Appendix E1-4

LVIA Methodology (E1)

Plans and Photos (E2)

Verified Visual Montages (E3)

A3 Photos (E4)

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LAND AT BARNHAM, EASTERGATE AND WESTERGATE (BEW)

ENVIRONMENTAL STATEMENT
APPENDIX E: LANDSCAPE AND VISUAL IMPACT ASSESSMENT: METHODOLOGY, FIGURES AND PHOTOS (A3 DOUBLESIDED)
NOVEMBER 2021

ARUN DISTRICT COUNCIL BN/11/22/OUT

ISSUE SHEET

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APPENDIX E1

LVIA METHODOLOGY

A1.1 INTRODUCTION

The methodology employed in carrying out the LVIA for the Barnham, Eastergate, Westergate Site, is drawn from the Landscape Institute and the Institute of Environmental Management and Assessment's "Guidelines for Landscape and Visual Impact Assessment" (GLVIA3) Third Edition (Routledge 2013). The method adopted is proportionate to the proposals.

The term landscape is defined as an area perceived by people, whose character is the result of the action and interaction of nature and / or human factors. It results from the way that different components of our environment – both natural and cultural / historical interact together and are perceived by us. The term does not mean just special, valued or designated landscapes and it does not only apply to the countryside. The definition of landscape can be classified as:

- All types of rural landscape, from high mountains and wild countryside to urban fringe farmland (rural landscapes);
- Marine and coastal landscapes (seascapes); and
- The landscape of villages, towns and cities (townscapes).

The LVIA will provide a description of the baseline conditions and sets out how the study area and site appears, or would appear, prior to the proposed development. The baseline assessment is then used to predict the landscape and visual impacts arising from the proposed development. The assessment of impact will be carried out as part of the iterative design process in order to build in mitigation measures to reduce the impacts as much as possible. The impact assessment will identify and assess effects during the stages of the proposed development (and in the case of this site the initial site enabling and construction stages and then at the operational phases).

The photography and preparation of any Verified Visual Montages (VVMs) will be prepared in accordance with Technical Guidance Note 06/19 on Visual Representation of Development Proposals (Landscape Institute, 17 September 2019).

A1.2 SUMMARY OVERVIEW OF LVIA METHODOLOGY

Landscape and visual assessments are separate, although linked, procedures. For example, often the assemblage of landscape elements contributes to informing the Zone of Theoretical Visibility and the degree of visibility from the range of visual receptors.

The baseline assessment describes:

- Each of the landscape elements which then collectively inform landscape character for the site and its context;
- The character, amenity and degree of openness of the view from a range of visual receptors (either transient, serial or static views);
- The current and future baseline scenarios; and
- The value of each of the landscape and visual receptors.

Landscape effects derive from either direct or in-direct changes to the physical landscape which may give rise to changes to the individual landscape components. This in turn effects the landscape character and potentially changes how the landscape is experienced and valued.

Visual effects relate to the changes that arise in the composition, character and amenity of the view as a result of changes to the landscape elements.

The assessment of effects therefore systematically:

- Combines the value of the receptor with the susceptibility to the proposed change to determine the sensitivity of the receptor;
- Combines the size, scale, geographic extent, duration of the proposals and its reversibility in order to understand the magnitude of the proposal;
- Combines the sensitivity of the each of the receptors and the magnitude of effect to determine the significance of the effect;
- Presents the landscape and visual effects in a factual logical, well-reasoned and objective fashion;
- Indicates the measures proposed over and above those designed into the scheme to prevent/avoid, reduce, offset, remedy, compensate for the effects (mitigation measures) or which provide an overall landscape and visual enhancement;
- Sets out any assumptions considered throughout the assessment of effects; and
- Sets out residual effects.
  Effects may be positive (beneficial) or negative (adverse) direct or indirect, residual, permanent or temporary short, medium or long term. They can also arise at different scales (national, regional, local or site level) and have different levels of significance (major, moderate, low, negligible or neutral / no change).

The combination of the above factors influences the professional judgement and opinion on the significance of the landscape and visual effects.

Cumulative effects of all other known development will also be considered (following agreement with the LPA of those developments to be considered as part of the scoping opinion).

The following sections set out in more detail the assessment process employed.

A1.3 ESTABLISHING THE LANDSCAPE BASELINE

Desk and Field Studies

The initial step is to identify the existing landscape and visual resource in the vicinity of the proposed development – the baseline landscape and visual conditions. The purpose of baseline study is to record and analyse the existing landscape, in terms of its constituent elements, features, characteristics, geographic extent, historical and cultural associations, condition, the way the landscape is experienced and the value / importance of that particular landscape. The baseline assessment will also identify any potential changes likely to occur in the local landscape or townscape which will change the characteristics of either the site or its setting.

A desk study will be carried out to establish the physical components of the local landscape and to broadly identify the boundaries of the study area. Ordnance survey (OS) maps and digital data will be used to identify local features relating to topography/ drainage pattern, land cover, vegetation, built developments/settlement pattern, transport corridors/definitive public rights of way and any historic or prominent landscape features, which together combine to create a series of key characteristics and character areas. Vertical aerial photography and Google streetview will be used to supplement OS information. At this stage, any special designated landscapes (such as Areas of Outstanding Natural Beauty, National Parks, Green Belt, Conservation Areas, Listed Buildings, Areas of Special Character); heritage or ecological assets are identified. A review of information available in terms of any published historic landscape characterisation together with any other landscape / capacity / urban fringe and visual related studies is carried out at this stage. In addition, a desk study of any unbuilt commitments will be incorporated.

Landscape character assessment is the tool for classifying the landscape into distinct character areas or types, which share common features and characteristics. There is a well established methodology developed in the UK by the Countryside Agency and Scottish Natural Heritage in 2002, which has been superseded in England by guidance published by Natural England in 2014. The national and regional level character assessments are often available in published documents. However the local / district or site levels may need to be set out based on a combination of desk studies and field survey work. The character assessment will also identify environmental and landscape opportunities, recent changes, future trends and forces for change where they may be important in relation to the proposal, especially considering how the landscape appears, or would appear prior to the commencement of development. The condition of the landscape, i.e. the physical state of an individual area of landscape, will be described as factually as possible. The assessment of landscape importance includes reference to policy or designations as an indicator of recognised value, including specific features or characteristics that justify the designation of the area. The value of that landscape by different stakeholders or user groups may also influence the baseline assessment.

If published site level landscape character assessments are not available, or require to be updated to reflect the current circumstances, the landscape will be classified into distinctive character areas and / or types, based on variations in landform, land cover, vegetation / settlement pattern, field pattern, enclosure, condition, value. The classification will take into account any National, County/District and Parish level landscape character assessments.

These desk based studies are then used as a basis for verification in the field. The field based assessment also considers the perceptual qualities of the landscape, including tranquillity.

Judgements on the value of both the landscape and visual receptor are made at the baseline stage.

Landscape Value

Value is concerned with the relative value or importance that is attached to different landscapes. The baseline assessment considers any environmental, historical and cultural aspects, physical and visual components together with any statutory and non-statutory designations and takes into account other values to society, which may be expressed by the local community or consultees. The tables set out on the following page are a starting point for consideration in the field. The landscape designations are to be considered in terms of their 'meaning' to today's context. The following table sets out the criteria and definitions used in the baseline assessment to determine landscape value (in addition to condition / quality).

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TABLE A1.1 – LANDSCAPE VALUE CRITERIA

CRITERIA
HIGH LANDSCAPE VALUE
• An exceptional landscape with outstanding perceptual qualities and sense of place (is wild and tranquil). An area that is wholly intact, natural and has high scenic qualities. It contains rare elements and features; • Lies wholly within a designated landscape where localised character and scenic value is distinct. The landscape may include World Heritage Sites, National Parks, Areas of Outstanding Natural Beauty or Heritage Coast or key elements/features that are representative; together with any non-statutory designations. Alternatively, the landscape may be un-designated but is valued as it comprises all of the key elements that are wholly representative of published landscape character assessments and which, for example, identify nationally or locally significant natural, historical, artistic or cultural connections which assist in informing the identify of a local area (such as 'Constable Country' or 'Jurassic Coast'). Specific components of the landscape, or a specific tract of land may be valued at the local level as identified through Neighbourhood Plans or engagement with local stakeholders; • An area that is valued for its recreational activity; • Includes key or protected views; • Areas designated and protected for archaeological, historical, cultural, geological or biological interest and conservation; • A landscape that contains particular characteristics or elements particularly important to the character of the area, or where the typical character of the area is represented in individual areas; • Very good or good condition overall with appropriate management for land use and land cover, or with some scope to improve certain elements; • Open spaces which have won awards for design or quality; • No or limited detracting features.
MEDIUM LANDSCAPE VALUE
• An ordinary landscape and with some perceptual qualities. Includes some intact natural areas and attributes, in part scenic or where scenic qualities are degraded and demonstrates a degree of wildness and tranquillity. • The area lies wholly or partially in a designated landscape. The landscape may include local designations such as Special Landscape Areas, Areas of Great Landscape Value, Strategic or Local Gaps; or un-designated but value expressed through regional or local natural, historical and / or cultural associations; or through demonstrable use by the local community for recreation (such as local green spaces, village greens or allotments); together with any non-statutory designations. Alternatively, the landscape may be valued as it demonstrates some locally distinctive landscape elements identified in landscape character assessment; • An area that is moderately valued for its recreation activity where the experience of the landscape plays a small part; • Areas locally designated and protected for archaeological, historical, cultural, geological or biological interest and conservation; • Distinguishable landscape structure, with some characteristic patterns and elements moderately important to the character of the area; • Typical, commonplace farmed landscape with limited variety or distinctiveness; • Open spaces or other features identified on a local list; • Good - ordinary condition, with some high quality elements and scope to improve management; • Scope to improve management; • Some detracting features.
LOW LANDSCAPE VALUE
• A poor landscape with limited perceptual qualities (limited natural attributes, sense of wildness and tranquillity); • Generally un-designated. Certain individual landscape elements or features identified in landscape character assessments may be worthy of conservation or a landscape that would benefit from restoration or enhancement (such as local parks and open spaces). Alternatively, the landscape may be valued through the landscape character assessment approach where some key qualities are defined; • An area where the landscape plays a limited role in the experience of recreation activities; • Monotonous, weak, uniform or degraded landscape which has lost most of it's natural features and where the landcover are often masked by land use; • Lack of management and intervention has resulted in degradation; • Ordinary - poor condition with lack of management and intervention has resulted in degradation; • Frequent dominant detracting features; • Disturbed or derelict land requires treatment.

Night Time Character Assessment

During the field survey stage it may be considered appropriate to carry out a baseline night time 'darkness' assessment to understand whether the Site is currently influenced by lighting at night. This will assist in understanding the likely effects of the proposal on the night-time character and visual experience gained, especially considering those receptors immediately adjacent to the Site or those travelling past the Site.

A1.4 ESTABLISHING IN THE VISUAL BASELINE

Desk and Field Studies

The visual baseline will establish the area in which the site and the proposed development may be visible, the different groups of people who may experience the views, the places where they will be affected and the nature, character and amenity of those views.

The area of study for the visual assessment is determined through identifying the area from which the existing site and proposal may be visible (the Zone of Theoretical Visibility or ZTV). The baseline ZTV of the site has been determined through manual topographical analysis. The actual extent of visibility is checked in the field (both in the summer and winter months if the project timescales allow) to record the screening effect of buildings, walls, fences, trees, hedgerows and banks not identified in the initial bare ground mapping stage and to provide an accurate baseline assessment of visibility. Viewpoints within the ZTV should also be identified during the desk assessment, and the viewpoints used for photographs selected to demonstrate the relative visibility of the site (and any existing development on it and its relationship with the surrounding landscape and built forms). The selection of a range of key viewpoints will be based on the following criteria for determination in the field:

- The requirement to provide an even spread of representative, specific, illustrative or static / kinetic / sequential / transient viewpoints within the ZTV and around all sides of the Site;
- From locations which represent a range of near, middle and long distance views (although the most distant views may be discounted in the impact assessment if it is judged that visibility will be extremely limited);
- Views from sensitive receptors within designated, historic or cultural landscapes or heritage assets (such as from within World Heritage Sites; adjacent to Listed Buildings - and co-ordinated with the heritage consultant - National Parks, Areas of Outstanding Natural Beauty or Registered Parks and Gardens) key tourist locations and public vantage points (such as viewpoints identified on OS maps);
- The inclusion of strategic / important / designed views and vistas identified in published documents;
- The selection of viewpoints considering cumulative views of the proposed development in conjunction with other developments (as agreed between the parties).

