

Siglion LLP

Chapelgarth

Environmental Impact Assessment - Volume II

Chapter 7 Landscape and Visual Impact

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1. Executive Summary

Siglion; a partnership between Carillion and Sunderland City Council managed by Igloo Regeneration has identified a site suitable for residential expansion within Chapelgarth, Sunderland. This chapter of the Environmental Statement describes the landscape and visual effects of the proposed urban extension as carried out by Colour : urban design limited (Colour).

The LVIA findings are a critical aspect of the masterplanning and landscape design of Chapelgarth, and will aid sound technical development of the proposals character and enhance local character.

The site is located at the south western edge of Sunderland Urban Area and is approximately 49.73 hectares in size. It currently comprises agricultural land (arable) with field hedges, individual trees and contains two areas of unfarmed open space, which are in rough grassland / meadow character.

Proposals for the site include for mixed residential neighbourhoods for up to 750 new dwellings. These are designed to relate to the adjacent neighbourhoods of Burdon Vale, Moorside and Doxford. A range of public open spaces including an area in excess of 13.5Ha of Suitable Alternative Natural Greenspace and a small village centre will complement the scheme.

Following a detailed desktop and field assessment of landscape and visual effects and consideration of primary mitigation measures the predicted significant effects can be summarised as follows:-

- The most sensitive visual receptors of the new development and construction works are the residents of Burdon Vale to the north and recreational users of informal footpaths around the field boundaries.
- Properties, which have the greatest visibility of the site and highest sensitivity to change include those along the southern, edge of the estate of Burdon Vale in particular the few, which face onto the site with no visual intervention between. The representative viewpoints of these residents are viewpoints 1 and 2, which after considering primary mitigation are predicted to have a moderate adverse significant effect.

- The loss of the fields is considered a moderate adverse effect.
- The change of use provides a greater provision of publicly accessible open space and a network of paths to enjoy it which is considered to be of major benefit to the local area.
- The effect on tranquillity of the site was considered to be minor adverse due to the increased activity associated with the development and increased street lighting.
- The addition of the acoustic treatments to the south of the site are considered a great benefit to all from the effects of the A19 transport corridor.
- The current openness of panoramic views across the largest field and southern site area is predicted to be more reduced, but framed along and down street networks.
- The increase in vegetation, through mitigation of loss of existing vegetation and 'gapping up' of existing hedges as well as extensions to hedge planting, new woodland planting and new street trees would be a major benefit.

In summary, it is considered that there would be a net enhancement to the landscape structure and amenities of Chapelgarth as a result of the residential proposals by Siglion.

Contents

1. Executive Summary	3
Contents	5
2. Introduction	9
2.1 Scope of assessment	9
2.2 Outline of overall proposals	10
2.3 The Study Area	12
2.4 Site Location and Description	13
3. Policy Context	15
3.1 Introduction	15
3.2 Policy Context	16
3.3 Landscape planning designations	17
4. Assessment Methodology & Significance Criteria	21
4.1 Assessment Methodology	21
4.2 Overall Significance Criteria	30
4.3 Consultation	32
5. Baseline Conditions	33
5.1 Introduction	33
5.2 Landscape Baseline	33
5.2 Visual Baseline	45
6. Identification of potential effects, before mitigation	52
6.1 Introduction	52
6.2 Design Development	52
6.3 Development features	53
6.4 Construction phase processes and features	53
6.5 Assessment of effects on landscape resources arising from completion of the proposed development	58
6.6 Assessment of effects on Visual Receptors arising from completion of the proposed development	65
7. Cumulative effects	72
7.1 Introduction	72

7.2	Description of adjacent development.....	73
7.3	Study area.....	73
7.4	Baseline for assessing cumulative landscape effects	74
7.5	Baseline for assessing cumulative visual effects	74
7.6	Identification and assessment of landscape effects	74
7.8	Identification and assessment of visual effects	78
7.9	Description of visual baseline and predicted cumulative effects.	78
7.10	Mitigating cumulative effects.....	81
8.	Primary Mitigation Measures	82
8.1	Introduction	82
8.2	Description of landscape mitigation measures and predicted effect.....	84
8.3	Description of visual mitigation measures and predicted effect.....	86
9.0	Residual Effects	89
9.1	Residual landscape effects.....	89
9.2	Residual visual effects.....	91
10.1	Summary and Conclusions.....	93
10.2	Summary of key issues: Landscape Effects	93
10.3	Summary of key issues: Visual Effects	94
11	Abbreviations	98
12	References.....	99
	APPENDIX 1 - Assessment tables	100

List of Drawings:

- URBED. Illustrative Masterplan, 944-M01 [Rev -]
- COLOUR. Site Context - Surrounding Local Topography, L-1515-PRP-001 [Rev 03]
- COLOUR. Existing Site - Topography, L-1515-PRP-002 [Rev 03]
- COLOUR. Landscape quality of principal vehicle approaches, L-1515-PRP-003 [Rev 01]
- COLOUR. Recreational routes - Existing links and site desire lines, L-1515-PRP-004 [Rev 04]
- COLOUR. Existing Site - Character Area, L-1515-PRP-007 [Rev 03]
- COLOUR. Viewpoint Locations, L-1515-PRP-009 [Rev 03]
- COLOUR. Existing site accesses and gaps in hedgerows, L-1515-PRP-010 [Rev 01]
- COLOUR. Landscape Character Types & Areas, L-1515-PRP-017 [Rev 01]
- COLOUR. Protected Landscapes within Study Area, L-1515-PRP-018 [Rev 01]

- COLOUR. Visible area of development from Viewpoint 4, L-1515-PRP-019 [Rev 01]
- COLOUR. Visible area of development from viewpoint 6, L-1515-PRP-020 [Rev 01]
- COLOUR. Visible area of development from viewpoint 7, L-1515-PRP-021 [Rev 01]
- COLOUR. Green networks - Proposed onsite routes & connections to off-site networks with existing well-trodden paths overlaid [in white], L-1515-PRP-027 [Rev 04]
- COLOUR. Open space strategy and ratio of provision, L-1515-PRP-028 [Rev 03]
- COLOUR. Illustration of the location of Primary mitigation measures, L-1515-PRP-043 [Rev 01]
- COLOUR. List of primary mitigation measures, L-1515-PRP-044 [Rev 01]
- COLOUR. Cumulative development plan, L-1515-PRP-046 [Rev 01]
- COLOUR. Visible area of development from Viewpoint 1, L-1515-PRP-047 [Rev 01]
- COLOUR. Visible area of development from Viewpoint 5, L-1515-PRP-048 [Rev 01]
- COLOUR. LVIA Viewpoint 01, L-1515-EXV-001 [Rev 01]
- COLOUR. LVIA Viewpoint 02, L-1515-EXP-002 [Rev 01]
- COLOUR. LVIA Viewpoint 03, L-1515-EXP-003 [Rev 01]
- COLOUR. LVIA Viewpoint 04, L-1515-EXP-004 [Rev 01]
- COLOUR. LVIA Viewpoint 05, L-1515-EXP-005 [Rev 01]
- COLOUR. LVIA Viewpoint 06, L-1515-EXP-006 [Rev 01]
- COLOUR. LVIA Viewpoint 07, L-1515-EXP-007 [Rev 01]
- COLOUR. LVIA Viewpoint 08, L-1515-EXP-008 [Rev 01]
- COLOUR. LVIA Viewpoint 09, L-1515-EXP-009 [Rev 01]
- ROBERTSON LANDSCAPE DESIGN. Landscape Masterplan, 5562-99-001 [Rev F]
- ID PARTNERSHIP. Proposed site layout - Southern Part (Footprint version), SL-01K [Rev K]
- ID PARTNERSHIP. Proposed site layout - Northern Part (Footprint version), SL-02K [Rev K]

List of tables:

- Table 01: Landscape designations in the greater study area (>8km radius from the centre of the site)
- Table 02: Value Criteria
- Table 03: Sensitivity criteria
- Table 04: Magnitude criteria
- Table 05: Significance criteria
- Table 06 - Matrix illustrating significance relating to sensitivity of the receptor and magnitude of change
- Table 07: Landscape Baseline - APPENDIX 01
- Table 08: Landscape Characterisation

- Table 09: Visual Baseline - APPENDIX 01
- Table 10: Construction phases effect assessment table
- Table 11 - Identification of potential landscape effects - pre-mitigation
- Table 12 - Identification of potential visual effects - pre-mitigation
- Table 13 - Landscape baseline and predicted cumulative effects
- Table 14 - Visual baseline and predicted cumulative effects
- Table 15 - Revisited Landscape effects - post-mitigation
- Table 16 - Revisited Visual effects - post-mitigation
- Table 17 - Residual Landscape effects
- Table 18 - Residual Visual effects

2. Introduction

2.1 Scope of assessment

2.1 Siglion; a partnership between Carillion and Sunderland City Council managed by Igloo Regeneration has identified a site suitable for residential development within Chapelgarth, Sunderland. This chapter of the Environmental Statement describes the landscape and visual impact assessment of the proposed urban extension as carried out by Colour : urban design limited (Colour).

2.2 Colour have been appointed by Siglion to prepare a Landscape and Visual Impact Assessment [LVIA] for the proposed residential development at Chapelgarth, Sunderland. The LVIA forms part of the Environmental Impact Assessment [EIA], which Cundall are coordinating. An Environmental Statement [ES] is to be submitted by the client on their behalf.

2.3 Colour are Chartered Landscape Architects registered with the Landscape Institute, the professional body that set the guidelines and codes for the profession. Landscape and Visual Impact Assessment (LVIA) is within our field of professional specialism. Our approach is design orientated EIA with proactive mitigation.

2.4 Associate Landscape Architect, Sharon Whiting-McKay CMLI (Chartered Member of the Landscape Institute) who has 10 years' professional experience, will write the chapter. Design Director Peter Owens CMLI who has 25 years' professional experience will review the document.

2.5 Within this assessment landscape and visual effects are assessed separately to ascertain significance as set out in 'Guidelines for Landscape and Visual Impact Assessment, third edition published by the Landscape Institute and Institute of Environmental Management and Assessment in 2013 (GLVIA3).

2.6 Although linked the two components of LVIA are:

- Assessment of landscape effects: assessing effects on the landscape as a resource in its own right;
- Assessment of visual effect: assessing effects on specific views and on the general visual amenity experienced by people.

- 2.7 The LVIA findings are a critical aspect of the masterplanning and landscape design of Chapelgarth, and will aid sound technical development of the proposals character and retain a sense of place.
- 2.8 The site is located at the south western edge of Sunderland Urban Area and is approximately 49.73 hectares in size. It currently comprises agricultural land (arable) with field hedges, individual trees and contains two areas of unfarmed open space, which are in rough grassland / meadow character.
- 2.9 Proposals for the site include the creation of a new residential neighbourhood within which sub neighbourhoods each with a different character are to be developed. This links to the adjacent neighbourhoods of Burdon Vale, Moorside and Doxford. A range of public open spaces and a small village centre will complement the scheme.
- 2.10 The submission of the development to the local authority is as a hybrid application where the overall masterplan is at outline design stage and an accompanying infrastructure / enabling works package has been detailed. The detailed package includes items such as new road junctions, sustainable urban drainage proposals and landscape design to create a welcoming frontage.
- 2.11 A design code has been developed to accompany the outline masterplan. This would be conditioned as part of a successful application to guide the developers and house builders on the detail for the layout of the masterplan, massing of built form and street characters including dwelling setbacks. As part of the design code a landscape and open strategy has been developed including distribution of space and outline designs on layout, materials and planting. As the masterplan is only at outline stage, architecture design is unknown at this time; however, the draft emerging South Sunderland Growth Area SPD provides guidance on built form, built environment and housing mix and choice which will provide a control over the future detailed design applications.

Outline of overall proposals

- 2.12 Sunderland City Council, through the Core Strategy are proposing to bring forward a new growth area known as South Sunderland Growth Area (SSGA). The Chapelgarth site forms part of this area and the emerging Supplementary Planning Guidance and associated masterplan allocates the area for housing.

- 2.13 In response Siglion are promoting the comprehensive development of an urban extension for the site. An outline masterplan for the site's development is proposed, incorporating consideration of the site's context, constraints and results of a number of assessments including flood risk and drainage, transportation, effects of noise and ecology.
- 2.14 The development of the proposed masterplan has been carefully considered and the design has evolved through a close working relationship and iterative process between the design teams, Urban Designers, Landscape Architects, Flood, Acoustic and Highways Engineers and Ecologists. Together, the aim has been to prevent or avoid significant adverse effects. As a result, primary mitigation measures have been integrated into the proposals through the iterative design process. These primary mitigation measures include landscape design.
- 2.15 The proposed development is for up to 750 new homes, comprising a mix of housing types and densities. A small mixed-use village centre is proposed along with new areas of open space and a substantial area of Suitable Alternative Natural Greenspace [SANG]. The number of new houses proposed is one reduction, which has taken place through iterative design assessment. As part of the informing of the final proposed number was the measure of ensuring the correct ratio of SANG could be provided per dwelling balanced with the other open space requirements, and existing green infrastructure constraints.
- 2.16 Defined character areas have been developed within which residential units will be mixed and arranged to create sub communities within the overall development. The development is proposed to be brought forward in phases detailed by successful house builders and guided by a design code. Access to the site is by three vehicle junctions off Weymouth Road to the north of the site. New pedestrian and cycle routes are linked into adjacent offsite networks creating a range of local recreational opportunities for a healthy lifestyle.
- 2.17 The proposals have been developed to retain existing trees and hedgerows where possible, including lengths of locally important species-rich hedgerows to the western extent of the southern and northern edges of the development.

