

APPENDIX II: NON-TECHNICAL SUMMARY

OF THE

DRAFT ENVIRONMENTAL REPORT

OF THE

PROPOSED VARIATION TO THE SOUTH DUBLIN COUNTY DEVELOPMENT PLAN 2004 - 2010

(LANDS AT ST. EDMONDSBURY AND WOODVILLE, LUCAN)

STRATEGIC ENVIRONMENTAL ASSESSMENT



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Section 1 Introduction

1.1 Introduction to SEA

As a result of the Strategic Environmental Assessment (SEA) Regulations, certain plans and programmes - including certain County Development Plan Variations - which are prepared by South Dublin County Council (SDCC) are required to undergo SEA. SEA is a systematic process of predicting and evaluating the likely environmental effects of implementing a proposed plan, or other strategic action, in order to ensure that these effects are appropriately addressed at the earliest appropriate stage of decision-making on a par with economic and social considerations.

The findings of SEA are expressed in an Environmental Report which is submitted to the Elected Members alongside the relevant plan or programme. The Elected Members must take account of the Environmental Report before the adoption of the plan or programme.

This is the Non-Technical Summary of the Draft Environmental Report for the Proposed Variation to the South Dublin County Development Plan (SDCCP) 2004-2010.

The SEA Directive requires that reasonable alternatives, taking into account the objectives

and the geographical scope of the Variation, are identified, described and evaluated for their likely significant effects on the environment. The SEA process is led by the environmental baseline, the current state of the environment, to facilitate the identification, evaluation and subsequent monitoring of the effects of the Variation and the alternatives.

In addition to achieving compliance with the provisions of the SEA Regulations, the SEA is being carried out in order to provide the Elected Members with a clear understanding of the likely environmental consequences of decisions regarding future development and in order to improve planning and environmental management.

1.2 A Proposed Variation

1.2.1 Subject Lands

The general area to which the Variation relates is indicated by the broken red line on Figure 1.1. The lands are bounded on the north, east and west by the River Liffey and to the south by the N4 National Primary Road and the R835 Regional Road serving Lucan Village.

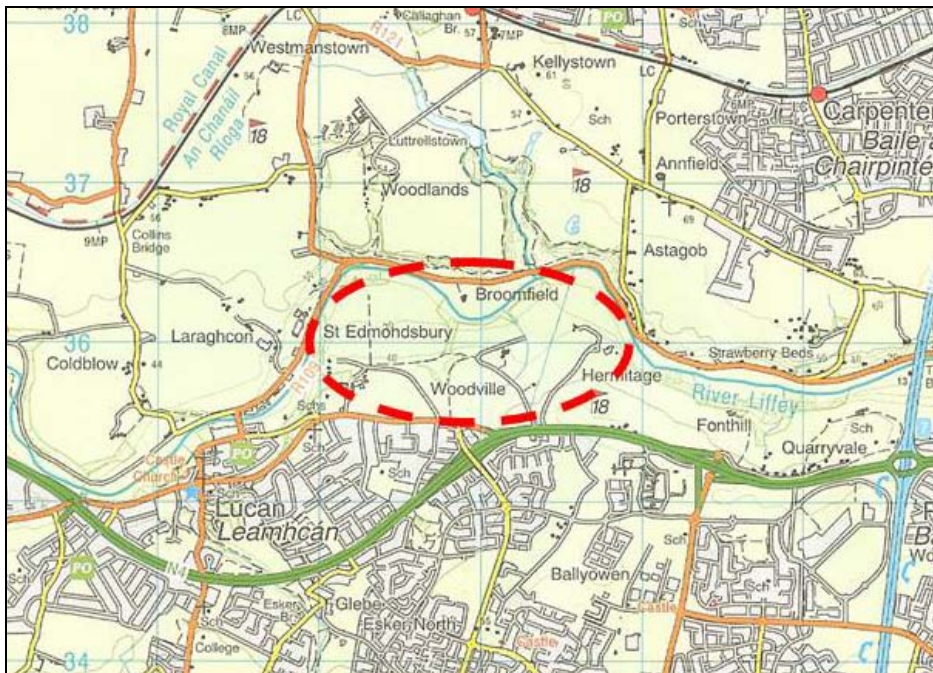


Figure 1.1 General Location Map of St. Edmondsbury and Woodville

1.2.2 Submission by Affordable Homes Partnership

South Dublin County Council is engaging in this Variation making process in response to a recommendation which was submitted by the Affordable Homes Partnership to the Council to initiate a variation of its Development Plan. A variation under the submission would involve:

- the re-zoning of lands comprising 99 acres adjoining the Liffey Valley from zoning objective GB - 'to protect and improve High Amenity Areas', to zoning objective A1 - 'to provide for new Residential Communities in accordance with Approved Area Plans', and;
- the insertion of a Specific Local Objective on the subject lands to provide that in any residential development 70% of the residential units (up to 10% of which may be social housing if so determined by the planning authority) shall be for affordable housing purposes as agreed in the covenant with the AHP.

The development proposed by Ballymore relates to a 115 acre site, which includes 16 acres of developed open space. It is envisaged by the AHP that the residential yield on the site would be 1,600 homes as follows: 1,000 affordable homes; 100 sheltered homes for the elderly and; 500 homes to be sold at market value.

The development company, Ballymore, also proposes:

- to donate the remaining 184 acres of the land that they own in the Liffey Valley to South Dublin County Council - including 16 acres of developed open space associated with the proposed development, 143 acres within the Liffey Valley SAAO area and a further 25 acres adjoining the SAAO in the ownership of Ballymore - for recreational and amenity purposes;
- to reserve a three acre site for a new primary school, and;
- to include a neighbourhood centre with crèche/community facilities and a local centre in the proposed development.

The site plan as submitted by Ballymore to the AHP is shown on Figure 1.2. It is noted that this site plan corresponds to Scenario 8 shown in Section 3.

1.2.3 Alternatives

Section 3 of this report identifies different alternative scenarios of how to achieve the development set out under the AHP recommendation. The evaluation of alternatives has resulted in the identification of potential impacts and mitigation measures for each alternative which are detailed in the Environmental Report and summarised in Sections 4 and 5 of this report. The Elected Members decide which alternative, if any, to proceed with.