  Views from the following are to be included in the visual assessment:
- Individual private dwellings. These are to be collated as representative viewpoints as it may not be practical to visit all properties that might be affected;
- Key public buildings, where relevant (i.e. libraries, hospitals, churches, community halls etc);

Desk and Field Studies Continued

- Transient views from public viewpoints (i.e. from roads, railway lines and Public Rights of Way - including tourist or scenic routes and associated viewpoints);
- Areas of publicly accessible green space (i.e. public open space, open access land, recreation grounds, country parks, visitor attractions, tourist destinations or scenic viewpoints); and
- Places of employment, are to be included in the assessment where relevant.

The final selection of the key viewpoints for inclusion in the LVIA will be based proportionately in relation to the scale and nature of the development proposals and likely significant effects and in agreement with the LPA.

The visual assessment records:

- The character and amenity of the view, including topographic, geological and drainage features, woodland, tree and hedgerow cover, land use, field boundaries, artefacts, access and rights of way, direction of view and potential seasonal screening effects and any skyline elements or features.
- The type of view, whether oblique or direct; panoramic or vistas.
- The extent of visibility of the range of receptors is based on a grading of degrees of visibility, from a visual inspection of the site and surrounding area. There will be a continuity of degree of visibility ranging from no view of the site (truncated) to fully open views. Views are recorded, even if views are truncated of the existing site, as the proposed development may be visible in these views. To indicate the degree of visibility of the site from any location, three categories are used:

a **Open View:**
An open, unobstructed and clear view of a significant proportion of the ground plane of the site; or its boundary elements; or a clear view of part of the site and its component elements in close proximity.

b **Partial View**:
A view of part of the site, a filtered or glimpsed view of the site, or a distant view where the site is perceived as a small part of the wider view;

c **Truncated View:**
No view of the site or the site is difficult to perceive.

Following the field survey (which should cover ideally both winter and summer views) the extent to which the site is visible from the surrounding area will be mapped. A Photographic Viewpoint Plan will be prepared to illustrate the representative, specific and illustrative views into / towards and within the Site (if publicly accessible) and the degree of visibility of the site noted. This Plan will be included in a Key Views document for agreement with the Local Planning Authority and any other statutory consultees as part of the consultation process. The visual assessment will include a series of annotated photographs, the location and extent of the site within the view together with identifying the character and amenity of the view, alongside any specific elements or important component features such as landform, buildings or vegetation or detracting features which interrupt, filter or otherwise influence views. The photograph will also be annotated with the Value attributed to the receptor or group of receptors.

By the end of this stage of the combined landscape and visual site study, it will be possible to advise, in landscape and visual terms, on any specific mitigation measures required in terms of the developments preferred siting, layout and design.

Value of Visual Receptors

Judgements on the value attached to the views experienced are based on the following criteria.

TABLE A1.2 – VALUE ATTACHED TO VIEWS

VALUE	CRITERIA
HIGH	Views from and to landscapes / viewpoints of national importance, or highly popular visitor attractions where the view forms a significant role in the visual experience, and / or has nationally recognised cultural associations. This may include residential receptors in Listed Buildings where the primary elevation of the dwelling is orientated to take advantage of a particular view (for example across a Registered Park and Garden or National Park).
MEDIUM	Views from and to landscapes / viewpoints of regional / district importance or moderately popular visitor attractions where the view forms part of the experience, and / or has local cultural associations. This may include residential receptors where the primary elevation of the dwelling is orientated to take advantage of a particular view.
LOW	Views from and to landscapes / viewpoints with no designation, not particularly important and with minimal or no cultural associations. This may include views from the rear elevation of residential properties.

A1.5 PREDICTING & DESCRIBING THE LANDSCAPE & VISUAL EFFECTS

An assessment of visual effect deals with the change on the character and amenity arising from the proposal on the range of visual receptors.

The assessment of effects aims to:

- Identify systematically and separately the likely landscape and visual effects of the proposed development;
- Identify the components and elements of the landscape that are likely to be affected by the proposed development;
- Identify interactions between the landscape receptors and the different components of the development at all its different stages (e.g. enabling, construction, operation, restoration etc);
- Indicate the secondary mitigation measures over and above those already designed into the scheme proposed to avoid, reduce, remedy or compensate for these effects;
- Estimate the magnitude of the effects as accurately as possible and considering this in relation to the sensitivity of the receptor; and
- Provide an assessment of the significance of these effects in a logical and well-reasoned fashion.

Having established the value of the landscape and visual receptor, the effects are then considered in relation to the magnitude of change, which includes the size / scale, geographical extent of the areas influenced and the duration, permanence and reversibility.

Wherever possible tables or matrices will be used, linked with the scheme proposals (i.e. parameter plans or detailed plans) so that the landscape and visual effects are recorded and quantified in a systematic and logical manner. Consideration is given to the impacts during site enabling, construction and then again at the completion of development at Year 1 and again at Year 15 / at maturity (to represent short, medium and long term effects) so that the residual effects of the development after mitigation are identified. Assumptions or limitations to the assessment will also be set out.

Effects will include the direct and/or indirect impacts of the development on individual landscape elements / features as well as the effect upon the general landscape character and visual receptors.

Landscape Susceptibility

Landscape susceptibility is evaluated by its ability to accommodate the proposed change (i.e. the degree to which the landscape is able to accommodate the proposed change without undue consequences for the maintenance of the baseline situation and / or the achievement of landscape planning policies and strategies) as set out in Table A1.3.

As part of the assessment of the landscape character and its component parts, conclusions will be drawn as to the overall susceptibility of the landscape / landscape elements and visual environment to the type of development proposed. Existing landscape capacity assessments may form a starting point for the refinement of the assessment of landscape susceptibility at the local and site level.

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TABLE A1.3 – LANDSCAPE SUSCEPTIBILITY CRITERIA

SUSCEPTIBILITY	CRITERIA
HIGH	A landscape or townscape particularly susceptible to the proposed change, which would result in significant negative or positive effects on landscape character, value, features or individual elements.
MEDIUM	A landscape or townscape capable of accepting some of the proposed change with some negative or positive effects on landscape character, value, features or elements.
LOW	A landscape or townscape capable of accommodating the proposed change without significant negative or positive effects on landscape character, value, features or elements.

Landscape Sensitivity

The assessment of landscape sensitivity is then combined through a judgement on the value attributed to that landscape receptor / component and the susceptibility of the landscape receptor to the proposed change using the following matrix.

TABLE A1.4 - LANDSCAPE SENSITIVITY

		LANDSCAPE RECEPTOR SUSCEPTIBILITY		
		HIGH	MEDIUM	LOW
LANDSCAPE VALUE	HIGH	HIGH	HIGH - MEDIUM	MEDIUM
	MEDIUM	HIGH - MEDIUM	MEDIUM	MEDIUM - LOW
	LOW	MEDIUM	MEDIUM - LOW	LOW - NEGLIGIBLE

Visual Susceptibility

The susceptibility of the different types of visual receptors to the changes proposed is based on the occupation of the activity of the viewer at a given location; and the extent to which the persons attention or interest may be focussed on a view, considering the visual character and amenity experienced at a given view. The criteria used to assess the susceptibility of a visual receptor is set out below.

TABLE A1.5 – VISUAL SUSCEPTIBILITY CRITERIA

Susceptibility	Criteria
HIGH	People particularly susceptible to the proposed change because they have a particular interest in the view, and/ or with prolonged viewing opportunity of the site / proposed development, such as: • Residents with direct/clear/open views of the site; • Those using Public Rights of Way, Access land, Commons or outdoor recreation facilities, where views are an important contributor to the experience; • Those with views from designated landscapes and heritage assets, or views described in literature, where the views of the surroundings are an important contributor to the experience; • Those using described/published scenic routes where views contribute to the enjoyment and quality of the journey; • Those with clear views of areas within or around the site, that contribute to landscape setting, and/or which are enjoyed by the community.
MEDIUM	People partially susceptible to the proposed change because they have a moderate interest in the view, and/or with some viewing opportunity of the site / proposed development, such as: • Those with an oblique or limited view toward the site, which may include some residents; • Those travelling through the landscape on roads or Public Rights of Way, or through Access land/Commons where views are partly constrained, or where views only partly contribute to the experience; • Those using outdoor recreation facilities, where views are incidental or not important to their enjoyment of that activity. • Those using roads that are not described/not published scenic routes, but where the appreciation of the view partly contributes to the enjoyment and quality of that journey. Those travelling by train or other transport modes; • Those with partial views of areas within or around the site, that contribute to landscape setting, and/or which are enjoyed by the community.
LOW	People with limited susceptibility to the proposed change because they have momentary, or little interest in the view and their surroundings, and/or because they have little viewing opportunity of the site / proposed development, such as: • Those with very oblique, limited or distant views of the site, which may include some residents; • Those travelling through the landscape on roads or Public Rights of Way, or through Access land/Commons where views are largely constrained (for example within or alongside a woodland); or where views make a limited contribution to the experience; • People engaged in outdoor sport, whose attention is focused on their activity; • People at their work place, whose attention is focused on their employment; • Travellers where the view is fleeting (for example, due to the speed of the road, or boundary vegetation) or where views are incidental to the experience of the journey; • Long distance views where the site and proposed development form a small part of the wider panorama.

Visual Sensitivity

The sensitivity of visual receptor is based on the professional judgement combining the value and susceptibility to change on that visual receptor.

TABLE A1.6 - VISUAL SENSITIVITY

		VISUAL RECEPTOR SUSCEPTIBILITY		
		HIGH	**MEDIUM**	**LOW**
VALUE OF VISUAL RECEPTOR	**HIGH**	HIGH	HIGH - MEDIUM	MEDIUM
	MEDIUM	HIGH - MEDIUM	MEDIUM	LOW
	LOW	MEDIUM	LOW	LOW - NEGLIGIBLE

A1.6 MAGNITUDE OF LANDSCAPE & VISUAL EFFECTS

Magnitude is to be determined relative to the size, scale, geographic extent, duration, permanence and reversibility of the individual project through the application of professional judgement and opinion.

Typically, the following are used:

Size and Scale: relates to the combination of the following (and are linked to the descriptions set out under table A1.9):

- the extent of existing landscape elements that will lost (to proportion of the total extent that is lost) and the contribution that the element has to landscape character;
- the degree to which aesthetic or perceptual aspects of the landscape are altered;
- whether the effect changes the key characteristics of the landscape (addition or removal of features and elements)
- the size and scale of change in the view (with respect to the loss or addition of features in the view) and changes to the composition, including the proportion of the view occupied by the proposed development;
- the degree of contrast or integration of any new features or changes in the landscape with the existing or remaining landscape elements and characteristic terms of form, scale, mass, line, height, colour and texture; and
- the nature of the view of the proposed development, in terms of relative amount of time over which it will be experienced and whether views will be open, partial, glimpsed.

Geographic Extent: In relation to landscape effects, this is to consider the geographic area over which the landscape effects will be felt relative to the proposal; effects limited to the site level; effects on the immediate setting; effects relating to the scale of the landscape type or character area (district, regional or national level); effects on a larger scale such as influencing several landscape character areas.

In relation to visual receptors, the geographic extent is to reflect the angle of the view; the distance of the viewpoint; the extent of the area over which the changes would be visible.

Duration, Permanence and Reversibility: These are separate but linked considerations and are project specific. Construction impacts are likely to be medium term, temporary, but see the start of a permanent change. Operational effects are likely to be long term, permanent and either irreversible or reversible, depending on the nature of the project and the element of the scheme being assessed.

TABLE A1.7 - MAGNITUDE OF LANDSCAPE & VISUAL EFFECTS

MAGNITUDE ELEMENTS				
SIZE / SCALE	**GEOGRAPHIC EXTENT**	**DURATION AND PERMANENCE**	**REVERSIBILITY**	**OVERALL MAGNITUDE OF CHANGE**
Significant change to the landscape elements, key characteristic features and perceptual qualities; Significant change to a open or partial view (static or transient). A major change overall.	Proposal effects wider setting a district or regional level; effects the site level or immediate setting to the site; effects a single or several landscape character areas. Middle distance or close range; direct or oblique views; readily noticeable perceived change.	Permanent or Temporary (Long, medium or short term)	Irreversible or Reversible	**High - Medium**
Some change to the landscape elements, key characteristic features and perceptual qualities; Moderate or significant change to static or transient, partial view. A moderate change overall.	Site or immediate setting to the site; effects a single or several landscape character areas. Middle distance views; direct or oblique views; partially obscured views; moderately perceived change.	Permanent or Temporary (Long, medium or short term)	Irreversible or Reversible	**Medium - Low**
Small change to the landscape elements, key characteristic features and perceptual qualities; Small change to a static or transient partial or glimpsed view. A minor change overall.	Site, immediate setting to the site, or wider setting; covering a single landscape character area. Distant views; very oblique; small perceived change.	Permanent or Temporary (Long, medium or short term)	Irreversible or Reversible	**Low**
Small, imperceptible change. Negligible.	All of the above	Permanent or Temporary (Long, medium or short term)	Irreversible or Reversible	**Negligible**

If there is no change to the landscape or visual receptor then the overall magnitude of change will be Neutral.

