# **NTKINS**

# Chippenham Site Allocations Plan Sustainability Appraisal Report

Wiltshire Council

Addendum 1: SA of Strategic Site Options

**April 2016** 



### **Notice**

This document and its contents have been prepared and are intended solely for Wiltshire Council's information and use in relation to the Chippenham Site Allocations Plan.

Atkins assumes no responsibility to any other party in respect of or arising out of or in connection with this document and/or its contents.

#### **Document history**

Job number: 5139589						
Revision	Purpose description	Originated	Checked	Reviewed	Authorised	Date
1.0	Draft for comment	BN/CW	MW	CW	CW	11/04/16
2.0	Draft Final	BN/CW	MW	CW	CW	28/04/16

#### **Client signoff**

Client	Wiltshire Council
Project	Chippenham Site Allocations Plan
Document title	SA Report
Job no.	5139589

## Strategic site options assessment

#### 1.1 Introduction

- 1.1.1 The 14 site options under consideration have been assessed. The scores summary of the site option assessments for all options is presented in Table 1.1. The detailed assessment results for each option are presented in the options assessment tables at Appendix A.
- 1.1.2 A number of common effects have been identified across all sites. These are:
  - moderate adverse effects (where mitigation is considered problematic) relating to the extent of BMV agricultural land and greenfield land (SO2)
  - minor adverse effects (where mitigation is considered achievable) in terms of risk of flooding associated with the site (SO5b)
  - no effects on Air Quality Management Areas (SO4)
  - minor beneficial effects in relation to reduction of deprivation in the surrounding areas (SO9)
  - moderate beneficial effect in relation to the site's ability to harness renewable energy on-site (SO5a)
- 1.1.3 A discussion of the assessment results for each site option is provided below:
  - A1
  - B1
  - C1
  - C2
  - C3
  - C4
  - D1
  - D3
  - D4
  - D7
  - E1
  - E2
  - E3
  - E5

#### 1.2 Methodology

1.2.1 The assessments have been undertaken using the methodology for the assessment of strategic site options set out in the SA Methodology chapter in Part One A.

- 1.2.2 Information contained in the various thematic evidence papers prepared in support of the Chippenham Site Allocations Plan has been utilised in the assessment together with information from constraints maps (see Appendix A of Part One B Review of SA of Strategic Areas) which have been prepared covering the following topics:
  - Biodiversity (linked to SA Objective 1)
  - RIGS (linked to SA Objective 1)
  - BAP Priority Habitats (linked to SA Objective 1)
  - Agricultural Land (linked to SA Objective 2)
  - Contaminated Land (linked to SA Objective 2
  - Mineral Safeguarding Areas (linked to SA Objective 2)
  - Water Resources and Flooding (linked to SA Objective 3)
  - Air Quality (linked to SA Objective 4)
  - Heritage (linked to SA Objective 6)
  - Landscape and Townscape (linked to SA Objective 7)
  - Community Facilities (linked to SA Objective 8)
  - Open Space (linked to SA Objective 8)
  - Public Rights of Way (linked to SA Objective 8)
  - Multiple Deprivation (linked to SA Objective 8
- 1.2.3 The following generic assessment scale has been utilised. Further details set out in the SA Methodology chapter in Part One A. Note: Major and moderate adverse and positive effects are considered significant.

Major adverse effect ()	Option likely to have a <u>major adverse</u> effect on the objective with no satisfactory mitigation possible. Option may be inappropriate for mixed use development
Moderate adverse effect ()	Option likely to have a <u>moderate adverse</u> effect on the objective with difficult or problematic mitigation
Minor adverse effect (-)	Option likely to have a <u>minor adverse</u> effect on the objective because mitigation measures are achievable to reduce the significance of effects
Neutral or no effect (0)	On balance option likely to have a neutral effect on the objective or no effect on the objective
Minor positive effect (+)	Option likely to have a minor positive effect on the objective as enhancement of existing conditions may result
Moderate positive effect (++)	Option likely to have a <u>moderate positive</u> effect on the objective as it would help resolve an existing issue
Major positive effect (+++)	Option likely to have a <u>major positive</u> effect on the objective as it would help maximise opportunities

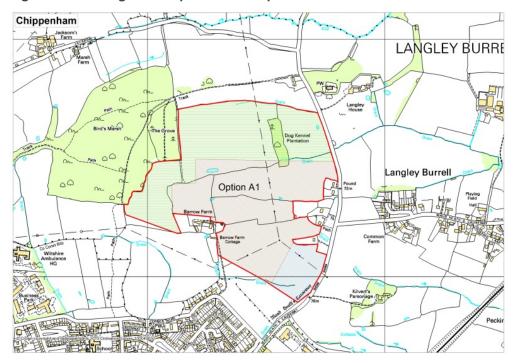
**Table 1.1: Summary of Scores of Site Options Assessments** 

Topic		A1	B1	C1	C2	C3	C4	D1	D3	D4	D7	E1	E2	E3	E5
ENVIRON	IENT														
Biodiversity	SO1														
	SO1														
Land	SO2														
	SO2														
	SO2														
	SO2														
Water	SO3														
resources	SO3														
Air and	SO4														
environment al pollution	SO4														
ai poliution	SO4														
Climate	SO5a														
change - emissions	SO5a														
Climate	SO5b														
change - vulnerability	SO5b														
Historic	SO6														
Landscape	SO7														
SOCIO-EC		;													
Housing	SO8														
Community	SO9														
	SO9														
	SO9														
	SO9														
Sustainable	SO10														
transport	SO10														
Economy	SO11														
	SO11														
	SO11														
	SO11														
Employment	SO12														
	SO12														
	SO12														

#### 1.3 Option A1

- Housing = 21.3ha, 460 dwellings;
- Employment = 3.6ha;
- Green Space = 19.4ha; and
- Access = B4069 Maud's Heath Causeway.

Figure 1.1: Strategic Site Option A1 - map



- 1.3.1 The assessment results for this option identify the presence of one major adverse effect (with mitigation not considered possible). This relates to environmental objective SO1 and arises out of the cumulative effects the adjacent permitted development site and Option A1 would have on the Birds Marsh Wood County Wildlife Site (CWS). The green space proposed at Option A1 would not provide sufficient mitigation to adequately prevent harm to the CWS. As a result of this important issue, it is recommended that this site should not be taken forward.
- 1.3.2 Additionally, moderate adverse effects (where mitigation is considered problematic) relate to the extent of BMV agricultural land and greenfield land which comprise Option A1 (SO2) and development of land which may contribute to the setting of Langley Burrell Conservation Area (SO6 and SO7). Minor adverse effects considered achievable to mitigate stemming from the development of Option A1 include the presence of an Outer Source Protection Zone (SO3), groundwater drainage issues (SO3), a decrease in air quality (SO4), impacts on climate change (SO5a) and vulnerability to effects of climate change (SO5b). The only moderate beneficial effect in relation to the environmental SA objectives relates to the site's ability to harness renewable energy on-site (SO5b). This effect is shared with all other site options.
- 1.3.3 When assessed against the socio-economic objectives Option A1 demonstrates minor beneficial effects linked to the connections between proposed development and existing employment areas (SO11 and SO12) and the commercial desirability of employment land delivered as part of Option A1. Option A1 would also have minor beneficial effects in terms of the provision of affordable housing (SO8), provision of community facilities and green space for existing communities (SO9), potential to deliver new employment land capable of supporting the vitality and viability of the town centre (SO11).
- 1.3.4 No socio-economic major or moderate adverse effects have been identified. The minor adverse effects stemming from this site option relate to risk from development on Public Rights of Way (SO9), weak access to health and educational facilities (SO9) and weak access by public transport on

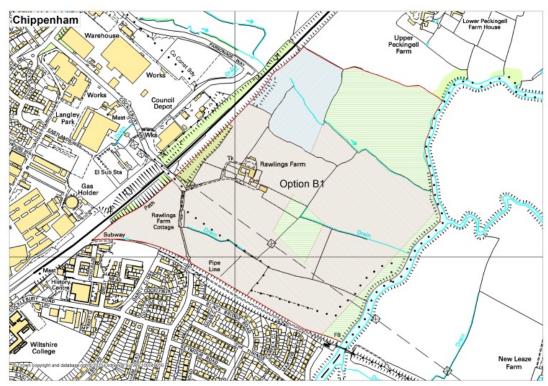
proposed employment land (SO12). Development of Option A1 has potential to be supported by improved public transport, however, as improvements to existing provision would be necessary, a minor adverse effect is identified against SO10.

1.3.5 Given the biodiversity issues associated with this option as discussed above, the assessments show that there are other site options that perform better in sustainability terms. Despite the local economic growth benefits identified, it is recommended that this option should not be taken forward.

#### 1.4 Option B1

- Housing = 34ha, 730 dwellings;
- Employment = 5ha;
- Green Space = 12ha; and
- Access = Cocklebury Road (via Darcy Close) and Parsonage Way.

Figure 1.2: Strategic Site Option B1 - map



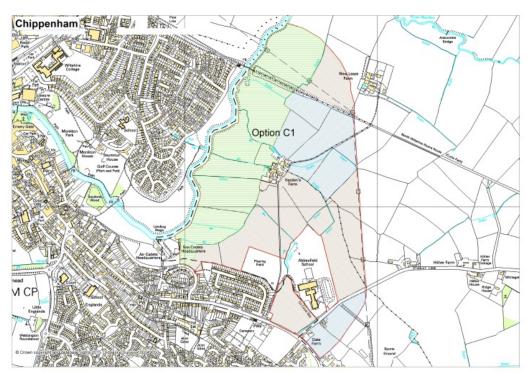
- 1.4.1 The assessment for Option B1 concludes that no major adverse effects are expected to arise from the development of this site option. A number of moderate and minor adverse effects are identified, so too are beneficial effects related to socio-economic SA objectives.
- 1.4.2 Overall, the assessment results for Option B1 highlight moderate adverse effects arising from the landscape impact of development in the wider area (SO7) and development occurring on land which may contribute to the settings of Langley Burrell and Tytherton Lucas Conservation Areas (SO6).
- 1.4.3 Option B1 would exert a moderate adverse effect against SO2 due to the extent to which the site option is comprised of greenfield land and BMV agricultural land. Mitigation is considered problematic as development of the site could not avoid the permanent loss of these features. This is shared by all site options. A moderate beneficial effect is expected in terms of the option's ability to deliver on-site renewable energy (SO5a); this is also shared by all site options.
- 1.4.4 For the remaining environmental SA objectives, a series of minor adverse effects are anticipated from the development of Option B1 (biodiversity, water resources, environmental pollution, impacts on climate change, vulnerability to climate change and visual amenity). These adverse effects are considered achievable to mitigate.

- 1.4.5 In terms of the remaining socio-economic objectives, Option B1 would provide minor beneficial effects to SO8 through the provision of affordable homes, SO9 in terms of provision of community facilities and green space for adjacent communities, SO11 and SO12 through the potential for new employment land which would support the town centre. Existing access is poor and requiring improvements, as such Option B1 exerts a minor adverse effect against SO10 in terms of current lack of sustainable access to the proposed residential and employment areas and SO9 in terms of access to schools.
- 1.4.6 The landscape and heritage effects of development on this site together poor accessibility to health and educational facilities are significant sustainability issues that would need to be resolved to take forward this option. It is recommended that a lesser density of development, prevention of intrusive large buildings on the site and improvements to public transport should be key parts of further consideration if this site is taken forward. Should these issues be satisfactorily resolved, development of Option B1 has the potential for significant benefits, particularly in terms of local economic growth.

#### 1.5 Option C1

- Housing = 36ha, 775 dwellings;
- Employment = 20ha;
- Green Space = 35ha; and
- Access = river bridge crossing of River Avon to north and A4 London Road south

Figure 1.3: Strategic Site Option C1 - map



- 1.5.1 The assessment for Option C1 demonstrates that development of the site would not result in any major adverse effects. A number of moderate and minor adverse effects are identified, so too are beneficial effects related to socio-economic SA objectives.
- 1.5.2 Six moderate adverse environmental effects arise from this option. The proposed bridge crossing the River Avon would dissect the County Wildlife Site (SO1) and bridging of the Avon would likely alter the flow of the river which could have adverse effects on the River Avon downstream, particularly in Chippenham town centre (SO3 and SO5b). An increase in greenhouse emissions would be associated with development (SO5a), the proposed development would impact on the landscape in

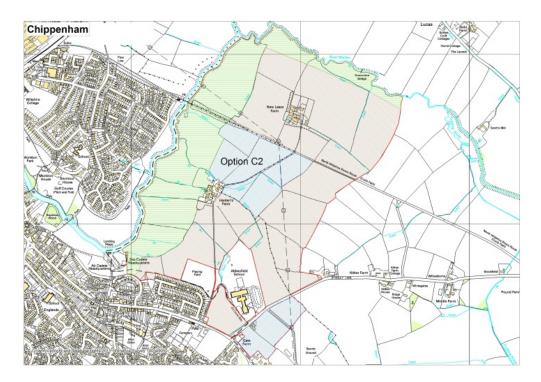
the surrounding areas (SO7) and development would occur on land which contribute to the setting of Tytherton Lucas Conservation Area (SO6).

- 1.5.3 Two major beneficial effects are identified for SO11 and SO12 as the northern access point constitutes road infrastructure which would promote economic growth and has the potential to integrate with the link road approved in Area A and improve access to the PRN and strategic lorry route along the A350, respectively. Moreover Option C1 supports the delivery of employment land as well as supporting the vitality and viability of the town centre and existing employment areas, all identified as minor beneficial effects. The location of Option C1 results in a moderate adverse effect in terms of access by sustainable transport (SO10) due to development in the north of the site having weaker ease of access by public transport while demonstrating potential to support improvements to future public and non-motorised transport connectivity within Chippenham, a minor beneficial effect.
- 1.5.4 In keeping with assessments for all other site options, Option C1 demonstrates moderate adverse effects (of problematic mitigation) against SO2 due to the extent to which greenfield land and BMV agricultural land covers the site as well as moderate beneficial effects relating to the site option's potential to support the delivery of on-site renewable energy (SO5a).
- 1.5.5 For the remaining environmental SA objectives, the assessment identifies a number of minor adverse effects (mitigation achievable). Notably development of Option C1 would have minor adverse effects on biodiversity (SO1), due to the proposed river bridge crossing dissecting the River Avon County Wildlife site and the presence of habitat connectivity features throughout the site option. Furthermore the presence of an Outer Source Protection Zone results in another minor adverse effect. Other minor adverse effects relate to environmental pollution (SO4), vulnerability to effects of climate change (SO5b) due to any increase in peak flows into the Avon due to the development of this site option potentially increasing flood risk in the town centre.
- 1.5.6 With regard to the remaining socio-economic SA objectives, development of Option C1 supports the delivery of affordable housing, leading to a minor beneficial effect against the housing SA objective (SO8). A number of minor beneficial effects are also experienced against SO9, particularly in terms of the provision of community facilities and green space for local communities and reduction of deprivation. Minor adverse effects are identified against SO9 relating to PROW being affected and the provision of educational facilities.
- 1.5.7 The dissection of the River Avon County Wildlife Site, the landscape and heritage impacts of development on this site together with weaker ease of access by public transport in the north of the site are significant sustainability issues that would need to be resolved to take forward this option. It is recommended that studies are undertaken to establish the best location for the river crossing, a lesser density of development is proposed on the north of the site, prevention of intrusive large buildings on the site and improved public transport should be key parts of further consideration if this site is taken forward. Should these issues be satisfactorily resolved, development of Option C1 has the potential for benefits, particularly in terms of local economic growth.

#### 1.6 Option C2

- Housing = 88ha, 1890 dwellings;
- Employment = 25ha;
- Green Space = 46ha; and
- Access = river bridge crossing of River Avon to north and A4 London Road to south

Figure 1.4: Strategic Site Option C2 – map



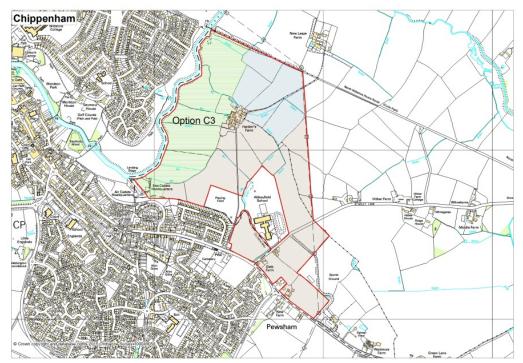
- 1.6.1 Option C2 represents a large site option. The greater scale of development results in major adverse effects in terms of visual impacts upon the landscape character of a wide area. The large proportion of development proposed in the sensitive Marden Valley also suggests that mitigation cannot be achieved when so much development will affect the whole landscape character of the valley and the extent of development also encroaches into the setting of Tyhtherton Lucas Conservation Area (SO7). As a result of these important issues, it is recommended that this site option should not be taken forward.
- Six moderate adverse environmental effects arise from this option. The proposed bridge crossing the River Avon would dissect the County Wildlife Site (SO1) and bridging of the Avon would likely alter the flow of the river which could have adverse effects on the River Avon downstream, particularly in Chippenham town centre (SO3 and SO5b). For SO4, although the permitted link road in Area A, if integrated with the river crossing access in the north of this site option, would create an alternative route to the PRN avoiding congested roads in Chippenham, it is unclear whether the reduced level of air pollution in the town due to the diversion of traffic would be sufficient. Development would occur on land which may well contribute to the setting of Tytherton Lucas Conservation Area (SO6) and an increase in greenhouse emissions associated with development (SO5a) would also result in moderate adverse effects.
- A major beneficial effect is identified for SO11 demonstrating major as the northern access point constitutes road infrastructure which would promotes economic growth. Another major beneficial effects is identified for SO12 as this option proposes two large areas for employment development with strong access to strategic lorry route, and following the completion of the approved link road in Area A, stronger access to the PRN. Moreover, Option C2 supports the vitality and viability of the town centre and existing employment areas, both identified as minor beneficial effects (SO12). The location of Option C2 results in a moderate adverse effect in terms of access by sustainable transport (SO10) due to development in the north of the site having weaker ease of access by public transport while demonstrating potential to support improvements to future public and non-motorised transport connectivity within Chippenham, a minor beneficial effect.
- In keeping with assessments for all other site options, Option C2 demonstrates moderate adverse effects (of problematic mitigation) against SO2 due to the extent to of greenfield and BMV agricultural land and moderate beneficial effects on environmental objectives relates to the site option's potential to support the delivery of on-site renewable energy (SO5a).

- 1.6.5 For the remaining environmental SA objectives, the assessment identifies a number of minor adverse effects (mitigation achievable). Notably development of Option C2 would have minor adverse effects on biodiversity (SO1), due to the proposed river bridge crossing dissecting the River Avon County Wildlife site and the presence of habitat connectivity features throughout the site option. Furthermore the presence of an Outer Source Protection Zone results in a minor adverse effect (SO3). Other minor adverse effects relate to vulnerability to effects of climate change (SO5b) due to an increase in peak flows into the Avon due to the development of this site option potentially increasing flood risk in the town.
- With regard to remaining socio-economic objectives, development of Option C2 strongly supports the delivery of affordable housing as a result of the increased scale of residential development, leading to a major beneficial effect against the housing SA objective (SO8). A number of minor beneficial effects are also experienced against SO9, particularly in terms of the provision of community facilities and green space for local communities and reduction of deprivation. Minor adverse effects are identified against SO9 relating to PROW being affected and the provision of educational facilities. Given the landscape issues associated with this option as discussed above, the assessments show that there are other site options that perform better in sustainability terms. Despite the local economic growth benefits identified, it is recommended that this option should not be taken forward.

#### 1.7 Option C3

- Housing = 43.8ha, 941 dwellings;
- Employment = 15.3ha;
- Green Space = 26.9ha; and
- Access = A4 London Road to south

Figure 1.5: Strategic Site Option C3 - map



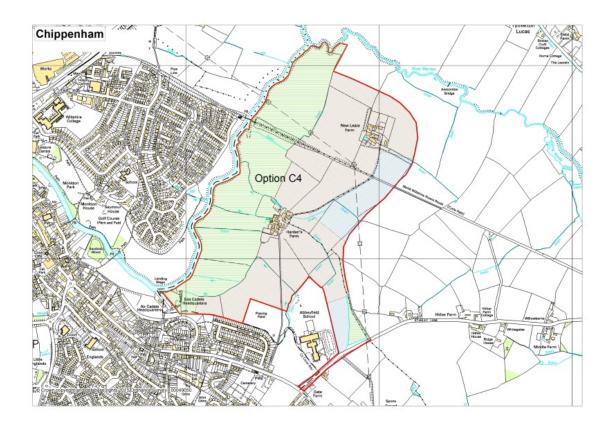
1.7.1 The assessment for Option C3 concludes that no major adverse effects are expected to arise from the development of this site option This site option does not propose to develop in the more sensitive area north of the North Wiltshire Rivers route and does not include a northern access point in the form of a river bridge crossing the River Avon. Avoidance of development in the Marsden Valley and over the Avon results in a better environmental performance, particularly in terms of biodiversity (SO1) and visual impact (SO7) compared to other site options in strategic area C.

- 1.7.2 Development of Option C3 would have no significant effects on the River Avon County Wildlife site, although some effects are expected against habitat connectivity features (SO1). Avoidance of land in the Marsden Valley north of the North Wiltshire Rivers route is reflected in Option C3's minor effect on landscape character and visual amenity (SO7).
- 1.7.3 Two moderate adverse environmental effects arise from this option due to an increase in greenhouse emissions associated with development (SO5a) and from the lack of a north access for Option C3 comes against SO4. Development of Option C3 would increase environmental pollution associated with the increase in vehicles accessing the site through the town centre along the A4.
- 1.7.4 In keeping with assessments for all other site options, Option C3 demonstrates moderate adverse effects (of problematic mitigation) against SO2 due to the extent to which greenfield land and BMV agricultural land covers the site and moderate beneficial effects relate to the site option's potential to support the delivery of on-site renewable energy (SO5a).
- 1.7.5 For the remaining environmental objectives, the assessment identifies a number of minor adverse effects (mitigation achievable): biodiversity (SO1) due to the presence of Otter in the River Avon and the existence of a wooded corridor and vulnerability to effects of climate change (SO5b) due to any increase in flows into the Avon due to the development of this site option potentially increasing flood risk in the town centre.
- 1.7.6 No major beneficial socio-economic effects are identified for Option C3. Moderate adverse socio-economic effects are identified relating to limited support to the vitality and viability of Chippenham town centre due to the proposed area for employment being situated away from the town centre and existing built up areas (SO11). Moderate adverse socio-economic effects on SO12 are also identified as although Option C3 provides employment land with strong connections to the strategic lorry network along the A4 access to the PRN is weak. This is likely to reduce the commercial desirability of the site. Also, although the south of the site would benefit from strong ease of access by public transport along the A4 London Road, access by public transport in the north of the site is moderate to weak and improvements to public transport along the A4 would be required (SO10 and SO12).
- 1.7.7 With regard to remaining socio-economic objectives development of Option C3 supports the delivery of affordable housing, leading to a minor beneficial effect against the housing SA objective (SO8). A number of minor beneficial effects are also experienced against SO9, particularly in terms of the provision of community facilities and green space for local communities and reduction of deprivation. Minor adverse effects are identified against SO9 relating to PROW being affected and the provision of educational facilities.
- 1.7.8 The air pollution impacts of development on this site is a significant sustainability issue that would need to be resolved to take forward this option. It is recommended that improved public transport should be a key part of further consideration if this site is taken forward. Should this issue be resolved satisfactorily, this option delivers relatively less economic growth benefits than some other options being considered.

#### 1.8 Option C4

- Housing = 51.4ha, 1105 dwellings;
- Employment = 10.08ha;
- Green Space = 40.6ha; and
- Access = river bridge crossing of River Avon to north and A4 London Road to south

Figure 1.6: Strategic Site Option C4 - map



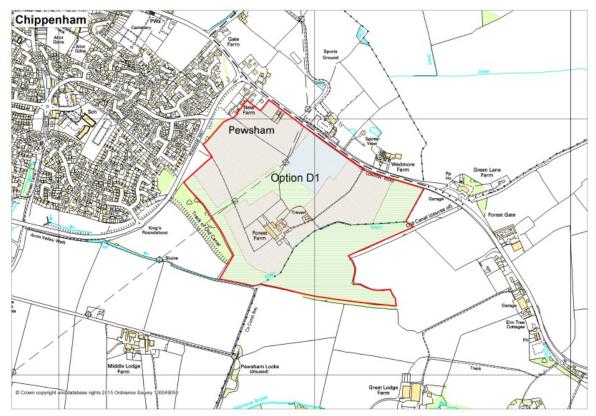
- 1.8.1 The assessment for Option C4 concludes that no major adverse effects are expected to arise from the development of this site option. A number of moderate and minor adverse effects are identified, so too are beneficial effects related to socio-economic SA objectives.
- 1.8.2 Six moderate adverse environmental effects arise from this option. The proposed bridge crossing the River Avon would dissect the County Wildlife Site (SO1) and bridging of the Avon would likely alter the flow of the river which could have adverse effects on the River Avon downstream, particularly in Chippenham town centre (SO3 and SO5b). An increase in greenhouse emissions associated with development (SO5a) would be likely, proposed development would impact on the landscape in the surrounding areas (SO7) and development would occur on land which may contribute to the setting of Tytherton Lucas Conservation Area (SO6).
- 1.8.3 A major beneficial effect is identified for SO11 as the northern access point constitutes road infrastructure which would promote economic growth. Moreover, Option C4 supports the delivery of employment land as well as supporting the vitality and viability of the town centre and existing employment areas, all identified as minor beneficial effects. The location of Option C4 results in a moderate adverse effect in terms of access by sustainable transport (SO10) due to development in the north of the site having weaker ease of access by public transport while demonstrating potential to support improvements to future public and non-motorised transport connectivity within Chippenham, a minor beneficial effect.
- 1.8.4 In keeping with assessments for all other site options, Option C4 demonstrates moderate adverse effects (of problematic mitigation) against SO2 due to the extent to which greenfield land and BMV agricultural land covers the site and moderate beneficial effects relate to the site option's potential to support the delivery of on-site renewable energy (SO5a).
- 1.8.5 For the remaining environmental SA objectives, the assessment identifies a number of minor adverse effects (mitigation achievable). The presence of an Outer Source Protection Zone results in a minor adverse effect. Other minor adverse effects relate to environmental pollution (SO4), vulnerability to effects of climate change (SO5b) due to any increase in flows into the Avon due to the development of this site option potentially increasing flood risk in the town centre.

- 1.8.6 With regard to the remaining socio-economic SA objectives, development of Option C4 supports the delivery of affordable housing, leading to a minor beneficial effect against the housing SA objective (SO8). A number of minor beneficial effects are also experienced against SO9, particularly in terms of the provision of community facilities and green space for local communities and reduction of deprivation. Minor adverse effects are identified against SO9 relating to PROW being affected and the provision of educational facilities.
- 1.8.7 The dissection of the River Avon County Wildlife Site, the landscape and heritage impacts of development on this site together with weaker ease of access by public transport in the north of the site are significant sustainability issues that would need to be resolved to take forward this option. It is recommended that studies are undertaken to establish the best location for the river crossing, a lesser density of development on the north of the site, prevention of intrusive large buildings on the site and improved public transport should be key parts of further consideration if this site is to taken forward. Should these issues be satisfactorily resolved, development of this option has the potential for benefits, particularly in terms of local economic growth.

#### 1.9 Option D1

- Housing = 22.4ha, 482 dwellings;
- Employment = 3.3ha;
- Green Space = 17.2ha; and
- Access = A4 London Road to the north

Figure 1.7: Option D1 – map



- 1.9.1 The assessment for Option D1 concludes that no major adverse effects are expected to arise from the development of this site option. A number of moderate and minor adverse effects are identified, so too are beneficial effects related to socio-economic SA objectives.
- 1.9.2 Moderate adverse effects, which are deemed problematic to mitigate, are expected on a number of SA objectives as a result of the development at Option D1. A number of these moderate adverse

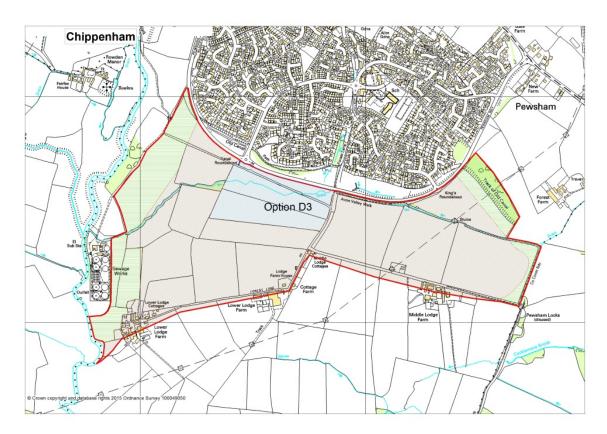
effects are common among site options throughout Chippenham, although a number are the result of features specific to the locality.

- 1.9.3 Development at Option D1 would lead to a moderate adverse effect in air quality, particularly along already congested routes and in the town centre (SO4) and an increase in greenhouse gases emissions (SO5a). The site option proposes only a very modest scale of employment development likely be suitable for employment development focused on one use class only resulting in a moderate adverse effect on SO11. The lack of an access point to the A350 corridor results in a moderate adverse effect against SO12, as lack of access to the PRN would likely reduce the site's commercial market desirability.
- 1.9.4 In keeping with assessments across all other sites, Option D1 demonstrates moderate adverse effects (of problematic mitigation) against SO2 due to the extent to which greenfield land and BMV agricultural land covers the site and moderate beneficial effects relate to the site option's potential to support the delivery of on-site renewable energy (SO5a).
- 1.9.5 Additionally, minor adverse effects, all of which are considered achievable to mitigate, are identified in regard to a number of environmental SA objectives. This includes effects relating to natural features of wildlife importance and the presence of bats (SO1), a site of potential land contamination (SO2), effects on surface water resources (SO3), vulnerability to effects of climate change (SO5b) and effects on the landscape (SO7). A mix of minor beneficial and minor adverse effects on the historic environment is identified for Option D1 which offers the potential to restore the old Wilts and Berks Canal, but also proposes development in an area of high potential for unknown heritage assets.
- 1.9.6 The only beneficial effect relating to the environmental SA objectives concerns the potential to provide renewable energy on-site (SO5a), this is a moderate beneficial effect shared by all site options. The assessment also finds a number of minor adverse effects for the remaining socio-economic SA objectives, notably relating Public Rights of Way (SO9) and weak non-motorised access to the town centre from employment uses (SO12). Option D1 would support only a minor beneficial effect in terms of provision of infrastructure to support economic growth as it does not propose any strategic road infrastructure (SO11).
- 1.9.7 No major socio-economic beneficial effects are identified for this option. A number of minor beneficial effects arise. Development of Option D1 would have minor beneficial effect with regard to the delivery of affordable homes (SO8), providing amenity space and opportunities for local communities as well as being accessible to educational and health facilities (SO9). Option D1's moderate non-motorised access to the town centre in the west combined with weak to the east results in a minor adverse effect on SO10 requiring improvements to off-site pedestrian and cycling facilities.
- 1.9.8 The air pollution impacts of development on this site and the very modest scale of employment associated with a lack of an access point to the A350 corridor are significant sustainability issues that would need to be resolved to take forward this option. This option is considered less sustainable than some other options being considered as it delivers very little economic benefits.

#### 1.10 **Option D3**

- Housing = 70.6ha, 1518 dwellings;
- Employment = 10.7ha;
- Green Space = 19.8ha; and
- Access = A4 Pewsham Way

Figure 1.8: Option D3 - map



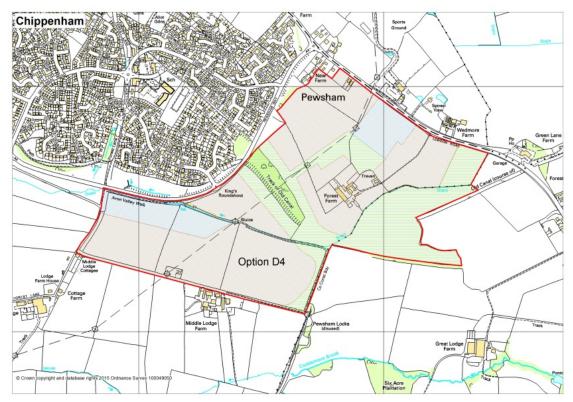
- 1.10.1 Overall, the assessment for Option D3 finds that development of the site would not result in any major adverse effects. A number of moderate and minor adverse effects are identified, so too are beneficial effects related to socio-economic SA objectives.
- 1.10.2 In keeping with assessments for all other site options, Option D3 demonstrates moderate adverse effects (of problematic mitigation) against SO2 due to the extent to which greenfield land and BMV agricultural land covers the site and moderate beneficial effects relate to the site option's potential to support the delivery of on-site renewable energy (SO5a).
- 1.10.3 Moderate adverse effects arising from development of Option D3 are identified against SO2, these relate to the extent to which greenfield land and BMV agricultural land covers the site. This is shared by all site options.
- 1.10.4 Further moderate adverse effects arise from the increase in carbon dioxide emissions (SO5a) and environmental pollution associated with development of this site option (SO4). Additionally, it is assessed that Option D3 would result in a moderate adverse effect against SO7 as development would affect the separation between Pewsham and Naish Hill.
- 1.10.5 Development of Option D3 would lead to minor adverse effects on a number of remaining environmental SA objectives (water resources, environmental pollution, vulnerability to effects of climate change and the historic environment).
- 1.10.6 Development of Option D3 strongly supports the delivery of affordable housing as a result of the increased scale of residential development, leading to a major beneficial effect against the housing SA objective (SO8).
- 1.10.7 Regarding the remaining socio-economic SA objectives, Option D3 would have one moderate adverse effects and three minor adverse effects. The site option proposes a sizeable scale of employment development and the lack of an access point to the A350 corridor results in a moderate adverse effect against SO12, as access to the PRN would likely reduce the site's commercial market desirability.
- 1.10.8 Development of Option D3 could have minor adverse effects on a number Public Rights of Way in the vicinity of the site (SO9). Another minor adverse effect relates to the provision of employment land which is accessible by sustainable transport modes (SO12), requiring on-site improvements to

- pedestrian links between the public transport corridor along the A4 London Road and the employment site as well as to non-motorised links with the town centre and transport hubs.
- 1.10.9 Sustainable transport (SO10) is another source of minor adverse effects for Option D3, again this is linked to the sustainable access to the site option, which is moderate by public transport but moderate to weak in terms of non-motorised access to the town centre and existing services.
- 1.10.10 The environmental pollution and landscape impacts of development on this option coupled with the lack of access point to the A350 corridor are significant sustainability issues that would need to be resolved to take forward this option. It is recommended that improved public transport should be a key part of further consideration if this site is taken forward. Despite the significant scale of employment development, this option is considered less sustainable than some other options as it delivers relatively less economic growth benefits due to the unattractiveness of its location.