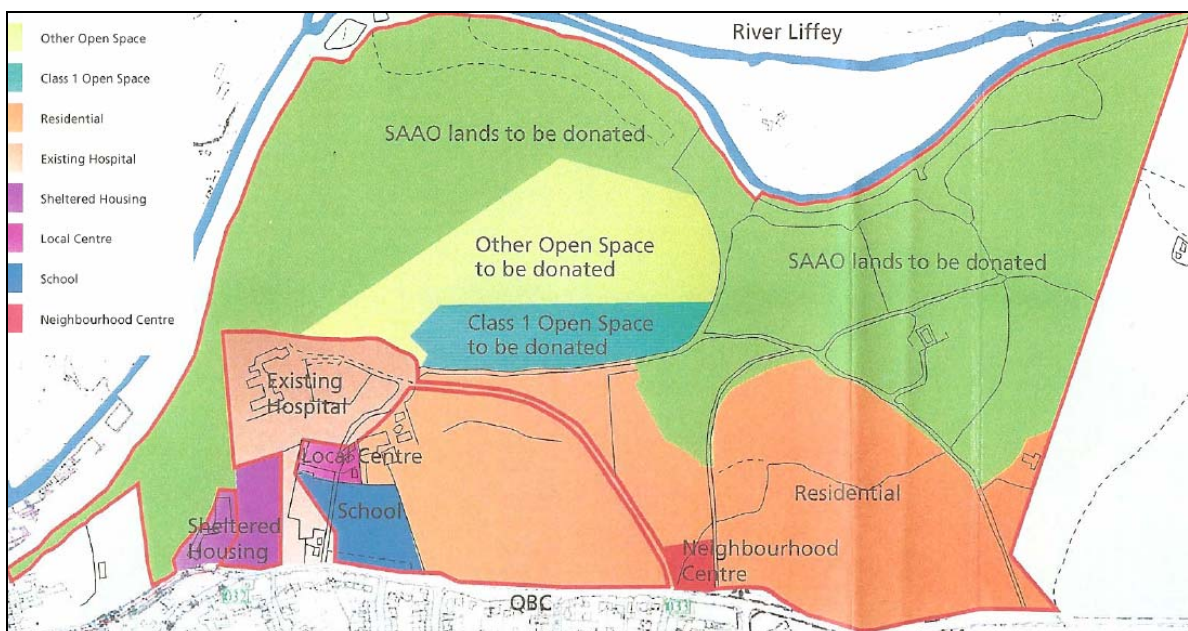


Figure 1.2 Site Plan from Ballymore Proposal to the AHP

Section 2 The Environmental Baseline and Strategic Environmental Objectives

2.1 Introduction

The *environmental baseline*, the current state of the environment at St. Edmondsbury and Woodville, is summarised in this Section and described in the Environmental Report in line with the legislative requirements, encompassing the following components - biodiversity, flora and fauna, population, human health, soil, water, air and climatic factors, material assets, cultural heritage, landscape and the interrelationship between these components.

Also included are *Strategic Environmental Objectives (SEOs)* which have been developed for the relevant environmental components for this SEA. SEOs are used as standards against which the objectives of the Proposed Variation, including the zoning provisions, can be evaluated in order to help identify areas in which significant adverse impacts are likely to occur, if unmitigated.

SEOs are methodological measures which are developed from international, national and local authority policies which generally govern environmental protection objectives and against which the environmental effects of the Proposed Variation can be tested. Such policy includes that of various European Directives which have been transposed into Irish law and relevant other Irish environmental legislation all of which are intended to be implemented at county level in South Dublin and integrated into any plan or Variation thereof for the County.

SEOs are distinct from the objectives of the County Development Plan to which the proposed Variation relates, although they will often overlap. An example of an SEO for the environmental component of water is *'To maintain and improve, where possible, the quality of the River Liffey'*.

The environmental baseline and the SEOs are used in order to identify, describe and evaluate the likely significant environmental effects of implementing the Proposed Variation and the alternatives (see Section 3) and in order to determine the required monitoring measures.

2.2 Biodiversity and Flora and Fauna

2.2.1 Baseline

A portion of the Liffey Valley proposed Natural Heritage Area (pNHA) site is situated to the north of the lands where the Variation is proposed. The pNHA covers the River Liffey and parts of its banks between Leixlip Bridge on the Kildare-Dublin border and downstream of the weir at Glenaulin, Palmerstown, Co. Dublin.

A portion of the Liffey Valley Special Amenity Area Order (SAAO) 1990 site is situated to the north of the lands where the Variation is proposed. The SAAO covers almost all of the pNHA lands as well as a large portion of improved grassland which is utilised by bird populations as feeding grounds.

Lands outside of the designated ecological sites consist of semi-improved grasslands in the northern portion of the lands with more improved grasslands supporting agriculture found in the southern portion of the lands near the old Galway Road. The lands in the north include a greater diversity of grasses and plant species than those in the south and act as feeding grounds for a variety of bird species.

Certain areas of vegetation within the subject lands have a Specific Objective in the South Dublin County Development Plan (SDCDP) 'to protect and preserve Trees and Woodlands' attached to them.

Ecological designations are mapped on Figure 2.1 (boundaries taken from the South Dublin County Development Plan 2004-2010).

2.2.2 Strategic Environmental Objectives

- B1: To avoid loss of relevant habitats, species or their sustaining resources within SAAO or pNHA lands as a result of the Variation
- B2: To avoid significant adverse impacts, including direct, cumulative and indirect impacts, on relevant habitats, species or their sustaining resources within SAAO or pNHA lands as a result of development adjacent to these sites arising from the Variation
- B3: To sustain, enhance or where relevant to prevent the loss of, ecological networks or parts thereof which provide significant connectivity between designated ecological sites and areas of local biodiversity

2.3 Population and Human Health

2.3.1 Baseline

Access to the lands at St. Edmondsbury and Woodville will facilitate the use of the lands as recreational, visual, cultural and ecological amenities. It will be important that levels of access to the lands are not less than those that are currently available.

With regard to human health, impacts relevant to the SEA are those which arise as a result of interactions with environmental vectors (i.e. environmental components such as air, water or soil through which contaminants or pollutants, which have the potential to cause harm, can be transported so that they come into contact with human beings).

2.3.2 Strategic Environmental Objective

- HH1: To protect human health from hazards or nuisances arising from exposure to incompatible landuses

2.4 Water

2.4.1 Baseline

The River Liffey is a dominant feature of the Proposed Variation lands. It bounds the western and northern sides of the area, flowing in an easterly direction to its mouth some 15 km downstream. It supports important aquatic flora and fauna and forms a very important part of Dublin's ecological network.

A stream divides the eastern Woodville section of the lands before meeting the River Liffey. This stream, together with buffers of 20m from both banks, is integrated into development constraints which are shown on Figure 2.5.

The principal legislation governing water quality in Ireland is the European Communities (Water Policy) Regulations 2003 (SI No. 722 of 2003) which transposes the Water Framework Directive (2000/60/EC). The Water Framework Directive (WFD) requires that all member states implement the necessary measures to prevent deterioration of the status of all waters - surface, ground, estuarine and coastal - and protect, enhance and restore all waters with the aim of achieving good status by 2015.

The Lower River Liffey waters are classified as being at risk of failing to achieve the objectives of the Water Framework Directive due to:

- Diffuse agricultural and urban pollution
- Upstream impoundments
- Point source pollution from wastewater treatment plants, Combined Sewage Overflows, Integrated Pollution Prevention Control licenses and Section 4 licenses

Groundwater alongside this stretch of the River Liffey - from Leixlip Reservoir to Islandbridge - is considered to be at risk from clusters of leaking sewers, septic tanks and contaminated land¹.

2.4.2 Strategic Environmental Objective

- W1: To maintain and improve, where possible, the quality of the River Liffey

¹ ERBD Project Office (2005) *Article 5 Characterisation Summary Report* Dublin: ERBD Project Office

2.5 Waste Water

2.5.1 Baseline

It is envisaged that waste water resulting from development will be pumped to the existing pumping station at Quarryvale and then to the relevant works for treatment. Impacts relating to waste water as a result of new development under the Variation will be avoided by complying with Mitigation Measure Number 9 (*MM9: Landuses on this site shall be sized, specified and designed to be capable of being accommodated by existing or imminent public infrastructure and utilities. This shall be achieved by the application of appropriate design standards and criteria*). Should new development be permitted before waste water capacity is available significant adverse impacts upon water quality, biodiversity, flora and fauna and human health would be likely, however, impacts relating to waste water will be avoided by complying with Mitigation Measures proposed by the Environmental Report.

2.5.2 Strategic Environmental Objective

M1: To serve new development under the Variation with appropriate waste water treatment

2.6 Transport

Traffic issues have been determined to be more appropriately assessed at higher levels in the land use and environmental protection hierarchies, at national and regional levels by the National Roads Authority, as well as at programme and individual project levels.

Issues relating to traffic are required to be evaluated and considered at project level through EIA.

