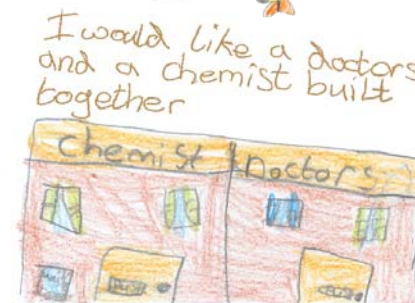




Cover pictures by kind permission of the pupils of
Shortstown Lower School



we would like easy journeys
for old people and young people
so they don't get hurt or
something like that.



Retirement Centres
are for old people to go there
part time



we would like a new school

creating new residential environments

LAND AT SHORTSTOWN DEVELOPMENT BRIEF

- around 1100 new homes
- re-sited lower school
- employment areas
- new community facilities
- re-routed A600
- open space



BEDFORD BOROUGH COUNCIL



BEDFORD BOROUGH COUNCIL

Land at Shortstown Development Brief

This development brief has been revised in the light of the comments received during the consultation exercise held in September and October 2002. The brief was adopted as supplementary planning guidance by the Borough Council on 29th January 2003.

If you would like a copy of the text of this document in larger print,
please contact Planning Services at the address below.

This document has been prepared by the Policy Team within the Planning Services Group
with the assistance of colleagues in other sections of the Borough Council.

The brief may be viewed on the Council's website: www.bedford.gov.uk/planning
Copies of this Brief may be obtained at a price of £4.50 or £5.00 by post from
Planning Administration at the address below.



David K Bailey, BSc DipTP MRTPI, Head of Planning Services

Town Hall, St Paul's Square, Bedford MK40 1SJ

Telephone: (01234) 267422 Facsimile: (01234) 221606

E-mail: planning@bedford.gov.uk

If you find it difficult to understand what this document says and would like further information, then please come into the Town Hall with this document or contact us for an appointment. We will arrange for an interpretation of this information.

ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਚਿੱਠੀ ਜਾਂ ਲੀਫਲੈੱਟ ਸਮਝ ਨਹੀਂ ਆਉਂਦਾ ਅਤੇ ਇਸ ਬਾਰੇ ਤੁਹਾਨੂੰ ਹੋਰ ਜਾਣਕਾਰੀ ਦੀ ਲੋੜ ਹੈ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਇਨ੍ਹਾਂ ਨੂੰ ਨਾਲ ਲੈ ਕੇ ਟਾਊਨ ਹਾਲ ਆਉ ਜਾਂ ਸਾਡੇ ਨਾਲ ਸੰਪਰਕ ਰਾਹੀਂ ਸਾਨੂੰ ਮਿਲਣ ਦਾ ਸਮਾਂ ਤੈ ਕਰੋ। ਅਸੀਂ ਤੁਹਾਨੂੰ ਮਿਲਣ ਸਮੇਂ ਇਕ ਤਰਜਮਾਕਾਰ ਦਾ ਪ੍ਰਬੰਧ ਕਰਾਂਗੇ।

اگر آپ کو اس خط یا لیفلٹ کے سمجھنے میں مشکل پیش آئے یا آپ مزید معلومات حاصل کرنا چاہیں تو براہ مہربانی اس خط یا لیفلٹ کے ساتھ ٹاؤن ہال میں تشریف لائیں یا ایپائنٹمنٹ حاصل کریں ہم ان معلومات کی وضاحت کیلئے مترجم کی خدمات حاصل کریں گے۔

এই চিঠি/প্রচারপত্র বুঝতে যদি অসুবিধা হয় এবং বিশেষ তথ্য জ্ঞানতে চান, তাহলে সেটা সঙ্গে নিয়ে টাউন হলে আসবেন অথবা একটি আপায়ন্টমেন্টে করার জন্য আমাদের সাথে যোগাযোগ করবেন। তখন আমরা একজন ইন্টারপ্রেটারের ব্যবস্থা করব। তিনি আপনার কাছে এই চিঠি/প্রচারপত্রের বিষয়বস্তু ব্যাখ্যা করবেন।

" જો તમને આ પત્ર કે પત્રિકા સમજવામાં તકલીફ પડતી હોય અને તમે વિશેષ માહિતી મેળવવા માગતા હોય તો મહેરબાની કરીને ટાઉન હોલમાં આ પત્ર કે પત્રિકા લઈને આવશો અથવા એક એપોઇન્ટમેન્ટ માટે અમારો સંપર્ક સાધશો. આ માહિતીના ભાષાંતર (ઇન્ટરપ્રીટેશન) માટે અમે વ્યવસ્થા કરશું."

यदि आपको यह पत्र या पत्रिका को समझने में कठिनाई हो रही है, और आप इसके बारे में अधिक जानकारी प्राप्त करना चाहते हैं, तो कृपया इस पत्र-पत्रिका को लेकर टाऊन हॉल में आएं या अपॉयंटमेंट बनाने के लिए हमसे सम्पर्क करें। हम आपके लिए इसमें दी गई जानकारी का अनुवाद करने का प्रबन्ध करेंगे।

Se vi è difficile capire questa lettera o volantino e volete altre informazioni, siete pregati di venire in municipio con questa lettera/volantino o di contattarci per prendere un appuntamento. Cerchiamo il modo di interpretare per voi questa informazione.

Contents

1 Purpose of the Development Brief	page 1	7 The Master Plan	page 21
Introduction	1	A mixed and balanced community	21
The need for development at Shortstown	1	Communications	24
The status of the brief	1	Parking	27
The structure of the brief	2	Telecommunications	28
2 Policy Context	page 3	Energy	28
Bedfordshire Structure Plan 2011	3	Waste management	28
Bedford Borough Local Plan: Deposit Draft	3	Surface water	28
Modification 261	3	Contamination	29
Additional Design Guidance	4	Ecology	29
Single Regeneration Budget Area	4	Archaeology	30
3 Site Appraisal	page 5	Existing Shortstown Estate	30
The extent of the area covered by the brief	5	Analysis of environmental quality	30
Historical context	5	Summary of issues	31
4 Development Influences	page 7	Programme of improvements	31
Shortstown Estate	7	8 Implementation	page 33
Highway network	7	Key objectives	33
Health impact assessment	7	Outline planning application	33
Lower School	7	Planning obligations and conditions	33
Other community infrastructure	7	Phasing	34
Health	8	Appendix 1	page 37
Flood plain	8	Bedford Borough Local Plan - Relevant Policies	
Cycleways/footpaths	8	Appendix 2 Urban Design Objectives	page 39
Landscape/topography	9	Village centre	39
Archaeology	9	Employment area	40
Fire safety	9	Residential districts	40
Community safety	10	Appendix 3	page 43
Bus services	10	Glossary	
Ecology	10	Figures A - H	
Utilities	10	Maps	
Drainage	11	1 Bedford Borough Local Plan	
Contamination	11	Proposed Modification (extract)	
5 Key Principles	page 13	2 Development Brief Area and Context	
Principle 1	13	3 Ownership and Planning History	
Principle 2	13	4 Existing and Potential Rights of Way	
Principle 3	13	5 Illustrative Master Plan	
Principle 4	13	6 Housing Density	
Principle 5	14	7 Proposals for Shortstown Estate	
6 Urban Design and Local Distinctiveness	page 15	8 Phasing	
Introduction to urban design	15		
Local distinctiveness	15		
Formal and urban character (Shortstown)	16		
Semi rural character	16		
Key urban design principles	17		
Urban design framework	18		
Urban design requirements	20		

1 Purpose of the Development Brief

Introduction

1.1 On 11th November 1996 Bedford Borough Council adopted supplementary planning guidance in the form of a development brief for land at Shortstown. Since that date, circumstances have changed: additional development land has become available; the concept and detail of the proposals have been debated at the Local Plan Inquiry; and the Inspector recommended that land east of the A600 should be allocated for development. The Council has accepted this recommendation and as a result has prepared this revised development brief. It seeks to review and expand upon previously adopted development principles to take account of current circumstances.

1.2 In short, the Council wants to promote the creation of a fully integrated extension to the existing community that is based on sustainable development principles and that will achieve:

- Distinctive high quality development that respects the historical context of Shortstown, achieves social and visual integration and a safe residential environment.
- A mixed and balanced community with appropriate community infrastructure.
- Definition of a high quality village centre.
- Priority for pedestrians, cyclists and public transport.
- Greening of the residential environment.
- Energy efficient development.

The Need for Development at Shortstown

1.3 There are close to 700 dwellings at Shortstown at the present time. In years gone by, the employment uses east of the A600 were an integral part of the local community. Not only did they offer work to Shortstown residents but they also offered meeting places and other facilities that have now been lost. The availability

of land east of the A600 offers a unique opportunity to achieve new development in a manner that respects, complements and enhances the remaining limited range of community uses.

1.4 Following the deposit draft stage of the local plan review process, Policies H9 and E6 relating to Shortstown were deleted because of concerns about the complexity of the sites and the effect this would have on achieving development within the plan period (to 2006). After hearing lengthy debate about housing land supply in general as well as the site-specific issues at Shortstown, the Local Plan Inspector recommended that the development sites east of the A600 be re-introduced into the local plan. The Council has agreed with this recommendation.

1.5 In Borough-wide terms, the development of land at Shortstown is considered to fulfil many of the criteria associated with sustainability. It:

- involves the development of brownfield land,
- provides the opportunity to create a balanced and sustainable community, less reliant on Bedford for essential needs,
- is close to the urban area of Bedford with existing and potential footpath and cycle links to the eastern areas of the town,
- is close to the Bedford Southern Bypass and therefore enjoys convenient access to the local, regional and national road network.

1.6 The proposed modifications to the Local Plan identify Shortstown as a 'selected settlement' that is, 'selected' as a focus for development before seeking development opportunities in the rural area.

The Status of the Brief

1.7 This Brief is adopted as supplementary planning guidance and prospective developers will need to demonstrate how their proposals comply with the established principles.

The structure of the brief

1.8 The remainder of the brief contains the following sections:

Section 2	Policy Context
Section 3	Site Appraisal
Section 4	Development Influences
Section 5	Key Principles
Section 6	Urban Design and Local Distinctiveness
Section 7	The Master Plan
Section 8	Implementation

Appendices and Maps

Appendix 1	Relevant Local Plan Policies
Appendix 2	Urban Design Objectives
Appendix 3	Glossary
Map 1	Bedford Borough Local Plan Proposed Modification (Extract)
Map 2	Development Brief Area and Context
Map 3	Ownership and Planning History
Map 4	Existing and Potential Rights of Way
Map 5	Illustrative Master Plan
Map 6	Housing Density
Map 7	Proposals for Shortstown Estate
Map 8	Phasing

2 Policy Context

Bedfordshire Structure Plan 2011

2.1 Adopted in March 1997, the Bedfordshire Structure Plan 2011 sets the context for the Bedford Borough Local Plan.

2.2 Policy 32 of the County Structure Plan states that provision will be made for about 16,200 net additional dwellings in Bedford Borough in the period 1991-2011 of which 11,700 are required by 2006.

2.3 Policy 33 states that new housing provision will be focused on locations in and adjoining major urban areas and in Strategic Corridors. Of the new housing provision required 8,900 dwellings are directed to locations in and adjoining the urban area of Bedford. In this respect, Shortstown is considered to adjoin the urban area by virtue of its close proximity. A development in the region of 1100 dwellings (260 within the plan period to 2006) will make a significant contribution to the strategic housing requirement.

Bedford Borough Local Plan: Deposit Draft

2.4 The Bedford Borough Local Plan (Deposit Draft) was published in February 1997 with proposed changes published in September 1998, August 1999 and January 2000. The Local Plan Inquiry commenced in February 1999, concluded in January 2000 and the Inspector's Report was published in May 2001. The Local Plan Inspector recommended that notional land at Shortstown should be re-introduced into the plan in order to partially address a shortfall in yield to the end of the plan period. In response to the Inspector's recommendation, the Council proposed the following modification to the plan.

2.5 Modification 261

Para 5.29 Shortstown is treated as adjoining the urban area by virtue of its close proximity. The Proposals Map (Inset 13b) shows the boundary of the area that will be the subject of a revised development brief. The purpose of the brief will be to guide development of land in a manner which integrates proposed new housing, commercial and associated uses with the existing residential estate. In

addition, the development brief will consider the operational requirements of those businesses already present in the locality including the Driving Standards Agency and users of the airship sheds.

Policy H9

The development of designated sites at Shortstown shall be undertaken in accordance with an agreed development brief. Each site will be expected to contribute towards necessary highway improvements and transport links, community and educational facilities, affordable housing, playing fields and sports pavilion and environmental improvements in Shortstown in a manner which secures full integration between existing and new residents. The sites identified are land east of the A600 including former MOD land at RAF Cardington and land west of Scott Avenue, Shortstown.

East of the A600, key principles for development include:

- i) a comprehensive and integrated development form including housing, commercial and community areas*
- ii) structural landscaping of the eastern boundary to the site and to strengthen the tree lined avenue*
- iii) any off-site highway improvements as required by the Highway Authority.*

West of the A600, key principles of development include:

- iv) the provision of a village hall/sports pavilion and playing field*
- v) any off site highway improvements as required by the highway authority (including a new roundabout on Greycote to serve the residential development west of Scott Avenue, the village hall/sports pavilion and playing field to the south, and traffic calming.)*
- vi) landscaping/woodland to the south of the playing field and to the west of the proposed residential area to soften the impact of the new development in the wider landscape*
- vii) provision of a pocket park*
- viii) environmental improvements in Shortstown.*

2.6 Modification 261 proposed amendments to the Proposals Map Inset 13b for Shortstown and this is appended to this brief as Map 1. The Council adopted the Local Plan on 20th October 2002 incorporating Modification 261.

2.7 The role of this brief is to demonstrate how the available land will be developed. The brief sets out in more detail what facilities and infrastructure will be required as part of the development and addresses issues relating to the phasing and timing. In addition to Policy H9 there are a number of other Deposit Plan policies which will need to be addressed in planning applications for the site. These are set out in Appendix 1.

Additional Design Guidance

2.8 The Council has published planning guidance on a variety of subjects directly relevant to this site including:

- Achieving Quality in Residential Layouts
- Parking Standards
- Traffic Calming – Streets for People
- Landscape Design Guide
- Water Conservation and Waste Management
- Mobility Housing

2.9 Developers will also be expected to take account of other guidance including:

- Cycleway Design and Maintenance Guide (Bedfordshire County Council June 96)
- Schools Travel Strategies and Plans, (DETR Guide)
- Places, Streets and Movement (DETR companion guide to Design Bulletin 32)
- By Design (DETR)
- The Urban Design Compendium (English Partnerships and the Housing Corporation)
- Better Places to Live (DTLR companion guide to PPG3)

Single Regeneration Budget Area

2.10 Shortstown, along with the Queen's Park and Cauldwell and Kingsbrook areas of Bedford, has been successful in attracting the support from the Government's regeneration programme (SRB). The vision of the SRB bid is to

'restore economic and social prosperity to one of the East of England's most deprived urban areas; to empower local residents to take an active role in the regeneration of their community; and to secure a safe and pleasant environment in which to live and work.'

2.11 The resulting programme comprises 20 main projects with two strategic aims which are to

- develop pathways and erode barriers to local participation in health, education, training and employment,
- build community skills and confidence in order to encourage sustainable local ownership and responsibility.

2.12 Several of the projects directly relate to Shortstown, for example the 'Millennium Youth Project' aimed at providing support for 11-25 year olds who are at risk of social exclusion and 'Shortstown Facilities for Youth' which has recently delivered a fully fenced hard surfaced area for all year round use with basketball hoops and five-a-side goals. Low level flood-lighting and other facilities are also proposed.

2.13 As part of the SRB initiative a 'mini sure-start' project has also been launched that will secure a community base aimed at giving support to parents of pre-school age children.

2.14 Shortstown was included in the SRB area in recognition of the levels of disadvantage centred on social housing areas within the estate.

3 Site Appraisal

The extent of the area covered by the Brief

3.1 The development brief area takes account of the existing Shortstown estate, land with planning permission west of the A600 and rear of the airship sheds as well as land east of the road. This is in accordance with the Local Plan Inspector's view that a comprehensive approach to the development of this area is appropriate (see Inspector's Report pages 87-90).

3.2 Map 2 shows the development brief area and the wider context – the proximity of Bedford and the southern bypass, Cardington village, the airfield in front of and adjacent to the listed sheds as well as a site with planning permission for an airship museum.