#### **1.11** Option D4

- Housing = 48.1ha, 1034 dwellings;
- Employment = 8.5ha;
- Green Space = 23.2ha; and
- Access = A4 Pewsham Way and/or A4 London Road

Figure 1.9: Option D4 - map



- 1.11.1 Overall, the assessment demonstrates that no major adverse effects are expected to arise from this site option development. A number of moderate and minor adverse effects are identified, so too are beneficial effects related to socio-economic SA objectives.
- 1.11.2 Option D4 demonstrates moderate adverse effects on SO4 (decrease in air quality, particularly along already congested routes and in the town centre) and SO5a (increase in carbon dioxide emissions). In addition, Option D4 would have a moderate adverse effect on SO7. This is due to the development in

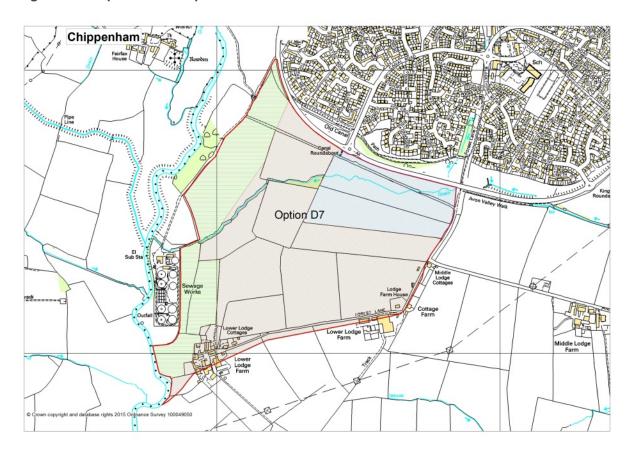
the south of this site option adversely affecting the visual separation between Naish Hill and Pewsham, due to the dome-like landscape in the area.

- 1.11.3 In keeping with assessments for all other site options, Option D4 demonstrates moderate adverse effects (of problematic mitigation) against SO2 due to the extent to which greenfield land and BMV agricultural land covers the site and moderate beneficial effects relate to the site option's potential to support the delivery of on-site renewable energy (SO5a). Development of Option D4 would lead to minor adverse effects on a number of remaining environmental SA objectives (water resources, environmental pollution, vulnerability to effects of climate change and the historic environment).
- 1.11.4 In terms of socio-economic objectives, no major beneficial effects are identified. Option D4 proposes a small scale of employment development on the periphery of town capable of accommodation all uses, this is reflected by the minor beneficial effects Option D4 would have in terms of potential for providing employment and supporting the vitality and viability of Chippenham town centre (SO11). One moderate adverse effect (SO12) arises out of the lack of an access point to the A350 corridor, as access to the PRN would likely reduce the site's commercial market desirability.
- 1.11.5 The assessment also finds a number of minor adverse effects for the remaining socio-economic objectives, notably relating Public Rights of Way (SO9) and weak non-motorised access to the town centre from employment uses (SO12). Option D3 would support only a minor beneficial effect in terms of provision of infrastructure to support economic growth as it does not propose any strategic road infrastructure (SO11).
- 1.11.6 Sustainable transport (SO10) is another source of minor adverse effects for Option D4, again this is linked to the sustainable access to the site option, which is moderate by public transport but moderate to weak in terms of non-motorised access to the town centre and existing services, performing particularly poorly in the southwest of the site.
- 1.11.7 The environmental pollution and landscape impacts of development on this site and the lack of access point to the A350 corridor are significant sustainability issues that would need to be resolved to take forward this option. Despite the scale of employment development, this option is considered less sustainable than some other options as it delivers relatively less economic growth benefits due to the unattractiveness of its location.

#### **1.12 Option D7**

- Housing = 37.5.ha, 806 dwellings;
- Employment = 10.5ha;
- Green Space = 13.9ha; and
- Access = A4 Pewsham Way and/or river bridge crossing of the River Avon to the south

Figure 1.10: Option D7 - map



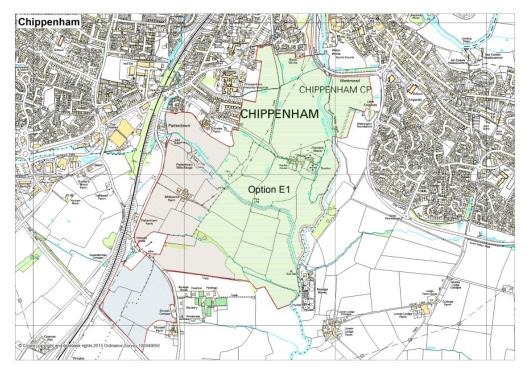
- 1.12.1 Overall, the assessment demonstrates that no major adverse effects are expected to arise from this site option development. A number of moderate and minor adverse effects are identified, so too are beneficial effects related to socio-economic SA objectives.
- 1.12.2 Moderate adverse effects would result from the development of this option on SO5a due to the increase in carbon dioxide emissions associated with development of the site and SO7 due to effects on the visual separation between Pewsham and Naish Hill, due to the dome-like landscape in the area. Moderate adverse effects have been identified on SO1 as the proposed bridge crossing the River Avon would dissect the County Wildlife Site and on SO3 and SO5b as bridging of the Avon would likely alter the flow of the river which could have adverse effects on water resources downstream.
- 1.12.3 Option D7 proposes a river crossing of the Avon to the south as well as access via A4 Pewsham Way. It has been assumed that provision of a southern road linking the A350 to the A4 will be provided. Provision of the link road boosts the site's performance against some economic objectives (SO11) with a major beneficial effect identified due to improved access to employment areas and the PRN (SO12).
- 1.12.4 In keeping with assessments for all other site options, Option D7 demonstrates moderate adverse effects (of problematic mitigation) against SO2 due to the extent to which greenfield land and BMV agricultural land covers the site and moderate beneficial effects relate to the site option's potential to support the delivery of on-site renewable energy (SO5a).
- 1.12.5 Development of Option D7 would lead to minor adverse effects on a number of remaining environmental SA objectives (environmental pollution, vulnerability to effects of climate change and the historic environment). The proposed access from the south results in a minor adverse effect for air quality (SO4) as vehicles accessing the site would be able to avoid already constrained routes and the town centre through using the link road.

- 1.12.6 With regard to the remaining socio-economic SA objectives, the scale of housing proposed as part of Option D7 results in a minor beneficial effect on affordable housing (SO8).
- 1.12.7 Sustainable transport (SO10) is another source of minor adverse effects for Option D7, again this is linked to the sustainable access to the site option, which is moderate by public transport but moderate to weak in terms of non-motorised access to the town centre and existing services, performing particularly poorly in the southwest of the site.
- 1.12.8 The landscape impacts of development on this site and the dissection of the River Avon County Wildlife Site are significant sustainability issues that would need to be resolved to take forward this option. It is recommended a prevention of intrusive large buildings on the site and that studies are undertaken to establish the best location for the river crossing. Should these issues be satisfactorily resolved, development of this option has the potential for benefits, particularly in terms of local economic growth.

#### **1.13 Option E1**

- Housing = 42ha, 903 dwellings;
- Employment = 18.1ha;
- Green Space = 103ha; and
- Access = B458/B4643

Figure 1.11: Option E1 - map



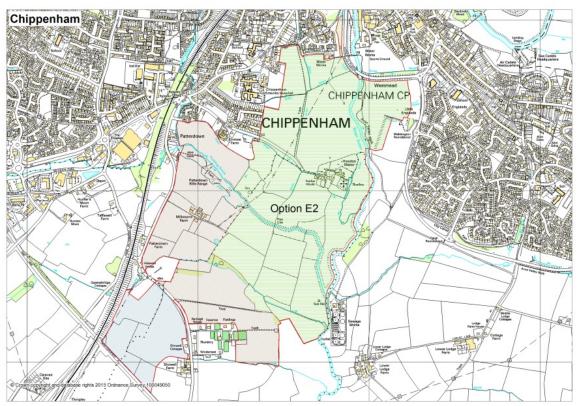
- 1.13.1 Overall, the assessment demonstrates that no major adverse effects are expected to arise from this site option development. A number of moderate and minor adverse effects are identified, so too are beneficial effects related to socio-economic SA objectives.
- 1.13.2 A couple of moderate adverse effects which would be problematic to mitigate are likely to arise from the development of this site option but generally these effects are shared by all site options rather than just for this particular site option. These are the extent of greenfield and BMV agricultural land (SO2) and the increase in carbon dioxide emissions associated with development (SO5a).
- 1.13.3 The assessment identifies major beneficial effects relating to the provision of employment land (SO11 and SO12), infrastructure to promote economic growth (SO11) and support for the vitality of existing

- areas of employment (SO11 and SO12). The indicative employment area proposed comprises a large site with strong access by public transport and strong access to the PRN and strategic lorry route.
- 1.13.4 With regard to remaining environmental SA objectives, the presence of Pudding Brook and increased surface water runoff from development would lead to minor effects on SO3; and increased rates of runoff flowing into the Avon have the potential to increase peak flows and flood risk downstream would lead to minor adverse effects on SO5b. Development proposed at Option E1 would also lead to minor adverse effects on SO1, due to the River Avon County Wildlife site and the recorded presence of bats within the vicinity of the site, on SO6 due to development being proposed in land that contributes to the setting of the nearby Rowden Conservation and on SO7 as development of this site option proposes an extensive green buffer along the River Avon in the east of this site option which protects the flat and wide open views associated with the floodplain.
- 1.13.5 With regard to the remaining socio-economic SA objectives, Option E1 performs well, providing minor beneficial effects for affordable housing (SO8) and communities (SO9) objective, in terms of supporting reduction of deprivation and economy (SO11) and employment (SO12) objectives. However, a number of minor adverse effects for SO9 which proposals could mitigate are identified in relation to loss of an accessible area of open space, PROWs being affected and the provision of educational facilities
- 1.13.6 The site option is very well situated when considering access by public transport (SO10) but development of this site option could result in minor adverse effects relating to non-motorised access to the town centre and services.
- 1.13.7 This option has the potential to offer significant economic benefits together with low levels of environmental effects making it a higher sustainability performance option.

#### **1.14 Option E2**

- Housing = 53ha, 1140 dwellings;
- Employment = 18.1ha;
- Green Space = 103ha; and
- Access = B458/B4643





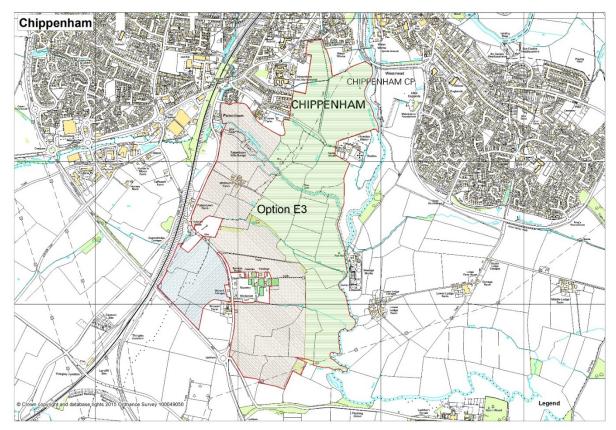
- 1.14.1 Overall, the assessment demonstrates that no major adverse effects are expected to arise from this site option development. A number of moderate and minor adverse effects are identified, so too are beneficial effects related to socio-economic SA objectives.
- 1.14.2 A couple of moderate adverse effects which would be problematic to mitigate are likely to arise from the development of this site option but generally these effects are shared by all site options rather than just for this particular site option. These are the extent of greenfield and BMV agricultural land (SO2) and the increase in carbon dioxide emissions associated with development (SO5a).
- 1.14.3 The assessment identifies major beneficial effects relating to the provision of employment land (SO11 and SO12), infrastructure to promote economic growth (SO11) and support for the vitality of existing areas of employment (SO11 and SO12). The indicative employment area proposed comprises a large site with strong access by public transport and strong access to the PRN and strategic lorry route.
- 1.14.4 With regard to remaining environmental SA objectives, the presence of Pudding Brook and increased surface water runoff from development would lead to minor effects on SO3; and increased rates of runoff flowing into the Avon have the potential to increase peak flows and flood risk downstream would lead to adverse effects on SO5b. Development proposed at Site Option E1 would also lead to minor adverse effects on SO1, due to the River Avon County Wildlife site and the recorded presence of bats within the vicinity of the site, and on SO6 due to development being proposed in land that contributes to the setting of the nearby Rowden Conservation and on SO7 as development of this site option proposes an extensive green buffer along the River Avon in the east of this site option which protects the flat and wide open views associated with the floodplain.
- 1.14.5 Regarding remaining socio-economic objectives Option E1 performs well, providing minor beneficial effects for affordable housing (SO8) and minor beneficial effects communities (SO9) objectives in terms of supporting reduction of deprivation and economy (SO11) and employment (SO12) objectives. However, a number of minor adverse effects for SO9 which proposals could mitigate are identified in relation to loss of an accessible area of open space, PROWs being affected and the provision of educational facilities.

- 1.14.6 The site option is very well situated when considering access by public transport (SO10) but development of this site option could result in minor adverse effects relating to non-motorised access to the town centre and services.
- 1.14.7 This option has the potential to offer significant economic benefits together with low levels of environmental impact making it a higher sustainability performance option.

#### **1.15** Option E3

- Housing = 80ha, 1720 dwellings;
- Employment = 18.1ha;
- Green Space = 91ha; and
- Access = B458/B4643

Figure 1.13: Option E3 - map



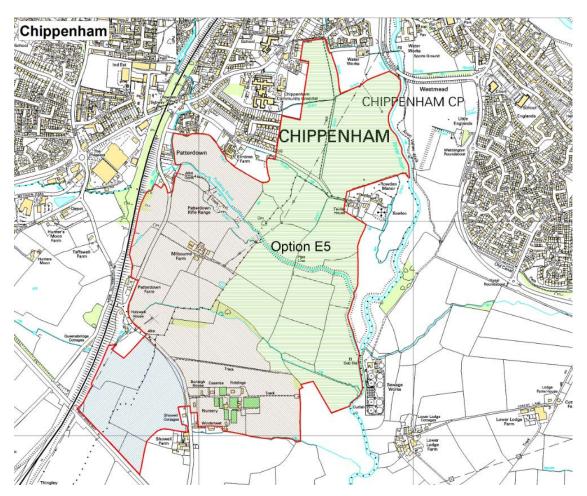
- 1.15.1 Overall, the assessment demonstrates that no major adverse effects are expected to arise from this site option development. A number of moderate and minor adverse effects are identified, so too are beneficial effects related to socio-economic SA objectives.
- 1.15.2 A couple of moderate adverse effects which would be problematic to mitigate are likely to arise from the development of this site option but generally these effects are shared by all site options rather than just for this particular site option. These are the extent of greenfield and BMV agricultural land (SO2) and the increase in carbon dioxide emissions associated with development (SO5a).
- 1.15.3 The increased extent of residential development in Option E3 results on a moderate adverse effect against one environmental SA objective (landscape, SO7). This stems from the strip of indicative green space proposed at the southern extent of the site not being sufficiently wide to adequately screen the effects of development on the local landscape character and visual amenity.
- 1.15.4 Option E3 would have major beneficial effects through the provision of good quality affordable homes (SO8), of a mix of uses and strong access of employment area to the PRN and strategic lorry route

- along the A350 and the potential to provide part of the southern link road to Chippenham, connecting the A350 south of the town to the A4 at Pewsham (SO11 and SO12).
- 1.15.5 With regard to remaining environmental SA objectives, the presence of Pudding Brook and increased surface water runoff from development would lead to minor effects on SO3; and increased rates of runoff flowing into the Avon have the potential to increase peak flows and flood risk downstream would lead to adverse effects on SO5b. Development proposed at Site Option E1 would also lead to minor adverse effects on SO1, due to the River Avon County Wildlife site and the recorded presence of bats within the vicinity of the site, and on SO6 due to development being proposed in land that contributes to the setting of the nearby Rowden Conservation.
- 1.15.6 Regarding remaining socio-economic objectives, Option E3 performs well, providing major beneficial effects for affordable housing (SO8) and some minor beneficial effects on communities (SO9) in terms of supporting reduction of deprivation,, economy (SO11) and employment (SO12) objectives. Minor adverse effects are predicted on the community objective (SO9) in relation to loss of an accessible area of open space PROWs being affected and the provision of educational facilities.
- 1.15.7 The site is situated along the B4643, an existing public transport corridor, as such access to the site by public transport is strong (SO10).
- 1.15.8 The landscape impacts of development on this site is a significant sustainability issue that would need to be resolved to take forward this option. It is recommended the extent of the indicative proposed green space proposed in in the south east of the site would need to be increased. Should this issue be satisfactorily resolved, this option has the potential to offer significant economic benefits together with relatively low levels of environmental impact making it a higher sustainability performance option.

#### **1.16** Option **E5**

- Housing = 64.5ha, 1385 dwellings;
- Employment = 18.1ha;
- Green Space = 75.4ha; and
- Access = B458/B4643

Figure 1.14: Option E5 - map



- 1.16.1 Overall, the assessment demonstrates that no major adverse effects are expected to arise from this site option development. A number of moderate and minor adverse effects are identified, so too are beneficial effects related to socio-economic SA objectives.
- 1.16.2 A couple of moderate adverse effects which would be problematic to mitigate are likely to arise from the development of this site option but generally these effects are shared by all site options rather than just for this particular site option. These are the extent of greenfield and BMV agricultural land (SO2) and the increase in carbon dioxide emissions associated with development (SO5a).
- 1.16.3 The assessment identifies major beneficial effects relating to the provision of employment land (SO11 and SO12), infrastructure to promote economic growth (SO11) and support for the vitality of existing areas of employment (SO11 and SO12). The indicative employment area proposed comprises a large site with strong access by public transport and strong access to the PRN and strategic lorry route.
- 1.16.4 With regard to remaining environmental SA objectives, the presence of Pudding Brook and increased surface water runoff from development would lead to minor effects on SO3; and increased rates of runoff flowing into the Avon have the potential to increase peak flows and flood risk downstream would lead to minor adverse effects on SO5b. Development proposed at Option E3 would also lead to minor adverse effects on SO1, due to the River Avon County Wildlife site and the recorded presence of bats within the vicinity of the site, on SO6 due to development being proposed in land that contributes to the setting of the nearby Rowden Conservation and on SO7 as development of this site option proposes an extensive green buffer along the River Avon in the east of this site option which protects the flat and wide open views associated with the floodplain.
- 1.16.5 In terms of the socio-economic objectives development of Option E5 would have major beneficial effects through the provision of good quality affordable homes (SO8), of a mix of uses and strong

- access of employment area to the PRN and strategic lorry route along the A350 and the potential to provide part of the southern link road to Chippenham, connecting the A350 south of the town to the A4 at Pewsham (SO11 and SO12).
- 1.16.6 Regarding remaining socio-economic objectives, some minor beneficial effects are predicted on communities (SO9) in terms of supporting reduction of deprivation, economy (SO11) and employment (SO12) objectives. Minor adverse effects are predicted on the community objective (SO9) in relation to loss of an accessible area of open space, PROWs being affected and the provision of educational facilities.
- 1.16.7 The site option is very well situated when considering access by public transport (SO10) but development of this site option could result in minor adverse effects relating to non-motorised access to the town centre and services.
- 1.16.8 This option has the potential to offer significant economic benefits together with relatively low levels of environmental impact making it a high sustainability performance option.

#### 1.17 Conclusions & Recommendations

- 1.17.1 The aim of this assessment exercise has been threefold:
  - Identification of more sustainable (preferred) site options for consideration in the preferred development strategy;
  - Identification of less sustainable (not preferred) site options which should only be considered if more sustainable options are undeliverable; and
  - Identification of options which should not be given further consideration.
- 1.17.2 The following conclusions and recommendations are reached:

#### More sustainable options for development

- 1.17.3 Options B1, C1, C3, C4, D7, E1, E2, E3 and E5 are of relatively higher sustainability performance and are recommended for consideration in the development of the preferred development strategy.
- 1.17.4 However, significant sustainability issues associated with Options B1, C1, C3, C4, D7 and E3 (as identified in the discussion for each option) would need to be resolved prior to inclusion in the preferred development strategy.

#### Less sustainable options for development

1.17.5 Options D1, D3 and D4 are considered less sustainable than those identified above as they deliver the least beneficial effects compared to those in the more sustainable options. They should only be given further consideration in the preferred strategy if the options identified above are not deliverable.

#### Options which should not be given further consideration

- 1.17.6 Option A1 due to the major adverse biodiversity effects identified should not be given further consideration in the preferred strategy.
- 1.17.7 Option C2 due to the major adverse landscape effects identified should not be given further consideration in the preferred strategy.

## Appendix A. Site assessments - detailed assessment tables

Table A.1: Option A1 assessment

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
1. Protect and enhance all biodiversity and geological features and avoid irreversible losses	- Affect a designated / undesignated site of biodiversity or geological value or affect legally protected species?	Development of the site would not directly affect any designated sites of biodiversity or geological value.  Birds Marsh Wood County Wildlife Site (CWS) comprises the western border to the site. Parts of the CWS are classified as BAP Priority Habitats. Proposals for this site option incorporate a buffer zone, shown as green space on the indicative layout drawing.  The cumulative adverse effects on Birds Marsh Wood from development of this site option and approved application (12/00560/OUT) on land to the south and west of the CWS would be significant. A buffer zone, sufficient in size to ensure no adverse effects from development, would likely leave insufficient space within the site option to deliver the level of mixed-use development proposed. This constitutes a major adverse effect.	()
	- Affect natural features that are important for wildlife or landscape character such as trees or hedgerows, or areas of ancient woodland not subject to statutory protection?	The site is comprised largely of neutral grassland with mature hedgerows and hedgerow trees. Dog Kennel Plantation and several small areas of wood pasture are situated within the site as are a number of watercourses and ponds. These features contribute to habitat corridors which provide connectivity between Birds Marsh Wood and the wider area.  Habitats within the site area are known to support populations of protected species including Great crested newt and Lesser and Greater horseshoe bats. The proposed layout for this site option would have moderate adverse effects on a number of these biodiversity features. Mitigation of effects would be problematic due to the extent of constrained land within the site.	()
2. Ensure efficient and effective use of land and the	- Use previously developed land, greenfield land or a mix of both?	The indicative layout shows that proposed development would occur entirely on greenfield land. Due to the extent of greenfield land mitigation would be problematic.	()

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
use of suitably located previously developed land and buildings	- Result in the permanent loss of the Best and Most Versatile Agricultural land (Grades 1, 2, 3)?	The site is comprised predominantly of Grade 2 (very good) BMV agricultural land. A small area of Grade 3 (good) agricultural land is located along the western extent of the site and a small area of non-agricultural urban lands is present along the southern border of the site. Due to the extent of BMV land mitigating effects by constructing on poorer land is not achievable and development of the site would result in the permanent loss of BMV land. As such mitigation is considered problematic.	()
	- Require the remediation of contaminated land? If so, would this lead to issues of viability and deliverability?	Due to its current agricultural use this site option is unlikely to require remediation of contamination. There are no sites of potential land contamination within option A1.	(0)
	- Lead to the sterilisation of viable mineral resources? If so, is there potential to extract the mineral resource as part of the development?	The site is not situated within a Mineral Safeguarding Zone.	(0)
3. Use and manage water resources in a sustainable manner	<ul> <li>Be situated in any of the following:</li> <li>Drinking Water Safeguarding Zone; or</li> <li>Groundwater Source Protection Zone</li> </ul>	Site Option A1 is situated entirely within an Outer Source Protection Zone (Zone 2c) and several tributaries of the River Avon run through the site. Further proposals for development in Option A1 should ensure appropriate land management practices and provide buffer strips between indicative development areas and tributaries.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	- Affect surface or groundwater resources in terms of volume, quality and flow?	The site is situated entirely within Flood Zone 1 in the River Avon catchment, however adverse effects on the River Avon are not anticipated due to the distance and the presence of the railway embankment which impedes flows.  Development of this greenfield site would likely increase surface water runoff due to increased impermeable surfaces. Mitigation could be achieved through incorporating surface water management measures into the further proposals for the site. The flat and elevated nature of the site combined with the clay substrata makes drainage by gravity less effective, as a result pumping would likely be required.  Drainage issues at the site increase the propensity of groundwater flooding which could be exacerbated by development which increases impermeable surfaces, further proposals should take account of this.	(-)
4. Improve air quality throughout Wiltshire and minimise all sources of environmental pollution	-Take place within a designated Air Quality Management Area (AQMA)? If so, is there evidence to suggest that the development of site will lead to an exacerbation of air quality issues? If so, can such impacts be appropriately mitigated in line with local air quality management plan?	The site is not situated in proximity to an AQMA.	(0)
	-Lead to a decrease in air quality locally? Or increase noise or light pollution?	Vehicular access to the site from the B4069 Maud's Heath Causeway north of Chippenham will increase pressure on the already constrained road. This would increase congestion and likely decrease air quality on the B4069 corridor into Chippenham.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		The increase in vehicles associated with development of the site would increase noise pollution as well as light pollution at night, affecting receptors along the B4069.	
		The permitted link road in Area A would provide direct access to the PRN which would likely direct traffic and therefore environmental pollution away from the town centre. Development of the site should encourage and be supported by sustainable transport modes to reduce private car dependency and lessen the effect of environmental pollution from development.	
	- Lie within an area of, or in close proximity to, any significant source(s) of environmental pollution (air, noise, light)?	The site is not situated in proximity to any existing sources of environmental pollution, as such no effects are expected	(0)
5a. Minimise our impacts on climate change – through reducing greenhouse gas emissions	- Reduce greenhouse emissions, in particular carbon dioxide emissions?	The development of this site option would increase greenhouse gas emissions, in particular carbon emissions due to increased levels of traffic and new buildings associated with new development. This is unavoidable to some extent, however the scale of development proposed at the site option and the site's strong to moderate non-motorised access to the town centre would likely result in less traffic generating carbon emissions.	(-)
		Carbon dioxide emissions from new buildings can be reduced by adhering to high standards of sustainable construction and design.	
	- Offer the potential to make provision for on-site renewable or very low carbon energy generation; thus carbon dioxide emissions?	Development of the site has the potential to make provision for on-site renewable or very low carbon energy generation. For these positive effects to be maximised it is recommended that renewable energy generation such as solar PV is considered.	(+ +)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
5b. Minimise our impacts on climate change – through reducing our vulnerability to future climate change effects	- Be located within flood zone 1? If not, are there alternative sites in the area that can be allocated in preference to developing land in flood zone 2? (To be determined through the application of the Sequential Test).	The site is situated entirely within Flood Zone 1 which means development would be less vulnerable to increasing extreme climatic events such as fluvial flooding, as such no effects are expected.	(0)
	- Address the risk of flooding from all sources?	The site is situated in Flood Zone 1.  Site option A1 is located upstream of Chippenham and surface water flows into the Avon. The presence of the railway embankment acts as a buffer to surface water runoff towards the Avon. Development of this site option must ensure flows into the Avon upstream of Chippenham are not increased by development.  Due to the site's elevated and flat topography and clay substrata, there is an increased propensity for groundwater flooding. The railway embankment impedes runoff into the Avon, exacerbating conditions. Surface water management measures should be incorporated into further development proposals to ensure that existing or improved greenfield rates of surface water runoff are achieved and detention/attenuation ponds are provided, thus reducing the risk of groundwater flooding on-site.  As surface water does not flow directly into the Avon development of this site option would need to connect with the existing drainage system.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
6. Protect, maintain and enhance the historic environment	- Affect directly or indirectly a heritage asset?	There are five listed buildings within the site, a cluster of three grade II listed buildings at Pound Farm along the B4069 and two grade II listed buildings at Barrow Farm.  The site comprises open agricultural land which contributes to the setting of the Langley Burrell Conservation Area. Development of this site could not avoid these adverse effects. Mitigation is also considered problematic, even though tree planting could screen views of development this would not protect the open setting of the Conservation Area.  There is high potential for unknown heritage assets of archaeological interest associated located in the site. Development can mitigate effects on these assets	()
		through preservation in situ of discrete areas of remains and archaeological recording for more widespread remains.	

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
7. Conserve and enhance the character and quality of Wiltshire's rural and urban landscapes, maintaining and strengthening local distinctiveness and sense of place	<ul> <li>Impact on the visual amenity or character of the natural landscape?</li> <li>Specifically considering the effects on: <ul> <li>Internationally/Nationally designated features and their setting;</li> <li>Locally designated landscapes/features and their setting;</li> <li>Local amenity.</li> </ul> </li> </ul>	There are no designated features within proximity of the site.  Development of the site would adversely affect a number of landscape qualities including the visual prominence of Birds Marsh Wood, visual separation between Chippenham and Kingston Langley, the wooded backdrop to existing development along the B4069 and Langley Burrell and the setting of Langley Burrell Conservation Area.  The landform in which this site option is situated blocks views between Chippenham, Kingston Langley and Langley Burrell. Development of this site option would exert an urban influence on the surrounding landscape and dilute the separate and isolated character for Kingston Langley and Langley Burrell. Incorporating green buffers to screen views of development from the north and east would go some way to reducing the visual impact of proposals. In addition, a lesser density of development and preventing intrusive large buildings on the site would need to be included as mitigation measures. Mitigation is considered problematic as a layout which favourably utilises the landform and existing and new woodland copses and trees to screen views would be difficult to achieve within the site option while maintaining the scale of development proposed.  Additionally, large employment buildings would have adverse effects on visual amenity which would be problematic to mitigate using vegetation buffers and the existing landform.	()
8. Provide everyone with the opportunity to live in good quality, affordable housing, and ensure an appropriate mix	- Help meet affordable housing needs/the needs of the local community (if known)?	A mixed use development of this site would deliver approximately 460 dwellings, which provides the opportunity to deliver good quality affordable housing that meets local needs in terms of tenure, size and type.	(+)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
of dwelling sizes, types and tenures			
9. Reduce poverty and deprivation and promote more inclusive and self- contained communities	- Result in an increase in poverty and deprivation and/or lead to significant social exclusion amongst existing and new residents?	Development at this site option would occur directly north of one of the most deprived areas in Chippenham. The site option is also situated in proximity to a large area of the least deprived in Chippenham.  The extant permission at Area A makes provision for new homes, employment land and a primary school which would support a reduction in local deprivation.  Development of this site option has the potential to deliver employment land and community facilities which would support a reduction in nearby levels of high deprivation.	(+)
	- Result in the loss of any existing or proposed Community facility/green or amenity space or would it contribute to the construction of a new facility/space?	Development of the site would not result in the loss of any community facilities or amenity space. There are no accessible open spaces within the site although Birds Marsh Wood and Dog Kennel Plantation, are situated adjacent to the site option. Proposed green space in the north and west of the site would create new accessible open space while connecting the existing spaces. This would constitute a minor beneficial effect.	(+)
	- Result in the loss of PROW or would it provide new PROW?	A network of Public Rights of Way (PRoWs) run through the site. The PRoWs create links between Jacksom's Lane, Hills Corner Road, Birds Marsh Wood and the B4069, most of the PRoWs run through the area identified on the indicative layout drawing proposed for residential development. Due to the number of PRoWs in the site adverse effects from development of the site are likely. Further development proposals for the site should incorporate PRoWs, where it is demonstrated that loss or alteration of PRoWs is unavoidable provision of suitable alternatives can be proposed to offset the impact.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	- Be accessible to educational and health facilities?	Non-motorised access to secondary schools is strong, however secondary schools in Chippenham are reaching capacity and would be unlikely to accommodate the number of pupils likely to arise from development of this site. Provision of educational facilities as part of development proposals or contribution to the delivery of new educational facilities off-site would mitigate this.	(-)
		The site has weak non-motorised ease of access to the hospital and existing access by public transport is weak. Private vehicles accessing the hospital would be directed along the B4069 into Chippenham. Development at this site option would require improvements to public transport to ensure access to the hospital. Further development proposals should demonstrate how development could be supported by and integrate with improvements to off-site pedestrian and cycle facilities.	
10. Reduce the need to travel and promote more sustainable transport choices	- Occur in an area currently accessible by public transport/ walking and cycling? If not, is there scope to make it so?	The site is situated along the B4069 Maud's Heath Causeway and has weak access by public transport. The B4069 is identified as having the potential to become a future public transport corridor. Development of the site could support an increase in the use of public transport services along this corridor.  Ease of access to the town centre by non-motorised modes from the site is moderate and further proposals should explore opportunities to integrate with	(-)
	- Support improvements to public transport connectivity and pedestrian and cycle links to the town, town centre, railway station and Wiltshire College campuses in Chippenham?	pedestrian and cycle network in the wider area.  Development of the site option is unlikely to support significant improvements to public transport connectivity, although residential and employment development of the site could create demand for a new public transport corridor along the B4069.  This site option is unlikely to support improvements to pedestrian or cycle links to the town or railway station.	(0)
11. Encourage a vibrant and diversified economy and	- Offer the potential to provide employment land for B1, B2 and B8 uses?	This site option proposes 3.6ha of employment land, the indicative layout shows this as one small area in the southeast of the site along the B4069. The scale and indicative layout offers the potential to deliver a small amount of employment land which would likely benefit from focusing on one B class use.	(+)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
provide for long- term sustainable economic growth		Access to the PRN will be strong following the completion of the link road which forms part of the extant permission in Area A. This will improve access from the strategic lorry route from the A350.  There is potential for strong access by public transport (along the B4069); however, existing public transport services are weak. Overall a minor beneficial effect is expected in terms of the potential to provide employment land at this site option.	
	- Support the vitality and viability Chippenham town centre (proximity to town centre, built up areas, station hub, college)?	The proposed employment land in the southeast of option A1 is approximately 1.5km from Chippenham Railway Station and approximately 2km from the bus station. Pedestrian access from these hubs in the town centre is moderate. Employment land at this site option would support movement between the site and the town centre, supporting the town's viability. The small scale of employment land proposed limits the beneficial effect anticipated to a minor beneficial effect	(+)
	- Provide infrastructure that will help to promote economic growth?	The road infrastructure proposed as part of this site option is unlikely to have any effect on economic growth in Chippenham.  The indicative green space proposed within this site option is unlikely to provide any economic benefit to the town's economy.	(0)
	- Be well connected to Principal Employment Areas?	The Parsonage Way Industrial Estate is situated in the immediate proximity of the proposed employment land in A1, along the B4069. As such connections between the existing and proposed sites would be strong.	(+)
12. Ensure adequate provision of high quality employment land	- Support the vitality of existing employment areas?	The proposed employment land in Option A1 would likely support the vitality of the adjacent Parsonage Way Industrial Estate and nearby Langley Park employment area as a result of its proximity. However the small scale of the proposed employment land limits the beneficial effect expected. A minor beneficial effect is anticipated.	(+)
and diverse employment opportunities to	- Provide employment land that meets commercial market requirements?	The site option proposes a small area for employment development, limiting the opportunities for development. Access to the PRN from this site option will be strong due to the link road which forms part of the existing permission in Area A. HGVs	(+)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
meet the needs of local businesses and a changing workforce	(offices require land in or close town centres; warehousing requires large sites with good local access to strategic road network)	and worker vehicles would avoid the town centre and congested routes through Chippenham. Further proposals should ensure that the layout and design of this site option integrates with the road network approved at the adjacent site.  The indicative employment area is suited to small scale B1, B2 and B8 development.	
	- Provide employment land in areas that are easily accessible by sustainable transport?	Existing access by public transport is weak, there is strong potential for access by public transport (the B4069 corridor). Employment development would need to be supported by improved public transport services.  Non-motorised access to the site from transport hubs and the town centre are moderate, pedestrian and cycle safety could be improved offsite along the B4069 to encourage access by sustainable transport modes.	(-)

