entrance.**
- Apply to all homes that are to be 'Lifetime Homes' (all entrances not just the main entrance).
 - Show the threshold over all entrances in cross-section on the application drawings. The cover over the main entrance and the position of lighting units to all entrances should be shown on the application drawings. Details of the means of illumination (how to be controlled, level of luminance, any measures to avoid nuisance to neighbours etc) should be explained in the Design & Access Statement.
 - See <http://www.lifetimehomes.org.uk/pages/criteria4.html>

Picture 4.1 Covered entrance with level access



4.12 **LHS 5 Communal stairs should provide easy access and, where homes are reached by a lift⁽¹⁾, the lift should be wheelchair accessible.**

- Apply to all homes that are to be 'Lifetime Homes' and which are reached by communal stairs or a lift.
- Detail the communal stairs and any lift on the application drawings.
- See <http://www.lifetimehomes.org.uk/pages/criteria5.html>

1 in blocks of flats which are more than two storeys high a communal lift should be provided

Picture 4.2 An accessible lift in a communal hallway



4.13 **LHS 6** The width of internal doorways and hallways should conform to Part M of the Building Regulations, except where the approach is not head-on and the corridor width is 900mm, where the clear opening width should be 900mm rather than 800mm. There should be 300mm to the side of the leading edge of the doors on the entrance level.

- Apply to all homes that are to be 'Lifetime Homes' .
- Detail as part of the floorplans on the application drawings.
- See <http://www.lifetimehomes.org.uk/pages/criteria6.html>

4.14 **LHS 7** There should be space for turning a wheelchair in dining areas and living rooms and adequate circulation space for wheelchair users elsewhere.

- Apply to all homes that are to be 'Lifetime Homes'
- Detail as part of the floorplans on the application drawings.
- See <http://www.lifetimehomes.org.uk/pages/criteria7.html>

Picture 4.3 An accessible dining area



4.15 **LHS 8 The living room should be at entrance level.**

- Apply to all homes that are to be 'Lifetime Homes' .
- Detail as part of the floorplans on the application drawings.
- See <http://www.lifetimehomes.org.uk/pages/criteria8.html>

4.16 **LHS 9 In houses of two or more storeys, there should be space on the ground floor that could be used as a convenient bed space.**

- Apply to all homes that are to be 'Lifetime Homes' where the accommodation is spread over more than one storey.
- Detail as part of the floorplans on the application drawings and explain in the Design & Access Statement.
- See <http://www.lifetimehomes.org.uk/pages/criteria9.html>

4.17 **LHS 10 There should be a wheelchair accessible entrance level toilet with drainage provision enabling a shower to be fitted in the future.**

- Apply to all homes that are to be 'Lifetime Homes'. Note however that compliance with Part M of the Building Regulations (only) is acceptable for homes of two bedrooms or fewer, but that a larger entrance level facility is required for homes of three or more bedrooms.
- Detail as part of the floorplans on the application drawings. Explain the waterproofing and drainage arrangements in the Design & Access Statement.
- See <http://www.lifetimehomes.org.uk/pages/criteria10.html>

4.18 **LHS 11 Walls in bathrooms and toilets should be capable of taking adaptations such as handrails.**

- Apply to all homes that are to be 'Lifetime Homes' .
- Explain in the Design & Access Statement.
- See <http://www.lifetimehomes.org.uk/pages/criteria11.html>

Picture 4.4 An accessible, adaptable bathroom



4.19 **LHS 12** The design should incorporate provision for a future stair-lift and a suitably identified space for a potential installation of a through-the-floor lift from the ground to the first floor, for example to a bedroom which is next to a bathroom.

- Apply to all homes where the accommodation is spread across more than one floor and which are to be 'Lifetime Homes' .
- Explain how the design would allow for the future provision of a stair lift in the Design & Access Statement. Show the position for a potential 'through the floor' lift as part of the floorplans on the application drawings.
- See <http://www.lifetimehomes.org.uk/pages/criteria12.html>

4.20 **LHS 13** The design should provide for a reasonable route for a potential hoist from a main bedroom to the bathroom.

- Apply to all homes that are to be 'Lifetime Homes' .
- Detail as part of the floorplans on the application drawings and explain in the Design & Access Statement.
- See <http://www.lifetimehomes.org.uk/pages/criteria13.html>

4.21 **LHS 14** The bathroom should be designed to incorporate ease of access to the bath, w.c. and wash basin.

- Apply to all homes that are to be 'Lifetime Homes' .
- Detail as part of the floorplans on the application drawings and explain in the Design & Access Statement.
- See <http://www.lifetimehomes.org.uk/pages/criteria14.html>

Picture 4.5 Accessible shower room layout (with underfloor gulley drainage for future adaptation to a wet room facility)



4.22 **LHS 15 Living room window glazing should begin at 800mm or lower and windows should be easy to open/operate.**

- Apply to all homes that are to be 'Lifetime Homes' .
- Show the windows on the application drawings. Detail the operational fittings in the Design & Access Statement.
- See <http://www.lifetimehomes.org.uk/pages/criteria15.html>

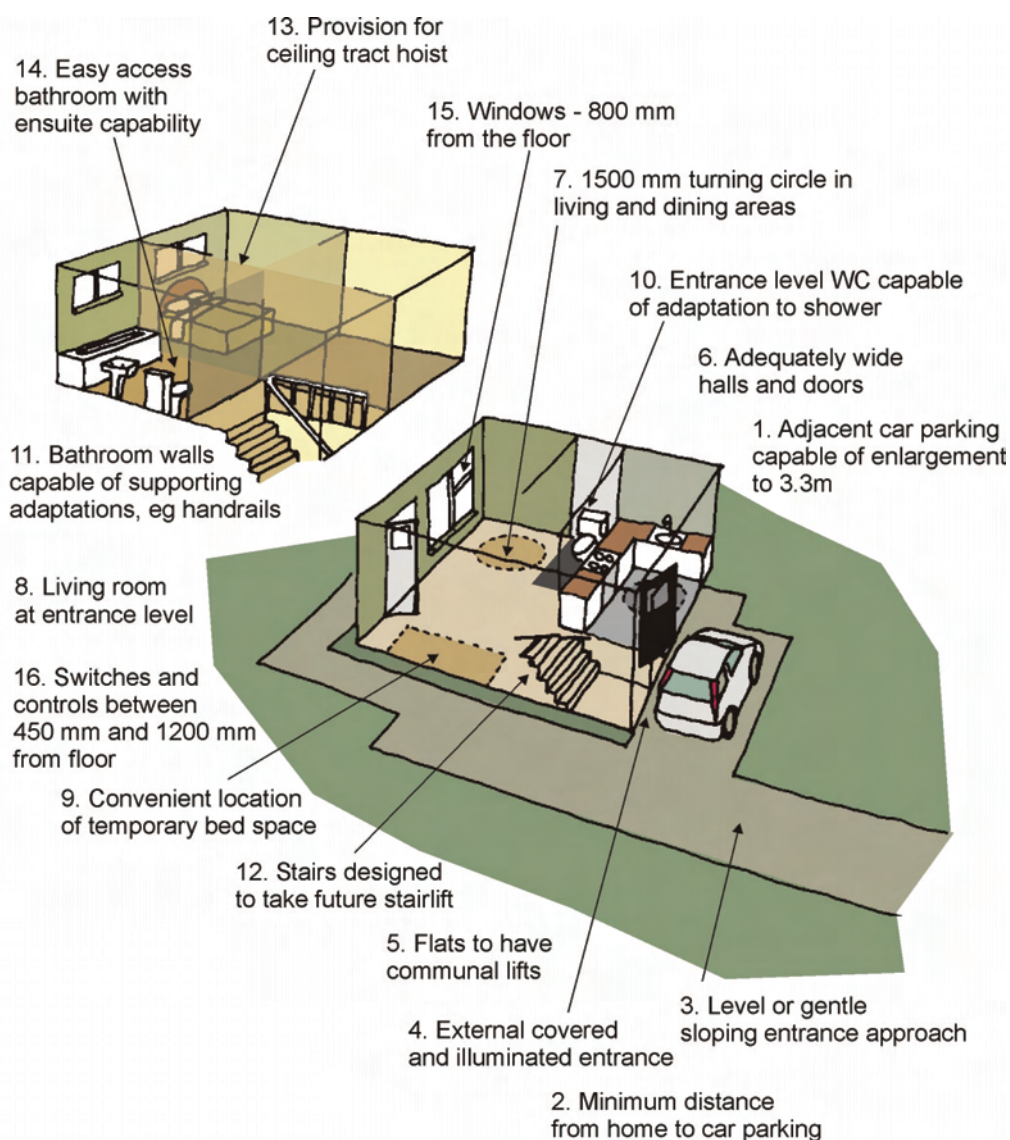
4.23 **LHS 16 Switches, sockets, ventilation and service controls should be at a height useable by all (i.e. between 450mm and 1200mm from the floor).**

- Apply to all homes that are to be 'Lifetime Homes' .
- Detail the positions of the fixtures & fittings in the Design & Access Statement.
- See <http://www.lifetimehomes.org.uk/pages/criteria16.html>

Picture 4.6 Electrical sockets 450mm above the floor



Picture 4.7 Lifetime Home Standards: internal layout illustration



What is a Wheelchair Standard Home?

- 4.24** A Lifetime Home allows a wheelchair user to visit the home but is not designed with the additional spatial requirements of a wheelchair user's needs. Additional design criteria are therefore applied to the Lifetime Home Standards to bring them up to Wheelchair Home Standard – suitable for occupation by a wheelchair user.
- 4.25** In basic terms a Wheelchair Standard Home is more spacious, allowing a wheelchair user to move around unhindered. These homes should be designed for wheelchair users with more complex requirements and should be suitable for occupation with minimal or no adaptation (this will depend upon the specific needs of the occupiers) but should include, for example, pre-installed features such as low-level kitchen facilities, infrared light switches, pre-installed handrails, etc ⁽²⁾.