3.3 Map 3 shows more site specific detail such as land ownership (as far as is understood), existing uses and some historical detail (including relevant planning decisions).

Historical context

3.4 Shortstown, the former Ministry of Defence (MOD) site and the airship sheds have a history dating back to the beginning of the twentieth century. It is this history that has influenced today's pattern of land-uses and that, to some extent, accounts for the form and make-up of present day Shortstown.

3.5 Very briefly, the Shorts brothers established the Airship Works in 1917. Accommodation for the brothers' workforce was built adjacent to the workplace and hence the Shortstown estate was born. The imposing sheds were built in 1918 and 1926 to house

the R100 and R101 airships and the airship passengers were accommodated in a hotel (the 'Shorts building') on the A600 frontage.

3.6 The MOD acquired the site from the Shorts brothers in the 1920s and consequently the workers' housing became accommodation for RAF personnel. Many thousands of servicemen have passed through the establishment since that time as a result of RAF Cardington's role as a holding station for new recruits. This function ceased in the 1950s when the site became an RAF Maintenance Unit. Today that function has also ceased and the land sold on for redevelopment.

3.7 The Shortstown estate however remains and since the early days, many new houses have been built to supplement the stock of original 'Shorts' houses. Unfortunately, this growth has not been matched by the provision of associated community facilities one would normally expect to find in such a residential area. For a long time the needs of the community were provided for within the perimeter of the RAF establishment, but now the RAF has moved on, those facilities are lost.

3.8 The 1996 development brief identified some land west of the A600 for development. The decision was taken to permit that land to come forward before land to the east of the road, provided it conformed with the requirements in the brief to contribute towards the provision of the roundabout on the A600 and much needed community facilities. Building on the former Residential Training and Conference Centre (RTCC) site is now complete and work has recently commenced on the second site west of Scott Avenue (known as site 5). As a result, the southern roundabout is in place and playing fields with a sports pavilion are in the pipeline.

4 Development Influences

4.1 Notwithstanding the policy requirements, the development will need to take into account a number of site specific potentials and constraints.

Shortstown Estate

4.2 For the most part the existing housing in Shortstown is of medium to high density and a range of house types and tenures is available. Apart from the original Shorts houses close to the A600 frontage and the newer houses on the former RTCC site, the residential area is formally arranged in a grid-iron pattern. Whilst the estate has an 'open' feel, the amount of amenity space is limited and is made up of mainly grassed verge areas. The lack of off-street parking facilities results in vehicles being parked in a haphazard fashion on the grass verges as well as the roadside. In practical terms this prevents the narrow roads from becoming clogged up with parked cars but results in a visually unacceptable residential environment. Landscaping is generally poor in the older areas and there is considerable potential for environmental improvement.

4.3 The percentage of affordable housing at Shortstown is high compared to other settlements in the Borough of a similar size though the development of 'site 5' (which delivered wide ranging community infrastructure but not affordable housing) will reduce the percentage considerably (from 40% to 29%). However, the Borough as a whole continues to have an identified housing need towards which development is required to contribute.

Highway network

4.4 The A600 Bedford to Hitchin road runs along the eastern edge of the Shortstown estate. The Council is concerned about the impact that additional development in the vicinity will have on the ability of the existing road to cope. Community infrastructure will be essential if further land is to be developed at Shortstown and that infrastructure must be available to existing as well as new residents in order to create an integrated and cohesive settlement. Clearly, safe and convenient movement between existing and new development is essential to achieve this and the Council sees the road as a potential barrier. A highway solution

that promotes integration will be required. That solution should take a comprehensive view of the surrounding highway network and consider the best arrangement to suit existing and proposed land uses and achieve economical use of land.

Health Impact Assessment

4.5 A Health Impact Assessment (HIA) was undertaken for the Healthier Bedford Partnership Board in 2000. It assessed three road route options for Shortstown, the existing alignment, a relief road option and a less extensive diversion, and the impact that they would be likely to have on health. It concludes that of the three, a relief road option as per the 1996 development brief would have least impact on health.

Lower School

4.6 The lower school is currently located on the western edge of Shortstown. The site is not large enough to allow for expansion of the school to cater for both the additional 251 dwellings being built west of Scott Avenue and in the order of 1100 - 1200 dwellings east of the A600 and neither is it in the best location in terms of its accessibility on foot (or by car) to serve the larger settlement. The development offers the opportunity to look at alternative ways of providing education for lower school age children and, if appropriate, alternative uses for the current site.

Other community infrastructure

4.7 There is currently very little in the way of community infrastructure to serve the existing residents of Shortstown. As well as the lower school which incorporates pre-school facilities, there are:

- a shop/post office that is well used. Although this has been extended in recent years, there is considered to be sufficient demand for additional retail floorspace to serve the needs of existing as well as proposed new residents.
- play facilities. These are found rear of Stirling Road and also in the new development on the former RTCC site. The National Playing Fields

Association (NPFA) and Local Plan standards for children's play are not met and as a result grass verges are routinely used for informal play. This is far from ideal owing to the proximity of fast moving traffic on the adjacent roads. Land for sports pitches is now available south of the estate though this is still slightly below the minimum amount required for the existing number of residents. A surfaced kickabout area and skateboard park has recently been completed.

- Royal Airship Works (RAW) club. This is a much valued local amenity. It doubles up as a meeting place during the day and in the evenings but is privately run ultimately with limited access to local groups and activities.

4.8 To the east of the A600 can be found:

- Former RAF Cardington land now sold on for redevelopment. Amounts to approx 26.84ha gross.
- Land adjacent to the disused railway line, identified for employment use in the 1996 adopted development brief. Amounts to approx 12.5ha gross
- Land to the rear of the airship sheds. Has planning permission for B1, B2, B8 use and development has legally commenced. Amounts to 11.76ha gross
- Driving Standards Agency (DSA). This will remain at Shortstown and the operational requirements of the Agency must be considered in any development proposal. In the longer term, surplus land at the DSA may come forward for development. Traffic from and to the DSA includes a high proportion of HGVs. Vehicles leaving the site east-bound routinely travel along Harrowden Lane to access the southern bypass at Cardington Cross. Also traffic from the DSA wishing to travel south must leave the site in a north-bound direction to turn left at Harrowden crossroads and past the village southbound on the A600 because of the lack of a more direct link between the DSA and the A600 to the south. The DSA currently only have one access in/out of their site. If possible, a second emergency access has been requested as part of the adjacent development.
- The listed airship sheds (Grade II*) fall outside the development brief boundary but, because of their sheer size and proximity, their relationship with new development (especially

potential for overshadowing) must be considered. Development east of the A600 presents an opportunity to rationalise traffic movement to and from the sheds and land to the rear.

- 134 Squadron ATC are still operating from the former RAF site and must be re-accommodated in the new proposals.
- The Airship Heritage Trust has recently renewed its planning permission for an airship museum in the south-east corner of the airfield (April 2002)

Health

4.9 Bedford Primary Care Trust advises that there is the need for a new health care facility in this area. The nearest general practice facility is London Road which already periodically has its books closed to registering new patients because of lack of capacity. The nearest community nursing team is also based at London Road Health Centre and is likewise already pressurised as a result of the gradual increase in population over recent years.

Flood plain

4.10 The Environment Agency (in liaison with the Internal Drainage Board) has identified land on the site of the former sewage works with a 1% (or greater) annual probability of flood occurrence. This land is known as the Indicative Flood Plain and is shown on Map 1. The Borough Council does not see this land as suitable for residential or industrial development though the presence of the Indicative Flood Plain may be significant for the development of the relief road. Liaison with the Environment Agency/IDB will be essential in this respect. Additionally, the site overlies a minor aquifer (variably permeable) with soils of high leaching potential. The site drains both north and southwards and attenuation will need to be provided accordingly.

Cycleways/footpaths

4.11 There is currently a strategic cycle route along Harrowden Lane to the A600 westwards and to Cardington village eastwards. Also, a bridleway (BW1) links Meadowsweet Drive, under the A421, to Old Harrowden Road and Footpath 4 (known locally as Bumpy Lane). Consideration must be given to safe pedestrian and cycle crossing of the relief road at the

junction with Harrowden Lane and at other locations within the site. Because of the close proximity to Bedford, especially the employment areas east of the town, there is considerable potential to create safe cycle and pedestrian alternatives to the car. There is also potential to create links within and beyond the site to the wider footpath network (Map 4).

Landscape/topography

4.12 In general the landscape to the south of Bedford is open in character with long views across arable fields as far as the Greensand Ridge. Features in the landscape are prominent as a result, none more so than the imposing airship sheds and the southern elevation of the Shortstown estate.

4.13 The development brief area itself has a varied topography. From the north, land rises in a southerly direction towards the Shorts building and then falls away again towards the airship sheds which are themselves situated in a flat and open landscape. To the west, Shortstown sits on a plateau whilst further to the east the land falls away towards the dismantled railway line. The playing field area south of the former RTCC site and the land west of Scott Avenue are largely flat and open in character. West of Scott Avenue the land rises gently to meet established development on Central Avenue.

4.14 The Marston Vale is one of twelve locations in the country selected for community forest status. The Forest of Marston Vale area extends to 61 square miles stretching between Bedford and the M1 motorway (encompassing Shortstown) and is a joint initiative between the Countryside Commission, Forestry Commission, Bedford Borough Council, Mid Bedfordshire District Council and Bedfordshire County Council. The Forest Plan is a non-statutory document although it is a material consideration in deciding planning applications.

4.15 The Forest Plan identifies Shortstown within the urban fringe. A substantial area of new planting along the southern edge of the bypass is suggested in the plan to create a buffer zone between the urban edge and the countryside beyond. The plan also suggests a buffer around development areas in the urban fringe, including Shortstown. These buffers should bring recreation and amenity as well as landscape benefits.

4.16 Within the development land east of the A600 there are high value blocks of established, semi-mature

trees of forest species with a long, useful life expectancy and significant landscape value. These are not only in situ at points along the southern periphery but also separate individual plots within the site itself. The northern boundaries and areas adjacent to Harrowden Lane are more associated with wider belts of semi-natural forest trees and occasional plantings of more broadly-ranging semi-ornamental species, including conifers. There are open views of the site from the north west, especially from the A600.

4.17 The area to the east of Paul Waller Avenue is more open and undeveloped. There is rich native regeneration of trees particularly oak together with more mature individual trees and relatively young screening to the roadside and that which is naturally provided by the adjacent disused railway corridor.

4.18 An area Tree Preservation Order has recently been served on the Bellway/Forthprice & Potton land (for land ownership details see Map 3) in order to protect the trees until such time as a landscape master plan can be agreed.

Archaeology

4.19 The development brief area contains one acknowledged area of archaeological interest to the north of Harrowden Lane. It contains the earthworks remains of medieval settlement. The lack of formally acknowledged interest in the remainder of the area is partly due to the fact that in the past, ground conditions have not been conducive to the detection of archaeological features. However, work recently undertaken in the vicinity, particularly in association with the Bedford Southern Bypass, has demonstrated that archaeological sites are more extensive than had previously been thought. Given this, the rest of the brief area may be considered to be of potential archaeological value.

Fire Safety

4.20 Developers should consider the opportunities for and benefits of introducing fire sprinkler systems in new buildings including those which are currently beyond regulatory requirements. They are also advised to seek the advice of the Arson Reduction Co-ordinator and Fire Safety Projects Officer of the Bedfordshire and Luton Fire and Rescue Service in relation to design measures to prevent fire related crime and disorder.

Community safety

4.21 To reduce crime and increase community safety requires an overall approach to ensure sufficient provision is made for social inclusion. The design and layout of the external environment can also play an important part in reducing opportunities for crime (including fire related crime and disorder), the fear of crime and the potential for anti-social behaviour. The following general principles can be identified.

- *Integrated approach* - the development's overall design and layout should be considered as a whole from the outset.
- *Legibility and identity* - take account of existing and proposed features and facilities to ensure that pedestrian routes have a clear reason and will attract a purposeful usage. Unnecessary paths which could be used to gain unobtrusive access and escape should be avoided.
- *Environmental quality and sense of ownership* - a high quality environment is more likely to engender pride in its users, who will tend to feel comfortable and safe and have a sense of shared ownership and responsibility. Public areas will tend to be well used, which is itself a safety element. However, care needs to be taken to avoid inadvertently creating opportunities for crime through providing hiding places or by poor positioning and choice of planting, walls and fences.
- *Layout and building details* - key factors include: natural surveillance; the creation of defensible space; the use of physical boundaries; and the strength of materials used in construction.
- *Maintenance of public areas* - it is important that ownership and responsibilities are clearly identified and sufficient resources made available to adequately maintain buildings and communal spaces. High standards of maintenance will encourage active use and engender a sense of pride.
- *Public lighting* - there is a strong link between the standard of lighting and fear of crime. Different sources and patterns of lighting need to be considered for different environments and deep shadows should be avoided. Lighting is

particularly important in the street environment, public footpaths and cycleways and in car parks.

- *CCTV* - closed circuit television surveillance may be an appropriate measure in certain situations, although it can be perceived as intrusive and a restriction on privacy and personal freedom.

4.22 Developers will be expected to take account of these principles in the detailed design and layout of the development, and to seek the advice of the Police Architectural Liaison Officer and Fire Brigade before submitting planning applications.

Bus services

4.23 The 181/182 bus services between Bedford and Hitchin provide the main public transport link between Shortstown and Bedford. This service runs every 30 mins and it is supplemented by the 106/107 Bedford to Shortstown service at peak periods. The bus stop for south-bound buses is not safe or inviting due to the lack of a safe pedestrian crossing point.

Ecology

4.24 In ecological terms, the most important part of the site is that around the airship sheds. Though the grassland is not rich in flora, pockets of species rich grassland may exist. The extent of the open grassland is such that it probably supports small mammals, brown hares and ground breeding birds such as skylark. The area may also support wintering populations of lapwing and golden plover. Sightings of bats and barn owls have been reported on the Bellway/Forthprice/Potton land. These are protected species and the requirements of English Nature must be fulfilled by the developer. The disused railway line is important as a wildlife corridor linking the countryside to the urban area.

Utilities

4.25 Gas

There is unlikely to be any difficulty supplying gas to the site.

4.26 Electricity

There is unlikely to be a difficulty supplying electricity to new development subject to the provision of additional sub-stations and an extension to the high voltage network.

4.27 Water

Water supplies to new development can be served from a new connection to existing water mains either in Harrowden Lane or the A600. Both of these are in the control of Anglian Water Services Ltd. Developers will be expected to fund on and off site works associated with providing water to the development.

Drainage

4.28 Foul Water

The existing foul sewers serving the former RAF camp discharge northwards, crossing Harrowden Lane and

connecting with the South Orbital Sewer. Anglian Water Services have advised that there is sufficient capacity in this sewer to serve the new development proposed. Surface water will not be allowed to discharge into the foul sewer.

4.29 Surface Water

Surface water currently discharges by means of a piped gravity system into the Elstow Brook. New development will increase the surface water run-off and the developer will be expected to demonstrate sustainable methods of discharge in line with the 'Marston Vale Surface Waters Plan' (an informal document endorsed by the Borough Council).

Contamination

4.30 Because of the range of industrial uses that have occurred on the former RAF site in the past, there may be 'hot spots' of contamination. Assessment and remediation will be required.

5 Key Principles

5.1 Part of the brief area has already been developed under the provisions of the 1996 adopted development brief. The RTCC site adjacent to the A600 is now complete and work on 'site 5' west of Scott Avenue has commenced (ultimately 251 homes). However the boundaries of remaining land available for development have changed since the first brief was adopted as have national and local planning policy objectives. This brief therefore aims to clarify the Council's objectives in relation to the development of the remaining land.

5.2 In accordance with Government advice the Council wishes to promote the creation of more sustainable residential environments. In order to achieve this, the Council will expect the development to follow a number of sustainable development principles that are set out below.

5.3 PRINCIPLE 1

Achieve a locally distinctive high quality cohesive development which respects the best of local character.

Aim 1 The development should create a locally-distinctive community of high-quality design that respects the historical context of Shortstown.

Aim 2 The development should achieve social and visual integration.

Aim 3 The development should establish a landscape character which adds quality within residential areas and aids the transition from village to open countryside.

Aim 4 The development should be designed to enhance community safety.

5.4 PRINCIPLE 2

Encourage a Mixed and Balanced Community.

Aim 1 The development will provide social and community facilities and employment alongside housing development in order to

create a mixed and balanced community and create a sense of well-being within the existing and new community.