Table A.2: Option B1 assessment

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
1. Protect and enhance all biodiversity and geological features and avoid irreversible losses	- Affect a designated / undesignated site of biodiversity or geological value or affect legally protected species?	Development of the site would not directly affect any designated sites of biodiversity or geological value.  The River Avon CWS runs along the eastern extent of the site, the river is also a BAP Priority Habitat. The European Otter is recorded on this section of river. The presence of over-grown willow along the Avon and standing deadwood trees have potential to support roosting bats. The indicative greenspace proposed along the River reduces the potential for adverse effects from development on these ecological feature. In addition, the steep relief between the developable area and the River Avon CWS may prevent public access. This is important because of the existence of otters in this section of the river. The presence of Otter on the river will require proposals to demonstrate that measures to prevent adverse effects on this protected species has been included.  This site could facilitate a bridge crossing the River Avon, this would dissect the County Wildlife Site and could had adverse effects on the site. Due to the extent of the CWS, which runs the entire length of the east of the site, avoidance is not achievable. While development proposals can incorporate mitigation measures which somewhat reduce or offset effects of a river crossing, mitigation of effects is likely to be problematic if a bridge is developed.	(-)
	- Affect natural features that are important for wildlife or landscape character such as trees or hedgerows, or areas of ancient woodland not subject to statutory protection?	Two significant linear wooded features are present in the south and west of the site along the disused railway line and west along the railway embankment. The proposed site layout does not propose buffer zones between these features and residential or employment development which could have adverse effects on these natural features. Further proposals for this site option might make provision for buffer zones along the southern and western boundaries to reduce harm to these features.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
2. Ensure efficient and effective use of land and the use of suitably	- Use previously developed land, greenfield land or a mix of both?	The indicative layout shows that proposed development would occur largely on greenfield land. There is a small amount of residential development proposed on previously developed land at Rawlings Farm in the west of the site option. Due to the extent of greenfield land mitigation would be problematic.	()
located previously developed land and buildings	- Result in the permanent loss of the Best and Most Versatile Agricultural land (Grades 1, 2, 3)?	The site is comprised predominantly of Grade 2 (very good) BMV agricultural land. A small area of non-agricultural urban lands is located in the southwest of this site option, although this is insufficient to deliver a strategic, mixed-use development. As such mitigation of effects on BMV land would be problematic.	()
	- Require the remediation of contaminated land? If so, would this lead to issues of viability and deliverability?	Due to its current agricultural use this site option is unlikely to require remediation of contamination. There are no sites of potential land contamination within this site option.	(0)
	- Lead to the sterilisation of viable mineral resources? If so, is there potential to extract the mineral resource as part of the development?	The site is not situated within a Mineral Safeguarding Area.	(0)
3. Use and manage water resources in a sustainable manner	<ul> <li>Be situated in any of the following:</li> <li>Drinking Water Safeguarding Zone;</li> <li>Groundwater Source Protection Zone</li> </ul>	The site is situated entirely within an Outer Source Protection Zone (Zone 2c). Two tributaries of the River Avon originate within the site, further development proposals should ensure appropriate land management practices and provide suitably sized buffer strips between development and these tributaries.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	- Affect surface or groundwater resources in terms of volume, quality and flow?	The site is situated largely within Flood Zone 1 in the River Avon catchment. Potential water resource implications are anticipated due to the close proximity of the river to the site. Development of the site would increase impermeable surfaces, increase runoff rates and drain directly into the Avon. The effects on water resources from development of the site can be reduced through the provision of surface water management measures.	(-)
4. Improve air quality throughout Wiltshire and minimise all sources of environmental pollution	-Take place within a designated Air Quality Management Area (AQMA)? If so, is there evidence to suggest that the development of site will lead to an exacerbation of air quality issues? If so, can such impacts be appropriately mitigated in line with local air quality management plan?	The site is not situated in proximity to an AQMA.	(0)
	-Lead to a decrease in air quality locally? Or increase noise or light pollution?	Vehicular access to the site from Parsonage Way onto the B4069 north of Chippenham would place additional pressure on the already constrained road. A second vehicular access from Cocklebury Road would direct traffic to the A420 in the centre of Chippenham.  The link road permitted in Area A will create strong access to the PRN and direct vehicles away from the centre of Chippenham, this will likely reduce the levels of environmental pollution this site would otherwise cause along already congested routes in the town centre.  The strong to moderate non-motorised access to the town centre would support a development with reduced vehicle dependency, this would further reduce effects from development of the site on environmental pollution along the B4069 corridor	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		into Chippenham. Mitigation of environmental pollution in the town centre is considered achievable, however development of this site would still lead to an increase in noise pollution as well as light pollution at night, affecting receptors along on Cocklebury Road, Parsonage Way and the B4069.  Development of the site should encourage and be supported by sustainable transport modes to reduce private car dependency and lessen the impact of environmental pollution from development.	
	- Lie within an area of, or in close proximity to, any significant source(s) of environmental pollution (air, noise, light)?	Development in the west of the site would be in proximity to the railway line, an existing source of noise pollution which would likely harm residential amenity in the west of the site. This harm could be avoided by providing buffer zones between the railway line and development. Reducing harm is also achievable through landscaping and design.	(-)
5a. Minimise our impacts on climate change – through reducing greenhouse gas emissions	- Reduce greenhouse emissions, in particular carbon dioxide emissions?	The development of this site option would increase greenhouse gas emissions, in particular carbon emissions due to increased levels of traffic and new buildings associated with new development. This is unavoidable to some extent, however the small scale of this option coupled with the proximity of it to the town centre and transport hubs would not result in a significant increase in traffic generating carbon emissions.	(-)
		Carbon dioxide emissions from new buildings can be reduced to some extent through meeting standards of sustainable construction and design.	
	- Offer the potential to make provision for on-site renewable or very low carbon energy generation thus reducing carbon dioxide emissions?	Development of the site has the potential to make provision for on-site renewable or very low carbon energy generation. For these positive effects to be maximised it is recommended that renewable energy generation such as solar PV is considered.	(++)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
5b. Minimise our impacts on climate change – through reducing our vulnerability to future climate change effects	- Be located within flood zone 1? If not, are there alternative sites in the area that can be allocated in preference to developing land in flood zone 2? (To be determined through the application of the Sequential Test).	The indicative development areas of this site option are situated entirely within Flood Zone 1. Indicative green space is proposed in Flood Zone 2 – 3.	(0)
	- Address the risk of flooding from all sources?	The site is situated largely within Flood Zone 1 with the indicative area of greenspace in the east coinciding with a small area of Flood Zone 3. Development of greenfield land would increase surface water runoff flowing into the Avon upstream of Chippenham. Surface water management measures should be incorporated into development design to ensure existing greenfield rates of surface water runoff are achieved in order to reduce the risk of flooding onsite and minimise increases to peak flows on the River Avon downstream, particularly in Chippenham town centre.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
6. Protect, maintain and enhance the historic environment	- Affect directly or indirectly a heritage asset?	The Grade II listed farmhouse at Rawlings Farm is the only heritage asset within the site. The primary reason for the designation of this heritage asset derives from its architectural heritage interest which would not be affected by development.  The site contains open agricultural land in the northeast which contributes to the setting of the Langley Burrell and Tytherton Lucas Conservation Areas.  Development in these areas of the site could not avoid effects on the settings of these heritage assets. An area of greenspace is proposed in the northeast of the site, planting vegetation in this area to screen views would provide some mitigation. While tree planting and landscaping would screen views of development on-site this would not protect the open setting of the Conservation Areas, as such mitigation is considered problematic.  There is high potential for unknown heritage assets of archaeological interest dating to prehistoric, Roman and medieval periods within the site option. Development can mitigate effects on these assets through preservation in situ of discrete areas of remains and archaeological recording for more widespread remains.	()

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
7. Conserve and enhance the character and quality of Wiltshire's rural and urban landscapes, maintaining and strengthening local distinctiveness and sense of place	<ul> <li>Impact on the visual amenity or character of the natural landscape?</li> <li>Specifically considering the effects on:</li> <li>Internationally/Nationally designated features and their setting;</li> <li>Locally designated landscapes/features and their setting;</li> <li>Local amenity.</li> </ul>	There are no designated features within proximity of the site.  The land which comprises Option B1 is prominent and forms the rural edge to Chippenham. The landform of this site option is elevated above the River Avon floodplain and supports the remoteness and separation of Langley Burrell. The relief of the site, which slopes eastward towards the Avon, makes mitigation of effects from development on visual amenity problematic to achieve.  The linear wooded features along the west and south of the site screen views of Chippenham from the rural north. Development of the site would extend the urban character northwards into the open agricultural landscape. Incorporating green buffers to screen views of development from the north and east would go some way to reducing the visual impact of proposals. In addition, a lesser density of development and preventing intrusive large buildings on the site would need to be included as mitigation measures. Overall adequately mitigating adverse effects is expected to be problematic.	()
8. Provide everyone with the opportunity to live in good quality, affordable housing, and ensure an appropriate mix of dwelling sizes, types and tenures	- Help meet affordable housing needs/the needs of the local community (if known)?	The development of this site would deliver approximately 730 dwellings, which provides the opportunity to deliver good quality affordable housing that meets local needs in terms of tenure, size and type.	(+)
9. Reduce poverty and deprivation and promote more inclusive and self-	- Result in an increase in poverty and deprivation and/or lead to significant social exclusion amongst existing and new residents?	Development at Option B1 would be situated to the east of one of Chippenham's least deprived areas. There are no deprived areas within proximity of this site option. Development at B1 would be unlikely to increase poverty or deprivation and should contribute to the low levels of deprivation experienced locally.	(+)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
contained communities	- Result in the loss of any existing or proposed Community facility/green or amenity space or would it contribute to the construction of a new facility/space?	Development of the site would not result in the loss of any existing or proposed community facilities or amenity space.  The indicative greenspace proposed in the northeast of the site has the potential to be publically accessible open space and could link to accessible open space along the River Avon. The 12ha of green space proposed constitutes a minor beneficial effect.	(+)
	- Result in the loss of PROW or will it provide new PROW?	A byway enters the site in the west and becomes a PRoW, passing through the southwest of the site. A PRoW runs south to north connecting Upper Peckingell Farm with development in the north of Chippenham. Development of the site could disrupt either the PRoWs or the byway although avoidance of harm is straightforward. Where development seeks to alter a PRoW provision of an alternative routes should be provided to offset the impact.	(-)
	- Be accessible to educational and health facilities?	Development of the site would have weak non-motorised access to the hospital. The site has strong potential access by public transport. Motorised access would be directed through Chippenham. Access to the hospital using the existing road network would be direct.	(-)
		Although development of the site would be in proximity to Abbeyfield School, the River Avon constrains access. A river crossing would strengthen access. Secondary schools in Chippenham are reaching capacity and may be unable to accommodate the number of pupils likely to arise from development of this site. Provision of educational facilities as part of development proposals or contribution to the delivery of new educational facilities off-site would mitigate this.	
10. Reduce the need to travel and promote more sustainable transport choices	- Occur in an area currently accessible by public transport/ walking and cycling? If not, is there scope to make it so?	The site has weak to moderate access by public transport, the B4069 is identified as having potential to become a public transport corridor which could improve public transport access.  Ease of access to the town centre by non-motorised modes from the site is strong to moderate and improvements to offsite pedestrian and cycle facilities would likely improve this.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	- Support improvements to public transport connectivity and pedestrian and cycle links to the town, town centre, railway station and Wiltshire College campuses in Chippenham?	The North Wiltshire Rivers (NWR) route (National Cycle Route 403) crosses the Avon and then follows it southwards in the southeast of the site, there is potential for development of the site to improve pedestrian and cycle links to the railway station, town centre and Wiltshire College from the north.	(+)
11. Encourage a vibrant and diversified economy and provide for long-term sustainable economic growth	- Offer the potential to provide employment land for B1, B2 and B8 uses?	This site option proposes 5ha of employment land, the indicative layout shows this as a small area in the northwest of the site along the railway embankment. The scale and proposed layout offers the potential to deliver a relatively small quantum of employment land which would likely benefit from focusing on one or two use classes.  Following the completion of the link road as part of the existing permission in Area A, access to the PRN will be strong. This will create a strong link to the site from the strategic lorry route. HGVs and workforce traffic accessing the site from the PRN would be directed away from already congested routes in the town centre. Access to this site option would be provided from Cocklebury Road and Parsonage Way. Parsonage Way provides access to the adjacent employment sites from the B4069 and is suitable for to HGVs.  The B4069 is identified as having potential to become a future bus corridor, as such there is potential for strong to moderate access by public transport, although existing public transport access is weak.  This site option offers the potential to provide relatively small scale employment development, building on existing employment areas nearby.	(+)
	- Support the vitality and viability Chippenham town centre (proximity to town centre, built up areas,	The proposed employment land in the northwest of the site option is approximately 1.8km from the railway station and approximately 2.3km from the bus station. Non-motorised access from these transport hubs and the town centre to this site option is strong to moderate but could be enhanced through the development of the site.	(+)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	station hub, college)?	The proximity of the site to Chippenham town centre would support movement between the site and the town centre, supporting the town's viability.	
	- Provide infrastructure that will help to promote economic growth?	This site option proposes access via a Cocklebury Link Road connecting Darcy Close to Cocklebury Lane. This will add a second point of access to Monkton Park which is currently a cul-de-sac. The site could also contribute to an Eastern Link Road through production of a river bridge crossing of the River Avon to the south of the site.	(+)
	- Be well connected to Principal Employment Areas?	The employment land proposed in B1 would be situated immediately adjacent to the Parsonage Way Industrial Estate, access to the site from Parsonage Way would ensure very strong connections between the two sites.	(+)
12. Ensure adequate provision of high quality	- Support the vitality of existing employment areas?	The indicative employment land proposed in B1 would likely support the vitality of the adjacent Parsonage Way Industrial Estate and nearby Langley Park employment area, however the small scale of indicative employment land proposed limits this to a minor beneficial effect.	(+)
employment land and diverse employment opportunities to meet the needs of local businesses and a changing	Provide employment land that meets commercial market requirements? (offices require land in or close town centres; warehousing requires large sites with good local access	This site option proposes 5ha of employment development. The link road which forms part of the extant permission in Area A will provide strong access to the PRN and HGVs associated with B8 development would likely avoid the centre of Chippenham and existing constrained routes.  Further proposals for this site option should relate to and integrate with the layout of the link road approved in Area A.	(+)
workforce	to strategic road network)	The indicative area of employment land is situated approximately 1.8km from the town centre, and has strong PRN access and potential for strong access by public transport. The indicative employment area is suited to B1, B2 and B8 uses,	
	Provide employment land in areas that are easily accessible by sustainable transport?	The employment land proposed in the northeast of B1 currently has moderate access by public transport.  On-site and off-site improvements to the pedestrian and cycle network would improve non-motorised access to the site from existing transport hubs in the town	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		centre.  Development proposals could capitalise on the strong potential access by public transport along the B4069. This would improve sustainable access to employment development at this site.	

Table A.3: Option C1 assessment

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
1. Protect and enhance all biodiversity and geological features and avoid irreversible losses	- Affect a designated / undesignated site of biodiversity or geological value or affect legally protected species?	Development of the site would not directly affect any designated sites of biodiversity or geological value.  The River Avon CWS runs along the western boundary of the site, the river is also a BAP Priority Habitat. The European Otter is recorded on this section of river. A key ecological feature within the site is the floodplain grazing marsh alongside the River Avon. This area could be important for wading/wintering birds. Proposals for site option C1 include a buffer zone along the River Avon shown as green space which would prevent adverse effects of development on the CWS. In addition, public access restrictions may be necessary due to the presence of otters in this section of the river.  Access from the north of the site is proposed in the form of a bridge crossing the River Avon, this would dissect the County Wildlife Site and could had adverse effects on the site. Due to the extent of the CWS, which runs the entire length of the west of the site, avoidance is not achievable. While development proposals can incorporate mitigation measures which somewhat reduce or offset effects of a river crossing, mitigation of effects is likely to be problematic. A moderate adverse effect is anticipated.	()
	- Affect natural features that are important for wildlife or landscape character such as trees or hedgerows, or areas of ancient woodland not subject to statutory protection?	Agriculturally improved fields are dominant at the site and boundary hedgerows are low in number, this reduces the ecological diversity of the site. In the northwest of the site the NWR route is supported by a wooded corridor, this feature has potential to be adversely effected by development of the site. There is also potential to protect and enhance the feature, extending it eastwards to improve habitat connectivity. Further development proposals for this site should consider extending this wooded area.	(-)
2. Ensure efficient and effective use of land and the	- Use previously developed land, greenfield land or a mix of both?	The site is comprised largely of greenfield land. Previously developed land at Harden's Farm is not included within the proposals as an area for development. Residential and employment development would result in the permanent loss of	()

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
use of suitably located previously developed land and buildings	- Result in the permanent loss of the Best and Most Versatile Agricultural land (Grades 1, 2, 3)?	greenfield land. Mitigation would be problematic.  The site is comprised largely of Grade 3 agricultural land and Grade 4 (poor) agricultural land. A precautionary approach is taken in regard to Grade 3 land, as such it is presumed to be BMV land.  A small area of non-agricultural land is present in the south of the site, adjacent to Pewsham. Much of the Grade 4 land coincides with the indicative area of green space along the River Avon. Insufficient poor or non-agricultural land exists within this site option to deliver development at the scale proposed in non BMV land. Development of this site area would likely result in the permanent loss of BMV land and this would be problematic to mitigate.	()
	- Require the remediation of contaminated land? If so, would this lead to issues of viability and deliverability?  - Lead to the sterilisation of viable mineral resources? If so, is there potential to extract the mineral resource as part of the development?	Due to its current agricultural use, this site option is unlikely to require remediation of contamination. A site of potential land contamination is situated in the southwest of the site in proximity to the River Avon, The indicative layout drawing shows an area of green space is proposed in this area, as such no effects on viability or deliverability is anticipated.  The site is not situated within a Mineral Safeguarding Area.	(0)
3. Use and manage water resources in a sustainable manner	Be situated in any of the following:     Drinking Water Safeguarding Zone; or     Groundwater Source Protection Zonee	With the exception of a small area of land in the south of the site the majority of land lies within an Outer Source Protection Zone (Zone 2c). A number of small watercourses associated with the River Avon run through the area, particularly in the west. Effects from development on the SPZ can be mitigated through provision of buffer strips where development is proposed to occur in proximity to water courses. Further development proposals should ensure appropriate land management practices.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	- Affect surface or groundwater resources in terms of volume, quality and flow?	The site is situated in the River Avon catchment. Potential water resource implications are anticipated as a result of the close proximity of the site to the river. Development of the site would increase impermeable surfaces and increase runoff rates in an area which drains directly into the Avon. The effects on water resources from development of the site could be reduced through the provision of surface water management measures.  A number of small watercourses pass through the site and would be at risk of pollution from development. Further proposals should consider the effects from development on this feature.  Access from the north of the site is proposed in the form of a bridge crossing the River Avon, bridging of the Avon would likely alter the flow of the river which could have adverse effects on the River Avon downstream, particularly in Chippenham town centre. As the site is bound to the west by the Avon avoidance is not achievable. Adequate mitigation of effects is likely to be problematic.	()
4. Improve air quality throughout Wiltshire and minimise all sources of environmental pollution	-Take place within a designated Air Quality Management Area (AQMA)? If so, is there evidence to suggest that the development of site will lead to an exacerbation of air quality issues? If so, can such impacts be appropriately mitigated in line with local air quality management plan?	The site is not situated in proximity to an AQMA.	(0)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	-Lead to a decrease in air quality locally? Or increase noise or light pollution?	Vehicular access to the site from the A4 London Road in the south and river bridge crossing from the north would place additional pressure on roads already constrained by congestion (A4 and B4069).  Based on the current road network access to the PRN directs vehicles through Chippenham, as such vehicle oriented development of the site would likely decrease air quality on these corridors and in the town centre. Mitigation of environmental pollution from development of the site is achievable, through the provision of river crossing to the north.  An increase in vehicles associated with the development of the site would increase noise issues as well as light pollution at night, affecting receptors along the A4 London Road.  The permitted link road in Area A, if integrated with a river crossing proposed as part of this site option, would provide an alternative route to the PRN, avoiding the centre of Chippenham. This would result in reduced levels of environmental pollution in the town centre and congested areas. This is dependent upon the delivery of the link road through Area A and further strategic road infrastructure through Area B.  Development of the site should encourage and be supported by sustainable transport modes to reduce private car dependency and lessen the impact of	(-)
		environmental pollution from development.	

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	- Lie within an area of, or in close proximity to, any significant source(s) of environmental pollution (air, noise, light)?	There are no existing sources of environmental pollution in proximity to the site, thus no effects are expected.	(0)
5a. Minimise our impacts on climate change – through reducing greenhouse gas emissions	- Reduce greenhouse emissions, in particular carbon dioxide emissions?	The development of this site option would increase greenhouse gas emissions, in particular carbon emissions due to increased levels of traffic and new buildings associated with new development. This is unavoidable to some extent and mitigation is likely to remain problematic in the short to medium term.  Carbon dioxide emissions from new buildings can be reduced to an extent through meeting standards of sustainable construction and design.	()
	- Offer the potential to make provision for on-site renewable or very low carbon energy generation thus reducing carbon dioxide emissions?	Development of the site has the potential to make provision for on-site renewable or very low carbon energy generation. For the above positive effects to be maximised it is recommended that renewable energy generation such as solar PV is considered.	(++)
5b. Minimise our impacts on climate change – through reducing our vulnerability to future climate change effects	- Be located within flood zone 1? If not, are there alternative sites in the area that can be allocated in preference to developing land in flood zone 2? (To be determined through the application of the Sequential Test).	The west of the site is situated within Flood Zone 2 - 3, this area is comprised of indicative green space. The majority of the developable area of the site is situated in Flood Zone 1 meaning development would be less vulnerable to increasing extreme climatic events such as fluvial flooding.	(0)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	- Address the risk of flooding from all sources?	The west of the site lies within Flood Zone 2-3 and holds significant flood water storage capacity. The indicative layout demonstrates that development of the site would avoid this area.  Development of greenfield land in Option C1 would increase rates of surface water runoff flowing directly into the Avon immediately upstream of Chippenham. Any increase in flows into the Avon due to the development of this site option would increase flood risk in the town centre. To prevent an increase in flood risk downstream proposals for this site option will be required to incorporate surface water management measures which ensure runoff rates are no greater than prior to development.  Access from the north of the site is proposed in the form of a bridge crossing the River Avon, bridging of the Avon would likely alter the flow of the river which could have adverse effects on the River Avon downstream, particularly in Chippenham town centre. The site is bound to the west by the Avon making avoidance of the river unachievable. Further proposals for development of the site should demonstrate how the bridge design adequately mitigates effects on the River Avon and prevents increased risk of flooding downstream.  Access from the north of the site is proposed in the form of a bridge crossing the	()
		River Avon, bridging of the Avon would likely alter the flow of the river which could have adverse effects on the River Avon downstream, particularly in Chippenham town centre. As the site is bound to the west by the Avon avoidance is not achievable. Adequate mitigation of effects on river flows to prevent increased flood risk is likely to be problematic.	

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
6. Protect, maintain and enhance the historic environment	- Affect directly or indirectly a heritage asset?	There is one designated heritage asset within the site, the Grade II listed building at Harden's Farm. The principal reason for its designation is the building's architectural heritage interest, which would not be affected by the development of the site.  Land in the north of the site contributes to the character of the Tytherton Lucas Conservation Area. Development in this area would likely adversely affect the remote and open setting of this heritage asset. This is likely to be exacerbated by the raised topography in the north of Option C1, which would increase the visual prominence of development from the Conservation Area. While vegetation buffers could be implemented to reduce views to an extent, this would adversely affect the open setting of the Conservation Area, making mitigation problematic. Despite the small extent of indicative development proposed in the Marden Valley it is likely that effects on the setting of the Conservation Area would be problematic to mitigate. Improved vegetation screening along the NWR route would contain views of development at the site, this would need to be considered by future development proposals.  There are several non-designated heritage assets at Harden's Farm including a medieval settlement and a ditch and pond of post medieval date. Development proposed in these areas could cause harm to these non-designated assets; however, provision of a buffer zone around Hardens Farm would prevent adverse effects.  The disused Calne and Chippenham branch of the Great Western Railway passes east to west through the site.  The NWR route passes east to west through the north of the site. This pedestrian and cycle path could be incorporated into the proposals and protected from adverse effects.  There is high potential for unknown heritage assets of archaeological interest dating	()

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		from the prehistoric and medieval periods. Development can mitigate effects on these assets through preservation in situ of discrete areas of remains and archaeological recording for more widespread remains.	

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
7. Conserve and enhance the character and quality of Wiltshire's rural and urban landscapes, maintaining and strengthening local distinctiveness and sense of place	<ul> <li>Impact on the visual amenity or character of the natural landscape?</li> <li>Specifically considering the effects on:</li> <li>Internationally/Nationally designated features and their setting;</li> <li>Locally designated landscapes/features and their setting;</li> <li>Local amenity.</li> </ul>	There are no designated features within proximity of the site.  The undulating topography of this site option makes development more suitable in some areas than others. Development of land north of the North Wiltshire Rivers route would reduce separation between Chippenham and Tytherton Lucas and the increase views of development at Chippenham as far as East Tytherton. This would be problematic to mitigate.  Land immediately south of the NWR route is located on elevated land which is visually prominent in the area. Extending the green buffer along the NWR route would go some way to mitigating this. Large employment buildings proposed in this visually prominent area of the site option would likely be unsuitable and further development proposals should identify more suitable locations within this site option to locate employment land.  The southern areas of this site option adjacent to Harden's Mead have the highest capacity for development due to the increased urban influence associated with Pewsham and the favourable landform in the south of the site option.  Development in the north of this site option would have adverse effects on visual amenity considered problematic to mitigate.  Access from the north of the site is proposed in the form of a bridge crossing the River Avon, avoidance is not achievable as the site is bound to the west by the river. Reduction of effects from the bridge on the visual integrity of the River Avon Valley could be achieved through design and landscaping in further development proposals for the site.  Overall mitigation of visual effects from development proposed in the north of this site option would be problematic. This is due to the extent of indicative residential land proposed in the visually prominent Marden Valley.	()

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
8. Provide everyone with the opportunity to live in good quality, affordable housing, and ensure an appropriate mix of dwelling sizes, types and tenures	- Help meet affordable housing needs/the needs of the local community (if known)?	A mixed use development of the site could deliver approximately 775 homes which provides the opportunity to deliver good quality affordable housing that meets the local needs in terms of tenure, size and type.	(+)
9. Reduce poverty and deprivation and promote more inclusive and self-contained communities	- Result in an increase in poverty and deprivation and/or lead to significant social exclusion amongst existing and new residents?	Site option C1 is situated within an area of moderate deprivation. Development at this site option would occur immediately north of an area of high deprivation at Pewsham. The indicative layout proposes residential development immediately adjacent to this area of deprivation.  Development of this site option holds the potential to provide community facilities which would support a reduction in high levels of deprivation in the surrounding area.	(+)
	- Result in the loss of any existing Community facility/green or amenity space or would it contribute to the provision of a new facility/space?	Development of the site would not result in the loss of any existing community facilities or amenity space. There are no accessible open spaces within the site although playing fields at Harden's Mead and Abbeyfield School are situated adjacent to the site. The proposed green space along the River Avon could be publicly accessible and link to accessible open space further along the river. 35ha of green space is proposed, this would be a minor beneficial effect.	(+)
	- Result in the loss of PROW or provision of new PROW?	The NWR route is a Sustrans national cycle route (403).  A number of PRoWs link Harden's Farm to Chippenham in the south and Tytherton Lucas in the north. Proposed development areas could avoid the PRoWs, however if it can be demonstrated that harm is unavoidable mitigation would be achievable through the appropriate provision of an alternative route. Further development proposals for this site would have to consider this.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	- Be accessible to educational and health facilities?	Residential development in the south of the site would benefit from strong non-motorised ease of access to Abbeyfield School. Secondary schools in Chippenham are reaching capacity and may be unable to accommodate the number of pupils likely to arise from development of this site. Provision of educational facilities as part of development proposals or contribution to the delivery of new educational facilities off-site would mitigate this.  The entire site has weak non-motorised access to the hospital, however public transport services along the A4 would provide an alternative means off access to the hospital from the south of the site.	(-)
10. Reduce the need to travel and promote more sustainable transport choices	- Occur in an area currently accessible by public transport/ walking and cycling? If not, is there scope to make it so?	Development proposed at the south of the site would benefit from strong ease of access by public transport along the A4 London Road.  The north of the site benefits from the proximity of NWR route, which provides a non-motorised link to Chippenham. There is also potential for proposals to enhance non-motorised access in the south of the site by integrating the development with the cycle route.  The permitted link road between the B4069 and A4 London Road in Area A, were it extended through Area B into this site option, could act as a future public transport corridor supporting improvements to connectivity.  Development in the north of the site has weaker ease of access by public transport. Further development proposals should consider that the proposed residential and employment development in the north of the site would be poorly served by existing public transport services along the A4 by virtue of distance. Improved services along the existing A4 corridor would not be sufficient to improve this making mitigation problematic.	()

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	- Support improvements to public transport connectivity and pedestrian and cycle links to the town, town centre, railway station and Wiltshire College campuses in Chippenham?	The permitted link road between in Area A, were it extended through Area B into this site option, could act as a future public transport corridor supporting improvements to connectivity.  Improving pedestrian and cycle access from the south of the site would rely upon proposals integrating with NWR route, this is considered achievable but must be considered by further development proposals.	(+)
11. Encourage a vibrant and diversified economy and provide for long-term sustainable economic growth	Offer the potential to provide employment land for B1, B2 and B8 uses?	Option C1 proposes 20ha for employment development. The indicative layout shows this as a large area in the northeast of the site bordering the NWR route and a smaller area to the south of Stanley Lane along the A4 London Road. The amount and indicative location of employment land supports the delivery of a mix of business use classes.  This site option proposes access via a river bridge crossing of the River Avon to the north of the site, were this access road to integrate with the permitted link road in Area A, access to the PRN would be considerably strengthened.  The A4 is identified as a strategic lorry route and the proposed River Avon crossing would likely integrate with the permitted link road in Area A, creating strong links to the PRN. This would support the development of B1, B2 and B8 uses at the site.  The employment land proposed in the southeast of Option C1 in proximity to the A4 would benefit from strong access by public transport while the indicative area in the north of the site would require improvements to public transport to support development.	(+)
	Support the vitality and viability Chippenham town centre (proximity to town centre, built up areas, station hub, college)?	The two areas proposed for employment development at this site option would be situated away from the town centre and existing built up areas. While new employment development would benefit existing employment in the town, the distance of these sites from the centre and the moderate non-motorised access will likely result in a limited interaction between the two areas.	(+)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	Provide infrastructure that will help to promote economic growth?	The river bridge crossing of the River Avon proposed as part of this site option would contribute to the delivery of an eastern link road between the A350 north of Chippenham and the A4 to the east. This would support major employment and housing growth.  The indicative green area proposed along the River Avon would support the formation of a continuous green infrastructure corridor along the river into the town centre, this could have minor beneficial effects on economic growth in Chippenham.	(+++)
	Be well connected to Principal Employment Areas?	The indicative employment areas proposed currently shares little relation to existing Principal Employment Areas. However the provision of a highway access from the north and improvements to the NWR route has potential to create strong connections to the Parsonage Way Industrial Estate. Proposals for development should demonstrate through design how this would be achieved. A minor beneficial effect is expected.	(+)
12. Ensure adequate provision of high quality employment land	Support the vitality of existing employment areas?	The proposed employment sites in C1 are not situated in immediate proximity of any existing employment areas; however, there is potential for access to the proposed employment site in the north of this site option from Cocklebury Lane or Parsonage Way, both provide access to existing employment sites. This might support, to some extent, the vitality of these existing areas	(+)
and diverse employment opportunities to meet the needs of local businesses and a changing workforce	Provide employment land that meets commercial market requirements? (offices require land in or close town centres; warehousing requires large sites with good local access to strategic road network)	HGVs associated with warehousing and storage type employment would have strong access to the strategic lorry route.  The proposed river bridge crossing of the River Avon to the north of the site has the potential to integrate with the link road approved in Area A. This would improve access to the PRN and strategic lorry route along the A350.  Both indicative areas are suitable for B1, B2 and B8 development, although the smaller site along Stanley Lane has stronger access by public transport making it the better suited of the two sites to employers with large workforces.  This site option proposes 20ha of employment land which would meet commercial	(+++)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		market requirements, this constitutes a major beneficial effect.	
	Provide employment land in areas that are easily accessible by sustainable transport?	The employment land proposed in the southeast of C1 benefits from strong access by public transport.  The larger site in the northeast of the site option is poorly served by public transport, however improvements to on-site pedestrian routes and integration with the NWR route would provide improved non-motorised access to public transport.	(-)

Table A.4: Option C2 assessment

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
1. Protect and enhance all biodiversity and geological features and avoid irreversible losses	Affect a designated / undesignated site of biodiversity or geological value or affect legally protected species?	Development of the site would not directly affect any designated sites of biodiversity or geological value.  The River Avon CWS runs along the western boundary of the site, the river is also a BAP Priority Habitat. The European Otter is recorded on this section of river. The River Marden runs along the northern boundary of the site. A key ecological feature within the site is the floodplain grazing marsh alongside the Rivers Avon and Marden. This area could be important for wading/wintering birds. The presence of over-grown willow along the Avon and standing deadwood trees have potential to support roosting bats. Proposals for this site option include a buffer zone shown as green space along both rivers. This measure would prevent direct effects from development on ecological features associated with the floodplains of both rivers. In addition, public access restrictions may be necessary due to the presence of Otter on the Avon.  Access from the north of the site is proposed in the form of a bridge crossing the River Avon, this would dissect the County Wildlife Site and could had adverse effects on the site. Due to the extent of the CWS, which runs the entire length of the west of the site, avoidance is not achievable. While development proposals can incorporate mitigation measures which reduce or offset effects of a river crossing to some extent, mitigation of effects is likely to be problematic, as such a moderate adverse effect is anticipated.	()
	Affect natural features that are important for wildlife or landscape character such as trees or hedgerows, or areas of ancient woodland not subject to statutory protection?	At the western extent of the NWR route within the site a wooded corridor exists, this feature has potential to be adversely effected by development of the site. There is also potential to protect and enhance the feature, extending it eastwards to improve connectivity. Further development proposals for this site should consider extending the wooded area.  Agriculturally improved fields are dominant within the site and boundary hedgerows	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		are low in number, this reduces the ecological diversity of the site.	
2. Ensure efficient and effective use of land and the use of suitably	- Use previously developed land, greenfield land or a mix of both?	The indicative layout shows that the proposed development would occur largely on greenfield land. While previously developed land at Harden's Farm is not included within the proposals an area of land at New Leaze Farm is. Due to the extent of greenfield land mitigation would be problematic.	()
located previously developed land and buildings	- Result in the permanent loss of the Best and Most Versatile Agricultural land (Grades 1, 2, 3)?	The majority of the site is comprised of Grade 3 (good to moderate) BMV agricultural land.  In the south of the site adjacent to Pewsham is an area of non-agricultural land. Much of the Grade 4 (poor) agricultural land coincides with the area of greenspace proposed along the River Avon's floodplain.  A precautionary approach is taken in regard to Grade 3 land, which is presumed to be BMV land. Avoidance of Grade 3 land would be difficult to achieve as insufficient poor and non-agricultural land exists within this site option to deliver strategic, mixed-use development. As such the development of C2 would likely result in the	()
	- Require the remediation of contaminated land? If so, would this lead to issues of viability and deliverability?	permanent loss of BMV land.  Due to its current agricultural use, this site option is unlikely to require remediation of contamination. A site of potential land contamination is situated in the southwest of the site in proximity to the River Avon, The indicative layout drawing shows an area of greenspace is proposed in this area, as such no effects on viability or deliverability is anticipated.	(0)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	- Lead to the sterilisation of viable mineral resources? If so, is there potential to extract the mineral resource as part of the development?	The site contains a small area of land situated within a Mineral Safeguarding Area, this area is located in the north of the site on land which coincides with the indicative greenspace along the River Marden. As such development of the site would not lead to the sterilisation of viable mineral resources	(0)
3. Use and manage water resources in a sustainable manner	- Be situated in any of the following:  • Drinking Water Safeguarding Zone; or  • Groundwater Source Protection Zone  - Affect surface or groundwater resources in terms of volume, quality and	The majority of this site option lies within an Outer Source Protection Zone (zone 2c). A number of small watercourses associated with the River Avon run through the area, particularly in the west. The indicative proposals include development within the SPZ, measures to mitigate effects from development on this feature include the provision of buffer strips where development is likely to occur in proximity to a watercourse and the use of appropriate land management practices.  The site is situated in the River Avon catchment. Potential water resource implications are anticipated as a result of the close proximity of the site to both the Avon and the Marden. Development of the site would increase impermeable	(-)
	flow?	surfaces and increase runoff rates in an area which drains directly into the Avon. The effects on water resources from development of the site could be reduced through the provision of surface water management measures in further development proposals.  A number of small watercourses pass through the site and would be at risk of pollution from development. Further proposals should consider the effects from development on this feature.	
		Access from the north of the site is proposed in the form of a bridge crossing the River Avon, bridging of the Avon would likely alter the flow of the river which could have adverse effects on the River Avon downstream, particularly in Chippenham town centre. As the site is bound to the west by the Avon avoidance is not achievable. Adequate mitigation of effects is likely to be problematic.	