- 2.18 Through liaising with the Sunderland City Councils ecology officer, set back sizes and strategies have been agreed for development adjacent to existing green infrastructure to avoid significant adverse effects on these elements. A 10m buffer is provided to either side of existing hedgerows where possible and within this zone no built development will take place. On the boundaries with woodland edges, a 25m woodland buffer is proposed where possible to provide a green edge and active frontage. On the site's north eastern boundaries with the adjacent Local Wildlife Site of Blakeney Woods a minimum 25m buffer is proposed with the objective of preventing any significant adverse effects arising from the residential expansion on this Local Wildlife Site.
- 2.19 Where it has not been possible to achieve these buffers within the development and back gardens fall within these zones a strategy for maintenance is proposed to highlight the constraints and sensitivities of the existing resource and promote their long-term management and success. Where sections of hedgerow are proposed to be removed to assist with access and circulation between the proposed neighbourhoods a considered response to mitigating these through 'gapping up' existing sections of poorer hedgerows and planting new to improve connectivity between ecological linkages has been planned.
- 2.20 New street trees, native structure planting, species rich grassland and wild flower in public open spaces and garden trees/ hedgerows are proposed to enhance the residential expansion and create local distinctiveness.
- 2.21 Sustainable drainage systems are proposed, including swales, rain gardens and attenuation basins which will be integrated into the residential street space and utilise the site's topography. The drainage proposals will be integrated into the provision of open space, add to the character, and place making of the new neighbourhoods. The attenuation basins have been developed in consultation with Argus ecological consultants to maximise habitat diversity and respond to local requirements.

The Study Area

- 2.22 For the Landscape Assessment the study area comprises the site and the wider landscape setting that is predicted to be affected by the development. Due to the enclosed nature of part of the site the topography of its setting and the natural road breaks, and adjacent urban form the study area is limited to 1km radius. In order to assess potential effects the landscape has been characterised at three different levels (national, regional and local/site).

- 2.23 The study area of the Visual Assessment comprises the area of land from which the development is visible which creates the visual envelope. A desktop study of the topography and initial site visit extends to a 7.5 km radius; the existing visual barriers (vegetation, localised landform, built areas) reduce the potential extent of the visual envelope noticeably in many directions, however, the site's elevated position within its setting allows glimpsed visibility from some distant viewpoints. A sample range of specific, representative and illustrative viewpoints been selected for assessment in further detail.

Site Location and Description

- 2.24 The development site lies on elevated land within a 6km radius to the south west of Sunderland City centre adjacent to the A19 trunk road and directly south of the suburban residential communities of Burdon Vale, Moorside, Silksworth and Doxford Park. Doxford International Enterprise Park is the adjacent land use to the west of the site.
- 2.25 The site is wider than it is deep and has an irregular edged boundary to its northern perimeter. It is 57m from north to south and 99m east to west at its widest points. The aspect of the site is almost entirely north facing, although a more undulating area referred to as Silksworth Plantation to the west provides localised multi-aspect landform. The majority of the site has a moderately steep gradient, sloping in a general south to north-northeast direction with a difference of level of over 30m. A man made plateau exists to the north eastern corner and is contained by steep embankments to its southern and western sides.
- 2.26 There is no existing public vehicle access onto or across the site although tractor access to the fields is via a gated stopped up road from Burdon Lane on the south eastern corner of the site. Weymouth Road bounds the site to the north and two existing mini roundabouts serving Portland Academy and St Wilfrid's Church and Burdon Vale residential estate have fourth stubs providing future vehicle connections onto the site. A small substation building exists to the east of the western roundabout and is the only building on the site.
- 2.27 Blakeney Woods Local Wildlife Site flanks the northeastern corner of the site and a linear plantation woodland adjoins the south eastern boundary. An established hedge runs between these two woodland areas along the eastern boundary adjacent to an offsite

footpath linking Hall Farm Road with Burdon Lane. An opening to the south of the hedgerow prevents it from fully connecting the two woodland areas and provides access to the fields.

- 2.28 A hedgerow defines the southern extent of the site running parallel with the Walney to Wear (W2W) coast to coast cycleway and Bridleway and separating the site from the A19 corridor, which is in cutting. Further tree planting line the south western boundary separating the site from the corridor of a disused rail route which is also in cutting and the Doxford International Enterprise Park beyond. The western boundary also has a woodland edge and follows Moorside Road.
- 2.29 Beyond the A19 corridor, but not visible, agricultural land and smallholdings rise away from the site to the south. To the east the land opens out, also in agricultural use and falls away towards Ryhope and the coast. Both these areas form part of the Sunderland Greenbelt.
- 2.30 The site has a strong landscape structure of hedges with individual trees within the hedgerows, these serve to largely enclose its three component fields. The fields are currently in arable use and two further areas of semi-improved grassland exist to the west and north east of the site. No active water bodies were present on the site during the site visit but areas of the fields are seasonally wet.
- 2.31 There are no public right of ways crossing the site however many well-trodden footpaths form circuits, following the edge of fields and connecting with residential areas and offsite recreational footpaths, bridleways and cycle ways.
- 2.32 In the wider context some open area of the site give access to panoramic views across Sunderland City to the north, the rooftops and landmarks of Ryhope to the east and the sea beyond in a easterly and northerly direction. From select locations, more distant views of the hills of East Boldon, Cleadon and even the Cheviots can be seen.

3. Policy Context

Introduction

3.1 A review of landscape planning policy at a national, regional and local level is part of the process in considering the proposed development constraints. The site lies wholly within the Sunderland City Council area.

3.2 The following documents were consulted during the process of undertaking the landscape and visual assessment:-

- Unitary Development Plan - Adopted Plan 1998 (City of Sunderland)
- Sunderland City Council: Sunderland South Sub area paper, Local development Framework, Sept 2009
- Sunderland City Council: Residential Design Guide, Local development Framework, October 2008
- Sunderland City Council: South Sunderland Growth Area, Draft Supplementary Planning Document, January 2016
- LUC: South Sunderland Growth Area Landscape Character Assessment, January 2015
- URS: South Sunderland Growth Area SPD: Appropriate Assessment, May 2015
- TNEI: SCC Sunderland South, Ecological Report, January 2014
- Natural England: An Approach to Landscape Character Assessment, October 2014
- Natural England: 'Nature Nearby': Accessible Natural Greenspace Guidance, March 2010
- Woodland Trust (2010), Space for People: Targeting action for woodland access.
- Fields in Trust: Guidance for Outdoor Sport and Play beyond the six acre standard, October 2015.
- Guidelines for Landscape and Visual Impact Assessment 3rd edition, produced by the Landscape Institute and the Institute of Environmental Assessment and Management in 2013
- Historical maps of the area
- Local Ordnance Survey Mapping

Policy Context

3.3 The following is considered relevant for the proposed development following a review of landscape policy at a national, regional and local level:

European

3.4 Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora otherwise known as the Habitats Directive ensures measures are in place for the protection of Special Areas of Conservation [SAC's] and Special Protection Areas [SPA's]. Durham Coast SAC and Northumbria Coast SPA lie within 4.5km of the site therefore, the new residential developments brought forward within the South Sunderland Growth area is subject to the allocation of sufficient land as Suitable Alternative Natural Greenspace [SANG] to alleviate the pressures of these designated sites being overused.

National

3.5 The National Planning Policy framework provides relevant guidance on elements such as:

- Access to high quality open spaces for recreation and sport to aid health and well-being of communities. This is supported by Natural England's 'Access to Natural Greenspace Standard' (ANGSt) and the Woodland Trusts 'Woodland Access Standard' [WASSt]
- Protect and enhance public Rights of Way for example adding links to existing rights of way networks
- The importance of good design
- Sustainable Drainage Systems

Local

3.6 The Sunderland City Council Unitary development plan [UDP] and emerging Core Strategy allocates the land at Chapelgarth for housing development. Alongside this, there are Supplementary Policy Documents [SPD'S], which provides guidance on local Residential Design, future desired multi-user and other recreational network connections, movement routes of local wildlife corridors and important views. A draft SPD for the South Sunderland Growth Area is emerging which contains the City of Sunderland's vision for the area and guidance on each parcel of land including Chapelgarth.

- 3.7 Blakeney Woods is designated by Sunderland City Council as a Local Wildlife Site and its protection is to be considered within adjacent development proposals.
- 3.8 The UDP, policy CN15 also mentions their intention to create the Great North Forest, on land between and around the main urban areas. Through this policy and CN16 the council seeks to "retain and enhance existing woodlands, tree belts and field hedgerows. It will undertake and encourage planting of new tree belts and woodlands, in the main of native species".

Landscape planning designations

- 3.9 The following section reviews the statutory and non-statutory designations for the site and the wider study area, an 8km radius from the development where designations might fall within the visual envelop.

Access - designated public rights of way

- 3.10 There are no designated footpaths and byways crossing the site. There are a number of well-trodden footpaths observed to be in local use, for leisure, dog walking, running and horse riding which whilst undesignated should be reviewed and considered for inclusion in the masterplan.
- 3.11 Outside the site boundary a track runs northwards through the centre of Blakeney Woods, parallel with the site's eastern boundary joining with Burdon Lane to the south. This is an extinguished Road, and cyclists and walkers have been observed using it. A public right of way and the route of the W2W long distance cycleway and bridleway joins the site perimeter south of the woodland plantation from Burdon Lane, travels west along the southern boundary of the site, and continues north following the route of the disused railway line, in cutting parallel with the western site boundary.
- 3.12 Public rights of way in close proximity to the site are illustrated on drawing L-1515-PRP-004, 'Recreational Routes - Existing links and site desire lines'.

Nature conservation / biodiversity

- 3.13 There are no landscape designations within the site.

3.14 Blakeney Woods which lies alongside the site's north eastern perimeter is designated as a Local Wildlife Site (LoWS). This designation is non-statutory, but recognises the high value of the site for primarily botanical interest.

Trees

3.15 There are no Tree Preservation Orders (TPS's) present on site.

Built Form

3.16 There are no listed buildings, conservation areas or scheduled monuments within or immediately adjacent to the site

Wider Study area

3.17 In the wider study area the following landscape designations can be found, these are also illustrated on drawing L-1515-PRP-018, 'Protected Landscape within Study Area'.

Table 1: Landscape designations in the greater study area (>8km radius from the centre of the site)

Designation	Distance from centre of development	Planning Policy / Legislation
Blakeney Woods - Local Wildlife Site	0.5km	SCC Local Plan
High Haining Hill - SSSI	1.9km	Wildlife and Countryside Act 1981 Conservation of Habitats & Species Regulations 2010
Warden Law Quarry - Local Wildlife Site / Sites of Nature Conservation Importance (SNCI's)	1.4km	SCC Local Plan
Burden Dene - Local Wildlife Site / Sites of Nature Conservation Importance (SNCI's)	1 - 2.3km	SCC Local Plan
Cherry Knowles Dene - Local Wildlife Site / Sites of Nature Conservation Importance (SNCI's)	2.4km - 3.3km	SCC Local Plan

Herrington Hill - SSSI	2.7km	Wildlife and Countryside Act 1981 Conservation of Habitats & Species Regulations 2010
Gilley Law - SSSI	1.9KM	Wildlife and Countryside Act 1981 Conservation of Habitats & Species Regulations 2010
Tunstall Hills and Ryhope Cutting - SSSI & Local Nature Reserve	3.1km	Natural Parks & Access to the Countryside Act 1949 Wildlife and Countryside Act 1981 Conservation of Habitats & Species Regulations 2010
Hastings Hill - SSSI	3.4km	Wildlife and Countryside Act 1981 Conservation of Habitats & Species Regulations 2010
Ryhope Dene - Local Wildlife Site // Sites of Nature Conservation Importance (SNCI's)	3.3-4.5km	SCC Local Plan
Durham Coast - SSSI & SAC Northumbria Coast - Ramsar & SPA	4.5km	Natura 2000 Wildlife and Countryside Act 1981 Conservation of Habitats & Species Regulations 2010 EC Habitats Directive - Conservation (Natural Habitats) Regulations 1994 EC Bird Directive -
Eppleton Grassland SSSI	4.4km	Wildlife and Countryside Act 1981 Conservation of Habitats & Species Regulations 2010
Hetton Bogs SSSI	4.2km	Wildlife and Countryside Act 1981 Conservation of Habitats & Species Regulations 2010
Joe's Pond SSSI	5.4km	Wildlife and Countryside Act 1981 Conservation of Habitats & Species Regulations 2010
Dawson's Plantation Quarry - SSSI	4.7km	Wildlife and Countryside Act 1981 Conservation of Habitats & Species Regulations 2010

South Hylton Pasture - SSSI	5.4km	Wildlife and Countryside Act 1981 Conservation of Habitats & Species Regulations 2010
Claxheugh Rock & Ford Limestone Quarry - SSSI	5.8km	Wildlife and Countryside Act 1981 Conservation of Habitats & Species Regulations 2010
Wear River Bank - SSSI	6.1km	Wildlife and Countryside Act 1981 Conservation of Habitats & Species Regulations 2010
Hesledon Moor East - SSSI	5.6km	Wildlife and Countryside Act 1981 Conservation of Habitats & Species Regulations 2010
Stoney Cut Cold - SSSI	6.1km	Wildlife and Countryside Act 1981 Conservation of Habitats & Species Regulations 2010

4. Assessment Methodology & Significance Criteria

Assessment Methodology

- 4.1 The methodology used for both the landscape and visual assessments has been based upon best practise - the recommendations in 'Guidelines for Landscape and Visual Impact Assessment', third edition published by the Landscape Institute and Institute of Environmental Management and Assessment in 2013 (GLVIA3).
- 4.2 Reference has also been made to the Countryside Agency (now Natural England) Landscape Character Assessment methodology.

