North Littlehampton

Fitzalan Link Road Planning Application

Landscape & Visual Impact

February 2011

greencore group

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WYG Planning & Design

part of the WYG group

Greencore Group PLC

Fitzalan Link, Littlehampton

Landscape and Visual Impact Assessment

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Report status: Version 3

Date of issue: 1 March 2011

Report reference:
A044029-2 L&Vimpact v2
101209.doc

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Fitzalan Link, Littlehampton

Landscape and visual impact assessment

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1.0 Introduction

Background

101 A consortium of adjacent landowners, led by Greencore, is submitting a planning application for the comprehensive redevelopment of land north of Littlehampton, located in the Arun District of West Sussex. The North Littlehampton planning application relates to a mixed use development extending to approximately 85 hectares in area. The southern section of the proposed A284 Lyminster Bypass is included within the proposals, which it is hoped will act as the catalyst to deliver improved infrastructure, including affordable housing, and services for the existing and new communities. It also offers the opportunity for a new gateway entrance to Littlehampton and improved internal connections, particularly by foot, cycle and bus.

102 This landscape and visual impact assessment relates to the proposed Fitzalan Link Road, which is a new section of highway to the south of the proposed A284 Lyminster bypass. It would link the southern roundabout on the Lyminster bypass at the A259 with East Street, located in Littlehampton town centre. The Fitzalan Link would also reduce traffic flows along Wick Street and Horsham Road.

103 The proposals involve the construction of approximately 1km of new highway between a new roundabout to be created at the A259 Worthing Road, connecting in with a new arm to the existing roundabout at the junction of East Street and Fitzalan Road, with changes to the geometry. It will comprise a single lane in each direction, each varying in width from 3.0m - 3.5m and a footpath/cycleway each side.

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Scope of assessment

104 This landscape and visual impact assessment (L&VIA) has been carried out in accordance with the *Guidelines for Landscape and Visual Impact Assessment* 2nd Edition[1] (GLVIA). The assessment in accordance with this guidance comprises:

- a landscape/townscape assessment;
- a visual amenity assessment; and
- a darkness and lighting assessment.

105 One of the "basic principles" set out in GLVIA is that "landscape and visual effects are assessed separately", as separate although linked topics, landscape effects being those on an environmental resource, while visual effects are part of the interrelated effects on people:

"Landscape effects derive from changes in the physical landscape, which may give rise to changes in its character and how it is experienced …"

"Visual effects relate to the changes that arise in the composition of available views as a result of changes to the landscape, to people's responses to the changes, and to the overall effects with respect to visual amenity."

106 This assessment is of the effects of the construction, operation and maintenance activities relating to the proposed highway, on the landscape of the site and its context, i.e. effects on features assessed as important to the landscape quality, or effects on the landscape character of the site and its setting. It also deals with the effects on views of the site and its setting, that is, visual amenity.

107 The objectives of the assessment are to:

- describe and evaluate the landscape and visual amenity of the site and surrounding area which might be affected by the proposed highway;
- identify and assess the significance of any effects on the landscape or visual amenity, associated with the design, construction or operation of the proposed highway;
- set out mitigation measures which could be implemented in order to avoid, reduce or remedy adverse effects; and
- describe any enhancements of the landscape or visual amenity incorporated into the proposals.

[1] The Landscape Institute and the Institute of Environmental Management & Assessment, **Guidelines for Landscape and Visual Impact Assessment** (2nd Edition), E&FN Spon 2002

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108 All photographs were taken during the site appraisal undertaken between 17 and 21 July 2008 and on 4 and 5 November 2009. This assessment is supplemented by the following figures:

- Figure 1: Landscape appraisal
- Figure 2: Visual appraisal
- Figure 3: Appraisal photographs
  - *Figure 3-1: Appraisal photographs 1 & 2*
  - *Figure 3-2: Appraisal photographs 3 & 4*
- Figure 4: Viewpoint photographs
- Figure 5: Landscape Designations
- Figure 6: Site appraisal
  - *Figure 6-1: Site appraisal (north)*
  - *Figure 6-2: Site appraisal (central)*
  - *Figure 6-3: Site appraisal (south)*
- Figure 7: Site photographs
  - *Figure 7-1: Site photographs 1 to 3*
  - *Figure 7-2: Site photographs 4 to 6*
  - *Figure 7-3: Site photographs 7 to 9*
  - *Figure 7-4: Site photographs 10 to 13*
  - *Figure 7-5: Site photographs 14 to 16*
  - *Figure 7-6: Site photographs 17 to 19*
- Figure 8: Darkness and lighting assessment
  - *Figure 8-1: Darkness and lighting appraisal*
  - *Figure 8-1: Darkness and lighting photographs 1 to*
- Figure 9: Landscape proposals
  - *Figure 9-1: Fitzalan Link landscape concept*
  - *Figure 9-2: Landscape proposals (north)*
  - *Figure 9-3: Landscape proposals (central)*
  - *Figure 9-4: Landscape proposals (south)*

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2.0 Assessment methodology

201 The landscape appraisal has two stages, the desk study and the field survey. The desk study includes reference to other studies and landscape character assessments, including those undertaken at a national, county and district level. The subsequent landscape and visual field survey was undertaken between 17 and 21 July 2008 and on 4 and 5 November 2009. In outline, the landscape appraisal involved:

- an inspection of publicly accessible viewpoints, representing the range of views available of the site, including a photographic survey;
- a review of landscape designations, planning policies and strategies for the landscape e.g. The Strategy for the West Sussex Landscape[2] and the Arun Landscape Study[3];
- an evaluation of the landscape context and setting, and their ability to accommodate the likely changes associated with the proposed development; and
- an appraisal of the dark landscape, existing sources of light, their brightness and prominence.

Study area

202 The study area for the different aspects of the L&VIA varies for direct and indirect landscape effects, visual effects, and lighting effects. The study area for the various elements of the assessment did not exceed the area shown on Figure 1 Landscape character, Figure 8 Darkness and lighting appraisal, Figure 5 Landscape designations and Figure 2 Visual appraisal.

203 The proposed highway would change the existing character of the landscape within the site through changes to the vegetation pattern, boundary treatment and the introduction of the traffic, lighting, signs and structures. Changes of this nature would directly affect the site and may impact indirectly upon adjacent areas due to changes in the landscape setting. The study area for the assessment of direct landscape impacts thus includes the site which would be directly affected and the wider landscape/townscape setting and context, which may be indirectly affected.

Spatial scope

204 The study area for the assessment of visual amenity includes those areas from which the proposed highway would potentially be a perceptible element in the view. For the purpose of this assessment the outer limit was defined by a radius of 1km from the site boundary. Beyond this distance the proposed development is obscured by intervening

2 West Sussex County Council, **A Strategy for the West Sussex Landscape**, 2005

3 Arun District Council, **Arun Landscape Study: Landscape and Visual Amenity Aspects of Development Choices in Arun District 2006-2026**, 2006

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buildings within the townscape. For the lighting assessment, a 3km distance was adopted as the extent of the study area, as the field studies indicated that the lighting of the proposed development could not have a significant influence beyond this distance.

Temporal scope

205 The landscape and visual impacts of the proposed highway would vary through time. The assessment therefore considers the effects on the landscape and views during construction, operation and maintenance. The assessment of visual impact considers effects during construction, on completion, and 10-15 years after constriction is complete.

Landscape baseline survey

Potential receptors

206 Landscape receptors include elements of the physical landscape or *landscape fabric*, for example vegetation, boundaries, landform, land use and other landscape/townscape features. These are combinations of features and patterns, which give rise to particular characteristics or *landscape character* that may be affected by development.

207 Visual impact receptors include the public, residents, visitors / tourists and other groups of viewers, and the general visual amenity of the area. Examples of locations considered are: residential properties, community facilities, places of work, recreational landscapes, public parks, public rights of way and cycle routes, as well as views from within valued landscapes and publicly accessible places, such as settlements, tourist attractions and recreation areas.

208 In summary, the potential landscape and visual receptors would include:

- landscape elements and features such as trees, hedges, ponds;
- vegetation patterns, landform and vegetation characteristics;
- qualities such as tranquillity or darkness at night;
- landscape character;
- the character and setting of nearby properties and settlement;
- views from: properties; public rights of way; the railways crossing the area; public open space, amenities such as school playing fields, caravan park and football club;
- landscape subject of designations: National park / AONB, conservation areas, etc.
- trees covered by tree preservation orders;
- landscapes, gardens and parks of historic interest.

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Landscape and recreational designations

209 Landscape designations are an indication of landscape value; they are areas that have been recognised for the scenic beauty and recreational potential of the landscape. National, regional and local level landscape designations are reviewed during the desk-study.

210 National Parks and Areas of Outstanding Natural Beauty (AONB) are statutory national landscape designations with the highest status of protection in relation to landscape and scenic value. The extent of National Parks is shown on Ordnance Survey Explorer maps.

211 Open access land is a statutory national recreational designation. It includes land managed by the Forestry Commission and areas with public access rights under the Countryside and Rights of Way Act, 2000. The right of access does not extend to camping, cycling, horse riding or driving a vehicle, nor does it apply to developed land, gardens or cultivated land. The extent of open access land is shown on new editions of the Ordnance Survey (OS) Explorer maps and on the Natural England website[4]. Public rights of way are also shown on (OS) Explorer maps.

212 Other landscape designations reviewed during the desk-study are non-statutory. These are generally designated by Local Authorities as a Special Landscape Areas (SLA).

Visual baseline survey

Visual receptors

213 Visual receptors[5], as defined in GLVIA, are identified within the visual envelope from OS mapping, from the visual appraisal and from consultee responses. Receptors can be divided into two main groups based upon their location and activities, which influence the way that they experience the landscape, seascape and views:

- Location Receptors are those in particular locations within which they are able to appreciate a relatively constant view or views towards the site, including residents, users of public open spaces and visitors to outdoor visitor attractions.
- Route Receptors are those travelling along linear routes, including motorists on public rights of way.

214 The main differences between the two types of receptors relate to their perception of changes in views, or their sensitivity to change. Location receptors can perceive long-term changes in a view for an appreciable duration. In contrast, route receptors are

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4 The **open access maps for England** can be viewed on the Natural England website located at: http://www.countrysideaccess.gov.uk/things_to_do/open_access/open_access_maps

5 GLVIA definition of visual receptors: 'Visual receptors include the public or community at large, residents, visitors, and other groups of viewers as well as the visual amenity of the people affected'.

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already experiencing a constantly changing series of views, potentially making them less aware of any one view or group of views in the sequence.

Viewpoint analysis and sensitivity

215 The viewpoint analysis considers views from locations that represent the main visual receptors identified within the visual envelope for the site. A representative selection of views, often selected in consultation with the local planning authority, are taken forward to the impact assessment. For each of the views selected, the visual receptors are identified along with their 'sensitivity' to the changes that would occur as a result of the proposed development. 'Sensitivity' to change has a number of contributing factors, which are:

- the location and context of the viewpoint;
- the extent of the location over which the changes would be visible;
- the field of view occupied by the development;
- the activity of the receptor and duration of the view for moving receptors;
- the expectation of the receptor in relation to the view available;
- orientation - of receptors in relation to the development, and
- the importance of the view / location - potentially indicated by designations, historic or cultural importance of the location.

216 Consequently, different types of receptors in a single location may have different levels of sensitivity. Alternatively, a single receptor may have different levels of sensitivity at a number of locations.

Photography

217 Photographs have a special role in describing landscape character and illustrating key views. In order for photographs to be representative and to create an image that is as similar as possible to that which is seen with the human eye, accepted practice is to use a lens with a focal length equivalent to 50 mm for a 35 mm Single Lens Reflex (SLR) camera, and a print size of 150 mm x 100 mm[6]. The camera used for the appraisal photography was a Canon EOS 400D digital SLR camera. Photographs were taken with a focal length of 30-32mm which is equivalent to a focal length of approximately 50mm on a 35 mm SLR camera.

218 Landscape photography includes wide angle or panoramic views requiring a sequence of photographs to be taken across the view. Where this approach is taken a series of overlapping photographs are digitally spliced together in Adobe Photoshop CS using a cylindrical projection to provide a panorama approximating to the normal field of view in a

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6 The Landscape Institute, **Landscape Institute Advice Note 01/09, Use of Photography and Photomontage in Landscape and Visual Assessment**, February 2009

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landscape context. Where necessary, the contrast and brightness of individual photographs is slightly manipulation in order to create a consistent panorama without visible joins. The viewpoints are located with their Ordnance Survey grid reference and height above Ordnance Datum.

Darkness and lighting

219 The methodology used for the survey of dark and lit areas of the landscape involves field surveys and desk studies, and is based on the recommendations and guidance published by the Department of Transport, Institute of Lighting Engineers (ILE)[7] and the Office of the Deputy Prime Minister[8].

220 The definitions and terms in the Institute of Lighting Engineers guidance are adopted for the lighting assessment; these are:

Lighting characteristics

221 The following terms describe the extent to which lighting affects the wider landscape:

- *Light Pollution:* obtrusive light, or impeding view of night sky, etc. - general term
- *Sky Glow:* "when upward stray light is reflected back to earth"; the brightening of the sky above towns and cities
- *Glare:* "the uncomfortable brightness of a light source when viewed against a dark background"
- *Light Trespass:* "the spillage of light beyond the property on which the light source is located".

Environmental Zones

222 The following categories are used to identify and map the levels of lighting which occur within the survey area, shown on Figure 8.1:

- *E1: Intrinsically Dark*, the level of darkness found in remote countryside, and associated with National Park, AONB, etc
- *E2: Low Distinct Brightness*, the level of light found in a rural or small village location
- *E3: Medium Distinct Brightness*, as found in small towns or urban locations
- *E4: High Distinct Brightness*, associated with larger town centres with a high level of night time activity.

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7 Institute of Lighting Engineers, **Guidance Notes for the Reduction of Obtrusive Light**, 2005

8 **Lighting in the Countryside: Towards Good Practice**, July 1997, available on Communities and Local Government website: http://www.communities.gov.uk/publications/planningandbuilding/lighting

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Sensitivity of the night time skies

223 The Institute of Lighting Engineers (ILE) sets out guidelines to determine the sensitivity to light in relation to landscape and visual amenity. The ILE Guidance also sets out criteria for "obtrusive light limitations" for external lighting which vary depending on which environmental zone the lighting scheme would be located in. Areas particularly sensitive to changes associated with the lighting of the Proposed Scheme, referred to as "Environmentally Sensitive Areas" were mapped:

- designated areas: Areas of Outstanding Natural Beauty (AONB), National Parks, Landscapes Parks and Gardens of Outstanding Historic Interest;
- long distance footpaths and national cycle routes;
- historic landscape;
- conservation areas;
- listed buildings and structures;
- residences, hospitals and nursing homes;
- dark landscapes: "a rural area where there is little or no exterior lighting within 1 mile"[9] environmentally sensitive at night; and
- ecologically important areas and species affected by lighting e.g. bats.

Baseline conditions

224 The aim of the baseline lighting survey is to identify the existing lighting conditions related to landscape character and assesses sensitive receptors of light. The results of the survey are mapped on Figure 8.1, as follows:

- areas and features of landscape, historic and wildlife importance including designated areas;
- dark landscapes and lit areas in the locality; and
- sources of light, their visibility, brightness and prominence.

225 The field surveys were undertaken on the night of 4 November 2009. In order to assess the artificial sources of night time lighting from both the site and from the surrounding area, the timing of the survey was chosen to minimise the contribution of natural light sources i.e. the sun and the moon. It also avoided weather conditions likely to temporarily increase the impact of artificial light, such as low cloud or fog.

226 In relation to sunlight, the survey was undertaken following sunset with a sufficient delay to ensure that no visible sunlight remained on the western horizon. The contribution than moonlight can have to the night sky was also considered. Cloud cover on the night of 4

9 Road Lighting Branch, **Internal Advice Note 1/93: Road Lighting**, 1993

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November obscured the moon during the baseline survey and photography of each viewpoint.

Darkness and lighting photography

227 Photographs of the night sky provide an illustration of the lighting conditions from selected viewpoints. The same camera and focal length is used for the lighting survey photography as for the visual appraisal, as described in paragraph 217. Given the low light levels exposure time is increased, which necessitates the use of a tripod. The exposure time is set at a point at which the survey photographs are an accurate reproduction of the night time view at the time of the survey.

Assessment and mitigation

228 Landscape and visual impact assessment requires a combination of objective analysis and subjective professional judgment. It follows a clearly defined methodology based on published guidance comprising a combination of desk studies and field surveys, with subsequent analysis. It involves analysis and evaluation of the baseline, including landscape features, landscape character, and views available of the site and the effects on them likely to arise from the proposed development. The methodology is based on the recommendations and guidance published by the Countryside Commission[10], in addition to Guidelines for Landscape and Visual Impact Assessment, published by The Landscape Institute and the Institute of Environmental Assessment[11]. In outline, the assessment would involve:

- a site survey and inspection of publicly accessible viewpoints with views of the site, including a photographic survey, as described above;
- a desk study to review landscape designations and planning policies for the landscape, and relevant studies of the landscape of the area;
- classification of the landscape or the study area into areas of distinct character, with a description of their distinguishing characteristics and qualities;
- an evaluation of the landscape of the site and its context and setting, and their sensitivity, or ability to accommodate the changes associated with the proposed development;
- analysis of the sensitivity of the visual amenity of the public in the surrounding area, including that of local residents, based upon a viewpoint survey;
- the identification of potential landscape and visual effects of the proposed development, their magnitude and significance;
- consideration of mitigation and enhancement measures to avoid, reduce or remedy significant effects on the landscape or on views;

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10 Countryside Commission, **Landscape Assessment Guidance**, 1993.