2.7 Cultural Heritage

2.7.1 Archaeological Heritage

2.7.1.1 Baseline

One entry in the Record of Monuments and Places is located on the lands at St. Edmondsbury and Woodville. This Recorded

Monument (017-006) is the site of a castle which used to stand over the Woodville lands.

The location of the monument is indicated with a generic circle on the Recorded Monument location taken from Record of Monuments and Places 6" Sheet No. 17. However no publication has been identified as having mapped the exact layout of the monument. Having regard to previous experiences at such sites, a 50m radial buffer was applied to the indicative location of the monument in order to facilitate the evaluation of the Variation and the alternatives against this component of cultural heritage.

The indicative Recorded Monument location and 50m radial buffer are shown on Figure 2.2.

2.7.1.2 Strategic Environmental Objective

CH1: To protect the archaeological heritage of Recorded Monument 017-006

2.7.2 Architectural Heritage

2.7.2.1 Baseline

The lands at St. Edmondsbury and Woodville have a rich architectural heritage, displayed by a number of entries in the Record of Protected Structures (RPS). A 50m buffer zone was applied to relevant Protected Structures in order to facilitate the evaluation of the Variation and the alternatives against the context of architectural heritage.

This enabled the identification of potential conflicts between development and the context of architectural heritage. The location of architectural heritage and the context of this heritage is shown on Figure 2.3.

2.7.2.2 Strategic Environmental Objectives

CH2: To preserve and protect the special interest and character of architectural heritage found within the subject lands with regard to Protected Structures

CH1: To preserve and protect the context in the surrounding landscape of architectural heritage found within the subject lands with regard to Protected Structures

2.8 Landscape

Regard was had to Figure 2.5 during the formulation of alternative scenarios and during the evaluation of these scenarios (see Sections 6 and 7).

2.8.1 Baseline

Site visits together with an examination of the topography and vegetation cover at the site allowed for the identification of areas of visual vulnerability which are located outside the SAAO site.

Two areas of visual vulnerability were identified within which if any development was to take place it would be likely to give rise to a significant loss of visual amenity to the SAAO. This loss of visual amenity would occur as a result of the visible incursion of structures - especially as seen on the skyline from the environs of the river. The larger of these two areas is located adjacent to the SAAO site at St. Edmondsbury while a smaller area is located adjacent to the SAAO site at Woodville.

In addition, an area of visual vulnerability was identified to the north of the gate lodge Protected Structure. This area is comprised of open grassland and is visible from the current entrance to St. Edmondsbury Hospital gateway entrance. Although development in this area of visual vulnerability would be likely to result in a physical loss to the context of this Protected Structure, the importance of this area is considered to be less than that of the two areas of visual vulnerability which relate to the visual amenity of the SAAO.

Areas of visual vulnerability located outside the SAAO site are shown on Figure 2.4.

2.8.2 Strategic Environmental Objective

L1: To protect Areas of Visual Vulnerability within the subject lands outside the SAAO

2.9 Development Constraints

The description of the environmental baseline allowed for the identification of areas which are likely to constrain any future development. Figure 2.5 shows constraints to any development from both designated environmental components and areas of visual vulnerability outside the Liffey Valley SAAO.

Appendix II: Non Technical Summary of the Draft Environmental Report of the Proposed Variation to the South Dublin County Development Plan 2004 - 2010 SEA



Figure 2.1 Ecological Designations



Figure 2.2 Archaeological Heritage



Figure 2.3 Architectural Heritage

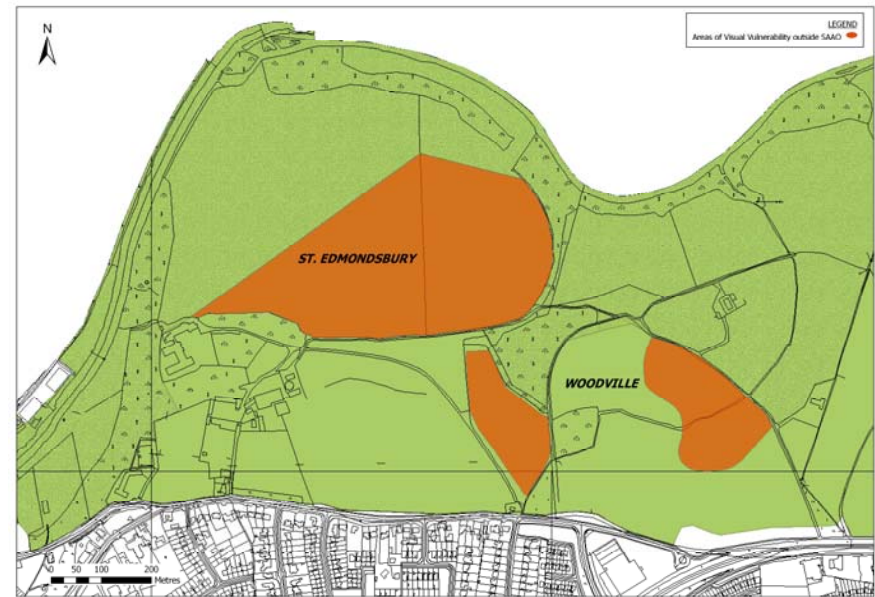


Figure 2.4 Areas of Visual Vulnerability



Figure 2.5 Composite Map illustrating Constraints from Designations, Areas of Visual Vulnerability outside SAO and Stream

Section 3 Description of Alternative Plan Scenarios

This section identifies and describes different alternatives of how to accommodate the recommendation of the Affordable Homes Partnership, taking into account the higher level strategic actions as well as the geographical scope of the Variation.

The total area for each of the scenarios is illustrated on Figures 3.1 to 3.8 and shown on Table 3.1. If a Variation is adopted it will be up to the applicant to decide as to what density of development will be applied for.

| Scenario No. | Total Area (hectares) Zoned 'A1' |
|---------------------|---|
| 1 | 0 |
| 2 | 9.95 |
| 3 | 9.92 |
| 4 | 19.85 |
| 5 | 23.78 |
| 6 | 29.92 |
| 7 | 35.35 |
| 8 | 38.53 |

Table 3.1 'A1' Zoned Areas

Each Scenario is described as follows:

Scenario 1: 'Do Nothing'

This scenario would involve the continuation of existing trends at the St. Edmondsbury and Woodville lands by not making any variation to the SDCDP.

Scenario 2: Western Lands

This scenario would involve allowing development in the western lands of the study area and adhering to all the environmental constraints.

Scenario 3: Eastern Lands

This scenario would involve allowing development in the eastern lands of the study area and adhering to most of the environmental constraints - areas of visual vulnerability would partially be adhered to with full adherence requiring mitigation.

Scenario 4: Eastern and Western Lands

This scenario would involve allowing development in the eastern and western lands of the study area and adhering to most of the environmental constraints detailed under - areas of visual

vulnerability would partially be adhered to with full adherence requiring mitigation.

Scenario 5: Eastern and Western Lands and fragmented areas of visual vulnerability

This scenario would involve allowing development in the eastern and western lands of the study area adhering to most of the environmental constraints. However, the environmental constraints presented by areas of visual vulnerability would not be adhered to.

Scenario 6: As Scenario 5 - but with no buffers around cultural heritage

This scenario would involve allowing development in the eastern and western lands of the study area and adhering to some of the environmental constraints. The environmental constraints presented by areas of visual vulnerability, buffers around cultural heritage and the stream in the eastern lands would not be adhered to.

Scenario 7: As Scenario 6 - but with no tree protection

This scenario would involve allowing development in the eastern and western lands of the study area and adhering to some of the environmental constraints. The environmental constraints presented by areas of visual vulnerability, buffers around cultural heritage, the stream in the eastern lands and tree protection objectives would not be adhered to.