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
4. Improve air quality throughout Wiltshire and minimise all sources of environmental pollution	-Take place within a designated Air Quality Management Area (AQMA)? If so, is there evidence to suggest that the development of site will lead to an exacerbation of air quality issues? If so, can such impacts be appropriately mitigated in line with local air quality management plan?	The site is not situated in proximity to an AQMA.	(0)
	-Lead to a decrease in air quality locally? Or increase noise or light pollution?	The proposed site access points from the A4 London Road in the south of the site and the River Avon bridge crossing in the northwest of the site will place additional pressure on already constrained local roads, exacerbating existing conditions.  Based on the current road network access to the PRN directs vehicles through the centre of Chippenham. As such vehicle oriented development of this site would likely decrease air quality in Chippenham and along the A4 and roads to the north.  The increase in vehicles associated with development would likely increase noise pollution as well as light pollution at night, affecting receptors along the A4 and roads in proximity to the proposed north access. Mitigation of environmental pollution from development of the site is considered problematic.  The permitted link road in Area A, if integrated with the river crossing access in the north of this site option would create an alternative route to the PRN, avoiding congested roads in Chippenham. This could result in a reduced level of environmental pollution in the town caused by development of C2 due to the diversion of traffic but it is unclear whether this would be sufficient to mitigate the adverse effects identified above.	()

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		While the provision of the link road to the A350 and improvements to sustainable transport modes would somewhat lessen the effects of development on environmental pollution, the scale of development proposed would result in an increase in environmental pollution and measures to adequately mitigate these effects are considered problematic, as such a moderate adverse is expected.	
	- Lie within an area of, or in close proximity to, any significant source(s) of environmental pollution (air, noise, light)?	There are no existing sources of environmental pollution within proximity to the site, thus no effects are expected.	(0)
5a. Minimise our impacts on climate change – through reducing greenhouse gas emissions	- Reduce greenhouse emissions, in particular carbon dioxide emissions?	The development of this site option would increase greenhouse gas emissions, in particular carbon emissions due to increased levels of traffic and new buildings associated with new development. This is unavoidable to some extent and mitigation is likely to remain problematic in the short to medium term.  Carbon dioxide emissions from new buildings can be somewhat reduced through meeting standards of sustainable construction and design.	()
	- Offer the potential to make provision for on-site renewable or very low carbon energy generation thus reducing carbon dioxide emissions?	Development of the site has the potential to make provision for on-site renewable or very low carbon energy generation. For the above positive effects to be maximised it is recommended, renewable energy generation such as solar PV is considered.	(++)
5b. Minimise our impacts on climate change –	- Be located within flood zone 1? If not, are there alternative sites in the area	The north and west of the site are situated within Flood Zone 2- 3, these areas are proposed as buffer zones, shown as green space on the indicative layout drawing. The rest of the site is situated in Flood Zone 1, as such development would be less	(0)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
through reducing our vulnerability to future climate change effects	that can be allocated in preference to developing land in flood zone 2? (To be determined through the application of the Sequential Test).	vulnerable to increasing extreme climatic events such as fluvial flooding. No effects are expected.	
	- Address the risk of flooding from all sources?	The west of this site option lies within Flood Zone 2 - 3, this area holds a significant proportion of Chippenham's upstream flood water storage, protecting the town centre. The indicative layout drawing demonstrates that development would avoid this area.	()
		Development of greenfield land in Option C2 would lead to an increase in surface water running into the Avon and Marden immediately upstream of Chippenham. An increase in runoff from development of this site option would increase the risk of flooding in the town centre. Proposals for development would require the incorporation of surface water management measures to meet existing rates of runoff.	
		Access from the north of Option C2 is proposed in the form of a bridge crossing the River Avon, bridging of the Avon would likely alter the flow of the river which could have adverse effects downstream, particularly at the Radial Gate in Chippenham town centre. As the site is bound to the west by the Avon avoidance is not achievable. Adequate mitigation of effects on river flows to prevent increased flood risk is likely to be problematic.	

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
6. Protect, maintain and enhance the historic environment	- Affect directly or indirectly a heritage asset?	There is one designated heritage asset within the site, a Grade II listed building at Harden's Farm. The principal reason for its designation is the buildings architectural interest which would be unaffected by the development of the site.  The NWR route passes east to west through the north of the site. This pedestrian and cycle path could be incorporated into the proposals and protected from adverse effects.	()
		Land in the north of the site contributes to the character of the Tytherton Lucas Conservation Area. An extensive area of development is proposed north of the NWR route, this would likely harm the remote and open setting of this heritage asset the remote and open setting of this heritage asset. The elevated topography would likely exacerbate this, increasing the visual prominence of development from the Conservation Area. While vegetation buffers could be implemented to reduce views to some degree, this mitigation measure would adversely affect the open setting of the Conservation Area, making mitigation problematic. The extent of indicative development proposed in the Marden Valley adds to the difficulty anticipated in mitigating adverse effects.	
		There are several non-designated heritage assets at Harden's Farm and New Leaze Farm, including a medieval settlement, a ditch and pond of post-medieval date and other potentially prehistoric features. Avoidance of these areas is possible and should be considered by further proposals.	
		The disused Calne and Chippenham branch of the Great Western Railway passes east to west through the site.	
		There is high potential for unknown heritage assets of archaeological interest dating from the prehistoric and medieval periods. Development can mitigate effects on these assets through preservation in situ of discrete areas of remains and archaeological recording for more widespread remains. This would need to be	

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		considered in further development proposals for the site.	

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
7. Conserve and enhance the character and quality of Wiltshire's rural and urban landscapes, maintaining and strengthening local distinctiveness and sense of place	- Impact on the visual amenity or character of the natural landscape? Specifically considering the effects on: - Internationally/Nationally designated features and their setting; - Locally designated landscapes/features and their setting; - Local amenity.	There are no designated features within proximity of the site.  The size of this site option and the changing nature of the landscape makes development more suitable in some areas than others. The site option proposes an extensive area of residential development on land north of the NWR route and in the sensitive River Marden valley. Development in this area of the site would be visually prominent within open land with a strong rural character. Development in the north of this site option would reduce separation between Chippenham and Tytherton Lucas. Development at this site would be visible from the north and east, increasing Chippenham's visual impact on the wider area. The scale of the development proposed makes mitigation unachievable.  Land immediately south of the NWR Route is located on elevated land which is visually prominent in the area. Extending the green buffer along the NWR route would go some way to mitigating this. Large scale employment buildings would be poorly located in this prominent area of the site and further development proposals should propose a more suitable location for employment development.  The southern areas of this site option adjacent to Harden's Mead have the highest capacity for development due to the increased urban influence associated with Pewsham and the favourable landform in the south of the site option.  Access from the north of the site is proposed in the form of a bridge crossing the River Avon, avoidance is not achievable as the site is bound to the west by the river. Reduction of effects from the bridge on the visual integrity of the River Avon Valley could be achieved through design and landscaping in further development proposals for the site.  Due to the extent of this site option avoidance of the most visually important land is not considered achievable. Insufficient land exists within this site option which can deliver the level of proposed growth without adversely affecting the local landscape character and visual amenity.	()

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
8. Provide everyone with the opportunity to live in good quality, affordable housing, and ensure an appropriate mix of dwelling sizes, types and tenures	- Help meet affordable housing needs/the needs of the local community (if known)?	A mixed use development of this site could deliver approximately 1890 dwellings, which provides the opportunity to deliver a significant number of good quality affordable housing which meets local needs in terms of tenure, size and type.	(+++)
9. Reduce poverty and deprivation and promote more inclusive and self-contained communities	- Result in an increase in poverty and deprivation and/or lead to significant social exclusion amongst existing and new residents?	This site option extends across a vast rural area east of Chippenham, this area experiences moderate levels deprivation. To the south of C2 at Pewsham lies an area of high deprivation which extends into the town centre.  Development at the scale of site option C2 creates opportunities to provide employment land and community facilities and services which would support reductions in deprivation in the surrounding area.	(+)
	- Result in the loss of any existing Community facility/green or amenity space or would it contribute to the provision of a new facility/space?	Development of the site would not result in the loss of any community facilities or amenity space. There are no accessible open spaces within the site although playing fields at Harden's Mead and Abbeyfield School are situated adjacent to the site. The proposed green space along the Rivers Avon and Marden could be publicly accessible and link to accessible open space further along the river.	(+)
	- Result in the loss of PROW or provision of new PROW?	The NWR route is a Sustrans national cycle route (403).  A number of PRoWs link Harden's Farm to Chippenham in the south and Tytherton Lucas in the north. Development of the site could avoid or the PRoWs. Should harm be unavoidable mitigation would be achievable through the appropriate provision of an alternative route.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	- Be accessible to educational and health facilities?	Residential development in the south of the site would benefit from strong non-motorised ease of access to Abbeyfield School, whereas development further north would have moderate access. Secondary schools in Chippenham are reaching capacity and may be unable to accommodate the number of pupils likely to arise from development of this site. Provision of educational facilities as part of development proposals or contribution to the delivery of new educational facilities off-site would mitigate this.  The entire site has weak non-motorised ease of access to the hospital, however public transport services along the A4 would provide an alternative means of access to the hospital from the south of the site.	(-)
10. Reduce the need to travel and promote more sustainable transport choices	- Occur in an area currently accessible by public transport/ walking and cycling? If not, is there scope to make it so?	The south of the site would benefit from strong ease of access by public transport along the A4 London Road. Development of the site could support an increase in the use of public transport services along this corridor.  Access by public transport in the north of the site is weak, particularly north of the NWR route where a substantial area of indicative residential development is proposed. Improved services along the existing A4 corridor would be unlikely to improve access for development in the north of the site option, as such mitigation is problematic.  Ease of access to the town centre by non-motorised modes from the site is moderate to poor and improvements to offsite pedestrian and cycle facilities would be required to improve this as part of further development proposals for this site.  The close proximity of the National Cycle Route 403 provides direct access to Chippenham town centre from the north of the site option and further proposals should capitalise upon this.	()

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	- Support improvements to public transport connectivity and pedestrian and cycle links to the town, town centre, railway station and Wiltshire College campuses in Chippenham?	The NWR route (National Cycle Route 403) passes through the site and follows the Avon southwards providing cycle links to the railway station, town centre and Wiltshire College. Further development proposals should integrate with the cycle route and improve access to it from the A4 through the site.  The permitted link road between in Area A, were it extended through Area B into this site option, could act as a future public transport corridor supporting improvements to connectivity.	(+)
11. Encourage a vibrant and diversified economy and provide for long-term sustainable economic growth	Offer the potential to provide employment land for B1, B2 and B8 uses?	Site option C2 proposes 25ha for employment development. The indicative layout shows this as a large area at the heart of the site, bordering the NWR route and a smaller area south of Stanley Lane along the A4 London Road. The A4 is identified as a strategic lorry route and the proposed River Avon crossing would likely integrate with the permitted link road in Area A, creating strong links to the PRN. This would support the development of B1, B2 and B8 uses at the site. The employment land proposed in the southeast of Option C2 in situated in proximity to the A4 and would benefit from strong access by public transport.	(+)
	Support the vitality and viability Chippenham town centre (proximity to town centre, built up areas, station hub, college)?	The two areas proposed for employment development in C2 would be situated away from the town centre and existing built up areas. Major employment development at these sites would support town centre uses, however the distance of these sites and the moderate to weak non-motorised access will likely limit interaction between the two areas.	(+)
	Provide infrastructure that will help to promote economic growth?	The northern access proposed for this site option would likely integrate with the permitted link road through Area A and B between the A350 north of Chippenham and the A4 to the east. This would support the delivery of major employment and housing growth in Chippenham.  The area of green space proposed along the River Avon would contribute to the formation of a continuous green infrastructure corridor along the river into the town centre, this could have beneficial effects on economic growth in Chippenham.	(+++)
	Be well connected to Principal Employment	The indicative employment areas proposed currently shares little relation to existing Principal Employment Areas. However the provision of a highway access from the	(+)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	Areas?	north and improvements to the NWR route has potential to create strong connections to the Parsonage Way Industrial Estate. Proposals for development should demonstrate through design how this would be achieved. A minor beneficial effect is expected.	
12. Ensure adequate provision of high quality employment land	Support the vitality of existing employment areas?	The two areas of indicative employment land in this site option are not situated in the immediate proximity of any existing employment areas; however, the potential exists for access from Parsonage Way Industrial Estate to the indicative employment site in the centre of C2, this could support this existing employment area to some extent.	(+)
and diverse employment opportunities to meet the needs of local businesses	Provide employment land that meets commercial market requirements? (offices require land in or close town centres;	This site option proposes two large areas for employment development. The sites have strong access to strategic lorry route, and following the completion of the approved link road in Area A, stronger access to the PRN. This will make both sites suitable for B2 and B8 uses.	(+++)
and a changing workforce	warehousing requires large sites with good local access to strategic road network)?	Access by public transport is stronger at the employment land proposed in the south of the site, making this indicative area more suited to employers with large workforces.	
		Both indicative areas are suitable for B1, B2 and B8 development, although the smaller site along Stanley Lane has stronger access by public transport and would therefore be the better suited of the two sites for employers with large workforces. This site option proposes 25ha of employment land which would meet commercial market requirements, this constitutes a major beneficial effect.	
	Provide employment land in areas that are easily accessible by sustainable transport?	The employment land proposed in the southeast of C2 benefits from strong access by public transport.  The larger site in the northeast of the site option is poorly served by public transport, however improvements to on-site pedestrian routes and integration with the NWR route would provide improved non-motorised access to public transport.	(-)

Table A.5: Option C3 assessment

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
1. Protect and enhance all biodiversity and geological features and avoid irreversible losses	Affect a designated / undesignated site of biodiversity or geological value or affect legally protected species?	Development of the site would not directly affect any designated sites of biodiversity or geological value.  The River Avon CWS runs along the western boundary of the site, the river is also a BAP Priority Habitat. The European Otter is recorded on this section of river. A key ecological feature within the site is the floodplain grazing marsh alongside the River Avon. This area could be important for wading/wintering birds. The presence of over-grown willow along the Avon and standing deadwood trees have potential to support roosting bats. Proposals for this site option include a buffer zone shown as green space along the Avon. This measure would prevent adverse effects of development on ecological features associated with the floodplain of the Avon. In addition, public access restrictions may be necessary due to the presence of otters in this section of the river. Due to the presence of Otter on this stretch of the River Avon proposals should be expected to demonstrate how the design ensures no adverse effects would occur from development on protected species. A minor adverse effect is expected.	(-)
	Affect natural features that are important for wildlife or landscape character such as trees or hedgerows, or areas of ancient woodland not subject to statutory protection?	At the northwest extent of the site, along the NWR route, is a wooded corridor, this feature has potential to be adversely effected by development of the site. There is also potential to protect and enhance the feature, extending it eastwards to improve connectivity. Further development proposals for this site should consider extending the wooded area.  Agriculturally improved fields are dominant at the site and boundary hedgerows are low in number, this reduces the ecological diversity of the site.	(-)
2. Ensure efficient and effective use of land and the	- Use previously developed land, greenfield land or a mix of both?	The indicative layout shows that the proposed development would occur largely on greenfield land. Previously developed land at Harden's Farm is not included within the proposals. Due to the extent of greenfield land mitigation would be problematic.	()

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
use of suitably located previously developed land and buildings	- Result in the permanent loss of the Best and Most Versatile Agricultural land (Grades 1, 2, 3)?	The majority of the site is comprised of Grade 3 and Grade 4 agricultural land. Much of the Grade 4 (poor) agricultural land in the site coincides with the area of green space proposed along the River Avon. In the south of the site adjacent to Pewsham lies a small area of non-agricultural land is present.  A precautionary approach to Grade 3 land presumes this to be BMV across the site option. Due to the extent of the Grade 3 land development of strategic, mixed-use development would likely result in the permanent loss of BMV land, this makes mitigation of effects problematic to achieve.	()
	- Require the remediation of contaminated land? If so, would this lead to issues of viability and deliverability?	Due to its current agricultural use, this site option is unlikely to require remediation of contamination. A site of potential land contamination is situated in the south west of the site in proximity to the River Avon, however the indicative layout proposes an area of green space at this location, as such no effects on viability or deliverability is anticipated.	(0)
	- Lead to the sterilisation of viable mineral resources? If so, is there potential to extract the mineral resource as part of the development?	There are no Mineral Safeguarding Areas within the site option.	(0)
3. Use and manage water resources in a sustainable manner	<ul> <li>Be situated in any of the following:</li> <li>Drinking Water Safeguarding Zone; or</li> <li>Groundwater Source Protection Zone</li> </ul>	With the exception of a small area of land in the south of the site the majority of land lies within an Outer Source Protection Zone (Zone 2c). A number of small watercourses associated with the River Avon run through the area, particularly in the west. The indicative proposals include development within the SPZ, further proposals should incorporate buffer strips between development and watercourses to mitigate effects from development. Proposals for development of this site option should demonstrate appropriate land management practices.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	- Affect surface or groundwater resources in terms of volume, quality and flow?	The site is situated in the River Avon catchment. Potential water resource implications are anticipated as a result of the close proximity of the site to the Avon. Development of the site would increase impermeable surfaces and increase runoff rates in an area which drains directly into the Avon. The effects on water resources from development of the site could be reduced through the provision of surface water management measures in further development proposals.  A number of small watercourses pass through the site and would be at risk of pollution from development. Further proposals should consider the effects from development on this feature.	(-)
4. Improve air quality throughout Wiltshire and minimise all sources of environmental pollution	-Take place within a designated Air Quality Management Area (AQMA)? If so, is there evidence to suggest that the development of site will lead to an exacerbation of air quality issues? If so, can such impacts be appropriately mitigated in line with local air quality management plan?	The site is not situated in proximity to an AQMA.	(0)
	-Lead to a decrease in air quality locally? Or increase noise or light pollution?	The proposed site access point from the A4 London Road in the south of the site will place additional pressure on already constrained A4, exacerbating existing conditions.  Based on the current road network, accessing the PRN would direct vehicles through the centre of Chippenham. As such vehicle oriented development of the site would likely decrease air quality in Chippenham and along the A4 and roads to the north.	()

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		The increase in vehicles associated with development would likely increase noise pollution as well as light pollution at night, affecting receptors along the A4 and roads in proximity to the proposed north access. Mitigation of environmental pollution from development of the site is considered problematic.  Mitigation of effects on Chippenham from development of the site are considered problematic. Unlike other site option in Area C, this site option does not propose a highway connection to the north capable of integrating with the permitted link road in Area A. As such development of the site can only reduce effects on environmental pollution from vehicles by encouraging sustainable transport modes to reduce private car dependency. This is considered somewhat achievable based on the moderate non-motorised access to the town centre.	
	- Lie within an area of, or in close proximity to, any significant source(s) of environmental pollution (air, noise, light)?	There are no existing sources of environmental pollution within proximity to the site, thus no effects are expected.	(0)
5a. Minimise our impacts on climate change – through reducing greenhouse gas emissions	- Reduce greenhouse emissions, in particular carbon dioxide emissions?	The development of this site option would increase greenhouse gas emissions, in particular carbon emissions due to increased levels of traffic and new buildings associated with new development. This is unavoidable to some extent and mitigation is likely to remain problematic in the short to medium term.  Carbon dioxide emissions from new buildings can be partially reduced through meeting standards of sustainable construction and design.	()
	- Offer the potential to make provision for on-site renewable or very low carbon energy generation thus reducing carbon dioxide emissions?	Development of the site has the potential to make provision for on-site renewable or very low carbon energy generation. For the above positive effects to be maximised it is recommended that renewable energy generation such as solar PV is considered.	(++)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
5b. Minimise our impacts on climate change – through reducing our vulnerability to future climate change effects	- Be located within flood zone 1? If not, are there alternative sites in the area that can be allocated in preference to developing land in flood zone 2? (To be determined through the application of the Sequential Test).	The west of the site is situated within Flood Zone 2 or 3, this area is proposed to be a buffer zones, shown as green space. The rest of the site is situated in Flood Zone 1 meaning development would be less vulnerable to increasing extreme climatic events such as fluvial flooding. No effects are expected.	(0)
	- Address the risk of flooding from all sources?	The west of the site lies within Flood Zone 2 or 3 and holds significant flood water storage capacity upstream of Chippenham. The indicative layout drawing demonstrates that development would avoid this area.  Development of this greenfield site would significantly increase surface water runoff upstream of Chippenham. An increase in runoff from development of this site option would likely increase flood risk downstream, particularly affecting the town centre. Further proposals should include surface water management measures in the design to ensure existing greenfield rates of surface water runoff are achieved.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
6. Protect, maintain and enhance the historic environment	- Affect directly or indirectly a heritage asset?	There is one designated heritage asset within the site, a Grade II listed building at Harden's Farm. The principal reason for its designation is the buildings archaeological heritage interest which development of the site would not affect.  Land to the north of the site contributes to the setting of the Tytherton Lucas Conservation Area. Land within this site option may have some influence on the setting of the conservation area. Vegetation planting along the NWR route would extend the existing green buffer and screen views of development at C3 from Tytherton Lucas. This would likely mitigate any adverse effects.  There are several non-designated heritage assets at Harden's Farm, including a medieval settlement, a ditch and a pond of post medieval date. Avoidance of these areas is possible and should be considered by further proposals.  The disused Calne and Chippenham branch of the Great Western Railway passes east to west through the site.  There is high potential for unknown heritage assets of archaeological interest dating from the prehistoric and medieval periods. Development can mitigate effects on these assets through preservation in situ of discrete areas of remains and archaeological recording for more widespread remains. This would need to be considered in further development proposals for the site.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
7. Conserve and enhance the character and quality of Wiltshire's rural and urban landscapes, maintaining and strengthening local distinctiveness and sense of place	<ul> <li>Impact on the visual amenity or character of the natural landscape?</li> <li>Specifically considering the effects on:</li> <li>Internationally/Nationally designated features and their setting;</li> <li>Locally designated landscapes/features and their setting;</li> <li>Local amenity.</li> </ul>	There are no designated features within proximity of the site.  Employment development at land directly south of the NWR route would be visually prominent on high ground. Further development proposals should seek to propose employment development in more suitable areas, extending the green buffers along the NWR route to reduce adverse effects on landscape character and visual amenity.  Development proposed in the south of this site option should reflect the rural, low density character of Stanley Lane and avoid development beyond the high ground south of the lane.	(-)
8. Provide everyone with the opportunity to live in good quality, affordable housing, and ensure an appropriate mix of dwelling sizes, types and tenures	- Help meet affordable housing needs/the needs of the local community (if known)?	A mixed use development of this site could deliver approximately 941 dwellings, which provides the opportunity to deliver good quality affordable housing which meets local needs in terms of tenure, size and type.	(+)
9. Reduce poverty and deprivation and promote more inclusive and self-contained communities	- Result in an increase in poverty and deprivation and/or lead to significant social exclusion amongst existing and new residents?	Option C3 is situated within a rural area of moderate deprivation east of Chippenham. One of the most deprived areas in Chippenham is situated to the south of the site at Pewsham, this area of deprivation extends westward into Chippenham town centre. The indicative layout for this site option proposes residential development adjacent to this area.  Development of this site option has the potential to deliver employment land and community facilities which would support a reduction in nearby levels of high	(+)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		deprivation.	
	- Result in the loss of any existing Community facility/green or amenity space or would it contribute to the provision of a new facility/space?	Development of the site would not result in the loss of any community facilities or amenity space. There are no accessible open spaces within the site although playing fields at Harden's Mead and Abbeyfield School are situated adjacent to the site. The proposed green space along the River Avon could be publicly accessible and link to accessible open space further along the river. 26.9ha of green space is proposed, this constitutes a minor beneficial effect.	(+)
	- Result in the loss of PROW or provision of new PROW?	A number of PRoWs link Harden's Farm to Chippenham in the south and Tytherton Lucas in the north. Development of the site could avoid or the PRoWs. Should harm be unavoidable mitigation would be achievable through the appropriate provision of an alternative route.	(-)
	- Be accessible to educational and health facilities?	Residential development in the south of the site would benefit from strong non-motorised ease of access to Abbeyfield School, whereas development further north would have moderate access. Secondary schools in Chippenham are reaching capacity and may be unable to accommodate the number of pupils likely to arise from development of this site. Provision of educational facilities as part of development proposals or contribution to the delivery of new educational facilities off-site would mitigate this.  The entire site has weak non-motorised ease of access to the hospital, however, public transport services along the A4 would provide an alternative means of access to the hospital from the south of the site.	(-)
10. Reduce the need to travel and promote more sustainable transport choices	- Occur in an area currently accessible by public transport/ walking and cycling? If not, is there scope to make it so?	The south of the site would benefit from strong ease of access by public transport along the A4 London Road. Development of the site could support an increase in the use of public transport services along this corridor.  Access by public transport in the north of the site is moderate to weak, further proposals should consider relocating employment development to an area with stronger public transport access.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		Improvements to existing services along the existing A4 corridor would somewhat enhance accessibility by public transport within the site, as such mitigation is deemed achievable.  Ease of access to the town centre by non-motorised modes from the site is moderate to weak and improvements to offsite pedestrian and cycle facilities would be required to improve this as part of further development proposals for this site.  The close proximity of the National Cycle Route 403 provides direct access to	
	- Support improvements to public transport connectivity and pedestrian and cycle links to the town, town centre, railway station and Wiltshire College campuses in Chippenham?	Chippenham town centre.  The North Wiltshire Rivers route (National Cycle Route 403) passes through the site and follows the River Avon southwards, providing cycle links to the railway station, town centre and Wiltshire College. Further development proposals should integrate with the cycle route and improve access to it from the A4 through the site.	(+)
11. Encourage a vibrant and diversified economy and provide for long-term sustainable economic growth	Offer the potential to provide employment land for B1, B2 and B8 uses?	Option C3 proposes 15.3ha for employment development. The indicative layout shows this as one large area in the northeast of the site to the south of the NWR route. The amount and layout of this indicative area would likely support the delivery of one or two use types.  While employment development at this site would have strong access to the strategic lorry route and moderate access by public transport along the A4, access to the PRN is weak. HGVs and worker vehicles would be directed through the town centre, which would exacerbate existing congestion issues, particularly considering the scale of indicative employment area proposed. Mitigating the effects of employment development with large workforces would be problematic.	()
	Support the vitality and viability Chippenham town centre (proximity to town	The area proposed for employment development in C3 is situated on the eastern edge of Chippenham away from the town centre and existing built up areas. Employment development at this site option would support town centre uses,	()

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	centre, built up areas, station hub, college)?	however the extent of this support is limited due to the distance between the town centre and the proposed employment area.  Congestion would increase in the town centre as a result of the development of this site option. This would have adverse effects on the vitality of Chippenham town centre and would be problematic to mitigate.	
	Provide infrastructure that will help to promote economic growth?	The road infrastructure proposed as part of this scheme is unlikely to promote economic growth.  This site option has the potential to integration with the North Wiltshire Rivers route and improve pedestrian and cycle links from the east of Chippenham with the town centre. This constitutes a minor beneficial effect.  The indicative green space proposed along the River Avon would support the formation of a continuous green infrastructure corridor along the river into the town	(+)
	Be well connected to Principal Employment Areas?	centre, this could have minor beneficial effects on economic growth in Chippenham.  The indicative employment areas proposed currently shares little relation to existing Principal Employment Areas. However improvements to the NWR route has potential to create strong non-motorised connections to the Parsonage Way Industrial Estate. Proposals for development should demonstrate through design how this would be achieved. A minor beneficial effect is expected.	(+)
12. Ensure adequate provision of high quality employment land and diverse employment opportunities to	Support the vitality of existing employment areas?	The indicative employment area proposed in Site Option C3 is not situated in immediate proximity of any existing employment areas. The NWR route provides a pedestrian and cycle connection between the proposed employment land and Parsonage Way Industrial Estate, a minor beneficial effect is anticipated as a result.  While this might have provide some support the benefits are limited. Further proposals for development should ensure strong links between the two sites so development is able to support the vitality of the existing site.	(+)
meet the needs of local businesses and a changing	Provide employment land that meets commercial market requirements?	This site option provides employment land with strong connections to the strategic lorry network along the A4. However, unlike other site options in Area C this site option does not include the eastern link road. As a result access to the PRN for	()

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
workforce	(offices require land in or close town centres; warehousing requires large sites with good local access to strategic road network)	HGVs and workforce traffic would be directed through the centre of Chippenham along already congested routes. While improved access by public transport would mitigate this to some extent, significant employment development would increase congestion in the town centre, making employment land less desirable.  Existing access by public transport is strong in the south of the site but moderate to weak in the north where the indicative layout proposes employment development. Further proposals for the site could improve non-motorised access on-site between the bus corridor on the A4 and the indicative employment area. On-site improvements would be required to support development with reduced car dependency. Development which attracts high levels of vehicle movement would require major improvements to public transport. Overall measures to reduce the adverse effects relating to the poor PRN access would not be sufficient, a moderate adverse effect is expected.	
	Provide employment land in areas that are easily accessible by sustainable transport?	The proposed employment land in the northeast of the site option has moderate access by public transport along the A4. Improvements to on-site pedestrian routes and integration with the North Wiltshire River route would provide improved non-motorised access to the A4 public transport corridor and the Railway Station hub.	(-)

Table A.6: Option C4 assessment

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
1. Protect and enhance all biodiversity and geological features and avoid irreversible losses	Affect a designated / undesignated site of biodiversity or geological value or affect legally protected species?	Development of the site would not directly affect any designated sites of biodiversity or geological value.  The River Avon CWS runs along the western boundary of the site, the river is also a BAP Priority Habitat. The European Otter is recorded on this section of river. A key ecological feature within the site is the floodplain grazing marsh alongside the River Avon. This area could be important for wading/wintering birds. The presence of over-grown willow along the Avon and standing deadwood trees have potential to support roosting bats. Proposals for this site option include a buffer zone shown as green space along the Avon. This measure would prevent adverse effects of development on ecological features associated with the floodplain of the Avon. Public access restrictions may be necessary along sections of the River Avon, due to the presence of otters in this section of the river.  Access from the north of the site is proposed in the form of a bridge crossing the River Avon, this would dissect the County Wildlife Site and could had adverse effects on the site. Due to the extent of the CWS, which runs the entire length of the west of the site, avoidance is not achievable. While development proposals can incorporate mitigation measures which somewhat reduce or offset effects of a river crossing, mitigation of effects is likely to be problematic. A moderate adverse effect is anticipated.	()
	- Affect natural features that are important for wildlife or landscape character such as trees or hedgerows, or areas of ancient woodland not subject to statutory protection?	At the western extent of the North Wiltshire Rivers cycleway within the site a wooded corridor exists, this feature has potential to be adversely effected by development of the site. There is also potential to protect and enhance the feature, extending it eastwards to improve connectivity. Further development proposals for this site should consider extending the wooded area.  Agriculturally improved fields are dominant at the site and boundary hedgerows are low in number, this reduces the ecological diversity of the site.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
2. Ensure efficient and effective use of land and the use of suitably	- Use previously developed land, greenfield land or a mix of both?	The indicative layout shows that the proposed development would occur largely on greenfield land. While previously developed land at Harden's Farm is not included within the proposals an area of land at New Leaze Farm is. Due to the extent of greenfield land mitigation would be problematic.	()
located previously developed land and buildings	- Result in the permanent loss of the Best and Most Versatile Agricultural land (Grades 1, 2, 3)?	The majority of the site is comprised of Grade 3 and Grade 4 agricultural land. In the south of the site adjacent to Pewsham an area of non-agricultural land is present. Much of the Grade 4 (poor) agricultural land in the site coincides with the area of green space proposed along the River Avon.  A precautionary approach is taken to Grade 3 land, it is presumed this the expanse of Grade 3 land across this site option is BMV. The lack of poor and non-agricultural land in C4 means development of this site option would result in the permanent loss	()
	- Require the remediation of contaminated land? If so, would this lead to issues of viability and deliverability?	of BMV land, making mitigation problematic.  Due to its current agricultural use, this site option is unlikely to require remediation of contamination. A site of potential land contamination is situated in the south west of the site in proximity to the River Avon, The indicative layout drawing shows an area of green space is proposed in this area, as such no effects on viability or deliverability is anticipated.	(0)
	- Lead to the sterilisation of viable mineral resources? If so, is there potential to extract the mineral resource as part of the development?	There are no Mineral Safeguarding Areas within the site.	(0)
3. Use and manage water resources in a sustainable manner	<ul> <li>Be situated in any of the following:</li> <li>Drinking Water Safeguarding Zone; or</li> <li>Groundwater Source Protection Zone</li> </ul>	With the exception of a small area in the south of this site option the majority of land is located within an Outer Source Protection Zone (Zone 2c). A number of small watercourses associated with the River Avon run through the area, particularly in the west. The indicative proposals include development within the Outer SPZ, where this occurs proposals should include measures to mitigate the effects of development, including appropriate land management and the provision of buffers	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		between watercourses and development.	
	- Affect surface or groundwater resources in terms of volume, quality and flow?	The site is situated in the River Avon catchment. Potential water resource implications are anticipated as a result of the close proximity of the site to the River Avon. Development of the site would increase impermeable surfaces and increase runoff rates in an area which drains directly into the Avon. The effects on water resources from development of the site could be reduced through the provision of surface water management measures in further development proposals.  A number of small watercourses pass through the site and would be at risk of pollution from development. Further proposals should consider the effects from development on this feature.  Access from the north of the site is proposed in the form of a bridge crossing the River Avon, bridging of the Avon would likely alter the flow of the river which could have adverse effects on the River Avon downstream, particularly in Chippenham town centre. As the site is bound to the west by the Avon avoidance is not achievable. Adequate mitigation of effects is likely to be problematic.	()
4. Improve air quality throughout Wiltshire and minimise all sources of environmental pollution	-Take place within a designated Air Quality Management Area (AQMA)? If so, is there evidence to suggest that the development of site will lead to an exacerbation of air quality issues? If so, can such impacts be appropriately mitigated in line with local air quality management plan?	The site is not situated in proximity to an AQMA.	(0)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	-Lead to a decrease in air quality locally? Or increase noise or light pollution?	The proposed site access points from the A4 London Road in the south of the site and the River Avon bridge crossing in the northwest of the site will place additional pressure on already constrained local roads, exacerbating existing conditions.  Based on the current road network accessing the PRN from the site directs vehicles through the centre of Chippenham along the constrained A4. As such vehicle oriented development of the site would likely decrease air quality in Chippenham and along the A4 and roads to the north.  The increase in vehicles associated with development would likely increase noise pollution as well as light pollution at night, affecting receptors along the A4 and roads in proximity to the proposed north access. Mitigation of environmental pollution from development of the site is considered problematic.  The permitted link road in Area A, if integrated with a river crossing proposed as part of this site option, would provide an alternative route to the PRN, avoiding the centre of Chippenham. This would result in reduced levels of environmental pollution in the town centre and congested areas. This is dependent upon the delivery of the link road through Area A and further strategic road infrastructure through Area B.  Further proposals at this site should encourage and be supported by sustainable transport modes to reduce private car dependency and somewhat lessen the impact of environmental pollution from development.	(-)
	- Lie within an area of, or in close proximity to, any significant source(s) of environmental pollution (air, noise, light)?	There are no existing sources of environmental pollution within proximity to the site, thus no effects are expected.	(0)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
5a. Minimise our impacts on climate change – through reducing greenhouse gas emissions	- Reduce greenhouse emissions, in particular carbon dioxide emissions?	The development of this site option would increase greenhouse gas emissions, in particular carbon emissions due to increased levels of traffic and new buildings associated with new development. This is unavoidable to some extent and mitigation is likely to remain problematic in the short to medium term.  Carbon dioxide emissions from new buildings can be partially reduced through meeting standards of sustainable construction and design.	()
	- Offer the potential to make provision for on-site renewable or very low carbon energy generation thus reducing carbon dioxide emissions?	Development of the site has the potential to make provision for on-site renewable or very low carbon energy generation For the above positive effects to be maximised it is recommended that renewable energy generation such as solar PV is considered.	(++)
5b. Minimise our impacts on climate change – through reducing our vulnerability to future climate change effects	- Be located within flood zone 1? If not, are there alternative sites in the area that can be allocated in preference to developing land in flood zone 2? (To be determined through the application of the Sequential Test).	The west of the site is situated within Flood Zone 2 - 3, this area is a proposed buffer zones, shown as green space. The rest of the site is situated in Flood Zone 1 meaning development would be less vulnerable to increasing extreme climatic events such as fluvial flooding. No effects are expected.	(0)
	- Address the risk of flooding from all sources?	The west of the site lies within Flood Zone 2 or 3 and holds significant upstream flood water storage capacity, protecting Chippenham town centre. The indicative layout drawing demonstrates that development would avoid this area.  Development of greenfield land in site option C4 would increase surface water runoff flowing directly into the Avon immediately upstream of Chippenham. Any increase in flows into the Avon from the development of this site option would greatly increase flood risk in the town centre. The incorporation of surface water management measures is necessary to ensure runoff rates are no greater than prior	()

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		to development.  Access from the north of the site is proposed in the form of a bridge crossing the River Avon, bridging of the Avon would likely alter the flow of the river which could have adverse effects on the River Avon downstream, particularly in Chippenham town centre. As the site is bound to the west by the Avon avoidance is not achievable. Adequate mitigation of effects on river flows to prevent increased flood risk is likely to be problematic.	