2 Note that, for homes that are being provided as affordable housing, it is usually a requirement that the wheelchair units are provided already fitted-out for immediate occupation by a wheelchair user

Wheelchair Home Standards

- 4.26** The principles for designing wheelchair accessible housing are set out in the Mayor of London's Best Practice Guidance (2007); these are reproduced below. These principles should guide the design and layout of Wheelchair Homes from inception, employing the relevant detailed standards to ensure that the finished home is suitable for immediate occupation by a wheelchair user or is capable of adaptation with minimal additional intervention for a future wheelchair user. As with the Best Practice Guidance (2007) the detailed Wheelchair Home Standards, reproduced from the Wheelchair Housing Design Guide 2006 (WHDG) are listed, as relevant to each principle.
- 4.27** **Moving around outside** *Ensure a high degree of accessibility within the development.*
- **WHDG 1.2.1**Footpaths: ensure that footpaths are smooth but slip resistant, of 1200mm minimum width and with adequate space to negotiate obstacles, turn and pass.
 - **WHDG 1.2.3**Gradients: ensure length-to-gradient ratios to footpaths or routes within a development do not exceed 2000mm at 1 in 12 or 5000mm at 1 in 15. Top, bottom and, where required, intermediate level landings at least 1200mm long must be provided.
 - **WHDG 1.2.4**Cross falls: ensure that these do not exceed 1 in 50 on paving whether dedicated to pedestrian use or shared with vehicles.
 - **WHDG 1.2.5**Crossings: ensure that these have flush junctions or shallow gradients and avoid gratings or channels that could trap wheels or footrests.
 - See also the Mayor of London's Best Practice Guidance '*Wheelchair accessible housing*' (2007) Figures 1, 2 & 3 (pages 13 & 14).
- 4.28** **Using outdoor spaces** *Ensure that spaces within the curtilage of the home are accessible, usable and, where appropriate, secure.*
- **WHDG 2.2.1**Garden gates: where private or side gardens are provided, ensure that gates have 850mm clear opening, and can be operated from each side by a wheelchair user, reachable and with easily manipulated fittings.
 - **WHDG 2.2.2**Balconies: provide nominally level access to balcony and useable space clear of any door swings.
 - **WHDG 2.2.3**Gardens: lay out garden to provide accessible route from external door, external storage and external gate.
 - **WHDG 2.2.4** Refuse & recycling: make suitable refuse and recycling provision, i.e. to deposit refuse and recycling in containers for collection, within a short distance of an external door, or ensure appropriate management provision.
 - See also the Mayor of London's Best Practice Guidance '*Wheelchair accessible housing*' (2007) Figure 4 (page 15).

4.29 ***Approach to the home*** ***Ensure ease of approach to the home by car, wheelchair or mobility scooter with good cover at the point of transfer and good protection from the elements at the individual or common entrance.***

- **WHDG 3.2.1** Dwellings with a direct external entrance: provide a covered parking space* for every ground floor level wheelchair user dwelling.
- ***WHDG 3.2.2** The covered area: ensure that bays have a minimum clear area of 3600mm (w) x 5400mm (d) and a clear height of 2200mm (increasing to a minimum 2600mm height in enclosed car parks) with slip resistant, smooth and nominally level paved surface below.
- **WHDG 3.2.3** Dwellings with a communal external entrance: where there is no direct external ground floor entrance, ensure parking provision in the form of designated parking space for each wheelchair user dwelling, off-street or kerbside, nominally level that can enable transfer to and from the vehicle.
- **WHDG 3.2.5** Route to entrance: smooth slip resistant route. Ramps, where unavoidable, are not steeper than 1 in 15 and not longer than 5000mm.
- **WHDG 3.2.6** Entrance landing: level landing 1500mm x 1500mm minimum (1800mm x 1800mm preferred) but ensure 1200mm depth clear of any door swing. Provide side protection where ground level is below path or landing level.
- **WHDG 3.2.7** Canopy at entrance: minimum 1200mm x 1500mm extending beyond door on lock side and at a maximum height of 2300mm.
- **WHDG 3.2.9** Lifts: where wheelchair dwellings are above the ground floor, lifts should be as detailed in BS 8300 (i.e. internal car dimensions of 1100mm wide x 1400mm deep). A second lift should be accessible to and from wheelchair user dwellings for use when the first or core lift is undergoing maintenance.
- See also the Mayor of London's Best Practice Guidance '*Wheelchair accessible housing*' (2007) Figures 5, 6 & 7 (pages 16, 17 & 18).

Picture 4.8 An accessible parking space & level approach



4.30 **Negotiating the entrance door** *Ensure that the clear opening, approach space and threshold are suitable for use by a person using a wheelchair.*

- **WHDG 4.2.1**Door: provide effective clear width of at least 800mm (900mm preferred).
- **WHDG 4.2.2**Approach space: provide space beside leading edge of door, 200mm minimum for a door opening away from the wheelchair user, 300mm for a door opening towards them, extending 1800mm from face of door.
- **WHDG 4.2.3**Threshold: provide weathertight accessible detail with total upstand clear of internal or external finishes not exceeding 15mm.
- See also the Mayor of London's Best Practice Guidance '*Wheelchair accessible housing*' (2007) Figure 8 (page 19).

4.31 **Entering & leaving and dealing with callers** *Ensure that the wheelchair user in their own home can: (a) enter, manoeuvre outdoor chair to enable transfer to indoor chair, and reverse the process when leaving; (b) leave outdoor or indoor chair on charge; and (c) approach the door to receive deliveries, retrieve post, open the door to visitors, manoeuvre and return to living areas.*

- **WHDG 5.2.5** Lobby: where entrance lobby incorporated or provision made for added inner door, ensure adequate space to manoeuvre between doors.
- **WHDG 5.2.2**Turning space: 1800mm x 1500mm behind closed door, clear of fittings and obstructions, plus 300mm clear space to the side of the leading edge of the door.
- **WHDG 5.2.1**Transfer space: provide a space within the home of 1100mm x 1700mm to manoeuvre wheelchair to transfer to a second chair, to store the first and if necessary to leave it on charge, clear of circulation routes and the required approach to furniture and doors.
- See also the Mayor of London's Best Practice Guidance '*Wheelchair accessible housing*' (2007) Figures 9 & 10 (page 21).

4.32 **Negotiating the secondary door** *Ensure direct connection to external spaces by an easily operated but secure door as access to private or shared gardens, balconies and as an escape in an emergency.*

- **WHDG 6.2.1**Exterior (landing): provide nominally level landing 1500mm wide x 1500mm deep with 1200mm clear of door swing.
- **WHDG 6.2.2**Door: provide effective clear width of 800mm to single or main leaf.
- **WHDG 6.2.3**Approach space: ensure space to approach, manoeuvre and pass through door on line.
- **WHDG 6.2.4**Threshold: provide weathertight, accessible detail.
- See also the Mayor of London's Best Practice Guidance '*Wheelchair accessible housing*' (2007) Figure 11 (page 22).

4.33 **Moving around inside; storing things** *Ensure that wheelchair users can: (a) conveniently manoeuvre, approach and negotiate all doors within circulation areas; and (b) approach and use storage off circulation areas.*

- **WHDG 7.2.1**Straight passages: ensure that passage widths or approaches where no turning or approach is required are no less than 900mm wide clear of all obstructions except skirtings.
- **WHDG 7.2.2**Head-on approach to doors in passages: ensure space beside latch edge of door, minimum 200mm on push side and minimum 300mm on pull side.
- **WHDG 7.2.5**Turning 90°: ensure at right angles that passage width clear of all obstructions (except skirtings) for the extent the turn is no less than 1200mm width in one direction and 900mm in the other; or 900mm in each direction in combination with an angle splayed by 300mm.
- **WHDG 7.2.4**Turning 180°: ensure that passage widths or approaches to turn through 180 degrees are no less than 1500mm clear of all obstructions (except skirtings) for extent manoeuvring space.
- **WHDG 7.2.6**Effective clear widths for doors: ensure 775mm minimum effective clear width. Increase where approach is at an angle. Effective clear width of doors refers to the width between the face of the door or projecting fitting in the open position and the nearest point on the opposite frame of the second door.
- **WHDG 7.2.8**Doors at angles: provide space to turn between doors at an angle to each other (at least 400mm from door to corner).
- **WHDG 7.2.9**Sliding doors: provide space beyond doorway at latch side for sideways approach and operation (300mm minimum).
- **WHDG 7.2.10**Storage: ensure that the depth and width of storage space, in combination with any shelving layout, provides optimum access to space and other stored items. Ensure that opening width of doors suits angled or head on approach.
- See also the Mayor of London's Best Practice Guidance '*Wheelchair accessible housing*' (2007) Figures 12, 13 & 14 (pages 24 & 25).

Picture 4.9 Accessible hallway



4.34 **Moving between levels within the dwelling** *Where dwellings are designed with more than one floor level, ensure that there is provision for independent movement between floor levels in a wheelchair without the need to transfer, without compromise of circulation or living space and with all the rooms remaining accessible.*

- **WHDG 8.2.3**Circulation: provide adequate circulation space at each level to manoeuvre, call the lift, approach and open its door to use it.
- See also the Mayor of London's Best Practice Guidance '*Wheelchair accessible housing*' (2007) Figure 15 (page 26).