Aim 2 The development should incorporate a range of different housing opportunities in terms of tenure, size and affordability.

5.5 PRINCIPLE 3

Give priority to pedestrians, cyclists and public transport access.

Aim 1 The development should give priority to pedestrians, cyclists and public transport.

Aim 2 The development should incorporate a network of direct, safe and convenient paths and cycle routes along with bus priority measures.

Aim 3 The development should include a village centre that is readily accessible by pedestrians and cyclists.

Aim 4 The development should secure an appropriate diversion of the A600 that adequately services all development land, facilitates the passage of through traffic and gives priority to the safety of pedestrians and cyclists.

Aim 5 The development should incorporate measures to minimise the environmental impact of traffic within the development and on the surrounding area.

Aim 6 The development should consolidate sustainable transport links with Bedford.

5.6 PRINCIPLE 4

Give priority to the greening of the residential environment.

Aim 1 The development should provide a network of high-quality, multi-functional open spaces linked by foot and cycle routes.

Aim 2 The development should incorporate measures which will reduce the demand for water and use of local water sources.

5.7 **PRINCIPLE 5**

Promote Energy Efficiency

Aim 1 The development should minimise energy consumption through attention to the layout,

orientation, design of buildings and use of planting to provide shelter.

Aim 2 The development should use land efficiently and incorporate a range of density levels.

Aim 3 The development should maximise renewable energy provision within the development.

6 Urban Design and Local Distinctiveness

6.1 A glossary is available at Appendix 3 to explain some of the design terminology used in this section.

Introduction to Urban Design

6.2 Since the closure of the RAF Maintenance Unit, Shortstown has experienced a lack of recreational and community facilities. The provision of a mixed use village centre incorporating educational, community and commercial facilities is a crucial element in developing a more sustainable community. The development should create effective linkages into the existing estate, surrounding countryside and transport network avoiding unnecessary barriers to ensure a permeable, integrated environment. It should also reflect the essential characteristics of the immediate settlement pattern of Shortstown and the surrounding villages whilst providing a distinctive and legible environment of its own.

6.3 These principles are embodied in the master plan (Map 5).

6.4 It is expected that the development will consist of a number of character areas which will respond sympathetically to the different nature of different parts of the site (see Figure A, opposite page 18). On the north and north east edges, it is envisaged that the development will take on a semi-rural character. This will help assimilate the development into the surrounding environment where it meets the former railway line and arable fields. The semi rural character will also respond to the characteristics of Old Harrowden Road, Harrowden Lane and Cardington village.

6.5 In response to the formal pattern of the existing Shortstown estate and building styles, it is appropriate for the development around the mixed-use village centre and radiating routes to take on a formal character. This will help ensure that the new development is well structured and legible.

6.6 The existing mature tree groups and the formal Paul Waller Avenue are important features of the site. The master plan seeks to retain these elements and incorporate them into a comprehensive open space

network. Footpaths and cycle routes run through the open space network and link into the strategic cycle network north of the site.

Local Distinctiveness

6.7 In order to identify those elements which would make the new development locally distinctive, there is a need to consider the context in which the development sits.

6.8 Shortstown has a particularly distinctive character that is intimately linked to the Shorts brothers' decision to establish an Airship Works on the site in the early twentieth century. Since that date, the settlement has grown to accommodate personnel associated with the later MOD uses, but still remains an independent and separate entity from the surrounding villages and the southern Bedford urban fringe.

6.9 The main features of Shortstown are:

- the two listed airship sheds that are dominant features in the landscape and the most potent symbol of Shortstown. These landmark buildings are visible from surrounding villages and the Bedford Southern Bypass and provide a point of reference in the south Bedford landscape.
- the Shorts building that was originally built to house the airship passengers and lies east of the A600. Three storeys in height, it is a local landmark within Shortstown.
- the original Shorts houses located west of the A600 facing the Shorts buildings. The layout is symmetrical and has a 'Garden City' character.
- the later MOD housing, west and south of the original Shorts dwellings.
- scattered workshop and ancillary buildings associated with the site's last use as an RAF Maintenance Unit and that lie east of the A600.
- the formally laid out Paul Waller Avenue that marks the edge of the built up area to the east and is the private access to the Driving Standards Agency site.
- large groups of mature native tree species.

Formal and Urban Character (Shortstown)

6.10 Adjacent to the existing Shortstown estate, around the mixed-use village centre and along the radiating routes into the new development, the master plan illustrates development of a formal/urban character. Short terraces of 2, 2½ and 3 storey buildings with consistent building types, materials and architectural style will typify this development. Densities will predominantly be in the range of 40 - 45 dwellings per hectare. Landscaping public areas will, for the most part, be restricted to specimen trees that reinforce the character of this area. Near continuous frontages will be created by boundary treatments (such as low brick walls, hedging and/or railings) which will enclose small front gardens.

6.11 The mixed use village centre will focus around a central square. As well as providing a focal point and heart to the development, it will provide amenity space and incorporate car parking at the eastern end for people using the facilities. Development within the village centre will include a lower school, community building, healthcare facility, pub and a convenience store. It is expected that these uses will be integrated with the residential development and, where possible, have dwellings above.

6.12 The appropriate urban reference points for this type of development are the Shorts building, original Shorts houses and Paul Waller Avenue. These have the following characteristics:

6.13 *Shorts Building*

- large 3 storey, asymmetrical building



Fig B

- formal style with strong vertical rhythm conveyed by window proportions and spacing and pilaster features around the entrance
- formal relationship to the A600 and the original Shortstown development
- high-quality front façade, poor-quality rear elevation
- red/orange brick with slate roof.

6.14 *Original Shorts Houses*

- 2 storey dwellings
- Garden City style vernacular with buildings set back from the road in managed landscape setting

Fig C



- formal elevations
- short terraces with gables projecting towards the road
- near continuous frontages created by boundary treatments
- modest front gardens predominantly enclosed by hedges with the occasional low wall and timber fence
- consistency in building type, materials and architectural style
- natural surveillance of public spaces
- red/orange brick with plain tile roof.

Semi Rural Character

6.15 (Cardington village, Old Harrowden Road, Harrowden Lane and Cardington Airship Sheds)

6.16 Old Harrowden Road, Harrowden Lane and Cardington village are the closest rural areas to the site. They present a number of characteristics which it will be appropriate to apply to the semi rural character areas on the northern and north eastern edges. The semi rural development will be quite distinct from the formal and urban areas as its informality will be landscape dominated. Detached and semi detached dwellings set back from the road with larger front gardens will create low density environment of 30 - 35 dwellings per hectare and help integrate the development into the surroundings.

6.17 The characteristics of the surrounding rural development are:

6.18 Cardington Village

- village focused around The Green
- bisected by the Bedford Road

Fig D



- peppered with semi mature and mature native trees
- continuous frontage created by a variety of boundary treatments
- low timber picket fences, stone walls, 1.8 - 2 metre red brick walls
- hedges and trees immediately behind and spilling over boundary treatments
- landscape dominant setting
- narrow frontages, deep plot depths
- short terraces of buildings, typically of three or four dwellings
- detached buildings are predominantly restricted to the school, public house, church and farmsteads

Fig E



- landmark features within the street scene
- groups of buildings associated with the farm houses create courtyard type development
- majority of new development based around culs de sac off the main street
- buildings typically 1½, 2 and 2½ storeys high.
- occasional gable end projecting towards the road.

6.19 Harrowden Lane/Old Harrowden Road

- scattered development along linear Harrowden Lane
- characterised by narrow carriageway, frequently no more than a car's width with passing places
- landscape dominant setting with field boundaries and hedgerows creating a country lane feel
- generally semi-detached and detached dwellings
- narrow building frontages, deep plot depths
- significant variation in building set backs from road
- a focal point around the public house where the road widens and a group of terraced housing pushes forward to the road edge.

6.20 Cardington Airship Sheds



Fig F

- overriding landmark feature in the south Bedford landscape
- 250m long, 55m wide and 48m high, the twin sheds have been a feature of the landscape since 1916
- significant views from Cardington to the west and approaching Shortstown from the south and from the southern bypass
- open grassland and agricultural landscape setting.

Key Urban Design Principles

6.21 In May 2000, the Department of the Environment, Transport and the Regions and the Commission for Architecture & The Built Environment published 'By Design. Urban Design in the Planning System: Towards Better Practice'.

6.22 The aim of the guide is to promote higher standards of urban design and it provides a companion

to the Government's policy for design as set out in Planning Policy Guidance Note 1 and other Planning Policy Guidance Notes.

6.23 It concludes that successful streets, spaces, villages, towns and cities tend to have common characteristics. These factors have been analysed and distilled into a series of principles or objectives for good urban design. They are:

Character

A place that has its own identity and a character that is locally distinctive in terms of both townscape and landscape.

Continuity and Enclosure

A place that has public and private spaces which are clearly defined by development and which promotes the continuity of street frontages.

Quality of the Public Realm

A place with attractive and successful public spaces and routes which are safe, attractive and accessible by all members of society including disabled and elderly people.

Ease of Movement

A place that is easy to get to and move through, which promotes accessibility and permeability, connects with its surroundings, puts people before traffic and integrates land uses and transport.

Legibility

A place that has a clear image and is easy to understand by incorporating recognisable routes, junctions and landmarks.

Adaptability

A place that can change easily in response to changing social, technological and economic conditions.

Diversity

A place with variety and choice through a mix of different land uses.

Urban Design Framework

6.24 This section sets down the Council's vision of how the key urban design principles should be applied to the site.

Character

6.25 Shortstown, Old Harrowden Road, Harrowden Lane and Cardington village have their own unique character. The properties that make these distinctive should be respected in the new development.

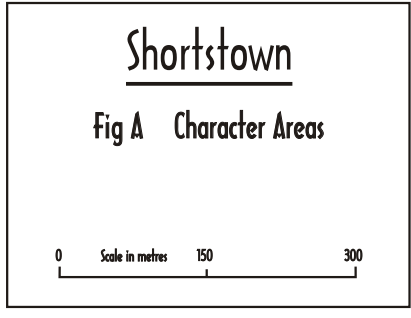
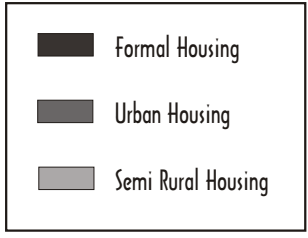
6.26 The relationship of the new development at Shortstown to the existing development is crucial to achieving proper integration. Therefore, the existing character of Shortstown in particular should be respected where new and old abut and in the main body of the new development. At the edges, particularly the north east and north west boundaries, the qualities that make Harrowden and Cardington distinctive should play an increasingly important part. Whilst respecting the character of the surrounding settlements, the new development should be distinctive in its own right to aid legibility and create a sense of place.

Continuity and Enclosure

6.27 The relationship between buildings and public spaces is important if a successful space is to be created. New development should be laid out so that there is a clear distinction between public and private space with the public domain being both overlooked and accessible. This is most successfully achieved by dividing the site into a series of perimeter blocks. These blocks should respond to the surrounding environment. The site has two main influences, the existing Shortstown estate and the surrounding rural environment. To address these influences a regular and informal block structure is required. Along major paths, continuity and enclosure can be maintained by consistent treatment of the urban form. Towards the periphery, structural landscaping elements can be used to achieve the same effect.

Quality of the Public realm

6.28 The significant public spaces within the master plan can be divided into two main categories - soft and hard landscaped spaces. Along the development edge to the north and north east, it is crucial that the public areas predominantly consists of soft landscaped spaces. These help to provide a soft edge to the built up area but also play an important part in the linear open space network, linking into the green corridor along the former railway line. Elsewhere within the development, major soft landscaped public spaces are focused around existing tree groups, contributing to the quality of the public



realm and providing focal points or greens. The opportunity should be taken to incorporate Neighbourhood and Local Equipped Play Areas within these spaces.

Ease of Movement

6.29 This principle has three distinct elements:

6.30 *Connections* - Strong connections with the existing Shortstown area are important to aid permeability and ensure proper integration. It is also important that those areas that are currently under development, have planning permission or are allocated in the Local Plan are given proper consideration so that they can be tied in in due course

6.31 *Permeability* - The layout of the site should incorporate an appropriate amount of permeability and choice of routes. Routes should be clear and direct, be overlooked and busy and should not undermine the defensible space of particular neighbourhoods.

6.32 *Integration of land use and transport* - It is important that the different uses on the site are easily accessible by foot, bicycle and public transport to create a sustainable environment. It is expected that key facilities such as the lower school, community centre and shops will be located around the main public space. As these facilities will serve the existing and new Shortstown communities, it is important that this main space is centrally located within the village as a whole. Strong connections should be made to this space. Major open spaces and the national cycle route network should also be easily accessible.

Legibility

6.33 Shortstown, Old Harrowden Road, Harrowden Lane and Cardington village each have their own individual character. This distinctiveness helps to create a sense of place and a legible environment. Key physical features that help establish a strong mental image of place can be defined as Paths, Nodes, Landmarks, Edges and Districts (see Figure G).

Paths

6.34 Paths are channels of movement. The principal movement route through the site will be along the relief road which links the A600 north and south of Shortstown. From this road, strong linkages will feed into the all parts of the development (see Figure H).

6.35 *Intermediate Access Roads* - The master plan shows the intermediate access roads through the site as the widest streets. Frequently these will be visually straight boulevards that pick up on the pattern of the existing Shortstown development. These will be able to accommodate the local bus service which it is anticipated will serve the development. Traffic speeds through these areas will be controlled through use of landscaped splitter islands and other localised horizontal deflections.

6.36 *Minor Access Roads* - The block structure ensures that the minor access roads are much narrower, with vistas terminated by other blocks or structural landscape elements.

6.37 *Country Lanes* - Country Lanes are proposed at the edges of the development or where they abut open space. The need to assimilate the built form into the surrounding landscape dictates that it is desirable to keep traffic widths to a minimum. Although narrow, these roads are sweeping and mirror the development parcels as they seek to create a soft edge with the surrounding landscape.

Nodes

6.38 The main focal points or nodes within the development will occur at the junctions from the relief road into the development and around the squares, particularly the mixed-use village centre into which the many of the roads feed.

Landmarks

6.39 Shortstown is fortunate to already have some very prominent landmark features. The most significant of these is the Cardington Airship Sheds to the south east of the site. These are an ever present feature in the landscape and are the defining image of this part of the south Bedford landscape. However, at a more localised level the Shorts building, the original Shorts housing, Paul Waller Avenue, and the disused railway line are all landmarks. Whilst elements such as the Shorts building and Paul Waller Avenue are incorporated into the master plan, further landmark elements will have to be established to aid legibility within the site. At the gateways to the development and around key public spaces, there will be an opportunity to provide landmark features. It is expected that key public buildings such as the lower school or community building will serve this purpose. The sequential hierarchy of spaces will also enhance legibility.

Edges

6.40 There will be a number of distinct edges to the development. The semi rural character area will create one edge to the north and north east. Another clear edge will be created to the south where the residential development is screened from the Airship Sheds and the open landscape beyond by existing tree groups and proposed structural landscaping. The last edge will be along the line of the A600 where the new development meets old. However, it is anticipated that this edge will be discrete, with new buildings responding in a sensitive manner to the Shorts building and original Shorts development.

Districts

6.41 It is expected that there will be a number of distinct districts or character areas within the site that will stem from the built forms response to existing landscape features, land uses and major movement routes. These will include:

- development fronting the A600 and radiating routes
- development fronting the former railway line and countryside to the north and north east
- development forming the village centre.

Adaptability

6.42 Buildings which are designed to be capable of conversion to retail or employment use are an important part of the village centre. Elsewhere, some residential properties should be designed with work space areas or accommodation which can readily be converted to encourage home working. Public spaces should also be adaptable to ensure their function can change over time, if required.