11 The Landscape Institute and the Institute of Environmental Management & Assessment, **Guidelines for Landscape and Visual Impact Assessment** (2nd Edition), E&FN Spon 2002

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- assessment of impact significance with design and committed mitigation measures in place.

229 Criteria for degrees of value or sensitivity, magnitude of change, and significance of effects, are set out in the following sections.

Landscape value (sensitivity)

230 The degree of the likely landscape and visual effects of the proposed development is determined by relating the ability of the landscape or view to accommodate the changes arising from the proposed development, referred to as *sensitivity*, and the magnitude of the changes to which they would be subjected. The following categories of landscape sensitivity to change are used:

- **Very high:** A landscape of high (or international) importance (or "value"), which is particularly vulnerable to disturbance and where insensitive change could result in unacceptable deleterious effects on its features or character, and with no or little potential for substitution.
- **High:** A landscape of high (or national) importance, including a large number of landscape elements sensitive to disturbance where change could have significant adverse effects, and with limited potential for substitution.
- **Medium:** A landscape of regional importance with a reasonable capacity to accommodate the proposed changes and with some features sensitive to disturbance, or with potential for substitution.
- **Low:** A landscape of low or medium importance, or local in scale, which has an intrinsic capacity to accommodate the changes proposed without unacceptable deleterious effects on its character, or on important landscape elements.
- **Negligible:** A landscape of very low importance and a high capacity to accommodate the proposed changes.

Visual Sensitivity

231 The sensitivity of views is affected by factors such as the distance to the viewer, whether few or many viewers are affected, and the importance of the site or proposed development in the overall view. The context of the viewpoint may also contribute to the ability to accommodate change, for example, a view from residential properties or from a valued landscape is regarded as less able to accommodate change, than a view from an industrial context. The following categories of visual sensitivity are used:

- **Very high:** A view of high importance (or "value"); near or open views from large numbers of residential or community properties or experienced by large numbers of viewers or from a valued landscape, where the proposed development would be the defining element in the view or where it would cause insensitive change resulting in unacceptable deleterious effects on visual amenity and with no or little potential for mitigation.

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- **High:** A view of high importance (or "value"); mid-distance open views from moderate numbers of residential or community properties or experienced by moderate numbers of viewers or from a valued landscape, where the proposed development would be an important element in the view or where insensitive change could result in unacceptable deleterious effects on visual amenity, but with limited potential for mitigation.
- **Medium:** A view of moderate importance (or "value"); mid- to greater distance views from moderate numbers of residential or community properties or experienced by moderate numbers of viewers or from a landscape of medium importance, where the proposed development would be an noticeable element in the view or where insensitive change could result in relatively deleterious effects on visual amenity, but with potential for mitigation.
- **Low:** A view of low or medium importance, or available to few viewers or from a distance, where the development is a relatively unimportant element in the view, and with good potential for mitigation of adverse effects.
- **Negligible:** A view of very low importance and a high capacity to accommodate the proposed changes.

Magnitude of Change

232 The impact of the proposed development is considered in terms of its effect upon landform, its visibility, its effects on the existing landscape and settlement pattern, landscape elements, cultural and historical associations and landscape character. The magnitude of change is graded as follows:

- **Major:** Loss of landscape integrity or severe damage to features important to landscape character or value; large scale or major improvement in landscape character.
- **Moderate:** Partial loss of key characteristics or features important to the landscape character, but without adversely affecting landscape integrity; benefit to, or enhancement or addition of features or characteristics, with noticeable benefit to the landscape character.
- **Minor:** Minor loss of, or alteration in, some key characteristics or features important to the landscape character, but without adversely affecting landscape integrity; some enhancement of landscape character.
- **Negligible:** Very minor loss or alteration in some key characteristics or features; very minor enhancement of landscape character.
- **No change:** No observable change.

Criteria for Assessing Significance of Effects

233 The degree of the likely landscape and visual effects of the proposed development is determined by relating the ability of the landscape or view to accommodate the changes arising from the development proposals, and the magnitude of the changes to which they

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would be subjected. The degree of effect, whether adverse or beneficial, is graded from substantial to negligible:

Table 1: Effects on landscape

Substantial:	*Considerable adverse change to the features, elements, character, or quality of a sensitive landscape, with limited scope for mitigation (or lesser change in very sensitive landscape);* ***or*** *Improvement to the landscape over a wide area sufficient to alter perceptions and upgrade overall landscape character.*
Moderate:	*Discernible change to landscape character, features, or elements of medium-high sensitivity, but with scope for mitigation;* ***or*** *Perceptible improvements to landscape character.*
Slight:	*Localised or limited adverse change to the existing landscape character with considerable scope for mitigation;* ***or*** *Localised improvement to the existing landscape quality.*
Negligible or None:	*No perceived change to the existing landscape character and quality, or the change is difficult to discern.*

Table 2: Effects on visual amenity

Substantial:	*Major visual intrusion experienced from settlements or numbers of properties and/or from sensitive public viewpoints where the development would cause deterioration in the existing view with limited scope for mitigation (or a lesser intrusion in highly sensitive views);* ***or*** *An improvement in the view, sufficient to provide some benefits to visual amenity.*
Moderate:	*Visual intrusion on settlements or numbers of properties and/or from public viewpoints where the development would cause a limited deterioration in the existing view, but with scope for mitigation;* ***or*** *A reduction in visual intrusion, or improvement in the view.*
Slight:	*Minor visual intrusion attributable to the development or a perceptible deterioration in the existing view, with scope for mitigation;* ***or*** *Localised reduction in visual intrusion, or noticeable improvement in the view.*
Negligible:	*The change in the view is imperceptible or difficult to discern.*

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Mitigation measures

234 The effects of the proposed highway, whether beneficial or adverse, would vary in nature and degree through the construction and operational phases. Mitigation measures are incorporated into the landscape design proposals and in the management of the construction and operational processes. The aims of mitigation measures are: first, to avoid potential effects; and second, to reduce the degree of adverse effects which are unavoidable. The effects assessed are those that remain after mitigation measures are put in place, defined as *'residual effects'.*

Consultations

235 The Landscape Officers at West Sussex County Council and Arun District Council were consulted as part of an EIA scoping process in August 2009.

236 Over a hundred and twenty members of the public participated in the North Littlehampton Community Planning Weekend, held on Friday 18 and Saturday 19 July 2008. The aim of the Weekend was to create a sustainable new vision for North Littlehampton, including the mixed use redevelopment of land to the north of the railway line and the Fitzalan Link. It considered how this new investment can help the wider regeneration of Littlehampton, including the community of Wick. Site visits were undertaken and nearby public footpaths were walked to allow members of the public to assist in identifying important landscape features and sensitive views. Consultation with the local authority and community has been ongoing since the first consultation event in July 2008.

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3.0 Baseline conditions

Introduction

301 The features described below are located on Figures 1 - 8. Landscape features are illustrated on Figure 1 Landscape appraisal, Figure 2 Visual appraisal, Figure 5 Designations and Figure 6 Site appraisal. Photographs of the site and the surrounding area, which illustrate many of the features described below, are included on Figures 3, 4, 6 and 7. The photograph viewpoints are located on Figures 2 and 6.

302 The landscape appraisal has been divided into three main sections; first, a broad overview of the landscape character of the wider area based on a desk-study of published landscape assessments; second, a summary of the landscape appraisal undertaken on 4 and 5 November 2009; and third, an appraisal of the site and its immediate context, undertaken on 5 November 2009.

The existing landscape

303 The site for the Fitzalan Link is located in the northern part of the coastal resort town of Littlehampton in West Sussex, at OS Gris Reference TQ 032 030 (503200, 103000). The site is located between the B2187 East Street and the A259 Worthing Road, Littlehampton in Arun District; refer to Figure 1 Landscape appraisal.

304 Topography is a defining characteristic of the wider landscape context of Littlehampton. The town is located on the broad coastal plain where levels are consistently around 5m AOD. There are a number of localised higher areas of land up to 10m AOD but these are exceptions; land below 5m AOD is more common. To the west of Littlehampton the Arun Valley has a broad floodplain orientated north to south across the coastal plain. The River flows southwards from the medieval market town of Arundel, located just over 3.5km to the northwest of the site. Along the northern edge of the coastal plain is the undulating chalk landscape of the 'South Downs' which, in contrast to the coastal plain, is elevated and well wooded.

Landscape context appraisal

305 The landscape appraisal has made reference to published landscape assessments at a national, county and district scale. At a national scale, The Character of England: landscape, wildlife and natural features, was developed by the Countryside Character Initiative programme[12].

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12 Countryside Agency, **The Character of England: landscape, wildlife and natural features**, on the Countryside Agency website at: http://www.countryside.gov.uk/

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306 Within The Character of England study the site is located in *Character Area 126: The South Coast Plain* and the salient features are defined.

"On the lower coastal plain, settlements are dominated by suburban villages and the extensive seaside towns between Brighton and the edge of Southampton. Large reflective glasshouses, advertisement signs for farm shops, nurseries and equestrian facilities, golf courses, horse paddocks and industrial and institutional buildings all bring a suburban character, which confuses the definition between the urban centres and the rural hinterland"

307 The appraisal of the landscape setting of the site, which was carried out in November 2009, identified that the area is broadly characterised by topography and land use patterns. There are four character types identified in the landscape setting, these are broadly consistent with the findings of published landscape assessment described below and are shown on Figure 1 Landscape appraisal.

308 The first landscape character area is the 'South Downs', which is to the north of the A27 (T) just over 2.3km north of the site. This is a gently undulating landscape defining the edge of the coastal plain to the south. The area is generally well wooded, although to a lesser extent to the east. Much of the woodland is ancient and semi-natural deciduous woodland, although there are large areas of coniferous plantation. The topography and vegetation combine to create an enclosed, self contained landscape with few external influences, although traffic noise from the A27 (T) dual carriageway is apparent for some distance away from the road. Along the southern margin of the A27 (T), which is generally in a cutting, vegetation creates a strong edge to the coastal plain beyond.

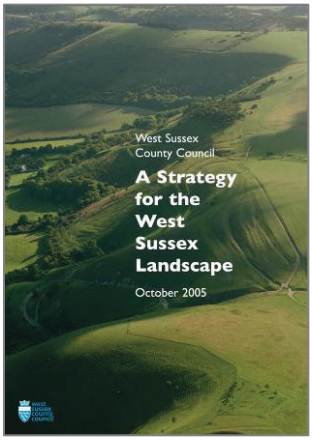
309 The second character area is immediately to the south of the South Downs along the northern part of the coastal plain. This area includes intensively cultivated arable land with few defining hedgerow boundaries to the extensive fields. It extends southwards to the northern edge of the Littlehampton urban fringe and westwards to the River Arun. The topography of the area is low lying and relatively level, rising away from the edge of the River Arun flood plain. The vegetation pattern is limited to narrow copses along water courses and small blocks of woodland and shelterbelts. Where hedgerows remain, these are intermittent with infrequent hedgerow trees; they give the landscape a more intimate scale, contrasting strongly with less vegetated areas.

310 The third character area is the River Arun and its floodplain, which extend southwards from Arundel forming a band of low lying land which is less intensively farmed than adjacent areas. It is distinct from the coastal plain in landscape terms. Fields are generally defined by drainage ditches with very few trees or areas of woodland. The river is contained by higher land along the riverbank which falls away from the river across the flood plain.

311 The final character area is Littlehampton. The northern edge of Littlehampton along the northern side of the mainline railway has typical urban fringe uses, in contrast to the urban area of Littlehampton south of the A259. There are a variety of land-uses including residential, business parks, a caravan park, Rustington Golf Centre and a waste recycling facility. There are also several nurseries in the area, ranging in scale from the large-scale glasshouses to smaller areas with poly-tunnels.

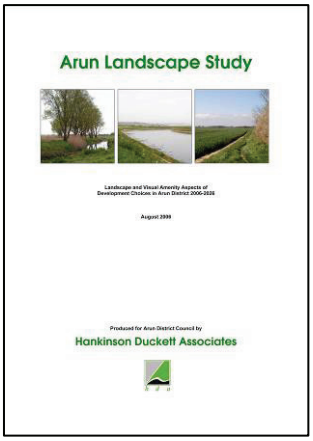
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Published landscape assessment



312 Landscape assessment has been undertaken at a county level by West Sussex County Council[13,14,15]. The wider region is within an area defined as *'Suburban Fringes'* in the *'Coastal Region'* within the Landscape Assessment of West Sussex. Key landscape characteristics of this area are:

- strategic gap designation;
- degraded tree and hedgerow framework;
- dominant urban fringe elements; and
- industry in the countryside.



313 A number of landscape management guidelines are proposed to provide landscape benefits to the area. The guidelines relate primarily to the rural landscape, but in relation to the proposals, they *'promote sympathetic design of new road schemes…'.*,

314 Landscape assessment has also been undertaken at a district level by Arun District Council[16]. This study supplements the Landscape Assessment of West Sussex with local landscape characterisation at an appropriate scale to understand the local variations in character. The main purpose of the study is to provide a framework for the assessment of sensitivity, value and capacity. The study subdivides the districts rural and urban fringe landscape into Landscape Character Areas (LCA) and areas of Landscape Type.

315 Located to the north of the mainline railway, approximately 400m north of the site, is *LCA 39: Littlehampton Northern Fringe*. A *strong urban influence from Littlehampton* is noted within the description of this area. The main landscape type is L10a: Glasshouses, although there are small areas of L3: Coastal plain enclosed pasture and U1: Utilities; it is assessed as *Slight* in relation to both landscape sensitivity and value. The urban area of Littlehampton to the south is not included within the study.

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13 Countryside Commission and West Sussex County Council, **Landscape Assessment of West Sussex, Section One**, 1995

14 Countryside Commission and West Sussex County Council, **Landscape Assessment of West Sussex, Section Three Landscape Management Guidelines**, 1995

15 West Sussex County Council**, A Strategy for the West Sussex Landscape**, 2005

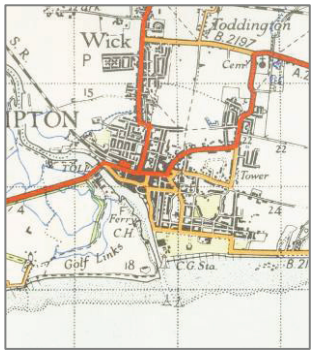
16 Arun Landscape Study: **Landscape and Visual Amenity Aspects of Development Choices in Arun District 2006-2026**, published by Arun District Council in 2006

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Settlement and townscape

316 The site is located within the settlement of Littlehampton. Other main settlements in the area are Arundel and Angmering; refer to Figure 1 Landscape Appraisal. Angmering, which joins Littlehampton, is located just over 3.5m from the site to the northeast. Both Angmering and Littlehampton are within the coastal plain and are mainly 20th century in origin. In contrast, Arundel, just over 3.5km to the northwest of the site, is of medieval origin; it is located on higher ground on the edge of the South Downs.

317 Outside the three main settlements there are three other villages within 2km of the site; these include Lyminster, Poling and Crossbush. All are located within the coastal plain at a similar elevation to the site. Lyminster is just over 1.2km to the northwest of the site, located along the A284. Crossbush is approximately 2.5km from the site to the north, just beyond the A27 (T) dual carriageway, which runs east to west along the southern edge of the South Downs. Poling is approximately 1.7km to the northeast and is accessed off the A27 (T) via Poling Street.



1946 map of Littlehampton

318 Littlehampton is a seaside resort town located on the east bank of the River Arun, where it enters the English Channel. It is typical of a number of smaller seaside towns on the South Coast. Littlehampton is Roman in origin, when it was known as Hampton. From the 14th Century onwards it was renamed Little Hampton, at that time in order to differentiate it from Southampton. Littlehampton expanded during the 19th Century as a seaside resort and incorporated the adjacent but separate settlements of Wick and Toddington by the start of the 20th Century. More rapid expansion and infill development occurred from the 1940's onwards. This infill development provides the immediate context for the site, with the exception of a small number of older properties at East Street.



319 The Townscape of Littlehampton reflects the historical development of the town. Older properties of Georgian and Victorian origin and associated street patterns are focused in the historic centres of Littlehampton, Wick and Toddington. This is reflected in the designation of three conservation areas within Littlehampton town centre: East Street, River Road and the Seafront. There are numerous listed buildings within these conservation areas, including several at East Street to the south and southwest of the site. There are also listed buildings to the north of the site at Toddington, near the level crossing on Toddington Lane; refer to Figure 5.

320 The landscape setting of conservation areas and listed buildings is a consideration during the preparation of landscape and visual impact assessments.

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Public open space

321 The landscape appraisal drawing, Figure 1, shows public parks and other green space within the settlement boundary. Although distributed throughout the urban area, there are fewer parks in Wick and those present tend to be smaller in area than the parks located along the seafront and through the eastern part of Littlehampton.