Terminology:

- 4.3 As defined in GLVIA 3 pg. 9, in this LVIA the terms 'impact' and 'effect' are used as follows:
- "Impact, defined as the action being taken"
 - "effect, defined as the change resulting from that action"
- 4.4 This document is structured to provide a brief description of the main characteristics of the proposed development including primary mitigation measures incorporated into the scheme through the iterative design process. It then defines the scope of the assessment and the extent of the study area and follows by describing the range of possible landscape effects and range of people and places that may be effected. The following stages of work are included in the assessment of landscape and visual effects which are each assessed through a separate systematic work stream:

Landscape effects assessment:

- Establishment of baseline condition, through landscape character assessment (identifies landscape elements and features contributing to the character of the area and considers the value attached to them)
- Identification of the landscape resources and consideration of the possible interaction between the proposed development and these. (At this stage the proposals are likely to include designed in aspects that provide some mitigation)
- Identification and assessment of predicted landscape effects, including analysis of:

- susceptibility of the landscape resource to change and value attached to the landscape resource, combining the judgement of both to gauge 'sensitivity' of the landscape resource.
- Size or scale of the landscape effect including its duration and whether it is reversible to provide a judgement of 'magnitude' of landscape effect.
- Judgements on the 'sensitivity' of the landscape resource and the 'magnitude' of landscape effect are combined to provide the overall assessment of landscape effect.
- Assessment of residual effects. (effects remaining following mitigation)
- Summary of predicted significant landscape effects.

Visual effects assessment:

- Through scoping of the EIA with Sunderland City Council, it has been agreed that the most applicable form of Visual Impact Assessment would be through viewpoint analysis.
- The first step was the identification and agreement of potential sensitive visual receptors, through selecting sample specific, representative and illustrative viewpoints by considering the possible interactions between the proposed development and these. (At this stage the proposals are likely to include designed in mitigation)
- Identification and assessment of predicted visual effects, including analysis of:
 - susceptibility of the visual receptor to change and value attached to particular views, combining the judgement of both to gauge 'sensitivity' of the visual receptor.
 - Size or scale of the visual effect including its duration and whether it is reversible to provide a judgement of 'magnitude' of visual effect.
- Judgements on the 'sensitivity' of the visual receptor and the 'magnitude' of visual effect are combined to provide the overall assessment of visual effect.
- Assessment of residual effects. (effects remaining following mitigation)
- Summary of predicted significant visual effects.

Collection of data to establish baselines:

The baseline study includes:

- A desktop study of the site and surrounding study area, using commissioned site surveys, Ordnance Survey maps and aerial photographs.
- A desktop review of relevant planning policy documents and pending adjacent developments
- A desktop survey of existing landscape character assessments for the site and wider study area at national and local level
- A field study of the site and surrounding area to identify and capture a photographic record of the landscape resource and visual amenity characteristics including: -
 - Landform and topography,

- Land use and management
 - Views out from and into the development
 - Movement routes for both vehicles and non vehicular recreational purposes,
 - Notable features, including vegetation, natural areas and water bodies and
 - Existing settlement form, and patterns and cultural features
 - Current condition of the landscape and its components
- Professional judgement to project forward drivers and trends in change and how they may effect the landscape over time, in absence of the proposal.

Determination of value

4.5 Value is assessed as part of the baseline as it refers to the existing conditions and how society rates particular landscapes and views in their entirety or elements within.

Landscapes and their component parts or views can be valued at different levels:

- Daily users; people at home or work v's occasional users (visitors /special interest groups)
- Local/ regional value v's national / international value.
- Designations are often markers of value in landscape
- Important views can be established from planning designations or visitor attractions or through literature or art

4.6 The following classification will be used for the assessment of value, based on the DETR's Guidance on the Methodology for Multi-Modal Studies and subsequently modified / extended.

Table 02: Value Criteria

Value		Typical criteria	Typical scale	Typical examples	Typical capacity for change
High	Exceptional	High Importance (or Quality) and Rarity. Non or limited potential for substitution	International, National	World Heritage Site, National Park, AONB	None or very limited

	High	High Importance (or Quality) and Rarity. Limited potential for substitution	National, Regional, Local	SSSI, SAC, SPA, Ramser	Limited
Medium	Medium	Medium Importance (or Quality) and Rarity. Limited potential for substitution	Regional, local	Special Landscape Area, Areas of Great Landscape Value, Areas of Landscape Importance, Local Nature Reserve, Local Wildlife Site Or Undesignated but value perhaps expressed through non-official publications or demonstration of use	Change possible without harm
Low	Poor	Low importance (or quality) and Rarity	Local	Areas identified as having some redeeming feature or features and possibly identified for improvement.	Change could be beneficial

	Very Poor	Low importance (or quality) and Rarity	Local	Areas identified for recovery	Change could be beneficial
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Source: GLVIA2, appendix 6 determination of value, amended to include additional columns

Sensitivity Criteria

- 4.7 A sensitive receptor is assessed within the GLVIA3 by combining judgements on the receptors susceptibility to the type of change or development proposed and the value attached to the receptor. A sensitive receptor is defined as an element or collection of elements that will be directly or indirectly affected by the proposed development.
- 4.8 Landscape receptors include physical elements of the landscape; geology, soil, landform, drainage and water bodies, vegetation cover, field boundaries, land use and artefacts.
- 4.9 Visual receptors include the public or community at large, residents, people visiting promoted landscapes or attractions, people passing through on roads or non-vehicle forms of recreation.
- 4.10 Susceptibility varies with effect of change so forms part of assessment of the proposals and does not form part of the baseline review.

Considerations for Landscape Susceptibility

- 4.11 Susceptibility of the landscape receptor is determined by the capacity of the landscape, either as a whole or as a particular element to accommodate change without detrimental effects on its character, or its ability to meet landscape policies or agendas. Factors affecting landscape sensitivity include:
- Existing land use
 - Pattern of vegetation and scale of the landscape
 - Topography
 - Enclosure / openness
 - Scope for mitigation
 - Value placed on the landscape

Considerations for Visual Susceptibility

4.12 Susceptibility of the visual receptors to changes in views and visual amenity is dependent on:

- Location and context of the viewpoint
- Type and temporal nature of the activity of the receptor
- The importance of the view

4.13 Sensitivity criteria for the purpose of this development is summarised in the following table:

Table 03: Sensitivity criteria

Sensitivity	Landscape	Visual
High	An area of particular distinctive sense of place, in good condition, or highly valued for its scenic quality and/or landscape / townscape with low tolerance to change of the type identified.	Viewers with proprietary interest and/or prolonged viewing opportunities and / or who have a particular interest in their visual environment, for example residents, or visitors to National Parks, AONBs or Heritage Coasts.
Moderate	An area with a clearly defined sense of place and / or character in moderate condition; an area valued at a local or regional level. An area that is partially tolerant of change of the type identified.	Viewers with a moderate interest in their visual environment for example users of local open space facilities and walkers on footpaths.
Low	An area with a weak sense of place, or low quality landscape character, in poor condition, often not valued for its scenic quality. An area, which is tolerant of substantial change of the type, identified.	Viewers with passing or momentary interest in their everyday surroundings, for example motorists or people at their places of work whose attention is focussed on other activities and are therefore less susceptible to change.

Magnitude criteria

4.14 Each of the effects identified for both landscape and visual receptors need to consider and to be assessed in terms of:

- Geographical extent of the area influenced
- Size and scale

- Duration and reversibility

Considerations for Landscape Magnitude

4.15 Judgements on the size or scale of landscape change predicted to be experienced from each effect is categorised on a scale of major, moderate, minor and neutral and is assessed as an adverse or beneficial effect. The judgements consider aspects such as:

- The extent of existing landscape elements that will be lost (or added), the proportion of the total extent that this represents and the contribution of that element to the character of the landscape
- The degree to which aesthetic or perceptual aspects of the landscape are altered either by removal of the existing components of the landscape or additions of new ones;
- Whether the effect changes the key characteristics of the landscape, which are critical to its distinctive character.

4.16 The geographical area over which the landscape would be changed is considered at the following scales:

- at the site level, within the development site itself
- at the level of the immediate setting of the site;
- at the scale of the landscape type or character area within which the proposals lies;
- on a larger scale, influencing several landscape types or character areas

Considerations for Visual Magnitude

4.17 Judgements on the size or scale of visual change predicted to be experienced from each effect is categorised on a scale of major, moderate, minor and neutral and is assessed as an adverse or beneficial effect. The judgements consider aspects such as:

- The degree of loss or addition of features in the view
- The nature of the view of the proposed development, whether full, partial or glimpsed, or the relative amount of time over which it will be experienced.
- The extent of changes in the composition of the view, including the proportion of the view occupied by the proposed development
- The degree of contrast or integration of the changes with the existing or remaining landscape elements and characteristics.

4.18 The geographical extent of a visual effect will vary with different viewpoints which is reflective of:

- the distance of the viewpoint from the proposed development
- the extent over which the changes would be visible
- the angle of view in relation to the main activity of the receptor

Duration and reversibility

4.19 The following terminology is used when describing duration of effects:

- Short term: 6months -1 year
- Medium term 1 -5 years
- Long term 5-10 years

4.20 The proposed development is a hybrid application and is predicted to be phased in construction following purchase of separate land parcels for detailed development by house builders. Detail design and construction of the main infrastructure, connecting to the immediate surroundings is would be completed in the short term. The first few phases of development including construction to occupation are hoped to be constructed in the medium term. This will be sequentially extended to complete the later phases of proposals within a 10-year period.

4.21 Reversibility is an evaluation of the ability and practicality of an effect being reversed in for example a lifetime. As an example housing is considered permanent however elements of the construction procedures and compound of the contractors can eventually be reduced, removed and land restated.

Distance of views

4.22 The following terminology is used when describing approximate distance between the viewer and the proposals.

- Local: up to 1km from the centre of development
- Medium: 1-3.5km from the centre of development
- Long distance: over 3.5-7.5km from the centre of development

Degree of visibility and length of view

4.23 The degree of visibility and length of view, of the proposed development within a selected viewpoint is measured in accordance with the following scale:

- Very prominent: open / panoramic views or near views
- Reasonably prominent: View of the proposals may be constrained or fragmented
- Not prominent: - Glimpsed or distant views

Number of viewers

4.24 The number of viewers or users who experience the view are factors in making a judgement of significance. The terminology used in the landscape and visual impact tables are:-

- LOW - very few people experience the view, or the view is rarely experienced
- MEDIUM - a moderate number of people experience the view, often
- HIGH - Many people experience the view, frequently

Table 04: Magnitude criteria

Magnitude	Landscape	Visual
Major adverse	<p>The proposed scheme will result in effects that:</p> <ul style="list-style-type: none"> - Are at a complete variance with the landform, scale, pattern, features and character of the landscape - will be substantially damaging to a high quality landscape 	<p>The proposed scheme will result in effects that will cause a significant deterioration to the composition of the view, the appreciation of the landscape character, the ability to enjoy the view.</p>
Moderate adverse	<p>The proposed scheme will result in effects that:</p> <ul style="list-style-type: none"> - are clearly at odds with the landform, scale, pattern, features and character of the landscape - will leave an adverse impact on a landscape of recognised quality 	<p>The proposed scheme will result in effects that will cause a noticeable deterioration to the composition of the view, the appreciation of the landscape character, the ability to enjoy the view.</p>
Minor adverse	<p>The proposed scheme will result in effects that:</p> <ul style="list-style-type: none"> - don't quite fit into the landform, scale, pattern, features and character of the landscape - will affect an area of recognised landscape character 	<p>The proposed scheme will result in effects that will cause a barely perceptible deterioration to the composition of the view, the appreciation of the landscape character, the ability to enjoy the view.</p>
Neutral	<p>The proposals will cause no change to the landform, scale,</p>	<p>The proposed scheme will result in effects that will cause no</p>

	pattern, features and character of the landscape	discernible deterioration or improvement to the composition of the view, the appreciation of the landscape character, the ability to enjoy the view.
Minor beneficial	The proposed scheme will result in effects that: -will achieve a degree of fit with the landform, scale, pattern, features and character of the landscape -contribute to the improvement of the condition or character of the landscape	The proposed scheme will result in effects that will cause a barely perceptible improvement to the composition of the view, the appreciation of the landscape character, the ability to enjoy the view
Moderate beneficial	The proposed scheme will result in effects that: - fit well into the landform, scale, pattern, features and or character of the landscape -contribute to the improvement of the condition or character of the landscape	The proposed scheme will result in effects that will cause a noticeable improvement to the composition of the view, the appreciation of the landscape character, the ability to enjoy the view
Major beneficial	The proposed scheme will result in effects that: - will totally accord with the landform, scale, pattern, features and character of the landscape - will restore, recreate or permanently benefit the condition or character of the landscape.	The proposed scheme will result in effects that will cause noticeable improvement to the composition of the view, the appreciation of the landscape character, the ability to enjoy the view.