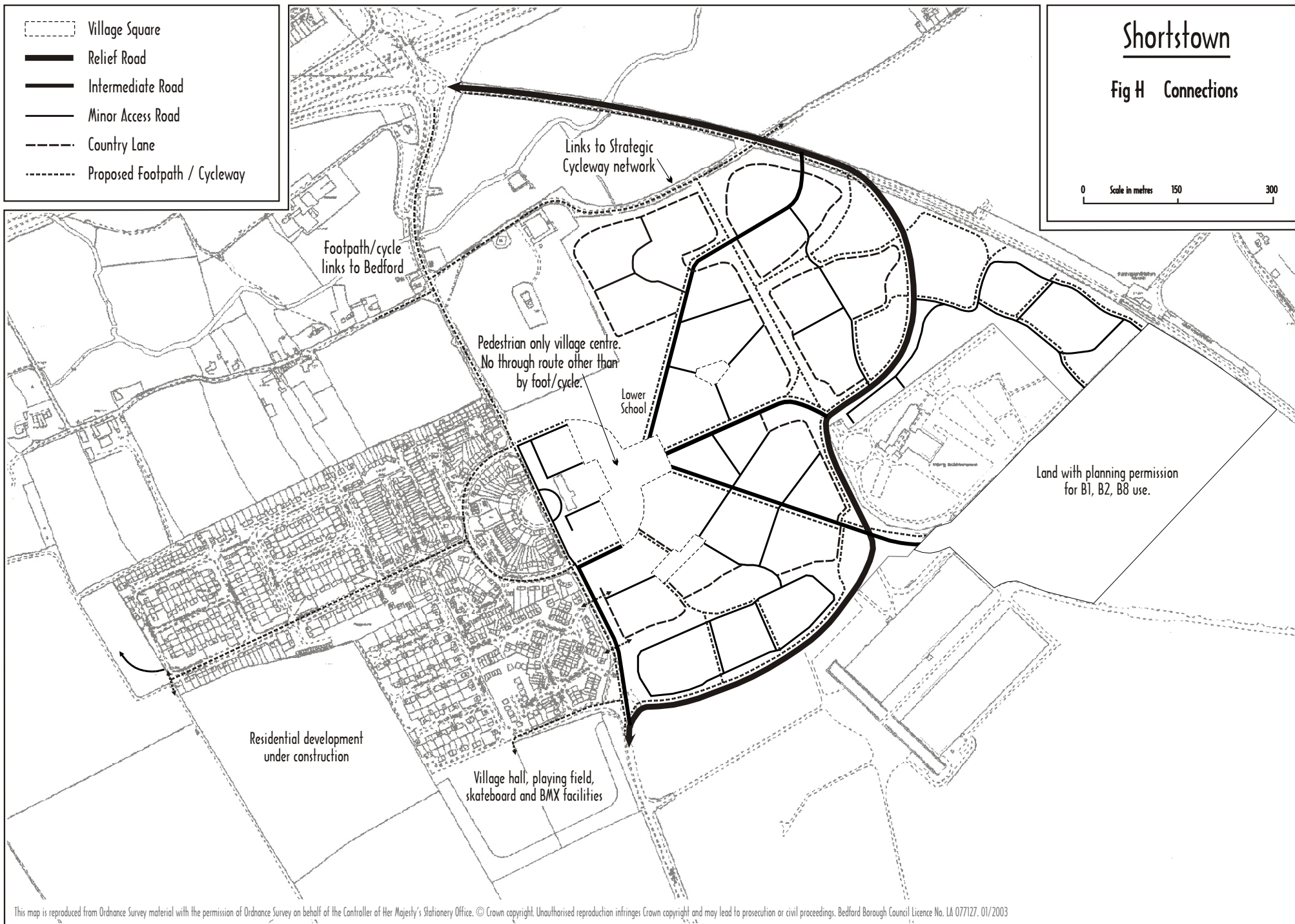
Diversity

6.43 It is accepted that the majority of the development will be for residential purposes. However, the village centre will be expected to support a mix of uses, including educational, community and retail uses in addition to residential. Buildings in this area should be sufficiently flexible so that they can accommodate office or other commercial uses should the demand arise.

Urban Design Requirements

6.44 Urban design objectives for individual districts or areas are set out in Appendix 2.

6.45 Taking these principles into consideration, the Council has prepared a master plan in order to demonstrate their application to the development of Shortstown.



7 The Master Plan

7.1 Map 5 shows an illustrative master plan. In bringing together the material considerations set out in sections 2-6, the master plan takes account of the potentials and constraints and shows how the land can be developed to achieve the stated aims. It illustrates the following requirements.

A mixed and balanced community

7.2 Such a planned extension to an existing residential area should be well connected to the community it adjoins and take advantage of the capacity to share essential community facilities. New development should consider the strengths and weaknesses of the existing estate and provide an appropriate mix of dwelling tenure types and other land uses to foster the concept of a whole and balanced community. The proposed development has the potential to double the size of Shortstown. It is thus critical to ensure that the development integrates with the existing settlement and, in introducing new uses (employment, village centre, school etc) and road pattern, that the new development is approached in a comprehensive manner. The piecemeal development of estates within the land east of the A600 will not achieve the objectives of the development set out in national guidance nor in the Local Plan or this Brief. Since there are several land ownerships involved, it is essential that, in establishing the pattern of development, co-operation and/or partnership between owners and developers is assured at the outset.

Village centre

7.3 The new village centre will be the focus for the community. It will be the interface between existing and new residential areas and its success will be paramount in achieving community integration. Community facilities will be located at the centre, (to include health care provision, place of worship, school, pub, shop). It is essential therefore that the centre itself is easily accessible by foot and cycle from both existing and new housing areas. The Council will support the inclusion of a 'cop shop' in the village centre if this suggestion is supported by the Police.

7.4 The design should be distinctive, reflecting the best of the existing urban form at the Shortstown

estate and the wealth of local history. The Shorts building should, if possible, be converted to form part of a mixed use village centre. Whilst its conversion to community uses has been considered, the internal layout and structure of the building does not easily lend itself to subdivision for such uses. However, should proposals be forthcoming that successfully achieve conversion of the Shorts building for viable community uses, the Borough Council will lend its support in principle. As an alternative, the master plan shows extension and conversion into flats. The rear elevation of the building is of poor visual quality and its integration with adjacent uses will require a careful design solution. If the Shorts building cannot be converted at all, a replacement in the same location and of similar scale should be provided in order to retain the historic relationship and landmark status between this key building and housing opposite. Key architectural features should be included in the design eg the date stone. The Council will support proposals to retain and perhaps complete the façade of the Shorts building in appropriate circumstances.

7.5 The Council's policies BE33 (gateways), BE34 (public spaces) and BE35 (public art) are particularly relevant when considering the potential use and design of public spaces.

Education

7.6 There is limited capacity at the existing lower school to cater for new housing. Whilst the option to expand the school on its present site could be further investigated, advice to date has been that an alternative solution would be preferable. Either a second school could be built east of the current alignment of the A600 to cater for the new housing or one larger school could be built in the centre of the village to cater for all children and an equal distance between old and new communities. Clearly, there are pros and cons of both approaches but on balance both the County and Borough Councils presently favour the latter as it is more likely to lead to successful integration of the community. It would also serve to strengthen the village centre as the hub of the community and encourage linked trips to other uses.

7.7 A site 1.75ha (minimum) in size will be required to accommodate a single, new lower school to serve the

entire settlement. Reprovision will also need to be made of the existing pre-school facilities and for those from the new housing development. A lay by is provided at the front of the school to allow for drop off and pick up of children and for the parking of two school buses. This space would also be available for stopping of the mobile library if appropriate. Site investigations will need to be undertaken prior to agreement of any specific school site of soil condition/contamination etc to ensure suitability for purpose.

7.8 The County Council advise that it is envisaged that there will be sufficient capacity in existing schools for middle and upper school age children.

7.9 In addition to the opportunities for housing development east of the A600, the vacation of the existing school site would present an opportunity for limited housing development at the western edge of the existing estate. Because of the exposed nature of this site, new housing should be contained by a belt of structural landscaping, continuing that achieved through the development of 'site 5' to the south and to comply with the detail of the Forest Plan.

Health centre

7.10 To ensure the provision of adequate facilities for the new development, a health care facility will be required in the first phase of this development. The Primary Care Trust has requested that temporary accommodation be provided as soon as the first dwelling is built in order that services can be provided to new residents. This temporary facility may be located in one of the residential units in the first phase with the property sold on once the permanent facility is available. The permanent health care facility should be located in the village centre and should accommodate a four GP practice on 350sq m footprint. It should also accommodate one ambulance/response vehicle within the grounds. A site of between 0.3 and 0.4ha will be required to accommodate these requirements. The final site size is to be agreed with the Primary Care Trust taking into consideration the capacity for sharing public parking spaces in front of the building.

Place of worship

7.11 The Church of England recommend that a site be identified for the building of a multi purpose ecumenical church centre to serve the village. This should be provided in or close to the village centre. In the short term, a suitable house should be available for the work

of a Christian key worker or minister to facilitate community development work in the expanding village.

Retail

7.12 No more than 350sq m net convenience retail floorspace should be provided in the village centre. This will serve to retain expenditure within the village, reducing the number of trips out of the settlement for 'top-up' shopping and will enhance the range of facilities available to local residents. In the interests of sustainability, the level of shopping provision should meet only the needs arising from Shortstown and avoid encouraging inward travel from the surrounding area.

Housing

7.13 A variety of dwelling types, sizes and styles will be required to ensure that the varied needs of the community are served and also to ensure that visual diversity is achieved in the overall character of the housing areas. Dwelling types that promote home working to reduce the need to travel and lifetime occupation will be encouraged. This may be in the form of live/work units or through the installation of necessary infrastructure such as telecommunications.

7.14 The local plan allows for 260 dwellings to be completed to the end of the plan period (2006). Depending upon the disposition of land uses, the capacity of the road junctions and the school, the total capacity could be in the region of 1100 - 1200 dwellings with the final capacity to be determined through the development control process.

7.15 PPG3 gives advice about appropriate densities for new development. In practice, density will vary across the development site though transition from higher to lower densities should be subtle. A density analysis should accompany the planning application showing areas of high, medium and low density housing and be supported by a statement justifying the rationale behind the selection. This statement should consider the relationship with other land uses, both new and existing. Precise densities will be determined on the submission of reserved matters applications. These applications will need to demonstrate that the densities proposed can be achieved through the use of appropriate layout and built form and that a satisfactory mix and range of dwelling types and sizes can be provided. It is important that all applications have regard to Policy H32 of the Local Plan which

expects the mix and range of dwelling types and sizes to reflect the needs of the community in particular those who require smaller homes. A density analysis of the master plan is illustrated on Map 6.

Affordable housing

7.16 In order to address the Borough's housing need, the Council will expect affordable housing to be provided in accordance with Policy H31 of the Local Plan. This policy sets a target of 30% of housing to be affordable. Of this, 25% will be sought as social rented housing and 5% for market sub-tenures involving equity ownership. Affordable housing should be phased and integrated within the housing areas in small groups. It should be designed and built so as to reflect the main design elements of surrounding private housing so that it is indistinguishable.

Mobility housing

7.17 The site should also make provision for a proportion of the dwellings to be built to mobility housing standards in accordance with Policy H34 of the Local Plan and supplementary planning guidance (Mobility Housing – September 2002).

Employment areas

7.18 Land rear of the sheds has planning permission for 11.76ha of B1, B2, B8 floorspace and is identified in the local plan as an employment site. The airship sheds themselves also offer employment opportunities. The Borough Council is concerned to ensure that a mixed-use development is achieved at Shortstown and whilst uses proposed in the village centre will provide much needed jobs (in the shop, pub, surgery and so on) there is also the opportunity to broaden the employment base by providing additional B1/B2 floorspace within the development land east of the A600. Following consultation, the master plan was amended and land east of the relief road is now identified for employment use. This will provide approximately 3ha of B1/B2 space. The Council would support the early implementation of live/work units within the residential area though this space is not counted as employment land, and is considered additional to necessary employment provision. The development of employment land adjacent to the DSA should, if possible, facilitate a second 'emergency only' access for the DSA site. Consideration should be given to incorporating principles to enhance community safety in the design of the employment area.

Open space

7.19 Open space should be seen as an integral part of the overall design. Not only should it provide for the formal and informal recreational needs of the community, but it should be arranged in a manner that encourages travel by foot and bicycle rather than by car. Open space corridors should link key land uses together and filter through the residential areas to the village centre.

7.20 The amount, nature and location of outdoor space for sport, play and amenity space should be provided in accordance with Policies LR15, LR16 and LR17 of the adopted Local Plan.

7.21 The 1996 development brief identified land south of the estate and west of the A600 for pitch space on the basis that an additional 575 dwellings would be provided. A considerably larger number of dwellings is now likely to be achieved and this calculation (based on NPFA guidelines) will need to be revisited. The additional space required for outdoor sporting use will need to be accommodated within available land to the east of the existing A600. Indoor sports such as badminton may be provided at the school (with the agreement of school Governors) but it is unlikely that joint use of outdoor pitch space will be acceptable. Additional pitch space must therefore be provided and, following changes made to the master plan as a result of consultation, space is now identified east of the relief road. A junior and mini pitch are identified to complement the full sized pitch to be available on land south of Greycote. A changing facility will also be required.

7.22 Neighbourhood equipped areas for play and local equipped areas for play will be provided in accordance with the Council's policies. The requirement for smaller localised less formal play areas (LAPS) within residential clusters must also be fulfilled. The Council will support the development of play streets or home zones that render the car subordinate to pedestrians and allow informal play close to the home. The Council will also support the provision of children's indoor play facilities to broaden the range of play opportunities available to local children. This will not normally count against the following requirements unless its management is vested in the Parish Council to ensure its retention in the longer term.

7.23 Minimum requirement for outdoor sport and children's play space* (see table on page 24).

Type of space	Standard	1100 dwellings	1200 dwellings
Outdoor sport in total **	0.4 - 0.45ha per 100 dwgs	4.4 - 4.95ha	4.8 - 5.4ha
of which pitch space	0.3ha per 100 dwgs	3.3ha	3.6ha
Children's play in total	0.15 - 0.2ha per 100 dwgs	1.65 - 2.2ha	1.8 - 2.4ha
of which equipped space***	0.05 - 0.075ha per 100 dwgs	0.55 - 0.83ha	0.6 - 0.9ha
Informal play	0.1 - 0.125ha per 100 dwgs	1.1 - 1.34ha	1.2 - 1.5ha

* walking distances will also be considered when assessing adequacy of play space provision

** pitches, greens, courts and athletics tracks

*** these figures do not include the buffers required between residential curtilages and the activity zone.

See Local Plan for further detail.

7.24 If provision of pitch space cannot be made to the minimum standard set out above, a contribution will be required in accordance with local plan policies to improve facilities elsewhere in Shortstown. In addition, a contribution may be required to enhance accommodation at the planned pavilion on land south of Greycote in lieu of any provision of this nature east of the road. Children's play areas will be expected on-site.

7.25 Provision for older teenagers should also be considered. The SRB funded skateboard park and surfaced kickabout area south of the existing estate will provide a significant focus for teenage gatherings but the provision of an additional 'shelter' adjacent to the proposed pitch space east of the A600 would further cater for this age group and possibly prevent groups of teenagers meeting in less appropriate localities including play areas designed for younger children.

7.26 Where appropriate, commuted sums to cover management and maintenance of play areas will be required.

Landscape/topography

7.27 The master plan embraces the opportunities afforded by the varied topography of the site. Existing mature landscaping is retained as part of the master plan where possible and is supplemented by additional planting appropriate to the residential/employment/community environment and the village's location within the community forest.

7.28 The relationship between services and trees must be such that mature trees will not be damaged by works to services and that new trees will be allowed to

mature, without disturbance, to reach their full potential. This will best be achieved through early determination of the location of services relative to the highway and landscape areas.

7.29 The Council will expect a detailed landscape assessment and strategy to accompany the planning application. The strategy should address, amongst other things, the potential for the re-use of the many young oaks present on the site. A management plan will also be required which should address the need to protect existing trees during construction.

7.30 Where appropriate, commuted sums to cover management and maintenance of landscaped areas will be required.

Airship Museum

7.31 Despite the fact that the Airship Heritage Trust has recently secured a renewal of planning permission for a museum in the south eastern corner of the airfield (see Map 2), the Borough Council would support, in principle, the inclusion of an alternative site within the development brief area. This is in recognition of Shortstown's unique association with the development of the airship and the strong local desire to retain links with the settlement's past.

Communications

Highways

7.32 The highway infrastructure is the most contentious element of the development of land at Shortstown. Whilst the relief road concept was not

supported by the Local Plan Inspector, the principle of re-routing traffic away from the village centre in a manner that promotes community safety and integration is sound. This brief (for the reasons stated below) reverts to the solution first put forward in the 1996 brief. The Council is mindful of the fact that the Local Plan Inspector did not support this option but considers that current circumstances are now sufficiently different that a direct link to the southern bypass can indeed be justified. The following details have changed since the Local Plan Inquiry and have a direct bearing on the most appropriate route of the road.