322 The site is located within undeveloped land used for informal recreation. A summary appraisal of the green spaces in Littlehampton has been undertaken to identify what types of green spaces are currently available. The appraisal identified that green spaces within Littlehampton can be divided into four categories; these are: established public parks, newer parks, allotments and natural areas.

323 *Established public parks:* formal and informal recreation with close-mown grass and mature tree and shrub planting, incorporating formal sports pitches and equipped play areas e.g. The Green. Other parks in Littlehampton incorporate greater variety and include boating lakes, mini-golf and wildlife interest e.g. Mewsbrook Park and the park extending to the west. These areas incorporate formal sports pitches and equipped play.





Established public parks, The Green and Mewsbrook Park

324 *Newer parks:* formally managed public parks incorporating sports pitches and children's play e.g. the park within the housing development east of Toddington between the A259 the B2187. A smaller green space has been created within the Eden Park development to the northeast of the site.

325 *Allotments:* located to the north of the site to the south of Wick Football Club. The allotments appear well maintained and fully utilised.

326 *Natural areas:* including land within the site to the rear of properties along Highdown Drive. Low levels of maintenance give this land a natural appearance. The number of routes through the grass suggests the area is well used by the public for informal recreation. Land to the north of Littlehampton along the southern site of the Black Ditch is similar to this area, in terms of its natural appearance and its informal use by the public.

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Newer park associated with recent residential development at Rustington




Allotments at Toddington




Natural areas along the Black Ditch and within the site

Public rights of way

327 Within the site there are two public rights of way. In the northern part of the site, where the proposed Fitzalan Link joins the A259, public footpaths 3654 and 3103 extend southwards from Highdown Drive and the A259. The footpaths join and a single route extends southwards to join Highdown Drive near to its junction with Blakehurst Way.

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This route continues southwards along Highdown Drive and Paterson Wilson Way before joining East Street. A branch off this footpath crosses the site to link Cornwall Road and Elm Grove Road. In addition to the public footpath there are numerous informal paths crossing this land; refer to Figure 6.1-6.3.

328 To the north of Toddington there is a public footpath link to Poling, public footpath 3096. This route proceeds southwards from the Lyminster to Poling bridleway on the western side of the village. It follows field boundaries with an almost continuous line of trees from this point in a southerly direction to the Black Ditch, which it crosses before entering the North Littlehampton redevelopment site. This footpath passes through the central part of the redevelopment site before joining Toddington Lane near the level crossing over the railway line.

329 A bridleway runs east to west along a track between Lyminster and Poling. The route is approximately 1.3km to the north of the site at its nearest point. It is an important route linking the two villages and offering links to other routes. The wider network of public footpaths crosses the farmland to the west of Angmering and there are also links up to and beyond the A27 (T) and the South Downs national park.

330 Along the western side of the Toddington allotments there is a public footpath heading northwards through the public open space, linking the A259 with Griffin Crescent and onwards to Coomes Way and Wick Football Club.

Landscape appraisal of the site

331 The site of the proposed Fitzalan Link Road is situated to the north of Littlehampton town centre and comprises a corridor of land approximately 1km in length between Worthing Road (A259) and East Street (B2187). The site extends to approximately 6.1 hectares and incorporates part of The Littlehampton Academy (TLA) playing fields and other undeveloped land.

332 The site boundary is defined to the north by Worthing Road (A259) and to the south by a roundabout at the junction of East Street (B2187) and Fitzalan Road. The western boundary of the site is defined by rear garden fences at residential properties along Highdown Drive and Paterson Wilson Road. In the southern part of the site the western boundary is defined by the Police building on Paterson Wilson Road and a disused area of land to the south, immediately adjacent to East Street.

333 There are a variety of land uses along the eastern boundary of the site, including education, open space and residential. Starting at the northern end of the site there is Cornfield School, which has mature trees along its boundary with the site. To the south is the continuation of the undeveloped land through which the proposed Fitzalan Link passes. The site boundary is undefined on the ground in his location. Further south is the large site of The Littlehampton Academy (TLA). The northern part of the site boundary with TLA is defined by mature trees and an overgrown hedgerow. However, the site extends into TLA playing fields, crossing boundary features, where it proceeds

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southwards towards Elm Grove Infant School. It crosses the western edge of land within the primary school, and follows the alignment of the rear garden fences of properties along the southern part of Highdown Drive. The route crosses the cycleway/footpath linking Cornwall Road to the west of the site with Elm Grove Road to the east. Rosemead public open space, residential properties and Summerlea House nursing home define the eastern boundary of the site between Elm Grove Infant School and East Street. Avenues of mature conifers define the site boundary in this location.

Designated landscapes

334 The South Downs Area of Outstanding Natural Beauty (AONB) was designated in 1966 to conserve and enhance the landscape of the South Downs. On the 31st of March 2009, the Secretary of State for Environment, Food and Rural Affairs announced the designation of the South Downs National Park. The announcement confirmed that the National Park would be formally established in April 2011, when the National Park Authority becomes fully operational.

335 The South Downs National Park is located approximately 2.5km to the north of the site. The AONB area it replaces is recognised as one of the most important chalk landscapes in England[17]. Inhabited since ancient times, the South Downs is very rich in historical features, including defensive sites, burial mounds and field boundaries. It is the traditional sheep grazing on the Downs that has given rise to the characteristic closely grazed chalk downland turf.

336 A national park is a national landscape designation which reflects the high quality and national importance of the landscape. The Landscape and visual impact assessment considers the features which give the national park its special landscape character, both within its boundaries and in its setting, and assess whether these would be affected by the proposed Fitzalan Link.

Other designations and landscapes of interest

337 There are no landscape designations in the local plan for areas within or in the vicinity of the site such as Areas of Special Landscape Character, Local Nature Reserves or wildlife sites. Designations of relevance to the proposal are shown on Figure 5 Landscape designations.

338 Conservation areas and listed buildings are referred to in paragraphs 316 to 320. There are several areas designated as scheduled monuments in the study area. The nearest to the site is a *Romano British Villa* and includes traces of Iron age occupation, this is located just over 2.5km to the northeast of the site at New Barn and occupies an area of approximately 4.5ha. Other scheduled monuments are considerably further from the site, including the *Ringwork,* located north east of Arundel station in Arundel. The landscape

17 More information about the south downs can be obtained from DEFRA, available online from URL http://www.defra.gov.uk/erdp/schemes/esas/stage1/southdowns.htm

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setting of scheduled monuments is a consideration during the preparation of landscape and visual impact assessments.

Landscape receptors

339 A number of landscape receptors have been identified during the landscape appraisal, including elements of the physical landscape or *landscape fabric*, for example vegetation. These features combine to create a distinct *landscape character,* which is itself a receptor.

340 The ability of a landscape to accommodate change may be defined as its ability to accept the proposed development "without unacceptable detrimental effects on its character"[18]; this is referred to as the *sensitivity* of the landscape. There are a number of factors that contribute to this ability:

- landscape designations reflecting the national/local value of the landscape
- existing landuse;
- the pattern and scale of the landscape;
- the presence of features of historical or cultural importance; and
- rarity of the elements or character.

341 These factors are considered during the landscape appraisal and are used to determine the level of landscape sensitivity. Examples of High, Medium and Low sensitivity are provided at paragraph 230, demonstrating how the contributing factors are interpreted. The landscape receptors considered sensitive to the proposed development are listed below:

- The character of the landscape is partly derived from existing vegetation within the site and its immediate context, including lines of mature Poplars and hedgerows. Therefore the degree of impact on the landscape resource of the area would relate in part to the impacts on this pattern which is a *sensitive* receptor.
- Landscape amenity is inextricably linked to the landscape character of the wider area which is a *sensitive* receptor. The landscape amenity, as experienced by local residents of Toddington, Oakcroft Gardens, Highdown Drive, East Street, Paterson Wilson Road and Fitzalan Road is regarded as a *sensitive* receptor. People would be aware of disturbance associated with construction and future use of the highway.
- The landscape setting of The Littlehampton Academy, Cornfield School and Elm Grove Infant School is a *sensitive* receptor.
- Recreation and enjoyment of publicly accessible places is inextricably linked to the landscape character of the wider area which is a *sensitive* receptor. The landscape amenity, as experienced by people who use the public footpaths, cycleways and roads within the immediate vicinity of the site and within the site is a *sensitive*

18 Countryside Commission, **Landscape Assessment Guidance**, 1993.

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receptor. People would be aware of disturbance associated with construction and future use of the site. Public access is also sensitive receptor.

- The landscape setting of the South Downs National Park is a *sensitive* receptor.

342 The sensitivity and impact of the proposed development on each of these receptors is described in the 'Assessment of Effects' section.

Visual amenity

343 The visual appraisal is shown on Figure 2 Visual Appraisal. The site is located within the settlement boundary of Littlehampton. Built development has a significant influence on the extent of the visual envelope for the site. Topography of the wider landscape setting has little influence on the views into the site. Where the site is visible from within the urban area, views are generally close proximity views of part of the site only. There are no public vantage points offering elevated views over the whole site due to the low lying nature of the landform. Near views of the site are from land of similar elevation from the north, west, south and east. Mature trees adjacent to the site are visible over a wider area and offer some visual screening of view towards the site.

344 The site is not visible from the rural landscape of the Coastal Plain, mainly due to the screening provided by built development within Littlehampton. There are areas of higher ground further to the north within the South Downs National Park, but distance, undulating topography, woodland and hedgerows obscure potential views.

345 The views available of the site and proposed development are grouped by direction:

Views from the north

346 The site is visible from residential properties along the A259 at Toddington. Rear garden boundary vegetation partially screens views of the A259 and the site from these properties, which are elevated slightly above the road. Other visual receptors in the area are vehicle travellers, cyclists and pedestrians along the A259 and at its junction with the northern end of Highdown Drive (refer to **Appraisal Photograph 1** on Figure 3-1). Cornfield School is located at the northern end of the site and has filtered views into the site through mature Poplars along the western boundary of the school.

Views from the east

347 There are views of the site from the east from residential properties (refer to **Appraisal Photograph 4** on Figure 3-2 and **Viewpoint Photograph 3** on Figure 4). However, The Littlehampton Academy (TLA) and Elm Grove Infant School are located between the residential properties and the site; these provide separation. Mature trees along the eastern edge of the site, along the boundary of a touring caravan site and at Rosemead provide screening.

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Views from the south

348 The site is visible from the south from residential properties, from Summerlea House Nursing Home, East Street and Fitzalan Road (refer to **Appraisal Photograph 2** on Figure 3-1 and **Appraisal Photograph 3** on Figure 3-2). Existing mature trees along East Street and conifers to the west of Rosemead help to screen or filter views of the site. The site is prominent in close proximity views from East Street and Fitzalan Road but less so in views from adjacent residential areas. Existing conifers to the west of Rosemead public open space and the nursing home screen or filter views of the site.

Views from the west

349 There are views of the site from the west from residential properties along Highdown Drive and Paterson Wilson Road (refer to **Viewpoint Photographs 1** and **2** on Figure 4). Residential properties overlook the site subject to views being screened or filtered by intermittent, intervening vegetation. A public footpath entering the site at Highdown Drive passes through the site.

Visual receptors

350 The *sensitivity* of views is affected by factors such as the distance to the viewer, the number of viewers affected and the importance of the site in the overall view. The context of the viewpoint may also contribute to its ability to accommodate change; for example a view from residential properties or from a valued landscape might be regarded as less able to accommodate change, than a view from an industrial context. The table at 231 provides examples of *High, Medium* and *Low sensitivity,* demonstrating how the contributing factors are interpreted.

351 Four Appraisal Photographs have been selected, which are considered *representative* of *sensitive* views available from publicly accessible places. The locations from which the Appraisal Photographs are taken are shown in Figure 2. The four appraisal views are:

- from the A259 Worthing Road on its eastern approach to the proposed roundabout with the Fitzalan Link; this view is considered of *high sensitivity* due to the potential number of viewers affected (refer to **Appraisal Photograph 1** on Figure 3-1).
- from Rosemead public open space; this view is considered of *medium sensitivity* due to the number of residential properties and potential number users of the public open space (refer to **Appraisal Photograph 2** on Figure 3-1).
- from Fitzalan Road on its southern approach to the East Street roundabout; this view is considered of *medium sensitivity* due to the potential number of viewers affected (refer to **Appraisal Photograph 3** on Figure 3-2).
- from Oakcroft Gardens; this view is considered of *medium sensitivity* due to the number of residential properties with primary and secondary views towards the site (refer to **Appraisal Photograph 4** on Figure 3-2).

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352 The sensitivity and impact of the proposed development on each of these representative views is described in the 'Assessment of Effects' section.

Existing darkness and lighting conditions

353 The site is located in the Town of Littlehampton, which has 'Category E3 Medium district brightness'. However, the undeveloped land within the site has lower light levels of 'Category E2 Low district brightness', more typical of a rural area, due to the absence of street lighting and limited number of external lights. To the north of the site beyond the urban fringe the area of low distinct brightness extends to the South Downs, which is 'Category E1 Intrinsically dark landscape', applying to National Parks and other nationally designated landscapes. The ILE recommends that areas lying on the boundary of this sensitive zone, such as land to the north of Littlehampton, should use the same light limitation values as those that are recommended for the 'Intrinsically Dark Landscapes' category. Areas within the Arun valley also have a distinct lack of settlement, justifying the extension of the 'Category E1 Intrinsically dark landscape' southwards along the River Arun. In line with ILE guidance all viewpoints within or adjacent to the 'Category E1 Intrinsically dark landscape' are assumed to have a *high sensitivity* to the introduction of increased lighting levels.

354 The darkness and lighting conditions are described by reference to the landscape character of the route corridor and its context. Existing vegetation and intervening built development have a significant impact on the level of change that occurs in each view.

355 The darkness and lighting appraisal was carried out on the night of 4 November 2009. It included visiting the site and the surrounding area to assess the sources of night time lighting from the site and within its context. The appraisal identified that there were a few notable sources of light from the site at the time the survey was undertaken. Existing lighting observed within and adjacent to the site from the surrounding landscape included:

- Flood lighting of playing fields at The Littlehampton Academy;
- external security lighting at The Littlehampton Academy;
- low level lighting from properties at Highdown Drive and Oakcroft Gardens;
- street lighting at Worthing Road (A259), East Street (B2187) and, to a lesser extent, Highdown Drive and Oakcroft Gardens.

356 The Flood lighting of playing fields at The Littlehampton Academy is a notable feature due to high levels of illumination in night time views, which results in glare; refer to Figure 8.2-2 and 8.2-3. The light sources are particularly visible in near views, including views from residential properties at Highdown Drive and Oakcroft Gardens.

357 As part of the darkness and lighting appraisal, photographs were taken from five viewpoints to represent the existing baseline night time views; refer to Figure 8.2. The location of these viewpoints is shown on Figure 8.1. A description of the sources of night time light experienced from each viewpoint is given below.

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Darkness and Lighting appraisal viewpoint 1: from bridleway between Poling and Lyminster

358 This view is taken from the rural area to the north of Littlehampton (*E2 Low district brightness*). The foreground of the view is very dark. Lyminster Road, the majority of which does not have street lighting, and the village of Lyminster are to the west (right) of the viewpoint, but there is little *light trespass*. Vegetation along Lyminster road successfully contains the light from car headlights.

359 Littlehampton (*E3 Medium district brightness*) is located to the south of the viewpoint with associated *skyglow* apparent in the view. A number of distinct light sources are visible along its northern edge in the view and these are identified in the photograph; refer to Figure 8.2-1. The Bodyshop Head Quarters has prominent external lighting which visually contrast with the dark foreground of the view to result in *glare*. Similarly, street lighting on Lyminster Road where it enters the built up area of Wick and Toddington also results in *glare. Skyglow* is visible above these light sources which appear to add to that associated with Littlehampton to the south. The street lighting along the A259 where it passes through the site is obscured by intervening vegetation and buildings at the North Littlehampton development site.

Darkness and Lighting appraisal viewpoint 2: from northern part of the site near A259

360 This view is taken from the northern part of the site, which has lighting levels more typical or a rural environment (*E2 Low district brightness*). The view is looking south towards East Street away from the A259. Adjacent residential development has higher levels of lighting (*E3 Medium district brightness*) but light spill from these areas is limited to the northern edge of the site along the A259. There are a limited number of low level point source lights from properties along Highdown Drive.

361 The Littlehampton Academy (TLA) is by far the most dominant light source, which includes external lighting and flood lighting of playing fields; refer to Figure 8.2-2. This lighting is prominent in the central part of the view and its visual contrast with the dark foreground of the view results in *glare*. It is assumed that this lighting is not used every night but is likely to be used several nights a week.

Darkness and Lighting appraisal viewpoint 3: from Oakcroft Gardens

362 This view is taken from Oakcroft Gardens approximately 400m east of the site. The viewpoint is in the urban area of Littlehampton (*E3 Medium district brightness*). The view is towards the west and Highdown Drive. Residential properties and street lighting along Highdown Drive result in a limited number of point sources. Street lighting along Oakcroft Gardens is in contrast to the dark foreground of the undeveloped land.