Scenario 8: As Scenario 7 - but with no heritage protection and with corner of pNHA zoned

This scenario would involve allowing development in the eastern and western lands of the study area and adhering to the SAAO environmental constraint. The environmental constraints presented by areas of visual vulnerability, buffers around cultural heritage, archaeological heritage, architectural heritage, the stream in the eastern lands, a corner of the pNHA and tree protection objectives would not be adhered to.

Appendix II: Non Technical Summary of the Draft Environmental Report of the Proposed Variation to the South Dublin County Development Plan 2004 - 2010 SEA



Figure 3.1 Scenario 1 'Do Nothing'

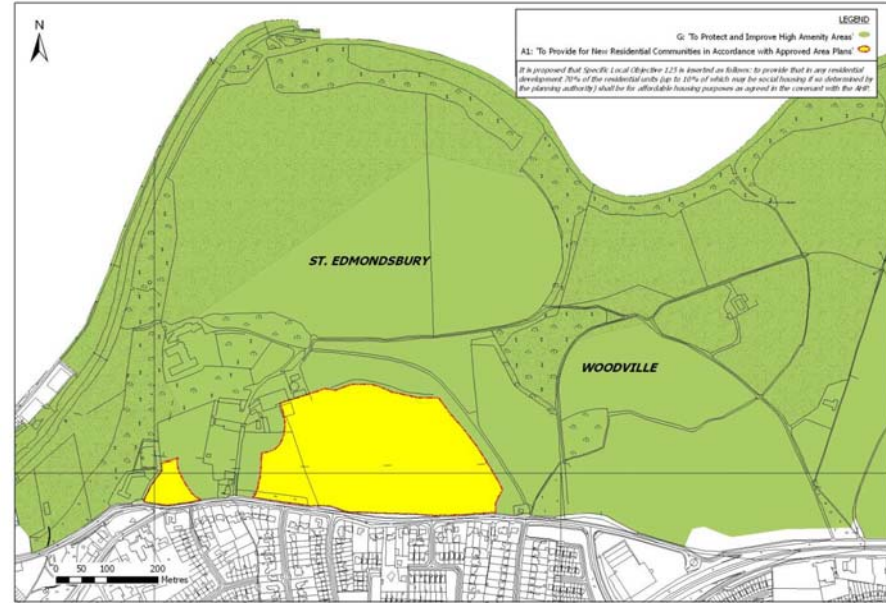


Figure 3.2 Scenario 2 'Western Lands'

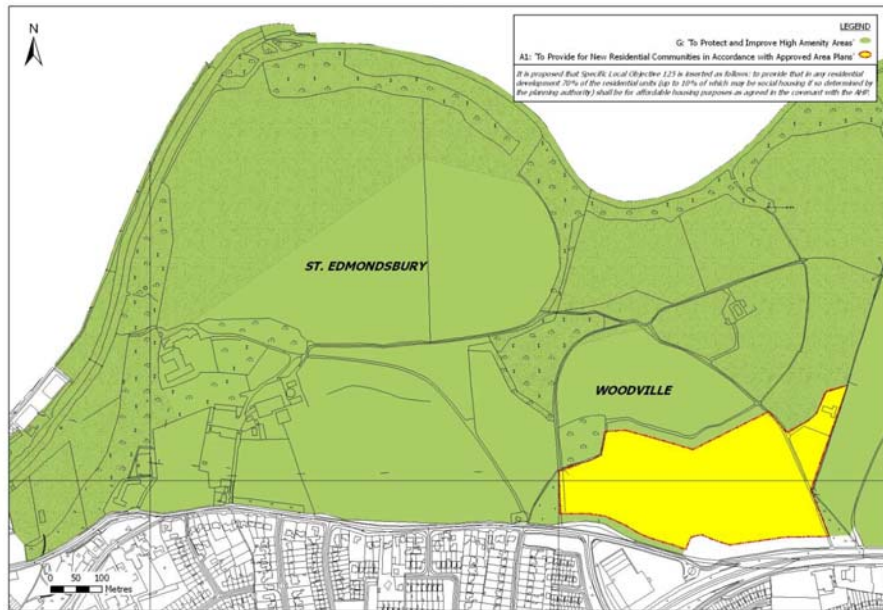


Figure 3.3 Scenario 3 'Eastern Lands'

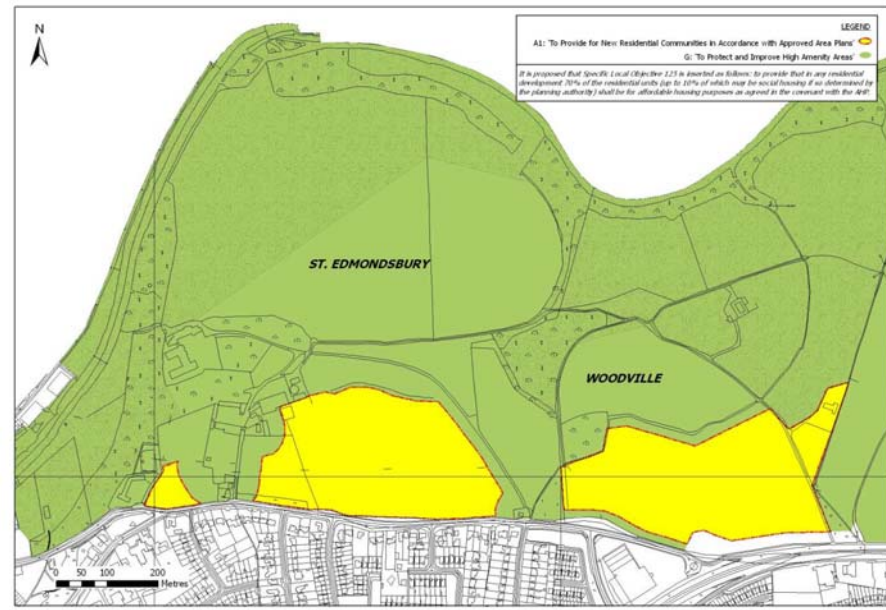


Figure 3.4 Scenario 4 'Eastern and Western Lands'

Appendix II: Non Technical Summary of the Draft Environmental Report of
the Proposed Variation to the South Dublin County Development Plan 2004 - 2010 SEA

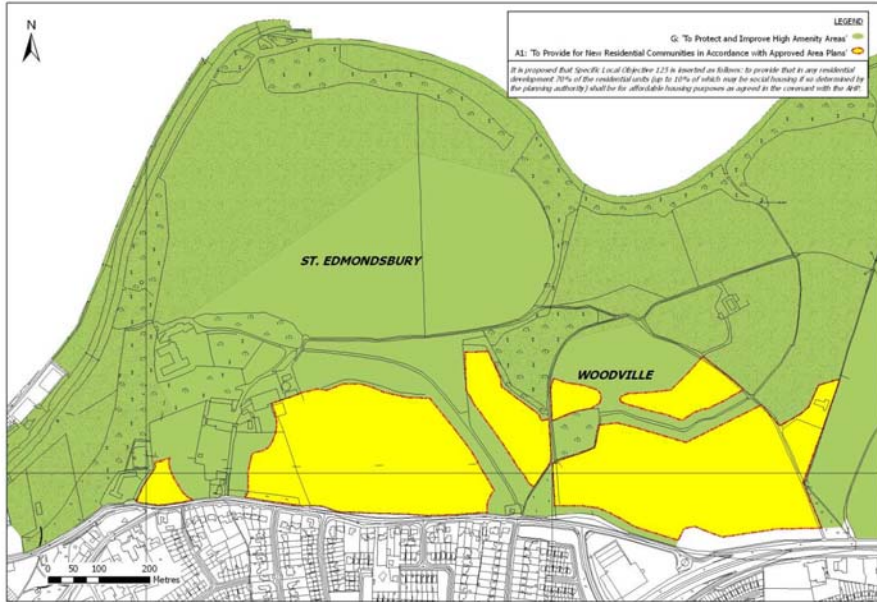


Figure 3.5 Scenario 5 'Eastern and Western Lands and fragmented areas of Visual Vulnerability'