- 1100 - 1200 dwellings are now being proposed on the land east of the A600 as opposed to 750 considered in the transport assessment presented to the Local Plan Inquiry.
- The existing school site will be available for residential development and must be included in the calculations.
- The capacity of 'site 5' was identified as 170 in the local plan deposit draft. Planning permission was given for 251 units.
- Planning permission has been given for B1, B2 use in Shed 2 (20,000sq m B1/B2 space).
- The Health Impact Assessment is available.
- Highway capacity study undertaken on behalf of the Highway Authority is now available.
- Additional Government guidance is available.

7.33 Not only must the passage of traffic within the development area be considered, but the effect of additional traffic movements on surrounding roads has also become a major issue as has the ability of the A600 to cope in capacity terms.

7.34 Whilst the Local Plan Inspector found no technical evidence that a relief road was needed for reasons of traffic capacity, recent work commissioned by the Highway Authority concludes that there is indeed a lack of highway capacity on the A600 between Shortstown and the bypass to carry the amount of traffic that would be generated by existing, committed and proposed development. This work concludes that the only realistic highway option is one that directly links to the southern bypass as per the 1996 brief.

7.35 However, the requirement for a relief road linking directly to the bypass is not just based on the capacity argument. The Health Impact Assessment looks at issues relating to social integration and exclusion

with resulting impact on health and adds weight to the argument for removing the road as far from the village centre as is practicably possible. Following public consultation, the alignment of the relief road has been further revised to take it east of all residential development. All residents will live west of the road and therefore not have to cross it to reach essential community facilities. However, safe crossing points will need to be built into the design to reach employment land now east of the relief road and the pitch facilities. Advice from the Highway Authority indicates that a relief road with a direct link to the bypass would need to be 7.3m wide. At the Local Plan Inquiry a highway solution that relied upon subways to cross the A600 was put before the Inspector on behalf of the developer. Both the Borough and County Councils, along with the Architectural Liaison Officer and the Health Authority, found the use of subways unacceptable in principle. The developer has abandoned the principle of providing subways in subsequent discussions about the redevelopment of the former MOD land.

7.36 Alternative road alignments that have been explored by the developer show a less extensive diversion of the A600 skirting around the community facilities and rejoining the A600 north of the settlement, feeding traffic along the existing stretch of The High Road to the southern bypass. The Highway Authority has fully considered the pros and cons of such options but does not believe that they offer an acceptable solution for Shortstown. The Council's aim is to create a fully integrated village environment and considers that the design of the road required to cope with the estimated volume of traffic in this location (close to the village centre) would be detrimental to that aim. Several junctions would be required relatively close together and indications are that four lanes of traffic would be required at each junction to accommodate the weight of traffic, meaning that a significant proportion of the road would be approximately 14.5m wide as opposed to 7.3m for the Council's preferred relief road. Whilst the road would include signalised crossings with a dedicated pedestrian/cyclist crossing phase, the Council's view is that this would not promote integration, indeed such a road so close to the village centre is likely to present a significant barrier to movement of residents between land to the west and east. With the amount of actual and potential new development in the vicinity, the reworked capacity calculations provided by the Highway Authority add weight to this view and to the conclusion that an alternative highway solution should be sought.

Masterplan

7.37 The solution shown on the master plan (Map 5) presents an opportunity to rationalise access arrangements to land rear of the airship sheds. Under such an arrangement, access to the employment land would be achieved via the southern arm of the relief road and then a spur into the site. The effect of this is to reduce the overall requirement for new road building in the locality.

7.38 The DSA currently has its own dedicated access on to Harrowden Lane, feeding north bound traffic towards Cardington village and then left to the Southern Bypass. The relief road option shown on the master plan affords direct access from the DSA to the southern bypass dumb bell roundabout thus removing heavy traffic from rural roads. It also affords much easier access to the A600 southbound.

7.39 The master plan identifies the future use of Paul Waller Avenue as a dedicated cycle/footpath linking to the existing strategic cycleway on Harrowden Lane.

7.40 The nature of the operation at the DSA means that there could be a conflict between large vehicles entering and exiting the site and adjacent new residential areas. This will need to be considered in the design. The solution shown on the master plan achieves significant separation between the relief road and adjacent housing.

7.41 Once re-routed, the existing stretch of the A600 from the Bedford Southern Bypass to the Shortstown southern roundabout will be traffic calmed to discourage non-essential through traffic. Severing the road in the village is an option. However, this would seriously inconvenience some existing Shortstown residents and may lead to an increase in traffic along Greycote and South/North Drive generated by those living in the converted Shorts building and adjacent properties that cannot be accessed from the relief road. The preferred option is to traffic-calm the road in the first instance and monitor the amount of non-essential through traffic. If it transpires that levels are high then in consultation with local residents the option to sever the road can be taken, although public transport access may need to be retained.

7.42 The junction where the relief road meets Harrowden Lane will require careful consideration to ensure that 'rat running' towards Cardington village is discouraged.

7.43 The internal road layout and the impact on the road network south of the A421 will need to be agreed with Bedfordshire County Council as Highway Authority. The impact on the road network north of the A421 will need to be agreed with Bedfordshire County Council and Bedford Borough Council as Highway Authority. The impact on the A421 Trunk Road will need to be agreed with the Highway Agency as the Trunk Road Highway Authority. A Transport Assessment will be required for all Highway Authorities to ascertain the full impact of the development on the existing road network and early discussions are advised. A Travel Plan will be required for the new school and for any employment uses that meet the criteria outlined in PPG13. The scope of the Transport Assessment should be agreed with the Highway Authorities in the first instance.

Footpaths/cycle routes

7.44 PPG13 promotes travel by means other than the private car. It identifies walking as the most important mode of travel at the local level and which offers the greatest potential to replace short car trips. Amongst other things, PPG13 advises local authorities to:

- Pay particular attention to the design, location and access arrangements of new development to help promote walking as a prime means of access and
- Review existing provision for pedestrians, including the links between key uses where the needs and safety of pedestrians will be given priority.
- Create more direct, safe and secure walking routes and ensure that the personal security concerns of pedestrians are addressed.
- Promote pedestrian friendly road crossings.
- Promote pedestrianisation schemes where vehicle access is restricted or prohibited.
- Promote provision of missing links in the rights of way network.
- Encourage provision of highly visible and integrated pedestrian routes.

7.45 PPG13 also identifies the potential for cycling to replace short car trips. Local authorities are advised to:

- Review existing provision for cyclists in order to identify networks and routes along which the needs and safety of cyclists will be given priority.
- Influence the design, location and access arrangements of development to ensure it promotes cycling.

- Seek the provision of convenient, safe and secure cycle parking where appropriate.
- Seek the provision of integrated cycle routes to promote personal safety.
- Assist in the completion of the national cycle network as well as promote local networks.

7.46 The development at Shortstown presents an opportunity to build footpath and cycle routes into the layout east of the road but should also consider links to community facilities from the existing estate. With the development of the village centre and new school east of the current alignment of the A600, existing residents will be drawn through the estate to reach the majority of essential facilities. The Council is keen to see pedestrian and cycle access improvements on main routes through Shortstown to encourage their use and discourage the use of the car for local journeys. The Council will expect the Transport Assessment to demonstrate how safe pedestrian and cycle access between the existing housing area and village centre will be achieved. The Transport Assessment should also demonstrate how links will be achieved to Bedford itself by cycle and foot; new links may be created and/or contributions towards upgrading existing facilities may be required.

7.47 In the new housing area, footpaths and cycleways should facilitate easy access to the village centre. The comparative distances and journey experience should encourage residents and those working in the employment area to walk to the centre rather than take the car. Routes should be direct, attractive and safe. Particular attention should be given to the design of crossing points on the re-routed A600. The walking and cycle network should also be designed with regard to the needs of those with impaired mobility or vision.

7.48 Safe and direct footpath and cycle routes to employment areas within and outside the brief area will be expected. This may include financial contributions towards off site works.

7.49 Links to the wider footpath and cycleway network will also be encouraged (see Map 4).

7.50 Cycle parking will be required at appropriate locations throughout the development.

Public transport

7.51 Whilst this development opportunity will provide additional community facilities that enable the

village to become more self sufficient, there will still be a need for residents to travel to Bedford. Whilst some will walk and cycle, others will rely on motorised transport. An efficient public transport service will encourage residents to leave the car at home and the development should be designed to give priority to buses. New housing areas should be regularly served by public transport; advice on bus routes should be sought from the County Council. The shift from the car to public transport will be encouraged by:

- incorporating infrastructure such as bus shelters.
- contributing to the operational cost of extending bus services into the area. The developer will need to enter into discussion with the bus operator to establish how existing services in Shortstown can be extended to run through the new residential area. These arrangements should be in place before the grant of any outline planning permission.
- ensuring that the maximum walking distance to a bus stop from each dwelling does not exceed 400m.
- providing bus priority at signalised junctions within the development (including the developer funding of transponders on service vehicles if required).
- seeking opportunities to achieve bus links to and from the park and ride site at Cardington Cross.

Parking

7.52 In response to Government guidance in PPG3 Housing, it will be important for the site to minimise the provision of off-street parking across the site to achieve more sustainable communities. Numbers of parking spaces will be provided in accordance with the Council's adopted standards and guidance in PPG3. Courtyards may cater for parking requirements, especially in higher density areas. In general terms, and to ensure security, car parking areas should:

- be overlooked
- have dusk to dawn lighting
- not be part of a through route
- generally provide parking for no more than 10 cars (or larger parking areas to be split into smaller groups).

Telecommunications

7.53 It will be important to install communications equipment integral with the development of new areas of housing and employment and with the development of the village centre and other public facilities. Cabling sufficient to provide broadband services and community access to satellite services will be required to ensure that the development as a whole is able to take advantage of these communications without the need for subsequent disruption and the proliferation of aerials and dishes.

Energy

7.54 The Council is keen to promote the efficient use of scarce energy resources. In particular, it will seek to achieve energy efficient residential layouts and minimise waste. The Council will require the planning application for the development to specifically address energy, natural resource and waste minimisation impacts.

7.55 As part of the outline planning application the developer will be required to prepare an energy statement showing how it is proposed to take account of the effect on energy consumption of:

- building grouping and orientation
- the location of principal habitable rooms
- the use of shelter belts and landscape features to protect homes from the chilling effects of prevailing winds
- the thermal insulation of the building fabric
- the efficiency and control of heating systems
- the ventilation characteristics of the dwelling
- the solar gain characteristics of the dwelling
- use of secondary/recycled aggregate in the construction process.

7.56 All dwellings will be required to meet the requirements of the Building Research Establishment's Eco Homes scheme and achieve a 'very good' rating. In seeking to ensure that the dwellings meet this standard the Council will enter into negotiation to incorporate solar panels into a proportion of dwellings. Similarly the BREEAM standard should be applied to employment uses. The principles contained in the energy statement will need to be reflected in the detailed design guidance which is

to be approved before the issue of outline planning permission.

7.57 It will be a condition of the outline planning permission that reserved matters submissions should accord with the energy statement and demonstrate how the matters covered in the statement have been addressed in the design.

Waste management

7.58 In line with the Council's adopted policy, the Council will seek to minimise waste and conserve water through simple and practical ways such as by encouraging the composting of garden waste and reuse of surface water run-off in garden watering. The Council will negotiate for all new dwellings built with gardens (ie. not flats) to be provided with compost bins and water butts. Compost bins should have a capacity of at least 200 litres for houses with up to 2 bedrooms and at least 300 litres for houses with 3 or more bedrooms. Water butts should have a capacity of at least 150 litres for houses with up to 2 bedrooms and at least 200 litres for houses with 3 or more bedrooms. Consideration should also be given to the provision of a 'bring site' to enable the collection of a wide range of recyclable materials. Detailed designs should make provision for three waste receptacles at two sites to be agreed.

Surface Water

7.59 Any increase in the impermeable area within a catchment will increase the risk of flooding downstream unless precautions are taken. Sustainable drainage systems aim to replicate the natural drainage of the land, to 'spread out' the flood peak to reduce the risk to property. Where appropriate, the Council will expect the development to incorporate a range of measures to manage surface water such as:

- on site collection and storage of rainwater for irrigation and car washing including water butts
- soakaways, swales and filter strips and retention ponds in order to increase filtration and natural discharge
- the use of permeable paving slabs to allow water to permeate, rather than simply run off
- treatment of the open space network, in terms of incorporating landscapes which do not need irrigation in the summer months.

7.60 Trials on land west of the A600 revealed that the potential to incorporate sustainable drainage systems was limited. Similar trials should be undertaken east of the A600 before the use of SDS is ruled out.

7.61 A strategy for the management of the water system should be submitted and approved by the relevant parties (the Internal Drainage Board; Anglian Water and the Environment Agency), prior to development commencing on site. Any storm water balancing facility (such as that shown on the master plan at the site of the former sewage works) must be well outside the flood plain of the Elstow Brook and will need to be adopted by an appropriate authority to ensure its long term security. The developer will need to satisfy the board that the new road will not restrict the flood flows or the normal operation of the flood plain. Additionally the Environment Agency has offered the following advice regarding surface water drainage:

- A scheme for the provision and implementation of pollution control to the water environment shall be submitted and agreed in writing with the local authority prior to the commencement of any development.
- Waste from the development must be re-used, recycled or disposed of in accordance with waste management legislation and in particular the Duty of Care.
- Only clean uncontaminated surface water should be discharged to any soakaway, watercourse or surface water sewer.
- All surface water from roofs shall be piped direct to an approved surface water system using sealed down pipes. Open gullies should not be used.

Contamination

7.62 A site-specific assessment of the actual contamination (including that of groundwater) and potential for harm must be submitted with the planning application. The report must detail any proposed remediation works and these must be approved before the development is commenced. Due to historical, potentially-contaminative activities previously undertaken at this site, the Environment Agency requires a risk assessment to be carried out. This should address the potential for contaminant impact on controlled waters.

7.63 The Agency recommends that piling on contaminated sites underlain by aquifers is avoided where possible, and that non-invasive methods such as rafts should be used instead. Where there is no alternative to piling, a method should be selected that minimises the risk of groundwater pollution or gas migration. Mitigation measures and/or environmental monitoring may need to be incorporated into the design. The method selected should be presented in a 'foundation works risk assessment report'.

Ecology

7.64 The presence of protected species on the site is a material consideration when considering a development proposal which, if carried out, would be likely to result in harm to the species or its habitat. The Council will require the developer to support the planning application with a Phase I Habitat Survey, survey of protected species, breeding bird survey and assessment of species rich grassland. Barn owls are known to be present and the loss of nesting, roosting and foraging areas should be fully mitigated to ensure that the barn owls are retained in the locality. This may require the identification and management of land beyond the development brief boundary to provide the necessary foraging habitat. It will be necessary to liaise with English Nature to agree appropriate mitigation for protected species before planning permission is granted.

7.65 Following public consultation, it has come to light that Great Crested Newts may be present within 300m of the north western boundary of the site. Prior to the granting of planning permission, re-survey will be required. If Great Crested Newts are found, an assessment will need to be undertaken to determine how they will be affected by the development. If they are likely to be adversely affected, mitigation measures will need to be agreed with English Nature.

7.66 Additionally, there has been support locally for better management of at least part of the site for the benefit of ecology, especially as some loss will be experienced as a result of the development of the northern part of the former railway corridor. The remaining length of the railway corridor is therefore identified for this purpose (see Map 5). Ideally this should be managed as a Local Nature Reserve with public access. There is scope for this project to be extended in a southerly direction should the land become available. A management plan for this area will be required.

Archaeology

7.67 In accordance with PPG16, implications for archaeology will need to be considered as part of the development proposal and will be dealt with according to the intrinsic importance of remains or features identified.

7.68 If nationally-important deposits are identified, it may be necessary to preserve these in situ. This might be achieved through the location of public open space above any such deposits.

7.69 In cases where archaeology of regional or local importance is concerned, it may be more appropriate to preserve these deposits by record. This is achieved through archaeological excavation and recording prior to development to a specification agreed with the County Council's Archaeological Officer.

7.70 Further investigations may indicate that it is necessary to maintain a watching brief during development where intrusive processes may impact on less important archaeological deposits. This would be undertaken by a suitably qualified archaeologist and would allow for the recording of any archaeology exposed during construction.