Overall Significance Criteria

- 4.25 To evaluate final conclusions about significance the separate judgements on sensitivity and magnitude of effect need to be combined, to allow a final assessment about whether each effect is significant or not.
- 4.26 To ensure a consistent approach across all technical chapters, landscape and visual effects shall be assessed against the same significance criteria as all other topic areas. The significance criteria used is set out in the Table 05:

Table 05: Significance criteria

Impact	Criteria
Major benefit	The proposed development, without mitigation measures, will have a substantial positive impact on the environment in comparison to baseline indicators.
Minor benefit	The proposed development, without mitigation measures, will have a small positive impact on the environment in comparison to baseline indicators
Moderate benefit	The proposed development, without mitigation measures, will have a noticeable positive impact on the environment in comparison to baseline indicators
Negligible / no impact	The proposed development, without mitigation measures, will have little or no impact on the environment in comparison with baseline indicators
Minor adverse	The proposed development, without mitigation measures, will have a small negative impact on the environment in comparison to baseline indicators
Moderate adverse	The proposed development, without mitigation measures, will have a noticeable negative impact on the environment in comparison to baseline indicators
Major adverse	The proposed development, without mitigation measures will have a substantial negative impact on the environment, in comparison to baseline indicators.

4.27 The matrix used to assess how the sensitivity criteria has been combined with the magnitude of change to reach the significance of effect is outlined below:-

Table 6: Matrix illustrating significance relating to sensitivity of the receptor and magnitude of change

Sensitivity of receptor	Magnitude of Change			
	Major	Moderate	Minor	Neutral
High	Major	Major	Moderate	Negligible / No Impact
Moderate	Major	Moderate	Minor	Negligible / No Impact

Low	Moderate	Minor	Minor	Negligible / No Impact
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Consultation

- 4.28 Early consultation has taken place with Sunderland City Councils [SCC], Landscape, Urban Design and Ecology Officers to establish key considerations for existing landscape features and objectives for the integration of the proposals within the site and greater development of the South Sunderland Growth Area. An indicative number and location of viewpoints were also discussed with SCC to determine the sample views by key visual receptors. These viewpoints were formally noted within the scoping report.
- 4.29 Formal consultation has also been coordinated on four occasions with local residents and the greater community from around the site which has aided the collection of local and city wide understanding of the value and enjoyment of existing the landscape and visual amenity.

5. Baseline Conditions

Introduction

- 5.1 An initial site survey followed by more detailed assessments (including views / topography / vegetation and access), together with desktop review of published documents and maps provide the basis of the assessment of the landscape baseline.
- 5.2 Baseline conditions are described separately for landscape resource and visual amenity.

Landscape Baseline

Introduction

- 5.3 This section provides an appraisal of the existing landscape baseline of the site and the wider study area and commences with a review of the landscape character, followed by a more detailed assessment of the landscape resources / receptors. Please refer to Table 07 in appendix 1 for further assessment of the landscape baseline.
- 5.4 The landscape assessment aims to determine how the proposed development will affect the character of the area how well it responds and how it sits within the wider landscape context.

Landscape Character

- 5.5 Natural England's "An Approach to Landscape Character Assessment", defines landscape character as " a distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse", original source: The Countryside Commission and Scottish Natural Heritage (2002) Landscape Character Assessment: Guidance for England and Scotland.
- 5.6 The Character of a landscape is the combination of a number of components and associations:
- Landscape elements: individual components of landscape such as trees, woodland, hedgerows, landform and topographic features, river corridors, streams, ponds, lakes, and rivers, and built elements (walls, building, roads)
 - Landscape features: particularly prominent or eye-catching elements like tree clumps, church towers, or wooded skylines

- Landscape characteristics: characteristic patterns and combinations of landscape features including landform, land cover and cultural elements, which contribute to the landscape character.

5.7 The initial desktop assessment has informed the characterisation of the site at three different levels as summarized in the table below:-

Table 08: Landscape Characterisation

Level	Character area / Name	Source
National	15. Durham Magnesian Limestone Plateau	Natural England – Natural Character Area Profile
Regional	Durham Magnesian Limestone Natural Area (DMLNA).	Durham Biodiversity Partnership
Local	Clay Plateau	LUC (2014) City of Sunderland Landscape Character Assessment Character Assessment

Refer to drawing L-1515-PRP-017 for an illustration of how the interrelationship of the character areas within the study area.

National Landscape Character

5.8 At a national level, the English landscape is divided into National Character Area Profiles [NCA] as defined by Natural England. The City of Sunderland, including the whole of the site and the majority of the study area lies within NCA 15 Durham Magnesian Limestone Plateau. The western extremity of the study area also lies within the eastern fringe of NCA 14 Tyne and Wear Lowlands.

5.9 The Durham Magnesian Limestone Plateau is described as: "a gently undulating plateau of large, open arable fields, with low hedges and few trees. It has dramatic, well-defined boundaries in the form of a steep limestone escarpment to the west and coastline to the east."

5.10 Key characteristics of the Durham Magnesian Limestone Plateau character area include:-

- Rural land cover consisting of arable land and grazing pasture, with small, isolated areas of wildlife –rich habitat such as Magnesian Limestone grassland and ancient woodland in the narrow valleys (or denes) running down to the coast.
- An area strongly shaped by its industry, with coal mining and quarrying in particular leaving a very clear mark on local landscapes and identity.
- There is a large urban and industrial context to the area profile with Sunderland being the largest urban area to the north of the area profile.
- Disused colliery railways and other footpaths provide good opportunities for outdoor recreation and enable commuting by bike.
- The A19 transport route is a prominent feature, creating a physical and psychological barrier and detracting from the tranquillity.
- The Landscape cover of the area is defined by its Magnesian Limestone underlying geology and overlaying boulder clay.

5.11 The limestone escarpments are not an element represented at site level however, they are present in the greater study area for example at Tunstall Hills which is visible from parts of the site. Equally, the wooded denes are not present on site, but some of the recreational routes off site, which follow the perimeter of the site, lead to Burdon, Cherry Knowle and Ryhope Dene to the east.

Regional Landscape Character

5.12 Regionally, the site lies within the Durham Magnesian Limestone Natural Area (DMLNA). The Durham Biodiversity Partnership is the administrative body for the Durham Biodiversity Action Plan, which is adopted by Sunderland City Council. They have produced documents including the Durham Magnesian Limestone Natural Area Woodland Inventory and A review of non-statutory grassland sites within the Durham Magnesian Limestone Natural Area many of the documented sites lie in close proximity to the Chapelgarth site.

Local Landscape Character

5.13 Locally, the site lies within the Clay Plateau Landscape character type as defined within the City of Sunderland Landscape Character Assessment (July 2015). The character areas which boarder the site to the north and west are defined as the Urban Limestone Plateau and Coastal Limestone Plateau. The Chapelgarth sub-area is also assessed

through the South Sunderland Growth Area Landscape Character Assessment published in January 2015

5.14 Key characteristics of the Clay Plateau Landscape character type and Chapelgarth Character area arising from these documents include:-

- Glacial till underlain by rocks of the Magnesian Limestone series.
- Elevated plateau between 100m and 170m.
- Little above-ground drainage evident - small stream flows through Blakeney Woods
- Good structure and boundary features provided by mature trees, shelterbelts and woodland, which provide wildlife habitat within the site but weaker structure in the greater study area.
- Mature hedgerows and field boundary features to the western part of the site provide a legibility of past land use.
- Agricultural landscape mostly in arable use with some pasture.
- Unstructured nature of the landscape of the more open fields to the east.
- The name Chapelgarth is thought to have originated from the Chapel of St Leonard, which is recorded at Silksworth in the middle ages.
- Urban fringe.
- Blakeney Woods is thought to have been established by the post -medieval period
- The character along Weymouth Road to the north of the site is described as being "open", "unfinished" and "underused" with an "indistinct" suburban character due to the high back garden fences of the residential properties opposite.
- The disused railway to the western boundary of the Chapelgarth Site is known to be the route of George Stephenson's 8mile colliery railway [Hetton Company's Railway] carrying coal to the docks which was the longest railway in the world at that time. However, no interpretation of this is available on site.
- The 1852 Ryhope Pumping Station and chimney is a local landmark [listed as Grade II *] visible from the Chapelgarth site associated with increased water for industry and domestic need.
- Biodiversity value of Chapelgarth not especially high and no nationally protected sites are within its boundaries.
- Chapelgarth falls within a local wildlife corridor which is illustrated around the Local Wildlife site of Blakeney Woods connecting through to a buffer around the wooded denes of Burdon Dene, Cherry Knowle Dene and Ryhope Denemouth.
- Former road [now extinguished] used as footpath running parallel with eastern boundary.
- Panoramic views northward towards city and coast.
- Effects of road noise [A19] acknowledged as being a detractive feature.

Landscape Survey of the Site and resources

- 5.15 Although relatively simple in character and highly influenced by its agricultural land use of arable fields, mechanically faced hedgerows and small woodland plantations to field edges the site can be broken down into seven distinct spaces / character areas. To aid assessing the varying susceptibility to change of each of these sub-areas from the effects of the proposed development the next section firstly explores the characterisation of each before assessing the individual landscape resources of the site in further detail.
- 5.16 For illustration of the site character areas refer to drawing L-1515-PRP-007 'Existing Site Character Areas'

Site character areas

- 'Large Field': Largest unit within the site at 190Ha located to the east, in agricultural use (arable). This field is particularly open in character with no vegetation or features dividing it. The distance between perimeter hedgerows appears vast particularly with the curvature of the landform, which conceals the field's full extent from some internal views. This field benefits from outward panoramic views particularly to the south and south east. Its negative features include the very audible road noise from the A19 and smell of fumes at the south western corner.
- 'Middle Field': Located within the central zone of the site extending to the southern boundary, in agricultural use (arable). This area presents a moderate sense of enclosure particularly to the north by the hedgerows. The southern area is more open, but the views out are less clear than from the 'Large Field' due to the intervening hedgerows. The traffic from the adjacent A19 also detracts from the experience of the southern half of the field.
- 'Square Field': This field is located to the north west of the site; it is the most enclosed area within the site, with wooded perimeter to its southwest and northwest sides and well-structured hedgerows to its northeast and southeast perimeter. The site has few outward views but experiences less road noise. Informal footpaths are in use around the perimeter of the field, which connect through to a woodland path along the western boundary with Moorside Road. Two wide gaps in the hedgerow boundary to the south eastern edge provide tractor

access. The boundary hedgerow is also less structured to the northern corner adjacent to the roundabout with Weymouth road and Moorside Road.

- 'Undulating Meadow'; Known historically as Silksworth Plantation due to its former wooded land use, is located to the west of the site and benefits from a more rolling landform with multi-aspects. The area is long and narrow in form and appears to be unfarmed and maintained as open space and is grassed with well-trodden sweeping paths. The area is most open to the south with some longer outward views and notable road noise. The site slopes down to the north where it becomes narrower and more enclosed by boundary vegetation. Views out are limited to filtered near views to the neighbouring Doxford Business Park to the west. The most northerly point feels quite hidden; footpaths extend from this into the woodland edge to linking through to Moorside Road.
- 'Sunken Area': This is the smallest sub-area of the site, which sits on the boundary between the 'square field' and the 'undulating meadow'. The area slopes steeply down into a wooded hollow and is thought to be a disused quarry.
- 'Embankment': Located to the northern edge of the site this area is narrow and linear in form and addresses Weymouth Road to the north and the southern edge of the 'Plateau'. The embankment is relatively steep and provides a distinct level change and buffer between Weymouth Road and the agricultural fields. It has a meadow-like grassed character with a well-structured hedgerow ridge and includes a relatively large number of hedgerow trees.
- 'Plateau': Located to the north eastern corner of the site, it addressing Weymouth Road and Portland Academy to the north. The area sits between two roundabouts on Weymouth Road each with a pre-built stump providing future access onto the site. A small substation building is sited in the northern perimeter. This area is relatively level with a man-made earth modelled character. There are steep embankments rising to the south and western edges. The area is rough grassland. Young trees and shrubs of a self-set nature are encroaching onto this site area extending from Blakeney Woods to the east. An attractive sweeping curved footpath of an informal nature extends westwards up the slope from Blakeney Woods.

Landform & Topography

- 5.17 The topography of the site is moderately sloping downwards in a general north-to-north-eastern direction. Across the site there is a change in level in excess of 30m. The surrounding area rises a little further to the south beyond the A19 cutting to an elevation of 170m AOD. The land generally falls away from the site to the west, north and east towards the River Wear, Sunderland City, Ryhope and the coast. Local high points exist to the north including the Tunstall Hills. Please refer to drawings L-1515-PRP-001 for a diagram of the topography within the study area and drawing L-1515-PRP-002 for a diagram of the topography of the site.
- 5.18 The 'Large Field' has the greatest elevation of the site at 139.5m AOD at its southern point with the W2W cycleway. It falls to the north western corner to an elevation of 121.5m AOD with the lowest point to the north eastern corner with Blakeney woods at 112.5m AOD. Falls across the field range from 1:16 to 1:24.
- 5.19 The 'Middle Field's greatest elevation is to the south eastern corner at 139.0m AOD. It falls way to the west to 128.0m AOD and to the north at approximately 124.0m AOD. The steepest section of this field is through the middle falling at a grade of 1:15.
- 5.20 The highest elevation of the 'Square Field' is to its southern corner at 128.0m AOD, falling to the lowest corner to the north at 115.5m AOD. The field also falls to the east to 124m AOD and to the west at 124.9m AOD. This field has a slightly gentler slope than the others do.
- 5.21 The 'Undulating Meadows' highest elevation is to the south east at 138.0 m AOD falling to the north western corner to 125.8m AOD. A localised Knoll exists to the southern half of the site and the land generally falls towards the western boundary with the disused railway cutting.
- 5.22 The 'Embankment' faces north and addresses Weymouth Road, following the road west to east. It is steeply graded varying from 1.5 to the west, 1.8 to the central area and 1:3 to the eastern extent.
- 5.23 The 'Plateau' is the north eastern corner of the site, which includes a reasonably level area of land. This area includes the lowest point on the site to the north east with the roundabout on Weymouth Road at 106.2m AOD. The land rises quickly from the roundabout to the level area and then more steeply to its southern and western

boundaries. The embankment to the west is split level creating a smaller level section prior to rising to the ridge of the 'Embankment'.