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A1.7 SIGNIFICANCE OF EFFECTS

The two principal criteria determining the significance of effects are the sensitivity of the receptor and in relation to the magnitude of effect. A higher level of significance is generally attached to the magnitude of change on a sensitive receptor; for example, a low magnitude of change on highly sensitive receptor can be of greater significance than very high magnitude of change on low sensitivity receptor. Therefore, whilst the table opposite sets out a starting point for the assessment, it is important that a balanced and well reasoned professional judgement of these two criteria is provided with an explanation.

In order to develop thresholds of significance, both the sensitivity of receptors and the magnitude of change must be classified for both landscape receptors and visual receptors as set out in the tables below. Where landscape effects are judged to be adverse, additional mitigation or compensatory measures are to be considered. The significant landscape effects remaining after mitigation are then to be summarised as the residual effects.

Effects will be described clearly and objectively, and the extent and duration of any negative / positive effects quantified, using four categories of effects, indicating a gradation from high to low.

TABLE A1.8 - COMBINATION OF SENSITIVITY AND MAGNITUDE OF EFFECTS TO DETERMINE SIGNIFICANCE OF EFFECT

MAGNITUDE	LANDSCAPE AND VISUAL RECEPTOR SENSITIVITY			
	HIGH	MEDIUM	LOW	
HIGH	SUBSTANTIAL	SUBSTANTIAL - MODERATE	MODERATE	
MEDIUM	SUBSTANTIAL - MODERATE	MODERATE	MODERATE	MINOR
LOW	MODERATE	MODERATE	MINOR	MINOR
NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE	
NEUTRAL	NEUTRAL	NEUTRAL	NEUTRAL	

The effects set out below the red line are not significant in EIA terms.

The degree of effect is graded on the following scale in relation to the significance criteria above.

TABLE A1.9 - SIGNIFICANCE OF LANDSCAPE AND VISUAL EFFECTS

EFFECT SIGNIFICANCE	CRITERIA
SUBSTANTIAL	Significant change to the landscape elements, key characteristic features and perceptual qualities; Major change to a static open or partial view. **Negative:** Where the proposals would cause the total or significant loss of or alteration to key mature landscape elements and characteristic features; or introduce elements considered uncharacteristic of the area; a major deterioration in the character and amenity of the view in terms of perceptual qualities and where the proposals would result in a significant deterioration or dominant element to close or medium distance views, or more notable change in more distant views, considering the character and amenity of the view from a range of visual receptors. **Positive:** Where the proposals would result in a significant enhancement to the key mature landscape elements or characteristic features; or introduce new elements considered wholly characteristic of the area; a significant improvement in the character and amenity of the close or middle distance view in terms of perceptual qualities for the range of visual receptors and range of distances.
MODERATE	Some change to the landscape elements, key characteristic features and perceptual qualities. Moderate or major change to static or kinetic, partial view. **Negative:** Where the proposals would cause the partial loss or moderate alteration of some of the key landscape elements and characteristic features; introduce elements considered part uncharacteristic of the area; and a barely perceived deterioration in the character and amenity of the view from the range of visual receptors and a range of distances. **Positive:** Where the proposals would cause a moderate enhancement to the key landscape elements or characteristic features; or introduce elements considered in part characteristic of the area; results in a noticeable improvement in the character and amenity of the existing view from a range of visual receptors and range of distances.
MINOR	Some change to the townscape elements, key characteristic features and perceptual qualities; Minor change to a static or kinetic partial or glimpsed view. **Negative:** Where the proposals would cause a minor loss of or slight alteration to some landscape elements or characteristic features; introduce elements considered in part uncharacteristic of the area; and a barely perceptible deterioration in the character and amenity of the view from the range of visual receptors and range of distances. Positive: Where the proposals would result in a minor enhancement, alteration or improvement of some elements or characteristic features; introduce elements considered characteristic; and cause a barely perceptible improvement in the character and amenity of the existing view for the range of receptors and range of distances.
NEGLIGIBLE	Where the proposals would have no discernible deterioration or improvement in the existing baseline situation in terms of landscape elements or view.
NEUTRAL OR NO CHANGE	Where the proposals would result in no change overall (resulting in no net beneficial or adverse effect).

Effects assessed as being lower than moderate are considered to be a insignificant effect (relative to the EIA regulations).

A1.8 EFFECTS DURING SITE ENABLING & CONSTRUCTION

It is recognised that project characteristics and hence sources of effects, will vary through time. The initial effects arise from the site enabling and construction works. Sources of landscape and visual effects may include:

- The location of the site access and haulage routes;
- The origin and nature of materials stockpiles, stripping of material and cut and fill operations / disposal and construction compounds;
- The construction equipment and plant (and colour);
- The provision of utilities, including lighting and any temporary facilities;
- The scale, location and nature of any temporary parking areas and on-site accommodation;
- The removal of vegetation to facilitate site access and establish the development platforms;
- The measures for the temporary protection of existing features (such as vegetation, trees, ponds, etc) and any temporary screening (such as hoarding lines); and
- The programme of work and phasing of construction.

A1.9 EFFECTS DURING OPERATION (AT YEAR 1 & YEAR 15)

At the operational stage, the sources of landscape and visual effects may include:

- The location, scale, height, mass and design of buildings in terms of elevational treatment; structures and processes, including any other features;
- Details of service arrangements such as storage areas or infrastructure elements and utilities and haulage routes;
- Access arrangements and traffic movements;
- Lighting;
- Car parking;
- The noise and movement of vehicles in terms of perceived effects on tranquillity;
- Signage and boundary treatments;
- Outdoor activities that may be visible;
- The operational landscape, including landform, structure planting, green infrastructure and hard landscape features; and
- Land management operations and objectives.

A1.10 MITIGATION AND COMPENSATORY MEASURES

The purpose of mitigation is to avoid, reduce and where possible, remedy or offset, any significant (major to moderate) negative (adverse) effects on the landscape and visual receptors arising from the proposed development. Mitigation is thus not solely concerned with “damage limitation”, but may also consider measures that could compensate for unavoidable residual effects. Mitigation measures may be considered under three categories:

- Primary measures that intrinsically comprise part of the development design through an iterative process;
- Standard construction and operational management practices for avoiding and reducing environmental effects; and
- Secondary (or residual) measures designed to specifically address the remaining effects after the primary and standard construction practices have been incorporated.

A1.11 RESIDUAL EFFECTS

The residual effects of the proposed development are to be assessed. Residual effects consider any additional mitigation measures required to address specific landscape and visual sensitivities in place over and above the primary mitigation measures proposed and those already included and designed in to the scheme. The process of assessing residual effects is the same as assessing the primary effects.

A1.12 CUMULATIVE EFFECTS

Cumulative effects are defined as effects which result from additional changes to the landscape and visual receptors by the proposed development in conjunction with other developments (associated with or separate to it) or actions that occurred in the past, present or likely to occur in the foreseeable future.

The scope of the developments to be included in the cumulative assessment are to be agreed with the LPA by the planning consultant and developer. Prescribed approaches to the assessment, in terms of the baseline environment and defining the study area, are to be relative to the developments identified to be assessed and are to be agreed with the LPA at the outset.

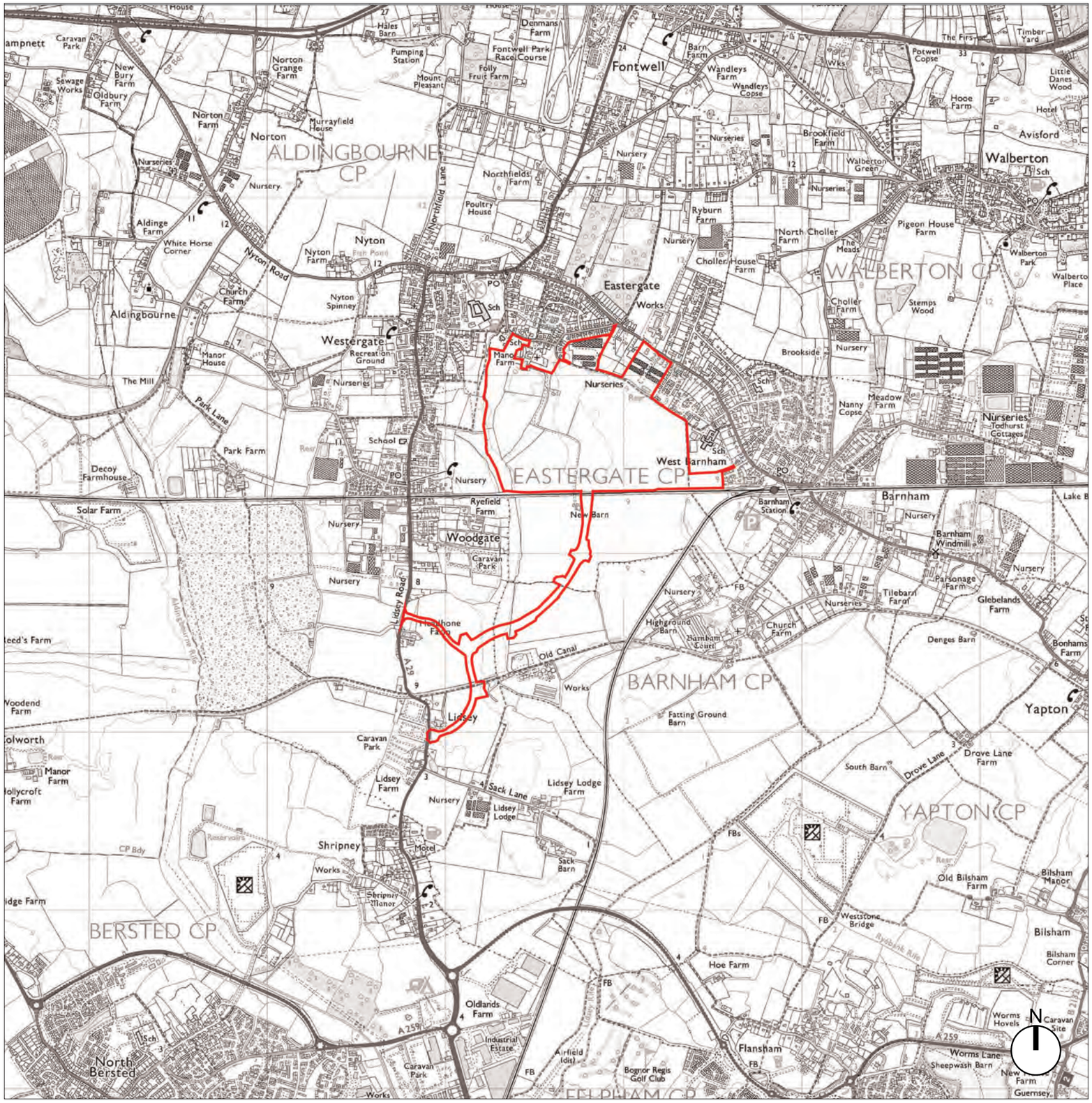
Cumulative effects arise from the intervisibility of a range of developments and/or from the combined effects of individual components of the proposed development occurring in the different locations over a period of time. The separate effects of such individual components or developments may not be significant, but together they may create an unacceptable degree of adverse effect on landscape and visual receptors.

Whilst the assessment of effects are to be assessed on the same basis as set out previously in this methodology, visual effects occur by combined visibility which occurs where the observer is able to see two or more developments from one viewpoint and / or, where sequential effects which occur when the observer has to move to another viewpoint to see different developments.