7.71 Prospective developers should discuss the requirement for a Field Evaluation with the County Council's Archaeological Officer to cover the application site boundary.

7.72 In addition to this, the Council supports the suggestion by English Heritage that an Industrial Archaeologist be employed to record the remaining buildings of the former RAF site before any demolition occurs. This is in recognition of the unique history of the area and to ensure that the detail of the site's layout and former function is not lost. The Borough Council will expect this to be funded by the developer.

Existing Shortstown Estate

7.73 The master plan deals with the developable land east of the A600. However, planning proposals will also have to address the existing estate in order to ensure greater levels of integration and social cohesion. The need for consideration of existing environmental quality in Shortstown was recognised by the Local Plan Inspector in his report and is therefore included in Policy H9.

Analysis of Environmental Quality

7.74 The Shortstown estate was developed soon after the Shorts brothers established the Airship Works in 1917. This original part of the estate largely consists of a crescent west of the Shorts building. Later phases of development, fuelled by the need to house RAF personnel, occurred to the south and west.

7.75 Despite the incremental development of the estate, it has a cohesive structure derived from a strong grid like pattern. This is based around a central axis running from the crescent to the east to the Lower School to the west. Roads intersect this axis at regular intervals along its length. Only to the south, in the later phases of the development, does the interconnected street pattern fragment with the introduction of culs de sac.

7.76 The estate would appear to have been little influenced by original field boundaries or the wider surrounding landscape. The northern boundary of the development, for example, has a long straight edge running parallel with Old Harrowden Road with no landscaping other than that found in rear gardens. This is not untypical of the other edges of the development. The combination of long straight unlandscaped edges, coupled with inward facing development, creates a hard unsympathetic relationship between the countryside and the built up area. In contrast, the eastern edge of the development has an unavoidably hard edge stemming from the A600 passing between the estate and the Shorts building.

7.77 Currently, the Shortstown estate is expanding to the south west. The completion of 'site 5' will 'round off' this part of the estate to make a more regular shape. A potential hard edge to this development has been avoided by planting a large swathe of public woodland round the south-western edge.

7.78 Subtle variations in street pattern, plot depth and architectural form distinguish the phases of development. However, common elements include:

- suburban character
- semi detached dwellings set back from road in rectangular plots
- front garden depth ranging from 4 to 20 metres
- limited definition between the public and private realm in places
- mixture of on street parking, garage courts and parking within curtilages.

7.79 Recreational and community facilities serving the Shortstown development have traditionally been located east of the A600 within the MoD site. Consequently, facilities and areas of open space within the development are limited. The only significant playground area lies south of the main axial route between the backs of properties.

7.80 Although Shortstown has a high level of social housing provision, many occupants have exercised their right to buy and private housing is now pepper-potted throughout the social rented areas.

Summary of Issues

7.81 The high proportion of social housing within the estate over recent years has created a negative image of Shortstown. The existence of owner-occupied dwellings within the social housing areas is sufficient to dictate that it would be difficult to redevelop any of the blocks to achieve a more balanced mix within the estate.

7.82 There is a severe shortage of open space provision for formal and informal recreation within the existing estate. This is already partially being addressed through the securing of playing fields and a skateboard park to the south of the built up area. The 'site 5' development is also generating a linear public woodland to the south west. On completion, these facilities will make a marked improvement to the situation within the existing estate. The northern edge, however, still suffers from an under-provision of open space and consideration should be given to upgrading existing areas.

7.83 There is a potential speeding problem within the estate stemming from the long straight roads, wide verges and open vistas. At present, the only deterrent is cars parked on the street.

7.84 The original tranche of the Shortstown development was built at a time when car ownership was not prevalent. The design of this part of the estate is such that there are difficulties in incorporating the motor car. On-street parking is common in this area and causes congestion. The problem is exacerbated at present by the A600 which cannot accommodate on street parking.

7.85 In addition to the shortage of open space provision, there is a lack of shops and community facilities within the estate. Shortstown is currently an unsustainable and culturally poor community.

7.86 Landscaping within the public realm is currently limited. The appearance of the development is suburban with the 'green' elements stemming from planting contained within front gardens.

Programme of Improvements

7.87 It is important that when the new development comes forward at Shortstown, that the existing community feels it is an expansion of their community rather than a new, separate entity. The master plan has been carefully designed to facilitate movement between the two communities, ensure the built form integrates and provide common focal points and services. However, it is recommended that a programme of improvements to the existing estate is brought forward at the same time as the new development commences to engender pride and show commitment to raising the quality of the existing settlement. Potential for improvement is shown on Map 7.

7.88 The suggested measures outlined below are expected to be subject to full public consultation and developed in partnership with the local residents and business community. Policy H9 identifies that each site will be expected to contribute towards environmental improvements in Shortstown in accordance with Policy H9. Suggested improvements are:

- introduction of a 20mph zone throughout the whole estate. This will ensure the traffic speeds within the existing estate are consistent with the maximum target speeds of the new development.
- introduction of Home Zone concepts into culs de sac and minor roads. These may include changes in carriageway and footpath materials to provide a unified, single level space, narrowing of entrances, and multi functional spaces. The benefits of this approach are well documented but can include: improving feeling of safety in residential areas; promoting greater use of public spaces; making streets more attractive; and creating a sense of ownership.
- retention and further upgrading of post office. Improve movement routes to new village centre to east of Shorts building, helping to create a sustainable community.
- create a public woodland along the northern edge of the estate to improve informal recreation provision and create a soft edge to the development.

- redevelop the Shortstown Lower School site for private dwellings to lower the proportion of social housing within the estate. Incorporate strong structural landscaping elements to create a soft edge to the development.
- consider (in negotiation with BPHA and other Registered Social Landlords) potential for redevelopment of parts of the existing settlement.
- public work of art that reflects and reinforces the character of Shortstown, aiding legibility and improving local distinctiveness.
- develop a Shortstown Trail which highlights the interesting features of the existing and proposed development and surrounding environment. The

Cardington Sheds, Shorts building, Paul Waller Avenue, public woodland etc are elements which could be included. This trail would link into existing footpaths around Harrowden and Cardington villages. The trail would have innovative works of art and information points at key locations along its length. The works of art should have a local theme and be designed by local artists/members of the community.

- Structural 'greening' of major routes through the estate. Ideally this will take the form of treed boulevards, although it is acknowledged that this may be difficult to implement where verges are now in private ownership. This will improve legibility within the estate and raise the quality of the environment.

8 Implementation

Key objectives

8.1 The key implementation objectives that developers will be required to address are to:

- secure, by way of binding agreement and other mechanisms as appropriate, the development of the site in accordance with the Local Plan and this brief
- adopt the appropriate mechanisms for achieving and maintaining a high-quality, distinctive development with a full range of appropriate infrastructure, affordable housing and facilities within acceptable time limits.

Outline planning application

8.2 In order to secure a comprehensive integrated approach to the development of land east of the A600 the Council expects an outline planning application for the developable area to be supported by the following.

- Development master plan
- Density Analysis
- Supplementary design guidance (to be approved before the issue of outline planning permission)
- Land budget for all uses (with floorspace for non-residential elements)
- Landscape assessment, strategy and master plan for the development brief area (to be approved before the issue of outline planning permission)
- Contractual arrangements for the delivery of public transport improvements
- Transport Assessment and Travel plans where necessary
- Stage 1 Road Safety Audit and NATA assessment for any highway improvements being proposed on the trunk road network
- Strategic highways plan
- Telecommunications strategy
- Energy statement
- Phase 1 habitat survey, Breeding Bird Survey, Survey of Protected Species (including Great Crested Newts off-site but within 300m) and identification of species rich grassland

(mitigation to be agreed with English Nature before the issue of outline planning permission)

- Archaeological field evaluation if required
- Industrial Archaeologist's survey
- Management plan for railway corridor (proposed nature reserve)
- Water management strategy including a scheme for the provision and implementation of surface water drainage
- A scheme for the provision and implementation of investigation, recording and remediation of contamination
- A scheme for the provision and implementation of pollution control to the water environment
- A risk assessment to address the potential for contaminant impact on controlled waters
- A Foundation Works Risk Assessment Report where appropriate
- Environmental monitoring scheme to control nuisance (noise, dust etc) during construction
- It is likely that a landowners' agreement will be necessary to demonstrate the ability to deliver the comprehensive plan
- Draft S106/S278 legal agreements.

Planning obligations and conditions

8.3 The following matters will need to be dealt with by condition or, if necessary, by planning obligation:

- The timing and phasing of the development
- The delivery of the A600 diversion including the transfer of land to the Highway Authority and contractual commitment to completion.
- Review of capacity at the lower school seven years after development commences to determine delivery/capacity of later stages
- Financial contribution towards environmental improvements in Shortstown west of the A600
- Reserved matters application to be accompanied by a statement to demonstrate how the supplementary design guide, energy strategy and landscape strategy have been adhered to

- The provision and timing of all elements of the village centre including education, retail, community, place of worship and other elements
- Provision of house for use by Christian key worker (by completion of the 50th dwelling) until the permanent facility is available
- The provision of on and off site highway improvements
- The provision of bus facilities and contributions to bus services
- The provision of funding to undertake identified monitoring and later modifications of the highway network (eg. closure of through route on current alignment of A600)
- Travel plans for the school and employment uses where appropriate
- The provision of telecommunications resources
- The provision of outdoor space for sport, children's play and amenity space
- Contribution towards the enhancement/extension of community pavilion on land south of Greycote
- Contribution to public art
- Affordable housing provision
- Ongoing management and maintenance of community facilities, including commuted sums as necessary for the amenity and landscaped areas, public open space, play and youth facilities, nature reserve, roads, footpaths and cycleways and balancing facilities.

8.4 It is intended that a single, comprehensive outline planning permission and associated legal agreements should give certainty to the comprehensive development of the whole area. In addition, this is required to engender the confidence of both the local planning authority and, importantly, the local community who face major upheaval and change as a result of these proposals.

8.5 All elements of commercially beneficial development need to provide and contribute to the provision of necessary services and facilities proposed by this brief. This will necessitate landowners forming a meaningful partnership or other legal arrangement at least in order to establish and deliver the principles of development described above.

Phasing

8.6 Development at Shortstown east of the A600 can be broken down into four phases (see Map 8).

Phase 1

8.7 A limited number of dwellings (no more than 150) will be permitted prior to the opening of the school and this will form the first phase of residential development. It will focus around the conversion and extension of the Shorts building, and include land directly to the north and south, the pedestrian area rear of the Shorts building and the community facilities. Lower school provision will need to be made in temporary accommodation on the existing school site and a safe crossing point will need to be provided on the A600 (both to be funded by the developer if necessary). This will take the form of a signalised crossing and will also afford access from the west to the new community facilities east of the road. Access to the first phase development will be via a new temporary roundabout on the A600.

8.8 Construction of the relief road and the lower school/playing fields will need to commence during this phase to ensure their availability at the start of Phase 2.

Phase 2

8.9 Phase 2 will see the closure of the existing school and delivery of the new, centrally-located school. The existing A600 will be traffic calmed (or closed) to discourage through traffic and therefore the need for the remainder of the relief road is triggered. The new school and the relief road are inextricably linked and both will be built and available before the occupation of the 151st dwelling. At this stage the temporary roundabout on the existing A600 can be removed and replaced with amenity space. Safe crossing points on the re-routed A600 will be required.

8.10 The developers will be required to enter into a planning obligation to achieve the funding and timing of the relief road. It is likely that this obligation will necessitate that landowners enter into a landowners' agreement. This agreement will be in place before the issue of any outline planning permission.

8.11 Phase two makes provision for a further 870 dwellings (approximately) on land both west and east of the relief road along with the neighbourhood play

SHORTSTOWN PHASING PLAN

PROVISION OF PRINCIPAL ELEMENTS

PHASE 1	PHASE 2	PHASE 3	PHASE 4
<ul style="list-style-type: none"> • 150 dwellings • Temporary classrooms at Shortstown Lower School • Financing and construction of new school commences • Safe crossing point on the A600 • Temporary access roundabout on the A600 • Integral and structural landscaping • Public square rear of Shorts building • Construction of relief road commences • Environmental Improvements in Shortstown (part) • House available for Christian key worker until permanent facility available • House or other temporary healthcare facility to be available prior to the occupation of the first dwelling <p>In addition serviced sites will be made available for the doctors' surgery and pharmacy, shop, pub and ATC centre.</p>	<ul style="list-style-type: none"> • Approx 870 dwellings • New lower school and nursery before the occupation of the 151st dwelling • Relief road open before the occupation of the 151st dwelling • Traffic calming of the existing A600 • Removal of temporary access roundabout • Environmental improvements in Shortstown (remainder) • NEAP, open space, pitches east of the A600 • Revised access to DSA site • Off-site highway improvements • Community centre space/contribution/place of worship • Employment land (1.5ha) • Nature Reserve 	<ul style="list-style-type: none"> • Approx 130 dwellings • Structural landscaping 	<ul style="list-style-type: none"> • Structural landscaping • Employment land (1.5ha)

area/pitches and associated open space and additional community meeting rooms in the village centre.

8.12 The existing school site can be redeveloped.

8.13 The employment land east of the realigned A600 can come forward.

Phase 3

8.14 This phase completes the development of the Bellway and Forthprice/Potton land. It secures the medium density development around the edge of the site amounting to approximately 130 dwellings.

Phase 4

8.15 This represents the development of the surplus DSA land amounting to approximately 1.5ha of employment land.

8.16 The phasing of the development is summarised in the table on page 35.

8.17 The Council will support an alternative phasing

of the development that combines 1 and 2 above and provides the school and relief road 'up front'. This dispenses with the need for, and therefore costs associated with, the provision of the temporary classrooms at the existing school, the signalised crossing on the A600 and the temporary roundabout on the A600 to serve Phase 1.

8.18 The phasing of development is an instrument to seek to ensure the provision of facilities and services alongside residential and employment development. Although it has been assumed that Shortstown will contribute 260 dwellings to meet structure plan requirements by 2006, phasing should not be regarded as seeking to control or limit the pace of development if higher build rates can be achieved without social detriment and unacceptable community disruption. Proposals that take the total level of development beyond 1000 dwellings will require the agreement of the Local Education Authority to ensure that capacity is available at the school at that time. A review of capacity at the school will be undertaken seven years after the commencement of development so as to inform the delivery and capacity of the later stages.

Appendix 1 Local Plan Policies

The following local plan policies relate to the area covered by this Brief

Policy

Strategy

- S6 Settlement Policy Areas
- S7 Rural settlement hierarchy
- S9 Provision of community facilities

Natural Environment

- NE2 Protected species
- NE4 Trees and hedges
- NE5 Tree Preservation Orders
- NE6 Woodland
- NE7 Wildlife corridors
- NE8 Replacement of natural history sites
- NE9 Management Agreements
- NE12 Retention of landscape feature
- NE13 Safeguarding and future management of landscape features
- NE16 Flooding
- NE20 Landscape improvement
- NE21 Forest of Marston Vale
- NE24 Protection and enhancement of water resources
- NE25 Air Quality
- NE28 Land contamination

Built Environment

- BE3 Self-sustaining communities
- BE4 Mixed use in residential areas
- BE5 Area of Special Restraint
- BE8 Energy efficient layouts
- BE24 Archaeology
- BE25 Archaeology
- BE29 High standard design
- BE30 Material considerations
- BE31 Statement of design principles
- BE32 Development on the edge of urban areas
- BE33 Gateways
- BE35 Quality in residential layouts
- BE37 Overdevelopment
- BE38 Landscaping
- BE39 Landscaping
- BE40 Landscaping
- BE43 Public spaces
- BE44 Public art

Policy

- BE45 Community safety and crime prevention
- BE48 Accessible environments
- BE49 Access provision

Housing

- H9 Shortstown
- H24 Development within SPA villages
- H31 The provision of Affordable Housing
- H32 The mix and range of housing type and sizes
- H34 Mobility housing

Employment

- E1 Proposed employment sites
- E6 Land at Shortstown
- E14 Working from Home
- E15 Business uses in residential areas
- E16 Affordable floorspace
- E17 Business uses within SPAs

Shopping

- SH7 New local shopping facilities

Transport

- T2 Highway network improvements
- T4 Highway Impact
- T6 Public transport infrastructure
- T7 Developer contributions
- T13 Pedestrian routes
- T14 Cycle routes
- T15 Parking
- T20 Safety and traffic calming
- T21 Accessibility for the disabled

Leisure & Recreation

- LR10 Access to countryside
- LR15 Provision of outdoor playing space
- LR16 Provision of children's play space
- LR17 Provision of general amenity open space
- LR19 Provision of new community facilities

Utilities

- U2 Floodplain
- U3 Sewage disposal

Appendix 2 Urban Design Objectives

The purpose of this appendix is to show how each of the urban design principles will be applied to the main elements of the development.