4.35 **Using living spaces** *Ensure that a room can accommodate the usual range of furniture with space for a wheelchair-using member of the household to circulate and transfer from wheelchair to seating.*

- **WHDG 9.2.1**Room layout: provide space for wheelchair users to approach furniture, circulate around it, transfer to seating and approach and operate doors, windows, equipment and control.
- See also the Mayor of London's Best Practice Guidance '*Wheelchair accessible housing*' (2007) Figure 16 (page 27).

Picture 4.10 An accessible living room



4.36 **Using the kitchen** *Ensure ease of approach to and use, for a wheelchair user, of the sink, worktops, equipment, all appliances and controls and all storage essential to kitchen operations.*

- **WHDG 10.2.1**Layout: clear manoeuvring space not less than 1800mm x 1500mm.
- See also the Mayor of London's Best Practice Guidance '*Wheelchair accessible housing*' (2007) Figure 17 (page 28).

Picture 4.11 Manoeuvring space in an accessible kitchen



4.37 Using the bathroom *In housing design terms the design of the bathroom is key to enabling independence and dignity for disabled people. The ability to manage most if not all toileting and bathing functions without assistance is highly desirable and is the foundation of 'independent living'.*

- **WHDG 11.2.1**Bathroom: in all dwellings provide fully accessible bathroom with w.c., basin and installed level-access shower with provision for bath in place of shower if needed with flexible or easily adapted services.
- **WHDG 11.2.2**Access from bedroom: ensure provision for direct access from main bedroom.
- **WHDG 11.2.3**Second w.c.: in dwellings of four or more persons, provide fully accessible second w.c. with basin and hand the transfer space opposite to the handing of the main w.c. to provide both left-handed and right-handed transfer options within the dwelling.
- **WHDG 11.2.4**Layout: ensure independent approach/transfer to and use of all fittings, including manoeuvring space clear of fittings.
- **WHDG 11.2.6**Shower: where fully installed, detail to be fully accessible comprising drained floor, reachable and usable controls and scope for suitable water containment or suitable enclosure.
- **WHDG 11.2.7**Bath: where provided select bath and taps, position and detail to allow a range of transfers, access to and operation of taps.
- **WHDG 11.2.10**Supports: ensure that walls and ceiling are adequate for adjustable height basins and subsequent fixing of hoists, seats, supports and other fittings.
- See also the Mayor of London's Best Practice Guidance '*Wheelchair accessible housing*' (2007) Figures 18, 19 & 20 (pages 31 & 32).

Picture 4.12 Direct access from the bedroom to the bathroom



4.38 Using bedrooms *Ensure that there is space in all bedrooms to accommodate the normal range of bedroom furniture and for the wheelchair-using member of the household to enter, approach and transfer to beds, approach and use other furniture and operate windows.*

- **WHDG 12.2.1**Layout: provide bedroom layouts to ensure access to both sides of beds in double bedrooms and outer side of beds in single bedrooms, access to other furniture and to window.
- **WHDG 12.2.3**Door: make provision for connection between main bedroom and bathroom by means of full-height knock-out panel, or door with panel over in full-height frame or fully detailed door.
- **WHDG 12.2.4** Hoist: make provision for future ceiling track hoist installation in main bedroom - strengthen ceiling to allow run into bathroom.
- See also the Mayor of London's Best Practice Guidance '*Wheelchair accessible housing*' (2007) Figure 21 (page 33).

Picture 4.13 Accessible bedroom layout



4.39 **Internal doors** *Ensure that all internal doors, including those to storage spaces, can be operated conveniently.*

- **WHDG 13.2.1**Internal doors: ensure that door construction permits subsequent fixing of pulls and other fittings.

4.40 **Windows** *Ensure independent control of opening windows, passive and mechanical ventilation to requirements of Building Regulations and to reasonable level of comfort. Ensure balance of daylight, views out, privacy and security.*

- **WHDG 14.2.1**Approach: ensure that wheelchair user can approach window to operate controls for opening and ventilation.
- **WHDG 14.2.4**Safety: ensure that windows opening out over paths do not create hazards.
- **WHDG 14.2.5**Glazing: ensure that glazing line to windows in living, dining and bedrooms is no higher than 800mm.
- **WHDG 14.2.6**Transoms: avoid full width transoms (horizontal divisions) between 800mm and 1500mm high.
- See also the Mayor of London's Best Practice Guidance '*Wheelchair accessible housing*' (2007) Figure 22 (page 35).

Sources and References 5

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5 Sources and References

5.1 The following documents can be referred to for further design and technical information when building Lifetime Home and Wheelchair Home Standard compliant buildings:

- **Wheelchair Housing Design Guide**, Stephen Thorpe, Architect and Habinteg Housing Association, Second Edition, 2006; ISBN 1 86081 8978
- **Accessible Thresholds in New Housing**, The Stationery Office Ltd, 1999; ISBN 0 11 702333 7
- **Designing Lifetime Homes**, Edited by Julie Brewerton and David Darton, Joseph Rowntree Foundation, 1997; ISBN 1 85935 025 9
- **Designing Lifetime Homes and Costing Lifetime Homes**, Kim Sangster, Joseph Rowntree Foundation, 1997; ISBN 1 85935 024 0
- **British Standard BS 8300: Design of buildings and their approaches to meet the needs of disabled people**, BSI 2001
- **British Standards Institution DD266: Design of accessible housing - lifetime home code of practice**, BSI 2007
- **Planning and Access for Disabled People: A Good Practice Guide**, ODPM, 2003
- **Building Regulations 2000: Part M Access to and use of Buildings**, ODPM, 2004
- **The London Plan: Spatial Development Strategy for Greater London - Consolidated with Alterations since 2004**, Greater London Authority, 2008
- **Accessible London: Achieving an Inclusive Environment**, London Plan SPG, Greater London Authority, 2004
- **Wheelchair Accessible Housing: Best Practice Guidance**, Greater London Authority, 2007
- **British Standards Institute: Design of Accessible Housing - Lifetime Homes Code of Practice DD266:2007**

Local Implementation Supplement: Conversion of Houses to Flats **Appendix 1**

Accessible Homes SPD (2010)

Appendix 1 Local Implementation Supplement: Conversion of Houses to Flats

Introduction

- 1.1** Harrow is a classic outer London suburb, much of its housing stock dating from the early-mid twentieth century. Experience has shown that the conversion of existing housing to flats in a manner that provides a satisfactory layout and convenience for future occupiers can be challenging, but the Council is nevertheless committed to seeking the same standard of accessibility in conversion flats as it expects of new build development. Such an approach is not only a matter of principle, it is also a matter of practicality: to maximise the supply of accessible housing all new homes, whether provided as new build or conversion, must be expected to contribute; and to optimise housing choice those in need of accessible housing should have the option of selecting a home within a conversion property if that is their preference.
- 1.2** The Council will therefore expect, as a starting point, that all flats in a conversion development will be Lifetime Homes and that a ground floor flat will be a Wheelchair Home. It is recognised that a degree of flexibility and pragmatism will be required when seeking to achieve these accessibility requirements, particularly with flats above ground floor level, but this does not mean that the standards should not be applied. The purpose of this supplement is therefore to set out how the Council will apply accessibility principles to the conversion of houses to flats and to illustrate, by way of examples, how the Lifetime and Wheelchair Homes Standards can be met.
- 1.3** It should be noted that this supplement is intended only to apply to the conversion of existing houses to flats, recognising the particular difficulties they can present. Other proposals, such as the conversion of redundant office buildings to flats or the formation of new dwellinghouses, will be expected to comply fully with the Lifetime and Wheelchair Home Standards as set out in the main part of this SPD. Any proposed extensions must accord with the requirements of the Council's SPG 'Extensions: A Householders' Guide' and the conversion must be satisfactory in relation to all other planning requirements.

Principles for Applying Lifetime and Wheelchair Home Standards to Conversions of Houses to Flats

- 1.4** All homes, whether the result of new build or conversion development, should comply with the relevant Lifetime Home Standards. For flats above ground floor level to be classified as 'Lifetime Homes', however, they need to be reached by an 'easy going' stair⁽¹⁾. In a straightforward conversion of a house to two flats, one on the ground floor and one on the first floor, the Council recognises that it will not normally be feasible to install an 'easy going' stair and that, consequently, the first floor flat cannot be categorised as a Lifetime Home. Nevertheless, the Council is committed to more inclusive, adaptable housing and will continue to apply the Lifetime Home Standards to the first floor flat where there is sufficient stair width and lobby/landing space for

1 An 'easy going' stair should have maximum uniform risers of 170mm, minimum uniform goings of 250mm, and a minimum width on stairs of 900mm (measured 450mm above the pitch line).

the future installation of a stair lift. In other conversion schemes, where two or more flats are to be provided above ground floor level, these should be served by an 'easy going' stair and therefore be fully compliant with the Lifetime Home Standards.

- 1.5** The Council will also require a ground floor flat to comply with the relevant Wheelchair Home Standards, insofar as possible and practical. Where it is not possible or practical to comply with any one of the Standards, the Council will consider whether this is fundamental to the occupation of the dwelling by a wheelchair user. If it is not fundamental, then the development will be expected to comply with all other relevant Wheelchair Home Standards.