ARUN DISTRICT COUNCIL BN/11/22/OUT

APPENDIX E2

FIGURES AND PHOTOS



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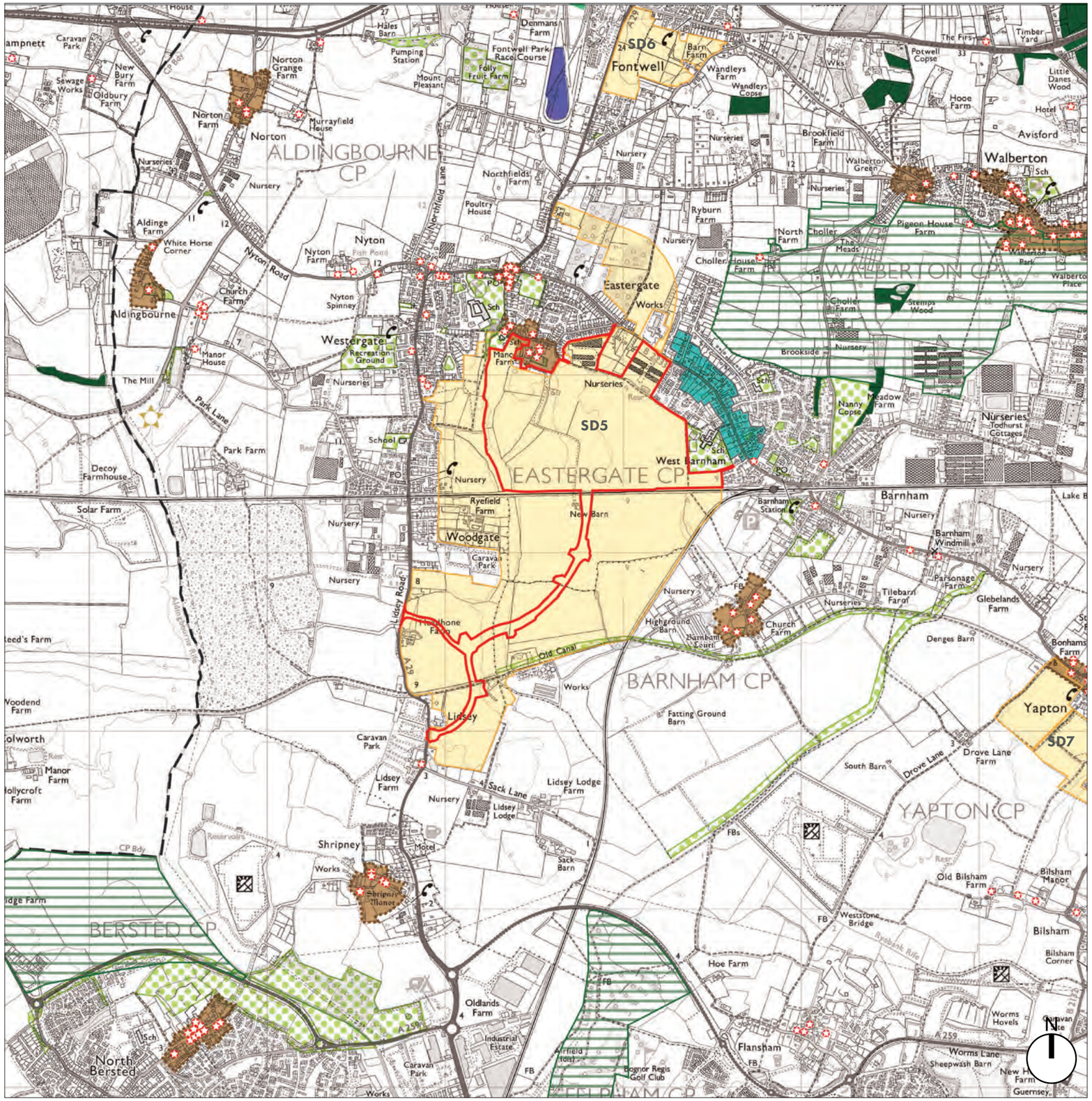
LEGEND

APPLICATION SITE BOUNDARY

FIGURE E2.1 – EXTRACT FROM ORDNANCE SURVEY PLAN SHOWING THE LOCATION OF THE APPLICATION SITE (FABRIK, 2020)

ARUN DISTRICT COUNCIL BN/11/22/OUT



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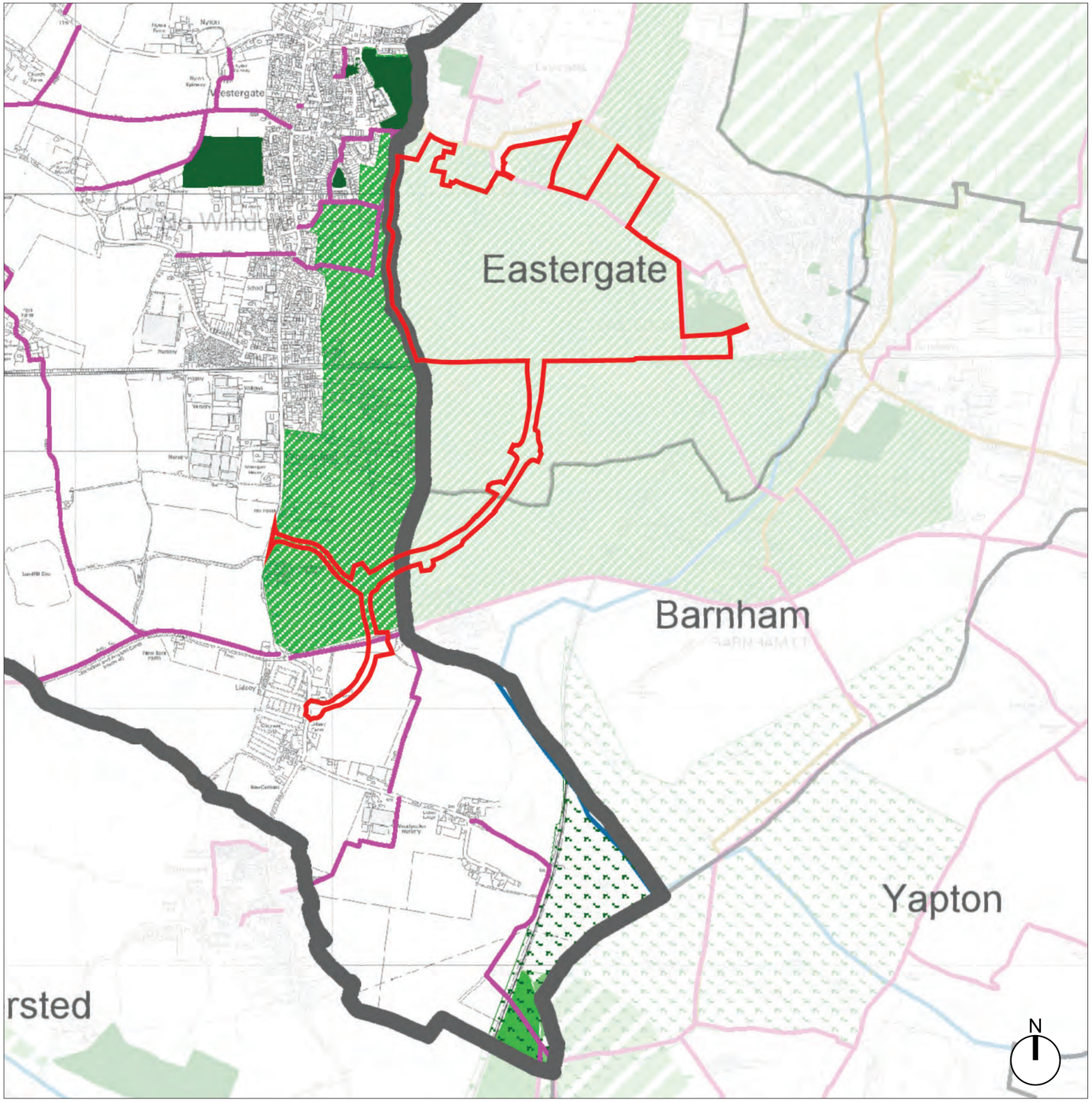
LEGEND

- APPLICATION SITE BOUNDARY
- STRATEGIC ALLOCATION AREA - SD5/ SD6/ SD7
- BOROUGH BOUNDARY
- ANCIENT WOODLANDS
- CONSERVATION AREAS
- LISTED BUILDINGS
- SCHEDULED ANCIENT MONUMENTS
- LOCAL GREEN SPACES (INCLUDING LOCAL OPEN SPACES IDENTIFIED IN NEIGHBOURHOOD PLAN)
- GAP BETWEEN SETTLEMENTS
- SNCI
- AREA OF CHARACTER

FIGURE E2.2 – PLAN SHOWING LANDSCAPE RELATED DESIGNATIONS (FABRIK, 2020)



LEGEND

APPLICATION SITE BOUNDARY

Parish Boundary

Surrounding Parishes

Rivers

Public Rights of Way:
Footpaths
Bridleway

Cycle Routes

Biodiversity Opportunity Area

SNCI
Sites of Nature Conservation Importance

Existing Open Space

Ancient Woodland

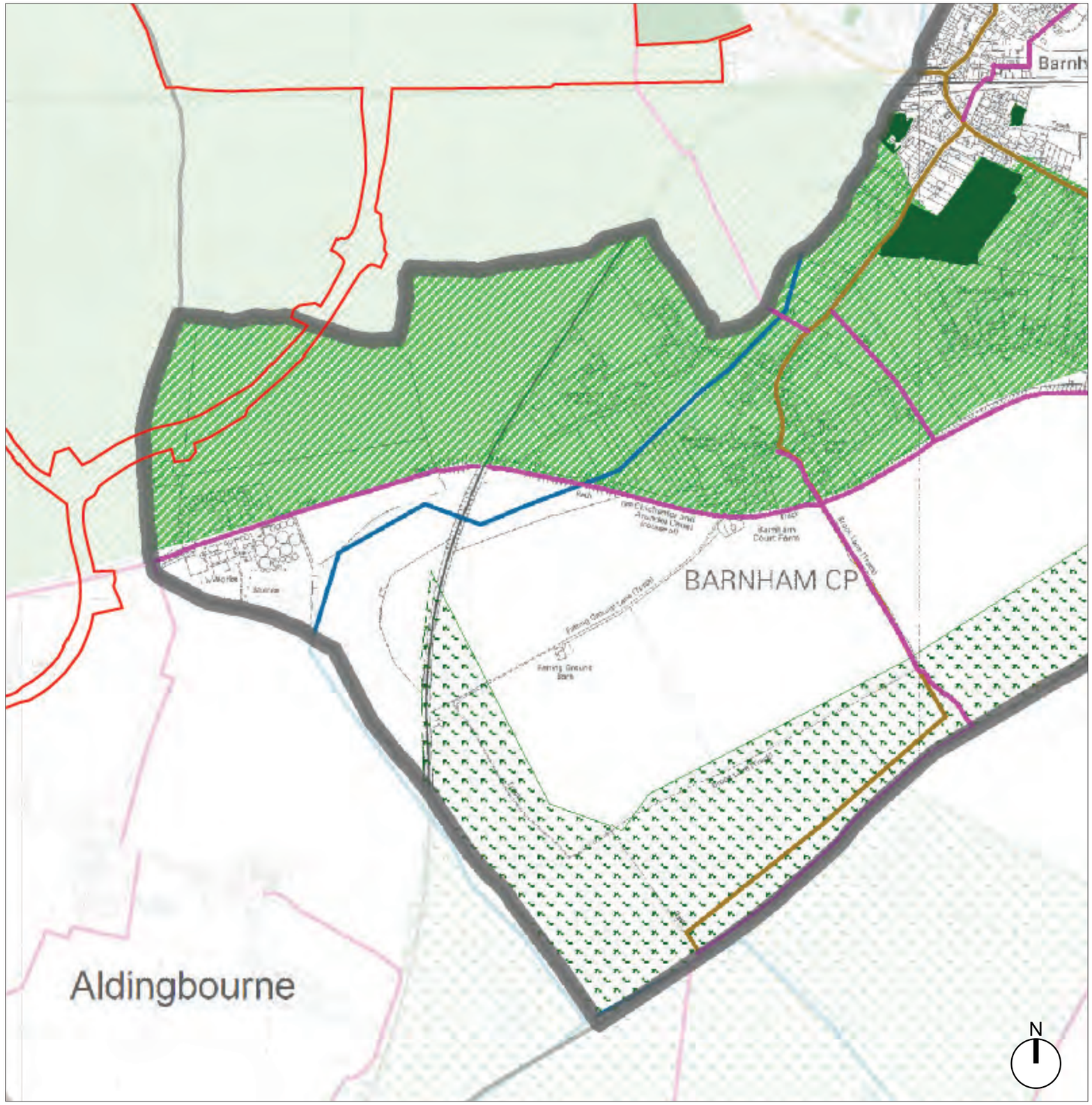
Green Infrastructure Corridor (GIC) - Type A

Green Infrastructure Corridor (GIC) - Type B
(Also subject to Community, Infrastructure and Housing Growth)

Green Infrastructure Corridor (GIC) - Type C
(Employment and Education Promotion Only)

FIGURE E2.3A – PLAN SHOWING GREEN INFRASTRUCTURE AREAS IN ALDINGBOURNE PARISH (ARUN DISTRICT COUNCIL, NOVEMBER 2012)

ARUN DISTRICT COUNCIL BN/11/22/OUT



LEGEND

APPLICATION SITE BOUNDARY

Parish Boundary

Surrounding Parishes

Public Rights of Way:

Footpaths

Bridleway

Cycle Routes

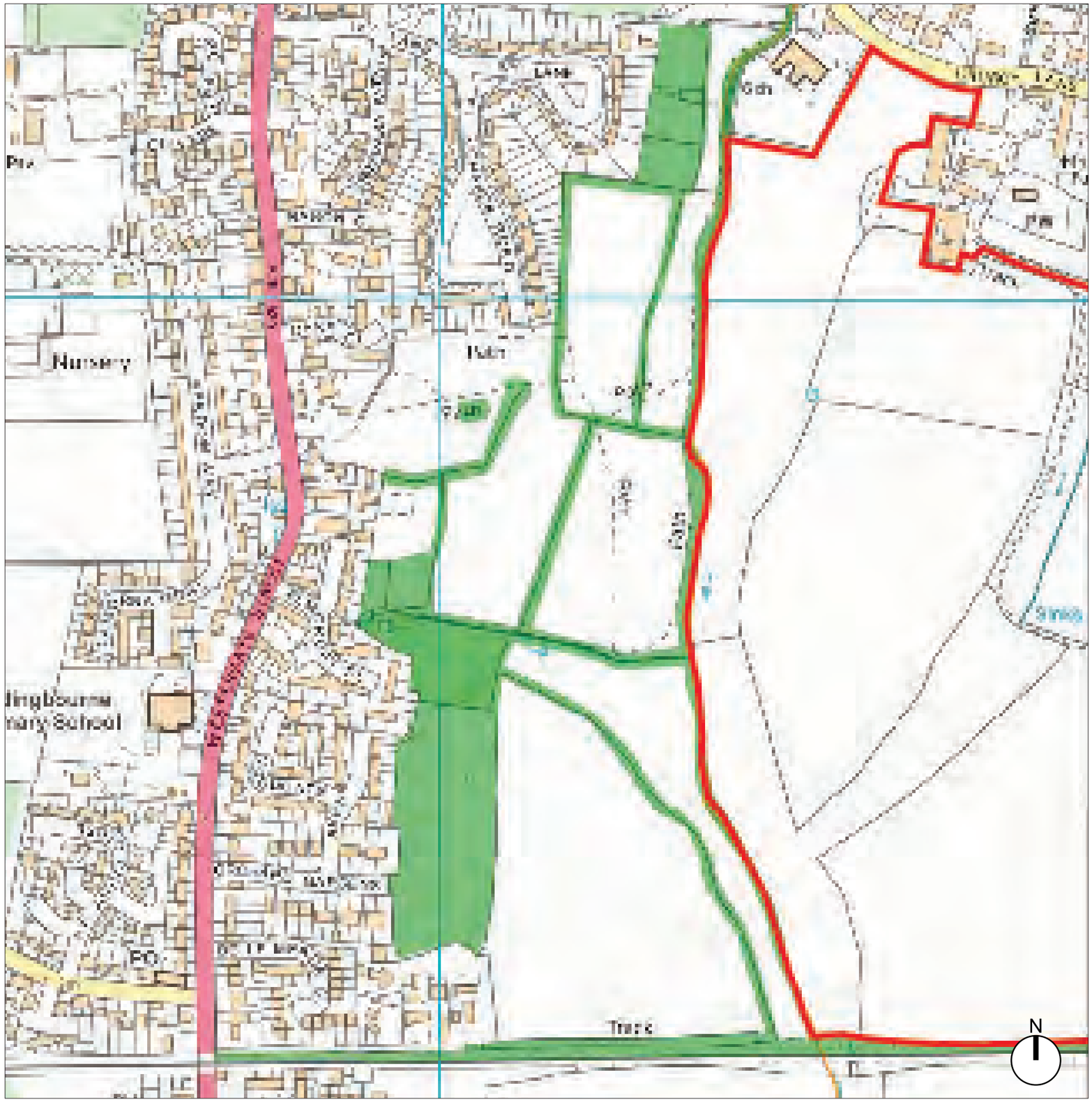
Biodiversity Opportunity Area

Existing Open Space

Green Infrastructure Corridor (GIC) - Type B

(Also subject to Community, Infrastructure and Housing Growth)

FIGURE E2.3B – PLAN SHOWING GREEN INFRASTRUCTURE AREAS IN BARNHAM PARISH (ARUN DISTRICT COUNCIL, NOVEMBER 2012)



LEGEND

APPLICATION SITE BOUNDARY

BIODIVERSITY CORRIDOR

FIGURE E2.4 – PLAN SHOWING BIODIVERSITY AREAS IN ALDINGBOURNE NEIGHBOURHOOD PLAN (ALDINGBOURNE PARISH COUNCIL 2019, REPRODUCED FROM AN ARUN DC MAP)

ARUN DISTRICT COUNCIL BN/11/22/OUT

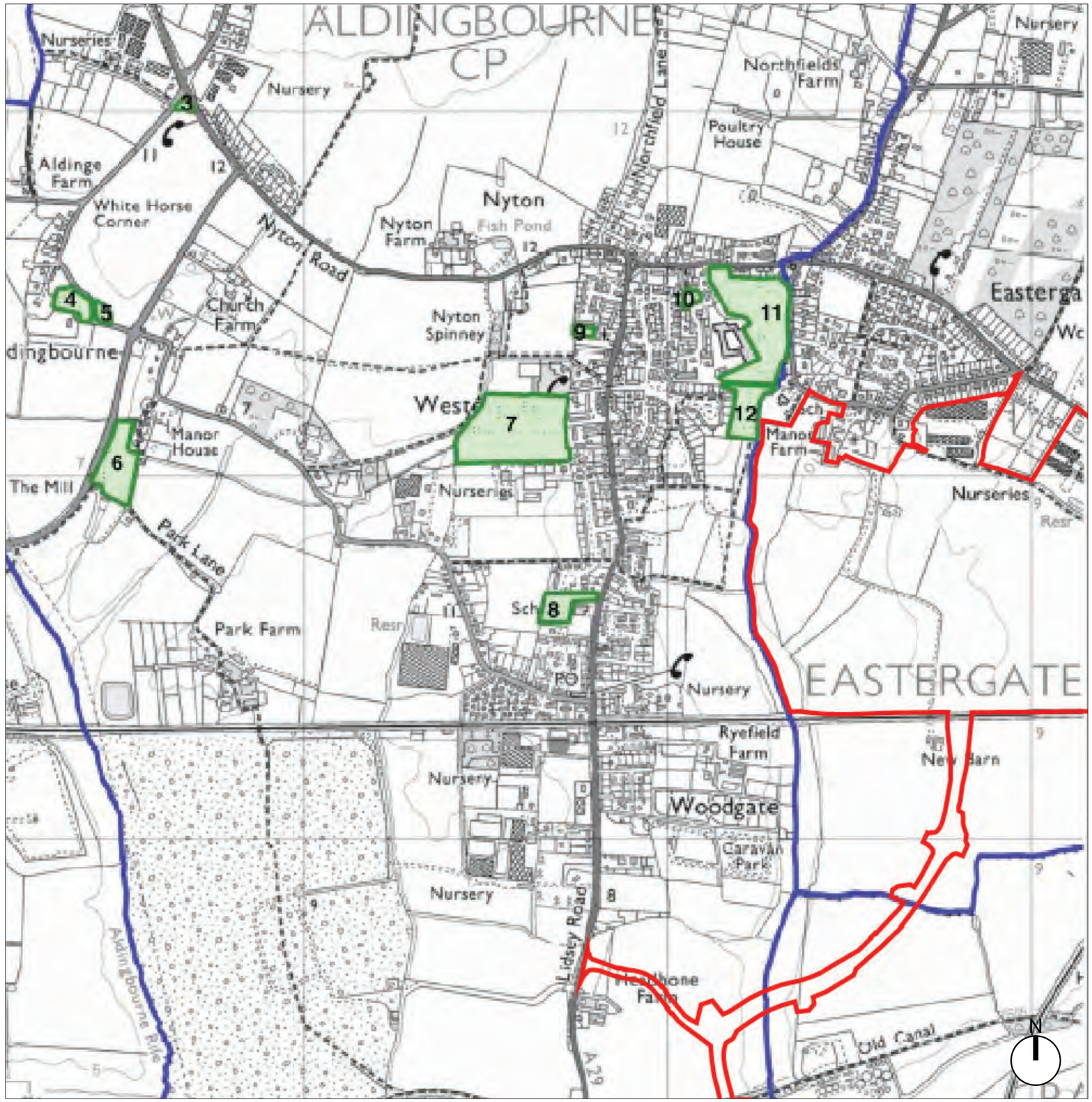


FIGURE E2.5 – PLAN SHOWING LOCAL GREEN SPACES (ALDINGBOURNE PARISH COUNCIL, 2019)