Landuse and management

5.24 The current landuse of the site is divided between agricultural and open space. The 'Large Field', 'Middle Field' and 'Square Field' are in use for agriculture and support arable crop production and are harvested and cultivated intensively throughout the year. The 'Plateau' and 'Undulating Meadow' are managed infrequently as rough grassland.

Vegetation

5.25 With the site being used predominately for agriculture the landscape cover to the site is limited to three fields in arable use, two areas of semi-improved grassland, hedgerows to most field boundaries and individual hedgerow trees and some small groups of trees. Some of the individual trees are prominent and create a local feature to the site area. Tree lined or woodland edges exists to the north eastern corner of the site [Blakeney Woods], the south eastern boundary, at Burdon Lane and the south west and north western boundaries of the 'Undulating Meadows'.

5.26 The hedgerows consist of both species poor and species-rich types, which the ecology chapter provides further detail. Most are fairly well structured with machine-trimmed sides. Most have been left to grow tall although the hedge along the eastern site boundary is an exception to this. The most valuable hedgerows in terms of species composition are the hedgerows to the northern site boundary running east -west and the southern site boundary although the others are valuable as ecological / wildlife linkages. Many of the hedges contain gaps for access between fields, and others stop short of connecting with another. Refer to drawing L-1515-PRP-010 for further detail.

5.27 Historic Ordnance Survey plans ranging from 1861 to 2014 illustrate the historic nature of the site's field patterns and previous vegetation cover. The field boundaries mimic those from the early map editions although some of the hedgerows may have origins that are more recent. The 'Undulating Meadows' is referred to as Silksworth Plantation on Ordnance Survey plans although the 'plantation' was felled sometime between 1921 and 1951.

5.28 Within the surrounding more rural landscape to the west and south, vegetation is also associated with agricultural use, comprising of predominately arable fields, and grassland

for grazing with hedgerows and blocks of woodland. The A19 corridor is in cutting and benefits from some tree lined embankments. The periurban areas to the north and east predominately include residential gardens with small trees, street trees and some areas of woodland buffers separate neighbourhoods.

Visual Character and landmark features / pattern

- 5.29 Due to the site's elevated position within the surrounding landscape and the openness of some of the site's character areas, mid to long views from the site are available. These outward views are considered relevant within the LVIA as they are part of the enjoyment of the site, its character and place making.
- 5.30 The open nature of the 'Large Field' provides it with the best outward views particularly from the southern and south eastern boundaries of the field. Mid distant views to the north and east are valued of the Tunstall Hills and historic Ryhope Pumping Station Chimney. Long distant views to the north and east include the Cleadon Hills and Water Tower, Sunderland City and associated landmarks including the Stadium of light and the North Sea. Long distant views of the outline of the Cheviot Hills are also visible on a clear day from some viewpoints look the north west. Refer to drawing L-1515-PRP-012 for key view corridors across this part of the site.
- 5.31 The visual character seen from northern areas of the large field include short distance filtered views to the north of the adjacent residential areas. There is also a glimpsed view of the A19 from the most southern point of the site by the W2W cycleway.
- 5.32 From the 'Middle Field' many of the same long distant views can be experienced as per the 'Large Field' however, they are often less clear and experienced above treetops. Mid distance, views are reduced due to the intervening field margins. Similarly, views outward to the north west are more limited and all the longest views from this area are appreciated from the southern boundary of the field.
- 5.33 The enclosed nature of the 'Square Field' results in very limited outward views.
- 5.34 Heavily filtered views are experienced of the Doxford Business Park from the 'Undulating Meadow' through the adjacent tree lined edge. Some long distance views can be experienced north eastwards between the large gap in the hedgerows to the southern edge of the area.

- 5.35 Views from the 'Embankment' and 'Plateau' areas are limited to near views of Weymouth Road, the neighbouring residential areas, and the back of the Portland Academy Building. Views of Blakeney Woods and up into the fields and following the site landform are also valued.
- 5.36 Few historic field boundaries exist especially to the west of the site. Historic maps illustrate that the field boundaries were noticeably altered between 1861 -1898 with the majority removed by the turn of the 19th Century to create larger fields, this is most apparent in the east of the site.

Site drainage

- 5.37 Whilst no active water bodies were found to be present during the site visit, an area of standing water was evident within the southern edge of the 'Large Field' by the woodland. The historic maps also refer to a few pond locations in earlier additions, one recurring pond features across a few map additions centring on the middle field another is within the converging hedgerows to the middle of the site.
- 5.38 Off-site, a stream runs through Blakeney Woods within the section to the woods east of the track. The source of the stream is not clear from the maps.
- 5.39 Drainage and flood-risk is explored further in the associated technical chapter.

Access – Road Network

- 5.40 Although the A19 runs adjacent to the southern boundary of the site the closest junction from it serving the adjacent residential areas and business park is approx. 2km to the north west of the site.
- 5.41 Doxford Park Way forms the link road from the A19 to the neighbouring suburban areas. Residential feeder roads connect from Doxford Park Way in four locations, Moorside Road and Hall Farm Road link from these junctions to Weymouth Road providing vehicular access to the northern boundary of the site. The landscape quality of these approach roads vary from good to fair depending on the existing landscape structure and presence of detracting features. Refer to drawing L-1515-PRP-003 for further information.

- 5.42 Burdon Lane lies to the south west of the site and provides a connection across the A19 fly over from Hangman's Lane to the south onwards to Ryhope. Sunderland City Councils highways department do not support any access onto the site from Burdon Lane.

Public Rights of Way

- 5.43 No public rights of way cross the site. Many informal desire lines / well-trodden paths dissect the site following the field boundaries and connect onto off site routes, these are well used by local residents.
- 5.44 The long distance W2W cycleway passes by the edge of the site following the western and southern boundaries before heading south over the Burdon Lane flyover with the A19. Off-site footpaths pass through Blakeney Woods following a stopped up road adjacent to the eastern boundary of the site. Less formal paths connect from this and wind through the southern woodland plantation. Burdon Village Lane to the south east of the site provides recreational access eastwards connecting to the former Murton Mineral Line, Green link that is proposed to be upgraded as part of the South Sunderland Growth Area.
- 5.45 Further public rights of way; footpaths, bridleways and cycle ways exist through the agricultural setting to the south of the site. Refer to drawing L-1515-PRP-004 for an illustration of these networks.

Green open spaces

- 5.46 Two areas of unfarmed land exist on site; these include the 'Undulating Meadows' to the west of the site and the combined areas of the 'Plateau' and 'Embankment' to the north between the northernmost field boundary and Weymouth Road. These areas are semi-improved grassland with some small groups of trees and self-set planting. Although no formal rights of way exist onto or across these areas, no boundary treatments exist to prevent this and local residents, including, dog walking, general walking, runners and horse riders use both areas for recreational purposes.
- 5.47 Offsite within the local study area there is open space at Hall Farm Field adjacent to the Youth Box Centre and at the two schools of Portland Academy and Benedict Bishop Academy.

Enclosure

5.48 The 'Square Field' and the northern end of the 'Undulating Meadows' are the two areas of the site with the greatest sense of enclosure due to established hedgerow field boundaries and tree lined edges, which define the spatial arrangement and reduce visual connections. In contrast, the 'Large Field' and the southern half of the 'Middle Field' present a far more open and exposed feel.

Tranquillity

5.49 Different degrees of tranquillity are experienced throughout the area due to the presence of the A19 road corridor and its constant activity. Doxford Business Park, Burdon Lane and Weymouth Road also detract from the feeling of tranquillity, although this varies throughout the day depending on peak times.

- No Tranquillity: constant background noise, vehicle fumes and some visual movement in localised positions detract from the southern most areas of the site, which lie adjacent to the A19 road corridor.
- Low - Moderate Tranquillity: The western edge of the 'Undulating Meadows' and the 'Embankment' and 'Plateau' areas present peaks of activity but moderate / low activity is prevalent.
- Moderate Tranquillity: The northern most edges of the three fields have low activity and are perceived as quiet. The elevation change to the north from Weymouth Road to the fields and the hedgerow field margin and tree lined ridge help visually separate these areas from Weymouth Road.

Built development and character of nearby area

5.50 Historic Ordnance Survey plans ranging from 1861 to 2014 illustrate the growth of Sunderlands suburban areas south towards the Chapelgarth site with the introduction of key transport networks. Along with older individual steadings the oldest neighbourhoods around the site date from the 1970's with the construction of the early route of the Doxford Park Way, these include the northern areas of Moorside and Doxford Park residential areas. The A19 corridor was constructed around the same era.

5.51 The area of Silksworth was formed in the 1980's at the same time as Moorside and Doxford Park expanded southwards and eastwards. Between the 1990's and early 2000's, Doxford Business Park was constructed, along with the residential areas of Burdon Vale and the areas south east of Hall Farm Road.

- 5.52 Wooded buffers separate many of the residential sub neighbourhoods from each other and the dwellings typically back onto these buffers accessed off loop roads and cul-de-sacs. The residential area of Burdon Vale is the closest neighbourhood to the site and for the most part it backs onto Weymouth Road and the site. The only two exceptions are the junctions of Englemann Way onto Weymouth road where the properties have been arranged to address the road / junction more.
- 5.53 The historic maps advise that there used to be a farmhouse and outbuildings to the centre of the site but these have since been demolished.

Visual Baseline

Introduction

- 5.54 The purpose of the visual baseline assessment is to define where within the greater study area it may be possible to see any part of the proposed development, enabling the extent of visibility and the effect on the various types of receptors and general visual amenity to be assessed from representative viewpoints.
- 5.55 During this process it is important to identify and define the character of the existing visual environment and assess its sensitivity to change. This will then provide the baseline against which the assessment of effects can be made using the methodology outlined in section 4.
- 5.56 As part of the LVIA, viewpoints have been prepared to assist with the assessment of the potential visual effects arising from the development. Photography for the assessment has been carried out in accordance with recommendations within 'LVIA Use of Photography and Photomontage in Landscape and Visual Assessment Guidance Note (2011)'.
- 5.57 GPS co-ordinates for the location of each photograph have been established using a Garmin GPS Etrex handheld GPS for each Key View and verified through detailed analysis of mapping data.
- 5.58 Individual photos have been spliced together to create the View Point images using Hugin panorama photo stitching software. Photographs have been taken with approximately a 50% overlap, in line with guidance listed above.

5.59 View Points illustrate a maximum of 80 degree curved panoramic view and are equivalent to 2 frames in landscape and 3 frames in portrait format. This angle of view allows the view to be represented in a way which is representative of the view as seen on site by the human eye. This places the development at the correct scale within the surrounding landscape context. This is important, as it allows the development to be read correctly in relation to existing elements within the landscape setting. In order to accurately view the View points when the drawing is printed a full size (A3 landscape), a viewing distance of 250mm must be maintained. This will allow for a correct representation of the development and surrounding elements when printed.

Extent of visibility

- 5.60 Through scoping of the EIA with Sunderland City Council, it has been agreed that the most applicable form of Visual Impact Assessment would be through viewpoint analysis.
- 5.61 The first step was the identification and agreement of potential sensitive visual receptors and specific, representative and illustrative viewpoints by considering the possible interactions between the proposed development and these. A desktop study of the topography together with an initial site visit was carried out to establish the approximate visibility of the development which creates the visual envelope.
- 5.62 The initial site visit extended to a study area of 8km radius from the site. The existing visual barriers including, vegetation, localised landform and built areas reduce the potential extent of the visual envelope in some directions.

Visual Receptors

- 5.63 A range of visual receptors will have views of the existing site from within the visual envelope and be affected by the proposed changes arising from the proposed development. These receptors include local residents, those working outdoors and other works, those traveling through the area including motorists and pedestrians and recreational users of the surrounding landscape such as cyclists, horse riders, walkers and those engaged in leisure activities within the visual envelop. Views of or from within valued landscapes are also considered.

- 5.64 The extent of the effect upon certain types of receptors will vary according to their level of sensitivity. All categories of receptors can be affected to a greater or lesser degree. Residents of adjacent properties can be anticipated to be most sensitive to change, whilst transitory visitors and those with temporary purpose will be less affected.
- 5.65 Furthermore, it is expected that those whose principal preoccupation is the enjoyment of the outdoor environment and the open countryside will be more sensitive to visual changes in the landscape. Workers, particularly outdoor workers of the land, are also predicted to be sensitive to any changes.
- 5.67 Four categories of receptors relevant to the visual envelope are considered in more detail below under the headings of residents, workers, the traveling public, and recreational users / visitors. The sample viewpoints agreed for the assessment include a range of these receptor groups. Consideration is also provided on the potential sensitivity of each of the visual receptors in respect of the change resulting from the proposed development.

Residents

- 5.68 The study area includes the residential area of Burdon Vale, which is the only residential area adjacent to the site boundary with visibility of the site. Owing to the relatively enclosed nature of the site it is unlikely that there is more than glimpsed views from properties from beyond the local area. For example, the residential area to the north west of the site accessed from Moorside Road has existing tree planting between properties and the site. Beyond this residential receptors have been identified that may experience more distant views.
- 5.69 Residents effected are listed below and are listed as local or long distance views:
- 5.70 Local views, within 100m of the site boundary amongst existing housing estate: High to moderate sensitivity
- 5.71 The following refers to those dwellings in Burdon Vale which face onto the site on the roads listed and are likely to have rooms occupied during daylight / waking hours:

- Dwellings on Englemann Way [west junction with Weymouth Road]. Direct views from ground and first floor windows. Current views are of the residential road and the 'embankment' of the northern edge of the site.
- Dwellings on Bristlecone [northside]. Direct views from ground and first floor windows. Current views are of the residential road and the 'embankment' of the northern edge of the site.