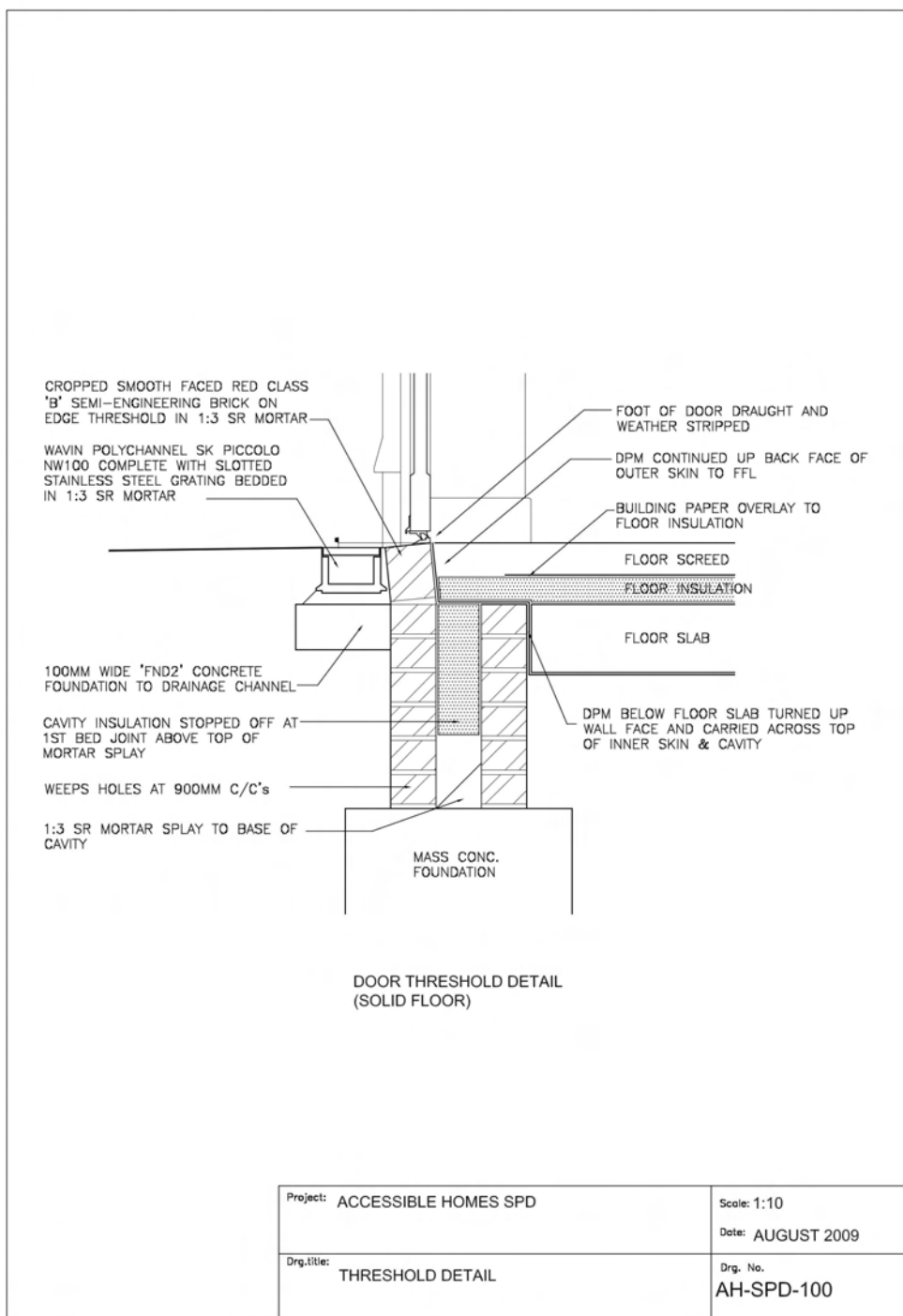
Forecourts

- 1.6** Many houses in Harrow have forecourts that are large enough to achieve some car parking and access to the front door, but this needs to be balanced against the need to leave sufficient space for landscaping and on-site drainage.
- 1.7** A 1200mm wide path should be provided, not exceeding 2m in length at 1 in 12 gradient or 5m at 1 in 15 gradient, leading to a level landing area outside the front door. The landing should be at least 1500mm x 1500mm and ensure a minimum of 1200mm clear of any door swing. These requirements reflect the access standards for Wheelchair Homes, on the basis that the forecourt will serve both a ground floor Wheelchair Standard Home as well as a first floor Lifetime Home. If it is demonstrated to the Council's satisfaction that the ground floor flat cannot be a Wheelchair Home but will be instead a Lifetime Home, then LHS 3 applies.
- 1.8** In most cases there will only be sufficient space to satisfactorily accommodate a single car parking space on the forecourt. This car parking space should be allocated to the ground floor Wheelchair Home. The dimensions for a wheelchair car parking bay are 3.6m wide x 4.8m deep, but in recognition of the size constraints of typical forecourts and the need to maximise space available for landscaping/drainage the LHS 1 principle can be applied, i.e. a standard 2.4m x 4.8m parking bay but located adjacent to the 1.2m wide path so that additional width is available to a wheelchair using driver/passenger to transfer from vehicle to wheelchair.
- 1.9** Where there is a usable service road to the rear of the property and subject to other planning considerations a parking space may be formed at the rear to serve the first floor Lifetime Home. Such parking should be provided and located in accordance with LHS 2.

Main Entrance

- 1.10** The level landing referred to above should be at internal ground floor level, providing a nominally level access across the entrance threshold (a weathertight accessible detail should be shown with a total upstand clear of internal or external finishes not exceeding 15mm). The communal front door should have a clear opening width of at least 800mm with space to the side of the door's leading edge of 300mm on the pull side and 200mm on the push side.

Picture 1.1 Cross Section: Weathertight Level Access



1.11 Wheelchair Home Standard WHDG 3.2.7 requires a 1200mm x 1500mm canopy at the entrance and LHS 4 also seeks a covered, main entrance. The Council recognises that in conversion proposals it will not normally be possible to provide such a large canopy in a manner coherent with the character of existing dwellings, especially as it will often be necessary to provide a porch in order to achieve sufficient manoeuvring space within a communal lobby (see below). A pragmatic approach to the provision of canopies in conversion proposals will therefore be applied, both in respect of the minimum dimensions and to waive the requirement where it is not possible to provide a canopy at all.

- 1.12** However the main entrance should be illuminated, in accordance with LHS 4, by means of an automatic censor but with an over-riding manual switch located within the communal lobby. Care should be taken both in the positioning of the light and the censor unit so as not to cause nuisance to neighbouring occupiers. For the Wheelchair Home a letter box should be installed at an appropriate height.

Communal Lobby

- 1.13** Getting the communal lobby right is critical to the accessibility of both the ground floor Wheelchair Home and the Lifetime Home within the conversion. It is also one of the most difficult parts of a conversion proposal, given the constraints of space imposed by the position of stairs and sometimes limited hallway width.
- 1.14** The lobby needs to provide sufficient space for a wheelchair user to manoeuvre between the main outer front door and the inner front door to the ground floor Wheelchair Home, but allowing sufficient space at the bottom of the stairs for the future installation of a stair lift to the first floor flat (see below). To achieve sufficient space it is envisaged that, in many instances, extension to provide a front porch will be required.
- 1.15** Ideally there should be turning space within the lobby of 1800mm x 1500mm. Where this cannot be achieved a smaller area may be acceptable provided that a wheelchair user can satisfactorily manoeuvre from the outer communal front door to the inner front door of the Wheelchair Home; internal manoeuvrability will be greatly aided if the outer door swings outwards and the inner door swings inwards (i.e. into the flat). As with the outer door, so too the inner door to the Wheelchair Home must have a clear opening width of 800mm and have space to the side of the leading edge of 300mm on the pull side and 200mm on the push side. The space to the side of the leading edge of the communal front door and the Wheelchair Home's inner door should extend back 1800mm from the face of the door.
- 1.16** In most cases the inner door to the first floor Lifetime Home will need to swing outwards, towards the flank wall, and should also have a clear opening of 800mm with 300mm to the side of the leading edge.

Ground Floor Wheelchair Home

- 1.17** The ground floor flat in a conversion scheme will be expected to be a Wheelchair Home. Where more than one flat is proposed on the ground floor, only one of the flats must be a Wheelchair Home but the other flats must be Lifetime Homes.
- 1.18** Wheelchair Home Standard WHDG 5.2.2 seeks turning space of 1800mm x 1500mm 'behind the closed door'. In most conversion instances, due to constraints of layout and available area, it will not be possible to provide this turning space immediately behind the flat's inner front door. However as a minimum there should be space extending 1800mm back from the face of the door. This should lead to an area within the hall that can double as a turning space (WHDG 5.2.1) and a transfer space (WHDG 5.2.1). There should be a space available to store a wheelchair clear of circulation and in most cases the area underneath the stairs will provide the obvious solution to this requirement.

