

4. BCC/AVDC Alternative Growth Strategies

4.1 Developing an alternative growth strategy option

Drivers / Considerations

- 4.1.2 The rationale for developing an alternative strategy is to test the feasibility of development occurring east of the M1. This has been necessitated by the failure of the existing MK 2031 strategy process to fully consider an east of M1 option.
- 4.1.3 It was important that the amount of development to the east of M1 was sufficient to support a neighbourhood centre and to be relatively self-sufficient in the same way as the MKP strategy's proposed urban extensions.
- 4.1.4 In developing an alternative strategy that incorporated expansion to the East of the M1, the ability to connect the new neighbourhoods to the existing city was considered to be vital. This essentially would involve additional crossings of the M1, and it was equally important when considering how to achieve this connectivity that there should be minimal impact on junctions 13 and 14 of the M1. At the same time, the strategy had to take into consideration proposals for the development of the Local Plan's existing Eastern Expansion Area (EEA) on the western side of the motorway.

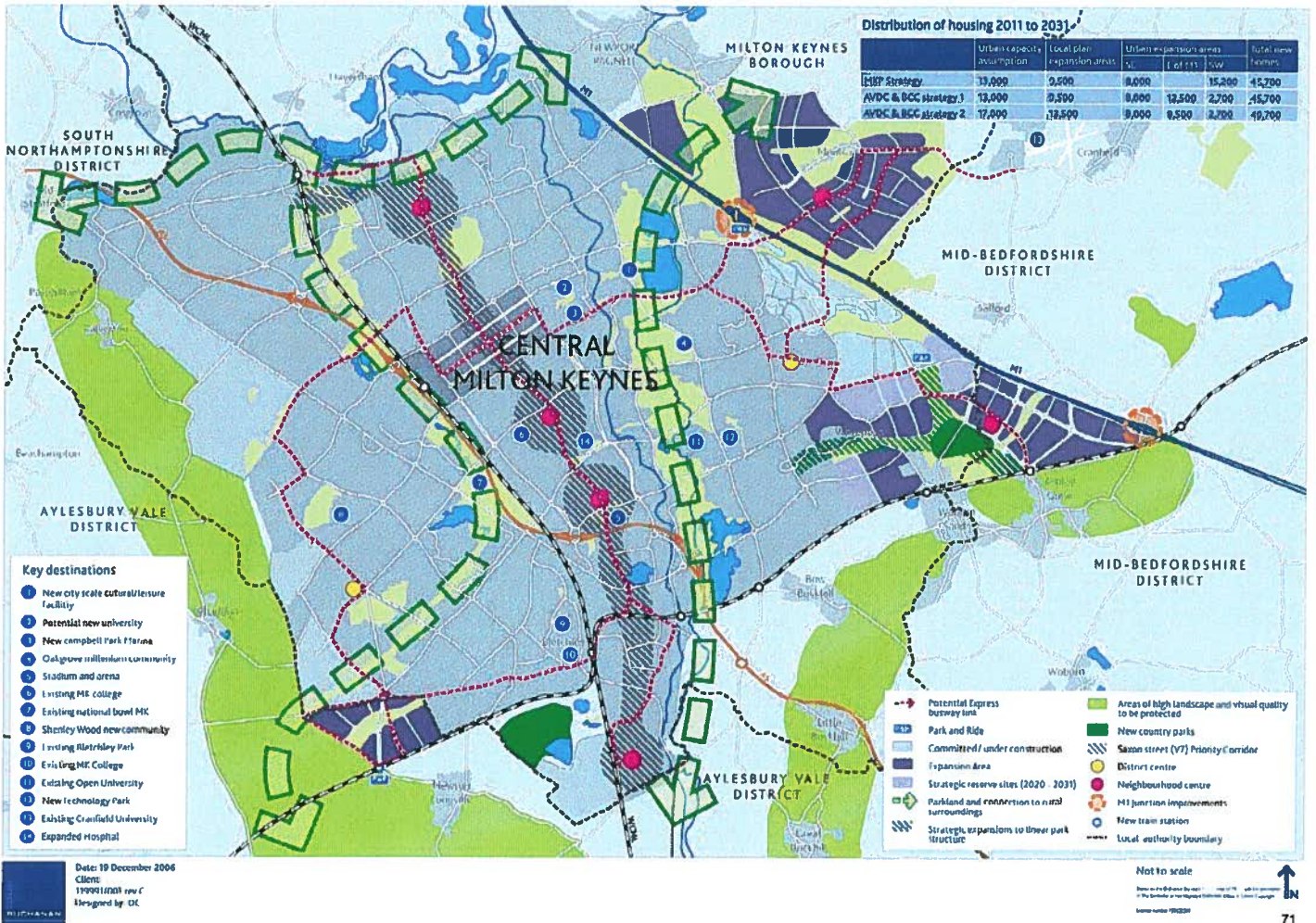
Approach

- 4.1.5 In developing an alternative strategy it was important to ensure that it could be compared equally with the MKP strategy, and, therefore, it was necessary to retain consistency of development parameters. The overall level of housing required in the period to 2031 was hence kept consistent. The amount of development to the south east has been kept at the same level as the MKP strategy and originally the same level of urban capacity was used. With regard to urban capacity, a separate review of the urban potential study of Milton Keynes was carried out on behalf of AVDC that concluded a higher level of urban development can be achieved than allowed for in the MKP strategy. As a result of this, two BCC/ AVDC alternative strategies are presented, one with 13,000 urban capacity (as in the MKP strategy) and the second with 17,000 urban capacity.
- 4.1.6 The two alternative strategies both include an allocation of 2,700 dwellings to the south west in an area that is contiguous to the existing urban area where there is capacity in landscape terms to absorb development. Some development in this location is also supported because :
- it supports the proposed park and ride facility and the development of a new station on the E-W rail line;
 - it can be used to help stimulate regeneration of Bletchley;
 - development at different locations around Milton Keynes maximises prospects of overall development targets and rates of development to 2031 being met because development at different locations would meet different markets.
- 4.1.7 A number of factors influence the location of development to east of M1, these are:
- the area identified for development is relatively closer to CMK and can be linked into the city's transport infrastructure;