5.72 Also, dwellings which back onto the site or have their side facing onto the side including:-

- Dwellings on Englemann Way [west junction with Weymouth Road]. Direct views from first floor windows. Current views from are of Weymouth Road and the 'embankment' of the northern edge of the site.
- Dwellings on Bristlecone [south side]. Direct views from first floor windows. Current views are of Weymouth Road and the 'embankment' of the northern edge of the site.
- Dwellings on Lacebark [south side]. Direct views from first floor windows. Current views are of Weymouth Road and the 'embankment' of the northern edge of the site.
- Dwellings on Englemann Way [east junction with round about on Weymouth Road]. Direct views from first floor windows. Current views are of the residential road and Weymouth Road the 'embankment' of the northern edge of the site, the 'plateau' and part of the large field.
- Dwellings on Whitebark [south side]. Direct views from first floor windows. Current views are of Weymouth Road, the 'plateau' and part of the large field.

5.73 Long distance views, over 3.5km of the site boundary with open panoramic views: Low sensitivity

5.74 It is unlikely that there is anything other than glimpsed distant views of the site beyond 1.5km of the site.

5.75 The representative viewpoint is of dwellings on Robertson Road, which face the site and have open views across the Wear Valley.

5.76 In summary, properties, which have the greatest visibility of the site and highest sensitivity to change include those along the southern, edge of the estate of Burdon Vale in particular the few, which face onto the site with no visual intervention between.

Workers

5.77 Places of employment within the local study area include schools, local businesses / light industry and farms. The principal visual receptors in this category and their potential sensitivity are summarised below:-

- Employees of Portland Academy, low sensitivity as the school generally has its back to the site.
- Employees who work in the light industrial businesses on Doxford International Enterprise Park adjacent to the site. Views through to the site are currently only filtered views through a tree-lined boundary. The cutting of the W2W cycleway [former railway line] widens the distance between this receptor and the site.
- Farmers and farm workers managing agricultural land to the west of the site: moderate sensitivity where the agricultural land abuts the site and views are uninterrupted reducing to low sensitivity where agricultural extends to the west and north where views are too distant. Occasional not continuous usage.

5.78 In summary, a small number of workers who have outdoor jobs (principally farming or land management related) and are in close proximity to the site with uninterrupted views are deemed to be most sensitive to change. The remaining workers in the study area generally have a low sensitivity to change where landform, vegetation or buildings intervene.

Recreational Users / Visitors

5.79 Visual receptor groups within this category have varying degrees of sensitivity to change in their views, the character of proposed landscape and their visual amenity resulting from effects arising from the proposed development. The principal visual receptors in this category and their potential sensitivity are summarised below:

- Those visiting the Tunstall Hills SSSI and local nature reserve where views of the surrounding landscape is an important contributor to their experience are predicted to have moderate to high sensitivity. This is depending on the perceived distance of the site from the viewer and if there is intervening landform, vegetation or urban form between.
- Cyclists or walkers on roads bounding the site. Moderate sensitivity depending on visibility into the site.
- People walking, cycling, running, or horse riding through the site on perimeter paths or on paths approaching the site. These have high to moderate sensitivity depending on whether there is intervening landforms and vegetation between the viewer and the site.

5.80 In summary, users of public rights of way and other undesignated footpaths through or adjacent to the site are those with the highest sensitivity to change in their visual amenity.

The Traveling Public

5.81 Motorists and public transport users are included within this group of visual receptors. Cycles are excluded as they have been assessed under the category of recreational users. Due to the generally brief experience, the changing nature of views and views being more sequential and intermittent, it is generally accepted that the traveling public are less sensitive to changes in their visual environment. Views are dominated by the road, road furniture and other vehicles.

5.82 The principal visual receptors in this category, and their potential sensitivity, are summarised below:

- Motorists using Burdon Lane with intermittent views of the site have low sensitivity; this is due in part to the average speed of travel on this busy lane and the interaction with other road users.
- Motorists using Weymouth Road and other local residential roads approaching the site. Sensitivity is on average moderate depending on the speed and direction of travel and nature of the views and any intervening landform or vegetation.
- Users of public transport [principally the local service bus] on local roads to the perimeter of the site or on a approaching the site. Sensitivity is on average moderate depending on the speed and direction of travel and nature of the views and any intervening landform or vegetation.

5.83 In summary, visual receptors with the greatest sensitivity to change are predicted to be those on local roads adjacent to the site perimeter or on approach to the site where the view is uninterrupted.

Viewpoints

5.84 Nine representative viewpoints were selected and agreed in principal through scoping. The exact locations of each of these were agreed to be reviewed further on site and finalised with Sunderland City Councils Landscape Officer.

- 5.85 For each of the selected viewpoints the following analysis and assessment is carried out in further site visits:-
- Existing visual amenity of the area and approximate visibility of the development
 - Potential receptors of visual effects
- 5.86 On further interrogation of the topography of the landscape over which the Great North Forest Trail (Long distance Route) takes it was concluded that two of the original viewpoints were at the west side of the ridge and didn't actually have a view of the site. These were labelled as 4 and 5 in the accompanying viewpoint locations drawing L-1515-PRP-009 [Rev 2] to the scoping report. Consequently, only one viewpoint has been explored along this route further south and within the visual envelope of the site.
- 5.87 In addition, whilst the scoping report was being considered two public consultations were undertaken with the local community and it was a second view point should be assessed from Weymouth Road. The viewpoints have been renumbered to reflect the omission and addition as above.
- 5.88 View Points are intended for illustration purposes only. Although these viewpoints are technical in their creation, they are not a substitute for field study and site visits. The viewpoint descriptions were undertaken in early November 2015, without the screening benefit of foliage on the trees.
- 5.89 A description of the visual baseline of the representative, illustrative and specific viewpoints together with their value and the type and number of receptors can be found within table 09, in appendix 1.
- 5.90 The LVIA is supported by the following Drawings and 9 View Points sheets:
- L-1515-PRP-009 - Viewpoint Locations
 - L-1515-EXV-001 - LVIA View Point 01
 - L-1515-EXV-002 - LVIA View Point 02
 - L-1515-EXV-003 - LVIA View Point 03
 - L-1515-EXV-004 - LVIA View Point 04
 - L-1515-EXV-005 - LVIA View Point 05
 - L-1515-EXV-006 - LVIA View Point 06
 - L-1515-EXV-007 - LVIA View Point 07
 - L-1515-EXV-008 - LVIA View Point 08
 - L-1515-EXV-009 - LVIA View Point 09

6. Identification of potential effects, before mitigation

Introduction

- 6.1 Following considerations of the site context and the proposed development, this section assesses the predicted effects before mitigation of the proposed scheme on the environment, in terms of the completed development and during the construction phase. For all the stages, the assessment is made in comparison with the baseline at the time of the study (Winter 2015). The assessment will consider the effects on both the landscape and visual receptors, in particular those within the site and immediately adjacent to the site boundaries.
- 6.2 The assessment deals with the development as a whole. Comments made are for the whole development unless stated otherwise.

Design Development

- 6.3 Through the iterative design process of developing the residential masterplan many decisions and design changes were made to avoid or reduce the landscape and visual impacts of the proposals. These include:-
- Retaining as much of the existing landscape structure as possible including the current field boundaries to preserve the legibility of the historic agricultural use.
 - Working within the development set back dimensions guided by Sunderland City Councils ecology officer for existing green infrastructure.
 - Orientating and laying out of the development blocks to create streets which end either with an outward view from the site or on existing or new landscape structure and open space. The development site benefits from a rural character with open views of the City of Sunderland City and the coast from some areas so the street pattern aims to retain the sense of place.
 - Retaining the Silksworth plantation as public open space and designating it as part of the SANG provision.
 - Distributing open space provision throughout the development to maintain access for play and fitness.
 - Creation of a new recreational network of new footpaths, cycleways, and bridleways.

- Maintaining a green edge along the southern frontage of Weymouth Road between the existing residential area of Burdon Vale and the new development to lessen the visual effect of residents views.
- Including trees within most residential streets to provide a new local character and distinctiveness and to aid the softening of the development into the neighbouring residential areas when viewed from a far.

Development features

6.4 Features of the proposed development that will give rise to landscape and visual effects are listed below-

- Up to 750 residential units, of varying types and a maximum of three storey.
- One neighbourhood centre to provide community facilities, such as health, leisure and retail.
- A network of residential roads, streets and shared surface lanes with linkages back to existing roundabouts and a new junction on Weymouth Road.
- To compliment the vehicular access provision a network of footpaths, cycleways and multi-user recreational routes woven through the development.
- To deflect visitor pressures on locally protected sites and mitigate for the increase in population the masterplan also has to accommodate a ratio of Suitable Alternative Natural Greenspace (SANG's). The masterplan includes an open space strategy for extending and enhancing green infrastructure, habitat provision and allotments, play and recreation.
- Noise mitigation measures in the form of earth bunds and living acoustic barrier.
- Sustainable Urban drainage measures in the form of swales wetland areas, rain gardens and attenuation basins.
- Tree, hedge and shrub, and meadow planting to the landscape designed spaces.
- Planting of new native woodland planting, particularly to the southern boundary.
- A pumping station
- Street lighting to access roads, parking and external spaces. Interior lighting.
- Increased vehicle activity and lights.

6.5 The masterplan proposals are provided by URBED and are illustrated on figure 944-M01 Rev -

Construction phase processes and features

6.6 Construction is predicted to be undertaken in two stages, the first stage is the initial infrastructure and enabling works along Weymouth Road and the second stage is the

main construction of the residential proposals and associated streets, open spaces and acoustic mitigation. There is currently no available information relating to the confirmed phasing of the residential proposals in terms of either the sequence of parcels of land to be developed or the size of each. Consequently, no assessment has been made on the effects of ongoing construction works and activities on the residents who move into the completed first phases homes.

- 6.7 An initial infrastructure package of works is proposed along Weymouth Road to enable accesses and utility connections to be made ready for the next phases of development. This package of works would include landscape design along Weymouth Road and to establish planting and a new frontage to the future residential community. It also includes the two new drainage attenuation basins, associated earthworks, and a foul pumping station. In addition, the extension of the vehicle accesses from the existing 'stumps' of the two existing mini roundabouts and the new junction to the west of Weymouth Road are proposed
- 6.8 A new crossing on Weymouth Road north of the westerly junction of Englemann Way is proposed with new footpath links on the embankment area to the south of Weymouth Road, which are to connect to the future recreational networks.
- 6.9 The first effects arising from the proposed development would be the activity associated with the construction plant and traffic within the site. It is assumed that a contractor's compound would be required to accommodate site construction staff and materials for each phase of development or parcel of land brought forward. This is likely to remain for the duration of the construction of that phase. At varying levels construction traffic and plant activity would feature throughout the development.
- 6.10 The features and predicted effects of the construction phase works of particular relevance to the landscape and visual assessment include:
- The visual effects of temporary stockpiling of materials and site won excavated soil.
 - Vegetation clearance where necessary for construction access or to facilitate level changes.
 - Construction of protective fencing of existing vegetation, and management and conservation of existing habitats.

- Potential restrictions on walkers and other recreational users of the site whilst construction operations are ongoing [e.g. Vegetation removal, laying of utilities, construction of new roads etc]
- The visual effects of construction works including earthworks, visibility of general building works and cranes above site hoardings
- The visual effect of site hoardings at street level on neighbouring residents, recreational users and traveling public.
- The visual effects of site lighting on adjacent residential areas, e.g. security lighting, and lighting during the winter months.
- The visual effect of HGV movement's deliveries and site plant, during phases of construction. It is assumed for the purposes of this report that all construction traffic access will be from Weymouth Road.

6.11 For the assessment of effects pre-primary mitigation created by the construction phase, the following assumptions have been made:

- Duration: 'short term' = 6months -1 year, 'medium term' = 1-5 years, 'Long Term' =5-10 years.
- The significance of effect has been assessed at 'local' level of view importance, relating to the adjacent residential areas with higher sensitivity.

6.12 The assessment of effects pre-primary mitigation resulting from the construction phase is illustrated in the following Table. The table also indicates proposed mitigation measures, any changes in effect significance and residual risk.