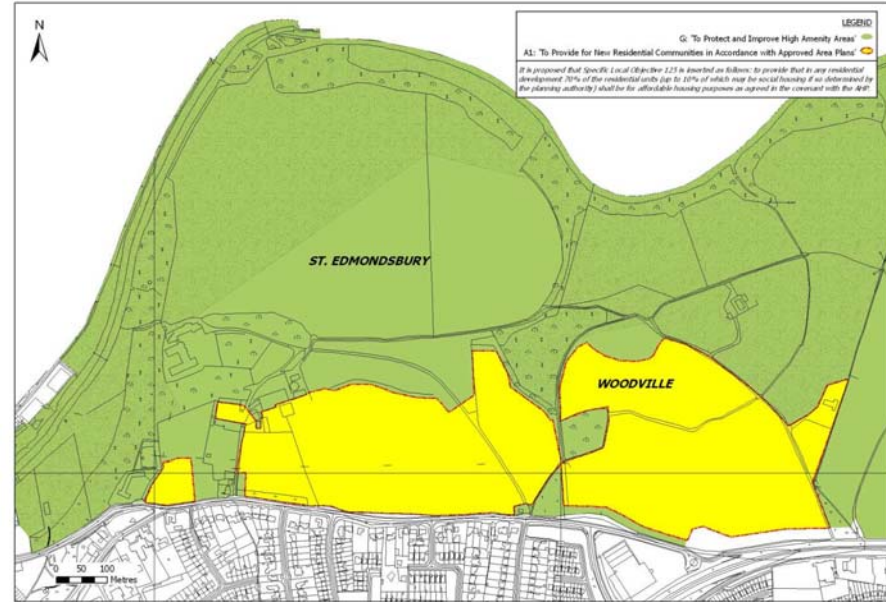


Figure 3.6 Scenario 6 'As Scenario 5 - but with no buffers around cultural heritage'

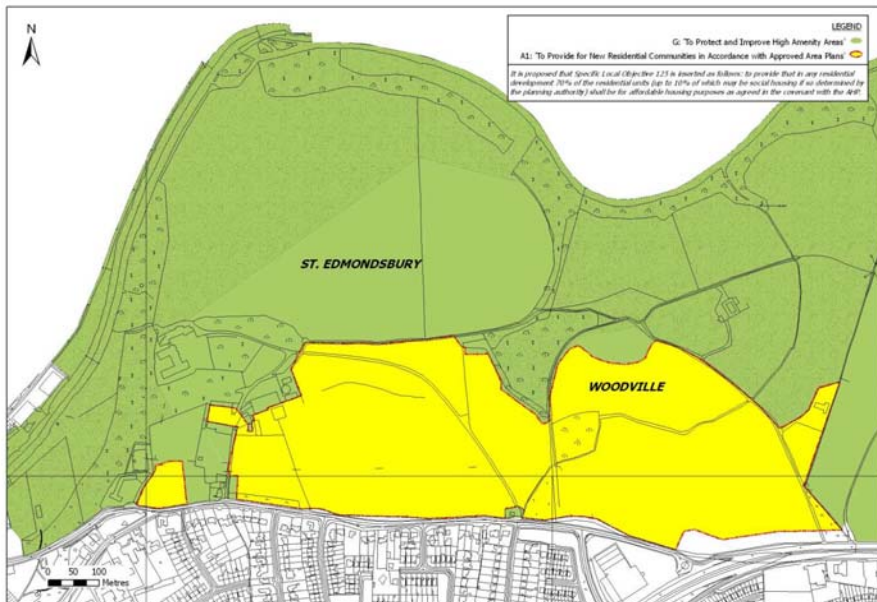


Figure 3.7 Scenario 7 'As Scenario 6 - but with no tree protection'

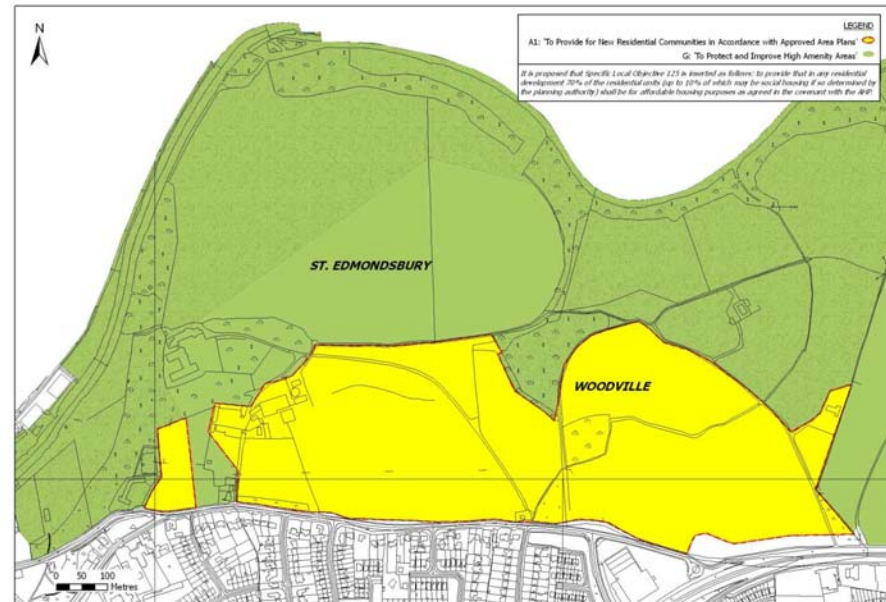


Figure 3.8 Scenario 8 'As Scenario 7 - but with no heritage protection and with corner of pNHA zoned'

Section 4 Evaluation of Alternative Plan Scenarios

4.1 Introduction

This section summarises the Environmental Report's evaluation of the scenarios against the environmental baseline and the Strategic Environmental Objectives (SEOs).

Use has been made of the environmental baseline description - including the maps which spatially represent components of the environmental baseline - in order to identify how each alternative scenario would impact upon the environment and planning.

4.2 Evaluation

4.2.1 Scenario 1

The environmental effects of this option will be to continue the trends that are evident in the existing environment namely:

- Areas of improved grassland will continue to be managed and used as such
- Woodland areas will continue to undergo slow changes in structure and competition as mature and over-mature plantation species are replaced, through successional processes, by indigenous species – with associated changes in the biodiversity of the flora and fauna. Free-standing ornamental planting will continue to mature and are unlikely to be replaced thereafter.
- The cultural heritage of the site - both national monuments and protected structures as well as their landscape context and settings - will continue to age, largely undisturbed.
- Views of the site from the entrance to St. Edmondsbury Hospital and views from the SAAO and its environs will remain largely unchanged.
- Water and air quality will remain largely unchanged – improving slightly due to improved ambient conditions. There will be no additional effects on utilities and infrastructure – such as water supply, sanitary services and traffic.

4.2.2 Scenario 2

The environmental effects of this option will be to continue the trends that are evident in the existing environment with the exception of the following minor effects:

- Loss of a relatively small area of managed grassland that is of little visual, ecological or cultural significance
- Increases in traffic on local junctions - particularly with the N4 - at peak hours dependent on the density of development
- Increased loading on water and sanitary services dependent on the density of development
- Otherwise the environmental effects of this option will be to continue the trends that are evident in the existing environment as set out under Scenario 1 above.