Village Centre

The village centre should be developed in accordance with the following design principles

Character

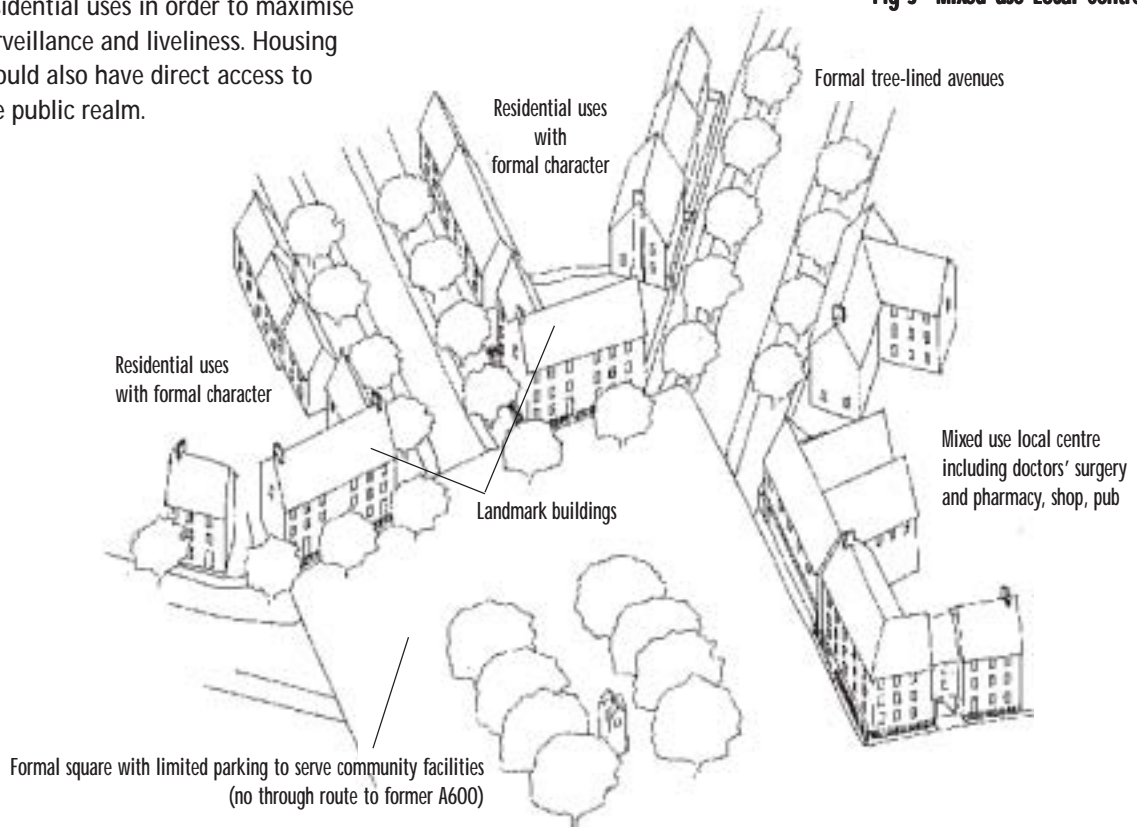
- The village centre provides the opportunity to create a form of mixed use development based on a traditional village square. Building scale and landmark features should be used to reflect the importance of this area as a focus for community activities.
- Formally laid out avenue tree planting will set the theme for the rest of the development and will, along with other measures, prevent vehicular access through the central square between the former A600 and the relief road.
- It is essential that residential use forms an integral part of the centre and that, where appropriate, this is located above non-residential uses in order to maximise surveillance and liveliness. Housing should also have direct access to the public realm.

- Use local materials, building methods and details in order to enhance local distinctiveness.
- Where appropriate, narrow plot widths should be used to promote more active frontages, increase the sense of enclosure and allow for higher densities.
- A public square should provide seating areas and parking areas and a more formal focus to the village centre. The space should be overlooked by buildings, but should also have tree planting to provide a degree of enclosure and shade.

Continuity and enclosure

- Development should be arranged in a series of streets and blocks and thus create a clear distinction between public and private space.
- Street frontages should be continuous with a minimum of blank walls and gaps between buildings thus maximising the extent to which the street is overlooked. Buildings should front onto the public square to enhance liveliness and

Fig J Mixed use Local Centre



community safety. Within the centre and with the exception of the school and health centre, buildings (including community and retail uses) should be fully integrated into the frontage, and should not 'stand alone' in their own grounds.

- Buildings and trees should be used to provide a strong sense of formality and definition. Private space, including service areas, should be enclosed by backs of buildings.
- The primary access to buildings should be from the street and building entrances should be easily identifiable.

Quality of the public realm

- The village centre should enclose a new formally designed totally pedestrian public square able to support a wide range of activities. The square may accommodate limited parking at the eastern end to serve the local facilities. The space should encourage liveliness and a sense of human scale.
- Building entrances should be at frequent intervals so as to create activity.
- The fronts of buildings should be orientated around the main pedestrian flows to enhance security and vitality.
- Works of art and well designed street furniture should be used to create identity and enhance the sense of place. Extensive seating opportunities should be incorporated into the design.
- Street furniture should be co-ordinated in order to avoid clutter. Maintenance, resistance to vandalism and access to underground services should also be considered.
- Account should be taken of the microclimate including sunlight, daylight, wind, temperature and frost pockets.

Ease of movement

- The village centre should be a major intersection for footpath and cycle networks.
- Higher residential densities should be located around the Shorts building and the village centre close to local facilities.

Legibility

- Legibility should be enhanced by using larger scale civic /community buildings to define public

spaces, by the use of landmark buildings and by careful orientation in terms of views and vistas.

- Legibility should also be enhanced through the detailing of buildings, street furniture and floor materials.

Adaptability

- Consideration should be given to floor to ceiling heights and building depths. These influence how easy it is to convert a building to other uses. It should be recognised that the composition of the centre will change over time and this should be facilitated in the building design.

Diversity

- For the centre to be successful it must accommodate a range of different community, retail and residential uses. This will support a wide range of services during the day and in the evening.

Employment area

Character

- The design and quality of the buildings and landscaping should be of the highest order and should add character and identity.
- New and existing planting will soften the visual impact of the buildings and avoid a hard urban edge being formed.

Legibility

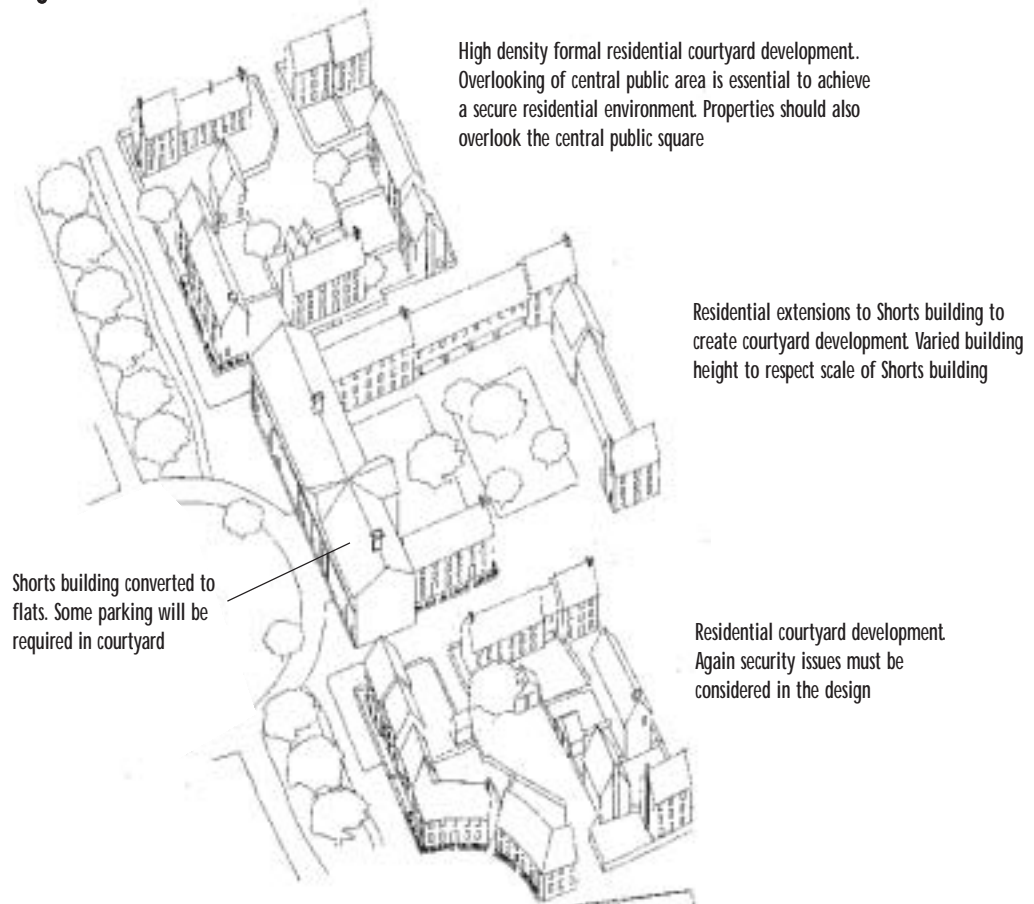
- The building designs and landscaping should incorporate landmark features to assist legibility from within and beyond the village.

Residential districts

Character

- A variety of dwelling types, sizes and styles should be provided to ensure that the varied needs of the community are met and that diversity is achieved.
- The character of the residential districts should reflect the character of existing housing areas within Shortstown as well as Old Harrowden Road, Harrowden Lane and Cardington. It should reflect local building

Fig K Shorts Building



forms including distinct house types, spatial relationships, boundary treatments, building lines, roof slopes, window types and gardens.

- Two distinct character areas have been identified – the formal and urban character area and the semi-rural character area:

The formal urban character area

Here it will be appropriate to reflect some of the features of the original Shorts housing and the formal geometrical style of the existing estate. The development will be expected to reflect the urban reference points set out in paras 6.10 - 6.14 of the main text. (see Figure K)

The semi-rural character area

Semi-rural character is influenced by development in Cardington village, Old Harrowden Road and Harrowden Lane. This development will be expected to reflect the semi-rural reference points given in paras 6.15 - 6.20 of the main text. (see Figure L)

Continuity and enclosure

- Development should be arranged in series of streets and blocks and thus create a distinction between public and private space.
- Street frontages should have a minimum of blank walls and gaps between buildings thus maximising the extent to which the street is overlooked. Buildings should also front onto the street and public open space and squares to enhance liveliness and community safety. This can be achieved by the use of separate slip roads where access is restricted eg from the relief road or from open space.
- The primary access to buildings should be from the street.
- Private spaces should be enclosed by the backs of buildings. Rear gardens should back on to other gardens rather than roads, footpaths or service areas. This will make them more secure.
- Where courtyard development is used, access to parking courtyards should be controlled by means of gates or by overlooking.

- Parking/garage areas at the rear of dwellings should be avoided unless access to them is controlled by means of gates or by overlooking.
- Clearly define public space by means of walls, fences, railings, gates, arches, signage and paving
- In the case of housing, position the less private rooms (such as the living room) so as to face the street, especially at ground floor level.

Quality of the public realm

- Streets and spaces should be overlooked in order to maximise natural surveillance. This is particularly important in the case of play areas, communal space and parking areas.
- Public space within residential areas should include footpath and cycle corridors as well as larger green open spaces, together with informal recreation facilities. There should be extensive seating opportunities and seating must be provided adjacent to equipped play areas.
- Works of art and well designed, high quality, durable street furniture and surfacing materials should be provided to create identity and enhance the sense of place. Maintenance, resistance to vandalism and access to underground services should also be considered.

Ease of movement

- The layout of housing areas should maximise accessibility to public transport. Higher densities should relate well to public transport routes.
- In general vehicles, pedestrians and cyclists should share the same movement corridor except in dedicated pedestrianised zones where motor vehicles will be prohibited.
- All dwellings should be within 400m of a bus stop.

Legibility

- Use prominent buildings to enhance legibility. The Shorts building itself will be a dominant feature in the village centre. Consider how detailing of boundary treatments, surfaces, building materials, windows and doors etc can be used to make residential areas more legible.

Adaptability

- Public spaces should be designed so as to support a range of different uses and activities.

Diversity

- To promote social inclusion, social housing should be fully integrated into the development.

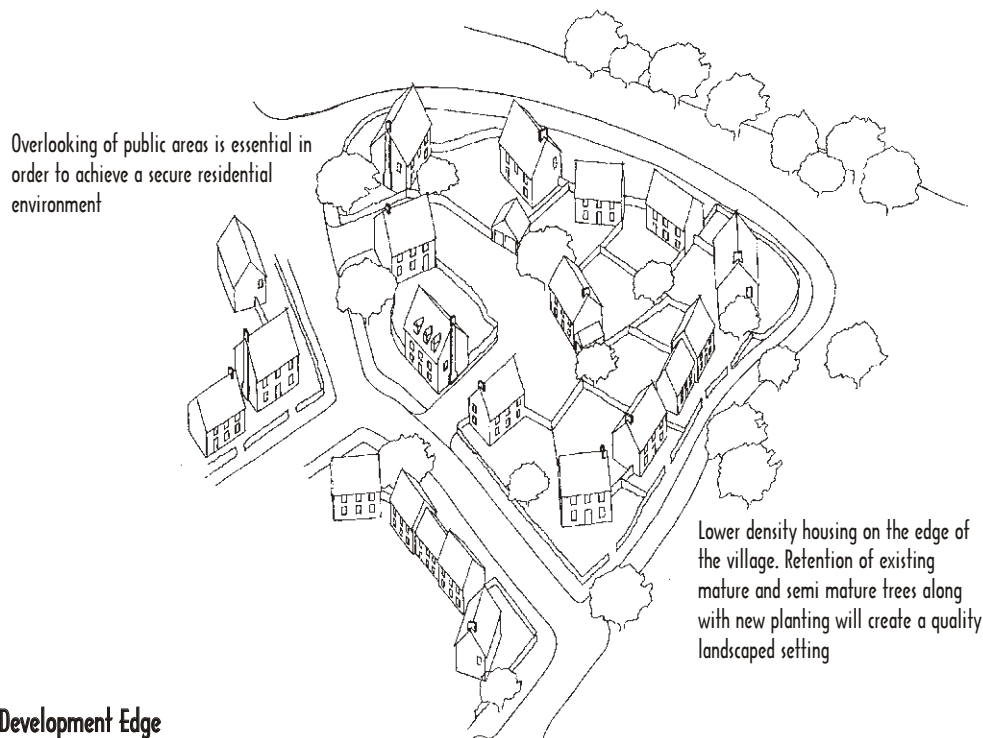


Fig L Development Edge

Appendix 3 Glossary

Accessibility

The ability of people to move around an area and to reach places and facilities, including elderly and disabled people, those with young children and those encumbered with luggage or shopping.

Activity Node

Concentration of activity at a particular point

Adaptability

The capacity of a building or space to be changed so as to respond to changing social, technological and economic conditions.

Building Line

The line formed by the frontages of buildings along a street. The building line can be shown on a plan or section.

Context

The setting of a site or area, including factors such as traffic, activities and land uses as well as landscape and built form.

Defensible space

Public and semi-public space that is defensible in the sense that it is surveyed, demarcated or maintained by somebody. An important concept in securing public safety in urban areas, defensible space is also dependent upon the existence of escape routes and the level of anonymity which can be anticipated by users of the space.

Diversity

Variety and choice through a mix of land uses.

Elevation

The façade of a building, or the drawing of a façade.

Enclosure

The use of buildings to create a sense of defined space.

Form

The layout (structure and urban grain), density, scale (height and massing), appearance (materials and details) and landscape development.

Human scale

The use within developments of elements which relate well in size to an individual human being and their assembly in a way which makes people feel comfortable rather than overwhelmed.

Landmark

A building or structure that stands out from its background by virtue of its height, size or some other aspect of design.

Layout

The way buildings, routes and open spaces are placed in relation to each other.

Legibility

The degree to which a place can be easily understood and traversed.