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
6. Protect, maintain and enhance the historic environment	- Affect directly or indirectly a heritage asset?	There is one designated heritage asset within the site, a Grade II listed building at Harden's Farm. The principal reason for its designation is the buildings architectural interest which would not be affected by the development of the site.  Land in the north of the site contributes to the setting of the Tytherton Lucas Conservation Area and this Option proposes an extensive area of development within this land. This would likely harm the remote and open setting of this heritage asset. Mitigation of these effects would be problematic through a combination of the unfavourable, elevated topography and adverse effects that vegetation screening would have on the open setting of the Conservation Area.  There are several non-designated heritage assets at Harden's Farm and New Leaze Farm, including a medieval settlement, a ditch and pond of post medieval date and other potentially prehistoric features. Avoidance of these areas is possible and should be considered by further proposals.  The disused Calne and Chippenham branch of the Great Western Railway passes east to west through the site.  There is high potential for unknown heritage assets of archaeological interest dating from the prehistoric and medieval periods. Development can mitigate effects on these assets through preservation in situ of discrete areas of remains and archaeological recording for more widespread remains. This would need to be considered in further development proposals for the site.	()

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
7. Conserve and enhance the character and quality of Wiltshire's rural and urban landscapes, maintaining and strengthening local distinctiveness and sense of place	<ul> <li>Impact on the visual amenity or character of the natural landscape?</li> <li>Specifically considering the effects on:</li> <li>Internationally/Nationally designated features and their setting;</li> <li>Locally designated landscapes/features and their setting;</li> <li>Local amenity.</li> </ul>	There are no designated features within proximity of the site.  The topography of this site option undulates, making development in some areas more suitable than others. Development of land north of the NWR route would reduce the separation between Chippenham and Tytherton Lucas, increasing views of development at Chippenham as far as East Tytherton. Mitigation of these effects is considered problematic.  Land south of the North Wiltshire Rivers route is also prominent on high ground and development could impact on the visual amenity of the natural landscape.  Extending the vegetation buffer along the NWR route could reduce the adverse effects to some extent. Employment development comprising large units in this area of the site option would be particularly prominent, further proposals should relocate the indicative employment area to elsewhere in Option C4.  There is insufficient land in Option C4 to deliver the scale of development proposed in land which would be visually prominent across the wider area.  The southern areas of the site option have a greater urban influence due to the proximity of Pewsham, moreover the landform in the south of the site would be favourable, containing views of development from the north.  Access from the north of the site is proposed in the form of a bridge crossing of the River Avon, avoidance is not achievable as the site is bound to the west by the river. Reduction of adverse effects could be achieved through design and landscaping in further proposals.	()

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
8. Provide everyone with the opportunity to live in good quality, affordable housing, and ensure an appropriate mix of dwelling sizes, types and tenures	- Help meet affordable housing needs/the needs of the local community (if known)?	A mixed use development of this site could deliver approximately 1105 dwellings, which provides the opportunity to deliver good quality affordable housing which meets local needs in terms of tenure, size and type.	(+)
9. Reduce poverty and deprivation and promote more inclusive and self-contained communities	- Result in an increase in poverty and deprivation and/or lead to significant social exclusion amongst existing and new residents?	Development at this site option would occur directly north of one of the most deprived areas in Chippenham which extends from the town centre to north Pewsham. Site Option C4 is situated in an area of moderate deprivation to the east of Chippenham.  Development of this site option offers the potential for the delivery of community facilities and an area of employment land, this would support a reduction in levels of high deprivation present nearby.	(+)
	- Result in the loss of any existing Community facility/green or amenity space or would it contribute to the provision of a new facility/space?	Development of the site would not result in the loss of any community facilities or amenity space There are no accessible open spaces within the site although playing fields at Harden's Mead and Abbeyfield School are situated adjacent to the site. The proposed green space along the River Avon could be publicly accessible and link to accessible open space further along the river.	(+)
	- Result in the loss of PROW or provision of new PROW?	The NWR route is a Sustrans national cycle route (403).  A number of PRoWs link Harden's Farm to Chippenham in the south and Tytherton Lucas in the north. Development of the site could avoid these PRoWs. Should harm from development be unavoidable, mitigation measures to reduce or offset the effects are achievable through the appropriate provision of an alternative route.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	- Be accessible to educational and health facilities?	Residential development in the south of the site would benefit from very strong non-motorised ease of access to Abbeyfield School, whereas development further north would have moderate access. Secondary schools in Chippenham are reaching capacity and may be unable to accommodate the number of pupils likely to arise from development of this site. Provision of educational facilities as part of development proposals or contribution to the delivery of new educational facilities off-site would mitigate this.  The entire site has moderate to weak non-motorised ease of access to the hospital, public transport services along the A4 would provide an alternative means of access to the hospital from the south of the site.	(-)
10. Reduce the need to travel and promote more sustainable transport choices	- Occur in an area currently accessible by public transport/ walking and cycling? If not, is there scope to make it so?	The south of the site would benefit from strong ease of access by public transport along the A4 London Road. Development of the site could support an increase in the use of public transport services along this corridor.  Access by public transport north of the NWR route is weak, and moderate immediately south of it. Further proposals should consider that residential development in this area of the site would be poorly served by existing public transport and improved services along the existing A4 corridor would be unlikely to improve this, as such mitigation is problematic.  The permitted link road between the B4069 and A4 London Road in Area A, were it extended through Area B into this site option, could act as a future public transport corridor supporting improvements to connectivity.  Ease of access to the town centre by non-motorised modes from the site is categorised as moderate to weak and improvements to offsite pedestrian and cycle facilities would be required to improve this as part of further development proposals for this site.  The close proximity of the National Cycle Route 403 provides direct access to Chippenham town centre from the north of the site option and further proposals	()

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		should capitalise upon this,	
	- Support improvements to public transport connectivity and pedestrian and cycle links to the town, town centre, railway station and Wiltshire College campuses in Chippenham?	The permitted link road between in Area A, were it extended through Area B into this site option, could act as a future public transport corridor supporting improvements to connectivity.  The North Wiltshire Rivers route (National Cycle Route 403) passes through the site and follows the Avon southwards providing cycle links to the railway station, town centre and Wiltshire College. Further development proposals should integrate with the cycle route and improve access to it from the A4 through the site.	(+)
11. Encourage a vibrant and diversified economy and provide for long-term sustainable economic growth	Offer the potential to provide employment land for B1, B2 and B8 uses?	This site option proposes two separate indicative areas of employment land totalling 10.08ha. The indicative layout shows this as a larger area and smaller area along the eastern boundary of the site option, separated by an area of residential development. The quantum of proposed employment land and the indicative layouts would likely support the delivery of one or two use types.  Site option C4 proposes access from the north via a river bridge crossing of the River Avon, were this access road to integrate with the approved link road in Area A, access to the PRN from the site would be considerably improved. The A4 and A350 are classified as a strategic lorry route, meaning employment development at this site option would have strong access to the strategic road network. This would support the development of B1, B2 and B8 uses at the site.  The southern extent of the indicative employment land in this site option would benefit from strong access by public transport while the indicative area in the north of the site would require improvements to public transport to support development.	(+)
	Support the vitality and viability Chippenham town centre (proximity to town	The indicative employment land proposed for development in this site option would be situated on the eastern periphery of the town away from existing built up areas. While new development would provide benefits to existing town centre uses, the	(+)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	centre, built up areas, station hub, college)?	distance to the town centre would limit the extent of this benefit.	
	Provide infrastructure that will help to promote economic growth?	The river bridge crossing of the River Avon proposed as part of this site option would contribute to the delivery of a eastern link road between the A350 north of Chippenham and the A4 to the east. This would support major employment and housing growth.  Green space proposed along the River Avon would support the formation of a continuous green infrastructure corridor along the river into the town centre, this	(+++)
	Be well connected to Principal Employment Areas?	could have minor beneficial effects on economic growth in Chippenham.  The indicative employment areas proposed currently shares little relation to existing Principal Employment Areas. However the provision of a highway access from the north and improvements to the NWR route has potential to create strong connections to the Parsonage Way Industrial Estate. Proposals for development should demonstrate through design how this would be achieved. A minor beneficial effect is expected.	(+)
12. Ensure adequate provision of high quality employment land	Support the vitality of existing employment areas?	The proposed employment sites in C4 are not situated in the immediate vicinity of any existing employment areas; however, the potential exists for site access to the proposed employment site in the east of this site option from Cocklebury Lane or the Parsonage Way Industrial Estate, this might provide some support to the vitality of existing employment areas.	(+)
and diverse employment opportunities to meet the needs of local businesses and a changing workforce	Provide employment land that meets commercial market requirements? (offices require land in or close town centres; warehousing requires large sites with good local access to strategic road network)	The proposed river bridge crossing of the River Avon to the north of the site has the potential to integrate with the A350-B4069 link road approved in Area A. This would improve access to the PRN and strategic lorry route along the A350, HGVs associated with warehousing and storage type employment would have strong access to the strategic lorry route.  Both indicative areas are suitable for B1, B2 and B8 development, although the smaller southern site has stronger access by public transport along the A4 and would be better suited to employers with large workforces.	(+)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	Provide employment land in areas that are easily accessible by sustainable transport?	Indicative employment land proposed in the north of this site option would have moderate to weak access by public transport whereas development proposed in the south of this site would have stronger links.	(-)

Table A.7: Option D1 assessment

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
1. Protect and enhance all biodiversity and geological features and avoid irreversible losses	- Affect a designated / undesignated site of biodiversity or geological value or affect legally protected species?	Development of the site would not affect any designated sites of biodiversity or geological value.  The old Wilts and Berks canal is an undesignated area with biodiversity value and is located in the east of the site. Mature trees line the canal on both sides forming a linear corridor of wetland habitats which links the River Avon to linear features to the north. The canal is known to support a breeding population of Great crested newts and may support roosting bats. Greenspace is proposed in the east of the site and acts as a buffer zone between development of the site and the canal, this prevents adverse effects from development are felt on this biodiversity feature.  Bat activity is recorded in the area, development proposals should be informed by ecological surveys and where populations are identified proposals would need to incorporate measures which avoid adverse effects on populations and important habitats. Where it can be demonstrated that avoidance is not achievable proposals should offset adverse effects by providing replacement habitats.	(-)
	- Affect natural features that are important for wildlife or landscape character such as trees or hedgerows, or areas of ancient woodland not subject to statutory protection?	Proposals include green space along the area of woodland in the southwest of the site, this buffer zone avoids adverse effects from development on this natural feature.  Further proposals should take account of existing hedgerows and individual trees within fields, and should seek to retain them in situ or where this is not possible translocate them within the site.	(-)
2. Ensure efficient and effective use of land and the use of suitably located	<ul> <li>Use previously developed land, greenfield land or a mix of both?</li> <li>Result in the permanent</li> </ul>	The indicative layout shows that proposed development would occur largely on greenfield land. A small area of brownfield land at Forest Farm is proposed for residential development. Due to the extent of greenfield land mitigation would be problematic.  Development of the site would result in the permanent loss of Grade 3 agricultural	()
previously	loss of the Best and Most	land which comprises the entire site. The precautionary approach to Grade 3 land	

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
developed land and buildings	Versatile Agricultural land (Grades 1, 2, 3)?	presumes all Grade 3 land to be BMV. As such development of the site would result in the permanent loss of BMV land, this would be problematic to mitigate.	
	- Require the remediation of contaminated land? If so, would this lead to issues of viability and deliverability?	A site of medium potential contamination coincides with woodland which forms the southwest border of the site. Two narrow strips of medium potential contamination which follow a drainage ditch lie within the site and may require remediation. The limited extent of potentially contaminated land suggests development could avoid these areas and prevent constraint to development.	(-)
	- Lead to the sterilisation of viable mineral resources? If so, is there potential to extract the mineral resource as part of the development?	The site is not situated within a Mineral Safeguarding Area.	(0)
3. Use and manage water resources in a sustainable manner	<ul> <li>Be situated in any of the following:</li> <li>Drinking Water Safeguarding Zone;</li> <li>Groundwater Source Protection Zone</li> </ul>	The site is not situated within a Groundwater Source Protection Zone, therefore it is unlikely that there would be any significant effect.	(0)
	- Affect surface or groundwater resources in terms of volume, quality and flow?	The site is situated in Flood Zone 1 within the River Avon catchment, although potential water resource implications are not anticipated to be significant. The River Avon flows approximately 1.5km to the west and development of the site would result in an increase in impermeable surfaces which could increase runoff rates into the Avon. Further proposals should incorporate surface water management measures which achieve equivalent to greenfield rates of runoff in order to reduce adverse effects from development on the River Avon downstream, particularly in Chippenham town centre.	(-)
		A small watercourse passes through the site and would be at risk of pollution from development. Further development proposals should take this into account and ensure development would not have adverse effects on the quality or flow of this	

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		water resource.	
4. Improve air quality throughout Wiltshire and minimise all sources of environmental pollution	-Take place within a designated Air Quality Management Area (AQMA)? If so, is there evidence to suggest that the development of site will lead to an exacerbation of air quality issues? If so, can such impacts be appropriately mitigated in line with local air quality management plan?	The site is not situated in proximity to an AQMA.	(0)
	-Lead to a decrease in air quality locally? Or increase noise or light pollution?	Vehicular access to the site from the A4 east of Pewsham would place significant pressure on the already constrained road, increasing congestion and likely decreasing air quality on the A4 at Pewsham.  Based on the current road network, accessing the PRN requires vehicles be directed through the centre of Chippenham. As such vehicle oriented development of the site would likely decrease air quality in Chippenham. The increase in vehicles associated with development of the site would also increase noise pollution as well as light pollution at night, affecting receptors along the A4. Mitigation of environmental pollution from development of the site is considered problematic.  Further development proposals have the potential to encourage and be supported by sustainable transport modes in order to reduce private car dependency and	()

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		somewhat reduce the impact of environmental pollution from development.	
	- Lie within an area of, or in close proximity to, any significant source(s) of environmental pollution (air, noise, light)?	The site is not situated in proximity to any existing sources of environmental pollution and as such no effects are expected.	(0)
5a. Minimise our impacts on climate change – through reducing greenhouse gas emissions	- Reduce greenhouse emissions, in particular carbon dioxide emissions?	The development of this site option would increase greenhouse gas emissions, in particular carbon emissions due to increased levels of traffic and new buildings associated with new development. This is unavoidable to some extent and mitigation is likely to remain problematic in the short to medium term.  Carbon dioxide emissions from new buildings can be somewhat reduced through meeting standards of sustainable construction and design.	()
	- Offer the potential to make provision for on-site renewable or very low carbon energy generation; thus reducing greenhouse gas emissions?	Development of the site has the potential to make provision for on-site renewable or very low carbon energy generation. For these positive effects to be maximised it is recommended that renewable energy generation such as solar PV is considered.	(++)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
5b. Minimise our impacts on climate change – through reducing our vulnerability to future climate change effects	- Be located within flood zone 1? If not, are there alternative sites in the area that can be allocated in preference to developing land in flood zone 2? (To be determined through the application of the Sequential Test).	The site is situated entirely within Flood Zone 1 which means development would be less vulnerable to increasing extreme climatic events such as fluvial flooding. No effects are expected.	(0)
	- Address the risk of flooding from all sources?	Drainage from development proposed at this site option will effect runoff rates downstream as surface water flows indirectly into the Avon. The small scale of this site option and its distance from the River Avon reduces the risk of adverse effects on peak flows downstream,  Development of this site would require a connection to the town's drainage system, which may give rise to capacity and management issues.  Surface water management measures should be incorporated into further proposals to ensure existing greenfield rates of surface water runoff are achieved, thus reducing the risk of groundwater flooding on-site and minimise increases to peak flows on the River Avon, affecting settlements downstream.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
6. Protect, maintain and enhance the historic environment	- Affect directly or indirectly a heritage asset?	There are no designated heritage assets within the site.  There is no land within the site which contributes to the character of any designated heritage asset.  There is high potential for unknown heritage assets of archaeological interest associated with the old Wilts and Berks canal located in the east of the site.  Development can mitigate effects on these assets through preservation in situ of discrete areas of remains and archaeological recording for more widespread remains.  The development of this site option provides the opportunity to restore the old Wilts and Berks canal which would have beneficial effects if considered. Overall a balanced effect is anticipated.	(0)
7. Conserve and enhance the character and quality of Wiltshire's rural and urban landscapes, maintaining and strengthening local distinctiveness and sense of place	<ul> <li>Impact on the visual amenity or character of the natural landscape?</li> <li>Specifically considering the effects on:</li> <li>Internationally/Nationally designated features and their setting;</li> <li>Locally designated landscapes/features and their setting;</li> <li>Local amenity.</li> </ul>	There are no designated features within proximity of the site.  Development of the site could undermine a number of landscape qualities including the visual separation between the Limestone Ridge (Naish Hill) and Pewsham and the rural character of the approach to Chippenham along Pewsham Way. Retention and enhancement of the green buffer fronting the A4 London Road and Pewsham Way would reduce the visual impact of development on the rural approach to Chippenham.  The mitigation of effects from development on the visually separate Naish Hill would be problematic to mitigate; however, the relatively small scale and compact nature of this site option limits the adverse effects this site option would have.	(-)
8. Provide everyone with the opportunity to live in good	- Help meet affordable housing needs/the needs of the local community (if known)?	A mixed use development of this site would deliver approximately 482 dwellings, which provides the opportunity to deliver good quality affordable housing that meets local needs in terms of tenure, size and type.	(+)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
quality, affordable housing, and ensure an appropriate mix of dwelling sizes, types and tenures			
9. Reduce poverty and deprivation and promote more inclusive and self-contained communities	- Result in an increase in poverty and deprivation and/or lead to significant social exclusion amongst existing and new residents?	Site option D1 is located to the east of Pewsham, in an area of relatively low deprivation. The eastern extent of an area of high deprivation is situated to the northwest of this site option. Development of D1 would occur in proximity to this area of high deprivation and proposals have the potential to deliver employment land which could support a reduction in nearby levels of high deprivation.  The small scale of this site option, however, limits opportunities for the delivery of community facilities and therefore the beneficial effects that this site option could have on deprived areas nearby are limited.	(+)
	- Result in the loss of any existing Community facility/green or amenity space or would it contribute to the provision of a new facility/space?	Development of the site would not result in the loss of any existing community facilities or amenity space. Proposed green space along the south and east boundaries of the site would create new amenity space. There are no existing accessible open spaces in the site. Proposed green space along the east and south of the site could be publicly accessible open space as well as improving access to the old Wilts and Berks Canal and wooded area in the southwest of the site. This would constitute a minor positive effect.	(+)
	- Result in the loss of PROW or provision of new PROW?	A PRoW passes through the site in proximity to Forest Farm and could be adversely effected by development of the site. Loss of the PRoW is easily avoidable through integration with further proposals. Where it can be demonstrated that permanent loss or alteration of the PRoW is unavoidable this can be offset by the provision of a suitable replacement.	(-)
	- Be accessible to educational and health facilities?	Residential development of the site would benefit from strong non-motorised ease of access to secondary schools due to the proximity of Abbeyfield School. Secondary schools in Chippenham are reaching capacity and may be unable to accommodate the number of pupils likely to arise from development of this site.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		Provision of educational facilities as part of development proposals or contribution to the delivery of new educational facilities off-site would mitigate this.  The site has moderate to weak non-motorised ease of access to the hospital, however, strong access by public transport services along the A4 provide an alternative mode of access to the hospital. Motorised access to the hospital would direct vehicles into Chippenham on the A4. While this site option is accessible to educational and health facilities, further proposals should seek to integrate with off-site pedestrian and cycle links to improve non-motorised access.	
10. Reduce the need to travel and promote more sustainable transport choices	- Occur in an area currently accessible by public transport/ walking and cycling? If not, is there scope to make it so?	The site is situated south of the A4 London Road and as such has strong access by public transport from the north of the site. Development of this site option could support an increase in the use of existing bus services along this corridor.  Ease of access to the town centre by non-motorised modes from the site is moderate in the west and weak to the east. Improvements to off-site pedestrian and cycle facilities would be required to improve this as part of further development proposals for this site.	(-)
	- Support improvements to public transport connectivity and pedestrian and cycle links to the town, town centre, railway station and Wiltshire College campuses in Chippenham?	Development of the site option is unlikely to support significant improvements to public transport connectivity although residential and employment development of the site could increase the use of services.  Due to this site option's peripheral location in the east of Chippenham there is limited potential to support improvements to pedestrian or cycle links to the town, railway station or Wiltshire College campuses.	(0)
11. Encourage a vibrant and diversified economy and provide for long-term sustainable economic growth	Offer the potential to provide employment land for B1, B2 and B8 uses?	This site option proposes 3.3ha of indicative employment land. The proposed layout shows this is formed of a small area on the A4 London Road. The scale of this employment land would likely be suitable for employment development focused on one use class only. This would limit the availability of land for the identified uses with mitigation considered problematic.  The A4 is identified as a strategic lorry route and also has strong access by public transport, although access to the PRN is weak. The site is considered suitable for	()

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		small sale B1, B2 and B8 development. HGVs and worker vehicles would be directed through the town centre, which would exacerbate existing congestion issues, particularly considering the scale of indicative employment area proposed. Mitigating the effects of employment development with large workforces would be problematic.	
	Support the vitality and viability Chippenham town centre (proximity to town centre, built up areas, station hub, college)?	The indicative employment land proposed for development in this site option would be small scale and situated on the periphery of the town. Employment development in this site option would provide a minor economic benefit to the town however this is limited due to the distance between the two areas.	(+)
	Provide infrastructure that will help to promote economic growth?	Road infrastructure proposed as part of this site option is unlikely to have any effects on economic growth in Chippenham.  Areas of indicative green space have the potential to restore the old Wilts and Berks Canal, however the economic benefit of this is unlikely to be noticeable.	(0)
	Be well connected to Principal Employment Areas?	The area proposed for employment development is not situated in proximity to the Principal Employment Areas in Chippenham and has little potential for improving connections. No effect is expected.	(0)
12. Ensure adequate provision of high quality	Support the vitality of existing employment areas?	The proposed land for employment development in D1 is not situated in proximity to any existing areas of employment land. The small quantum of employment land proposed in this site option, limits the likely effects of employment development on existing employment areas. No tangible effects are expected.	(0)
employment land and diverse employment opportunities to meet the needs of local businesses and a changing workforce	Provide employment land that meets commercial market requirements? (offices require land in or close town centres; warehousing requires large sites with good local access to strategic road network)	This site option proposes a small area for employment development. Access from the PRN is weak and vehicles accessing the PRN would be directed through the town centre, limiting the attractiveness and commercial desirability of this site.  B8 uses would benefit from strong access to the strategic lorry route along the A4, however the small site limits the scale of B8 development which this site option could support.	()

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		Access by public transport along the A4 is strong and this somewhat mitigates the weak non-motorised access to the town centre.	
	Provide employment land in areas that are easily accessible by sustainable transport?	The employment land proposed at Site Option D1 benefits from strong access by public transport.  Non-motorised access to the town centre and transport hubs could be improved to ensure employment land is more accessible by a greater range of sustainable transport modes/services.	(-)

Table A.8: Option D3 assessment

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
1. Protect and enhance all biodiversity and geological features and avoid irreversible losses	- Affect a designated / undesignated site of biodiversity or geological value or affect legally protected species?	Development of the site would not affect any designated sites of biodiversity or geological value.  The River Avon CWS and Mortimore's Wood CWS are situated to the west of the site and, in places, form the western site boundary. These sites are also BAP Priority Habitats. Development in proximity to these ecological features would likely have adverse effects on ecology. Avoidance of these features through the provision of buffer zones, as is proposed on the indicative layout drawing, would avoid adverse effects from development.  The River Avon floodplain in the west of the site is of ecological significance and forms a strategic habitat corridor throughout the wider area. The indicative layout shows an extensive area of green space along the west of the site which would protect habitats associated with the river and would avoid adverse effects to its floodplain.  Bat activity is recorded in the area, development proposals should be informed by ecological surveys and where populations are identified proposals would need to incorporate measures which avoid adverse effects on populations and important habitats. Where it can be demonstrated that avoidance is not achievable proposals should offset adverse effects by providing replacement habitats. As a result a minor adverse effect is expected	(-)
	- Affect natural features that are important for wildlife or landscape character such as trees or hedgerows, or areas of ancient woodland not subject to statutory protection?	Proposals include green space along the area of woodland in the east of the site, this buffer zone avoids adverse effects from development on this natural feature.  Hedgerows with hedgerow trees are present throughout the site, these features provide habitats connectivity and further proposals for development of the site could incorporate these features into the development. Where vegetation removal is demonstrated to be unavoidable translocation should be proposed prevent adverse	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		effects from development on habitat connectivity.	
2. Ensure efficient and effective use of land and the use of suitably	- Use previously developed land, greenfield land or a mix of both?	The indicative layout shows that proposed development would occur largely on greenfield land. Previously developed land includes a number of lodges and farmhouses along the southern site boundary. Due to the extent of greenfield land mitigation would be problematic.	()
located previously developed land and buildings	- Result in the permanent loss of the Best and Most Versatile Agricultural land (Grades 1, 2, 3)?	The site is comprised largely of Grade 3 agricultural land. The precautionary approach to Grade 3 land presumes it to be BMV. Grade 4 (poor) agricultural land coincides largely with the area of green space proposed along the River Avon. As such there is insufficient poor agricultural land to deliver the level of mixed-use development proposed at this site option. Development of this site option would likely result in the permanent loss of BMV land, this would be problematic to mitigate.	()
	- Require the remediation of contaminated land? If so, would this lead to issues of viability and deliverability?	A site of medium potential contamination coincides with the wooded area in the northeast of the site, this indicative layout shows that this area is not proposed for development and a buffer zone, shown as green space, is proposed. As a result no effects on the viability and deliverability of the site are expected.	(0)
	- Lead to the sterilisation of viable mineral resources? If so, is there potential to extract the mineral resource as part of the development?	The southwest of the site is situated within a Mineral Safeguarding Area, this area coincides with the proposed greenspace and as such development would not lead to the sterilisation of safeguarded mineral resources.	(0)
3. Use and manage water resources in a sustainable manner	<ul> <li>Be situated in any of the following:</li> <li>Drinking Water Safeguarding Zone;</li> <li>Groundwater Source Protection Zone</li> </ul>	The site is not situated within a Groundwater Source Protection Zone, therefore it is unlikely that there would be any significant effect.	(0)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	- Affect surface or groundwater resources in terms of volume, quality and flow?	The site is situated within the River Avon catchment and on land adjacent to the river. Development of the site would lead to an increase in impermeable surfaces which could increase runoff rates in an area which flows directly into the Avon. Further proposals could reduce the potential effects of development on water resources, such as anthropogenic pollution and increasing peak flows on the Avon downstream, by incorporating surface water management measures into the design.  A small watercourse passes through the north of the site and would be at risk of pollution from development. Further development proposals for the site should take this into account and ensure development would not have adverse effects on the quality or flow of this water resource.	(-)
4. Improve air quality throughout Wiltshire and minimise all sources of environmental pollution	-Take place within a designated Air Quality Management Area (AQMA)? If so, is there evidence to suggest that the development of site will lead to an exacerbation of air quality issues? If so, can such impacts be appropriately mitigated in line with local air quality management plan?	The site is not situated in proximity to an AQMA.	(0)
	-Lead to a decrease in air quality locally? Or increase noise or light pollution?	Vehicular access to the site from the A4 Pewsham Way and/or the A4 London Road would place significant pressure on this already constrained route. An increase in congestion at the A4 would likely decrease air quality at Pewsham.  Based on the current road network access to the PRN would direct vehicles through the central areas of Chippenham along the constrained A4. As such vehicle oriented development of the site would likely decrease air quality in Chippenham.	()

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		The increase in vehicles associated with development of the site would also increase noise pollution as well as light pollution at night, affecting receptors along the A4. Mitigation of environmental pollution from development of the site is considered problematic.	
		Further proposals for this D3 should encourage and be supported by sustainable transport modes which reduce private car dependency, this would to some extent reduce the levels of environmental pollution from development.	
	- Lie within an area of, or in close proximity to, any significant source(s) of environmental pollution (air, noise, light)?	The site is situated in proximity to the Chippenham Sewage Treatment Works (STW). The site option proposals include a green buffer along the west of the site which would help prevent nuisance to proposed development from odours associated with the facility. Application of odour control measures at the STW may also be required.	(-)
5a. Minimise our impacts on climate change – through reducing greenhouse gas emissions	- Reduce greenhouse emissions, in particular carbon dioxide emissions?	The development of this site option would increase greenhouse gas emissions, in particular carbon emissions due to increased levels of traffic and new buildings associated with new development. This is unavoidable to some extent and mitigation is likely to remain problematic in the short to medium term.  Carbon dioxide emissions from new buildings can be somewhat reduced through meeting standards of sustainable construction and design.	()
	- Offer the potential to make provision for on-site renewable or very low carbon energy generation reducing carbon dioxide emissions?	Development of the site has the potential to make provision for on-site renewable or very low carbon energy generation. For these positive effects to be maximised it is recommended that, renewable energy generation such as solar PV is considered.	(+ +)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
5b. Minimise our impacts on climate change – through reducing our vulnerability to future climate change effects	- Be located within flood zone 1? If not, are there alternative sites in the area that can be allocated in preference to developing land in flood zone 2? (To be determined through the application of the Sequential Test).	The site is situated largely within Flood Zone 1. The areas of the site located in Flood Zones 2 and 3 are proposed as green space, as such no effects are expected.	(0)
	- Address the risk of flooding from all sources?	Drainage from development proposed at this site option will affect runoff rates downstream. Any increases in surface water runoff rates into the Avon caused by the development of this site option would increase the risk of flooding downstream. Surface water management measures should be incorporated into further proposals to ensure existing greenfield rates of surface water runoff are achieved	(-)
6. Protect, maintain and enhance the historic environment	- Affect directly or indirectly a heritage asset?	There are no designated heritage assets within the site.  Land in the west of the site may contribute to the setting of Rowden Conservation Area due to its proximity. A buffer zone, illustrated as green space on the indicative site layout drawing, is proposed along the west of the site, this will reduce the adverse effects of development on the setting of this heritage asset. Further development proposals for this site option should include mitigation measures such as landscaping or vegetation buffers to screen views and reduce adverse effects from development on the setting of the Conservation Area.  There is high potential for unknown heritage assets of archaeological interest associated with the Pewsham Forest medieval deer park.  Development can mitigate effects on these assets through preservation in situ of discrete areas of remains and archaeological recording for more widespread remains.	(-)
7. Conserve and enhance the	- Impact on the visual amenity or character of the	There are no designated features within proximity of the site.	()