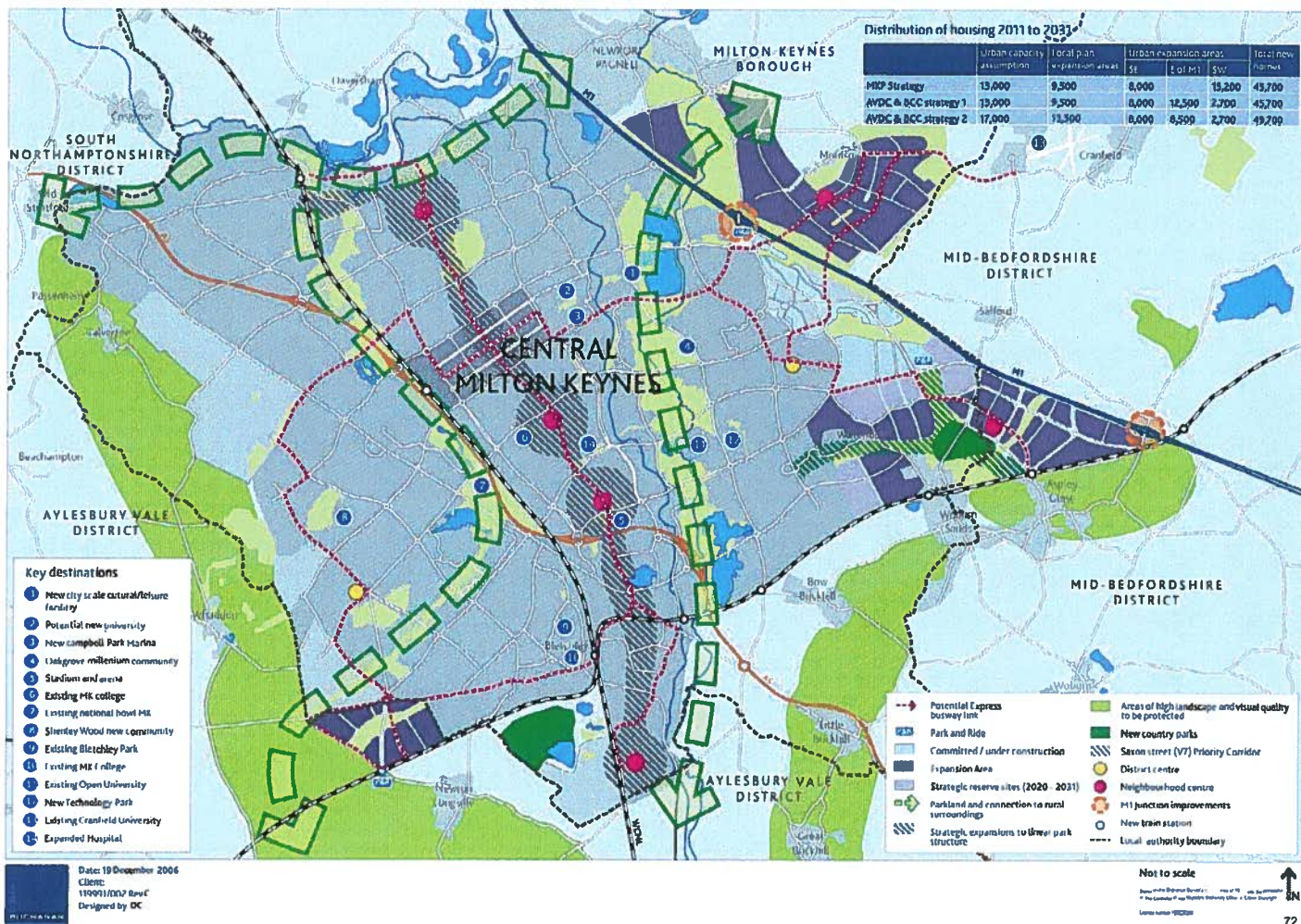
- there is the potential of planning the extension around a new high quality bus service, linking Cranfield University and Airport, the expansion, the planned development of the site west of the M1, Junction 14 Park and Ride, the proposed future University site and CMK;
- introduction of an area of higher density employment led mixed use, served by the bus and linked to Cranfield;
- creation of a knowledge corridor stretching from CMK with the proposed MK university, the SEL and Cranfield University with its associated airport and business park;
- connections across the M1 but not via existing motorway junctions;
- avoidance of development on an area of floodplain and establishment of linear park features;
- utilisation of a site that is currently being mined and where extraction work is due to finish within the next five years;
- creation of a logical extension that people can move within;
- no sprawling along the M1 and protection of Salford;
- minimised impact on Moulsoe;
- retention of the green ridge towards Cranfield; and
- takeoff path from the airport kept clear.

4.1.8 The two alternative BCC/ AVDC alternative strategies are shown diagrammatically overleaf. The strategies are based on the MKP strategy but with only a limited amount of development to the south west of the city and an urban extension east of the M1. The difference between the two BCC/ AVDC alternative strategies is that strategy 2 increases the amount of development within the urban area by 4,000 units and reduces the amount of development east of the M1 by 4,000 units.

BCC / AVDC ALTERNATIVE STRATEGY 1



BCC / AVDC ALTERNATIVE STRATEGY 2





4.2 Testing of BCC/AVDC alternative preferred strategy

Introduction

4.2.2 In order to ensure that the alternative strategies could be compared and assessed against the MKP strategy it was necessary to subject them, as far as practicable, to the same tests as the six options developed by the MKP. It was also necessary to apply the same tests to the MKP strategy to enable the different strategies to be compared equally. Although the MKP strategy has been subject to a detailed sustainability appraisal, it was not assessed using the same tests as the six earlier options and it was not possible therefore, to make a direct comparison. In carrying out the same tests on the MKP strategy and the BCC/ AVDC alternatives it is possible to compare them and to take an informed judgement as to the merits of each, and which, is the more sustainable.