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- 1.19** Internal door widths should achieve a clear opening of 775mm and, so far as possible, should be located towards the part of the hallway where the turning/transfer space is provided so that they can be approached head-on. Internal doors must also be provided with space to the side of the leading edge, 300mm on the pull side and 200mm on the push side.
- 1.20** The bathroom should be installed with a level-access shower facility but with sufficient space for the installation of a bath in place of the shower if needed. The w.c. must have transfer space of 700mm to one side and have clear approach space of 1100mm. There should also be 1100mm in front of the wash basin. The walls and ceiling must be strengthened, where necessary, to allow future installation of a height adjustable basin, hoists, seats, support and other fittings.
- 1.21** The bathroom should be located adjacent to the main bedroom and should be capable of direct access, usually by a knock-out floor-to-ceiling wall panel between the two rooms.
- 1.22** Wheelchair Home Standard WHDG 11.2.3 requires the provision of a second, fully accessible w.c. with handwash basin in dwellings for four or more persons (i.e. two double bedrooms). Where this can be achieved the w.c. should be provided with the same transfer and approach space described above, but with the transfer space located on the handed side to that provided in the main bathroom. However, the Council recognises that the space and layout constraints of conversion schemes will make it difficult in many instances to achieve a second, accessible w.c. and will therefore be prepared to waive this requirement where it is justified.
- 1.23** The kitchen layout should provide clear manoeuvring space, after the units have been installed, of 1800mm x 1500mm.
- 1.24** Ideally living rooms should have a width of at least 3m and include a defined space for dining, but given the space constraints of conversions it is recognised that this will not always be achievable. However there must be turning space (1500mm diameter) in living & dining areas and, in addition, the living room should be large enough for a wheelchair user to be able to approach/circulate around furniture and there should be space to transfer from wheelchair to seating.
- 1.25** Wheelchair Home Standard WHDG 12.2.1 requires that the main bedroom should be large enough to permit access to both sides as well as access to the window and bedroom furniture. In conversions it will not always be possible to achieve wheelchair access to both sides of a double bed, but as a minimum there must be sufficient turning space (a 1500mm turning circle) to one side and access to a wardrobe. As noted above, there should be potential for direct access to a bathroom via a knock-out wall panel, and the ceiling should be strong enough (as built or existing ceiling strengthened) to allow future installation of a track hoist between the bedroom and the bathroom.
- 1.26** The Wheelchair Home Standards require easy to operate windows with the glazing serving living, dining rooms and bedrooms no higher than 800mm above floor level, and no transoms between 800mm and 1500mm. The Council recognises that these requirements will be difficult to achieve in existing dwellings where the size and design of existing windows will be established and, often, will provide architectural

coherence with neighbouring property. However on less sensitive elevations, such as the ground floor rear elevation, the windows should comply with the relevant Wheelchair Home Standards.

- 1.27** Any secondary or back door should have a clear opening width of 800mm and should have a weathertight detail over a level-access threshold. There should be a head-on approach to the door and a level, exterior landing 1500mm x 1500mm with at least 1200mm clear of the door swing. Where there are sliding doors such as patio doors, a space to the side of the doorway latch for sideways approach and operation should be provided - at least 300mm.
- 1.28** The Wheelchair Home should comply with LHS 16 - switches, sockets, ventilation and service controls to be between 450mm and 1200mm above floor level - and regard should be had to the additional detailed advice in relation to door handles and other controls set out at Appendix 1. These matters can be addressed through the Design & Access Statement rather than on the drawings.

First Floor Lifetime Home

- 1.29** To achieve Lifetime Home status for flats above ground floor level, in a conversion scheme, requires flexibility in the application and interpretation of the Standards relating to stairs, lifts and the entrance level.
- 1.30** Where there is more than one flat above ground floor level the stairs must be 'easy-going' in accordance with LHS 5. In conversion schemes this will usually necessitate the installation of a new staircase to satisfy the 'easy-going' requirements of a uniform rise not exceeding 170mm and a uniform tread not exceeding 250mm. The handrails should be fitted at a height of 900mm above the stair treads and should extend 300mm beyond the top and bottom steps. With an 'easy going' communal stairway there is no requirement for a stair lift and the upper floor served by the stairway will be regarded as the 'entrance level' for the flats concerned.
- 1.31** More typically however the first floor in a conversion scheme is occupied by a single flat served by a private entrance hall and stairway from the ground floor. As noted at paragraph 1.4, such flats cannot be categorised as 'Lifetime Homes' because there would not be an entrance level living room, toilet facility or convenient bed space. However where there is sufficient space for the future installation of a stair lift, the Council will treat the first floor as the effective entrance level and will therefore apply the Lifetime Home Standards to the flat. Sufficient space for a stair lift means that there must be 900mm clear between the main stair wall and the edge of the opposite handrail/wall, and there must be landing space for the stairlift chair at the top and bottom of the stairs.
- 1.32** Where the first floor flat is a duplex apartment, with the accommodation spread over two floors by (for example) the provision of an extra bedroom in a loft conversion, strict compliance with Lifetime Home Standard LHS 12 would require provision for a stair lift and a suitably identified space for a through-the-floor lift. Where the stairs between the first floor and the loft conversion are not capable of permitting future stair lift installation, then it will be acceptable for the room in the loft space to be served only by a through-the-floor lift *provided* that the main bedroom and bathroom are on the entrance level (i.e. the first floor).

Accessible Homes SPD (2010)

- 1.33** Within the flat, the doorway/corridor widths must satisfy the Building Regulations and additional Lifetime Home requirements which are reproduced at Appendix 1. The requirement for a 300mm space to the side of the leading edge of the door only applies to the 'pull' side of the door to rooms on the entrance level of Lifetime Homes.
- 1.34** The provision of the only or main bathroom on the first floor will satisfy the requirement for an entrance level accessible toilet provided that adequate space between items of bathroom furniture is provided, i.e. a 700mm transfer space to one side of the w.c., 1100mm in front of the w.c. and wash basin, and 1100mm to the side of the bath. Drainage infrastructure must be fitted at build stage to allow the bathroom to be converted to a 'wet room' facility if required by a future occupier.
- 1.35** In duplex apartments, where the main bathroom is provided at an upper level, a separate, accessible toilet with drainage provision must be provided on the entrance level.
- 1.36** Where bathrooms are formed from an existing layout comprising solid (brick or breeze block) walls it is likely that they will already be capable of taking future adaptations such as handrails. However new layouts formed by stud-wall or other partitions will need to be especially strengthened at build stage.
- 1.37** The living room must be provided at entrance level and there should be adequate turning space for a wheelchair within the room (1500mm diameter or 1400mm x 1700mm ellipse). Where a dining room or integral space for dining is provided this should also have sufficient wheelchair turning space.
- 1.38** Adequate circulation space must be provided elsewhere in the flat and this should include, as a guide, a 1500mm turning space in the kitchen and hall/landing.
- 1.39** In most conversion schemes the main bedroom will be on the entrance level, but where this is not the case (such as a duplex apartment) then there should be space on the entrance level that could be used as a convenient temporary bed space. This requirement can be achieved by the allocation of an area within the living room provided that there is sufficient, usable area retained for the rest of the room to continue to function as a living space.
- 1.40** The main bedroom and bathroom should be on the same floor which, in most conversion flat situations, will be on the entrance level. Ideally the main bedroom will be located adjacent to the bathroom with a potential direct hoist route provided via a knock-out wall panel. However where this is not possible, a 'reasonable route' for the hoist will need to take into account distance and occupancy - for example a long route down a hallway passing living and secondary bedrooms occupied by other members of the household is unlikely to be considered reasonable.
- 1.41** In duplex apartments where the bedrooms and the bathroom are located other than on the entrance level, the main bedroom should be the one served by the through the floor lift and, as noted above, an accessible toilet with drainage provision must be provided on the entrance level.

- 1.42** Lifetime Home Standard LHS 15 seeks to enable persons seated to see out of the window and for a wheelchair user to be able to open & close at least one window in each room. The Council recognises that in the conversion of existing dwellings the achievement of low level opening windows will not always be possible without external alterations that could damage architectural harmony.
- 1.43** Switches, sockets, ventilation and service controls should be located between 450mm and 1200mm above floor level - and regard should be had to the additional detailed advice in relation to door handles and other controls set out at Appendix 1. As with the ground floor Wheelchair Home, this matter can be addressed through the Design & Access Statement rather than on the drawings.

Gardens

- 1.44** Considerations of accessibility should extend to the layout and use of rear garden spaces. Typically, houses in Harrow have long rear gardens and in conventional conversion schemes the space is apportioned equally to create a private garden for each flat: that nearest the house allocated to the ground floor and that furthest allocated to the first floor flat and accessed *via* a side passageway.
- 1.45** There should be direct access from the ground floor Wheelchair Home to the garden. The garden door should have a clear opening width of 800mm and have a level, weathertight access over the threshold. The secondary door should lead to a level patio area at least 1500mm x 1500mm, but with 1200mm clear of the door swing.
- 1.46** A 1200mm path should lead from the patio area to the garden gate and should be level. Where a gradient is unavoidable it should comply with the length-to-gradient ratios required by Wheelchair Home Standard WHDG 1.2.3. The gate should have a clear opening width of 850mm.
- 1.47** The location of waste and recycling facilities should avoid the potential for odour and nuisance to occupiers of the development (and their neighbours) but should allow convenient access.

Example 1: Single Storey Rear Extension, Alterations to Roof to Form End Gable and Rear Dormer, Conversion of Extended House to Two Flats