4.2.3 Scenario 3

The environmental effects of this option will be to continue the trends that are evident in the existing environment with the exception of the following minor effects;-

- Loss of a relatively small area of managed grassland that is of little visual, ecological or cultural significance
- Increases in traffic on local junctions - particularly with the N4 - at peak hours dependent on the density of development
- Increased loading on water and sanitary services dependent on the density of development
- Otherwise the environmental effects of this option will be to continue the trends that are evident in the existing environment as set out under Scenario 1 above.

4.2.4 Scenario 4

Effects of this scenario include:

- Loss of an area of managed grassland that is of little visual, ecological or cultural significance
- Increases in traffic on local junctions - particularly with the N4 - at peak hours, when compared with Scenarios 2 and 3
- Increased loading on water and sanitary services, when compared with Scenarios 2 and 3
- Otherwise the environmental effects of this option will be to continue the trends that are evident in the existing environment as set out under Scenario 1 above.

4.2.5 Scenario 5

The environmental effects of this option will affect the ecological and visual integrity of the boundaries of the SAAO.

- Loss of an area of managed grassland and adverse impacts on ecological connectivity
- Adverse impacts on views from within the SAAO towards the north and north-east of the subject lands
- Adverse impact on views from entrance gates and driveway to St. Edmondsbury Hospital
- Increases in traffic on local junctions - particularly with the N4 - at peak hours, when compared with Scenario 4
- Increased loading on water and sanitary services, when compared with Scenario 4

4.2.6 Scenario 6

The environmental effects of this option will affect the ecological and visual integrity of the boundaries of the SAAO as well as the context and settings of Recorded Monuments and protected structures.

- Loss of an area of managed grassland and adverse impacts on ecological connectivity
- Adverse impacts on watercourse leading to important salmon waters

- Adverse impacts on views from within the SAAO towards the north and north-east of the subject lands
- Increased adverse impacts on views from entrance gates and driveway to St. Edmondsbury Hospital when compared with Scenario 5
- Adverse impacts on the context of Protected Structures
- Significant potential for adverse impacts on the remains of a Recorded Monument
- Increases in traffic on local junctions - particularly with the N4 - at peak hours, when compared with Scenario 5
- Increased loading on water and sanitary services, when compared with Scenario 5

4.2.7 Scenario 7

This option will negatively affect the ecological and visual integrity of the SAAO, the protection of the Recorded Monument and the context of Protected Structures. It is likely to lead to a more significant loss of trees and woodland than would be the case under any of the previous scenarios.

- Loss of an area of managed grassland, trees and areas of woodland together with associated adverse impacts on ecological connectivity
- Adverse impacts on watercourse leading to important salmon waters
- Adverse impacts on views from within the SAAO towards the north and north-east of the subject lands
- Adverse impact on views from entrance gates and driveway to St. Edmondsbury Hospital
- Adverse impacts on the context of Protected Structures
- Significant potential for adverse impacts on the remains of a Recorded Monument
- Adverse impacts on trees and woodland that are designated for protection in the County Development Plan
- Adverse impacts on the pNHA due to excess proximity of development
- Increases in traffic on local junctions - particularly with the N4 - at peak hours, compared with that of Scenario 6
- Increased loading on water and sanitary services, compared with that of Scenario 6

4.2.8 Scenario 8

The environmental effects of the development of housing and associated developments over the entire area with its associated site development works and loading on infrastructure and utilities are likely to lead to effects on the ecological and visual integrity of the boundaries of the SAAO as well as the context and settings of the Recorded Monument and the protected structures. It is likely to lead to a more significant loss of trees and woodland than would be the case under any of the previous scenarios as well as having a high potential to adversely affect the fabric of a Recorded Monument and Protected Structures.

These effects are likely to be;-

- Loss of an area of managed grassland , trees and areas of woodland together with associated impacts upon ecological connectivity
- Adverse impacts on watercourse leading to important salmon waters
- Adverse impacts on views from within the SAAO towards the north and north-east of the subject lands
- Adverse impact on views from entrance gates and driveway to St. Edmondsbury Hospital
- Adverse impacts on the fabric and context of a number of Protected Structures

- Adverse impacts on the remains of a Recorded Monument
- Adverse impacts on trees and woodland that are designated for protection in the County Development Plan
- Adverse impacts on the pNHA due to excess proximity of development
- Increases in traffic on local junctions - particularly with the N4 - at peak hours, compared with that of Scenario 7
- Increased loading on water and sanitary services, compared with that of Scenario 7

4.3 Evaluation against SEOs

Based on an understanding of the existing environmental conditions in the Variation lands, a series of SEOs were developed in order to assess the likely significant environmental effects which would be caused by implementation of each of the eight alternative scenarios described and mapped in Section 6. The alternatives are evaluated using compatibility criteria (see Table 4.2 overleaf) in order to determine how they are likely to affect the status of these SEOs.

Table 4.1 (below) brings together all the SEOs outlined in Section 3 which have been developed from international, national and local authority policies which generally govern environmental protection objectives.

| SEO Code | SEO |
|------------|--|
| B1 | To avoid loss of relevant habitats, species or their sustaining resources within SAAO or pNHA lands as a result of the Variation |
| B2 | To avoid significant adverse impacts, including direct, cumulative and indirect impacts, on relevant habitats, species or their sustaining resources within SAAO or pNHA lands as a result of development adjacent to these sites arising from the Variation |
| B3 | To sustain, enhance or where relevant to prevent the loss of, ecological networks or parts thereof which provide significant connectivity between designated ecological sites and areas of local biodiversity |
| HH1 | To protect human health from hazards or nuisances arising from exposure to incompatible landuses |
| W1 | To maintain and improve, where possible, the quality of the River Liffey |
| M1 | To serve new development under the Variation with appropriate waste water treatment |
| CH1 | To protect the archaeological heritage of Recorded Monument 017-006 |
| CH2 | To preserve and protect the special interest and character of architectural heritage found within the subject lands with regard to Protected Structures |
| CH3 | To preserve and protect the context in the surrounding landscape of architectural heritage found within the subject lands with regard to Protected Structures |
| L1 | To protect Areas of Visual Vulnerability within the subject lands outside the SAAO |

Table 4.1 Strategic Environmental Objectives (SEOs)

Appendix II: Non Technical Summary of the Draft Environmental Report of the Proposed Variation to the South Dublin County Development Plan 2004 - 2010 SEA

| | Likely to Improve status of SEOs | Probable Conflict with status of SEOs- unlikely to be mitigated | Potential Conflict with status of SEOs- likely to be mitigated | Uncertain interaction with status of SEOs | Neutral Interaction with status of SEOs | No Likely interaction with status of SEOs | Mitigation Measure Codes (see Section 8) |
|------------|---|--|---|--|--|--|---|
| Scenario 1 | B1 B2 B3 HH1 W1 CH1 CH2 CH3 L1 | None | | | | M1 | None |
| Scenario 2 | B1 B2 B3 W1 CH1 CH2 CH3 L1 | None | M1 HH1 | | | | MM1 MM2 MM3 MM4 MM5 MM6 MM7 MM8 MM9 |
| Scenario 3 | B1 B2 B3 W1 CH1 CH2 CH3 | None | M1 HH1 L1 | | | | MM1 MM2 MM3 MM4 MM5 MM6 MM7 MM8 MM9 |
| Scenario 4 | B1 B2 B3 W1 CH1 CH2 CH3 | None | M1 HH1 L1 | | | | MM1 MM2 MM3 MM4 MM5 MM6 MM7 MM8 MM9 |
| Scenario 5 | B1 B2 W1 CH1 CH2 CH3 | L1 | M1 HH1 B3 | | | | MM1 MM2 MM3 MM4 MM5 MM6 MM7 MM8 MM9 |
| Scenario 6 | | CH1 CH3 L1 B3 | B1 B2 M1 HH1 W1 CH2 | | | | MM1 MM2 MM3 MM4 MM5 MM6 MM7 MM8 MM9 |
| Scenario 7 | | B2 B3 CH1 CH3 L1 | B1 M1 HH1 W1 CH2 | | | | MM1 MM2 MM3 MM4 MM5 MM6 MM7 MM8 MM9 |
| Scenario 8 | | B1 B2 B3 CH1 CH2 CH3 L1 | M1 HH1 W1 | | | | MM1 MM2 MM3 MM4 MM5 MM6 MM7 MM8 MM9 |

Table 4.2 Evaluation of Alternative Scenarios against SEOs

Table 4.2 summarises the evaluation of Alternative Scenarios 1 to 8 against the Strategic Environmental Objectives (SEOs)².