4.2.3 Table 4.4 of the June 2006 document 'A strategy for growth to 2031' sets out six technical evaluation tests. They are:

- sustainability appraisal;
- stakeholder and community feedback;
- planning policy
- draft strategic objectives and principles;
- land suitability
 - (a) growth frame analysis
 - (b) urban potential study
- transport

Tests undertaken

4.2.4 Sustainability appraisal – This test was undertaken because one of the primary aims of this study is to assess the sustainability of Milton Keynes expanding east of the M1.

4.2.5 Planning policy – It was important to ensure that an alternative strategy is compliant with planning policy.

4.2.6 Draft strategic objectives and principles – It was necessary that an alternative strategy meets the objectives and principles that underpin the draft strategy. The tests undertaken as part of this study are sustainability appraisal, planning policy and draft strategic objectives and principles.

4.2.7 Transport – The review of work undertaken in developing the MKP strategy revealed that the transport model used contained a number of errors. The transport testing of the BCC/ AVDC alternative strategies has used a corrected version of the model.

Tests not undertaken

4.2.8 Stakeholder and community feedback - It has not been possible to consult the public on the BCC/ AVDC alternative strategies because of the time period involved and, therefore, neither of the BCC/ AVDC alternative strategies have been tested against stakeholder and community opinion.

4.2.9 Land suitability – The time constraints on undertaking this study mean that a full growth framework analysis has not been undertaken. However, this study involved reviewing the growth frame analysis and a landscape character assessment has been undertaken.



Testing

- 4.2.10 The approach taken to testing the BCC/ AVDC alternative strategies has been to replicate where possible the tests applied to the six options subject to public consultation in November 2005 to January 2006.

Sustainability appraisal

- 4.2.11 The sustainability appraisal was undertaken on two levels: an appraisal of the spatial options and a detailed assessment of the draft strategy.
- 4.2.12 The appraisal of the six options assessed the options against 22 SA objectives (these are set out in annex 2 of the June 2006 draft strategy). The SA assessed the options in the short, medium and long term (no definition is given of these timeframes) and scores the options against each criteria using a system of symbols (for example, +++ = major positive, --- = major negative). To enable the BCC/ AVDC alternative strategies to be compared and assessed against the options it was necessary to convert the symbols into numeric values so that the options could be scored. A set of numeric scores was provided in Annex two of the June 2006 draft strategy.
- 4.2.13 The MKP strategy was not subject to the same SA assessment, therefore, to enable a direct comparison to be made the consultant undertook the SA assessment of the MKP strategy as well as the BCC/ AVDC alternative strategies. The results are set out in Appendix 4 which details the scores of the six options, the BCC/ AVDC alternative strategies and the MKP strategy. It should be pointed out that in the full sustainability report published in July 2006 the SA of the six options is presented with numeric scores but additional scores to those set out in the April 2006 SA have been used². The April 2006 scoring system has been used here because it is considered to be a more transparent scoring system.
- 4.2.14 The detailed assessment of the MKP strategy is more comprehensive but it does not provide a numeric scoring and is not useful for comparing the two strategies. A detailed assessment of the BCC/ AVDC alternative strategies has also been undertaken and is presented in Appendix 6.
- 4.2.15 The results of the SA indicate that the BCC/ AVDC alternative strategies score better than the MKP strategy. The two strategies are similar in their basic components of urban capacity and amount of development to urban extensions. The primary difference is that the BCC/ AVDC alternative strategies propose development to the east of the M1 and this accounts for the improved score. The east of M1 options score better on two accounts. The first is that east of the M1 is of lower landscape value than the area to the south west, and the second is that east of the M1 is closer to CMK and is considered to generate shorter trips and be more likely to encourage public transport users.