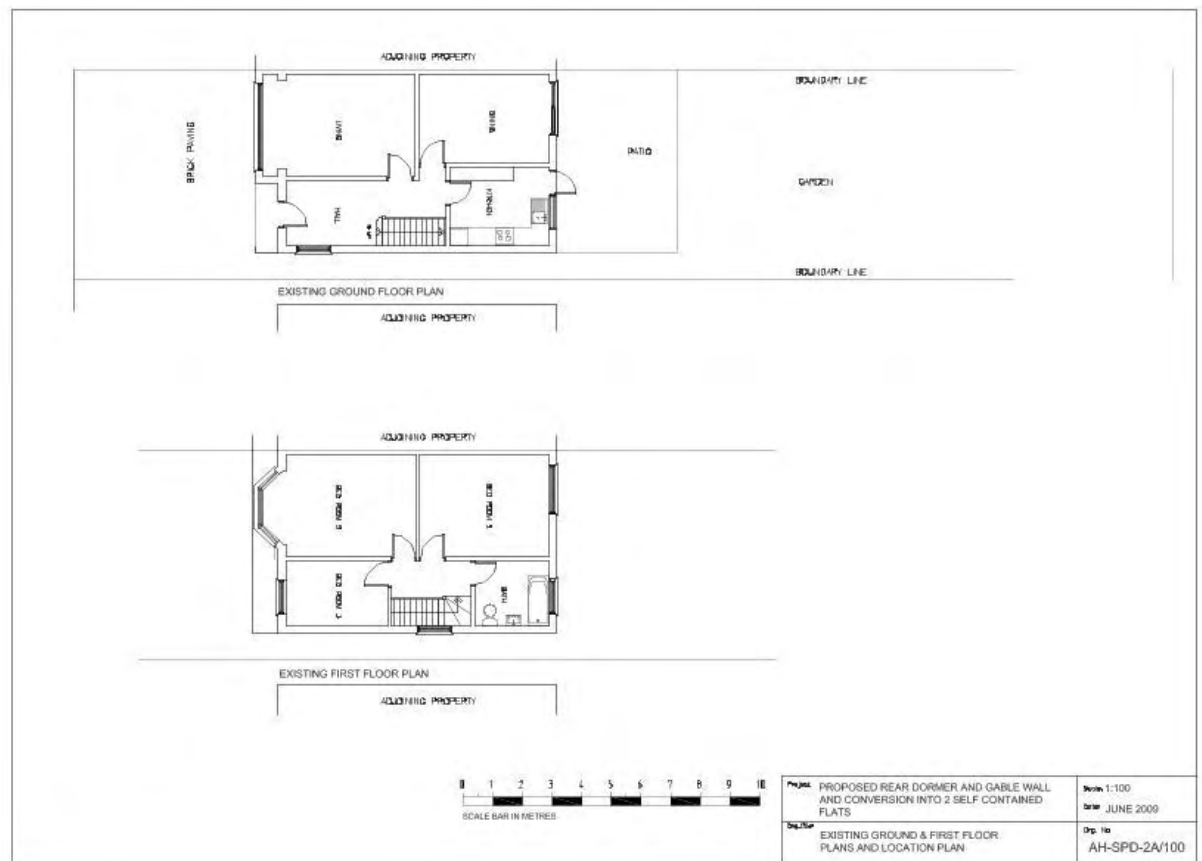
Summary

- 1.48** The property is an existing inter-war semi-detached house with no existing extensions and a narrow gap at the side. It has a traditional front forecourt and a service road runs across the back of this and neighbouring houses. The proposal is for a conversion to two flats. To facilitate the conversion a single storey rear extension and a loft conversion comprising an end-gable and rear dormer roof extension are also proposed; these comply with the Council's design guidance for householder extensions.

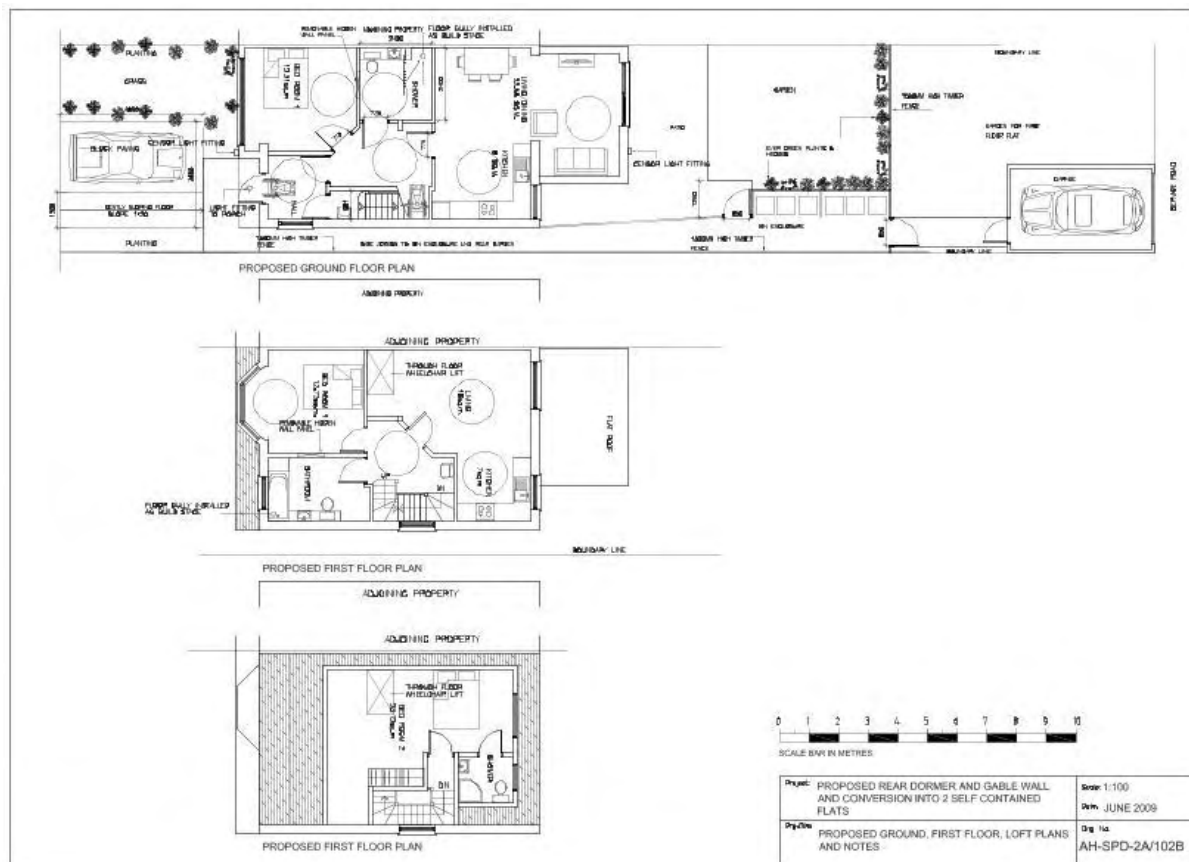
Picture 1.2 Example 1: Existing and Proposed Elevations



Picture 1.3 Example 1: Existing Floorplans



Picture 1.4 Example 1: Proposed Floorplans and Site Layout



Forecourt

- 1.49** The proposed forecourt layout would provide one standard parking space of 2.4m x 4.8m but located adjacent to a 1.2m wide path, so that overall the parking space would be expandable to a width of 3.6m. The parking space and path would have an acceptable gradient of 1 in 20, and the path would lead to a 1.9m x 2.3m landing, exceeding the minimum requirement for an entrance landing and sufficient to ensure 1.2m clear of the swing of the proposed communal front door. The landing would wrap around the side of the house and a shallow gradient would provide access to the rear gardens.
- 1.50** The remaining space on the forecourt would be made available for a scheme of low maintenance landscaping.
- 1.51** The forecourt parking space would be allocated to the ground floor Wheelchair Home. In this case there is a rear service road which provides the opportunity for a standard parking space to be provided. The space would be accessed through the garden and *via* the side of the house giving an overall distance of 25m to the front door, which is acceptable.

Main Entrance

- 1.52** The proposal utilises the existing canopy to provide a covered main entrance. Although the canopy's size does not meet the minimum dimensions required to satisfy Wheelchair Home Standard WHDG 3.2.7 it is acceptable, recognising that a canopy projecting beyond the bay window would give rise to design objections.
- 1.53** A sensor controlled light is proposed to be fitted to the underside of the canopy.
- 1.54** The proposed communal main entrance would have a clear opening width of 800mm and a space in excess of 300mm to the side of the leading edge on the pull side, which extends back over the landing by more than 1800mm from the face of the door. The landing would provide a level access over the entrance threshold and a weathertight detail is shown.

Communal Lobby

- 1.55** In this example the original stairs are located well back in the hallway of the original house enabling an 1800mm lobby to be formed. The usability of the lobby would be maximised because the outer communal door would swing open outwards and would leave sufficient area for a 1800mm x 1500mm turning space. Both flat's doors would have an 800mm clear opening width and would swing open into the lobby. There would be (in excess of) 300mm to the side of the leading edge of the doors extending back by 1800mm from the face of the door and, to the ground floor Wheelchair Home, 200mm on the push side.

Ground Floor Flat (Wheelchair Home)

- 1.56** The space to the side of the leading edge of the flat's front door would extend over 1800mm back from the face of the door and the proposed layout enables sufficient turning space (1800mm x 1500mm) and transfer space (1100mm x 1700mm) to be provided within the flat's hallway. An area under the stairs would be available for storing a wheelchair.
- 1.57** The internal doorways would provide a clear opening width of 775mm with adequate space adjacent to the leading edge on the push and pull sides. The layout of the hallway and the rooms, with adequate wheelchair turning space, means that all doors can be approached head-on.
- 1.58** The bathroom is shown to be installed with a level-access shower facility and an accessible arrangement of other bathroom furniture. Sufficient space for future installation of a bath would be provided. The layout places the bathroom adjacent to the flat's only bedroom and the drawing clearly marks the provision of a knock-out floor to ceiling wall panel between the two rooms. Details of the wall and ceiling strengthening, to enable future adaptations, would be set out in the Design and Access Statement for the proposal.
- 1.59** A spacious, habitable room would be located at the rear of the flat and would provide a kitchen, a defined dining area and living room. There would be sufficient turning space in the living and dining areas and clear manoeuvring space in excess of 1800mm x 1500mm would be provided in the kitchen.

- 1.60** The proposed bedroom would have dimensions 3.6m x 3.4m. Whilst this would not permit wheelchair access to both sides of a double bed there is sufficient space for a 1500mm turning circle.
- 1.61** The existing window would be retained to the front (serving the flat's bedroom) but the rear extension provides the opportunity for patio doors which would allow a wheelchair user clear views out from the living room to the garden. The sliding patio door would give a clear opening width of 800mm and there would be accessible space on the latch side to enable a wheelchair user to operate the door.
- 1.62** The height and details of switches, controls etc would be set out in the Design and Access Statement.