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
character and quality of Wiltshire's rural and urban landscapes, maintaining and strengthening local distinctiveness and sense of place	natural landscape? Specifically considering the effects on: - Internationally/Nationally designated features and their setting; - Locally designated landscapes/features and their setting; - Local amenity.	Development of the site would undermine a number of landscape qualities including the visual separation between the Limestone Ridge (Naish Hill) and Pewsham and the rural character of the approach to Chippenham along Pewsham Way. Further proposals for this site option could mitigate effects on the rural character of the area through the provision of green buffers along the A4 Pewsham Way.  Due to the domed landscape rising from the River Avon in the west and south, mitigating effects from development on the visual separation between Naish Hill and Pewsham would be problematic.	
8. Provide everyone with the opportunity to live in good quality, affordable housing, and ensure an appropriate mix of dwelling sizes, types and tenures	- Help meet affordable housing needs/the needs of the local community (if known)?	A mixed use development of this site deliver approximately 1518 dwellings, which provides the opportunity to deliver good quality affordable housing that meets local needs in terms of tenure, size and type.	(+++)
9. Reduce poverty and deprivation and promote more inclusive and self-contained communities	- Result in an increase in poverty and deprivation and/or lead to significant social exclusion amongst existing and new residents?	Site option D3 is situated within an area of low deprivation to the south of Chippenham. Areas of high and relatively high deprivation border the site option to the west and northwest while low levels of deprivation are experienced at Pewsham to the northeast.  The mixed-use development of this site option could include the provision of community facilities which would have wider benefits for deprived areas nearby. Employment land proposed as part of this site option is limited in size but would likely have minor beneficial effects on poverty in the surrounding area.	(+)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	- Result in the loss of any existing Community facility/green or amenity space or would it contribute to the provision of a new facility/space?	Development of the site would not result in the loss of any community facilities or amenity space. Proposed green space along the River Avon in the west of the site would likely create accessible amenity space, this constitutes a minor positive effect.  There are no existing accessible open spaces in the site, however Mortimore's Wood is situated adjacent to the site. The proposals include provision of green space in proximity of Mortimore's Wood which could facilitate improved access to this open space. This would constitute a minor positive effect.	(+)
	- Result in the loss of PROW or provision of new PROW?	A Bridleway between two fields dissects the site from south to north at the centre of the site, two PRoWs follow existing field boundaries, one along the south east of the site and one north to south to the east of the bridleway. Loss of PRoWs is avoidable through integration with further proposals for the site. Where it can be demonstrated that permanent loss or alteration of the PRoW is unavoidable this can be offset by the provision of a suitable replacement.	(-)
	- Be accessible to educational and health facilities?	Access to Abbeyfield School is strong to moderate and would be directed along the A4 Pewsham Way. Secondary schools in Chippenham are reaching capacity and may be unable to accommodate the number of pupils likely to arise from development of this site. Provision of educational facilities as part of development proposals or contribution to the delivery of new educational facilities off-site would mitigate this.  The site has strong to moderate non-motorised ease of access to the hospital, however, potential access by public transport services along the A4 could provide an alternative mode of access. While this site option is accessible to educational and health facilities, further proposals should seek to integrate with off-site pedestrian and cycle links to improve non-motorised access.	(-)
10. Reduce the need to travel and promote more sustainable	- Occur in an area currently accessible by public transport/ walking and cycling? If not, is there	The site is situated along the A4 Pewsham Way and has moderate access by public transport. Development of the site would require provision of on-site pedestrian links to the bus corridor at the A4 London Road.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
transport choices	scope to make it so?	Ease of access to the town centre by non-motorised modes is moderate to strong in the west of the site option and moderate to poor in the east. Further proposals would be required to consider how/if development in the east of the site option could be supported by and integrate with improvements to off-site pedestrian and cycle facilities.	
	- Support improvements to public transport connectivity and pedestrian and cycle links to the town, town centre, railway station and Wiltshire College campuses in Chippenham?	Development of the site option is unlikely to support significant improvements to public transport connectivity, although residential and employment development of the site could increase the use of services.  This site option is unlikely to support improvements to pedestrian or cycle links to the town or railway station. No effects are expected.	(0)
11. Encourage a vibrant and diversified economy and provide for long-term sustainable economic growth	Offer the potential to provide employment land for B1, B2 and B8 uses?	Option D3 proposes 10.7ha for employment development. The employment land is formed of a single area along the A4 Pewsham Way. The amount and indicative layout would support a mix of B class uses.  The A4 is identified as a strategic lorry route and has strong to moderate access by public transport along the London Road. However, access to the PRN is weak and vehicles would be directed through the town centre. As such employment uses which result in high levels of vehicle movements will increase congestion in the town centre. While the strong to moderate access to public transport mitigates this to some extent mitigating effects against large employment sites would be problematic.	()
	Support the vitality and viability Chippenham town centre (proximity to town centre, built up areas, station hub, college)?	The indicative employment areas proposed would be situated on the periphery of Chippenham. Employment development at this site option would provide an economic benefit to the town; however this is limited due to the distance between the two areas.  Access from the PRN to employment land in this site option would be directed along already congested routes through the town centre, this would adversely affect the vitality of Chippenham and mitigation of effects would be problematic.	()

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	Provide infrastructure that will help to promote economic growth?	This site option does not incorporate any road infrastructure which would promote the economic growth of the town.  The area of green space proposed along the River Avon in the west of the site option would have a minor beneficial effect on the town's economy, contributing to the integration of the river with the town centre.	(+)
	Be well connected to Principal Employment Areas?	The area proposed for employment development is not situated in proximity to the Principal Employment Areas in Chippenham and has little potential for improving connections. No effect is expected.	(0)
12. Ensure adequate provision of high	Support the vitality of existing employment areas?	The area proposed for employment development is not situated in proximity to any existing areas of employment land.	(0)
quality employment land and diverse employment opportunities to meet the needs of local businesses and a changing workforce	Provide employment land that meets commercial market requirements? (offices require land in or close town centres; warehousing requires large sites with good local access to strategic road network)	The proposed area for employment development comprises a relatively large site with strong links to the strategic lorry route, making it suitable for B8 development.  Access to the site by public transport is moderate; improvements would be required to support employment types which employ a large workforce. Access from the PRN is weak and vehicles accessing the PRN would be directed along already congested routes through the town centre. This would reduce the commercial desirability of employment land at this site, particularly for B1 and B2 uses which would require stronger access to the PRN. Strengthening public transport access would mitigate this to some extent, however not sufficiently to address the scale of adversity anticipated from employment development with large workforces.	()
	Provide employment land in areas that are easily accessible by sustainable transport?	The indicative employment area has moderate access by public transport which would require on-site improvements to pedestrian links between the public transport corridor along the A4 London Road and the employment site. Improvements to non-motorised links with the town centre and transport hubs may also be required to support employment development.	(-)

Table A.9: Option D4 assessment

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
1. Protect and enhance all biodiversity and geological features and avoid irreversible losses	- Affect a designated / undesignated site of biodiversity or geological value or affect legally protected species?	Development of the site would not affect any designated sites of biodiversity or geological value.  The old Wilts and Berks canal is an undesignated area with biodiversity value and is located in the east of the site. Mature trees line the canal on both sides forming a linear corridor of wetland habitats which links the River Avon to linear features to the north. The canal is known to support a breeding population of Great crested newts and may support roosting bats. Green space is proposed in the east of the site and acts as a buffer zone between development of the site and the canal, this ensures that no adverse effects from development are felt on this biodiversity feature.  Bat activity is recorded in the area, development proposals should be informed by ecological surveys and where populations are identified proposals would need to incorporate measures which avoid adverse effects on populations and important habitats. Where it can be demonstrated that avoidance is not achievable proposals should offset adverse effects by providing replacement habitats. A minor adverse effect is expected.	(-)
2. Ensure efficient and effective use of land and the	- Affect natural features that are important for wildlife or landscape character such as trees or hedgerows, or areas of ancient woodland not subject to statutory protection?  - Use previously developed land, greenfield land or a mix of both?	Proposals include green space along the area of woodland in the west of the site, this buffer zone avoids adverse effects from development on this natural feature.  Hedgerows with hedgerow trees are particularly present in the east and south of the site, these features provide habitat connectivity and any further development proposals should consider incorporating these into the design. Where vegetation removal is demonstrated to be unavoidable translocation should be proposed in order to prevent adverse effects on habitat connectivity  The indicative layout shows that proposed development would occur largely on greenfield land. A small area of brownfield land at Forest Farm is proposed for residential development, there is another small area of previously developed land in	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
located previously developed land and buildings		problematic.	
	- Result in the permanent loss of the Best and Most Versatile Agricultural land (Grades 1, 2, 3)?	Development of the site would result in the permanent loss of Grade 3 agricultural land which comprises the entire site. The precautionary approach to Grade 3 land presumes it BMV. As such development of the site would result in the permanent loss of BMV land. This is considered problematic to mitigate.	()
	- Require the remediation of contaminated land? If so, would this lead to issues of viability and deliverability?	A site of medium potential contamination coincides with the wooded area in the west of the site. Two narrow strips of medium potential contamination which follow a drainage ditch lie within the site and may require remediation. The limited extent of potentially contaminated land suggests development could avoid these areas and prevent constraint to development.	(-)
	- Lead to the sterilisation of viable mineral resources? If so, is there potential to extract the mineral resource as part of the development?	The site is not situated within a Mineral Safeguarding Area.	(0)
3. Use and manage water resources in a sustainable manner	<ul> <li>Be situated in any of the following:</li> <li>Drinking Water Safeguarding Zone; or</li> <li>Groundwater Source Protection Zone</li> </ul>	The site is not situated within a Groundwater Source Protection Zone, therefore it is unlikely that there would be any significant effect.	(0)
	- Affect surface or groundwater resources in terms of volume, quality and flow?	The site is situated in Flood Zone 1 within the River Avon catchment, although potential water resource implications are not anticipated to be significant. The River Avon flows approximately 1km from the western extent of the site. Development of the site would result in an increase in impermeable surfaces which could increase	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		runoff rates into the Avon. Further proposals should incorporate surface water management measures which achieve equivalent to greenfield rates of runoff in order to reduce adverse effects from development on the River Avon downstream, particularly in Chippenham town centre.  A small watercourse passes through the site and would be at risk of pollution from development. Further development proposals should take this into account and ensure development would not have adverse effects on the quality or flow of this water resource.	
4. Improve air quality throughout Wiltshire and minimise all sources of environmental pollution	-Take place within a designated Air Quality Management Area (AQMA)? If so, is there evidence to suggest that the development of site will lead to an exacerbation of air quality issues? If so, can such impacts be appropriately mitigated in line with local air quality management plan?	The site is not situated in proximity to an AQMA.	(0)
	-Lead to a decrease in air quality locally? Or increase noise or light pollution?	Vehicular access to the site from the A4 Pewsham Way and/or the A4 London Road would place significant pressure on this already constrained route. An increase in congestion at the A4 would likely decrease air quality at Pewsham.  Based on the current road network, access to the PRN would require vehicles navigate through the centre of Chippenham along the constrained A4. As such vehicle oriented development of the site would likely decrease air quality in Chippenham.  The increase in vehicles associated with development of the site would also	()

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		increase noise pollution as well as light pollution at night, affecting receptors along the A4. Mitigation of environmental pollution from development of the site is considered problematic.  Further development proposals have the potential to encourage and be supported by sustainable transport modes in order to reduce private car dependency and somewhat reduce the impact of environmental pollution from development.	
	- Lie within an area of, or in close proximity to, any significant source(s) of environmental pollution (air, noise, light)?	The site is not situated in proximity to any existing sources of environmental pollution and as such no effects are expected.	(0)
5a. Minimise our impacts on climate change – through reducing greenhouse gas emissions	- Reduce greenhouse emissions, in particular carbon dioxide emissions?	The development of this site option would increase greenhouse gas emissions, in particular carbon emissions due to increased levels of traffic and new buildings associated with new development. This is unavoidable to some extent and mitigation is likely to remain problematic in the short to medium term.  Carbon dioxide emissions from new buildings can be somewhat reduced through meeting standards of sustainable construction and design.	()
	- Offer the potential to make provision for on-site renewable or very low carbon energy generation reducing carbon dioxide emissions?	Development of the site has the potential to make provision for on-site renewable or very low carbon energy generation. For these positive effects to be maximised it is recommended that, renewable energy generation such as solar PV is considered.	(+ +)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
5b. Minimise our impacts on climate change – through reducing our vulnerability to future climate change effects	- Be located within flood zone 1? If not, are there alternative sites in the area that can be allocated in preference to developing land in flood zone 2? (To be determined through the application of the Sequential Test).	The site is situated entirely within Flood Zone 1 which means development would be less vulnerable to increasing extreme climatic events such as fluvial flooding. No effects are expected	(0)
	- Address the risk of flooding from all sources?	This site option is situated wholly within Flood Zone 1. Development of this predominantly greenfield site would increase rates of surface water runoff in an area which drains into the River Avon. The distance from this site to the Avon would require development to connect to the town's drainage system, this could give rise to capacity and management issues.  Increases in rates of runoff into the Avon from development of this site could lead to an increase in the risk of flooding in settlements downstream. Surface water management measures should be incorporated into further development proposals to address flood risk downstream.	(-)
6. Protect, maintain and enhance the historic environment	- Affect directly or indirectly a heritage asset?	There are no designated heritage assets within the site.  There is high potential for unknown heritage assets of archaeological interest associated with the old Wilts and Berks canal located in the east of the site.  Development can mitigate effects on these assets through preservation in situ of discrete areas of remains and archaeological recording for more widespread remains.  Development of the site offers the opportunity to restore the old Wilts and Berks Canal, This is considered a minor beneficial effect. Overall a balance of beneficial and adverse effects are expected	(0)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
7. Conserve and enhance the character and quality of Wiltshire's rural and urban landscapes, maintaining and strengthening local distinctiveness and sense of place	<ul> <li>Impact on the visual amenity or character of the natural landscape?</li> <li>Specifically considering the effects on:</li> <li>Internationally/Nationally designated features and their setting;</li> <li>Locally designated landscapes/features and their setting;</li> <li>Local amenity.</li> </ul>	There are no designated features within proximity of the site.  Development of the site could undermine a number of landscape qualities including the visual separation between the Limestone Ridge (Naish Hill) and Pewsham and the rural character of the south east approach to Chippenham along Pewsham Way. Further proposals for this site option can reduce the adverse effects development would have on the rural character of the area by enhancing the green buffer fronting the A4 London Road and Pewsham Way.  Development in the south of this site option would adversely affect the visual separation between Naish Hill and Pewsham, due to the dome-like landscape in the area. Mitigation would be problematic as a result.	()
8. Provide everyone with the opportunity to live in good quality, affordable housing, and ensure an appropriate mix of dwelling sizes, types and tenures	- Help meet affordable housing needs/the needs of the local community (if known)?	A mixed use development of this site deliver approximately 804 dwellings, which provides the opportunity to deliver good quality affordable housing that meets local needs in terms of tenure, size and type.	(+)
9. Reduce poverty and deprivation and promote more inclusive and self-contained communities	- Result in an increase in poverty and deprivation and/or lead to significant social exclusion amongst existing and new residents?	Site option D4 is located to the east of Pewsham, in an area of relatively low deprivation, however, an area of high deprivation is situated to the northwest of D4.  Development of this site option would occur in proximity to this area of high deprivation, proposals have the potential to deliver employment land and community facilities which could have beneficial effects on areas of high deprivation nearby.	(+)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	- Result in the loss of any existing Community facility/green or amenity space or would it contribute to the provision of a new facility/space?	Development of the site would not result in the loss of any existing community facilities or amenity space. There are no existing accessible open spaces in the site. Proposed green space along the east and across the centre of the site could be publicly accessible open space while simultaneously improving access to the old Wilts and Berks Canal and the wooded area in the west of the site. This would constitute a minor positive effect.	(+)
	- Result in the loss of PROW or provision of new PROW?	Several PRoWs run through the site, one in proximity to the farm buildings at the centre of the site, one crosses the site north to south along a field boundary in the west of the site and a PRoW and Bridleway form the southern and western boundaries of the site. Loss of PRoWs is easily avoidable through integration with further proposals. Where it can be demonstrated that permanent loss or alteration of the PRoW is unavoidable this can be offset by the provision of a suitable replacement.	(-)
	- Be accessible to educational and health facilities?	Residential development of the site would benefit from strong non-motorised ease of access to secondary schools due to the proximity of Abbeyfield School. Secondary schools in Chippenham are reaching capacity and may be unable to accommodate the number of pupils likely to arise from development of this site. Provision of educational facilities as part of development proposals or contribution to the delivery of new educational facilities off-site would mitigate this. The site has moderate to weak non-motorised ease of access to the hospital, however, strong access by public transport services along the A4 could provide an alternative mode of access to the hospital. Motorised access to the hospital would direct vehicles into Chippenham on the A4. While the development at the site would be accessible to educational and health facilities, further proposals should seek to integrate with off-site pedestrian and cycle links to improve non-motorised access.	(-)
10. Reduce the need to travel and promote more sustainable transport choices	- Occur in an area currently accessible by public transport/ walking and cycling? If not, is there scope to make it so?	The site is situated along the A4 London Road and A4 Pewsham Way and has strong access by public transport, particularly in the northeast of the site option. Development of the site could support an increase in the use of public transport services along this corridor.  Ease of access to the town centre by non-motorised modes from the site is	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		moderate in the west and moderate to weak in the east. Further proposals for this site option would be required to consider how/if development might be better supported by improvements to the wider pedestrian and cycle network.	
	- Support improvements to public transport connectivity and pedestrian and cycle links to the town, town centre, railway station and Wiltshire College campuses in Chippenham?	Development of the site option is unlikely to support significant improvements to public transport connectivity, although residential and employment development of the site could increase the use of services.  This site option has limited potential to support improvements to pedestrian or cycle links to the town, railway station or Wiltshire College campuses.	(0)
11. Encourage a vibrant and diversified economy and provide for long-term sustainable economic growth	Offer the potential to provide employment land for B1, B2 and B8 uses?	Site option D4 proposes 8.5ha for employment development. The indicative layout shows this is formed of two small areas, a narrow strip along the A4 Pewsham Way and a small area on the A4 London Road. The amount and indicative layout would support a mix of B class uses.  The A4 London Road follows the strategic lorry route, providing strong access for HGVs. However access to the PRN is weak and vehicles would be directed through the town centre. As such employment uses which result in high levels of vehicle movements will increase congestion in the town centre. While the strong to moderate access by public transport would mitigate this to some extent mitigating effects against large employers at the site would be problematic.	()
	Support the vitality and viability Chippenham town centre (proximity to town centre, built up areas, station hub, college)?	The two areas proposed for employment development in this site option would be small sites situated on the periphery of the town. Employment development in this site option would provide an economic benefit to the town; however this is limited to a minor beneficial effect due to the distance between the indicative employment area and the town centre.  Access from the PRN to employment land in this Option D4 would be directed along already congested routes through the town centre, increasing congestion and adversely affect the vitality of Chippenham. Mitigation of effects would be	()

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		problematic.	
	Provide infrastructure that will help to promote economic growth?	Due to its peripheral location infrastructure proposed as part of this site option is unlikely to promote economic growth.  Areas of indicative green space have the potential to restore the old Wilts and Berks Canal, however the economic benefit of this is unlikely to be noticeable.	(0)
	Be well connected to Principal Employment Areas?	The area proposed for employment development is not situated in proximity to the Principal Employment Areas in Chippenham and has little potential for improving connections. No effect is expected.	(0)
12. Ensure adequate provision of high quality	Support the vitality of existing employment areas?	The indicative areas for employment development in this site option are not located in proximity to any existing areas of employment land. The two sites are of a small scale which limits the likely effects employment development would have on existing employment areas. No tangible effects are expected.	(0)
employment land and diverse employment opportunities to meet the needs of local businesses and a changing workforce	Provide employment land that meets commercial market requirements? (offices require land in or close town centres; warehousing requires large sites with good local access to strategic road network)	The small size of the two areas proposed limits the scale of B8 development at this site option; however small scale B8 development would be supported by strong access to the strategic lorry route.  Access by public transport along the A4 London Road is strong and strong to moderate along the A4 Pewsham Way. Improvements would be required in order to ensure employment land is desirable to certain business use types and large employers. Weak access to the PRN is exacerbated by the requirement of vehicles to navigate already congested routes through the town centre to reach the site from the PRN. This will reduce the commercial desirability of this site, particularly for large employers. Strengthening public transport access would mitigate this to some extent, however a moderate adverse effect is anticipated.	()
	Provide employment land in areas that are easily accessible by sustainable transport?	The proposed site for employment development along the A4 London Road benefits from very strong access by public transport. Further development proposals should ensure strong non-motorised connectivity between the A4 London Road and the employment site proposed in the west of the site.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		Non-motorised access to the town centre and transport hubs could be improved to ensure employment land is more access by a greater range of sustainable transport modes/services.	

**Table A.10: Option D7 assessment** 

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
1. Protect and enhance all biodiversity and geological features and avoid irreversible losses	- Affect a designated / undesignated site of biodiversity or geological value or affect legally protected species?	Development of the site would not affect any designated sites of biodiversity or geological value.  The River Avon CWS and Mortimore's Wood CWS are situated to the west of the site and, in places, form the western site boundary. These sites are also BAP Priority Habitats. Development in proximity to these ecological features would likely have adverse effects on ecology. Avoidance of these features through the provision of buffer zones, as is proposed on the indicative layout drawing, would avoid adverse effects from development.  Bat activity is recorded in the area, development proposals should be informed by ecological surveys and where populations are identified proposals would need to incorporate measures which avoid adverse effects on populations and important habitats. Where it can be demonstrated that avoidance is not achievable proposals should offset adverse effects by providing replacement habitats.  The River Avon floodplain in the west of the site is of ecological significance and forms a strategic habitat corridor throughout the wider area. The indicative layout shows an extensive area of green space along the west of the site which would protect habitats associated with the river and would avoid adverse effects to its floodplain.  Access from the south of the site is proposed in the form of a bridge crossing the River Avon, this would dissect the CWS. Avoidance of the CWS is not considered achievable as the river flows to the west and south of the site. As such proposals for the bridge would need to include within the design measures which reduce and offset the anticipated adverse effect. Reducing adverse effects to a sufficient level would be problematic, as such a moderate adverse effect is anticipated.	()
	- Affect natural features that	Hedgerows with hedgerow trees are present throughout the site, these features	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	are important for wildlife or landscape character such as trees or hedgerows, or areas of ancient woodland not subject to statutory protection?	provide habitats connectivity and further proposals for development of the site could incorporate these features into the development. Where vegetation removal is demonstrated to be unavoidable translocation should be proposed prevent adverse effects from development on habitat connectivity.	
2. Ensure efficient and effective use of land and the use of suitably	- Use previously developed land, greenfield land or a mix of both?	The indicative layout shows that proposed development would occur largely on greenfield land. Previously developed land includes a number of lodges and farmhouses along the eastern and southern site boundaries. Due to the extent of greenfield land mitigation would be problematic.	()
located previously developed land and buildings	- Result in the permanent loss of the Best and Most Versatile Agricultural land (Grades 1, 2, 3)?	The site is comprised largely of Grade 3 agricultural land. The precautionary approach to Grade 3 land presumes it to be BMV. Grade 4 (poor) agricultural land coincides largely with the area of green space proposed along the River Avon. There is insufficient poor agricultural land to deliver strategic, mixed-use development at this site option. As such mitigation is considered problematic.	()
	- Require the remediation of contaminated land? If so, would this lead to issues of viability and deliverability?	There are no potential contamination sites within this site option.	(0)
	- Lead to the sterilisation of viable mineral resources? If so, is there potential to extract the mineral resource as part of the development?	The southwest of the site is situated within a Mineral Safeguarding Area, this area coincides with the proposed greenspace and as such development would not lead to the sterilisation of safeguarded mineral resources.	(0)
3. Use and manage water resources in a sustainable manner	<ul> <li>Be situated in any of the following:</li> <li>Drinking Water Safeguarding Zone; or</li> <li>Groundwater Source Protection Zone</li> </ul>	The site is not situated within a Groundwater Source Protection Zone, therefore it is unlikely that there would be any significant effect.	(0)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	- Affect surface or groundwater resources in terms of volume, quality and flow?	The site is situated within the River Avon catchment and in proximity to the river. Development of the site would lead to an increase in impermeable surfaces which could increase runoff rates in an area which flows directly into the Avon. Further proposals could reduce the potential effects of development on water resources, such as anthropogenic pollution and increasing peak flows on the Avon downstream, by incorporating surface water management measures into the design.  A small watercourse passes through the north of the site and would be at risk of pollution from development. Further development proposals for the site should take this into account and ensure development would not have adverse effects on the quality or flow of this water resource.  Access from the north of the site is proposed in the form of a bridge crossing the River Avon, bridging of the Avon would likely alter the flow of the river which could have adverse effects on the River Avon downstream, particularly in Chippenham town centre. As the site is bound to the west by the Avon avoidance is not achievable. Adequate mitigation of effects is likely to be problematic.	()
4. Improve air quality throughout Wiltshire and minimise all sources of environmental pollution	-Take place within a designated Air Quality Management Area (AQMA)? If so, is there evidence to suggest that the development of site will lead to an exacerbation of air quality issues? If so, can such impacts be appropriately mitigated in line with local air quality management plan?	The site is not situated in proximity to an AQMA.	(0)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	-Lead to a decrease in air quality locally? Or increase noise or light pollution?	Two vehicular access points are proposed. The A4 Pewsham Way from the north and a bridge crossing from the south. Access from the A4 would place significant pressure on this already constrained route. An increase in congestion at the A4 would likely decrease air quality at Pewsham.	(-)
		Based on the current road network access to the PRN would direct vehicles through the centre of Chippenham. As such vehicle oriented development of the site would likely decrease air quality in the town centre.	
		The increase in vehicles associated with development of the site would also increase noise pollution as well as light pollution at night, affecting receptors along the A4.Mitigation of environmental pollution from development of the site is considered problematic.	
		This site option proposes a river crossing from the south, if this were to integrate with the A350 south of Chippenham access to the PRN would be significantly strengthened, this would relieve pressure on the A4 and reduce environmental pollution from vehicles in the town centre. This is dependent on the delivery of the southern link road through Area E.	
		Further development proposals have the potential to encourage and be supported by sustainable transport modes in order to reduce private car dependency and somewhat reduce the impact of environmental pollution from development.	
	- Lie within an area of, or in close proximity to, any significant source(s) of environmental pollution (air, noise, light)?	The site is situated in proximity to the Chippenham Sewage Treatment Works (STW). The site option proposes to deliver a green buffer along the west of the site which would help prevent nuisance to proposed development from odours associated with the facility. Application of odour control measures at the STW may also be required.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
5a. Minimise our impacts on climate change – through reducing greenhouse gas emissions	- Reduce greenhouse emissions, in particular carbon dioxide emissions?	The development of this site option would increase greenhouse gas emissions, in particular carbon emissions due to increased levels of traffic and new buildings associated with new development. This is unavoidable to some extent and mitigation is likely to remain problematic in the short to medium term.  Carbon dioxide emissions from new buildings can be reduced to some extent through meeting standards of sustainable construction and design.	()
	- Offer the potential to make provision for on-site renewable or very low carbon energy generation thus reducing carbon dioxide emissions?	Development of the site has the potential to make provision for on-site renewable or very low carbon energy generation. For these positive effects to be maximised it is recommended that, renewable energy generation such as solar PV is considered.	(+ +)
5b. Minimise our impacts on climate change – through reducing our vulnerability to future climate change effects	- Be located within flood zone 1? If not, are there alternative sites in the area that can be allocated in preference to developing land in flood zone 2? (To be determined through the application of the Sequential Test).	The site is situated largely within Flood Zone 1. The areas of the site located in Flood Zones 2 or 3 are proposed as green space and thus would not be the location for residential or employment development, as such no effects are expected.	(0)
	- Address the risk of flooding from all sources?	This site option is situated partially within Flood Zones 2 and 3. An indicative area of greenspace is proposed to coincide with areas of flood risk. Development of this site option would likely increase runoff rates, flowing directly into the Avon and would increase the risk of flooding downstream. In order to ensure greenfield rates of runoff are maintained following development, further proposals should incorporate surface water management measures to ensure existing greenfield rates of surface water runoff are achieved.  Access from the north of the site is proposed in the form of a bridge crossing the	()

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		River Avon, bridging of the Avon would likely alter the flow of the river which could have adverse effects on the River Avon downstream, particularly in Chippenham town centre. As the site is bound to the west by the Avon avoidance is not achievable. Adequate mitigation of effects on river flows to prevent increased flood risk is likely to be problematic.	
6. Protect, maintain and enhance the historic environment	- Affect directly or indirectly a heritage asset?	There are no designated heritage assets within the site.  Land in the west of the site may contribute to the setting of Rowden Conservation Area due to its proximity. A buffer zone, illustrated as green space on the indicative site layout drawing, is proposed along the west of the site, this will reduce the adverse effects of development on the setting of this heritage asset. Further development proposals for this site option should include mitigation measures such as landscaping or vegetation buffers to screen views and reduce adverse effects from development on the setting of the Conservation Area.  There is high potential for unknown heritage assets of archaeological interest associated with the Pewsham Forest medieval deer park.  Development can mitigate effects on these assets through preservation in situ of discrete areas of remains and archaeological recording for more widespread remains.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
7. Conserve and enhance the character and quality of Wiltshire's rural and urban landscapes, maintaining and strengthening local distinctiveness and sense of place	<ul> <li>Impact on the visual amenity or character of the natural landscape?</li> <li>Specifically considering the effects on:</li> <li>Internationally/Nationally designated features and their setting;</li> <li>Locally designated landscapes/features and their setting;</li> <li>Local amenity.</li> </ul>	There are no designated features within proximity of the site.  Development of the site would undermine a number of landscape qualities including the visual separation between the Limestone Ridge (Naish Hill) and Pewsham and the rural character of the approach to Chippenham along Pewsham Way. Further proposals for this site option could mitigate effects on the rural character of the area through the provision of green buffers along the A4 Pewsham Way.  Due to the domed landscape rising from the River Avon in the west and south, mitigating effects from development on the visual separation between Naish Hill and Pewsham would be problematic.  Access from the south of the site is proposed in the form of a bridge crossing the River Avon, avoidance is not achievable as the site is bound to the south and west by the river. Reduction of effects from the bridge on the visual integrity of the River Avon Valley could be achieved through design in further development proposals for the site.	()
8. Provide everyone with the opportunity to live in good quality, affordable housing, and ensure an appropriate mix of dwelling sizes, types and tenures	- Help meet affordable housing needs/the needs of the local community (if known)?	A mixed use development at this site would deliver approximately 806 dwellings, which provides the opportunity to deliver good quality affordable housing that meets local needs in terms of tenure, size and type.	(+)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
9. Reduce poverty and deprivation and promote more inclusive and self-contained communities	- Result in an increase in poverty and deprivation and/or lead to significant social exclusion amongst existing and new residents?	Site option D7 is situated predominantly in an area of low deprivation. To the west of the site option lies an area of relatively high deprivation, although this is largely rural. Pewsham borders the site to the north, this is one of the least deprived areas of Chippenham.  Development of this site option proposes employment land and has the potential to deliver community facilities which could have wider benefits for the surrounding area.	(+)
	- Result in the loss of any existing Community facility/green or amenity space or would it contribute to the provision of a new facility/space?	Development of the site would not result in the loss of any community facilities or amenity space. There are no existing accessible open spaces in the site, however Mortimore's Wood is situated adjacent to the site. The proposals include provision of green space in proximity of Mortimore's Wood which could facilitate improved access to this open space. This would constitute a minor positive effect.	(+)
	- Result in the loss of PROW or provision of new PROW?	A bridleway runs adjacent to part of the eastern boundary of the site. The bridleway is beyond the site option boundary and would not be effected by development.	(0)
	- Be accessible to educational and health facilities?	Access to Abbeyfield School is moderate and would be directed along the A4 Pewsham Way. Secondary schools in Chippenham are reaching capacity and may be unable to accommodate the number of pupils likely to arise from development of this site. Provision of educational facilities as part of development proposals or contribution to the delivery of new educational facilities off-site would mitigate this. The site has strong to moderate non-motorised ease of access to the hospital, and moderate access by public transport services along the A4 London Road. Motorised access to the hospital would direct vehicles through Chippenham along the A4 Pewsham Way. While this site option is accessible to educational and health facilities, further proposals should seek to integrate with off-site pedestrian and cycle links to improve non-motorised access.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
10. Reduce the need to travel and promote more sustainable transport choices	- Occur in an area currently accessible by public transport/ walking and cycling? If not, is there scope to make it so?	The site is situated along the A4 Pewsham Way and has moderate to weak access by public transport, performing particularly poorly in the southwest of the site option. Development of the site could support an increase in the use of public transport services along this corridor.  Ease of access to the town centre by non-motorised modes from the northwest of this site option is moderate to strong, the southern areas of the site have moderate to weak non-motorised access. Further proposals for the development of this site option should demonstrate how/if development could be supported by and integrate with improvements to the wider pedestrian and cycle network.	(-)
	- Support improvements to public transport connectivity and pedestrian and cycle links to the town, town centre, railway station and Wiltshire College campuses in Chippenham?	Development of the site option proposes highway access from the south of the in the form of a bridge crossing the River Avon. While this has potential to become a future public transport corridor, linking the A350 and A4, the likelihood of this occurring is not clear. The residential and employment development of the site could increase the demand for existing services.  This site option is unlikely to support improvements to pedestrian or cycle links to the town or railway station. No effects are expected.	(0)
11. Encourage a vibrant and diversified economy and provide for long-term sustainable economic growth	- Offer the potential to provide employment land for B1, B2 and B8 uses?	This site option proposes 10.5ha for employment development, formed of a single area on the A4 Pewsham Way. This would support a mix of employment use classes.  The A4 is identified as a strategic lorry route, providing employment development at this site option with strong access to the strategic lorry route. Access via a river crossing over the River Avon to the south would provide strong links to the PRN south of Chippenham.  Access by public transport is moderate with opportunities for improvement.	(+)
	- Support the vitality and viability Chippenham town centre (proximity to town	The indicative employment areas proposed would be situated on the periphery of Chippenham. Employment development at this site option would provide an economic benefit to the town; however this is limited due to the distance between	(+)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	centre, built up areas, station hub, college)?	the two areas.	
	Provide infrastructure that will help to promote economic growth?	This site option proposes a river crossing of the River Avon to the south, completing a southern link road between the A350 and the A4. This would support major housing and employment development at Chippenham.  The site option also includes the provision of a green infrastructure corridor along the River Avon, which would better connect the river with the town centre, having a minor beneficial effect on the town's economic growth.	(+++)
	Be well connected to Principal Employment Areas?	The area proposed for employment development is not situated in proximity to the Principal Employment Areas in Chippenham. The provision of a river bridge crossing of the River Avon to the south would improve connections to the Methuen Business Park. A minor beneficial effect is expected.	(+)
12. Ensure adequate	Support the vitality of existing employment areas?	The area proposed for employment development is not situated in proximity to any existing areas of employment land.	(0)
provision of high quality employment land and diverse employment opportunities to meet the needs of local businesses and a changing	Provide employment land that meets commercial market requirements? (offices require land in or close town centres; warehousing requires large sites with good local access to strategic road network)	The size of the indicative employment area proposed in D7 would suit a reasonably sized B1, B2 or B8 development. B8 development would be supported by strong access to the strategic lorry route along the A4 Pewsham Way. This access would be strengthened by the provision of a link road to the south, connecting with the A350 south of Chippenham.  Access by public transport from the site is moderate and would likely require improvements in order to be desirable to certain business use types and large employers. Existing access to the PRN is weak access and vehicles are required to	(+)
workforce		navigate through the town centre to reach the site from the PRN. While this would reduce the commercial desirability of this site the provision of a southern access to the A350 PRN would mitigate this adverse effect. Furthermore, strengthening access by public transport and non-motorised access to public transport would mitigate this further, and should be considered by further proposals for development of Option D7.	