Planning policy

- 4.2.16 The planning policy assessment has only considered national level policy. The Milton Keynes 2031 strategy has been formulated within the framework of the MKSM SRS which established the broad directions of growth and the quantity of growth. The long term strategy is for the period beyond that of the current local plans of Milton Keynes, Aylesbury Vale and Mid Bedfordshire and therefore local policy was not considered in the assessment.

² The April 2006 SA has scoring values of 3, 2, 1, 0, -0.5, -1, -2, -3. The July 2006 SA report has included scores of 0.75 and -0.8.



- 4.2.17 The planning policy assessment of the six options grouped policy into five broad categories. The consultants considered that the categories needed to be refined to enable a more detailed policy assessment to be undertaken. The policy assessment of the BCC/ AVDC alternative strategies and MKP strategy is set out in Appendix 4.
- 4.2.18 The two strategies score very similar results with the BCC/ AVDC alternative strategies scoring marginally higher. The reason why the BCC/ AVDC alternative strategies scores slightly better is because development to the east of the M1 utilises less sensitive landscapes and is located closer to CMK.

Draft strategic objectives and principles

- 4.2.19 There are two parts to this test, name objectives and principles. The results of the assessment are set out in Appendix 4. The objectives and principles have been formulated through the consultation process of developing the draft strategy. In particular the objectives reflect the view of Milton Keynes Council.
- 4.2.20 The assessment of the BCC/ AVDC alternative strategies and the MKP strategy against the strategic plan objectives indicates that the BCC/ AVDC alternative strategies perform better. As with the sustainability and planning policy tests, the area where the BCC/ AVDC alternative strategies score better is that of impact on landscape with development to the east of the M1 being less sensitive than land to the south west of the city.
- 4.2.21 Both the BCC/ AVDC alternative strategies and MKP strategy score the same when assessed against the strategic principles.

Transport

- 4.2.22 The principles underpinning the transport elements of the AVDC / BCC strategies have been described earlier in this section.
- 4.2.23 In order to assess the performance of these strategies, the SATURN model has been used to test the spatial distribution identified, along with accompanying highway infrastructure and public transport services. In order to allow a comparison with the MKP Strategy the tests have been made on the basis of the most up-to-date modelling assumptions for this strategy and are therefore only directly comparable with the MKP Strategy (rather than with the Option 1 to 6 results). In order to ensure that the results are as comparable as possible the changes to the highway and public transport networks have been kept to a minimum and can be summarised as follows:
- The additional highway network in the south-west has been reduced to reflect the smaller area that needs to be served.
 - The highway network to the east of the M1 has been altered to reflect the proposed masterplan layout. In particular, two new bridge crossings of the M1 motorway have been introduced and the existing road connection between Moulsoe and the A509 has been severed. A link has also been created to the Newport Pagnell Bypass at an existing three-way roundabout.
 - A 10 minute frequency bus service has been introduced between the East of M1 development area and CMK.
 - A new bus service running between Cranfield, through the East of M1 development area to CMK and then to the South West development area and Bletchley at a 30 minute frequency has been introduced to replace the 10 minute frequency service running into the South West development area in the MKP Strategy.
 - A short extension to a core network route previously terminating at Tattenhoe Roundabout into South West development area has been introduced.



4.2.24 The following table provides a summary comparison of the key outputs for the MKP strategy and the BCC / AVDC Strategies 1 and 2 for both 2026 and 2031, against a 2001 baseline:

Table 4.1: SATURN Result Summary for MKP Strategy and BCC / AVDC Strategy 1 and 2

| | 2026 | | | 2031 | | |
|-------------------------------------|--------------|-----------------------|-----------------------|--------------|-----------------------|-----------------------|
| | MKP Strategy | BCC / AVDC Strategy 1 | BCC / AVDC Strategy 2 | MKP Strategy | BCC / AVDC Strategy 1 | BCC / AVDC Strategy 2 |
| 2031 PT mode share CMK | 12.2% | 12.1% | 12.1% | 12.2% | 12.2% | 12.2% |
| 2031 PT mode share MK | 7.7% | 7.9% | 7.8% | 7.6% | 7.7% | 7.8% |
| Increase in highway travel demand | 46% | 46% | 49% | 57% | 56% | 56% |
| Increase in highway travel distance | 40% | 39% | 40% | 47% | 46% | 46% |
| Increase in highway travel time | 55% | 49% | 52% | 69% | 65% | 63% |
| Increase in average speed | -9% | -7% | -8% | -13% | -11% | -10% |
| Increase in average delay / veh | 48% | 27% | 29% | 70% | 53% | 48% |

4.2.25 The model results show that the public transport mode share for the MKP Strategy and BCC / AVDC Strategies 1 and 2 are very similar. For highway performance however, there are a number of differences. Travel demand and travel distance are similar for the two alternatives, but travel time increases are lower for BCC / AVDC Strategy 1 in both 2026 and 2031. The reduction in vehicle speeds is also lower for the BCC / AVDC Strategy 1 when compared to the MKP Strategy. The most significant difference is the average increase in delay per vehicle across the network. Average delays are likely to be the single most strongly perceived characteristic of individuals journeys in determining an impression of overall congestion. The model shows this to be 70% for the MKP strategy, but only 53% for the BCC / AVDC Strategy 1 (a difference of 17%). This is greater than the difference between the best and worst performing strategies in the option analysis (Option 1 and Option 6 - 16% difference).

4.2.26 Looking at BCC / AVDC Strategy 2, in 2031 this shows even better results in terms of highway network performance. This is in line with the findings of the

earlier option analysis, which indicated that options with higher urban capacities resulted in better highway performance. Looking at the 2026 results, however, shows the highway network performance to be slightly worse than for BCC / AVDC Strategy 1. This is because housing delivery is quicker in Strategy 2, with 1100 more households (and jobs) being in place by 2026. However, even with this higher level of development at 2026, BCC / AVDC Strategy 2 still performs better than the MKP Strategy in 2026.

- 4.2.27 The above results indicate that locating development to the east of the M1 does not inherently result in poor transport performance. If development in this location is accompanied by a suitable access strategy targeted at removing the potential severance effects of the motorway and ensuring that pressure on existing motorway junctions is reduced the overall effect on the road network performance is better than achieved by the MKP Strategy.
- 4.2.28 It should also be noted that development in this location also offers the potential to alleviate some of the pressure on J14 of the M1 if the proposed access strategy is followed. Providing an alternative route for traffic from Moulsoe to / from CMK has the potential to assist in reducing through traffic on the A509 across this junction. This requires two new bridge crossings of the M1 motorway, which will have cost implications, but it should be born in mind that large scale development in the south-west will require at least one new bridge across the railway line, delivery of which could incur a shared value claim by Network Rail.

Environment

How the results and the strategic objectives relate to the proposed alternative option

- 4.2.29 Site Assessment Areas 1 - 8 have been assessed in terms of the environmental sensitivity and capacity to accommodate development, as follows:
- South east of Milton Keynes (site assessment areas 5 and 6)
 - East of the M1 (site assessment areas 1 to 4)
 - South west of Milton Keynes (site assessment areas 7 and 8)
- 4.2.30 In conjunction with the assessment of the outline environmental constraints within an area this analysis has enabled the judgements to be made in terms of the extent, appropriateness and priority of potential development and growth.
- 4.2.31 Having undertaken this process the site assessment areas that have been identified as appropriate for development have been refined to create an alternative 'hybrid' development option. There are a number of fundamental differences and parallels between the MKP strategy and the BCC/AVDC alternatives.
- 4.2.32 The following text provides details as to how the BCC? AVDC strategies have been developed and where it has built upon the MKP strategy.
- South east (around Wavendon and Woburn Sands)
- 4.2.33 The MKP strategy includes areas of proposed development to the south east (east) around Wavendon and Woburn.
- 4.2.34 The findings of this study have also found that this area (site assessment areas 5 and 6) would be suitable for development. This area has a strong sense of enclosure that is created by the vegetated arable field boundaries and also small blocks of trees and woodland. The edges of the nearby villages are generally well vegetated, however in order to meet strategic objectives related to the protection of historic environments the character and setting of these

historic and cultural heritage assets will need to be appropriately considered and where necessary protected.