LEGEND

APPLICATION SITE BOUNDARY

LOCAL GREEN SPACES

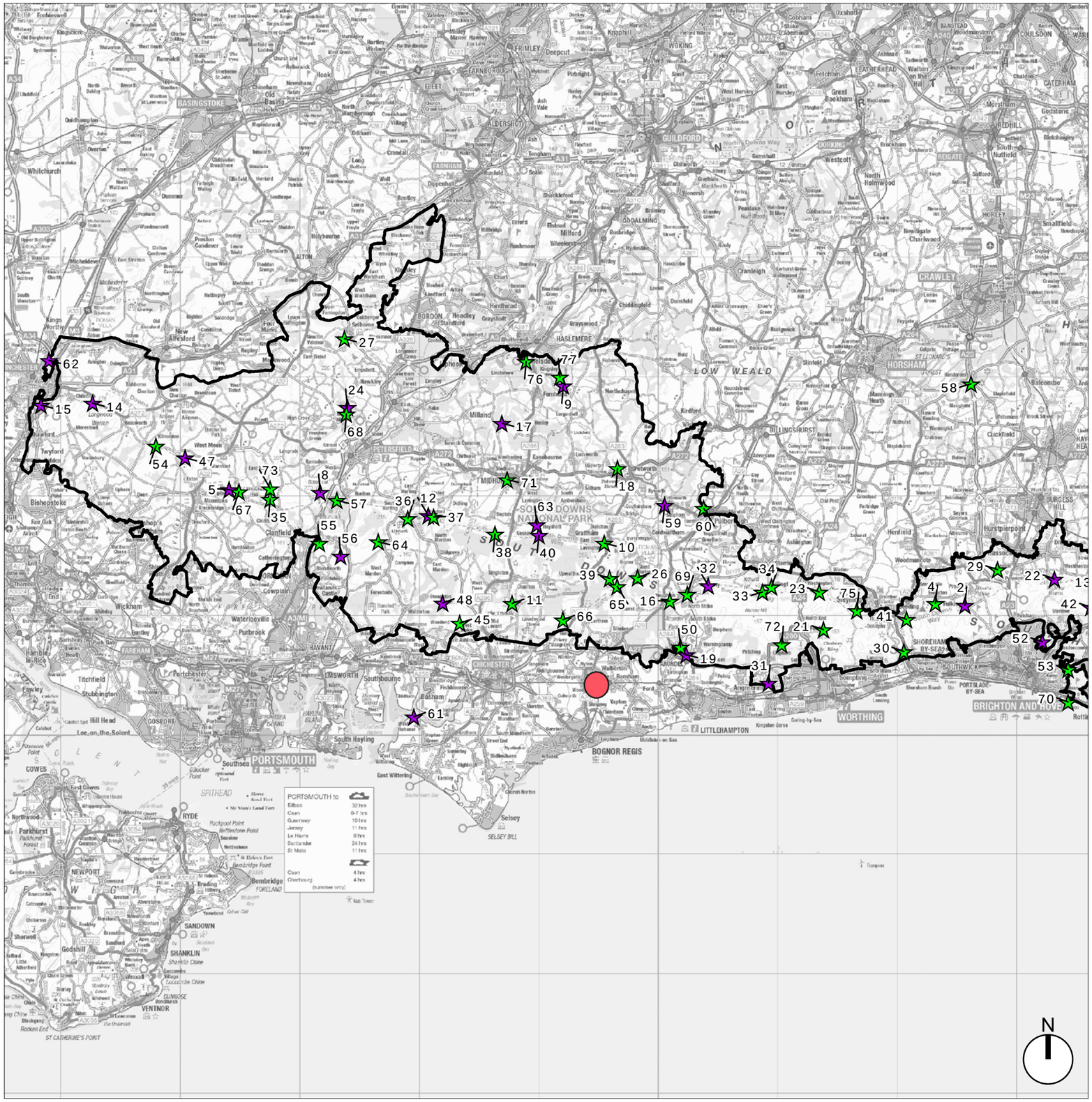


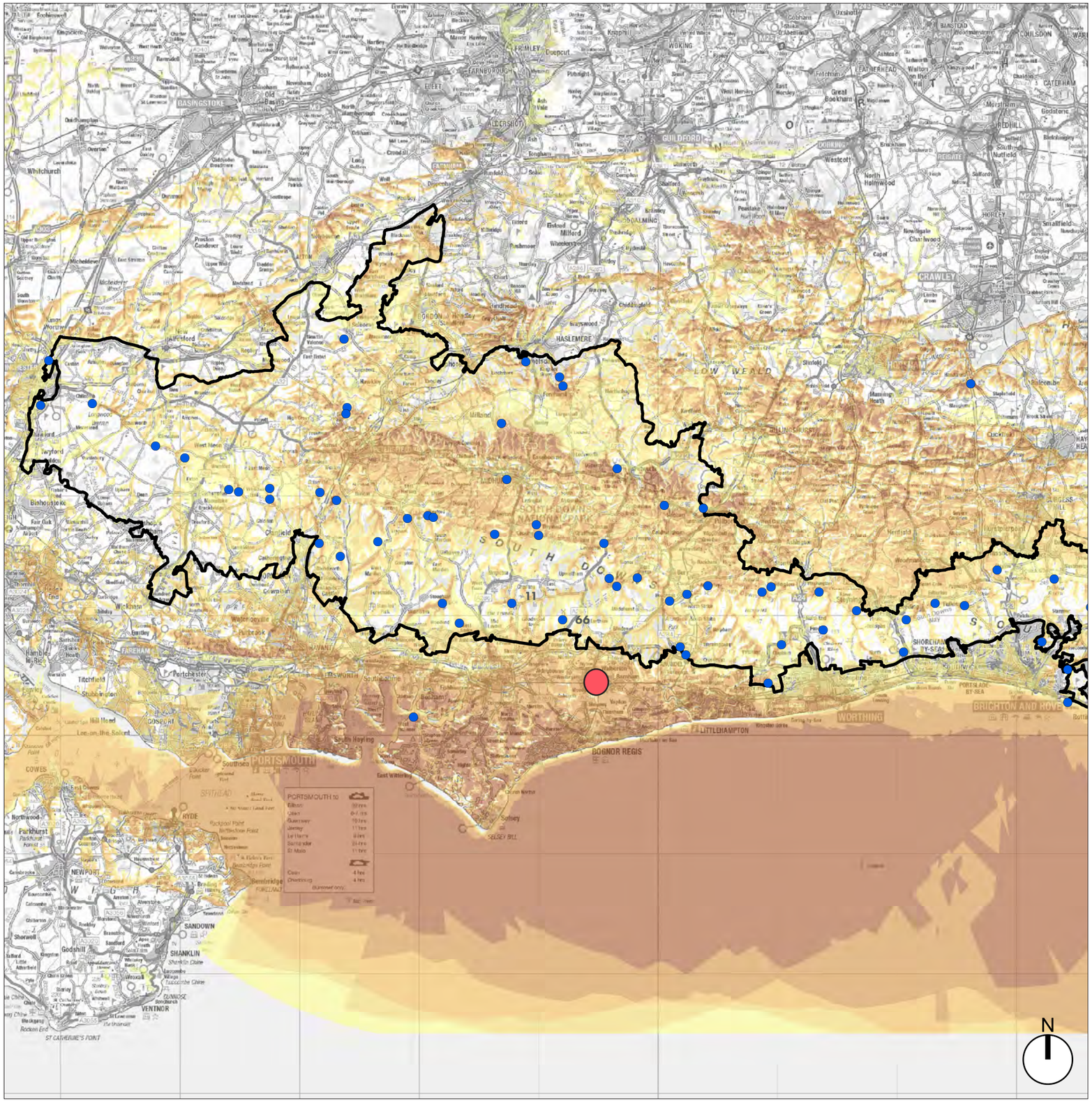
FIGURE E2.6 – PLAN SHOWING SOUTH DOWNS VIEWSHED CHARACTERISATION AND ANALYSIS FIGURE 2.1: REPRESENTATIVE VIEWPOINTS (LUC, 2015)

LEGEND

- APPROXIMATE LOCATION OF APPLICATION SITE
- South Downs National Park
- Representative viewpoint
- Representative viewpoint and photograph monitoring point

NOTE: NO. 11 IS THE TRUNDLE; 66 IS HALNAKER WINDMILL

ARUN DISTRICT COUNCIL BN/11/22/OUT



LEGEND

APPROXIMATE LOCATION OF APPLICATION SITE

South Downs National Park

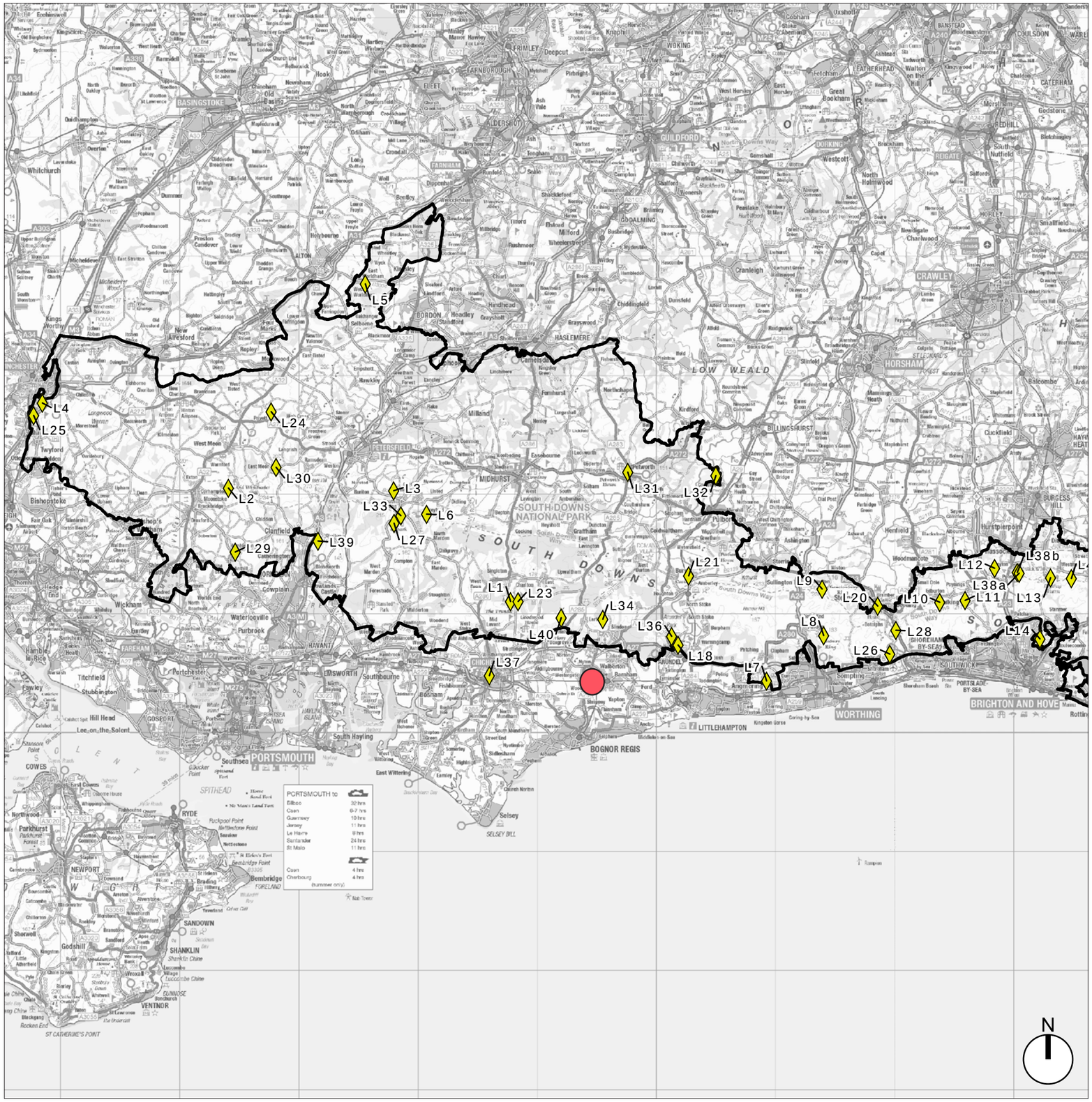
Representative viewpoint

Number of viewpoints location is visible from

- 1
- 2 - 3
- 4 - 5
- 6 - 10
- 11 - 20
- 21+

NOTE: NO. 11 IS THE TRUNDLE; 66 IS HALNAKER WINDMILL

FIGURE E2.7 – PLAN SHOWING SOUTH DOWNS VIEWSHED CHARACTERISATION AND ANALYSIS FIGURE 2.2: CUMULATIVE VIEWSHED MAP (LUC, 2015)



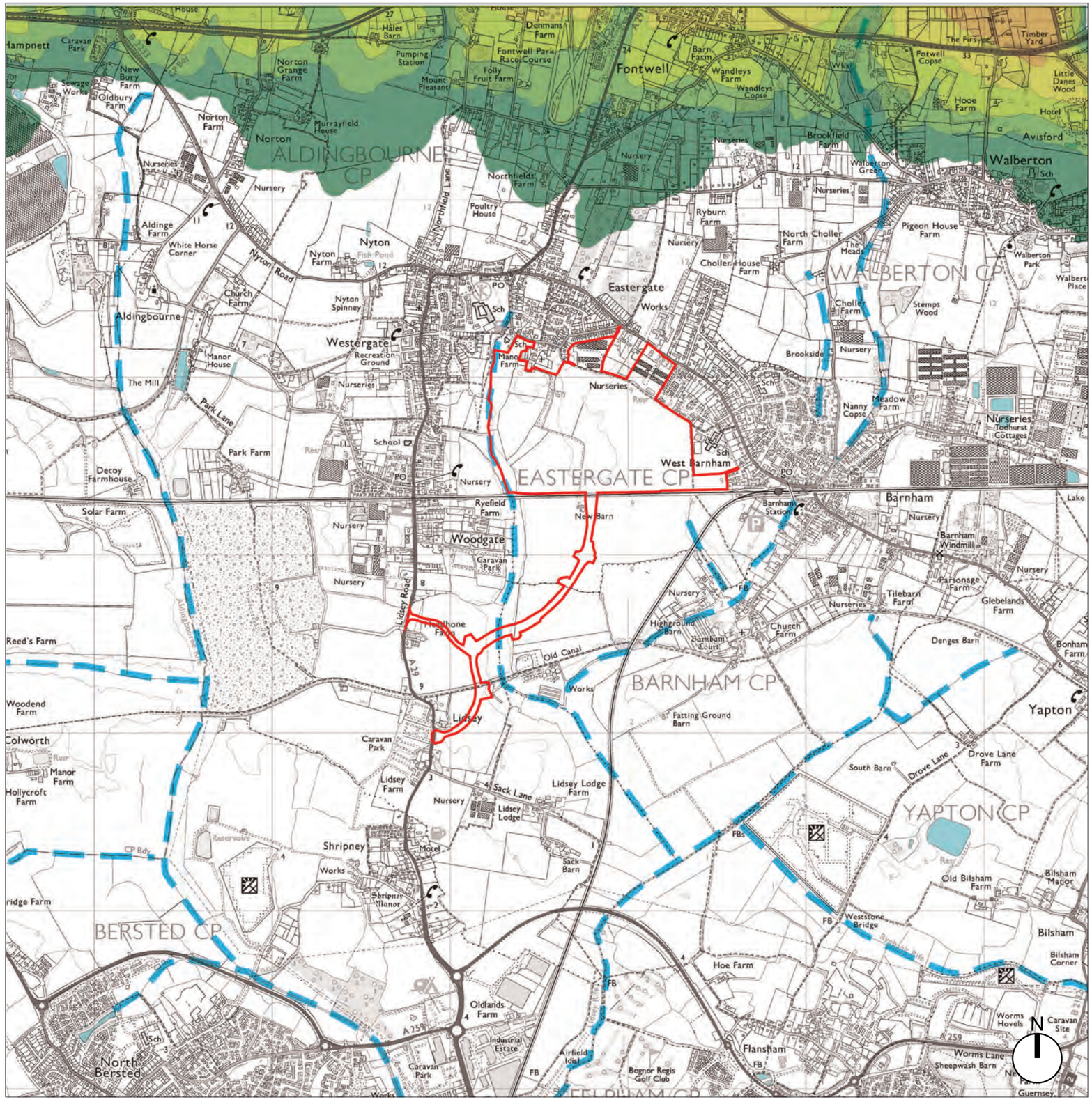
LEGEND

- APPROXIMATE LOCATION OF APPLICATION SITE
- South Downs National Park
- Landmark

NOTE: NO. 40 IS HALNAKER WINDMILL

FIGURE E2.8 – PLAN SHOWING SOUTH DOWNS VIEWSHED CHARACTERISATION AND ANALYSIS FIGURE 2.3: LANDMARKS (LUC, 2015)