363 The Littlehampton Academy (TLA) is by far the most dominant light source, which includes external lighting, but most significantly flood lighting of playing fields; refer to

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Figure 8.2-3. This lighting is prominent in the central part of the view and its visual contrast with the dark foreground of the view results in *glare* and *light trespass*. It is assumed that this lighting is not used every night but is likely to be used several nights a week.

Darkness and Lighting appraisal viewpoint 4: from eastern end of Cornwall Road looking south

364 This view is taken from Cornwall Road at the cycleway/footpath link to Elm Grove Road; refer to Figure 8.2-4. The viewpoint is in the urban area of Littlehampton (*E3 Medium district brightness*). The view is towards the south to East Street. Residential properties and street lighting along Paterson Wilson Road and at Rosemead result in a limited number of low level point sources. Street lighting along the cycleway and at East Street are the most prominent light sources. Their contrast with the dark foreground of the undeveloped land results in some *glare*.

Darkness and Lighting appraisal viewpoint 5: from eastern end of Cornwall Road looking north

365 This view is taken from Cornwall Road at the cycleway/footpath link to Elm Grove Road; refer to Figure 8.2-5. The viewpoint is in the urban area of Littlehampton (*E3 Medium district brightness*). The view is towards the north and The Littlehampton Academy. There are low level distant light sources associated with street lighting along the A259 at the northern end of the site. The Littlehampton Academy (TLA) is by far the most dominant light source, which includes external lighting, but most significantly flood lighting of playing fields. This lighting is in the central part of the view and its visual contrast with the dark foreground of the view results in *glare*. It is assumed that this lighting is not used every night but is likely to be used several nights a week.

Darkness and lighting receptors

366 The darkness and lighting appraisal identified the existing darkness and lighting conditions within the site and its context; refer to refer to Figure 8.1. It highlighted potential impacts associated with the proposed development. The key issues are:

- The site generally has low levels of lighting (E2 rural, low distinct brightness) with low level point sources of light around the perimeter.
- Existing flood lighting of the playing fields at The Littlehampton Academy is prominent over a wider area.
- A conventional approach to lighting along the proposed road would result in a significant change to night time views from the rear of properties along Highdown Drive, and to a lesser extent on views from Oakcroft gardens.
- Lighting along the A259 and East Street is visually prominent in night views near those roads. This prominence reduces significantly with distance away from the light sources.

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4.0 Planning Policies relating to landscape

National Planning policy

401 Planning Policy England[19], Planning Policy Statement (PPS) 1: Sustainable Development states in respect to protection and enhancement of environment that *"…a high level of protection should be given to most valued townscapes and landscapes, wildlife habitats and natural resources. Those with national and international designations should receive the highest level of protection'*

402 PPS 1 states in respect of the design of proposed developments that: '….. good design should contribute positively to making places better for people. Design which is inappropriate in its context, or which fails to take the opportunities available for improving the character and quality of an area and the way it functions, should not be accepted'

403 PPS1 also states that: "….high quality design should create well-mixed and integrated developments which avoid segregation and have well-planned public spaces that bring people together and provide opportunities for physical activity and recreation…… not just for the short term but over the lifetime of the development".

404 According to PPS 9: Biodiversity and Geological Conservation, *'Regional spatial strategies should:*

- incorporate biodiversity objectives
- address regional, sub-regional and cross-boundary issues in relation to habitats, species and geomorphological processes through criteria-based policies;
- include policies to conserve and enhance biodiversity at the regional and sub regional levels;
- include targets for the restoration and re-creation of priority habitats and the recovery of priority species populations, linked to national goals; and
- identify suitable indicators for monitoring biodiversity".

405 PPS11: Regional Spatial Strategy (RSS) England, states that *"Planning should facilitate and promote sustainable and inclusive patterns of urban and rural development by:*

- making suitable land available for development in line with economic, social and environmental objectives to improve people's quality of life;
- contributing to sustainable economic development;
- protecting and enhancing the natural and historic environment, the quality and character of the countryside, and existing communities;
- ensuring high quality development through good and inclusive design, and the efficient use of resources".

19 The Planning Policy Statements are available from the Planning portal at www.planningportal.gov.uk

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Regional

406 The South East Regional Spatial Strategy (RSS)[20], sets out the long term spatial planning framework for the region over the years 2006-2026.

407 POLICY CC7: INFRASTRUCTURE AND IMPLEMENTATION – refers to the provision of adequate infrastructure to support new development and its importance in improving the quality of life. The definition of infrastructure includes transport, education, health and housing, but it also includes Social Infrastructure (social and community facilities, sports centres, open spaces, parks and play space) and Green Infrastructure.

408 POLICY CC8: GREEN INFRASTRUCTURE – refers to the need to plan, provide and manage connected and substantial networks of accessible multi-functional green space. These networks include both existing and new green infrastructure, and their management should deliver the widest range of linked environmental and social benefits. A variety of GREEN INFRASTRUCTURE ASSETS are listed; these can form part of networks of Green Infrastructure:

- **parks and gardens** - including urban parks, country parks and formal gardens;
- **natural and semi-natural urban greenspaces** - including woodlands, urban forestry, scrub, grasslands (e.g. downlands, commons and meadows) wetlands, open and running water, wastelands and derelict open land and rock areas (eg cliffs, quarries and pits);
- **green corridors** - including river and canal banks, cycleways, and rights of way;
- **outdoor sports facilities** (with natural or artificial surfaces, either publicly or privately owned) - including tennis courts, bowling greens, sports pitches, golf courses, athletics tracks, school and other institutional playing fields, and other outdoor sports areas;
- **amenity greenspace** (most commonly, but not exclusively, in housing areas) – including informal recreation spaces, greenspaces in and around housing, domestic gardens and village greens;
- **provision for children and teenagers** - including play areas, skateboard parks, outdoor basketball hoops, and other more informal areas (e.g. 'hanging out' areas, teenage shelters);
- **allotments**, community gardens, and city (urban) farms cemeteries and churchyards;
- **accessible countryside** in urban fringe areas;
- river and canal corridors; and
- **green roofs** and walls.

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20 **The South East Plan - Regional Spatial Strategy (RSS) for the South East of England**, The Government Office for the South East, 2009

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409 POLICY NRM4: SUSTAINABLE FLOOD RISK MANAGEMENT – is of relevance to landscape due to the reference to Sustainable Drainage Systems (SuDS), which are typically part of green spaces. It states that *"the probability and impacts of flooding can be reduced … through use of appropriate SuDS to help reduce the likelihood of flooding and pollution by controlling surface water run off"*. These techniques include permeable surfaces, filter drains/strips, swales, basins, ponds and wetlands, soakaway, green roofs and infiltration trenches. Collectively, SuDS aim to improve the quality and reduce the quantity/rate of runoff entering receiving watercourse.

410 POLICY NRM5: CONSERVATION AND IMPROVEMENT OF BIODIVERSITY – states that Local planning authorities and other bodies shall avoid a net loss of biodiversity, and actively pursue opportunities to achieve a net gain across the region. Green infrastructure is to be identified, developed and implemented in conjunction with new development.

411 South East Green Infrastructure Framework - From Policy into Practice[21] seeks to:

- establish Green Infrastructure as an integral and essential component of sustainable communities;
- develop a common understanding of the role and importance of green infrastructure;
- help implement the South East Plan's green infrastructure policy; and
- provide detailed guidance on how Green Infrastructure can be delivered through the planning system and local partnerships.

West Sussex Structure Plan 2001-2016

Policy CH1: Character

412 This policy states that: "development should not be permitted unless it maintains and, where possible, enhances the character, distinctiveness and sense of place of the settlements and different areas and features of the County, including the woodlands, forests, rivers, waterways, wetlands, and the coast, and that it reflects and, where possible, reinforces the character of the main natural character areas of the County - the South Coast Plain.."

413 Policy DEV1: High quality development. This policy requires that development should not be permitted unless: "construction, layout, scale, appearance and landscaping are of high quality taking into account the need to" take a number of factors into account. Those of most relevance to landscape are:

(2) have regard to the local context including:

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21 **South East Green Infrastructure Framework - From Policy into Practice**, The Government Office for the South East, 2009

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(i) the varied traditions and character of the different parts of West Sussex;
(ii) the characteristics of the site in terms of topography, natural and man-made features, and micro-climate;
(iii) the morphology, landscape, townscape, streetscape and skyline of the surrounding area;
(iv) views into and out of the site; and

(3) create a sense of place which is easy to understand through the use of distinctive buildings, open spaces, routes, and landmarks (including works of art);

(4) give high priority to pedestrians, those with impaired mobility, cyclists and users of passenger transport, reduce the dominance of cars and roads, and integrate with existing transport provision;

(7) protect and enhance the biodiversity of the site and the surrounding area;

(9) minimise impact on and the use of natural resources (air, soil, water and minerals), minimise waste generation, and maximise the use of recycled materials; …"

414 Policy DEV4: Travel needs and choices. Development should not be permitted unless: *"it encourages and enables an increase in walking, cycling"*

Arun District Local Plan 2003

415 Policy GEN 27: Landscape Diversity, states the following: "Development which would have an unacceptable adverse impact on individual features or the character of the landscape would not be permitted".

416 Policy GEN 33: Light Pollution

"Planning permission would be permitted for proposals which would involve an outdoor lighting scheme subject to:

no adverse impact on neighbouring uses or the wider landscape;

light levels being the minimum required for security and working purposes; and

minimising the potential glare and spillage. Where appropriate the local planning authority would seek to control the times of illumination".

417 Policy SITE 3: New Public Open Space Allocations, states the following:

"The following areas…. are allocated for use as public open space. The loss of these areas to unrelated uses would not be permitted. Proposals should allow for reversal to agricultural use where appropriate".

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5.0 Identification and evaluation of potential impacts

The potential sources of impact

501 The design of the Fitzalan Link has evolved through consideration of the potential landscape and visual effects and how adverse effects may be avoided or mitigated. The magnitude and significance of effects varies during the construction and operational phase of the highway.

502 During the construction phase the potential sources of impact are initially associated with the removal of existing features and addition of new features associated with site preparation: setting up the contractor's compounds, fencing of construction areas, traffic management systems, temporary accesses, etc.; and site clearance, in particular, removal of soils and vegetation. These activities will be followed by the construction of the carriageway and surfacing, installation of street furniture, signs, lighting, boundary fencing and walling. Change would reduce considerably towards the completion of the scheme, with landscape works: grass seeding and planting, reducing the visual prominence of the highway.

503 Highway construction activities would continue for at least one year but would be preceded by construction works associated with the Lyminster Bypass South. Work on that scheme would have more significant landscape and visual impacts due to the scale of change relating to the bridge over the railway and the embankment. However, the Fitzalan Link will be constructed in close proximity to the rear of residential properties along the eastern side of Highdown Drive. Increased levels of construction activity will inevitably result in disturbance within the setting of these and other properties at Oakcroft Gardens.

504 The landscape appraisal of the site and its context identified five landscape receptors; refer to paragraph 341. The magnitude of change in the landscape, and the effects on the different receptors is considered, and their potential significance assessed in chapter 6.0.

505 Four Appraisal Photograph viewpoints have been selected, which are *representative* of *sensitive* views available from publicly accessible places. The locations from which the Appraisal Photographs are taken are shown in Figure 2. The four appraisal views are listed at paragraph 351.

Proposed mitigation measures

506 The landscape strategy for the Fitzalan Link, which incorporates both mitigation and enhancement measures, is shown on Figure 9. Mitigation measures are incorporated into the proposals, which were developed through an iterative design process. The purpose of mitigation measures is first, to prevent the adverse impacts identified, and if that is not possible, to reduce the potential adverse effect.

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507 The primary landscape design objectives are to provide an appropriate setting for the proposed highway and associated pedestrian and cycle routes, and to mitigate potential adverse landscape and visual impacts. Secondary design objectives include assisting in achieving sustainability objectives, for example, increasing biodiversity and accommodating sustainable drainage (SuDS). Boundary treatments proposed by the landscape strategy also provide noise mitigation for adjacent residential properties.

508 In the following paragraphs the mitigation measures incorporated into the construction and operational phase of the Fitzalan Link are described.

Construction phase

509 There is little scope for mitigating the visual effects of the construction activities and the changes that will be associated with construction of the proposed Fitzalan Link. The level of disruption may be reduced by using best construction practice, and management measures: restriction of the working areas available, traffic management, maintenance of accesses and provision of alternative pedestrian routes, control of hours of working and minimising night working, and programming of operations to minimise the duration of works in any one location. The phasing of the works would minimise disruption to traffic flows on the A259 and B2187 at times of peak traffic flows. Any lighting requirements for the contractor's compounds would be required to limit light spill, and compounds would be screened with appropriate fencing.

510 The extent of vegetation to be removed as a result of the highway scheme has been minimised. Vegetation proposed to be retained would be protected, from direct damage from construction operations and from indirect damage resulting from activities in the vicinity of the vegetation. Temporary fencing to define the edge of the construction area would be installed from the commencement of the works.

Operational phase

511 The highway design for the Fitzalan Link incorporates a number of measures to mitigate potential landscape and visual impacts. In order to create an attractive parkland character for the route, the highway has been aligned centrally to allow space on both sides of the route for tree planting. Along the rear of residential properties at Highdown Drive additional planting and low level earthworks have been accommodated to provide mitigation of visual impact and adverse effects on landscape amenity. Specific proposals for vegetation, boundary treatment and vegetation are identified below:

Vegetation

512 Tree and shrub planting is proposed along the route of the Fitzalan Link to create an attractive route for road users, pedestrians and cyclists. The planting will mitigate the loss of mature trees and hedgerows, and the resulting more open landscape pattern. Tree and shrub planting would be of native species and of local provenance using the Forestry Commission geographic area criteria, except where ornamental planting would

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be required to perform a specific function at roundabouts, i.e. screening car headlights between the A259 and the realigned northern end of Highdown Drive.

513 The grass-seed mixes used for the verge areas would reflect the species indigenous to the area and, where practicable, would use seed of local provenance. The careful stripping of the soils, stockpiling in segregated piles, and replacement in the source area, would also be relied on to provide species diversity through natural regeneration.

Boundary treatment

514 There are two main boundary treatments proposed for the Fitzalan Link: brick and flint walling is proposed at the two roundabouts and at key entrances; and timber fences are proposed to provide noise mitigation along other sections of highway boundary. Along the western boundary of the site low level landform is proposed to provide noise mitigation, potentially instead of replacement timber fencing for the rear boundary of properties along High down Drive.

515 Where walling is proposed, it would be located at the back of verge to define the highway corridor visually. Walls would include brick coping and wall end with infill panels of random flint, consistent with existing walling at East Street. Where feasible at the East Street roundabout, materials would be salvaged from existing walls to be demolished and re-used in the new walls.

516 At Worthing Road (A259) brick and flint walling is proposed to define the highway boundary. This walling would be up to 2 metres in height to provide mitigation of traffic noise for adjacent properties. It would reflect the vernacular and provide a high quality consistent boundary treatment, and integrate the proposals into the townscape.

517 At East Street (B2187) brick and flint walling is proposed to define the highway boundary. This walling would be up to 2 metres in height. In additional to providing mitigation of traffic noise for adjacent properties, the walling would help to integrate the proposals into the townscape. The appearance of the walling would be consistent with the existing lengths of wall adjoining and within the site at Summerlea House.

Lighting

518 It is proposed that the Fitzalan link will have street lighting for its whole length from the A259 roundabout to the B2187 roundabout at East Street. This will result in a significant change in the light levels of the site, which does not have street lighting at present. To mitigate the impact of this lighting on adjacent residential properties, high pressure sodium lights, with full cut-off lanterns are proposed. These will direct the light towards the area needing to be lit and minimise *light trespass* into surrounding areas. Tree planting proposed along the road will also help to filter views of the lighting columns and *glare* from the lanterns.

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Landscape strategy

519 The landscape strategy forms an integral part of the proposals. It aims to integrate the highway into its landscape context, and not adversely affect landscape character. The strategy reflects the townscape of the site context whilst retaining key areas of existing vegetation.

Landscape design objectives

520 The primary landscape design objective is to provide an appropriate setting for the proposed highway. In addition, there are a number of secondary design objectives which have guided the preparation of the landscape strategy, which are to:

- mitigate potential adverse landscape impacts and maximise landscape enhancements;
- reflect the townscape of the setting of the site to reinforce locally distinct features and character;
- mitigate potential adverse visual impacts resulting from the introduction of the highway into the site, traffic and lighting; particularly visual impacts on views identified as 'sensitive' to change;
- incorporate existing elements of green infrastructure and supplement these with planting to create an attractive route towards Littlehampton seafront;
- assist in achieving sustainability objectives, for example increasing biodiversity and incorporating Sustainable Drainage Systems (SuDS); and
- facilitate and encourage active recreation and movement through the site by including attractive and direct footpath and cycle routes within the proposals; these links form a component of the route from seafront to countryside.

Existing features and opportunities

521 The landscape design objectives are addressed in part through the retention of mature trees, scrub and two sections of a hedgerow running through the site. These existing features are landscape 'assets' which are a positive addition to the green infrastructure of the highway corridor. They offer an opportunity to give the landscape strategy a 'head start' in relation to achieving the design objectives. Furthermore, where existing townscape features or character outside the site boundary can be incorporated or reflected within the landscape proposals, they can assist in integrating the highway into its setting. This approach contributes to the effective mitigation of potential landscape and visual impacts.