- 4.2.35 The retention of good quality trees and woodland and also the creation of new areas of open space and planting (to protect setting) will contribute to the strategic growth option of maintaining and extending green infrastructure.
- 4.2.36 There are a number of urbanising influences that affect the suitability of the area for development. These include the M1, other main roads, industrial areas, nurseries and residential development. These are generally detracting features that reduce the overall quality and sensitivity of the area.
- 4.2.37 The inclusion of this area within the strategy provides an opportunity to improve the condition and overall quality of landscape character with high quality masterplanning proposals and the mitigation of detracting elements. It should be noted that within this area landscape features that make a positive contribution to the character will need to be protected.
- 4.2.38 Masterplanning of this area would need to carefully consider issues related to the physical coalescence of settlements. This will contribute to the strategic policy objectives related to maintaining character and identity of existing settlements.
- East of M1
- 4.2.39 The MKP strategy does not include land to the east of the M1, however this study has found that this area has a high development potential (site assessment areas 1 to 4). A number of constraints do exist to the east of the M1 however it is considered that these can be overcome by the exclusion of specific areas and careful consideration during masterplanning. The development of the alternative option has accounted for constraints and exclusions.
- 4.2.40 Where constraints are found that would exclude built development, these areas would potentially make a strong contribution to strategic objectives relating to maintaining and extending the green infrastructure. This opportunity can also be extended to make a positive contribution to an area of landscape character that is in poor condition.
- 4.2.41 There are a limited number of villages within this area, however this existing settlement is often of high quality in terms of cultural heritage. Strategic objectives related to maintaining historic environments have been considered at this stage by the exclusion of areas around the village of Moulsoe and also including a stand off from more elevated areas of topography. This has resulted in a proposed alternative option that considers the setting and character of these villages.
- 4.2.42 The presence of certain constraints and provision for these within the proposed alternative option has also reduced the potential for physical coalescence between settlements. From areas of elevated topography visual coalescence could potentially occur between the existing eastern edge of Milton Keynes and settlements to the east of the M1. However, the proposed development option restricts potential development to the lower slopes of the landform. In these areas the vegetation structure is stronger and provides a framework that would contain development and prevent visual coalescence occurring. Within development proposals, further reinforcement of the existing landscape framework will also contribute to strategic objectives that relate to maintaining and extending green infrastructure.
- 4.2.43 Strategic policy objectives also refer to the establishment of long term boundaries for Milton Keynes. The BCC/AVDC alternative strategy would result

in the creation of a clearly defined boundary to the east of Milton Keynes defined as being well below the ridge of topography to the east of Site Assessment Areas 2 to 4. In addition in order to meet other strategic objectives this boundary would be likely to provide a strong vegetated edge that appropriately contains development and restricts the influence on the surrounding area.