Table 10: Construction phases effect assessment table

Description of predicted effect	Sensitivity	Duration	Magnitude of effect pre-primary mitigation	Distance of view	Significance pre-primary mitigation	Proposed mitigation measures	Timing of mitigation measures	Significance post mitigation	Residual effects
The visual effects on residents and recreational users of the fields of temporary stockpiling of materials and site won excavated soil.	High	Long Term over different phases	Moderate adverse	Local	Major adverse	Material to be stock piled in areas of the site less visibly sensitive and out with root protection areas of existing vegetation	During construction period	Moderate adverse	Temporary views of stockpiled material will likely remain for recreational users of the site's footpaths. However, most views from residential properties would be avoided.
The visual effects of construction works including earthworks, visibility of general building works and cranes through / above site hoardings.	High for residents and recreational users and low for traveling public	Long term over different phases	Moderate adverse [for the western half of the site, where it is more enclosed] Moderate -major adverse [for the eastern half of the site, where it is more open]. Major adverse for the area along Weymouth Road visible by residents	Local-Medium	Major adverse for all reducing to moderate as the phases of work move further away from the residential areas.	Use of solid hoarding boards, painted an appropriate shade to be less intrusive. Well maintained hoardings.	During construction period.	Major adverse for the enabling works along Weymouth Road visible by residents Moderate -major adverse for the remaining areas	Temporary views of hoardings and plant machinery remain.
The temporary visual and landscape effect of construction of protective fencing for existing vegetation, and management and conservation of existing habitats.	High	Long term over different phases	Minor adverse	Local	Moderate adverse	Avoid the use of solid hoarding boards for this use. Phased approach for the erection of temporary tree protection fencing only in the areas effected by adjacent construction works. Consultation with ecologist to ensure foraging routes and nest areas are undisturbed at key times.	During appropriate construction phases.	Remains at minor to moderate	Temporary views of protective fencing will remain but if areas are limited to where active construction works are being undertaken the fencing will be viewed in the context of the rest of the construction works.
The visual effect of site hoardings at street level on neighbouring residents, recreational users and traveling public.	High	Short to medium term [for residents by Weymouth Road] Long term [for recreational users of the greater site area as it would be experienced over different phases.]	Major adverse	Local	Major adverse	Use of solid hoarding boards, painted an appropriate shade to be less intrusive. Well maintained hoardings. Length of hoardings are left in place should be kept to minimal required.	During appropriate construction phases.	Major adverse	Temporary views of hoardings will remain

The visual effects of site lighting on adjacent residential areas, e.g. security lighting, and lighting during the winter months.	High	Medium Term [the later phases of construction should be further from the immediate residents.]	Moderate adverse	Local	Major adverse	Lighting only during agreed working hours.	During construction period	Moderate adverse	Temporary views of lighting will remain during agreed working hours when ambient light levels are low and during winter months.
The visual effect of HGV movement's deliveries and site plant, during phases of construction. It is assumed for the purposes of this report that all construction traffic access will be from Weymouth Road.	High	Long Term	Moderate adverse	Local	Major adverse	HGV activity to take place during agreed working hours. HGV's and site plant to be within site compound and use of standard wheel wash operations adhered to.	During construction period	Moderate adverse	Views of HGV activity will remain during agreed working hours. This will be a temporary impact.
Potential restrictions on walkers and other recreational users of the site whilst construction operations are ongoing [e.g. Vegetation removal, laying of utilities, construction of new roads etc]	High	Medium Term	Minor adverse	Local	Moderate adverse	Work to take place during agreed hours. Alternative safe recreational routes to be directed between the neighbouring residential areas up to the areas of open space.	During construction period	Moderate adverse	Views of works will remain. Diversions to regular desire lines may be in operation.
The landscape effect of vegetation clearance where necessary for construction access or to facilitate level changes.	Moderate	Medium Term	Minor adverse	local	Minor adverse	Replacement planting to be phased to be installed as close to the removal as possible to allow for the greatest establishment period	During construction period	Minor adverse	Some loss of vegetation will be required but major replanting is proposed within the development's mitigation proposals.
The visual effect of the construction works on the users of the W2W multiuser route at viewpoint 3	High	Medium term	Major adverse - users of the current route of the W2W will experience a complete loss of outlook northwards at this viewpoint during the construction of the 1.5m high planted earth bund and 2.5m high living screen.	Local	Major adverse	Diversion of the multiuser route north side of the bund	During early phases of the construction works	Minor benefit whilst the remaining construction works are ongoing.	Views remain of the construction of the residential expansion

Assessment of effects on landscape resources arising from completion of the proposed development

Please refer to Table 11 for the assessment of landscape receptors, potential effects - pre-primary mitigation.

Table 11 - Identification of potential landscape effects - pre- primary mitigation						
Landscape Resources	Description of Change and Effect prior to mitigation	Value of landscape	Sensitivity of Landscape resource to change	Duration and reversibility	Predicted Magnitude	Significance
Fields	<p>Loss of agricultural green open space and change of use from arable fields and rough grassland to:</p> <ul style="list-style-type: none"> • Residential development • Small neighbourhood centre <p>- Integration of Sustainable Urban Drainage</p> <p>- Proposed gain in accessible green open space in the form of new suitable alternative natural greenspace [SANG], parks and play facilities</p> <p>- Limited change to the 'Undulating Meadows area'</p> <p>- Availability of outward views will be less open and constrained to those directed along street network, and glimpsed between houses and over rooftops.</p> <p>- Major earth works are proposed along the 'Embankment' and 'Plateau' areas to form the new surface water drainage attenuation basins and the footpath network around these,</p> <p>- Major earth works are proposed along the southern boundary with the A19 to form a raised earth bund as part of the noise mitigation measures</p> <p>- Major earth works are proposed to raise and sculpt the Panoramic Park</p> <p>- Moderate earth works are proposed to create the new road junction to the west of Weymouth Way</p> <p>- Moderate earth works are proposed to construct the new road and street infrastructure and integrate the new dwelling plots onto the existing topography.</p> <p>- Minor earth works are proposed to integrate the new development with the vegetation buffers.</p> <p>- Two new road accesses will be formed onto the site by extending the existing fourth stumps to the two mini roundabouts on Weymouth Road. A third road access is proposed to the western end of Weymouth Road via a new junction and right-hand filter lane. These roads will extend to provide a network of residential streets across the site.</p>	Low- Medium	Moderate	Long term. Non reversible	Major adverse	Major adverse

<p>Landscape Structure (Including vegetation / visual character & landmark features / pattern)</p>	<p>Loss of a few short sections of hedges to allow for direct development of dwellings or to allow for new roads, street networks and paths to be fed between existing field boundaries, and the associated re-levelling.</p> <p>Increased change in enclosure from solely natural field boundaries to field boundaries and buildings and street trees.</p>	<p>Medium</p>	<p>Moderate</p>	<p>Long term. Non reversible</p>	<p>Minor adverse</p>	<p>Minor adverse</p>
<p>Site Drainage</p>	<ul style="list-style-type: none"> - Creation of two large natural attenuation basins with swales to the north of the site alongside Weymouth Road. - Integration of swales along many residential streets and lower lying edges of open space margins. 	<p>Low</p>	<p>Low</p>	<p>Long term. Non reversible</p>	<p>Major beneficial</p>	<p>Moderate benefit</p>
<p>Public Rights of Way</p>	<p>Access along informal footpaths around field boundaries will be disrupted during the construction works.</p> <p>A section of the W2W cycleway and bridleway is proposed to be diverted from its current route running parallel with the A19 to the south side of the existing hedgerow to bring it north side of the existing hedgerow and along the acoustic bund.</p>	<p>Medium</p>	<p>Moderate</p>	<p>Long term. Non reversible</p>	<p>Major beneficial</p>	<p>Major benefit</p>
<p>Tranquillity</p>	<p>Reduced Road noise and movement from A19 corridor mitigated by acoustic bund and living screen.</p> <ul style="list-style-type: none"> - Increased vehicular movement and pedestrian activity associated from the new residential areas. - Further activity to Weymouth Road and feeder roads from Doxford Park Highway [further background noise and movement] - Increase street lighting and lights from resident's cars. 	<p>Low</p>	<p>Moderate</p>	<p>Long term. Non reversible</p>	<p>Minor adverse</p>	<p>Minor adverse</p>

Effect on Landscape Character

6.13 The following section reviews the potential changes the proposals may have on landscape character both at a national and local level and considers neighbouring character types where there is inter-visibility with the site.

National

6.14 At a national level whilst the Durham Magnesian Limestone Plateau is predominately an agricultural landscape, the site itself lies adjacent to the City of Sunderland so has a low sensitivity to change. The proposals result in the loss of open arable fields typical of the character type. However, within the scale of the national character area, the proposed change of character of the site from agriculture to mixed residential use is considered to be minor adverse.

Local

6.15 Apart from the direct effect of the loss of three arable fields from the Chapelgarth site and the subsequent effect of pushing the rural edge further way for the existing residential areas, the most distinctive change in character of the Clay Plateau character type would be the introduction of built form into a previously undeveloped site. This results in a major change in use. However, the site is adjacent to urban limestone plateau which is heavily built-up and is bisected from the rest of the Clay Plateau character area by the A19 truck Road. Therefore, the sensitivity of this part of the character area is considered low.

6.16 The site is defined by a relatively simple set of sloping fields framed with natural field boundaries with open panoramic views from the elevated southern areas. The proposed residential development will bring a more structured character to the site and introduce a greater complexity of landform and built form which will constrain the outward views and create more activity within the site. The predicted change to the local character area is a moderate adverse effect.

6.17 The following section assesses predicted effects on other key landscape resources.

Fields

6.18 The proposals result in a complete variance to the land use of the site with the loss of all three arable fields and part of the rough grassland to mixed residential use with associated transport and landscape infrastructure. The additional new uses include for a

small neighbourhood centre, provision of new Suitable Alternative Natural Greenspace [SANG] and integration of Sustainable Urban Drainage [SUDs].

- 6.19 The proposals look to increase the provision of publically accessible green space in the form of natural open space of which over 13.5Ha would be SANG, along with other community parks and play facilities.
- 6.20 The loss of land from agriculture has a major adverse significance. However, the site gains changes to help prevent flooding, reduce visitor pressures on the local SAC and SPA sites and a public fronting transition between the residential use and rural edge to the south of the site. A management company is to be formed to maintain the open spaces associated with the new development and improve the management and frontage onto Weymouth Road.
- 6.21 A no-build buffer of 25m is proposed along the southern edge of the proposals with the A19 to allow for the formation of an earth bund and living screen for acoustic mitigation of the transport corridor. The buffer will also include the new multi-user route to be built along the bund to enhance outward views to the north and east. This buffer will also benefit from having a single sided 'Green Street' with properties facing onto it. The buffer looks to retain the known wildlife corridor which crosses the site to the south from west to east and the proposals enhance this with native woodland planting and new tree and meadow grass planting.
- 6.22 Noticeable effects on landform are predicted due to the existing moderately to locally steep sloping topography of the fields and change in level of in excess of 30m across the site. Creation of development platforms for dwelling plots will require operations involving excavation, storage and reuse of subsoil and top soil to achieve the required levels with greater demand on access gradients.
- 6.23 Major earth works are proposed along the 'Embankment' and 'Plateau' areas to form the new surface water drainage attenuation basins and the footpath network around these. These materials are to be retained on site and re-used to form the raised earth bund, which forms part of the noise mitigation measures to the south of the site along the A19 transport corridor.

- 6.24 Moderate earth works are proposed to create the new road junction to the west of Weymouth Way. Excavations and regrading works would be required throughout the site to construct the new residential street network and excavations for utilities. The infrastructure works and excavations for building foundations will generate volumes of site won materials for use as engineering material to raise and sculpt the Panoramic Park.
- 6.25 Minor earth works are proposed within the vegetation buffers to integrate the proposed topography with the existing. During construction temporary stockpiling of materials is predicted whilst development phasing is progressed with minor adverse effects arising if these are visible from the residents and recreational users.
- 6.26 Although the changes to the landform and topography are a major change, when considering the scale of change to the existing character of the site and when integrating this into the proposed residential character these landforms provide interest, accessibility and provide function to the other landscape elements. Therefore, when considering the overall significance of the change it can be considered to be at first major adverse but if sensitively integrated these landform changes could increase to provide a minor benefit.

Landscape Structure (Including, vegetation, landmark features and pattern)

- 6.27 The existing framework of mature hedgerows and trees, which form the site's field boundaries are proposed to be retained and enhanced where possible to protect the existing green infrastructure, habitats and the legibility of historic agricultural use. These would be integrated into the extended green infrastructure of the development. However, some of the existing vegetation is proposed for removal to facilitate the development. A small group of trees to the centre of the site along with an isolated short length are directly affected by the proposed developable area for housing. The other areas proposed for removal are single hedgerow trees and small sections of hedgerow where new roads, footpaths or swales are required to pass through as part of the proposed layout and the associated changes of level. The loss of existing vegetation is considered to be of minor adverse significance.

- 6.28 A minor benefit to the site would be the increased enclosure and shelter experience from the addition of built form and additional street trees, which will be a noticeable change to the eastern side of the site within the 'Large Field' which is currently very open.
- 6.29 The proposed residential development would bring a new layer of street patterning to the site and the land form changes to the attenuation basins, acoustic bund and sculpted form of the 'Panoramic Park' would be features of the proposed development.
- 6.30 Outward views from parts of the site are predicted to be less open than current due to the proposed addition of built form. This is predicted to have a moderate adverse effect on the site character. However, the proposals would maintain key views out from the site and frame and direct these along the street network.

Woodland adjacent to the site

- 6.31 There is likely to be no direct effect upon woodland adjacent to the development boundary. This includes the woodland at Blakeney Woods to the north east of the site, the linear plantation north of Burdon Lane to the site's southern boundary and the woodland edge to Moorside Road to the West. The proposals include a minimum 25m woodland buffer from the stems of the woodland edge. This is thought to provide sufficient distance between the woodland edge and the proposed development to avoid any effect [directly or indirectly] upon the woodland trees or vegetation. The development proposals respond positively to these woodland boundaries by maintaining single sided 'Green streets' where properties face onto the buffers providing an active public frontage.

Existing field boundaries and the proposed built form

- 6.32 A constraints framework of 10m buffers have been proposed to either side of the existing field boundary hedgerows of which the proposed dwellings have been positioned away from to respect these habitats and the historic legibility of the site's current agricultural use. Where possible the development has been designed so that the residential streets are single sided and properties either face onto or have their gable ends facing these boundaries to retain a public and active frontage. It is possible that on a few occasions this principal may not be possible and the design may result with the dwellings having their back gardens backing onto the field boundaries.