522 There are several key landscape/townscape 'assets' which have been retained and incorporated into the masterplan proposals. These include:

- mature Poplar trees along the boundary of the site at Cornfield School;

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- mature Poplar trees along the eastern edge of the site adjacent to The Littlehampton Academy (TLA);
- sections of an existing hedgerow which cross the site diagonally near the footpath connection to Highdown Drive; and
- mature trees along the eastern boundary of the site with Rosemead and Summerlea House nursing home.

523 The landscape treatment of the highway corridor creates an attractive environment for road users, pedestrians and cyclists. Pedestrian and cycle routes are aligned away from the highway edge where possible, linking Worthing Road and East Street conveniently, pleasantly and safely. Cycleways and footways have been considered as an amenity in their own right due to their contribution to active recreation provision.

524 East to west connectivity has been addressed through several crossing points and a pelican crossing at the eastern end of Cornwall Road. Crossing points have been located on the line of existing east to west routes.

525 The landscape strategy includes structure planting to supplement existing vegetation in key areas, for example, the rear garden boundary of properties along Highdown Drive. This planting helps to screen/filter views of the highway from the west, and improve the nature conservation value. Native species and local provenance plant material would be used for the majority of planting proposed within the site[22].

Landscape aftercare proposals

526 The management objectives are to guide the long-term development of the landscape to:

- provide an appropriate landscape setting for the proposed highway;
- create a variety of non-vehicular routes;
- create diverse, sustainable habitats which maximise wildlife value;
- maintain the habitat value of the site; and
- manage retained trees to increase longevity and amenity value.

527 In order to fulfil the aims of the landscape strategy, a long term commitment to management and maintenance is necessary. A detailed programme of regular maintenance would be implemented as part of the landscape strategy for the proposed highway. Maintenance of proposed planting areas would include all necessary maintenance operation to ensure the successful establishment of planting areas. Existing vegetation would be managed in order to improve species diversity.

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22 **Forest Practice Note No. 8, titled Using Local Seed Sources for Planting Native Trees and Shrubs**, Forestry Commission (1999).

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Darkness and lighting mitigation measures

528 The proposed highway incorporates measures to mitigate adverse impacts associated with increased levels of lighting. These are:

- the use of non-standard lighting columns to contribute to the townscape and reinforce the importance of the route;
- the frequency of lighting columns and level of lighting provided would be reduced from current standards where possible;
- retained trees and proposed planting would help to minimise the potential for *glare* and *light trespass* as a result of highway lighting;
- lighting with 8m high columns and high pressure sodium lamps with horizontal cut-off luminaires would be used to minimise upward spill of light into the night sky;

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6.0 Assessment of effects

Potential landscape effects

601 Potentially *sensitive* landscape receptors are identified in paragraph 341. These are:

- Landscape character, derived from the **existing vegetation** within the site and its context;
- **Landscape amenity**, as experienced by local residents of Toddington, Oakcroft Gardens, Highdown Drive, East Street, Paterson Wilson Road and Fitzalan Road;
- The **landscape setting** of The Littlehampton Academy, Cornfield School and Elm Grove Infant School;
- **Landscape amenity**, as experienced by people who use public footpaths, cycleways and roads within the immediate vicinity of the site; and
- The **landscape setting** of the South Downs National Park.

602 The landscape effects assessed are those which result from change relating to the proposed development. The effects are those that remain after mitigation measures are incorporated into the proposals, defined as *'residual effects'.* The sensitivity and impact of the proposed highway on each of the *sensitive* receptors is described in the following paragraphs.

Distinctive pattern of existing vegetation

603 The character of the landscape/townscape is partly derived from the existing vegetation within the site, including rows of mature Poplars, a tall hedgerow crossing the site diagonally, and hedgerows along the A259 highway boundary. The mature Poplar trees are visible in near and distant views towards the site, and form a landmark feature within the urban area. They echo the rural landscape to the north of Littlehampton, where Poplars have been planted to provide windbreaks.

604 The existing vegetation within the site is a key landscape 'asset' which has been retained where feasible and incorporated into the proposals. Windbreak trees are a typical feature of the rural landscape to the north of Littlehampton. Several prominent lines of mature Poplars can also be found within the urban area; these make an important contribution to amenity and echo those found acrros the rural landscape of the coastal plain. Within the site they occur along the site boundary with Cornfield School and The Littlehampton Academy.

605 There are coniferous shelterbelts of *leylandii* within the site along the boundary with the Rosemead public open space and Summerlea Nursing Home. The landscape strategy has not proposed the removal of these prominent trees, but more appropriate planting is proposed on adjacent land within the site. Once established this planting will reduce the

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potential impact associated with the removal of the *leylandii* trees at some point in the future.

606 The degree of impact on the landscape resource of the site would relate in part to the impacts on existing vegetation, which is a receptor of *medium sensitivity*. During site clearance there would be localised loss and disturbance of existing vegetation in a number of locations. This would result in the removal of sections of hedgerow, several smaller Poplar trees and the clearance of small areas of scrub in a number of locations. The short term impact on the vegetation pattern of the site during site clearance is ***slight adverse***. A that time, the clearance of vegetation along the route corridor of the Fitzalan Link would be at its most prominent. During construction the level of impact would be sustained until planting within the road corridor is implemented. This would lead to mitigation of the adverse impacts to negligible. In the medium to long term the effect of the proposed landscape strategy on the vegetation pattern is assessed as ***slight beneficial***. The proposals mitigate adverse impacts associated with the loss of vegetation, but also offer enhancement compared to the existing situation. This enhancement results from more appropriate management of retained vegetation and the introduction of planting to reinforce the existing vegetation pattern.

Landscape amenity of local residents of Toddington, Oakcroft Gardens, Highdown Drive, East Street, Paterson Wilson Road and Fitzalan Road

607 The landscape amenity of residents within the site context is a receptor of *medium sensitivity.* During construction of the Fitzalan Link there would be a period of increased disturbance during site clearance and establishment of a construction site. Adverse impact would occur where the proposed highway is a perceptible element in the setting of the property. This includes a number of properties at Toddington, Oakcroft Gardens, Highdown Drive, East Street, Paterson Wilson Road and Fitzalan Road.

608 Residents of properties in **Toddington** would be aware of construction activities along the northern section of the Fitzalan Link. The associated adverse impacts would represent a continuation of impacts relating to the Lyminster Bypass South, constructed as part of the North Littlehampton development. In relation to the Fitzalan Link, there would be a ***moderate adverse*** impact on the landscape amenity of those properties in closest proximity to the works at the A259 roundabout. Properties along the southern edge of Toddington would provide separation from the disruption associated with construction activities for other residents of Toddington and Eden Park. The public park and allotments provide a degree of separation between the proposed Fitzalan Link at properties in Toddington to the west of the public park.

609 In the longer term, towards the end of construction and during the operation of highway, the establishment of proposed planting would help to integrate the Fitzalan Link into its landscape/townscape context. The impact on landscape amenity of residents of Toddington would reduce to ***slight adverse*** at that stage. Lighting proposed for the Fitzalan Link would not significantly increase the level of artificial lighting in the area; the A259 already has street lighting between the Rustington and Wick roundabouts.

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610 Residents at properties at **Oakcroft Gardens** would be aware of construction activities along the northern end of the Fitzalan Link. The site is not a significant element in the setting of properties at Oakcroft Gardens due to the separation provided by the undeveloped land between Cornfield School and The Littlehampton Academy; potential impacts on landscape amenity are therefore ***negligible***.

611 Residents at properties along **Highdown Drive** would be aware of construction activities along the central and northern section of the proposed Fitzalan Link. For those properties at the northern end of Highdown Drive, the proposed highway would represent a continuation of adverse impacts relating to the construction of the Lyminster Bypass South, part of the proposed North Littlehampton development. The construction of Fitzalan Link would result in a ***moderate adverse*** impact on the landscape amenity of those properties along the eastern side of Highdown Drive; the rear gardens of these properties are along the western boundary of the site. The disruption associated with construction activities and in the longer term associated with traffic, would contribute to ***moderate adverse*** impacts on landscape amenity. Properties along the eastern side of Highdown Drive would provide separation for other properties to the west.

612 In the longer term, towards the end of construction and during the operation of the highway, the establishment of proposed planting would help to integrate the Fitzalan Link into its landscape context. The impact on landscape amenity of residents of Highdown Drive would reduce to ***slight adverse*** at this stage.

613 Residents at properties near the southern section of the Fitzalan Link would be aware of construction activities; these are residents at **East Street**, **Paterson Wilson Road**, **Fitzalan Road**, **Summerlea House Nursing Home** and **Rosemead**. There would be a ***moderate adverse*** impact on the landscape amenity of those properties in closest proximity to the works along the southern section of the Fitzalan Link and at the East Street roundabout. Properties nearest the site provide separation of other properties beyond.

614 In the longer term, towards the end of construction and during the operation of the highway, the establishment of proposed planting would help to integrate the Fitzalan Link into its landscape/townscape context. The impact on landscape amenity of residents near the southern section of the site would reduce to ***slight adverse*** at that stage. Lighting proposed for the Fitzalan Link would not significantly increase the level of artificial lighting in the area; the B2187, Fitzalan Road, Paterson Wilson Road and Rosemead already have street lighting.

The landscape setting of The Littlehampton Academy, Cornfield School and Elm Grove Infant School.

615 The landscape amenity of The Littlehampton Academy, Cornfield School and Elm Grove Infant School is a receptor of *medium sensitivity.* During construction of the Fitzalan Link there would be a period of increased disturbance during site clearance and establishment of a construction site. Staff and pupils at the schools would be aware of construction

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activities within the site, different parts of which are immediately adjacent to each of the schools. There would be a ***moderate adverse*** impact on the landscape amenity of the schools during adjacent construction activities. Intervening retained boundary vegetation offers some separation from the construction site at Cornfield School and The Littlehampton Academy.

616 In the longer term, towards the end of construction and during the operation of highway, the establishment of proposed planting would help to integrate the Fitzalan Link into its landscape/townscape context. The impact on landscape amenity of The Littlehampton Academy, Cornfield School and Elm Grove Infant School would reduce to ***slight adverse*** at that stage.

Landscape amenity as experienced by people who use public footpaths, cycleways and roads within the immediate vicinity of the site

617 Recreation and enjoyment of publicly accessible places is inextricably linked to the landscape character of the wider area which is as a landscape receptor of *medium sensitivity*. The potential adverse impacts on the amenity of uses of public footpaths and roads in the area, as a result of the proposed Fitzalan Link, would change during the construction and operation of the highway.

618 During the construction of the Fitzalan Link there would be periods of increased disturbance during site clearance and each stage of construction of the highway. The impacts on landscape amenity of people who use public footpaths, cycleways and roads at the northern end of the scheme would represent a continuation of impacts relating to the construction of the Lyminster Bypass South.

619 Adverse impact would only occur where the construction activities are a perceptible element in the setting of the public right of way, cycleway or road. For the majority of routes within the study area the construction activities would not represent a significant impact on landscape amenity. The impact on landscape amenity would relate to proximity to the works.

620 Public footpaths 3654 and 3103, which pass through the site, would have short term ***moderate adverse*** impacts on their landscape setting. The routes would need to be diverted whilst construction works are undertaken across the current alignments. A permanent realignment of the routes is incorporated into the proposals for the highway. During construction works in parts of the site away from these routes the impact would be ***negligible*** to ***moderate adverse***, depending on the prominence of the construction work within the setting of the route.

621 There would be ***moderate adverse*** impacts on the landscape setting of the cycleway between Cornwall Road and Elm Grove Road. This would occur for a short period during the construction of the central section of the Fitzalan Link. Following the completion of this element of the project, remaining construction activities would be more distant to the south and north, resulting in a reduction of adverse impacts to ***slight adverse***.

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622 Users of the public park and allotments at Toddington would experience short term ***slight adverse*** impacts on landscape amenity. This would occur during the construction of the A259 roundabout in particular. Following the completion of this element of the project, remaining construction activities would be more distant to the south, resulting in a reduction of adverse impacts to ***negligible***.

623 Vehicle travellers would perceive construction activities to a lesser extent than pedestrians. The landscape setting of the A259 and B2187 near the site is urban in character. Construction activities associated with the proposed highway would be typical in this setting and therefore less likely to result in adverse impacts on landscape amenity.

624 In the longer term, towards the end of construction and during the operation of the proposed highway, the integration of proposed green infrastructure with retained vegetation would improve the amenity of public footpaths within the site. The site includes footways at the highway edge and footpaths passing through the adjacent landscape areas. These would provide variety of experience to encourage their use. The routes would become an integral part of a network of recreation routes in Littlehampton. Given the improvements to public access and the variety of green infrastructure included within the highway corridor, in the long-term there would be a ***slight beneficial*** impact on landscape amenity.

The landscape setting of the South Downs National Park.

625 The South Downs National Park is located approximately 2.5km to the north of the site. It is a landscape of national importance and therefore a landscape receptor of *high sensitivity*. The coastal plain extends southwards away from the National Park boundary towards the Black Ditch and the redevelopment site at North Littlehampton. Further to the south is the site for the Fitzalan Link, which lies beyond the development site and the adjacent railway. The coastal plain is an important element in the landscape setting of the South Downs, contributing to its character.

626 Views across the coastal plain contribute to the character and allow an appreciation of the setting of the National Park. Settlements and built development along the southern edge of the coastal plain appear distant. In contrast, traffic noise and movement associated with the A27(T) are intrusive, having a negative impact on tranquillity. Given the proximity of the site and the separation provided by intervening features, the Fitzalan Link would not impact upon the landscape setting of the South Downs National Park.

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Potential visual effects

627 The visual appraisal identified a number of locations from which the proposed development would be potentially visible. The locations of the appraisal photographs are shown on the Visual Appraisal, Figure 2. These areas were visited and the most sensitive views selected.

628 The visual effects assessed are those that remain after mitigation measures have been incorporated into the development proposals, defined as *'residual effects'.* Four viewpoints have been selected as representative of the most sensitive views available. These views are described below and the effects of the development on them assessed:

- from the A259 Worthing Road on its eastern approach to the proposed roundabout with the Fitzalan Link;
- from Rosemead public open space;
- from Fitzalan Road on its southern approach to the East Street roundabout; and
- from Oakcroft Gardens;

Appraisal Photograph 1: *Taken from the A259 Worthing Road on its eastern approach to the proposed roundabout with the Fitzalan Link (refer to Figure 3-1).*

629 This view is of *high sensitivity* due to the number of viewers affected. The view is towards the west along the A259, which occupies a large proportion of the view. There is a tall, highway boundary hedgerow defining the right side of the view. It contains the view and guides views along the highway corridor. A number of houses are visible above the hedge in the extreme right of the view.

630 Mature Poplar trees along the boundary of Cornfield School are located in the left of the view. These trees rise above the highway boundary hedge along the left side of the road, which is similar in scale to the hedge on the right side of the view. The kissing-gate at the entrance of public footpath 3103 is located in the left of the view. Other features visible along road corridor are a number of houses, distant and small-scale.

631 During vegetation clearance at the site there would not be a significant change in the view. Existing hedgerows would be removed on the left and right side of the A259 to accommodate the proposed roundabout, which would result in a more open view and a less defined highway corridor. Activities associated with the construction of the A259 roundabout would occupy a significant proportion of the view. Once construction works in this part of the site are complete, works along the remainder of the Fitzalan Link would not be visible.

632 The proposed development would lead to a moderate magnitude of change and result in a short-term ***significant adverse*** visual impact during vegetation clearance and construction of the A259 and Fitzalan Link roundabout. The visual impact would reduce to

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moderate adverse for the remainder of the construction period once boundary walling is implemented to redefine the highway corridor.

633 Following construction the overall scale of change would result in ***moderate adverse*** visual impact, including impacts associated with increased levels of street lighting. In the longer-term, the planting proposals would begin to define the highway corridor and re-establish the vegetated character of this section of the A259. This process would steadily reduce adverse impacts to ***slight adverse*** and **negligible** once the landscape proposals have established after 15 years.

Appraisal Photograph 2: *Taken from Rosemead public open space (refer to Figure 3-1).*

634 This view is of *medium sensitivity* due to the number of residential properties and potential number users of the public open space. The view is towards the site of the Fitzalan Link across the Rosemead public open space, which occupies the foreground of the view.

635 A line of conifers along the boundary of the site is visually prominent in the left of the view. Existing properties along the western side of the site on Paterson Wilson Lane are just visible through gaps between the conifers. Mature trees of mixed species along the cycleway at the southern boundary of Elm Grove Infant School extend across the view in the middle distance. The school buildings are visible between the trees, obscuring The Littlehampton Academy beyond.

636 During vegetation clearance within the site there would little change in the view. Construction activities would be confined to filtered views between the conifers, which are not proposed to be removed. Similarly, the scale of change following construction of the Fitzalan Link and operation of the highway would be small-scale due to the filtered nature of the view available.