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		Overall this site option proposes 10.5ha of employment which would meet commercial market requirements, constituting a minor beneficial effect.	
	Provide employment land in areas that are easily accessible by sustainable transport?	The proposed area for employment development has moderate access by public transport. Improvements to on-site pedestrian access between the A4 London Road and the indicative employment area would be required to ensure employment development is supported by sustainable transport.	(-)
		Proposed employment land would also require improvements to off-site pedestrian and cycle infrastructure to ensure access to the town centre as non-motorised access is moderate.	

Table A.11: Option E1 assessment

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
1. Protect and enhance all biodiversity and geological features and avoid irreversible losses	- Affect a designated / undesignated site of biodiversity or geological value or affect legally protected species?	Development of the site would not directly affect any designated sites of biodiversity or geological value.  The River Avon County Wildlife Site (CWS) forms the majority of the site option's eastern boundary and passes through the site in the north. The River Avon is a BAP Priority Habitat and the associated floodplain forms grazing marsh which could be important for wintering or wading birds. The indicative layout proposes a significant buffer zone, shown as green space, along the entire extent of the River Avon in the east of the site. As such no effects from development are expected on these biodiversity features.  Daubenton's, Whiskered, Pipistrelle, Greater horseshoe, Lesser horseshoe, Brown long-eared, Brandt's, Serotine, Noctule and Soprano pipistrelle Bats are recorded in the site. Bat activity has been recorded at Patterdown in the west of the site and at Showell in the south. Development is proposed in proximity to both these areas and could have adverse effects on these populations. Further proposed development should be informed by ecological surveys to better understand how development of the site option can mitigate adverse effects.  European Otter is recorded on the River Avon, no adverse effects from development are expected as a result of the extensive buffer zone proposed. Restricted access to the public may be necessary due to the presence of European	(-)
		Otter on this stretch of the river.	

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	- Affect natural features that are important for wildlife or landscape character such as trees or hedgerows, or areas of ancient woodland not subject to statutory protection?	The railway embankment running along parts of the west of the site is a significant green corridor and links with Pudding Brook which crosses the area west to east and flows into the Avon. Residential development is proposed to be situated on Pudding Brook in the west of the site, this could have adverse effects on habitat connectivity. Further development proposals for this site option can, using green buffers, avoid this area to prevent adverse effects.  An area of neutral grassland in the north of the site is situated within the extensive area of proposed green space, this prevents adverse effects from development.  Throughout the site large overgrown hedgerows and standing deadwood trees are significant ecological features which could be affected by residential and employment development in the west and south of the site. Further proposals for this site option should take account of this and prevent adverse effects from development by retaining these features or, where it can be demonstrated that harm is unavoidable, translocating them.	(-)
2. Ensure efficient and effective use of land and the use of suitably	- Use previously developed land, greenfield land or a mix of both?	The indicative layout shows that proposed development would occur predominantly on greenfield land. Several areas of previously developed land are present in the site. Land at Showell Nursery is omitted from this site option. Due to the extent of greenfield land mitigation would be problematic.	()
located previously developed land and buildings	- Result in the permanent loss of the Best and Most Versatile Agricultural land (Grades 1, 2, 3)?	The site is comprised predominantly of BMV agricultural land. Much of the area identified for development is coincides with Grade 2 (very good) land. The precautionary approach to Grade 3 land presumes Grade 3 land within this site option to be BMV.  Areas of non-agricultural and poor land coincide with the extensive area of green space proposed. Insufficient non BMV land exists within this site option to deliver strategic, mixed-use development, thus development of this site option would result in the permanent loss of BMV land, mitigation is considered problematic.	()

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	- Require the remediation of contaminated land? If so, would this lead to issues of viability and deliverability?	Remediation of contamination across much of the site is unlikely as a result of the land's agricultural use.  The defunct Westmead Refuse Tip is situated in the northeast of the site option on the east bank of the River Avon. Remediation may be required, however an indicative area of green space is proposed for this area, as such viability and deliverability are unlikely to affect built development.  Land at Chippenham Shooting Range, may have received waste for a period of time. Indicative proposals show residential development at this site for potential contamination. Further development proposals should be informed by land contamination surveys to assess the extent of constraint and therefore avoid adverse effects on viability and deliverability of development. Mitigation measures may involve straight disposal, in-situ or off-site treatments, depending on the type of land contamination.	(-)
	- Lead to the sterilisation of viable mineral resources? If so, is there potential to extract the mineral resource as part of the development?	A Mineral Safeguarding Area may constrain development across the site option. A large amount of the MSA coincides with the area of proposed green space, however, much of the land proposed for residential development is situated within the MSA and could lead to sterilisation of viable mineral resources.  The proportion of indicative residential land in this site option affected by the MSA is large. Further proposals for this site must take this into consideration and ensure that development on land affected by the MSA would not lead to the sterilisation of mineral resources.  Proposed employment development in the southwest of the site option is entirely unaffected.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
3. Use and manage water resources in a sustainable manner	Be situated in any of the following:     Drinking Water Safeguarding Zone; or     Groundwater Source Protection Zone	An area of land between Rowden Lane and the B4528, proposed for residential development is situated within an Outer SPZ (Zone 2), as is part of the land proposed for employment development in the southwest of the site option (also Zone 2). Further proposals can sufficiently reduce the effects of development on the Outer SPZ through the incorporation of buffer strips between water courses and development and the use of appropriate land management practices.  Pudding Brook runs through the site and flows into the River Avon, this watercourses would be at risk of increased rates of runoff, potentially carrying anthropogenic contaminants.  Further development proposals should create a buffer zone between development and Pudding Brook to prevent adverse effects from development on water resources, this buffer zone would also ensure development avoids Flood Zones 2 – 3 associated with Pudding Brook.	(-)
	- Affect surface or groundwater resources in terms of volume, quality and flow?	The site is situated largely within Flood Zone 1 with some land adjacent to the Avon and Pudding Brook within Flood Zones 2 – 3. As development of the site option would flow directly into the River Avon adverse effects from development on water quality and flows are anticipated.  Areas of this site option are identified as having a high propensity for groundwater flooding. These areas coincide with indicative green space, as such no effects are expected on development of this site.  Development of this greenfield site would likely increase surface water runoff due to increased impermeable surfaces. Mitigation could be achieved through incorporating surface water management measures into the further proposals for the site.	(-)
4. Improve air quality throughout	-Take place within a designated Air Quality Management Area	The site is not situated in proximity to an AQMA.	(0)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
Wiltshire and minimise all sources of environmental pollution	(AQMA)? If so, is there evidence to suggest that the development of site will lead to an exacerbation of air quality issues? If so, can such impacts be appropriately mitigated in line with local air quality management plan?		
	-Lead to a decrease in air quality locally? Or increase noise or light pollution?	The increase in vehicles associated with development of the site would contribute to a decrease in air quality and increase in noise pollution as well as light pollution at night, particularly affecting receptors along the B4528/B4643.  Highway access is proposed from the B4528 for this site option, this would likely avoid significant increases in congestion and environmental pollution in central areas of Chippenham.  Development will increase vehicle numbers, however, the site should encourage and be supported by sustainable transport modes to reduce private car dependency and lessen the effect of environmental pollution from development.	(-)
	- Lie within an area of, or in close proximity to, any significant source(s) of environmental pollution (air, noise, light)?	The Chippenham STW is situated to the southeast of the site option. Proposed green space along the River Avon provides a buffer between the facility and proposed development, as such no adverse effects are expected.  The Chippenham Rifle Range is situated in the west of the site in the area proposed for residential development. This existing noise source would likely have adverse effects on development within immediate proximity. Further proposals for the site option should introduce a buffer zone to reduce effects on proposed development. The railway line running along parts of the west of the site option boundary could have adverse effects on residential and employment development in the west of the site. A suitable buffer zone could prevent or reduce noise impacts, alternatively	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		further development proposals could introduce tree planting or landscaping to reduce effects	
5a. Minimise our impacts on climate change – through reducing greenhouse gas emissions	- Reduce greenhouse emissions, in particular carbon dioxide emissions?	The development of this site option would increase greenhouse gas emissions, in particular carbon emissions due to increased levels of traffic and new buildings associated with new development. This is unavoidable to some extent and mitigation is likely to remain problematic in the short to medium term.  Carbon dioxide emissions from new buildings can be somewhat reduced through meeting standards of sustainable construction and design.	()
	- Offer the potential to make provision for on-site renewable or very low carbon energy generation thus reducing carbon dioxide emissions?	Development of the site has the potential to make provision for on-site renewable or very low carbon energy generation For these positive effects to be maximised it is recommended that, renewable energy generation such as solar PV is considered.	(++)
5b. Minimise our impacts on climate change – through reducing our vulnerability to future climate change effects	- Be located within flood zone 1? If not, are there alternative sites in the area that can be allocated in preference to developing land in flood zone 2? (To be determined through the application of the Sequential Test).	The site is situated predominantly in Flood Zone 1. Land along the River Avon is situated in Flood Zones 2 and 3, these areas coincide with the proposed green space. Residential development is proposed in the immediate proximity of Pudding Brook, some of this land is within Flood Zones 2 and 3. Further development proposals for this site option must avoid development proposed in flood risk areas, this can be achieved through the provision of green space.  As the majority of development proposed occurs in Flood Zone 1 the proposals would be less vulnerable to increasing extreme climatic events such as fluvial flooding.	(-)
	- Address the risk of flooding from all sources?	All indicative developable areas are situated in Flood Zone 1. Development would increase surface water runoff in proximity to the River Avon. Increased rates of runoff flowing into the Avon have the potential to increase peak flows and flood risk downstream. Surface water management measures should be incorporated into further development proposals to ensure that existing greenfield rates of surface water runoff are achieved, thus reducing the risk of flooding on-site and in	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		settlements downstream.	
6. Protect, maintain and enhance the historic environment	- Affect directly or indirectly a heritage asset?	The three listed buildings clustered at Rowden Farm; two grade II and one Grade II*, are the only listed buildings within the site. A moated site and fishponds southeast of Rowden Farm form a Scheduled Monument which is also situated within the site option.  These heritage assets are situated in the east of the site within the indicative area of green space and as such development of the site is unlikely to have any adverse effects.	(-)
		The Rowden Conservation Area extends across the east of the site. The Conservation Area incorporates agricultural fields which contribute to the setting of Rowden Manor. Residential and employment development is proposed in the south and west of the site. While the indicative layout is proposed beyond the Conservation Area, some of the land may contribute to its setting. Where this is the case proposals should avoid this land or incorporate measures which reduce adverse effects on the heritage asset. As development which achievably mitigates potential adverse effects could be accommodated, a minor adverse effect is expected.	
		16 non-designated heritage assets are situated within the approximate area of this site option, this includes evidence for Neolithic, Bronze Age, Iron Age and Roman settlements.	
		There is high potential for unknown heritage assets of archaeological interest.  Development can mitigate effects on these assets through preservation in situ of discrete areas of remains and archaeological recording for more widespread remains.	
7. Conserve and enhance the character and	- Impact on the visual amenity or character of the natural landscape?	There are no designated features within proximity of the site.  This site option proposes the majority of development to be focused in the west of	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
quality of Wiltshire's rural and urban landscapes, maintaining and strengthening local distinctiveness and sense of place	Specifically considering the effects on:  - Internationally/Nationally designated features and their setting;  - Locally designated landscapes/features and their setting;  - Local amenity.	the site. The indicative layout makes provision for an area of green space between the River Avon and indicative development land. This proposed green buffer protects the visual amenity in the north of the site option, the flat and wide open views associated with the floodplain and minimises the urbanising influence development would have on the rural landscape to the east. As a result a minor adverse effect from development of this site option is expected on the visual amenity and local character of the surrounding area. Further proposals for this site option can ensure adverse effects on the character of the surrounding landscape are avoided through tree planting and landscaping.	
8. Provide everyone with the opportunity to live in good quality, affordable housing, and ensure an appropriate mix of dwelling sizes, types and tenures	- Help meet affordable housing needs/the needs of the local community (if known)?	The development of this site would deliver approximately 903 dwellings, which provides the opportunity to deliver good quality affordable housing that meets local needs in terms of tenure, size and type.	(+)
9. Reduce poverty and deprivation and promote more inclusive and self-contained communities	- Result in an increase in poverty and deprivation and/or lead to significant social exclusion amongst existing and new residents?	This site option is situated partially in land considered to have relatively high deprivation rates and partially in land considered to have relatively low deprivation rates.  Two key areas of high deprivation in Chippenham are located to the northwest and northeast of this site option. The indicative layout proposes residential development in the west of the site in proximity to one area of high deprivation.  The provision of community facilities and employment land as part of the mixed-use development of this site option would benefit the wider area and support reductions in deprivation nearby.	(+)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	- Result in the loss of any existing Community facility/green or amenity space or would it contribute to the provision of a new facility/space?	An area of indicative residential development in the west of this site option proposes the loss of an area of accessible open space situated south of Rowden Lane. Further proposals for this site option could prevent the loss of this open space. Where it can be demonstrated that loss is unavoidable proposals should create additional open space to offset the loss. The indicative layout proposes a vast area of green space in the east of the area, this has potential to be delivered as accessible open space which would offset the loss of the existing accessible open space.	(-)
	- Result in the loss of PROW?	A number of PRoW run through the site. Where PRoWs pass through areas proposed for green space adverse effects are not anticipated.  Proposed residential development in the west of site option has the potential to affect several PRoWs. Further development proposals for the site should retain PRoWs, where it is demonstrated that loss or alteration of PRoWs is unavoidable provision of suitable alternatives can offset the impact.	(-)
	- Be accessible to educational and health facilities?	Access to secondary schools is weak by non-motorised modes. Access by public transport is strong, particularly in the west of the site, vehicular access would direct traffic through town to existing schools in the north and east. Secondary schools in Chippenham are reaching capacity and may be unable to accommodate the number of pupils likely to arise from development of this site. Provision of educational facilities as part of development proposals or contribution to the delivery of new educational facilities off-site would mitigate this.  This site option has strong access the hospital which is situated immediately north of the areas proposed for residential development.	(-)
		Development at this site would benefit from the provision of a new school to serve the south of Chippenham.	
10. Reduce the need to travel and promote more	- Occur in an area currently accessible by public transport/ walking and	The site is situated along the B4528 and B4643 which is well served by public transport. As such development of this site option would have strong access by public transport, particularly the western areas of the site. Development of the site	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
sustainable transport choices	cycling? If not, is there scope to make it so?	could support an increase in the use of public transport services along this corridor.  Ease of access to the town centre by non-motorised modes from the site is strong in the north and moderate to weak in the south in the indicative area of residential development and employment areas. Further proposals for the development of this site option should demonstrate how/if development could be supported by and integrate with improvements to the wider pedestrian and cycle network.	
	- Support improvements to public transport connectivity and pedestrian and cycle links to the town, town centre, railway station and Wiltshire College campuses in Chippenham?	Development of the site option is unlikely to support significant improvements to public transport connectivity, although residential and employment development of the site could increase demand for public transport services along the B4528 and B4643.  Further proposals for this site option have the potential to create more direct pedestrian and cycle links to the town centre from the south.	(+)
11. Encourage a vibrant and diversified economy and provide for long-term sustainable economic growth	Offer the potential to provide employment land for B1, B2 and B8 uses?	Site Option E1 proposes 18.1ha of employment development. The indicative layout shows this as a single area in the southwest of the site option along the B4528/B4643 and A350. The scale and layout of the indicative employment land suits a mix of use types.  Access to the PRN and strategic lorry route along the A350 is strong. The B4528/B4643 is a bus corridor, making public transport access to the indicative employment area strong. This site option offers the potential to provide B1, B2 and B8 employment land.	(+++)
	Support the vitality and viability of Chippenham town centre (proximity to town centre, built up areas, station hub, college)?	The area proposed for employment development in this site option would be situated on the periphery of the town and away from existing built up areas. Employment development at the scale would support the vitality of the town, however the distance from the town centre is likely to limit this benefit.	(+)
	Provide infrastructure that will help to promote economic growth?	This site option has the potential to deliver a stretch of the southern link road between the A350 south of Chippenham and A4 at Pewsham. This would support major housing and employment development.	(+++)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	Be well connected to Principal Employment Areas?	Option E1 includes an extensive area of green infrastructure along the River Avon which would better connect the River Avon with the town centre and have minor beneficial effects on the economic growth of Chippenham.  The area proposed for employment development in E1 is situated in proximity to the Methuen Business Park and improvements to connections between the two sites would capitalise on this potential.	(+)
12. Ensure adequate provision of high quality employment land and diverse employment opportunities to meet the needs of local businesses and a changing	Support the vitality of existing employment areas?  Provide employment land that meets commercial market requirements? (offices require land in or close town centres; warehousing requires large sites with good local access to strategic road network)	The Methuen Business Park and Herman Miller Industrial Estate are situated to the north of the proposed employment development site in Site Option E1. Employment development at this site option would likely have beneficial effects on the vitality of existing employment areas in the south of Chippenham.  The indicative employment area proposed comprises a large site with strong access by public transport and strong access to the PRN and strategic lorry route.  Employment land proposed as part of this site option meets basic commercial market requirements for a range of employment types.	(+++)
workforce	Provide employment land in areas that are easily accessible by sustainable transport?	Access by public transport is considered strong in the southwest of Site Option E1. The area proposed for employment development is situated on the B4528, which is an existing bus corridor into Chippenham.  Non-motorised access from the indicative employment area to the town centre and transport hubs is weak, further proposals for the development of this site option should seek to improve pedestrian and cycle links through the site in order to provide a greater range of sustainable transport modes serving the proposed employment area.	(+)

Table A.12: Option E2 assessment

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
1. Protect and enhance all biodiversity and geological features and avoid irreversible losses	- Affect a designated / undesignated site of biodiversity or geological value or affect legally protected species?	Development of the site would not directly affect any designated sites of biodiversity or geological value.  The River Avon CWS forms the majority of the eastern boundary of the site. The River Avon is a Priority Habitat and the associated floodplain forms a grazing marsh which could be an important habitat for wading and wintering birds. The indicative layout proposes a significant green buffer along the entire extent of the River Avon in the east of the site. As such no effects from development are expected on these biodiversity features.  Daubenton's, Whiskered, Pipistrelle, Greater horseshoe, Lesser horseshoe, Brown long-eared, Brandt's, Serotine, Noctule and Soprano pipistrelle Bats are recorded in the site. Bat activity has been recorded at Patterdown in the west of the site and at Showell in the south. Development is proposed in immediate proximity to both of these areas and could have adverse effects on these populations. Further proposed development should be informed by ecological surveys to better understand how development of the site option can mitigate adverse effects.  European Otter is recorded on the River Avon, no adverse effects from development are expected as a result of the extensive buffer zone proposed. Public access restrictions might be an additional measure necessary to protect Otter species.	(-)
	- Affect natural features that are important for wildlife or landscape character such as trees or hedgerows, or areas of ancient woodland not subject to statutory protection?	The railway embankment running along parts of the west of site is a significant green corridor and links with Pudding Brook which crosses the site west to east and flows into the Avon. Residential development is proposed to be situated on Pudding Brook in the west of the site, this could have adverse effects on habitat connectivity. Further development proposals for this site option can, using green buffers, avoid this area to prevent adverse effects.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		An area of neutral grassland in the north of the site is situated within the extensive area of proposed green space, this prevents adverse effects from development.  Throughout the site large overgrown hedgerows and standing deadwood trees are significant ecological features which development of the site has the potential to harm. Further proposals for this site option should take account of this and prevent adverse effects from development by retaining these features or, where it can be demonstrated that harm is unavoidable, translocating them.	
2. Ensure efficient and effective use of land and the use of suitably	- Use previously developed land, greenfield land or a mix of both?	The indicative layout shows that proposed development would occur predominantly on greenfield land. There are areas of previously developed land are present in the site. Land at Showell Nursery is omitted from this site option. Due to the extent of greenfield land mitigation would be problematic.	()
located previously developed land and buildings	- Result in the permanent loss of the Best and Most Versatile Agricultural land (Grades 1, 2, 3)?	The site is comprised predominantly of BMV agricultural land. Much of the area identified for development is coincides with Grade 2 (very good) land. The precautionary approach to Grade 3 land presumes areas of Grade 3 within this site option to be BMV. A small area of Grade 1 (excellent) land is situated in the south of this site option. Areas of non-agricultural and poor land coincide with the extensive area of green space proposed.	()
		There is insufficient non-BMV land within this site option to deliver all the strategic, mixed-use development proposed, therefore development of this site option would likely result in the permanent loss of BMV land, mitigation is considered problematic.	
	- Require the remediation of contaminated land? If so, would this lead to issues of viability and deliverability?	Remediation of contamination across much of the site is unlikely as a result of the land's agricultural use.  The defunct Westmead Refuse Tip is situated in the northeast of the site option on the east bank of the River Avon. Remediation may be required, however as green space is proposed for this area viability and deliverability are unlikely to affect built development.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		Two areas, land at Showell Nursery and land at Chippenham Shooting Range, may have received waste for a period of time. Land at Showell Nursery is omitted from this site option however residential development is proposed adjacent to this area. Proposals show residential development at the Chippenham Shooting Range, further development proposals should be informed by land contamination surveys to assess the extent of constraint and therefore avoid adverse effects on viability and deliverability of development.	
	- Lead to the sterilisation of viable mineral resources? If so, is there potential to extract the mineral resource as part of the development?	A Mineral Safeguarding Area may constrain development across the site option. A large amount of the MSA coincides with the area of proposed green space, however, much of the land proposed for residential development is situated within the MSA and could lead to sterilisation of viable mineral resources.  The proportion of indicative residential land in this site option affected by the MSA is large. Further proposals for this site must take this into consideration and ensure that development on land affected by the MSA would not lead to the sterilisation of mineral resources.  Proposed employment development in the southwest of the site option is entirely unaffected.	(-)
3. Use and manage water resources in a sustainable manner	Be situated in any of the following:     Drinking Water Safeguarding Zone; or     Groundwater Source Protection Zone	An area of land between Rowden Lane and the B4528/B4643, proposed for residential development is situated within an Outer SPZ (Zone 2), as is part of the land proposed for employment development in the southwest of the site option (also Zone 2). Further proposals can sufficiently reduce the effects of development on the Outer SPZ through the incorporation of buffer strips between water courses and development as well as the use of appropriate land management practices.  Pudding Brook runs through the site and flows into the River Avon, this watercourses would be at risk of increased rates of runoff, potentially carrying anthropogenic contaminants. Further development proposals should create a buffer zone between development and Pudding Brook to prevent adverse effects from development on water resources, this buffer zone would also ensure development	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		avoids Flood Zones 2 – 3 associated with Pudding Brook.	
	- Affect surface or groundwater resources in terms of volume, quality and flow?	The site is situated largely within Flood Zone 1 with some land adjacent to the Avon and Pudding Brook within Flood Zones 2 – 3. As development of the site option would flow directly into the River Avon adverse effects from development on water quality and flows are anticipated.  Areas of this site option are identified as having a high propensity for groundwater flooding. These areas coincide with indicative green space, as such no effects are expected on development of this site.  Development of this greenfield site would likely increase surface water runoff due to increased impermeable surfaces. Mitigation could be achieved through incorporating surface water management measures into the further proposals for the site.	(-)
4. Improve air quality throughout Wiltshire and minimise all sources of environmental pollution	-Take place within a designated Air Quality Management Area (AQMA)? If so, is there evidence to suggest that the development of site will lead to an exacerbation of air quality issues? If so, can such impacts be appropriately mitigated in	The site is not situated in proximity to an AQMA.	(0)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	line with local air quality management plan?		
	-Lead to a decrease in air quality locally? Or increase noise or light pollution?	The increase in vehicles associated with development of the site would contribute to a decrease in air quality and increase in noise pollution as well as light pollution at night, particularly affecting receptors along the B4528/B4643.  Highway access is proposed from the B4528 for this site option, this would likely avoid significant increases in congestion and environmental pollution in central areas of Chippenham.	(-)
		Development will increase vehicle numbers, however, the site should encourage and be supported by sustainable transport modes to reduce private car dependency and lessen the effect of environmental pollution from development.	
	- Lie within an area of, or in close proximity to, any significant source(s) of environmental pollution (air, noise, light)?	The Chippenham Sewage Treatment Works is situated to the site's southeast. Indicative green space is proposed along the River Avon and this provides a buffer between the facility and indicative development areas, as such no adverse effects are expected.	(-)
	,g, .	The Chippenham Rifle Range is situated in the west of the site in the area proposed for residential development. This existing noise source would likely have adverse effects on development within immediate proximity. Further proposals for the site option should introduce a buffer zone to reduce effects on proposed development. The railway line running along parts of the west of the site option boundary could have adverse effects on residential and employment development in the west of the site. A suitable buffer zone could prevent or reduce noise impacts, alternatively further development proposals could introduce tree planting or landscaping to reduce effects	

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
5a. Minimise our impacts on climate change – through reducing greenhouse gas emissions	- Reduce greenhouse emissions, in particular carbon dioxide emissions?	The development of this site option would increase greenhouse gas emissions, in particular carbon emissions due to increased levels of traffic and new buildings associated with new development. This is unavoidable to some extent and mitigation is likely to remain problematic in the short to medium term.  Carbon dioxide emissions from new buildings can be reduced to an extent through meeting standards of sustainable construction and design.	()
	- Offer the potential to make provision for on-site renewable or very low carbon energy generation; thus reducing carbon dioxide emissions?	Development of the site has the potential to make provision for on-site renewable or very low carbon energy generation. For these positive effects to be maximised it is recommended that renewable energy generation such as solar PV is considered.	(+ +)
5b. Minimise our impacts on climate change – through reducing our vulnerability to future climate change effects	- Be located within flood zone 1? If not, are there alternative sites in the area that can be allocated in preference to developing land in flood zone 2? (To be determined through the application of the Sequential Test).	The site is situated predominantly in Flood Zone 1. Land along the River Avon is situated in Flood Zones 2 – 3, these areas coincide with the proposed green space. Residential development is proposed in the immediate proximity of Pudding Brook, some of this land is within Flood Zones 2 – 3. Further development proposals for this site option must avoid development proposed in flood risk areas, this can be achieved through the provision of green space.  As the majority of development proposed occurs in Flood Zone 1 the proposals would be less vulnerable to increasing extreme climatic events such as fluvial flooding.	(-)
	- Address the risk of flooding from all sources?	The majority of indicative developable areas in Option E2 are situated in Flood Zone 1. An area proposed for residential development in proximity to Pudding Brook is located in Flood Zones 2 and 3. Further proposals should ensure a buffer zone is provided along Pudding Brook to reduce the risk of flooding.  Development would increase surface water runoff in proximity to the River Avon. Increased rates of runoff flowing into the Avon have the potential to increase peak flows and flood risk downstream. Surface water management measures should be	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		incorporated into further development proposals to ensure that existing greenfield rates of surface water runoff are achieved, thus reducing the risk of flooding on-site and in settlements downstream.	
6. Protect, maintain and enhance the historic environment	- Affect directly or indirectly a heritage asset?	The three listed buildings clustered at Rowden Farm; two grade II and one Grade II*, are the only listed buildings within the site. A moated site and fishponds southeast of Rowden Farm form a Scheduled Monument which is also situated within the site option.	(-)
environment		These heritage assets are situated in the east of the site within the area proposed for green space and as such development of the site is unlikely to have any adverse effects.	
		The Rowden Conservation Area extends across the east of the site. The Conservation Area incorporates agricultural fields which contribute to the setting of Rowden Manor. Residential and employment development is proposed in the south and west of the site. While the indicative layout is proposed beyond the Conservation Area, some of the land may contribute to its setting. Where this is the case proposals should avoid this land or incorporate measures which reduce adverse effects on the heritage asset. As development which achievably mitigates potential adverse effects could be accommodated, a minor adverse effect is expected.	
		16 non-designated heritage assets are situated within the approximate area of this site option, this includes evidence for Neolithic, Bronze Age, Iron Age and Roman settlements.	
		There is high potential for unknown heritage assets of archaeological interest.  Development can mitigate effects on these assets through preservation in situ of discrete areas of remains and archaeological recording for more widespread remains.	

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
7. Conserve and enhance the character and quality of Wiltshire's rural and urban landscapes, maintaining and strengthening local distinctiveness and sense of place	<ul> <li>Impact on the visual amenity or character of the natural landscape?</li> <li>Specifically considering the effects on:         <ul> <li>Internationally/Nationally designated features and their setting;</li> <li>Locally designated landscapes/features and their setting;</li> <li>Local amenity.</li> </ul> </li> </ul>	There are no designated features within proximity of the site.  This site option proposes the majority of development to be focused in the west of the site. The indicative layout makes provision for an area of green space between the River Avon and indicative development land. This proposed green buffer protects the visual amenity in the north of the site option, the flat and wide open views associated with the floodplain and minimises the urbanising influence development would have on the rural landscape to the east. As a result a minor adverse effect from development of this site option is expected on the visual amenity and local character of the surrounding area. Further proposals for this site option can ensure adverse effects on the character of the surrounding landscape are avoided through tree planting and landscaping.	(-)
8. Provide everyone with the opportunity to live in good quality, affordable housing, and ensure an appropriate mix of dwelling sizes, types and tenures	- Help meet affordable housing needs/the needs of the local community (if known)?	A mixed use development of this site would deliver approximately 1140 dwellings, which provides the opportunity to deliver good quality affordable housing that meets local needs in terms of tenure, size and type.	(+)
9. Reduce poverty and deprivation and promote more inclusive and self-contained communities	- Result in an increase in poverty and deprivation and/or lead to significant social exclusion amongst existing and new residents?	This site option is situated partially in land considered to have relatively high deprivation rates and partially in land considered to have relatively low deprivation rates.  Two key areas of high deprivation in Chippenham are located to the northwest and northeast of this site option. The indicative layout proposes residential development in the west of the site in proximity to one area of high deprivation.	(+)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		The provision of community facilities and employment land as part of the mixed-use development of this site option would benefit the wider area and support reductions in deprivation nearby.	
	- Result in the loss of any existing Community facility/green or amenity space or would it contribute to the provision of a new facility/space?	An area of indicative residential development in the west of this site option proposes the loss of an area of accessible open space situated south of Rowden Lane. Further proposals for this site option could prevent the loss of this open space. Where it can be demonstrated that loss is unavoidable proposals should create additional open space to offset the loss. The indicative layout proposes a vast area of green space in the east of the area, this has potential to be delivered as accessible open space which would offset the loss of the existing accessible open space.	(-)
	- Result in the loss of PROW or provision of new PROW?	A number of PRoW run through the site. Where PRoWs pass through areas proposed for green space adverse effects are not anticipated.  Proposed residential development in the west of site option has the potential to affect several PRoWs. Further development proposals for the site should retain PRoWs, where it is demonstrated that loss or alteration of PRoWs is unavoidable provision of suitable alternatives can offset the impact.	(-)
	- Be accessible to educational and health facilities?	Access to secondary schools is weak by non-motorised modes. Access by public transport is strong, vehicular access would direct traffic through the town centre to existing schools in the north and east. Secondary schools in Chippenham are reaching capacity and may be unable to accommodate the number of pupils likely to arise from development of this site. Provision of educational facilities as part of development proposals or contribution to the delivery of new educational facilities off-site would mitigate this.  This site option has strong access the hospital, particularly for the northern most area proposed for residential development.	(-)
10. Reduce the need to travel and promote more sustainable	- Occur in an area currently accessible by public transport/ walking and cycling? If not, is there	The site is situated along the B4528/B4643 which is well served by public transport. Development of the site could support an increase in the use of public transport services along this corridor.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
transport choices	scope to make it so?	Ease of access to the town centre by non-motorised modes from the site is strong in the north and moderate to weak in the south in the indicative area of residential development and employment areas. Further proposals for the development of this site option should demonstrate how/if development could be supported by and integrate with improvements to the wider pedestrian and cycle network.	
	- Support improvements to public transport connectivity and pedestrian and cycle links to the town, town centre, railway station and Wiltshire College campuses in Chippenham?	Development of the site option is unlikely to support significant improvements to public transport connectivity, although residential and employment development of the site could increase the use of services along the existing corridor.  Further proposals for this site option have the potential to provide more direct pedestrian and cycle routes to the town centre from the south.	(+)
11. Encourage a vibrant and diversified economy and provide for long-term sustainable economic growth	Offer the potential to provide employment land for B1, B2 and B8 uses?	This site option proposes 18.1ha of employment development which is shown on the indicative layout as being formed of one large area in the southwest of the site option. The scale and location of this employment land would be suited to a mix of use types.  Access to the PRN and strategic lorry route along the A350 is strong. The B4528/B4643 is a bus corridor, making public transport access to the indicative employment area strong. As such Site Option E2 offers the potential to provide B1, B2 and B8 employment land.	(+++)
	Support the vitality and viability of Chippenham town centre (proximity to town centre, built up areas, station hub, college)?	The area proposed for employment development in this site option would be situated on the outskirts of the town and away from existing built up areas. Employment development at the scale proposed would likely support the vitality and viability of the town; however the distance of this employment land from the town centre is likely to limit the benefits for the town centre.	(+)
	Provide infrastructure that will help to promote economic growth?	There is potential for this site option to deliver a stretch of the southern link road to Chippenham between the A350 and the A4 at Pewsham. The provision of this road infrastructure would support the delivery of major housing and employment development.	(+++)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		The site option also proposes an extensive area of green infrastructure along the River Avon, this would have minor beneficial effects on economic growth by better connecting the river with the town centre.	
	Be well connected to Principal Employment Areas?	The area proposed for employment development in E2 is situated in proximity to the Methuen Business Park; however improvements to connections between the two sites would be required to capitalise on this proximity.	(+)
12. Ensure adequate provision of high quality	Support the vitality of existing employment areas?	The Methuen Business Park and Herman Miller Industrial Estate are situated to the north of the proposed employment development area in this site option.  Employment development at this site option would likely have beneficial effects on the vitality of existing employment areas in the south of Chippenham.	(+++)
employment land and diverse employment opportunities to meet the needs of local businesses and a changing workforce	Provide employment land that meets commercial market requirements? (offices require land in or close town centres; warehousing requires large sites with good local access to strategic road network)	The quantum of indicative employment land proposed, strong access by public transport and strong access to the PRN and strategic lorry route make this site option well suited to a mix of use class types. Employment land at this site option meets the basic commercial requirements for B1, B2 and B8 uses.	(+++)
	Provide employment land in areas that are easily accessible by sustainable transport?	Access to site option E2 by public transport is strong. The indicative area for employment development is situated on the B4528/B4643, which is an existing bus corridor.  Non-motorised access to the town centre and transport hubs is weak and would require on-site improvements to pedestrian and cycle links between the town centre and proposed employment land in order to provide a greater range of sustainable transport modes serving the proposed employment area.	(+)

Table A.13: Option E3 assessment

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
1. Protect and enhance all biodiversity and geological features and avoid irreversible losses	- Affect a designated / undesignated site of biodiversity or geological value or affect legally protected species?	Development of the site would not directly affect any designated sites of biodiversity or geological value.  The River Avon County Wildlife Site (CWS) forms the site option's eastern boundary in the northeast and south east. The River Avon is a BAP Priority Habitat and the associated floodplain forms grazing marsh which could be important for wintering or wading birds. The indicative layout proposes a significant buffer zone, shown as green space, between proposed development and the River Avon in the east of the site. As such no effects from development are expected on these biodiversity features.  Daubenton's, Whiskered, Pipistrelle, Greater horseshoe, Lesser horseshoe, Brown long-eared, Brandt's, Serotine, Noctule and Soprano pipistrelle Bats are recorded in the site. Bat activity has been recorded at Patterdown in the west of the site and at Showell in the south. Development is proposed in proximity to both these areas and could have adverse effects on these populations, particularly at Showell Nursery and land to the south where residential development would occur in proximity of existing agricultural buildings which may be potential roosting sites. Further proposed development should be informed by ecological surveys to better understand how development of the site option can mitigate adverse effects.  European Otter is recorded on the River Avon, no adverse effects from development are expected as a result of the extensive buffer zone proposed. Additionally, public access restrictions may be necessary to protect Otter populations at this stretch of the Avon.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	- Affect natural features that are important for wildlife or landscape character such as trees or hedgerows, or areas of ancient woodland not subject to statutory protection?	The railway embankment which forms part of the western boundary of this site option is a significant green corridor and links with Pudding Brook which crosses the area west to east and flows into the Avon. Residential development is proposed to be situated on Pudding Brook in the west of the site, this could have adverse effects on habitat connectivity. Further development proposals for this site option can, using green buffers, avoid this area to prevent adverse effects.  An area of neutral grassland with potential to become species rich grassland is partially situated within the north of the site. Green space is proposed in this area which prevents adverse effects from development.  Throughout the site large overgrown hedgerows and standing deadwood trees are significant ecological features which could be affected by residential and employment development in the west and south of the site. Further proposals for this site option should take account of this and prevent adverse effects from development by retaining these features or, where it can be demonstrated that harm is unavoidable, translocating them.	(-)
2. Ensure efficient and effective use of land and the use of suitably	- Use previously developed land, greenfield land or a mix of both?	The indicative layout shows that proposed development would occur predominantly on greenfield land. There are areas of previously developed land are present in the site. Land at Showell Nursery is omitted from this site option. Due to the extent of greenfield land mitigation would be problematic.	()
located previously developed land and buildings	- Result in the permanent loss of the Best and Most Versatile Agricultural land (Grades 1, 2, 3)?	The site is comprised of Grades 1 (excellent), 2 (very good) and 3 (presumed good) BMV agricultural land. Areas of Grade 4 (poor) coincide with the area of green space proposed along the River Avon. A small area of non-agricultural urban lands is situated in the north of the site and coincides with the area of green space proposed.	()
		There is insufficient non-BMV land within this site option to deliver all the mixed-use development proposed, development of this site option would result in the permanent loss of BMV land, mitigation is considered problematic.	