ARUN DISTRICT COUNCIL BN/11/22/OUT



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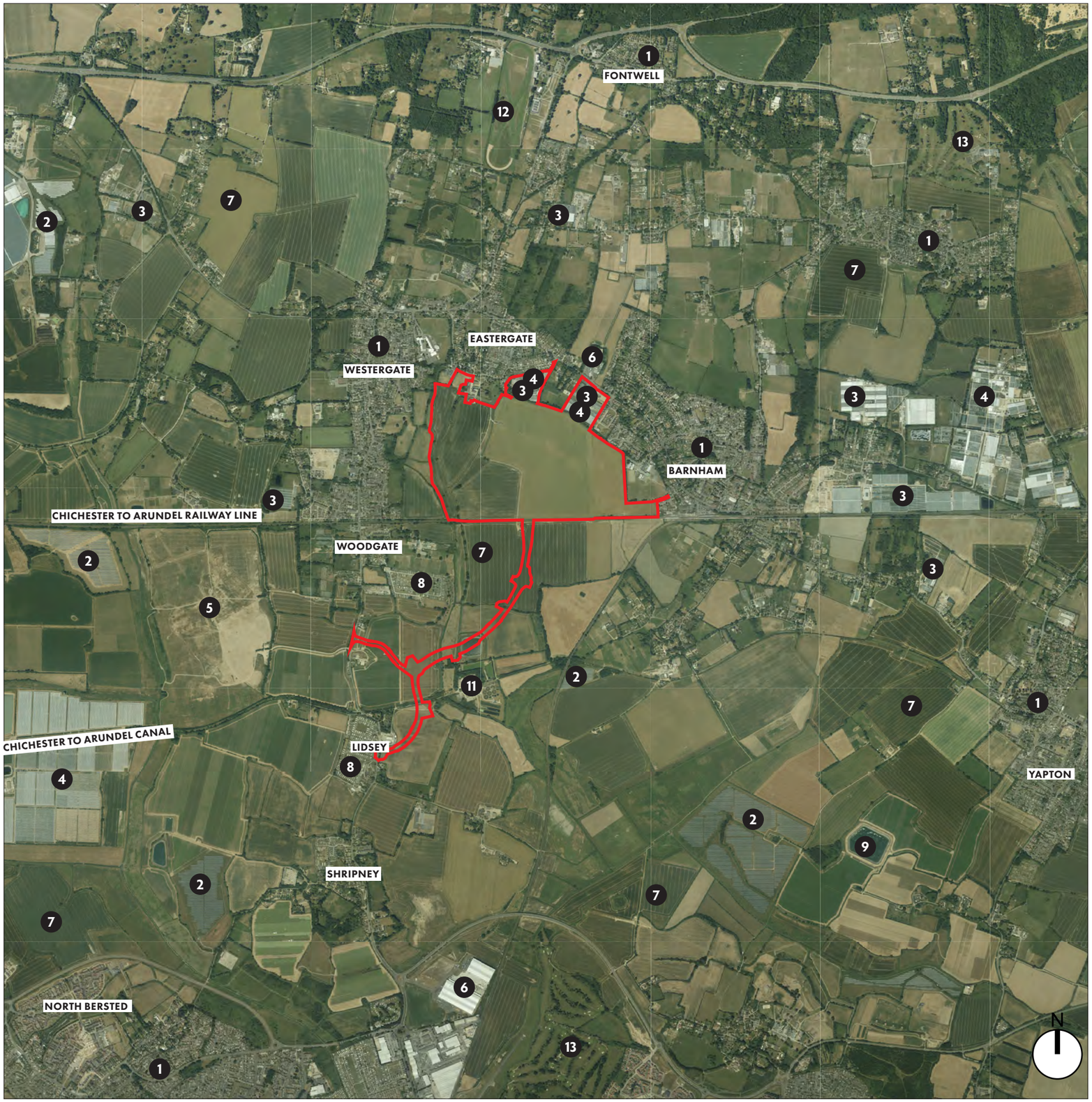
LEGEND

- APPLICATION SITE BOUNDARY
- MINOR VALLEYS
- WATER BODIES
- 15 AOD
- 20 AOD
- 25 AOD
- 30 AOD
- 35 AOD

FIGURE E2.9 – PLAN ILLUSTRATING TOPOGRAPHY AND DRAINAGE (FABRIK, 2020)



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LEGEND

- APPLICATION SITE BOUNDARY
- 1 SETTLEMENT
- 2 SOLAR FARM
- 3 GLASSHOUSES
- 4 POLY TUNNELS
- 5 FORMER MINERAL EXTRACTION / RESTORATION
- 6 BUSINESS PARKS
- 7 FARMLAND
- 8 CARAVAN PARK
- 9 RESERVOIRS / WATERBODIES
- 10 CEMETERY
- 11 WATER TREATMENT WORKS
- 12 FONTWELL PARK RACE COURSE
- 13 GOLF COURSE

FIGURE E2.10 – AERIAL PHOTO SHOWING LAND COVER (FABRIK, 2020)

ARUN DISTRICT COUNCIL BN/11/22/OUT

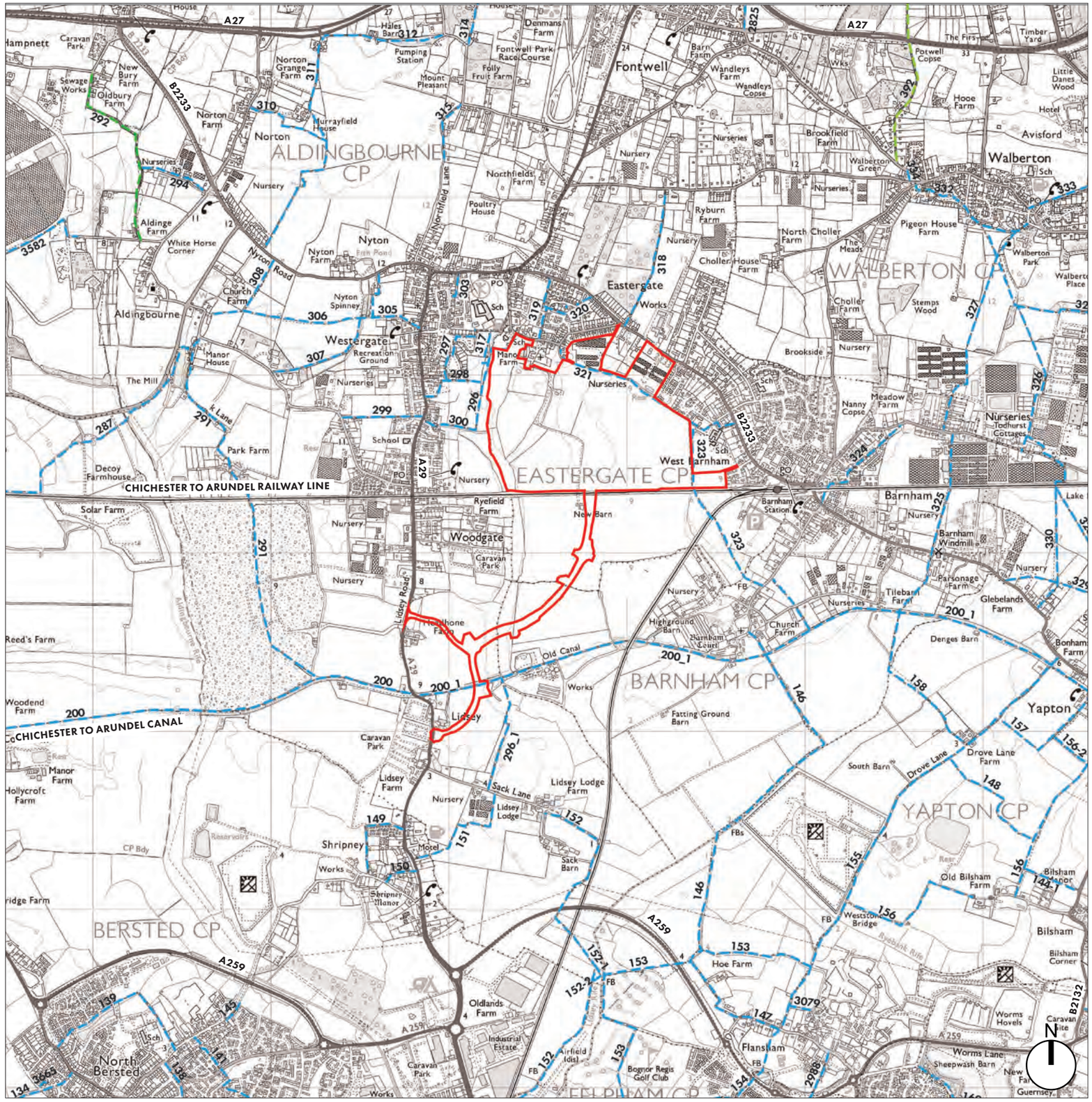

FIGURE E2.11 – PLAN SHOWING PUBLIC RIGHTS OF WAY (FABRIK, 2020)