637 The proposed development would result in minor magnitude of change and ***slight adverse*** visual impact. The visual impact would be maintained for the remainder of the construction period and implementation of proposed planting. Following construction and during the operation of the highway the overall scale of change would result in ***slight adverse*** visual impact, including impacts associated with increased levels of street lighting. In the longer-term, the planting proposals would begin to screen or filter views further. This process would steadily reduce adverse impacts to ***slight adverse*** and **negligible** once the landscape proposals have established after 15 years.

Appraisal Photograph 3: *Taken from Fitzalan Road on its southern approach to the East Street roundabout (refer to Figure 3-2).*

638 This view is of *medium sensitivity* due to the prominence of the site in the view and the potential number of viewers affected. The view is towards the proposed East Street roundabout along Fitzalan Road, which occupies the central part of the view. Existing

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footways, verges and highway boundary fencing provide the context for the view on the left and right. The existing East Street and Fitzalan Road roundabout is located in the middle distance in the central part of the view; this occupies a small part of the view. Beyond, the site extends away from the roundabout, defined on right by a line of conifers at the Summerlea Nursing Home boundary. The left boundary of the site is obscured by trees within the highway verge at the roundabout.

639 During site clearance there would not be a significant change in the view. The site and the existing roundabout occupy a small proportion of the view, which is confined by the highway corridor. Activities associated with the construction of the B2187 roundabout would also occupy a small proportion of the view. Once construction works in this part of the site are complete, works along the remainder of the Fitzalan Link would not be visible.

640 The proposed development would result in a minor magnitude of change and short-term ***slight adverse*** visual impact during site clearance and construction of the B2187 and East Street roundabout. The visual impact would remain at ***slight adverse*** for the remainder of the construction period and following construction, including impacts associated with increased levels of street lighting. In the longer-term, the planting proposals would begin to re-define the highway corridor and create a higher quality environment for this important route. This process would steadily reduce adverse impacts and provide a **negligible** or ***slight beneficial*** impact once the landscape proposals have established after 15 years.

Appraisal Photograph 4: *Taken from Oakcroft Gardens (refer to Figure 3-2).*

641 This view is of *medium sensitivity* due to the number of residential properties with primary and secondary views towards the site. The view is across undeveloped land towards the site and properties at Highdown Drive. Mature trees at Cornfield School are in the right of the view. The Littlehampton Academy and adjacent properties are in the left of the view. Mature trees along the highway boundary of Oakcroft gardens are in the foreground and filter the view. Properties at Highdown Drive and trees along the eastern boundary of the site are at the horizon in the central part of the view.

642 During site clearance there would not be a significant change in the view. The site occupies a small proportion of the view. Activities associated with the construction of the Fitzalan Link would in part be screened by retained trees along the eastern boundary of the site. Once construction works in this part of the site are complete, works along the remainder of the Fitzalan Link would not be visible.

643 The proposed development would result be a negligible magnitude of change and a ***negligible*** visual impact during site clearance and construction of the central part of the Fitzalan Link. In the longer-term, the introduction of traffic and street lighting would increase the magnitude of change to minor and visual impact to ***slight adverse*** or ***negligible***. The establishment of the landscape proposals would begin to screen passing traffic in the longer term, which would steadily reduce adverse impacts to **negligible** once the landscape proposals have established after 15 years.

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7.0 Conclusion

701 A number of potential landscape impacts on sensitive receptors have been identified. These vary in significance from ***Moderate adverse*** to ***slight beneficial.*** Adverse impacts due to the loss of existing vegetation occur during site clearance. The proposed landscape strategy results in some beneficial impacts in the long term. Landscape amenity, as experienced by local residents, people who use the public footpaths, bridleways and roads within the immediate vicinity, is a sensitive landscape receptor. Adverse impacts on this receptor vary considerably due to proximity, duration and to which section of the highway is being constructed at a particular time. Adverse impacts occur mainly where properties are in close proximity to construction work. Given the proximity of the proposed highway and the separation provided by intervening features, it would not have a significant impact on the landscape setting of the South Downs National Park.

702 Visual impacts are generally adverse due to the scale of the changes proposed and the sensitivity of receptors. The landscape strategy which is part of the development proposals provides partial mitigation of potential impacts in a number of locations. Proposed planting incorporated into the highway scheme helps to integrate the highway into views by responding to vegetation patterns within and outside the site boundary. The assessment identified residual adverse visual impacts for the four appraisal views generally ranging from **slight adverse** to **slight beneficial**. Short term substantial adverse impacts are identified for one viewpoint where there are large numbers of viewers and the proposed changes occupy a significant proportion of the view. These impacts are short in duration, relating to only part of the construction period. Adverse impacts for the remainder of the construction period and during the operation of the road progressively reduce to slight adverse 15 years after construction.

703 The assessment is summarised below in Table 3 and Table 4.

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Table 3: Summary of landscape impacts

Receptor	Description of the activity resulting in the environmental change and mitigation measures	Value / Sensitivity of receptor	Extent that change is perceived	Nature and scale of temporary impact - construction	Nature and scale of permanent residual impact- construction / operation
Landscape character, derived from the **existing vegetation** within the site and its context.	During site clearance there would be localised loss and disturbance of existing vegetation in a number of locations; the removal of a section of hedgerow, several smaller Poplar trees and the clearance of small areas of scrub in a number of locations. The proposals offer enhancement compared to the existing situation; more appropriate management of retained vegetation, introduction of planting to reinforce the existing vegetation pattern.	Medium	District / Local / Site	slight adverse	Slight beneficial
Landscape amenity *of local residents*: Toddington, Oakcroft Gardens, Highdown Drive, East Street, Paterson Wilson Road and Fitzalan Road	At the northern end of the site the associated adverse impacts would represent a continuation of impacts relating to the Lyminster Bypass South, constructed as part of the North Littlehampton development. During site clearance there would be localised loss of vegetation and disturbance of the site; followed by construction activities; and the introduction of the highway into the site. Traffic and lighting would have associated impacts.	Medium	Local / Site	Moderate adverse	Slight adverse

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Receptor	Description of the activity resulting in the environmental change and mitigation measures	Value / Sensitivity of receptor	Extent that change is perceived	Nature and scale of temporary impact - construction	Nature and scale of permanent residual impact- construction / operation
Landscape setting of TLA, Cornfield School and Elm Grove Infant School.	Increased disturbance during site clearance and establishment of a construction site. Staff and pupils at the schools would be aware of construction activities within the site, different parts of which are immediately adjacent to each of the schools. In the longer term, the establishment of proposed planting would help to integrate the Fitzalan Link into its landscape/townscape context.	Medium	Local / Site	Moderate adverse	Slight adverse
The landscape amenity, as experienced by **people who use the public footpaths, cycleways and roads** within the immediate vicinity of the site	The impacts on landscape amenity at the northern end of the scheme would represent a continuation of impacts relating to the construction of the Lyminster Bypass South. Public footpaths 3654 and 3103, which pass through the site, would have short term impacts on their landscape setting. The routes would need to be diverted; a permanent realignment of the routes is incorporated into the proposals for the highway. The site includes routes which provide variety of experience to encourage their use. The routes would become an integral part of a network of recreation routes in Littlehampton.	Medium	Local / Site	Moderate adverse to negligible	Slight beneficial

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Receptor	Description of the activity resulting in the environmental change and mitigation measures	Value / Sensitivity of receptor	Extent that change is perceived	Nature and scale of temporary impact - construction	Nature and scale of permanent residual impact- construction / operation
The landscape setting of the **South Downs National Park**.	The South Downs National Park is located approximately 2.5km to the north of the site. Views across the coastal plain contribute to the character and allow an appreciation of the setting of the National Park. Given the proximity of the site and the separation provided by intervening features, the Fitzalan Link would not impact upon the landscape setting of the South Downs National Park.	High	Local	Not perceptible	Not perceptible

Table 4: Summary of visual impacts

Receptor	Description of the activity resulting in the environmental change and mitigation measures	Value / Sensitivity of receptor	Extent that change is perceived	Nature and scale of <u>temporary</u> impact - construction	Nature and scale of <u>permanent</u> residual impact- construction / operation
Appraisal Photograph 1: View from the A259 Worthing Road on its eastern approach to the proposed roundabout with the Fitzalan Link (refer to **Appraisal Photograph 1** on Figure 3-1).	During vegetation clearance there would not be a significant change in the view. Existing hedgerows would be removed to accommodate the proposed roundabout, resulting in a more open view and less well defined highway corridor. Activities associated with the construction of the roundabout would occupy a significant proportion of the view. In the longer-term, the planting proposals would begin to define the highway corridor and re-establish the vegetated character of this section of the A259.	High (high number of viewers)	Local	Significant adverse to moderate adverse	Moderate adverse to negligible

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Receptor	Description of the activity resulting in the environmental change and mitigation measures	Value / Sensitivity of receptor	Extent that change is perceived	Nature and scale of <u>temporary</u> impact - construction	Nature and scale of <u>permanent</u> residual impact- construction / operation
Appraisal Photograph 2: View from Rosemead public open space (refer to **Appraisal Photograph 2** on Figure 3-1).	During vegetation clearance within the site there would little change in the view. Construction activities would be confined to filtered views between the conifers, which are not proposed to be removed. Similarly, the scale of change following construction of the Fitzalan Link and operation of the highway would be small-scale due to the filtered nature of the view available. In the longer-term, the planting proposals would begin to screen or filter views further.	Medium (number of residential properties and potential number users of the public open space)	Local	Slight adverse	Slight adverse to negligible
Appraisal Photograph 3: View from Fitzalan Road on its southern approach to the East Street roundabout (refer to **Appraisal Photograph 3** on Figure 3-2).	During site clearance there would not be a significant change in the view. The site and the existing roundabout occupy a small proportion of the view, which is confined by the highway corridor. Activities associated with the construction of the B2187 roundabout would also occupy a small proportion of the view. Once construction works in this part of the site are complete, works along the remainder of the Fitzalan Link would not be visible.	Medium (high number of viewers)	Local	Slight adverse	Slight adverse to slight beneficial

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Receptor	Description of the activity resulting in the environmental change and mitigation measures	Value / Sensitivity of receptor	Extent that change is perceived	Nature and scale of <u>temporary</u> impact - construction	Nature and scale of <u>permanent</u> residual impact- construction / operation
Appraisal Photograph 4: View from Oakcroft Gardens (refer to **Appraisal Photograph 4** on Figure 3-2).	During site clearance there would not be a significant change in the view. The site occupies a small proportion of the view. In the longer-term, the introduction of traffic and street lighting would increase the magnitude of change.	Medium (number of viewers)	Local	Negligible	Slight adverse to Negligible

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APPENDICES

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APPENDIX 1: REFERENCES

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APPENDIX 2: FIGURES

Figure 1: Landscape appraisal

Figure 2: Visual appraisal

Figure 3: Appraisal photographs

Figure 3-1: Appraisal photographs 1 & 2
Figure 3-2: Appraisal photographs 3 & 4

Figure 4: Viewpoint photographs

Figure 5: Landscape Designations

Figure 6: Site appraisal

Figure 6-1: Site appraisal (north)
Figure 6-2: Site appraisal (central)
Figure 6-3: Site appraisal (south)

Figure 7: Site photographs

Figure 7-1: Site photographs 1 to 3
Figure 7-2: Site photographs 4 to 6
Figure 7-3: Site photographs 7 to 9
Figure 7-4: Site photographs 10 to 13
Figure 7-5: Site photographs 14 to 16
Figure 7-6: Site photographs 17 to 19

Figure 8: Darkness and lighting assessment

Figure 8-1: Darkness and lighting appraisal
Figure 8-1: Darkness and lighting photographs 1 to

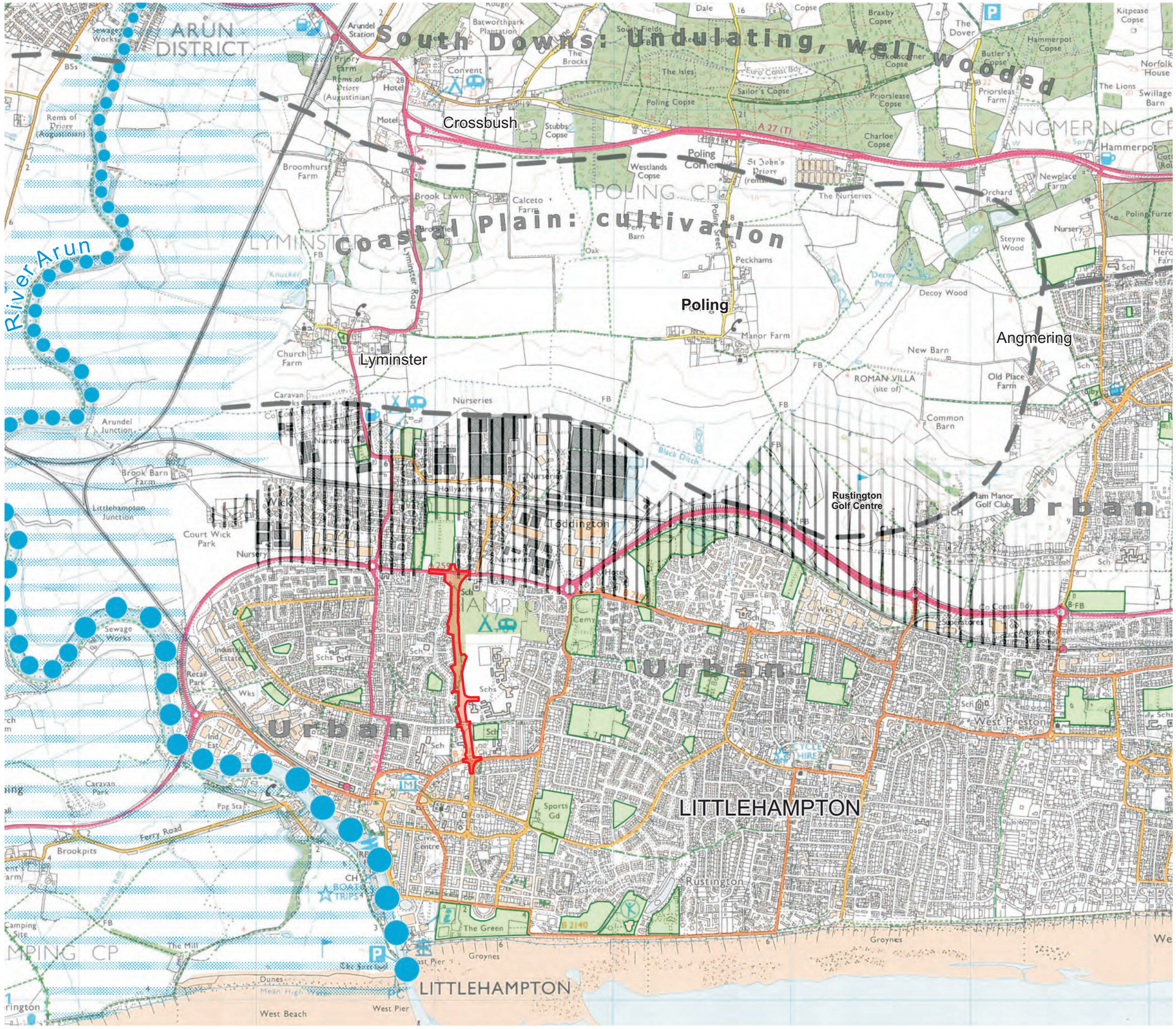
Figure 9: Landscape proposals

Figure 9-1: Fitzalan Link landscape concept
Figure 9-2: Landscape proposals (north)
Figure 9-3: Landscape proposals (central)
Figure 9-4: Landscape proposals (south)

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Landscape Appraisal

1

key

- Site boundary
- Woodland and plantation forestry
- Public open space and allotments
- Approximate landscape character area boundary
- River Arun and low lying land
- Urban — Character area
- Urban areas
- Urban fringe, mixed use

North

0 250 500 750 1000 1250 m

Scale 1:25,000 @ A3 Do not scale from this drawing

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Visual Appraisal

2

key

- Site boundary
- Settlements
- Woodland and plantation forestry
- Public open space and allotments
- Other green space in public use
- Appraisal Photographs [refer to figure 3]
- Viewpoint Photographs [refer to figure 4]
- River Arun and low lying land
- Land above 15m AOD
- Land above 5m AOD
- Public right of way

North

0 250 500 750 1000 1250 m

Scale 1:20,000 @ A3 Do not scale from this drawing

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Appraisal Photographs

3-1



Appraisal Photograph 1: View west along the A259 Worthing Road at entrance to public footpath 3103



Appraisal Photograph 2: View north west from entrance to Rosemead open space

Refer to figure 2 for photograph locations and directions

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Appraisal Photographs

3-2



Appraisal Photograph 3: View north from Fitzalan Road, approaching roundabout link to the B2187 East Street



Appraisal Photograph 4: View west from Oakcroft Gardens

Refer to figure 2 for photograph locations and directions

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Viewpoint Photograph 1: View northeast into the site from public footpath link at Highdown Drive

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Viewpoint Photographs

4



Viewpoint Photograph 2: View south from Cornwell Road cycleway along route of Fitzalan Link