Scenario 1, which would involve the continuation of existing trends at the St. Edmondsbury and Woodville lands by not making any variation to the SDCDP, would be likely to improve the status of SEOs.

Scenarios 2, 3 and 4 which would all involve allowing differing amounts of development within the St. Edmondsbury and Woodville lands would be likely to improve the status of most of the SEOs while having no conflict with the SEOs that couldn't be mitigated.

Scenarios 5, 6, 7 and 8 would be likely to have probable conflicts with varying numbers of the SEOs which would be unlikely to be mitigated.

Scenario 5 has one unavoidable conflict (relating to the protection of areas of visual vulnerability).

Scenario 6 has four unavoidable conflicts (relating to the protection of areas of visual vulnerability, archaeological heritage, the context of Protected Structures and ecological networks) and six conflicts that could be mitigated.

Scenario 7 has five unavoidable impacts (relating to the protection of areas of visual vulnerability, archaeological heritage, the context of Protected Structures, ecological networks and, as a result of adjacent development, ecologically designated sites) and five conflicts that could be mitigated.

Scenario 8 has seven unavoidable impacts (relating to the protection of areas of visual vulnerability, archaeological heritage, the context and fabric of Protected Structures, ecological networks and ecologically designated sites) and three conflicts that could be mitigated.

² Strategic Environmental Objectives (SEOs) are methodological measures which are developed from international, national and county policies which generally govern environmental protection objectives and against which the environmental effects of the Proposed Variation can be tested. The SEOs are used as standards against which the objectives of the Proposed Variation, including the zoning provisions, can be evaluated in order to help identify areas in which significant adverse impacts are likely to occur, if unmitigated against.

Mitigation measures - measures envisaged to prevent, reduce and, as fully as possible, offset any significant adverse impacts on the environment (see Section 5) - accompany all scenarios which would result in the making of a Variation for the lands at St. Edmondsbury and Woodville. The avoidance and reduction of environmental impacts as a result of adhering to the mitigation measures would be best achieved by Scenarios which conflict with SEOs the least.

4.4 The 'Maximum Impact' Scenario

As Scenario 8 has been recommended by the AHP and has been evaluated as being the scenario with both the greatest number and severity of adverse environmental and planning impacts, maps have been prepared in order to demonstrate these impacts. Figure 4.1 overlays the development area under Scenario 8 against the environmental constraints and areas of visual vulnerability presented by the lands in question - areas of conflict are clearly identifiable. For comparative purposes, Figure 4.2 overlays the development area under Scenario 4 against the environmental constraints - areas of conflict under this scenario are minimised to an area of visual vulnerability to the north east of the subject lands.