Live edge

Provided by a building or other feature whose use is directly accessible from the street or space which it faces; the opposite effect to a blank wall.

Local distinctiveness

The positive features of a place and its communities which contribute to its special character and sense of place.

Modal split

How the total number of journeys in an area or to a destination is split between different means of transport such as train, bus, car, walking and cycling.

Natural surveillance

The discouragement to wrong-doing by the presence of passers by or the ability of people to be seen out of surrounding windows. Also known as passive surveillance.

Node

A place where activity and routes are concentrated – often used as a synonym for junction.

Perimeter Block

A specific type of layout with private open space to the rear of the house and public open space to the front.

Permeability

The degree to which an area has a variety of pleasant, convenient and safe routes through it.

Public Art

Works of art visible to the general public, whether part of the building or free standing. Can include sculpture, lighting effects, street furniture, paving, railings and signs.

Public domain or public realm

The parts of a village, town or city (whether publicly or privately owned) that are available, without charge, for everyone to use or see, including streets, squares and parks.

Scale

The impression of a building when seen in relation to its surroundings, or the size of parts of a building which give it its sense of scale: at other times it is the size of the elements and the way they are combined. The concept is a difficult and ambiguous one.

Sustainable development

Defined as development which meets present needs without compromising the ability of future generations to achieve their own needs and aspirations.

Topography

A description or representation of artificial or natural features on or off the ground.

Urban design framework

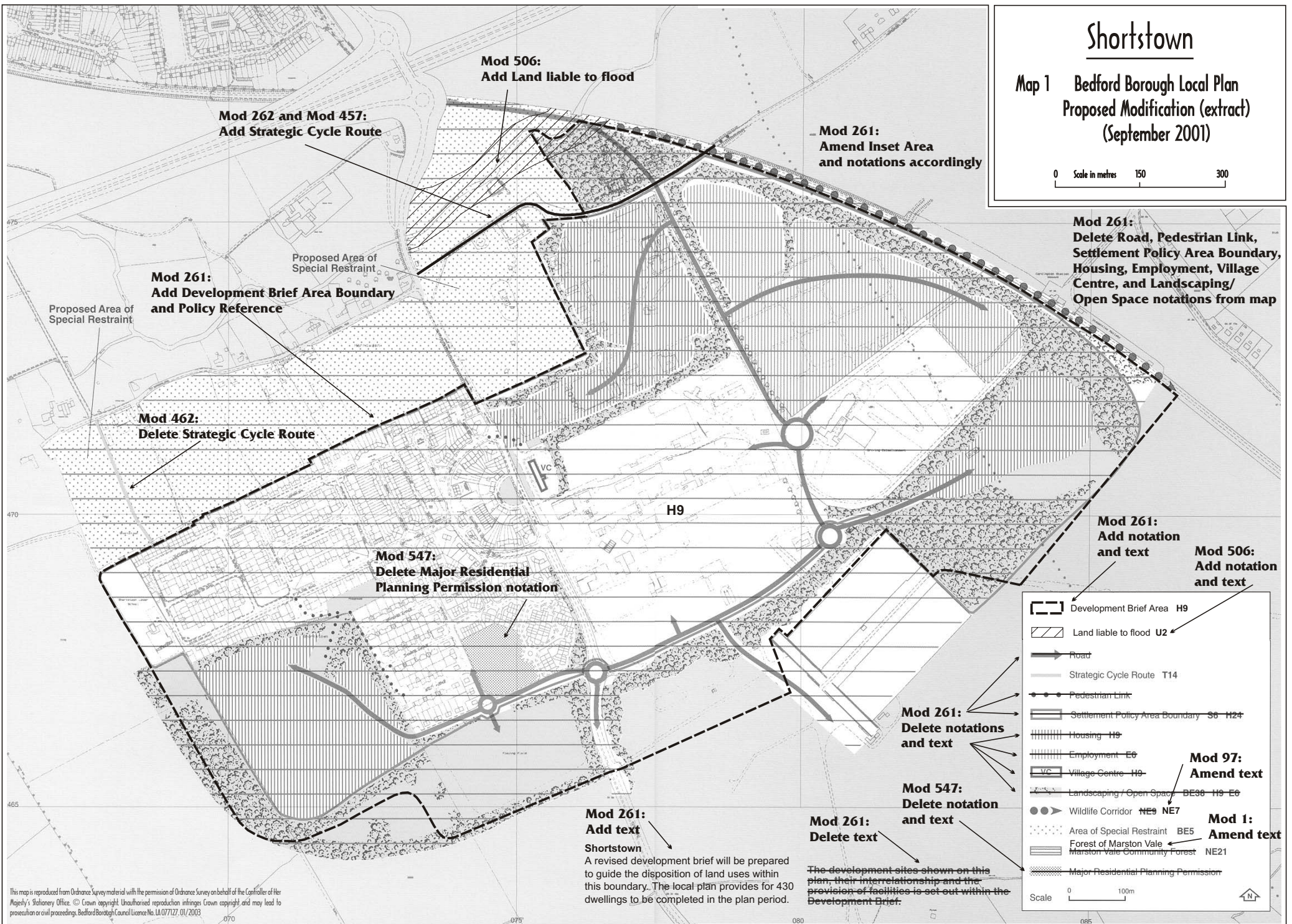
A document which informs the preparation of development plan policies, or sets out in detail how they are to be implemented in a particular area where there is a need to control, guide and promote change. Area development frameworks are also called a variety of other names, including urban design strategies, area development frameworks, spatial masterplans and planning and urban design frameworks.

Compiled with the assistance of 'By Design – urban design in the planning system: towards better practice' DETR 2000

Shortstown

Map 1 Bedford Borough Local Plan Proposed Modification (extract) (September 2001)

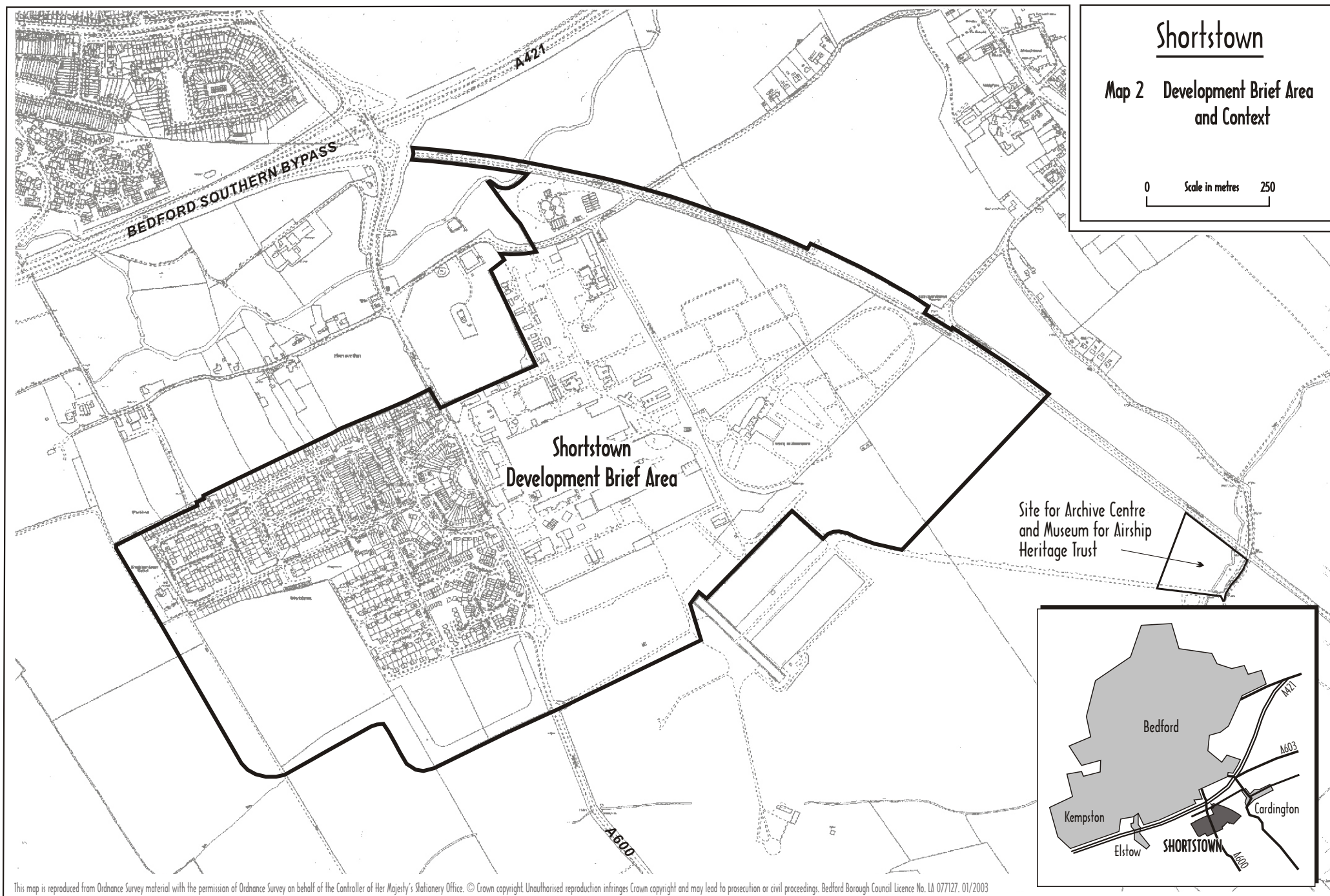
0 Scale in metres 150 300



Shortstown

Map 2 Development Brief Area and Context

0 Scale in metres 250



Shortstown

Map 3 Ownership & Planning History (abridged)

0 Scale in metres 250

BELLWAY HOMES LTD

99/00570/OUT Mixed residential, commercial and community development with ancillary highway works. (Undetermined)

FORTHPRICE LTD

POTTON LTD

Private Ownership

DRIVING STANDARDS AGENCY (DSA)

00/01106/C84 Accommodation block.
01/00968/C84 Driving track redevelopment
01/01660/C84 and 01/02550/AOC
Rationalisation of vehicular circulation

McLEAN HOMES

98/01731/OUT Residential development, sports pavilion, playing field. (Approved)
00/01581/FUL Community facility/village hall and car park. (Approved)
01/00572/REM 240 dwellings, roads and sewers etc. (Approved)
02/00190/REM 106 dwellings (Approved)
02/02130/REM 77 dwellings (Approved)
Total site capacity 251 dwellings (Nov 2002)

Private Ownership

BUILDING RESEARCH ESTABLISHMENT (BRE)

01/00442/COU Change of use to Class B1 and B2. (Approved)

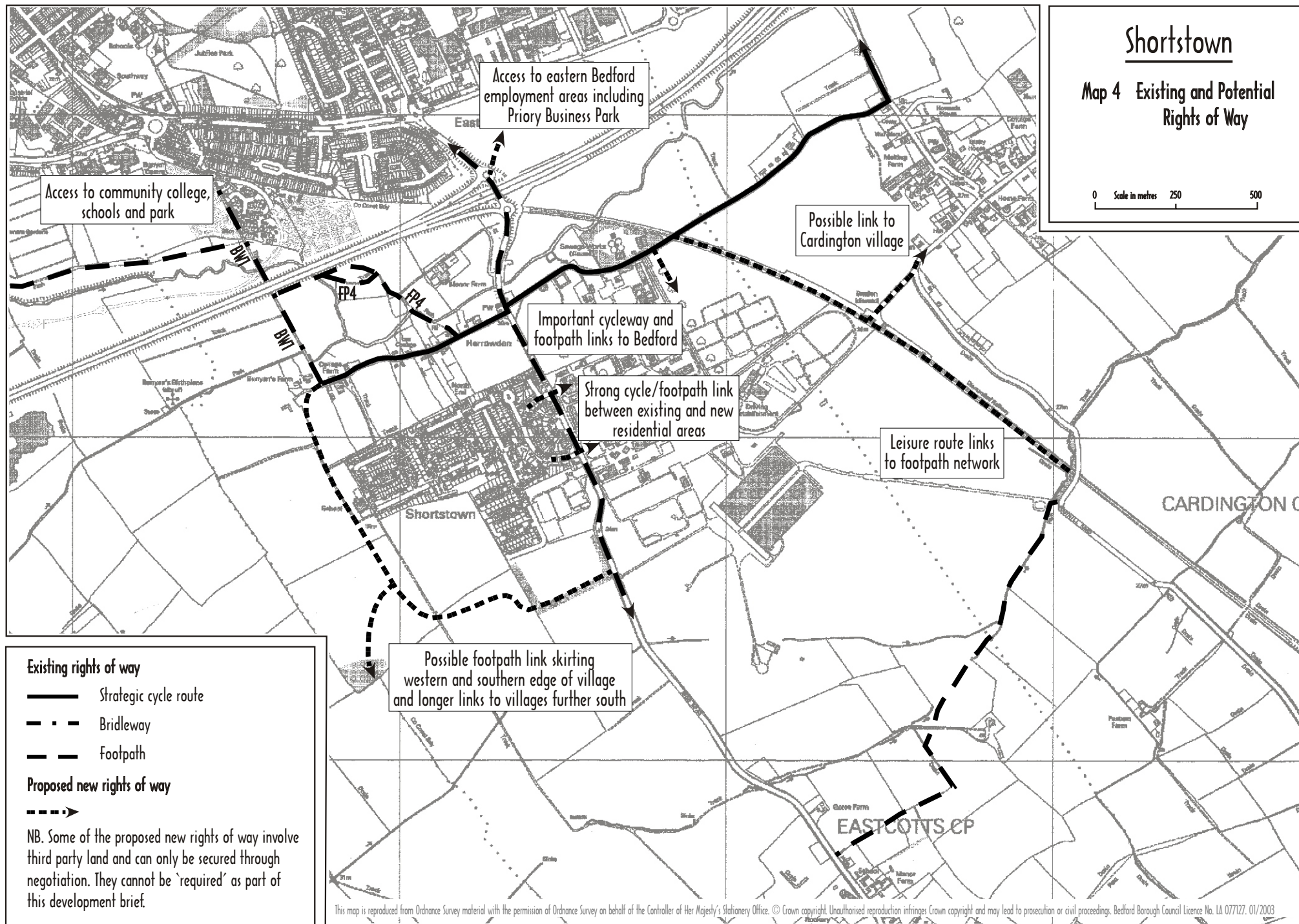
CARDINGTON PROPERTIES LTD

87/01786/OUT B1, B2 and B8 use (Approved)
90/01580/REM B1, B2 and B8 use on land NE of hangars (Approved). Conditions varied by
93/00491, 95/00695, 96/01066 and 96/01089.
97/01416/S73 Renewal of outline and reserved matters (Approved)
99/00750/OUT B1, B2 and B8 use (Withdrawn)

Shortstown

Map 4 Existing and Potential Rights of Way

0 Scale in metres 250 500



Existing rights of way

- Strategic cycle route
- - - Bridleway
- ... Footpath

Proposed new rights of way



NB. Some of the proposed new rights of way involve third party land and can only be secured through negotiation. They cannot be 'required' as part of this development brief.

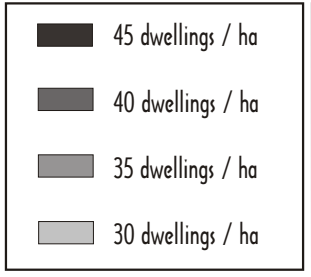
- Relief Road
- Road
- - - Footpath / Cycleway
- Squares
- Open Space
- Playing Fields
- * NEAP - Neighbourhood Equipped Area for Play
- * LEAP - Local Equipped Area for Play
- Existing trees and tree groups
- Proposed trees and tree groups
- Local Nature Reserve
- Housing
- Mixed Use (including pharmacy, shop, pub.)
- Employment
- HC Health Centre
- TA Site reserved for TA use
- Landmark Buildings
- Key Frontages
- Changing Rooms
- Balancing Pond
- Settlement Policy Area Boundary

Land at Shortstown

Map 5 Illustrative Master Plan

0 Scale in metres 150 300





Shortstown

Map 6 Housing Density

0

Scale in metres

150

300



This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Bedford Borough Council Licence No. LA 077127. 01/2003

PHASE 1
150 dwellings (max),
community facilities, health centre

PHASE 2
870 dwellings (approx), relief road,
school, employment land (part)

PHASE 3
130 dwellings (approx)

PHASE 4
Employment land (part)

Shortstown

Map 8 Phasing

0 Scale in metres 150 300