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LEGEND

- APPLICATION SITE BOUNDARY
- BRIDLEWAYS
- FOOTPATHS

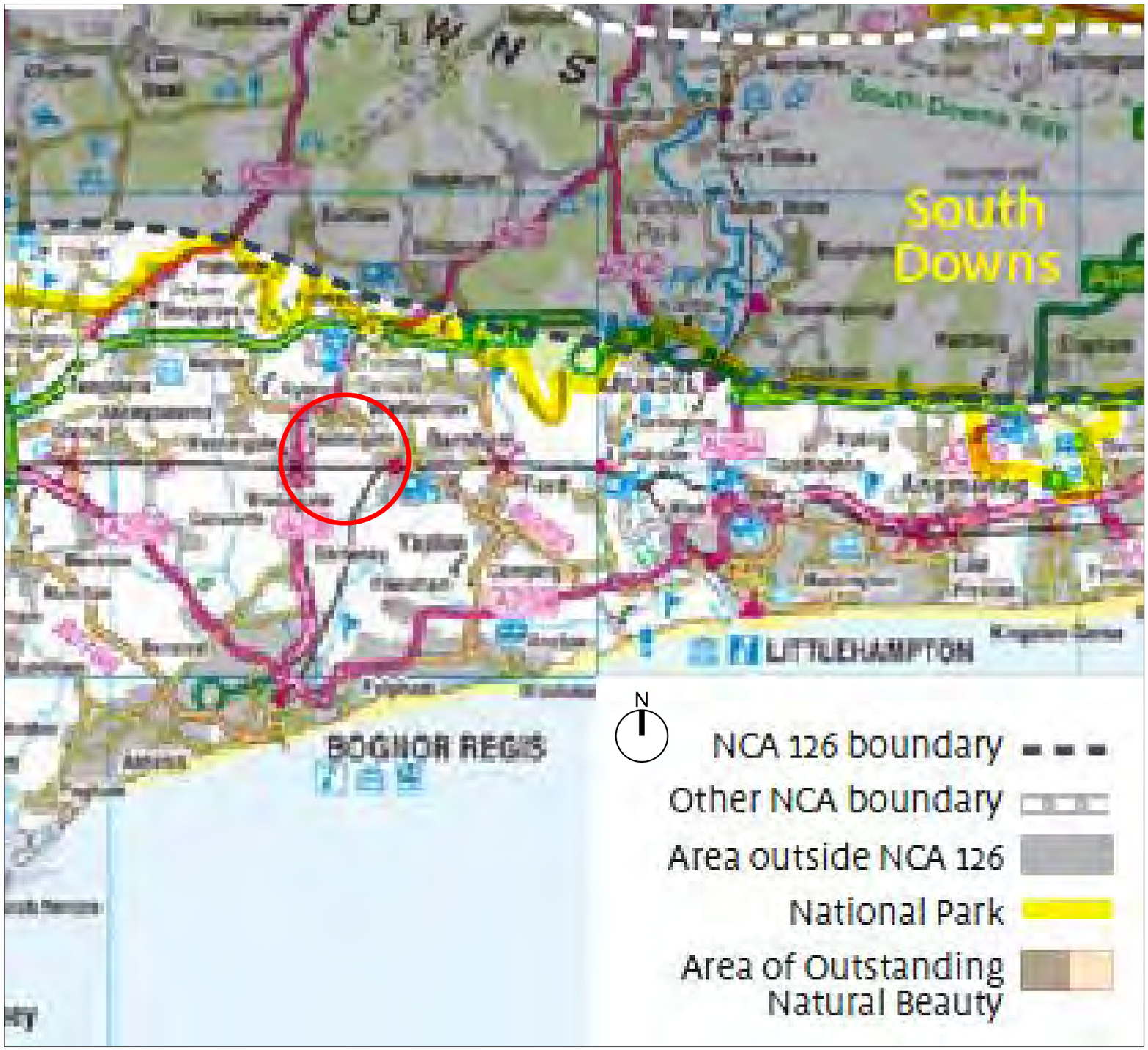
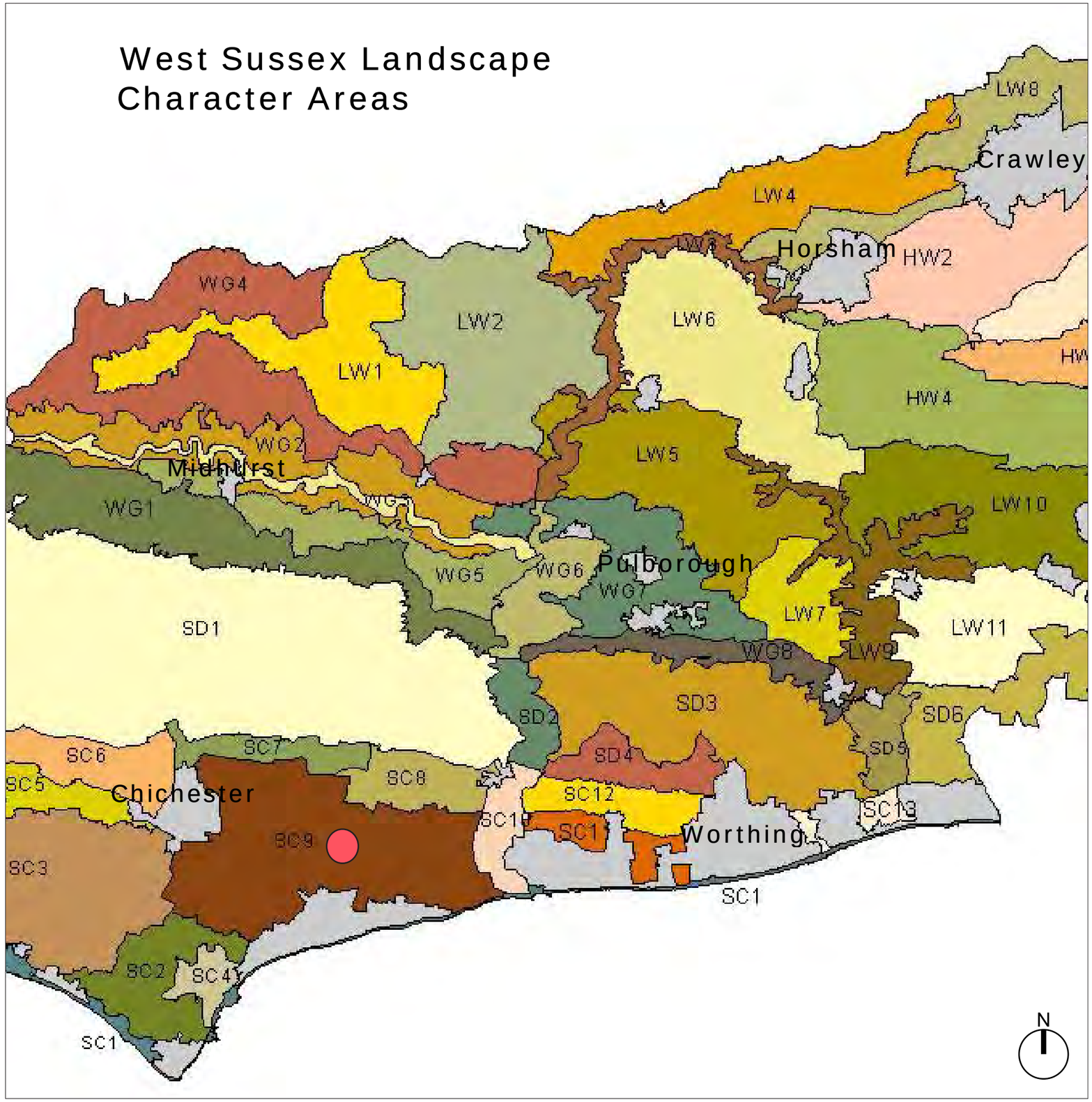


FIGURE E2.12 – EXTRACT FROM NATIONAL LANDSCAPE CHARACTER AREA MAP (NATURAL ENGLAND, 2014)

LEGEND

APPLICATION SITE LOCATION

ARUN DISTRICT COUNCIL BN/11/22/OUT



LEGEND

APPROXIMATE APPLICATION SITE LOCATION

SD4	Angmering Park
SC12	Angmering Upper Coastal Plain
WG6	Arun Wildbrooks
SC6	Ashlings Upper Coastal Plain
	Built Up Area
SD3	Central Downs
LW6	Central Low Weald
WG8	Central Scarp Footslopes
SC3	Chichester Harbour
SC9	Chichester to Yapton Coastal Plain
SD5	Downland Adur Valley
SD2	Downland Arun Valley
SD6	Eastern Downs
LW10	Eastern Low Weald
LW11	Eastern Scarp Footslopes
SC8	Fontwell Upper Coastal Plain
SC7	Halnaker Upper Coastal Plain
HW1	High Weald
HW2	High Weald Forests
HW4	High Weald Fringes
SC11	Littlehampton & Worthing Fringes
LW4	Low Weald Hills
SC10	Lower Arun Valley
SC2	Manhood Peninsula
LW2	North Western Low Weald
LW1	North Western Ridges
WG4	North Western Valleys
LW8	Northern Vales
HW3	Ouse Valley
SC4	Pagham Harbour
WG2	Rother Farmlands
WG3	Rother Valley
WG5	Rother Woods and Heaths
SC1	South Coast Shoreline
SC5	Southbourne Coastal Plain
LW5	Southern Low Weald
WG7	Storrington Woods & Heaths
LW9	Upper Adur Valley
LW3	Upper Arun Valley
SD1	Western Downs
WG1	Western Scarp Footslopes
LW7	Wiston Low Weald
SC13	Worthing & Adur Fringes

FIGURE E2.13 – EXTRACT FROM COUNTY LANDSCAPE CHARACTER AREA MAP (WEST SUSSEX COUNTY COUNCIL, 2003)

Waterbeach
Hainaker
Slindon
Boxgrove
Fontwell
Slindon Common
Strettington
Temple Bar
East Hampnett
Crockerhill
Aldingbourne
Mount Noddy
Tangmere
Norton
Murrayfield Ho
Nyton
Walberton
Binsted
Tortington
Aldingbourne
Westergate
Eastergate
Shopwyke
Oving
Woodham
Barnham
Saxby
North End
Woodgate
Ruffs Cotts
Reed's Fm
Yapton
Burndell
Ford
Merston
Colworth
Colworth Fm
Groves Fm
Elbridge
Poplars Barn
Lidsey Lodge
Shripney
Oldlands
Bilsham
Flansham
Hoe Fm
Climping
Saltham Ho
Butterlees
Park Fm
Crimsham Manor
Lagness
Copyhold Fm
North Bersted
South Bersted
Felpham
Middleton-on-Sea
Atherington
Setter Fm
Rookery Fm
Holiday Centre
Tortington Common
Binsted Wood
Meadow Lodge
Marsh Fm
Todhurst Fm
Lower Fm
Church Fm
Poory Fm
Horsemere Green
Airfield (disused)
Drove Lane Fm
Hams
Wicks Fm
Poole Place
Hotel
Park Fm
Hospl
Race Course
Northfields Fm
Mount Noddy
Oldbar Fm
Coppe Fm
Sch
Ruffs Cotts
Highkettle Fm
Colworth Fm
Marsh
Runcton
Crimsham Manor Fm
Penncott's Fm
Morella Fm
Copyhold Fm
Rose
Rookery Fm
Sch
Holiday Centre
Pier
Hotel
Poole Place
Felpham
Lidsey
Wks
Barnham Coun
Hoe Fm
Oldlands
Shripney Manor
Poplars Barn
Lidsey Lodge
Hams
Bilsham
Drove Lane Fm
Horsemere Green
Airfield (disused)
Climping
Wicks Fm
Saxby
Todhurst Fm
Lower Fm
Marsh Fm
Meadow Lodge
Tortington Common
Binsted Wood
Poory Fm
Church Fm
Hotel
Hospl
Park Fm
Paine's Wood
Earthworks
The Firs
Hotel
Race Course
Northfields Fm
Murrayfield Ho
Oldbar Fm
Mount Noddy
Aldingbourne Ho
Crockerhill
Coppe Fm
Sch
Shopwyke
Oving
Woodham Fm
Park Fm
Ruffs Cotts
Highkettle Fm
Reed's Fm
Colworth Fm
Groves Fm
Marsh
Runcton
Crimsham Manor Fm
Penncott's Fm
Morella Fm
Copyhold Fm
Rose
Rookery Fm
Setter

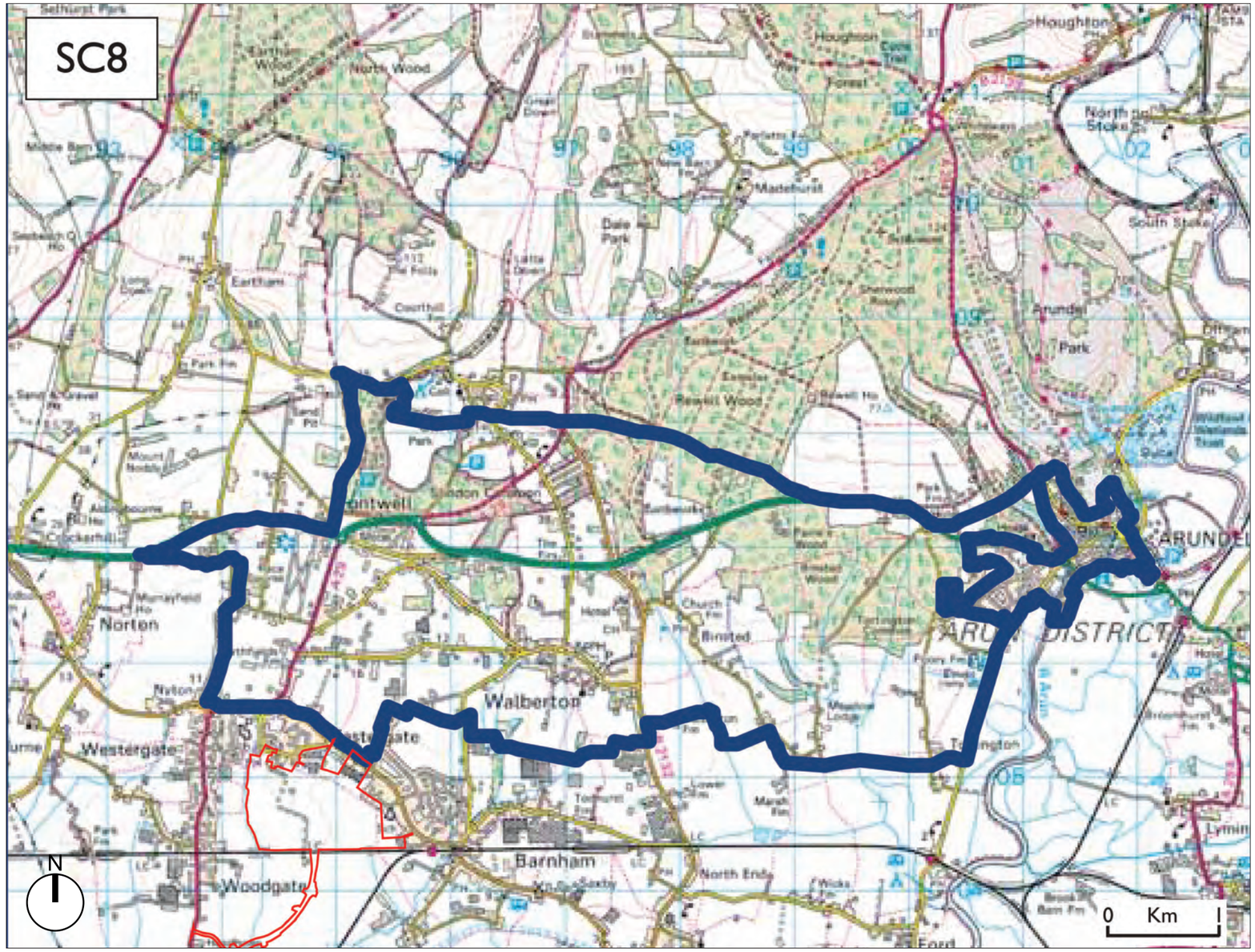


FIGURE E2.14B – EXTRACT FROM COUNTY LANDSCAPE CHARACTER AREA MAP SC8 - FONTWELL UPPER COASTAL PLAIN (WEST SUSSEX COUNTY COUNCIL, 2003)

LEGEND

APPLICATION SITE BOUNDARY