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	- Require the remediation of contaminated land? If so, would this lead to issues of viability and deliverability?	Remediation of contamination across much of the site is unlikely as a result of the land's agricultural use.  Two areas, land at Showell Nursery and land at Chippenham Shooting Range, may have received waste historically. Land at Showell Nursery is omitted from this site option however residential development is proposed adjacent to this site. Proposals show residential development at Chippenham Shooting Range, which could require remediation. Further development proposals for the site should undertake contaminated land surveys to assess the extent of constraint to development and thus reduce risk of adverse effects on viability and deliverability of proposed development.	(-)
	- Lead to the sterilisation of viable mineral resources? If so, is there potential to extract the mineral resource as part of the development?	A Mineral Safeguarding Area may constrain development across a small part of this site option. Much of the MSA coincides with the proposed green space, however, an area of the land proposed for residential development is situated within the MSA and could lead to sterilisation of viable mineral resources. Further proposals for this site must take this into consideration and ensure that development on land affected by the MSA would not lead to the sterilisation of mineral resources. The proportion of the indicative residential area of this site option affected by the MSA is small. This site option contains a sufficient amount of land not in the MSA to deliver the indicative amount of residential and employment land set out.  Proposed employment development in the southwest of the site option and residential development proposed west of the B4528/B4643 and at Showell Nursery would be entirely unaffected.	(-)
3. Use and manage water resources in a sustainable manner	<ul> <li>Be situated in any of the following:</li> <li>Drinking Water Safeguarding Zone; or</li> <li>Groundwater Source Protection Zone</li> </ul>	An area of land between Rowden Lane and the B4528/B4643, proposed for residential development is situated within an Outer SPZ (Zone 2), as is part of the land proposed for employment development in the southwest of the site option (also Zone 2). Further proposals for development of this site option should seek to reduce the effects of development on the Outer SPZ by including within the design buffer strips between water courses and development and ensuring the use of appropriate land management practices.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		Pudding Brook runs through the site and flows into the River Avon, this watercourses would be at risk of increased rates of runoff, potentially carrying anthropogenic contaminants. Further development proposals should create a buffer zone between development and Pudding Brook to prevent adverse effects from development on water resources, this buffer zone would also ensure proposals avoids Flood Zones 2 – 3 associated with Pudding Brook.	
	- Affect surface or groundwater resources in terms of volume, quality and flow?	The site is situated largely within Flood Zone 1 with some land adjacent to the Avon and Pudding Brook within Flood Zones 2 – 3. As development of the site option would flow directly into the River Avon adverse effects from development on water quality and flows are anticipated.  Areas of this site option are identified as having a high propensity for groundwater flooding. These areas coincide with indicative green space, as such no effects are expected on development of this site.  Development of this greenfield site would likely increase surface water runoff due to increased impermeable surfaces. Mitigation could be achieved through incorporating surface water management measures into the further proposals for the site.	(-)
4. Improve air quality throughout Wiltshire and minimise all sources of environmental pollution	-Take place within a designated Air Quality Management Area (AQMA)? If so, is there evidence to suggest that the development of site will lead to an exacerbation of air quality issues? If so, can such impacts be appropriately mitigated in line with local air quality	The site is not situated in proximity to an AQMA.	(0)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	management plan?		
	-Lead to a decrease in air quality locally? Or increase noise or light pollution?	The increase in vehicles associated with development of the site would contribute to a decrease in air quality and increase in noise pollution as well as light pollution at night, particularly affecting receptors along the B4528/B4643.	(-)
		Highway access is proposed from the B4528 for this site option, this would likely avoid significant increases in congestion and environmental pollution in central areas of Chippenham and at existing congestion points.	
		Development will increase vehicle numbers, however, the site should encourage and be supported by sustainable transport modes to reduce private car dependency and lessen the effect of environmental pollution from development.	
	- Lie within an area of, or in close proximity to, any significant source(s) of environmental pollution (air,	The Chippenham Sewage Treatment Works is situated to the southeast of the site option. Proposed green space in the southeast of the site provides a buffer between the facility and proposed development, as such no adverse effects are expected.	(-)
	noise, light)?	The Chippenham Rifle Range is situated in the west of the site in the area proposed for residential development. This existing noise source would likely have adverse effects on development within immediate proximity.	
		Further proposals for the site option should introduce a buffer zone, landscaping and vegetation screening to reduce effects on proposed development.	
		The railway line running along the west of the proposed residential and employment areas in this site option boundary could have adverse effects on amenity, particularly for development west of the B4643. A buffer zone could prevent or reduce noise impacts, alternatively further development proposals could introduce tree planting or landscaping to reduce effects.	
5a. Minimise our impacts on climate change –	- Reduce greenhouse emissions, in particular carbon dioxide emissions?	The development of this site option would increase greenhouse gas emissions, in particular carbon emissions due to increased levels of traffic and new buildings. This is unavoidable to some extent.	()

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
through reducing greenhouse gas emissions		Carbon dioxide emissions from new buildings can be reduced to an extent through meeting standards of sustainable construction and design.	
	- Offer the potential to make provision for on-site renewable or very low carbon energy generation thus reducing carbon dioxide emissions?	Development of the site has the potential to make provision for on-site renewable or very low carbon energy generation. For these positive effects to be maximised it is recommended that, renewable energy generation such as solar PV is considered.	(++)
5b. Minimise our impacts on climate change – through reducing our vulnerability to future climate change effects	- Be located within flood zone 1? If not, are there alternative sites in the area that can be allocated in preference to developing land in flood zone 2? (To be determined through the application of the Sequential Test).	The site is situated predominantly in Flood Zone 1. Land along the River Avon is situated in Flood Zones 2 – 3, these areas coincide with the proposed green space. Residential development is proposed in the immediate proximity of Pudding Brook, some of this land is within Flood Zones 2 – 3. Further development proposals for this site option must avoid development proposed in flood risk areas, this can be achieved through the provision of green space.  As the majority of development proposed occurs in Flood Zone 1 the proposals would be less vulnerable to increasing extreme climatic events such as fluvial	(-)
	- Address the risk of flooding from all sources?	flooding.  All indicative developable areas are situated in Flood Zone 1. Development would increase surface water runoff in proximity to the River Avon. Increased rates of runoff flowing into the Avon have the potential to increase peak flows and flood risk downstream. Surface water management measures should be incorporated into further development proposals to ensure that existing greenfield rates of surface water runoff are achieved, thus reducing the risk of flooding on-site and in settlements downstream.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
6. Protect, maintain and enhance the historic environment	- Affect directly or indirectly a heritage asset?	There are no listed buildings within this site option, however, the setting of three listed buildings clustered at Rowden Farm are influenced by land within the site option.  The Rowden Conservation Area extends across the east of the site. The Conservation Area incorporates agricultural fields which contribute to the setting of Rowden Manor. Residential and employment development is proposed in the south and west of the site. While the indicative layout is proposed beyond the Conservation Area, some of the land may contribute to its setting. Where this is the case proposals should avoid this land or incorporate measures which reduce adverse effects on the heritage asset. As development which achievably mitigates potential adverse effects could be accommodated, a minor adverse effect is expected.  16 non-designated heritage assets are situated within the approximate area of this site option, this includes evidence for Neolithic, Bronze Age, Iron Age and Roman settlements.  There is high potential for unknown heritage assets of archaeological interest. Development can mitigate effects on these assets through preservation in situ of discrete areas of remains and archaeological recording for more widespread remains.	(-)
7. Conserve and enhance the character and quality of Wiltshire's rural and urban landscapes, maintaining and strengthening local	<ul> <li>Impact on the visual amenity or character of the natural landscape?</li> <li>Specifically considering the effects on:</li> <li>Internationally/Nationally designated features and their setting;</li> <li>Locally designated landscapes/features and</li> </ul>	There are no designated features within proximity of the site.  Development of this site option proposes an extensive green buffer along the River Avon which protects the flat and wide open views associated with the floodplain and minimises the effects of urbanisation on the rural landscape. The provision of this extensive green buffer protects the visual amenity in the north of the site option. South of Showell Nursery, however, the proposed green buffer between the river and proposed residential development narrows. This coincides with the most rural and remote area within this site option, as such development would have an increased urban influence on the southern approach to Chippenham. This is	()

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
distinctiveness and sense of place	their setting; - Local amenity.	deemed to be difficult mitigate with the proposed layout as the extent of the indicative green space proposed in the south of the site would need to be increased.	
8. Provide everyone with the opportunity to live in good quality, affordable housing, and ensure an appropriate mix of dwelling sizes, types and tenures	- Help meet affordable housing needs/the needs of the local community (if known)?	The development of this site would deliver approximately 1785 dwellings, which provides the opportunity to deliver a significant number of good quality affordable homes that meets local needs in terms of tenure, size and type.	(+++)
9. Reduce poverty and deprivation and promote more inclusive and self- contained communities	- Result in an increase in poverty and deprivation and/or lead to significant social exclusion amongst existing and new residents?	Site option E3 is situated partially in land considered to have relatively high levels of deprivation and partially in land considered to have relatively low levels of deprivation.  Two key areas of high deprivation in Chippenham are located to the northwest and northeast of this site option. The indicative layout proposes residential development in the west of the site in proximity to one area of high deprivation.  The provision of community facilities and employment land as part of the mixed-use development of this site option would benefit the wider area and support reductions in deprivation nearby,	(+)
	- Result in the loss of any existing Community facility/green or amenity space or would it contribute to the provision of a new facility/space?	An area of indicative residential development in the west of this site option proposes the loss of an area of accessible open space situated south of Rowden Lane. Further proposals for this site option could prevent the loss of this open space. Where it can be demonstrated that loss is unavoidable proposals should create additional open space to offset the loss. The indicative layout proposes a vast area of green space in the east of the area, this has potential to be delivered as accessible open space which would offset the loss of the existing accessible open	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		space.	
	- Result in the loss of PROW or provision of new PROW?	A number of PRoWs run through the site. Where PRoWs pass through areas proposed for green space adverse effects are not anticipated.	(-)
		Proposed residential development in the west of site option has the potential to affect several PRoWs. Further development proposals for the site should retain PRoWs, where it is demonstrated that loss or alteration of PRoWs is unavoidable provision of suitable alternatives can offset the impact.	
	- Be accessible to educational and health facilities?	Access to secondary schools from this site option is weak by non-motorised modes, particularly in the south of the site option. Access by public transport is strong along the western extent of the site. Vehicular access to schools would direct traffic through the town centre to existing schools in the north and east. Secondary schools in Chippenham are reaching capacity and may be unable to accommodate the number of pupils likely to arise from development of this site. Provision of educational facilities as part of development proposals or contribution to the delivery of new educational facilities off-site would mitigate this.	(-)
		This site option has strong to moderate non-motorised access to the hospital, the northern areas perform particularly strongly as the hospital is situated immediately north of the indicative areas proposed for residential development.	
10. Reduce the need to travel and promote more sustainable	- Occur in an area currently accessible by public transport/ walking and cycling? If not, is there	The site is situated along the B4528/B4643 which is well served by public transport. Development of the site could support an increase in the use of public transport services along this corridor.	(-)
transport choices	scope to make it so?	Ease of access to the town centre by non-motorised modes from the site is strong in the north and moderate to weak in the south in the indicative area of residential development and employment areas. Further proposals for the development of this site option should demonstrate how/if development could be supported by and integrate with improvements to the wider pedestrian and cycle network.	

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	- Support improvements to public transport connectivity and pedestrian and cycle links to the town, town centre, railway station and Wiltshire College campuses in Chippenham?	Development of the site option is unlikely to support significant improvements to public transport connectivity, although residential and employment development of the site could create demand for public transport services along the B4528/B4643.  Further proposals for this site option have the potential to integrate on-site pedestrian and cycle routes into existing surrounding routes, creating more direct routes through the wider area, particularly between the town centre and areas further south.	(+)
11. Encourage a vibrant and diversified economy and provide for long-term sustainable economic growth	Offer the potential to provide employment land for B1, B2 and B8 uses?	Site Option E3 proposes 18.1ha of employment development in the southwest of the site option. The indicative layout shows this as a single area in the southwest of the site option along the B4528/B4643 and A350. The scale and layout of the indicative employment land suits a mix of use types.  Access to the PRN and strategic lorry route along the A350 is strong.  The B4528/B4643 is an existing bus corridor, providing strong public transport access to the indicative employment area. As such Site Option E3 offers the potential to provide B1, B2 and B8 employment land.	(+++)
	Support the vitality and viability of Chippenham town centre (proximity to town centre, built up areas, station hub, college)?	The area proposed for employment development in this site option would be situated on the periphery of the town and away from existing built up areas. The scale of employment development proposed at this site option would support the vitality of the town, however the distance of the proposed site to existing town centre uses is likely to limit the extent of the beneficial effect.	(+)
	Provide infrastructure that will help to promote economic growth?	This site option hold the potential to deliver strategic road infrastructure for Chippenham. Development of this site option would provide part of the southern link road to Chippenham, connecting the A350 south of the town to the A4 at Pewsham. This would support major housing and employment growth.  Site Option E3 also proposes an extensive area of green infrastructure along the River Avon. This green space would provide a better connection to the town centre from the south along the river, this would likely have minor beneficial effects on economic growth.	(+++)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	Be well connected to Principal Employment Areas?	The indicative area of employment land proposed in Site Option E3 is situated in proximity to the Methuen Business Park; however improvements to connections between the two sites would be required to capitalise on this proximity.	(+)
12. Ensure adequate provision of high quality	Support the vitality of existing employment areas?	The Methuen Business Park and Herman Miller Industrial Estate are situated to the north of the proposed employment development site in Site Option E3. Employment development at this site option would likely have beneficial effects on the vitality of existing employment areas in the south of Chippenham.	(+++)
employment land and diverse employment opportunities to meet the needs of local businesses and a changing workforce	Provide employment land that meets commercial market requirements? (offices require land in or close town centres; warehousing requires large sites with good local access to strategic road network)	The indicative employment area proposed comprises a large site with strong access by public transport and strong access to the PRN and strategic lorry route.  Employment land proposed as part of this site option meets basic commercial market requirements for a range of employment types.	(+++)
	Provide employment land in areas that are easily accessible by sustainable transport?	Access by public transport is considered strong in the southwest of Site Option E3. The area proposed for employment development is situated on the B4528/B4643, which is an existing bus corridor.  Non-motorised access to the town centre and transport hubs is weak. Further proposals for the development of this site option should seek to improve pedestrian and cycle links through the site in order to provide a greater range of sustainable transport modes serving the proposed employment area.	(+)

Table A.14: Option E5 assessment

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
1. Protect and enhance all biodiversity and geological features and avoid irreversible losses	- Affect a designated / undesignated site of biodiversity or geological value or affect legally protected species?	Development of Site Option E5 would not directly affect any designated sites of biodiversity or geological value.  The River Avon CWS forms much of the site's eastern boundary. The river is also a BAP Priority Habitat and the floodplain associated with it forms areas of grazing marsh which have the potential to support wintering and wading birds. The indicative layout proposes a significant area of green space between this area and the developable area, this is shown as green space on the indicative layout drawing. As such no effects from development are expected on these biodiversity features.  Protected species including Daubenton's, Whiskered, Pipistrelle, Greater horseshoe, Lesser horseshoe, Brown long-eared, Brandt's, Serotine, Noctule and Soprano pipistrelle Bats are recorded in the site. Bat activity has been recorded at Patterdown in the west of the site option and at Showell Nursery in the south. Developable areas are proposed in proximity to both these areas, as such development of this site option could adversely affect these populations.  Further proposed development should be informed by ecological surveys to better understand how development of the site option can mitigate adverse effects.  European Otter is recorded on the River Avon, no adverse effects from development are expected as a result of the extensive buffer zone proposed, public access restrictions may be necessary to provide further protection to Otter populations at this stretch of the Avon.	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	- Affect natural features that are important for wildlife or landscape character such as trees or hedgerows, or areas of ancient woodland not subject to statutory protection?	The railway embankment which forms the majority of the western boundary of Option E5 is a significant green corridor and links with Pudding Brook, which crosses the area west to east and flows into the Avon. Residential development is proposed to be situated on land which forms Pudding Brook and its flood zone. This could have adverse effects on habitat connectivity in the area. Further development proposals for this site option can, using green buffers, avoid this area to prevent adverse effects.	(-)
		An area of neutral grassland with potential to become species rich grassland is partially situated within the north of the site. Indicative green space is proposed in this area which prevents adverse effects from development.	
		Large overgrown hedgerows and standing deadwood trees are present throughout the site, these are significant ecological features which could be affected by the development of this site option. Further proposals for this option E5 should take account of this and prevent adverse effects from development by retaining these features or, where it can be demonstrated that harm is unavoidable, translocating them.	
2. Ensure efficient and effective use of land and the use of suitably	- Use previously developed land, greenfield land or a mix of both?	The indicative layout shows that proposed development would occur predominantly on greenfield land. A small are of land at Showell Nursery comprises previously developed land. Due to the extent of greenfield land mitigation would be problematic.	()
located previously developed land and buildings	- Result in the permanent loss of the Best and Most Versatile Agricultural land (Grades 1, 2, 3)?	The site is comprised of Grades 1 (excellent), 2 (very good) and 3 (presumed good) BMV agricultural land. Areas of Grade 4 (poor) coincide with the area of green space proposed along the River Avon. A small area of non-agricultural urban lands is situated in the north of the site and coincides with the area of green space proposed.	()
		Under the presumption that Grade 3 land in this site option is BMV there remains insufficient poor and non-agricultural land within this site option to deliver the level of mixed-use development proposed, as such the development of this site option	

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		would likely result in the permanent loss of BMV land.	
	- Require the remediation of contaminated land? If so, would this lead to issues of viability and deliverability?	Remediation of contamination across much of the site is unlikely as a result of the land's agricultural use.  An area of land at Showell Nursery is identified as potentially having received waste in the past. Similarly land at Chippenham Shooting Range, situated within the developable area in this site, is recorded as having received waste. Remediation of these sites may be required prior to their development. Decisions should be based on the outcome of contaminated land surveys. These surveys should assess the extent of constraint to development, informing the extent to which contaminated land is a risk to viability and deliverability of proposed development.	(-)
	- Lead to the sterilisation of viable mineral resources? If so, is there potential to extract the mineral resource as part of the development?	A Mineral Safeguarding Area may constrain development across a small part of this site option. Much of the MSA coincides with the indicative area green space proposed across much of the east of the site. Part of the developable area earmarked for residential development is situated within the MSA, development of this land could lead to the sterilisation of viable mineral resources. Further proposals for this site option would be expected to consider this and ensure that development on affected land would not sterilise mineral resources.  The proportion of the indicative residential area of this site option affected by the MSA is small, making avoidance more achievable. The developable area within this site option is likely sufficient to deliver the scale of development proposed.	(-)
3. Use and manage water resources in a sustainable manner	<ul> <li>Be situated in any of the following:</li> <li>Drinking Water Safeguarding Zone; or</li> <li>Groundwater Source Protection Zone</li> </ul>	The indicative area of residential development south of Rowden Lane is situated within an Outer SPZ (Zone 2), so too is a part of the indicative employment land in the southwest of the site option. Further proposals for development of this site option should seek to reduce the effects of development on the Outer SPZ by including within the design buffer strips between water courses and development and ensuring the use of appropriate land management practices.  Pudding Brook runs through the site and flows into the River Avon, this watercourses would be at risk of increased rates of runoff, potentially carrying	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		anthropogenic contaminants.  Further development proposals should create a buffer zone between development and Pudding Brook to prevent adverse effects from development on water resources, this buffer zone would also ensure proposals avoids Flood Zones 2 and 3 associated with Pudding Brook.	
	- Affect surface or groundwater resources in terms of volume, quality and flow?	The developable area of E5 is situated largely within Flood Zone 1 with some land adjacent to Pudding Brook within Flood Zones 2 and 3. As development of the site option would flow directly into the River Avon adverse effects from development on water quality and flows are anticipated.  Areas of this site option are identified as having a high propensity for groundwater flooding. These areas coincide with indicative green space, as such no effects are expected on development of this site.  Development of this greenfield site would likely increase surface water runoff due to increased impermeable surfaces. Mitigation could be achieved through incorporating surface water management measures into the further proposals for the site.	(-)
4. Improve air quality throughout Wiltshire and minimise all sources of environmental pollution	-Take place within a designated Air Quality Management Area (AQMA)? If so, is there evidence to suggest that the development of site will lead to an exacerbation of air quality issues? If so, can such impacts be appropriately mitigated in line with local air quality management plan?	The site is not situated in proximity to an AQMA.	(0)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	-Lead to a decrease in air quality locally? Or increase noise or light pollution?	The increase in vehicles associated with the development of this site option would lead to a decrease in local air quality and increase in noise pollution as well as light pollution at night, particularly affecting receptors along the B4528/B4643.  Highway access is proposed from the B4528, this would likely avoid existing areas of congestion and the town centre thus having limited effect in terms of increases in congestion and environmental pollution at these locations.  Development will increase vehicle numbers, however, the site should encourage and be supported by sustainable transport modes to reduce private car dependency and lessen the effect of environmental pollution from development.	(-)
	- Lie within an area of, or in close proximity to, any significant source(s) of environmental pollution (air, noise, light)?	The Chippenham STW is situated to the southeast of the site option. Proposed green space in the southeast of the site provides a buffer between the facility and proposed development, as such no adverse effects are expected.  The Chippenham Rifle Range is situated in the west of the site. This existing noise source would likely have adverse effects on development within its immediate proximity.  Further proposals for the site option should introduce a buffer zone, landscaping and vegetation screening to reduce effects on proposed development, this would likely reduce the developable area to some extent.	(-)
5a. Minimise our	- Reduce greenhouse	The railway line running along the west of the proposed residential and employment areas in this site option boundary could have adverse effects on development, particularly for development on the strip of land west of the B4643. A buffer zone could prevent or reduce noise impacts, alternatively further development proposals could introduce sufficient levels of tree planting or landscaping to reduce noise and vibration to acceptable levels.	
impacts on	emissions, in particular	The development of this site option would increase greenhouse gas emissions, in particular carbon emissions due to increased levels of traffic and new buildings.	()

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
climate change – through reducing greenhouse gas emissions	carbon dioxide emissions?	This is unavoidable to some extent.  Carbon dioxide emissions from new buildings can be reduced to an extent through meeting standards of sustainable construction and design.	
	- Offer the potential to make provision for on-site renewable or very low carbon energy generation thus reducing carbon dioxide emissions?	Development of this site option has could support the provision of on-site renewable and very low carbon energy generation. For these positive effects to be maximised it is recommended that, renewable energy generation such as solar PV is considered.	(+ +)
5b. Minimise our impacts on climate change – through reducing our vulnerability to future climate change effects	- Be located within flood zone 1? If not, are there alternative sites in the area that can be allocated in preference to developing land in flood zone 2? (To be determined through the application of the Sequential Test).	The site is situated predominantly in Flood Zone 1. Land along the River Avon is situated in Flood Zones 2 and 3, these areas generally coincide with the proposed green space, although an area of residential development proposed in proximity to Pudding Brook would be situated in Flood Zone 2 and 3.  Further development proposals for this site would be required to avoid development in areas at risk of flooding. The small size of the affected area makes avoidance achievable while ensuring sufficient land in this site option exists to deliver the level of development proposed. A green buffer should be proposed along the entire length of Pudding Brook within this site option.  Providing further proposals avoid Flood Zones 2 and three development would be	(-)
	- Address the risk of flooding from all sources?	less vulnerable to increasing extreme climatic events such as fluvial flooding.  The majority of the indicative developable area is situated in Flood Zone 1.  Avoidance of areas at Pudding Brook within Flood Zones 2 and 3 would be required to address the risk of flooding to development in the vicinity.  Development of E5 would increase impermeable areas and therefore increase rates of surface water runoff in proximity to the River Avon. Increased rates of runoff flowing into the Avon have the potential to increase peak flows and flood risk downstream. Further proposals for this site option should include surface water	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		management measures into the design to ensure that existing greenfield rates of surface water runoff are achieved.	
6. Protect, maintain and enhance the historic	- Affect directly or indirectly a heritage asset?	This site option contains no listed buildings, however, land which contributes to the setting of three listed buildings clustered at Rowden Farm is located within the site option.  The Royden Conservation Area extends person the cost of the site. The	(-)
environment		The Rowden Conservation Area extends across the east of the site. The Conservation Area incorporates agricultural fields which contribute to the setting of Rowden Manor. Residential and employment development is proposed in the south and west of the site. While the indicative layout is proposed beyond the Conservation Area, some of the land may contribute to its setting. Where this is the case proposals should avoid this land or incorporate measures which reduce adverse effects on the heritage asset. As development which achievably mitigates potential adverse effects could be accommodated, a minor adverse effect is expected.  16 non-designated heritage assets are situated within the approximate area of this site option, this includes evidence for Neolithic, Bronze Age, Iron Age and Roman settlements.  There is high potential for unknown heritage assets of archaeological interest. Development can mitigate effects on these assets through preservation in situ of discrete areas of remains and archaeological recording for more widespread remains.	
7. Conserve and enhance the	- Impact on the visual amenity or character of the	There are no designated features within proximity of the site.	(-)
character and quality of Wiltshire's rural and urban landscapes, maintaining and	natural landscape? Specifically considering the effects on: - Internationally/Nationally designated features and their setting;	This site option proposes the majority of development to be focused in the west of the site in proximity to existing development. The indicative layout makes provision for an area of green space between the River Avon and indicative development land. This proposed green buffer protects the visual amenity in the north of the site option, the flat and wide open views associated with the floodplain and minimises the urbanising influence development would have on the rural landscape to the	

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
strengthening local distinctiveness and sense of place	<ul> <li>Locally designated landscapes/features and their setting;</li> <li>Local amenity.</li> </ul>	east. As a result a minor adverse effect from development of this site option is expected on the visual amenity and local character of the surrounding area. Further proposals for this site option can ensure adverse effects on the character of the surrounding landscape are avoided through tree planting and landscaping.	
8. Provide everyone with the opportunity to live in good quality, affordable housing, and ensure an appropriate mix of dwelling sizes, types and tenures	- Help meet affordable housing needs/the needs of the local community (if known)?	The development of site option E5 would deliver approximately 1385 dwellings, which provides the opportunity to deliver a significant number of good quality affordable homes that meets local needs in terms of tenure, size and type.	(+++)
9. Reduce poverty and deprivation and promote more inclusive and self-contained communities	- Result in an increase in poverty and deprivation and/or lead to significant social exclusion amongst existing and new residents?	Site option E5 is situated in an area of land considered to have relatively high levels of deprivation and an area with relatively low levels of deprivation.  Two areas with some of the highest levels of deprivation in Chippenham are located to the northwest and northeast of this site option. The indicative layout proposes residential development in the west of the site in proximity to one of these areas.  The provision of community facilities and employment land as part of the mixed-use development of this site option would benefit the wider area and support reductions in deprivation nearby.	(+)
	- Result in the loss of any existing Community facility/green or amenity space or would it contribute to the provision of a new facility/space?	An area of indicative residential development in the west of this site option proposes the loss of an area of accessible open space situated south of Rowden Lane. Further proposals for this site option could prevent the loss of this open space. Where it can be demonstrated that loss is unavoidable proposals should create additional open space to offset the loss. The indicative layout proposes a vast area of green space in the east of the area, this has potential to be delivered as	(-)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
		accessible open space which would offset the loss of the existing accessible open space.	
	- Result in the loss of PROW or provision of new PROW?	A number of PRoWs run through the site. Where PRoWs pass through areas proposed for green space adverse effects are not anticipated.  Proposed residential development in the west of site option has the potential to affect several PRoWs. Further proposals for the site should demonstrate how development would retain PRoWs, or where loss or alteration of a PRoW is	(-)
	- Be accessible to educational and health facilities?	unavoidable, how a suitable alternative offsets this.  Access to secondary schools from this site option is weak by non-motorised modes. Vehicles accessing schools in the north and east would be directed through the centre of Chippenham. Access by public transport in the west of the site is strong and offers a potential solution. Secondary schools in Chippenham are reaching capacity and may be unable to accommodate the number of pupils likely to arise from development of this site. Provision of educational facilities as part of development proposals or contribution to the delivery of new educational facilities off-site would mitigate this.	(-)
		This site option has strong to moderate non-motorised access to the hospital, the northern areas perform particularly strongly as the hospital is situated immediately north of the indicative areas proposed for residential development.	
10. Reduce the need to travel and promote more sustainable	- Occur in an area currently accessible by public transport/ walking and cycling? If not, is there	The site is situated along the B4528/B4643 which is well served by public transport. Development of the site could support an increase in the use of public transport services along this corridor.	(-)
transport choices	scope to make it so?	Ease of access to the town centre by non-motorised modes from the site is strong in the north and moderate to weak in the south in the indicative area of residential development and employment areas. Further proposals for the development of this site option should demonstrate how/if development could be supported by and integrate with improvements to the wider pedestrian and cycle network.	

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
	- Support improvements to public transport connectivity and pedestrian and cycle links to the town, town centre, railway station and Wiltshire College campuses in Chippenham?	This site option is unlikely to support significant improvements to public transport connectivity, although residential and employment development of the site could create new demand for existing bus services along the B4528/B4643 corridor.  Further proposals have the potential to integrate on-site pedestrian and cycle routes into existing routes in the wider area, creating more direct links between the town centre and areas further south.	(+)
11. Encourage a vibrant and diversified economy and provide for long-term sustainable economic growth	Offer the potential to provide employment land for B1, B2 and B8 uses?	E5 proposes 18.1ha of employment development. This is shown on the indicative layout drawings as being formed of one large area in the southwest of the site option, bordered by the B4528/B4643 to the east and A350 to the south.  Access to the PRN and strategic lorry route along the A350 is strong. The B4528/B4643 is an existing bus corridor, providing strong public transport access to the indicative employment area. The scale, layout and access of the indicative employment land suits a mix of use types.	(+++)
	Support the vitality and viability of Chippenham town centre (proximity to town centre, built up areas, station hub, college)?	The area proposed for employment development in this site option would be situated on the periphery of the town and away from existing built up areas. The scale of employment development proposed at this site option would support the vitality of the town, although the moderate to weak non-motorised access and distance between the proposed site and town centre is likely to limit the extent to which the beneficial effect is felt.	(+)
	Provide infrastructure that will help to promote economic growth?	This site option holds the potential to deliver part of the southern link road between the A350 south of Chippenham and the A4 to the east. This would support major housing and employment growth at adjacent sites.  E5 also proposes an extensive area of green infrastructure along the River Avon, this would facilitate better connection to the town centre from the south which would likely have a minor beneficial effect on economic growth.	(+++)
	Be well connected to Principal Employment Areas?	The indicative area of employment land proposed in the southwest of this site option is situated in proximity to the Methuen Business Park. Improvements to connections between the two sites would capitalise on the potential.	(+)

SA objective (see also decision - aiding questions in SA Framework)	Questions to aid the assessment (consider each)  Would development of the site	Evidence of likely effects and further comments, including any specific mitigation measures that could reduce likely effects (consider likely scale of effects – temporary, reversibility, spatial scale, permanence)	Assessment outcome (on balance)
12. Ensure adequate provision of high quality	Support the vitality of existing employment areas?	The Methuen Business Park and Herman Miller Industrial Estate are situated to the north of the indicative employment site in the southwest of the site. Employment development at this site option would likely bring about beneficial effects for the vitality of existing these employment areas.	(+++)
employment land and diverse employment opportunities to meet the needs of local businesses and a changing workforce	Provide employment land that meets commercial market requirements? (offices require land in or close town centres; warehousing requires large sites with good local access to strategic road network)	The indicative employment area proposed comprises a large site with strong access by public transport and strong access to the PRN and strategic lorry route.  The employment land proposed at E5 meets basic commercial market expectations for a range of employment land types.	(+++)
	Provide employment land in areas that are easily accessible by sustainable transport?	Access to indicative employment land at this site option is strong by public transport due to the proximity of the B4528/B4643 corridor running adjacent to the site.  Non-motorised access to the town centre and transport hubs is weak, however proposals for this site can make provision for strong and direct pedestrian and cycle links through the site to better link the town centre with the proposed employment area.	(+)

Euston Tower 30<sup>th</sup> Floor 286 Euston Road London NW1 3AT