First Floor Duplex Flat (Lifetime Home)

- 1.63** The flat would be reached by the existing stairs, which are not 'easy going', so the flat cannot be categorised as a 'Lifetime Home'. However the stair width and layout would support the future installation of a stair lift so that the living room, bathroom and a bedroom are all provided at effective entrance level.
- 1.64** The bathroom is shown to be fitted with floor-gulley drainage to allow future installation of a wetroom shower facility and construction details indicate that the new stud walls would be strengthened to allow support for handrail fixings if required.
- 1.65** The flat's internal doors all have a clear opening width of 750mm, which is acceptable as the hall area exceeds 900mm width and all can be approached head-on; all doors also have 300mm to the side of the leading edge on the pull side.
- 1.66** There is sufficient space to turn a wheelchair within the kitchen-living room. The floor area of the first floor is more constrained than that of the ground floor, but there nevertheless remains sufficient circulation for wheelchair users in the hall, bedroom and bathroom.
- 1.67** The flat's main (effective entrance level) bedroom is located next to the bathroom and, as with the ground floor, the drawings indicate a hidden, removable wall panel through to the bathroom which would allow the formation of an *en-suite* facility and a direct route for hoist if required. The first floor bathroom largely uses the original house walls, but the stud wall adjacent to the w.c. would be strengthened to give support for handrail fixings if required. The arrangement of the bathroom furniture ensures that (in excess of) 700mm is provided to one side of the w.c. & 1100mm in front of it, and that there is 1100mm in front of the wash basin/to the side of the bath.
- 1.68** As well as provision for a stair lift from ground to first floor level, making this the effective entrance level, provision is also made for a 'through the floor' lift to the loft-level bedroom. The lift, if installed, would provide a user direct access from the living area up to the central part of the roofspace - i.e. where there is sufficient headroom underneath the main roof ridge. The through the floor lift hatch complies with the recommended dimensions of 1m x 1.5m.

Accessible Homes SPD (2010)

- 1.69** As a conversion of an existing semi-detached property and in the interests of neighbouring occupiers' privacy it is not possible to achieve living room window glazing at 800mm above floor level. However it is noted in this case that the existing window glazing begins just 1m above floor area.
- 1.70** Details of sockets, switches and other controls' height above floor level would be confirmed in the Design & Access Statement.

Gardens

- 1.71** The ground floor Wheelchair Home would have level access over the threshold onto a 2.6m deep patio area which wraps around the side of the proposed single storey rear extension. A 1.2m wide path would lead to the garden gate, with a clear opening width of 800mm. The bin enclosure would be located adjacent to the garden gate for ease of access by a wheelchair user.

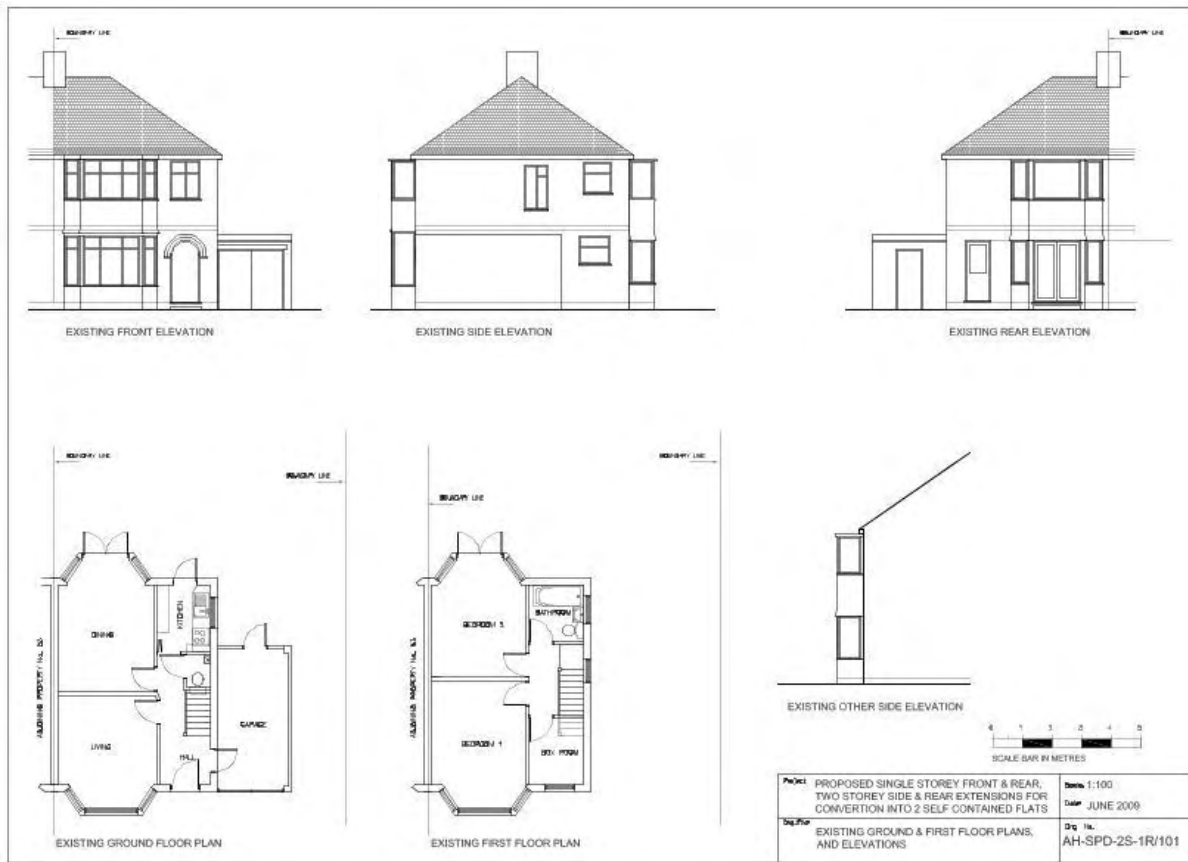
Example 2: Single and Two Storey Side and Rear Extensions, Conversion of Extended House to Two Flats**Summary**

- 1.72** The second example is a two storey, inter-war semi-detached house on a corner plot with space at the side as well as the rear for extension. The proposal is again for a conversion to two flats, but this time involving single and two storey side to rear extensions - all in accordance with the Council's design guidance for householder extensions.

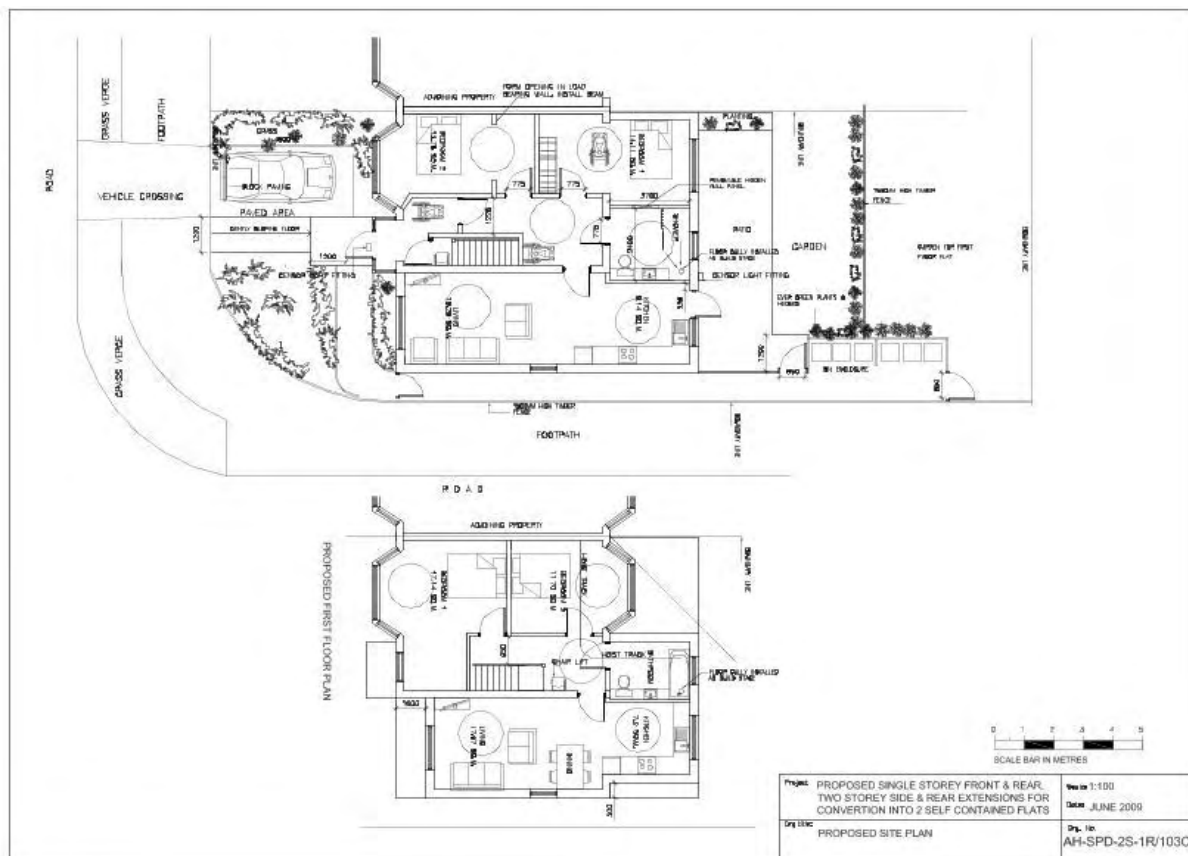
Forecourt

- 1.73** As with example 1, the proposal would accommodate one standard car parking space on the forecourt but located adjacent to a 1.2m wide path in order to provide sufficient transfer width for a wheelchair driver or passenger. It would be allocated to the ground floor Wheelchair Home. The path and space would have a gradient of 1 in 35 which can be regarded as nominally level and therefore acceptable. A 1.6m wide landing would extend 1200mm clear of the proposed communal front door's outward swing.
- 1.74** From the landing a path would wrap around the side to access the rear gardens. The path would have a shallow, nominally level gradient.
- 1.75** The remaining space on the forecourt would be made available for a scheme of low maintenance landscaping.