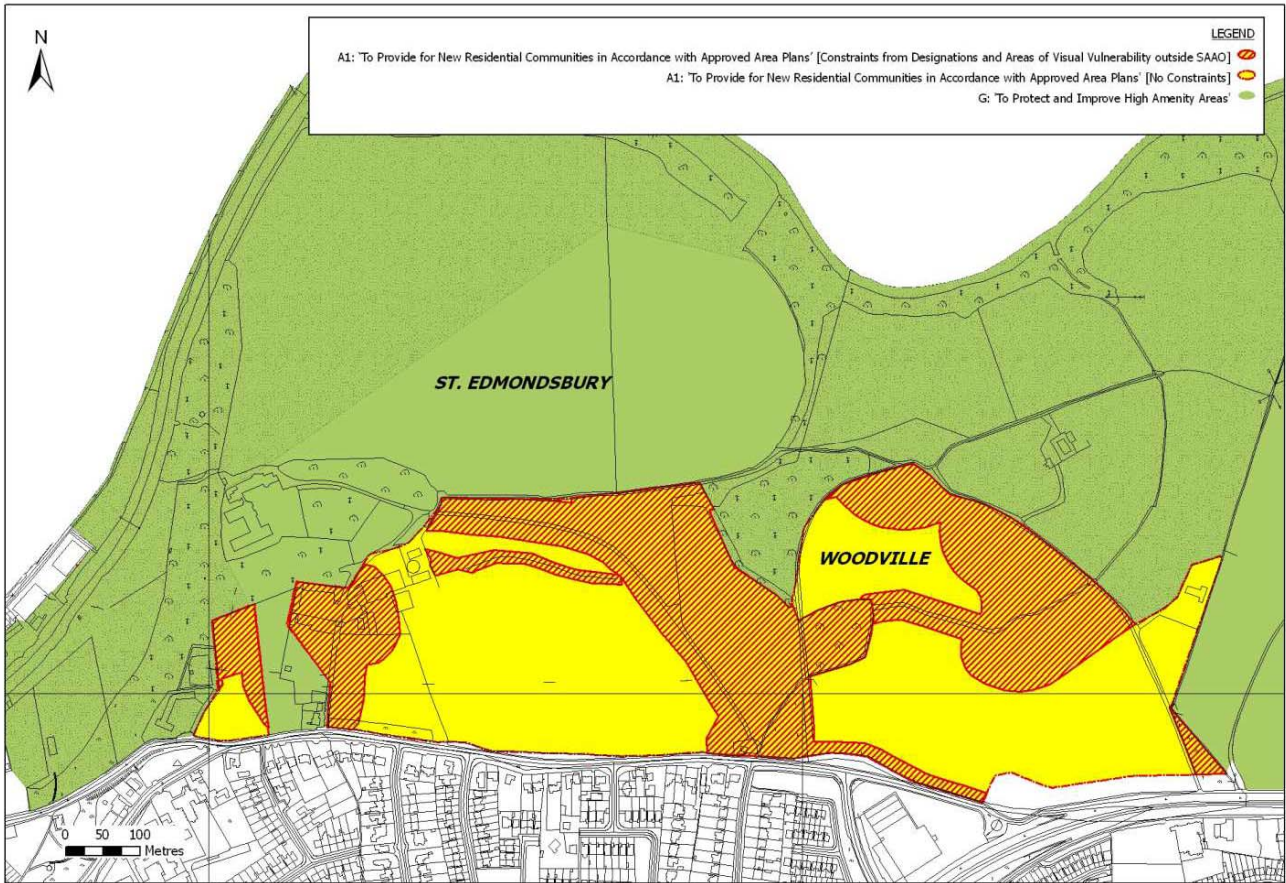


Figure 4.1 Conflicts between Scenario 8 and Development Constraints

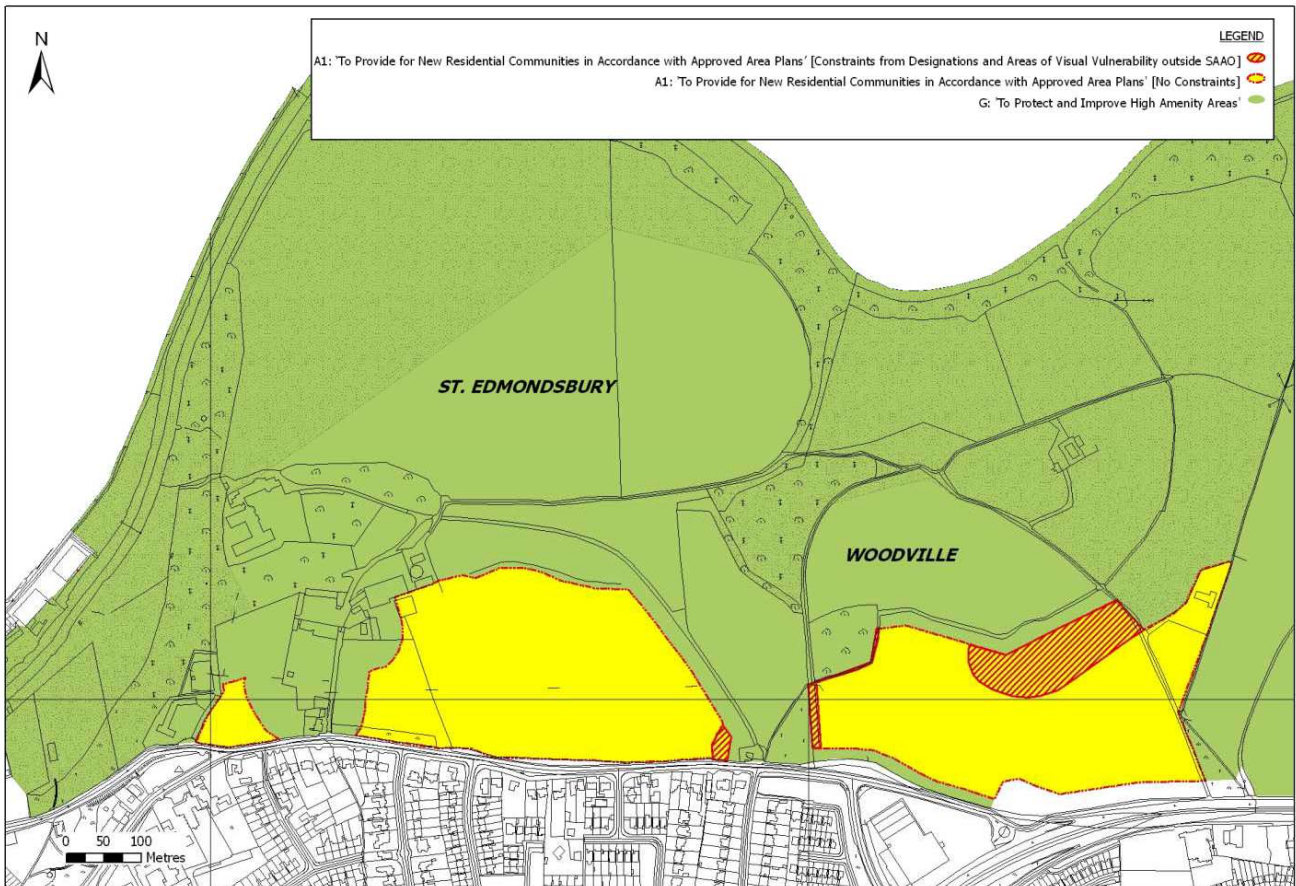


Figure 4.2 Conflicts between Scenario 4 and Development Constraints

Section 5 Mitigation

5.1 Introduction

This section details a number of mitigation measures which are recommended to be adopted as part of any Variation. These measures are envisaged to prevent, reduce and, as fully as possible, offset any significant adverse impacts on the environment of implementing the Variation.

Mitigation involves ameliorating significant negative effects. Where there are significant negative effects, consideration is given in the first instance to preventing such effects or, where this is not possible for stated reasons, to lessening or offsetting those effects. Mitigation measures can be roughly divided into those that: *avoid* effects; *reduce* the magnitude or extent, probability and/or severity of effects; *repair* effects after they have occurred, and; *compensate* for effects, balancing out negative impacts with other positive ones.

The mitigation measures are organised according to the receiving environmental components. These mitigation measures may be incorporated into the briefing of design teams as well as the subsequent design, specification and development management of the landuses to be accommodated on the Proposed Variation lands.

5.2 Human Beings (MM1)

Landuses on this site shall not diminish public access to recreational, visual, cultural or ecological amenities to levels that are less than those that are currently available.

Where practical such access shall be increased or improved. This shall be achieved by the application of appropriate design standards and criteria.

It is noted that the AHP recommendation includes provision for public access to the high amenity lands.

5.3 Flora (MM2)

Landuses on this site or associated developments – during development or use - shall not give rise to effects – direct or indirect – that will remove, reduce or otherwise adversely affect the biological diversity of natural, naturalised or semi-natural flora. The only exception to this being that where improved grasslands are removed then topsoil shall be removed, stored and reused during landscape works at this site. This shall be achieved by the application of appropriate design and site management techniques.

5.4 Fauna (MM3)

Landuses on this site or associated developments - during development or use - shall not give rise to effects - direct or indirect - that will remove, reduce or otherwise adversely affect the biological diversity of the fauna of the site through the loss of habitat for feeding, breeding, roosting or movement. Site layout and landscape design shall ensure continued connectivity for wildlife between existing habitats. Site development shall endeavour to increase the diversity of habitats for wildlife.

This shall be achieved by the application of appropriate design and site management techniques.

5.5 Soil (MM4)

Landuses on this site shall not give rise to the removal, compaction, pollution or alteration of nutrient or drainage regimes of soils on and adjacent to the site except those required for development. This shall be achieved by the application of appropriate design and site management techniques.

5.6 Water (MM5)

Landuses on this site shall not give rise to the pollution of ground or surface waters during the construction or operation of the development through the adherence to best practice in the

design, installation and management of systems for the interception, collection and appropriate disposal or treatment of all surface waters and effluents.

Landuses on this site shall not give rise to increases in the run-off characteristics above those that currently exist.

This mitigation shall be achieved by the application of the appropriate design and site management techniques.

5.7 Air (MM6)

Landuses on this site shall not give rise to emissions to air – particulates [including dust], pollutants, noise or vibration during construction or uses – except as in accordance with appropriate standards.

This mitigation shall be achieved by the application of the appropriate design and site management techniques.

5.8 Landscape (MM7)

Landuses on this site shall not give rise to significant loss of visual amenity to the SAAO through the incursion of the visibility of structures - especially as seen on the skyline from the environs of the river.

Landuses on this site shall not significantly diminish the existing visual character or quality of the immediate settings of Recorded Monuments or protected structures.

This shall be achieved by the application of appropriate design standards and criteria as well as mitigation measures.

5.9 Cultural Heritage (MM8)

Landuses on the site shall not give rise to significant losses of the integrity, quality or context of archaeological material, Recorded Monuments or protected structures - except as may be conditioned or directed by the appropriate heritage agencies.

This shall be achieved by the application of appropriate design standards and criteria.

5.10 Material Assets (MM9)

Landuses on this site shall be sized, specified and designed to be capable of being accommodated by existing or imminent public infrastructure and utilities.

This shall be achieved by the application of appropriate design standards and criteria.

Section 6 Monitoring

The SEA Directive requires that the significant environmental effects of the implementation of plans and programmes are monitored. The environmental report puts forward proposals for monitoring the Proposed Variation.

Monitoring enables, at an early stage, the identification of unforeseen adverse effects and the undertaking of appropriate remedial action. In addition to this, monitoring can also play an important role in assessing whether the Variation is achieving environmental objectives and targets.