South west

- 4.2.44 The MKP strategy includes development to the south west of Milton Keynes, around and beyond the existing settlement of Newton Longville. The BCC/AVDC alternatives have considered site assessment areas (7 and 8) and have excluded the majority of these areas.
- 4.2.45 Development to the south-west, proposed within the MKP strategy, conflicts with strategic policy objectives that relate to the establishment of long term boundaries. This area has an elevated and undulating landform with often extensive and open views. In terms of physical features, there are no strongly defining elements (such as roads, ridgelines, woodland) that would form a natural barrier to the extent of development. Development around Newton Longville is also likely to be visible from much of the surrounding area and have a strong adverse influence on the landscape character of this area.
- 4.2.46 Site assessment work has highlighted that a small area close to The Leys, located directly adjacent to the western fringe of Milton Keynes/Bletchley and north of the disused east to west railway line, has some potential for development. This area is located in a small pocket of topography that is partially visually contained to the south west by a low ridgeline. The creation of a strong vegetated edge to the development in this area would also meet strategic objectives related to extending green infrastructure and would also provide a logical limit against further development to the south of the disused rail line. This small area has therefore been included in the proposed alternative option.
- 4.2.47 There are a number of settlements located throughout this area most of which have Conservation Area status. Due to the openness of views and the nature of the topography across and beyond the majority of the site assessment areas, it would be extremely difficult to avoid adversely affecting the setting of these settlements. The landscape currently lacks areas of woodland which could limit the extent of such views. It would be necessary to implement extensive screening vegetation to limit these views. Screening could only be achieved over a considerable time period and due to the nature of the topography, the potential for adverse impacts to be generated by development could remain. In addition, such extensive planting could alter the landscape character to the south west of Milton Keynes, which has been identified as being currently of high quality. Therefore, in order to maintain the historic environments and setting of these villages the proposed alternative option does not include the development in those areas, which have been proposed in the current MKP strategy.
- 4.2.48 Landscape character within site assessment areas 7 and 8 is in good condition and is generally of moderate to high sensitivity. There are limited detracting or urbanising influences. There is a low potential for development in these areas as it would adversely affect the character and tranquillity of the landscape. As such the proposed alternative option has not included proposed development in and around Newton Longville. The proposed alternative option has restricted the extent of development to a small area that is directly adjacent to the existing urban fringe and is influenced by the A421.
- 4.2.49 The existing settlements are generally located in areas of elevated topography. The areas proposed for development in the MKP strategy are likely to result in

visual coalescence between settlements and also with the urban fringe of Milton Keynes. In order to meet strategic policy objectives related to maintaining the distinctive character and identity of the existing settlements development in these areas has been excluded from the proposed alternative option.

4.3 Comparison of BCC/ AVDC alternative strategies with MKP strategy

4.3.1 The MKP strategy and the two BCC/ AVDC alternative strategies are in several respects the same. The difference between them (and it is a significant difference) is that the BCC/ AVDC alternative strategies locate development east of M1 with only a limited amount of development to the SW. Table 4.1 below sets out a comparison between the SW and east of M1 options.

Table 4.2: Comparison of SW versus east of M1 expansion

| SW extension | East of M1 option |
|---|---|
| Low density residential areas between the SW extension and central Milton Keynes which will not support public transport. | Express busway will link CMK with the proposed new university, the SEL within the east of M1 extension and Cranfield University with its associated airport and business park. |
| SEL is isolated from other employment areas and the wider transport network (unless used for rail freight) and is likely to encourage commuting from surrounding towns. SW extension seems based on the notion that its location will support delivery of E-W rail. | The SEL within the east of M1 extension forms part of an employment / knowledge corridor stretching from CMK to Cranfield University. The SEL is also better located to utilise the existing transport network (other than rail freight operations). Policy MKAV 1 of the draft RSS identifies Newport Pagnell as a Key location for employment development. The east of M1 extension is ideally situation to provide a close by work force and for the SEL to complement employment sites in Newport Pagnell. |
| Area of high landscape value which has been identified as having low development potential. There are no definable landscape features to act as a boundary to expansion and development would be visible over an extended distance. | Area has generally low landscape value and has been identified as having high development potential. there are landscape features that can act as boundaries to development. |
| Newton Longville has historic value and contains a conservation area. Development will have to protect these assets. | Moulsoe has limited historic and urban design value. |
| Located approximately 10km from the CMK. | Located closer to CMK than SW extension. |
| | Express busway will link the extension with the eastern expansion area and Aspley Guise station for connection with E-W rail services. |
| | Will require additional infrastructure to cross the M1 and integrate the extension with the existing city. |
| Moderate/ high overall historic environmental sensitivity | Low/ moderate historic environmental sensitivity |