Viewpoint Photograph 3: View west from Oakcroft Gardens

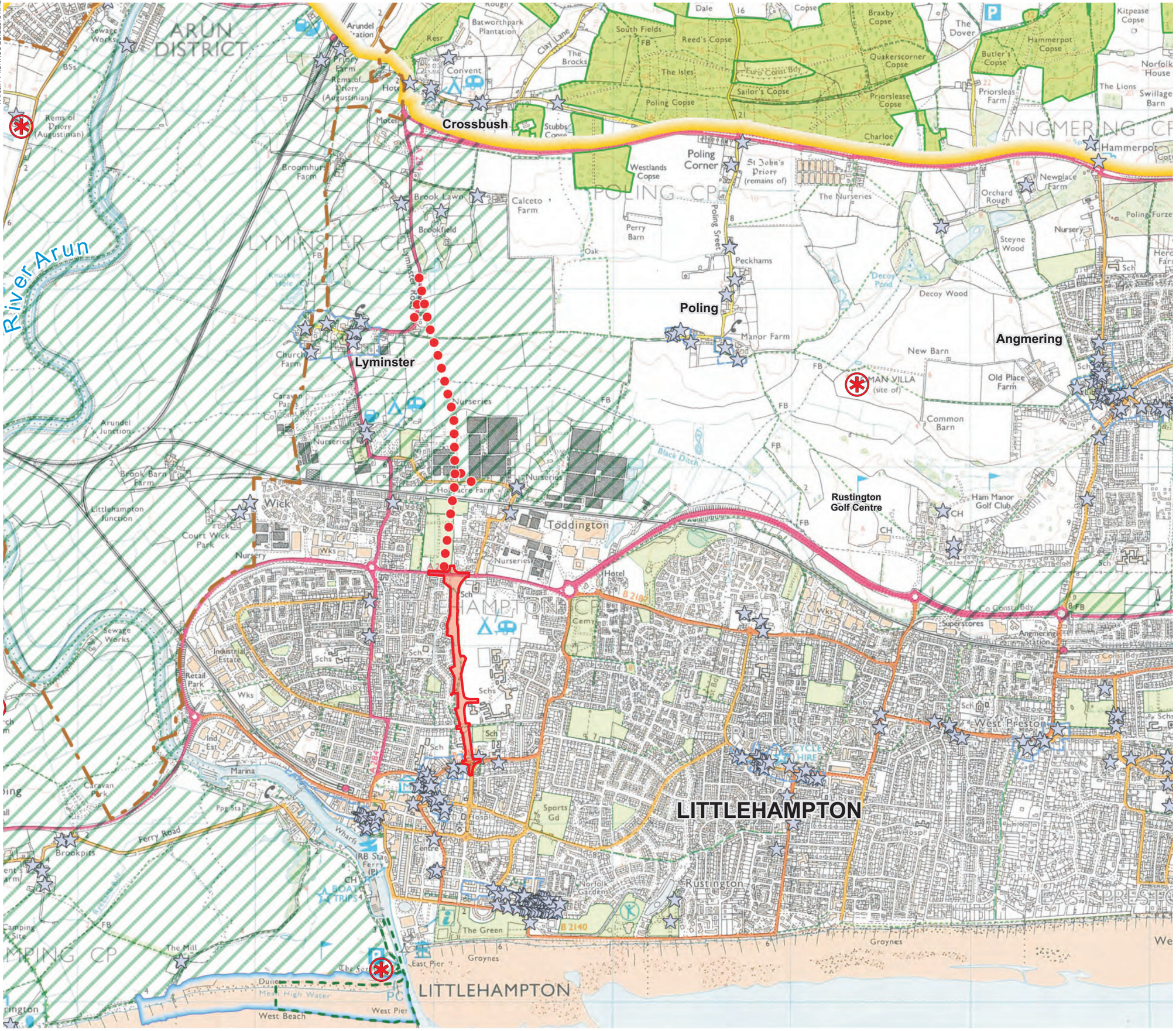
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Landscape Designations

5

key

- Planning application boundary

Designations

- South Downs National Park
- Ancient woodland
- Registered parks and gardens
- Listed buildings
- Scheduled monument
- Local Nature Reserve
- Site of Special Scientific Interest (SSSI)

Arun District Council Local Plan (2003)

- Strategic and local gaps
- Existing open spaces and allotments
- Conservation areas
- Setting of Arundel
- Protected line of Lyminster Bypass

North

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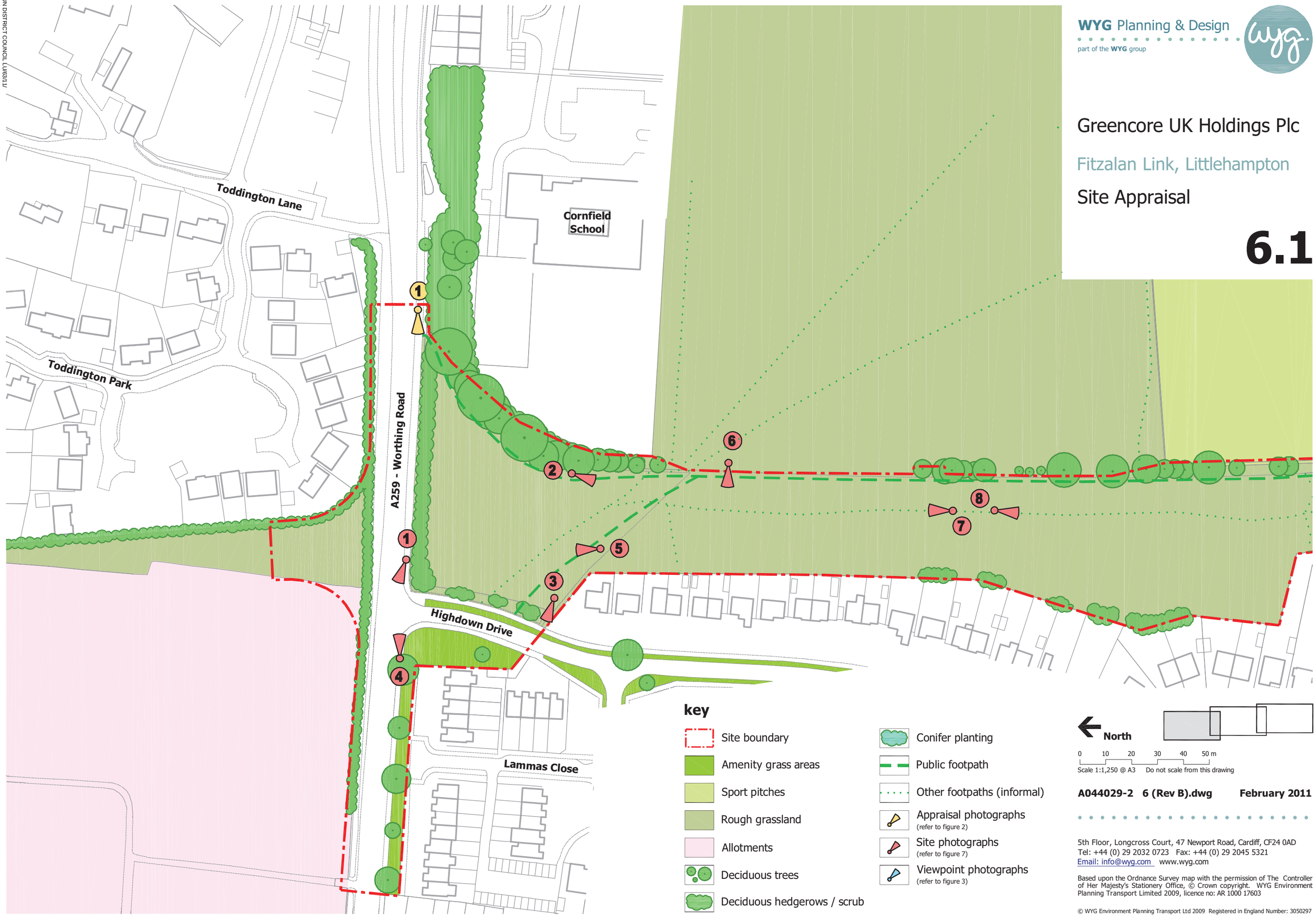
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key

- Site boundary
- Amenity grass areas
- Sport pitches
- Rough grassland
- Allotments
- Deciduous trees
- Deciduous hedgerows / scrub
- Conifer planting
- Public footpath
- Other footpaths (informal)
- Appraisal photographs (refer to figure 2)
- Site photographs (refer to figure 7)
- Viewpoint photographs (refer to figure 3)

North

0 10 20 30 40 50 m

Scale 1:1,250 @ A3 Do not scale from this drawing

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Site Appraisal

6.1

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Site Appraisal

6.2



key

- Site boundary
- Amenity grass areas
- Sport pitches
- Rough grassland
- Allotments
- Deciduous trees
- Deciduous hedgerows / scrub
- Conifer planting
- Public footpath
- Other footpaths (informal)
- Appraisal photographs (refer to figure 2)
- Site photographs (refer to figure 7)
- Viewpoint photographs (refer to figure 3)

North

0 10 20 30 40 50 m

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6.3

Rosemead
B2187 - East Street
Summerlea House (Nursing Home)
Elm Grove Infant School
Fitzalan Road
Meadowfield House
Police Station
Paterson Wilson Road
The Orsmby Centre
B2187 - East Street
Winterton Lodge

key

- Site boundary
- Amenity grass areas
- Sport pitches
- Rough grassland
- Allotments
- Deciduous trees
- Deciduous hedgerows / scrub
- Conifer planting
- Public footpath
- Other footpaths (informal)
- Appraisal photographs (refer to figure 2)
- Site photographs (refer to figure 7)
- Viewpoint photographs (refer to figure 3)

North

0 10 20 30 40 50 m

Scale 1:1,250 @ A3 Do not scale from this drawing

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Site Photographs

7-1





Refer to figure 6 for photograph locations and directions

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Site Photographs

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Site Photograph 10



Site Photograph 11

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Site Photographs

7-4



Site Photograph 12



Site Photograph 13

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Site Photograph 17



Site Photograph 18



Site Photograph 19

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Site Photographs

7-6

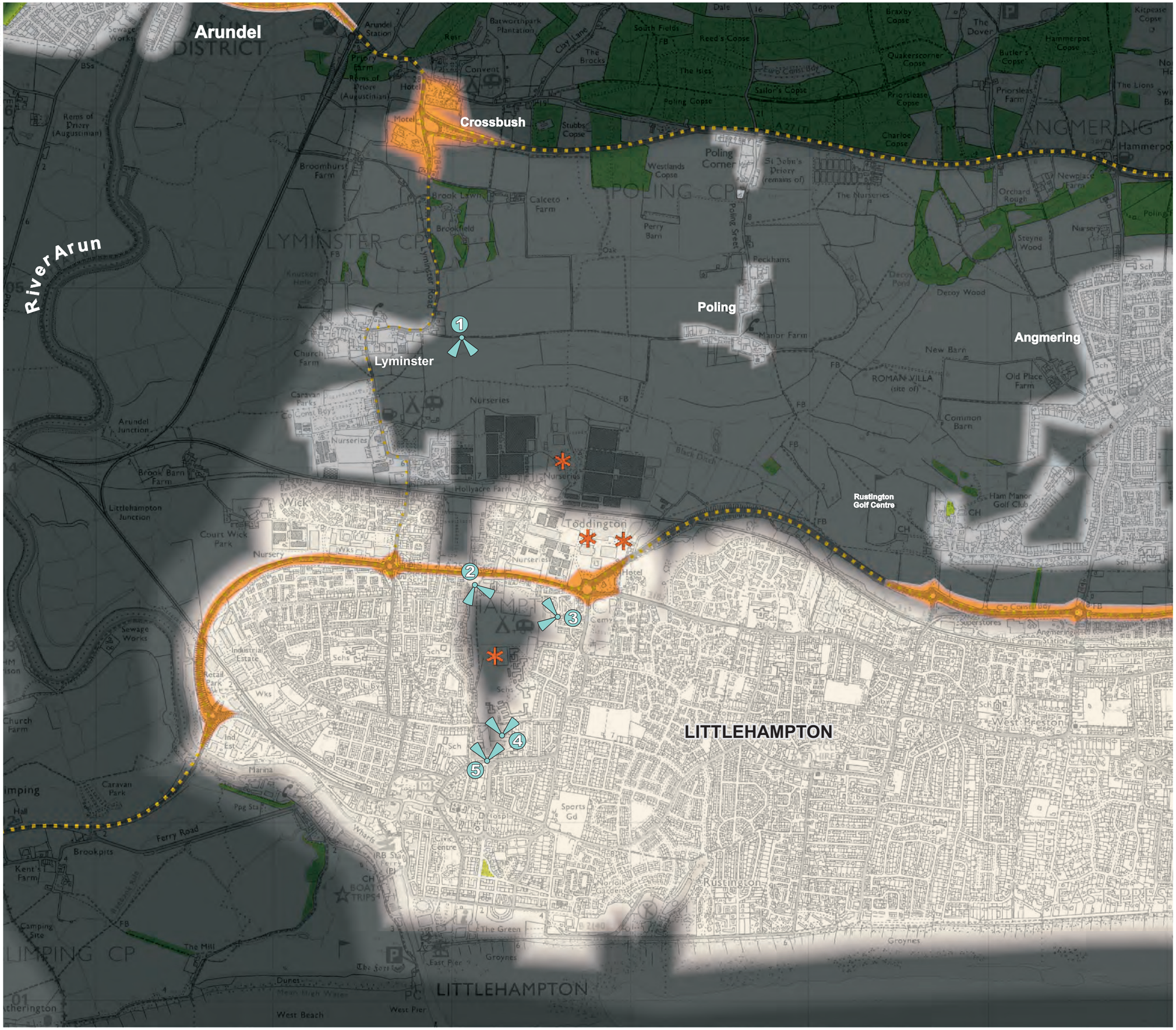
Refer to figure 6 for photograph locations and directions

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Fitzalan Link, Littlehampton

Darkness and Lighting Assessment

8.1

key

- Site boundary

Areas of darkness

- E1 (Intrinsically dark)
- E2 (Rural, low district brightness)
- E3 (Small town, medium distinct brightness)
- E4 (Town Centre, high distinct brightness)

Light sources

- Prominent road lighting (A259 & A27)
- Isolated light source / property with external lighting (point source)
- Vehicle headlights along main roads
- Existing vegetation which limits the extent of light spill
- Darkness and lighting appraisal photographs [refer to figure 8.2]

North

0 250 500 750 1000 1250 m

Scale 1:20,000 @ A3 Do not scale from this drawing

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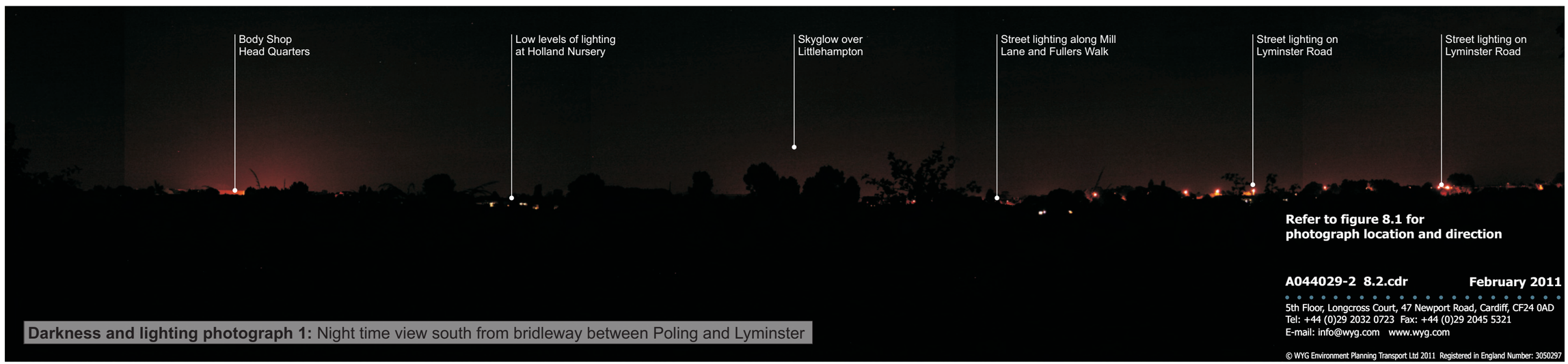
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Darkness and Lighting
Appraisal Photographs

8.2-1



Darkness and lighting photograph 1: Day time view south from bridleway between Poling and Lyminster



Darkness and lighting photograph 1: Night time view south from bridleway between Poling and Lyminster