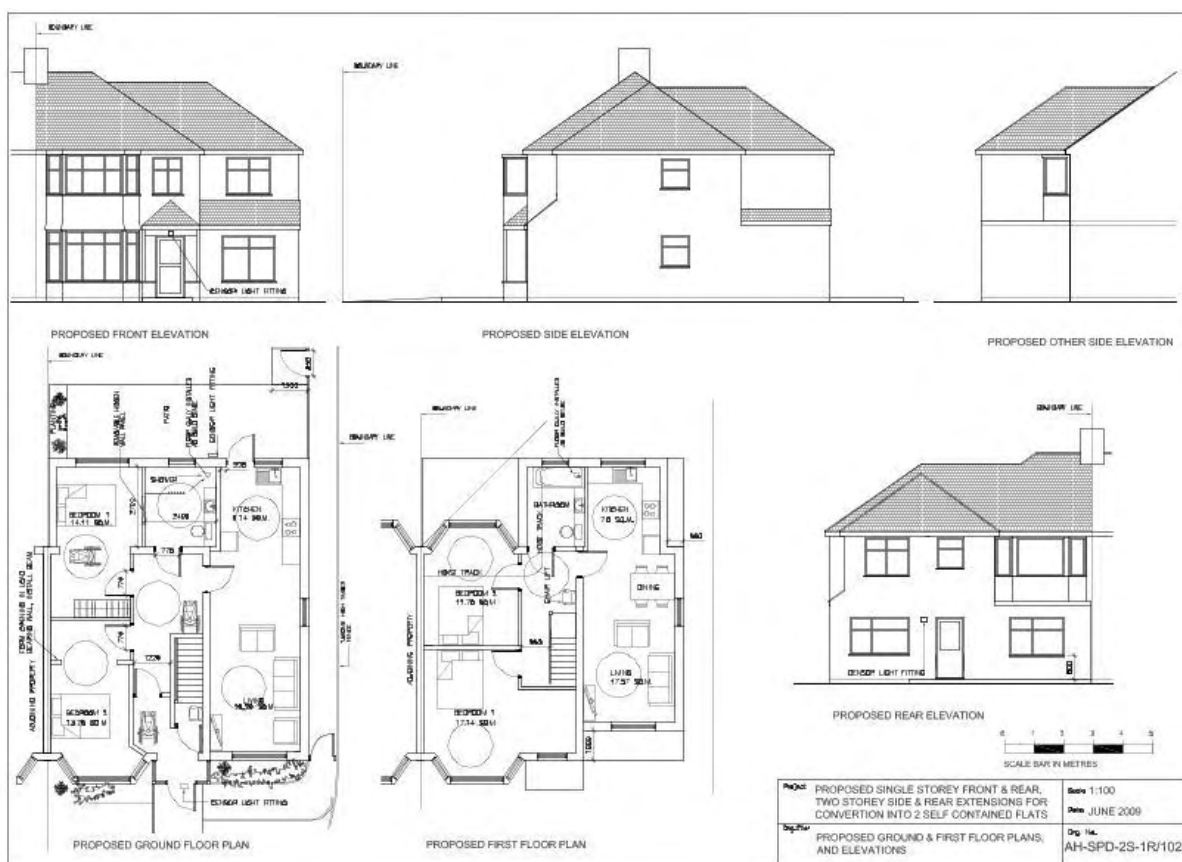
Picture 1.5 Example 2: Existing Floorplans and Elevations



Picture 1.6 Example 2: Proposed Floorplans and Site Layout



Picture 1.7 Example 2: Proposed Elevations and Floorplans



Main Entrance

- 1.76** To provide adequate lobby space a porch would be added to the front of the property, to line up with but remain detached from the original front bay window. A further canopy projecting beyond the porch would not be appropriate in design terms but a censor controlled light fitting would be provided over the front door.
- 1.77** As with example 1, the proposed communal main entrance would have a clear opening width of 800mm and a space in excess of 300mm to the side of the leading edge on the pull side, which extends back over the landing by more than 1800mm from the face of the door. The landing would provide a level access over the entrance threshold and a weathertight detail is shown.

Communal Lobby

- 1.78** The addition of the proposed porch and the outward swing of the front door would enable a 1700mm x 1700mm inner lobby to be formed. Although this does not exactly match the ideal 1800mm x 1500mm area recommended for a lobby and would not be without obstruction, it is large enough to enable a wheelchair user to enter from outside and to approach & operate the main front door from within. A 900mm pinch point, approached at an angle from the main turning space, would lead to a 1.226m wide space in front of the ground floor flat's inner door. This space allows an 1800mm approach to front door and sufficient width for an 800mm clear opening to the door and 300mm on the side of the leading edge. The door would swing open into the flat so as not to obstruct the limited approach space.

- 1.79** The first floor flat would have an outward opening inner door, also with a clear opening width of 800mm and with 300mm to the side of the leading edge on the pull side.

Ground Floor Flat (Wheelchair Home)

- 1.80** As noted above there would be 300mm to the side of the leading edge of the flat's inner front door and this would extend back in excess of 1800mm behind the door. A 1226mm wide corridor would lead to a hallway which is large enough to provide the required turning space (1800mm x 1500mm) and transfer space (1100mm x 1700mm) to be provided within the flat's hallway. Again there is storage space underneath the stairs to accommodate the indoor/outdoor wheelchair when not in use.
- 1.81** The internal doorways would provide a clear opening width of 775mm with adequate space adjacent to the leading edge on the push and pull sides. Other than bedroom 2, which would be accessed via the 1226mm wide corridor and therefore exceeds the required corridor/door width ratio, all of the doors could be approached head-on.
- 1.82** The bathroom is shown to be installed with a level-access shower facility and an accessible arrangement of other bathroom furniture. Sufficient space for future installation of a bath would be provided. The layout places the bathroom adjacent to the flat's main bedroom and the drawing clearly marks the provision of a knock-out floor to ceiling wall panel between the two rooms. Details of the wall and ceiling strengthening, to enable future adaptations, would be set out in the Design and Access Statement for the proposal.
- 1.83** As a two double bedroom flat, capable of occupation by four persons, the Wheelchair Home Standard WHDG 11.2.3 would require the provision of a second w.c., fully accessible and with handed transfer space to that of the main w.c. However it is clear that such provision cannot be made, satisfactorily, within the constraints of the proposed conversion and the requirement can therefore be waived in this case.
- 1.84** A single, habitable room would be located in the side extension and would provide a kitchen, a living room and space for dining. There would be sufficient turning space in the living room and manoeuvring space in excess of 1800mm x 1500mm would be provided in the kitchen.
- 1.85** The proposed main bedroom would have dimensions 3.3m x 5.9m. Whilst the configuration of the room would not permit wheelchair access to both sides of a double bed there is sufficient space for a 1500mm turning circle. Similarly there is sufficient space for a 1500mm turning circle in the second bedroom.
- 1.86** The existing window would be retained to the front (serving the flat's second bedroom) but the rear extension provides the opportunity for a standard-compliant window to the main bedroom, which would allow a wheelchair user clear views out to the garden. The kitchen door would give a clear opening width of 800mm out into the garden.
- 1.87** The height and details of switches, controls etc would be set out in the Design and Access Statement.

First Floor Flat (Lifetime Home)

- 1.88** As per example 1, the existing stairs to the first floor are not 'easy going'. However there is sufficient stair width and lobby/landing space to provide a stairlift and therefore the first floor can be treated as effective entrance level.
- 1.89** The door to bedroom 1 would be located at right angles to a 950mm wide corridor and so would be 900mm wide, with a 200mm space to the side of the leading edge on the push side. All other internal doorways would have a clear opening width of 750mm and can be approached by a 'head on' *via* the wider landing space at the top of the stairs.
- 1.90** There is sufficient space to turn a wheelchair in the living/dining space and the kitchen area. Adequate circulation space exists throughout the rest of the flat.
- 1.91** All accommodation is at first floor level, to be regarded as effective entrance level. LHS 9 does not apply and there is no need for a through-the-floor lift referred to in LHS 12.
- 1.92** A route for a potential hoist is shown on the drawings, between the bathroom and bedroom 2. Although bedroom 2 is not the largest bedroom it is a 'double' size room and therefore may be regarded as a main bedroom which would be suitable for future adaption. Although smaller than desirable the bathroom manages to achieve an arrangement of furniture that meets accessibility requirements - i.e. 700mm to one side of the w.c., 1100mm to the front of the w.c. and basin and to the side of the bath. The bathroom is fitted with floor gulley drainage to allow future conversion to a wet-room shower facility if needed. The stud walls around the bathroom would be strengthened to allow the installation of adaptations such as handrails.
- 1.93** The living room is provided in the side extension but for reasons of design coherence with the existing property it is not feasible to achieve living room window glazing at 800mm above floor level.
- 1.94** Details of sockets, switches and other controls' height above floor level would be confirmed in the Design & Access Statement.

Gardens

- 1.95** The ground floor Wheelchair Home would have level access over the threshold onto a 2.4m deep patio area. A 1.2m wide path would lead to the garden gate, with a clear opening width of 800mm and, as with example 1, the bin enclosure would be located adjacent to the garden gate for ease of access by a wheelchair user.