Refer to figure 8.1 for photograph location and direction

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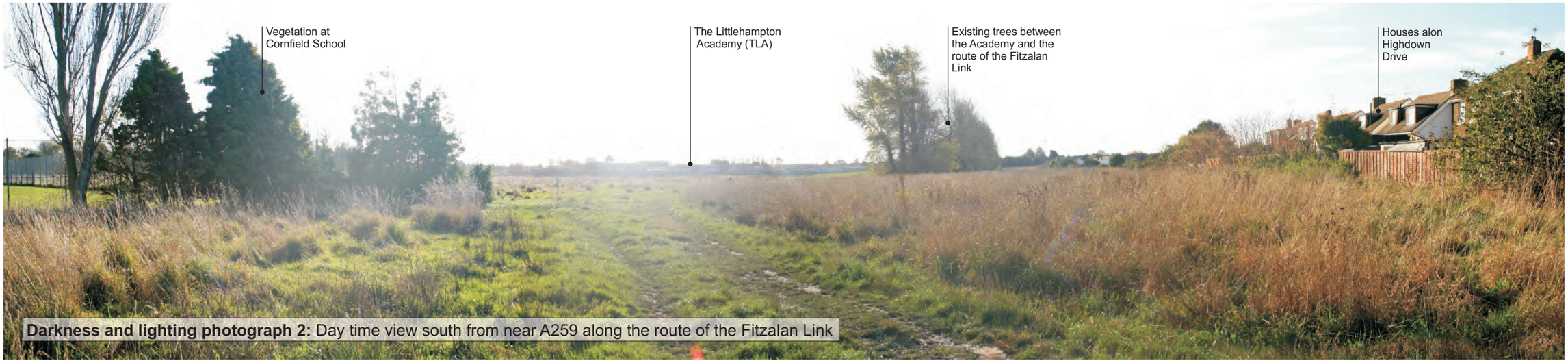
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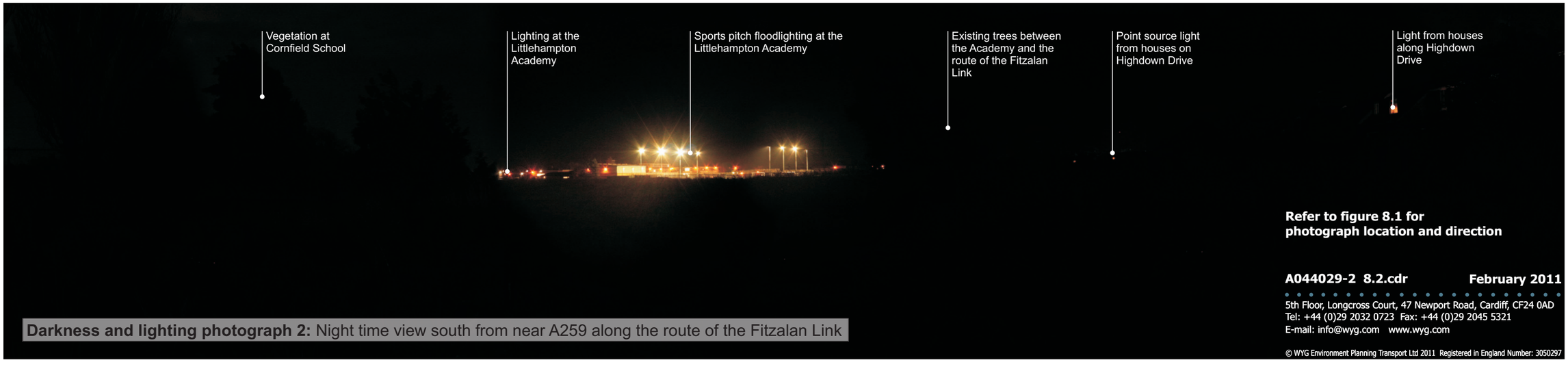
Fitzalan Link, Littlehampton

Darkness and Lighting Appraisal Photographs

8.2-2



Darkness and lighting photograph 2: Day time view south from near A259 along the route of the Fitzalan Link



Darkness and lighting photograph 2: Night time view south from near A259 along the route of the Fitzalan Link

Refer to figure 8.1 for photograph location and direction

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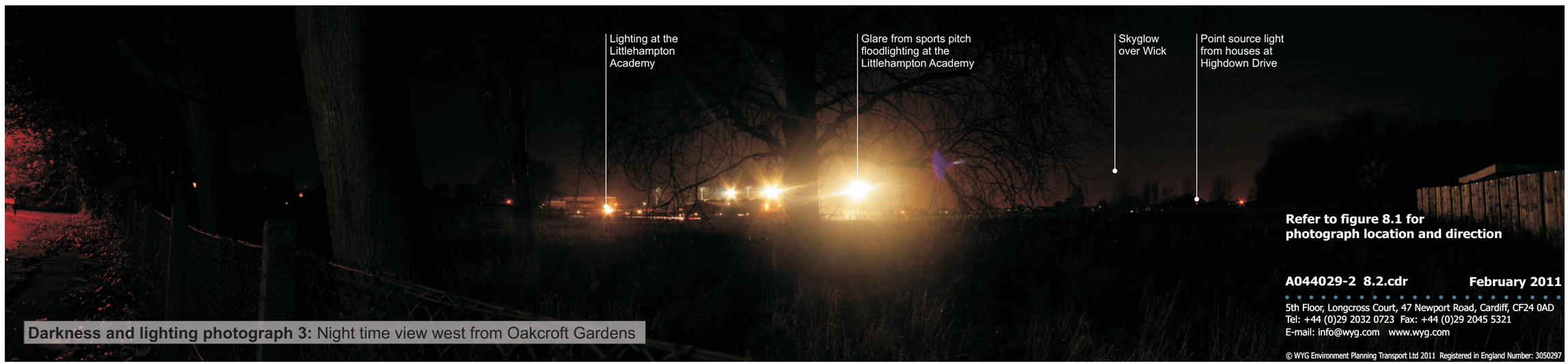
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Darkness and Lighting
Appraisal Photographs

8.2-3



Darkness and lighting photograph 3: Day time view west from Oakcroft Gardens



Darkness and lighting photograph 3: Night time view west from Oakcroft Gardens

Refer to figure 8.1 for photograph location and direction

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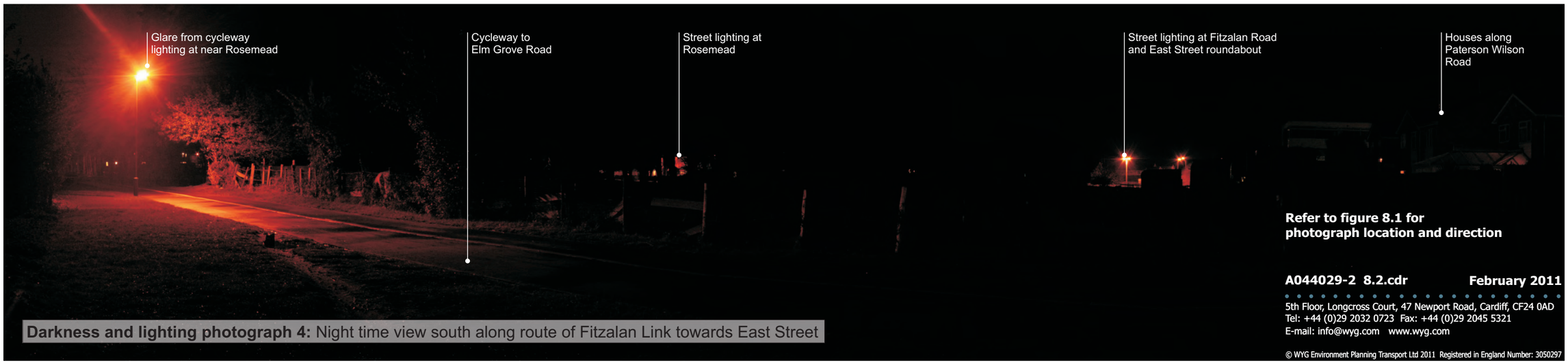
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Darkness and Lighting
Appraisal Photographs

8.2-4



Darkness and lighting photograph 4: Day time view south along route of Fitzalan Link towards East Street



Darkness and lighting photograph 4: Night time view south along route of Fitzalan Link towards East Street

Refer to figure 8.1 for photograph location and direction

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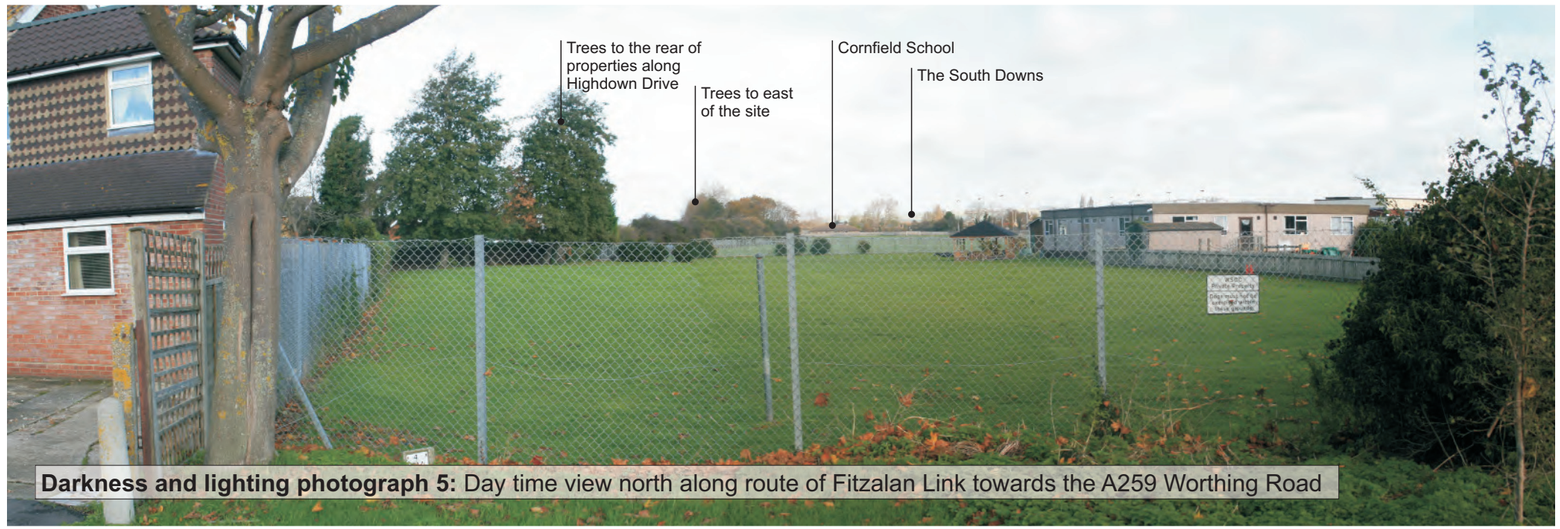
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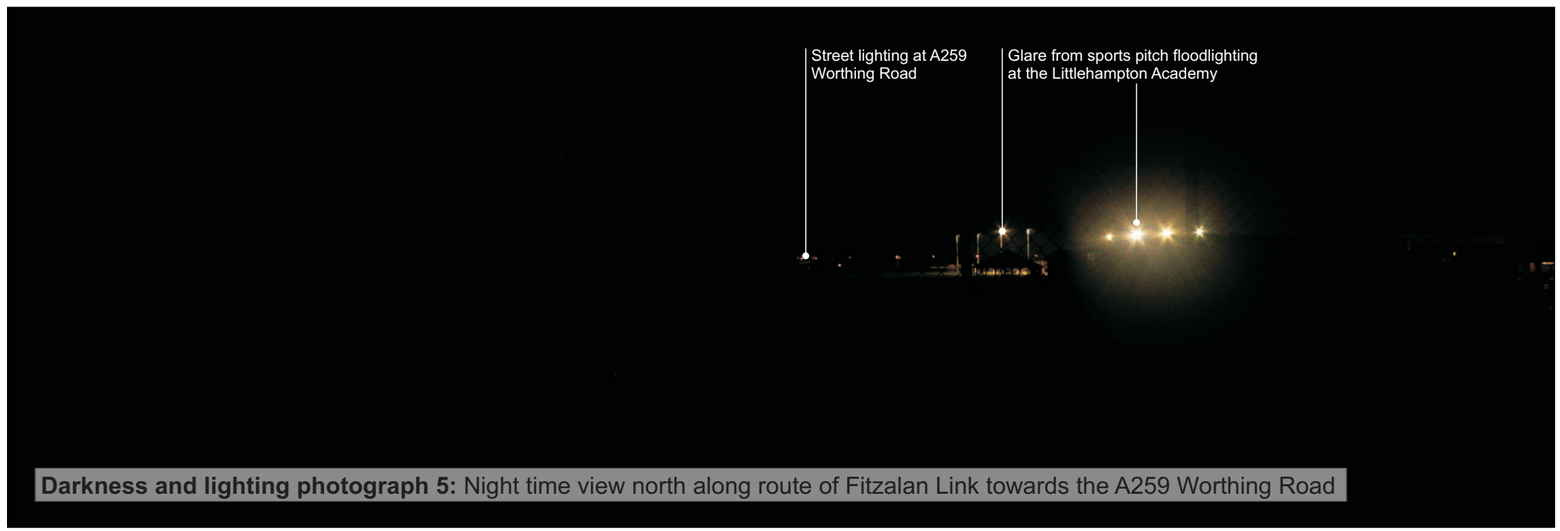
Fitzalan Link, Littlehampton

Darkness and Lighting Appraisal Photographs

8.2-5



Darkness and lighting photograph 5: Day time view north along route of Fitzalan Link towards the A259 Worthing Road



Darkness and lighting photograph 5: Night time view north along route of Fitzalan Link towards the A259 Worthing Road

Refer to figure 8.1 for photograph location and direction

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Landscape Concept

9-1

Proposed development at North Littlehampton

Northern approach
A key point of arrival at the commercial centre of the proposed North Littlehampton development.

Toddington Lane
Elevated panoramic views from Lyminster Bypass across the proposed development and towards the South Downs.

Railway
A key point of arrival into Littlehampton with elevated panoramic views over the town towards the seafront.

A259 Junction
A strategic junction between the A259, Lyminster Bypass South and the Fitzalan Link.

The Littlehampton Academy (TLA)
The main vehicular access to the proposed academy

East Street and Fitzalan Road
The southern end of the Fitzalan Link. A key junction providing access to the town centre and the seafront.

Figure 9.2

Figure 9.3

Figure 9.4



Lyminster Bypass

Formal landscape treatment at commercial centre to contrast with informal treatment to the north along the Black Ditch.

Highway boundary: Tree and shrub planting along embankment slopes whilst maintaining selected views from the road.

Railway overbridge

High quality materials used in visually prominent locations.

Highway boundary: Steel parapet used over railway with sections of brick and flint walling used to the north and south to create a high quality, consistent boundary treatment reflecting the vernacular.

Allotments

Maintain sense of 'openess' without direct views over the adjacent allotments

Western boundary: Low false cutting used in combination with acoustic fence.

Eastern boundary: Tree and shrub planting with upgraded garden fences and walls for noise mitigation.

A259 Junction

High quality environment at important arrival point to Littlehampton. Tree planting to highlight the start of the parkway extending to the south from this location.

Highway boundary: Brick and flint walling used to create a high quality, consistent boundary treatment reflecting the vernacular. Walling to provide noise mitigation.

Fitzalan Link

A 'parkway': a blend of formal and informal landscape treatment to create a linear park between the A259 and East Street. Pedestrian access across route to be maintained in a number of locations.

Western boundary: Landform used for noise mitigation or acoustic fencing where space is limited. Tree and shrub planting used to soften boundary with housing.

Eastern boundary: Low false cutting with acoustic fence at northern end adjacent to proposed housing.

Tree, shrub and hedge planting used to unify appearance of adjacent land uses. Change in landscape treatment to highlight access to Academy

East Street Junction

High quality environment at important arrival point to Littlehampton.

Highway boundary: Brick and flint walling used to create a high quality, consistent boundary treatment reflecting the vernacular. Walling to provide noise mitigation.

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Landscape Design

9.2

key

- Site boundary

Existing features

- Amenity grass areas
- Sport pitches
- Rough grassland
- Allotments
- Trees / hedgerows / scrub
- Public footpath
- Other footpaths (informal)

Proposed features

- Tree planting
- Hedge planting
- Native and ornamental shrub planting
- Grass
- Removed vegetation
- Landform up to 1.0m high
- Brick and flint walling
- Timber close-board fencing
- Road
- Footpaths
- Lighting column locations

North

0 10 20 30 40 50 m

Scale 1:1,250 @ A3 Do not scale from this drawing

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Landscape Design

9.3

The Littlehampton Academy (TLA)

Elm Grove
Infant School

key

- Site boundary

Existing features

- Amenity grass areas
- Sport pitches
- Rough grassland
- Allotments
- Trees / hedgerows / scrub
- Public footpath
- Other footpaths (informal)

Proposed features

- Tree planting
- Hedge planting
- Native and ornamental shrub planting
- Grass
- Removed vegetation
- Landform up to 1.0m high
- Brick and flint walling
- Timber close-board fencing
- Road
- Footpaths
- Lighting column locations

North

0 10 20 30 40 50 m

Scale 1:1,250 @ A3 Do not scale from this drawing

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Landscape Design

9.4



key

- Site boundary

Existing features

- Amenity grass areas
- Sport pitches
- Rough grassland
- Allotments
- Trees / hedgerows / scrub
- Public footpath
- Other footpaths (informal)

Proposed features

- Tree planting
- Hedge planting
- Native and ornamental shrub planting
- Grass
- Removed vegetation
- Landform up to 1.0m high
- Brick and flint walling
- Timber close-board fencing
- Road
- Footpaths
- Lighting column locations

North

0 10 20 30 40 50 m

Scale 1:1,250 @ A3 Do not scale from this drawing

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