Site drainage

- 6.33 The proposals include the creation of two large natural attenuation basins with swales to the north of the site alongside Weymouth Road. These will also be supplemented by further swales in residential streets, rain gardens and possibly secondary ponds upstream in lower lying edges of open space margins. The integration of Sustainable Urban Drainage Systems onto the site would have a minor benefit to the existing condition of the site and the adjacent residential areas which suffer from standing water and flooding in extreme rainfall.

Public Rights of Way

- 6.34 Access along informal footpaths around field boundaries will be disrupted during the construction works.
- 6.35 A section of the W2W cycleway and bridleway is proposed to be diverted from its current route running parallel with the A19 to the south side of the existing hedgerow to bring it north side of the existing hedgerow and along the acoustic bund which will noticeably benefit the user experience of this route.
- 6.36 New enhanced network of recreational routes of all types are proposed as part of the residential development which will have an overall major benefit to the site.

Tranquillity

- 6.37 A direct result of the residential development will be a reduction in the perceived tranquillity of the site experienced by users of the informal recreational paths around the existing field boundaries. This is due to the increased vehicular movement and pedestrian activity associated from the new residential areas.
- 6.38 Further increased activity including background noise and movement to Weymouth Road and the feeder roads from Doxford Park Highway area also expected. Increased street lighting and lighting from cars is predicted.
- 6.39 This will also be balanced with a greatly improved reduction in road noise and movement from the A19 corridor mitigated by the acoustic bund and living screen. Overall, the significance of change to this resource is predicted to be minor adverse.

Assessment of effects on Visual Receptors arising from completion of the proposed development

Please refer to Table 11 for the assessment of principal viewpoints, potential effects - pre mitigation.

Table 12 - Identification of potential visual effects - pre-primary mitigation								
Visual receptor [Sample viewpoint No]	Figure Reference	Summary of viewpoint location	Degree of visibility	Sensitivity of visual receptor to change	Duration and reversibility	Predicted Magnitude	Description of effect prior to primary- mitigation	Significance of effect
1	L-1515-EXP-001	South facing view from southern edge of Burdon Vale residential area at the eastern junction of EnglemannWay with the roundabout on Weymouth Road.	Very prominent	High	Long term. Non reversible	Major adverse	<p>Those with properties on the southern edge of Burdon Vale which back onto or have their end elevation facing Weymouth Road will have views from their upstairs windows across the intervening green open space and attenuation basin to the proposed dwellings.</p> <p>Motorists and pedestrians on Weymouth Road from the west and those joining from Engleman Way will have views along the 'embankment area'. The landform in this area would to be noticeably altered to incorporate a surface attenuation basin and footpath around the new landform.</p> <p>The existing planting to the top of the embankment is to be retained where possible. The proposed development will be visible between the trees beyond this. Views into the estate will be experienced up the new primary road, which extends from the existing roundabout stump.</p> <p>Across the lower level eastern site edge [to the left of the view], there will be views across a broad green verge, beyond that of residential properties</p> <p>Longer views looking SSE will be shortened with the addition of proposed dwellings. This will also break up the current view of the skyline. The sloping natural form of the fields will be interrupted with the addition of dwellings, gardens, roads and tree planting.</p> <p>The view will become busier with the movements of new residents and the street light levels will also increase with the phasing of the development.</p>	Major adverse

2	L-1515-EXP-002	South facing view from southern edge of Burdon Vale residential area at the western junction of Englemann Way onto Weymouth Road.	Very prominent	High	Long term. Non reversible	Major adverse	<p>Those with properties on the southern edge of Burdon Vale which face onto Weymouth Road will have views of the reinstated greenspace which would include a swale and footpath. Beyond this there will be views of the proposed dwellings between and above the existing tree and hedge planting to the top of the embankment.</p> <p>To the right of the view it is likely that the new road junction will be visible. To create this, a section of the landscape structure to the top of the embankment including a section of hedge and individual hedgerow trees will be removed. Because of this new opening there may be glimpsed views at street level into the new development.</p> <p>Those with properties which back onto Weymouth Road will have views from their upstairs windows across the new junction and into the residential extension.</p>	Major adverse
3	L-1515-EXP-003	View north from designated long distance cycle way [W2W Cycleway]. The view point is from a point on the southern boundary of the site at the junction between the large and middle fields. The viewpoint is fairly level with the site at this point but the site falls away to the north and east.	Very prominent	High	Long term. Non reversible	Major adverse	<p>The view from the multi-user route would significantly change with the addition of new houses and streets to the large field.</p> <p>To the left of the view the proposals include a 1.5m high-engineered earth bund and 2.5 m high living screen, which forms part of the acoustic mitigation measures. This would reduce the view into and across the 'middle field' which would also be shortened by the new houses.</p>	Major adverse
4	L-1515-EXP-004	Burdon Lane looking south west just east of the old road through Blakeney Woods.	Reasonably prominent	Low	Long term. Non reversible	Major adverse	<p>Users of this stretch of Burdon Lane will have views over the site of the proposed residential properties. The existing woodland strip to the south, the established hedgerow to the eastern site boundary and Blakeney Woods are to be retained so this will offer some screening of the development and will break-up the view and change from arable land to housing.</p> <p>Longer view up to the higher elevations of the site and current field will be shortened by the proposed dwellings in the foreground.</p>	Moderate adverse
5	L-1515-EXP-005	View north from designated long distance footpath and bridal way (Great North Forest Trail) to the south of the site. The viewpoint is from a section of route just north of the North East Karting Track.	Not prominent	High	Long term. Non reversible	Neutral	<p>The proposed development is not predicted to be visible from this view point.</p> <p>Light levels will increase with the phasing of the development which will cause a barely perceptual increase to the glow above the woods in the mid distance when read with the rest of Sunderland City.</p>	Negligible
6	L-1515-EXP-006	Burdon Lane looking south west at the junction with Burdon Village Road.	Not prominent	Low	Long term. Non reversible	Moderate adverse	<p>Users of this stretch of Burdon Lane will have glimpsed views into the site at this viewpoint of the proposed residential expansion. The existing woodland strip to the south at Burdon Lane, the established hedgerow to the eastern site boundary and Blakeney Woods are to be retained so this will offer substantial screening of the development from this direction.</p> <p>Light levels will increase with the phasing of the development which will cause a small increase to the glow above Blakeney Woods.</p>	Minor adverse

7	L-1515-EXP-007	View south west from Tunstall Hills SSSI and local nature reserve elevation marker.	Reasonably prominent	High	Long term. Non reversible	Minor adverse	There will be distant views of the proposed dwellings and infrastructure from this viewpoint. It is unlikely that the viewer would focus on any element of the completed development as the land use will be an extension of the adjacent character. The skyline of the view is unlikely to be effected by the proposals which maintains a rural 'green' edge.	Moderate adverse
8	L-1515-EXP-008	View south east from Penshaw Monument.	Not prominent	High	Long term. Non reversible	Neutral	The proposed development is not predicted to be visible from this view point. Light levels will increase with the phasing of the development which will cause a barely perceptual increase to the glow above the woods to the skyline when read with the rest of Sunderland City and Doxford Enterprise Park.	Negligible
9	L-1515-EXP-009	View south from Robertson Road a residential street in Sunderland.	Not prominent	High	Long term. Non reversible	Neutral	There would be a limited and distant glimpsed view of the proposed residential properties which will form an extension of the current landscape character and view.	Negligible

Residents

- 6.40 Two representative viewpoints of the neighbouring residential area of Burdon Vale have been assessed to establish the predicted significant effect of the proposals in terms of their visual amenity.
- 6.41 Viewpoint 1 represents the eastern extent of Burdon Vale and a typical view from properties immediately opposite the development area. The development is very prominent from this view point which is only 18m from the site. From this view point the properties typically back onto Weymouth Road and the development site or have their gable end facing the site so views are generally from the properties upstairs windows.
- 6.42 Views of the new development are across Weymouth Road and for some properties the mini roundabout.
- 6.43 Intervening green open space would provide a break between the two developments, beyond which the outlook is predicted to be noticeably different. The change in view will include the extension of the fourth exit from the roundabout which creates the primary road up into the new housing area. Earth works will be necessary to provide the required gradient for the road. To the right of the new road, development platforms will be created for the new dwellings. Further to the right the landform of the existing embankment is predicted to be noticeably altered to accommodate a surface attenuation basin and footpath around the new landform. Much of the planting to the top of the embankment is to be retained.
- 6.44 To the left of the view across the lower level eastern site edge, there will be views across a broad green verge which would include a new footpath beyond this of new homes.
- 6.45 Longer views looking SSE will be shortened with the addition of proposed dwellings. The natural sloping character of the fields will be interrupted with the addition of dwellings, gardens, roads and tree planting.
- 6.46 The view will become busier with the movements of new residents and the street light levels will also increase with the phasing of the development.
- 6.47 The change to the view is predicted to be major adverse prior to primary mitigation.

- 6.48 Viewpoint 2 represents the western half of the southern edge of Burdon Vale and a typical local view from properties immediately opposite the development area. Some properties face south towards Weymouth Road and the development site and have a direct view across Englemann Way junction. Other properties are oriented less directly at the site and their view would be from a more oblique angle or from upstairs windows.
- 6.49 These properties have a near view which is focused on the embankment to the south of the Weymouth Road. Their outlook is predicted to be most effected during the construction period, when intensive earth remodelling of the embankment takes place to create the new vehicle access and drainage basin and swale. This will be busy with the activity of construction plant and traffic. Part of the hedgerow field boundary and hedgerow trees may need to be felled to allow for this so temporary longer views up into the site and of the proposed construction of the dwellings are predicted.
- 6.50 Longer term views will be of the reinstated greenspace in the foreground to the other side of Weymouth Road which would include a swale and footpath. Beyond this there will be views of the proposed dwellings between and above tree and hedge planting and the new access road. The change to the view is predicted to be major adverse prior to primary mitigation.

Workers

- 6.51 Places of employment are very limited within the visual envelope of the development site and only those involved with farming or land management, principally on arable land or maintaining field boundaries to the east of the site will have the opportunity to have views towards the development. Representative views from this direction would be viewpoint four or six, which assess views from Burdon Lane, which passes through farmland.
- 6.52 The significance of the change will depend on the workers distance from the site, and whether their view is local and more open, or a distant glimpse. The significance of the change is predicted to vary from negligible to minor adverse.

Recreational Users / visitors

- 6.53 This receptor type includes local neighbouring residents using the informal paths around the site for dog walking or fitness. It also includes users of the multi-user route, which passes alongside the southern boundary of the site. At a more distant scale visitors to

the Tunstall Hills SSSI and local nature reserve also have a view of the development from 2.9km within the greater study area.

- 6.54 Viewpoints 1 and 2 are representative of the view local residents have when approaching to cross Weymouth Road to use the existing informal footpaths which are being proposed to be formalised to follow similar routes around the site. As described within the Residents section the likely change experienced from these viewpoints is predicted to be major adverse prior to mitigation.
- 6.55 Viewpoint 3 is representative of the view north from the designated long distance cycle way [W2W] and bridleway. The viewpoint is from a location on the southern boundary of the site at the junction between the large and middle fields. The proposal in this area includes the construction of a 1.5m high planted earth bund and 2.5m high living barrier which is part of the designed mitigation to alleviate the noise effects from the A19. The view from the multi-user route will significantly change with the addition of the earth mound and the residential expansion.
- 6.56 The significance of the changes on this viewpoint is thought to be major adverse prior to mitigation.
- 6.57 Viewpoint 7 is representative of a visitors view south towards the site from Tunstall Hills SSSI and local nature reserve elevation marker. There will be distant views of the proposed dwellings and infrastructure from this viewpoint. It is unlikely that the viewer would focus on any element of the completed development as the land use will be an extension of the adjacent character. The significance of the changes from this viewpoint are predicted to be moderate adverse prior to mitigation. Please refer to drawing L-1515-PRP-021 which illustrates the extent of the development area which is visible from this viewpoint.

Traveling Public

- 6.58 This receptor type is only likely to experience the change from development from the east by private vehicle on Burdon Lane or from the North along Weymouth Road, which includes a local service bus route.

6.59 Viewpoints 4 and 6 provide representative views from Burdon Lane. Viewpoint four has a more local and prominent degree of visibility than viewpoint six which is more distant and glimpsed. Only a small part of the site and the associated development is visible from each viewpoint due to the intervening woodland. Please refer to drawings L-1515-PRP-019 and L-1515-PRP-020, which illustrate the extent of the development area, which is visible from these viewpoints, and the predicted effect of further reduced visibility if the proposed development at Burdon Lane goes ahead which would dominate and partially block the view. The significance of the change is predicted to vary from minor to moderate adverse prior to mitigation.

7. Cumulative effects

Introduction

- 7.1 Cumulative landscape and visual effects are those resulting from further changes to the landscape and visual baseline conditions caused by the proposed development in conjunction with other developments which have either commenced construction or are reasonably foreseeable through the planning system.
- 7.2 For the purpose of this assessment, the effects of the proposed development at Chapelgarth have been considered as a whole in association with the accompanying road infrastructure.
- 7.3 As described in the introduction of the chapter, Chapelgarth site forms part of the South Sunderland Growth Area (SSGA), which was allocated by Sunderland City Council for housing. Chapelgarth is the westerly most development parcel within the SSGA which is a ribbon of land stretching east wards towards Ryhope and the coast.
- 7.4 The scoping opinion dated 11th November 2015 makes reference to two pending applications noted to be at Scoping stage which would likely be a material consideration at the time of determining the Chapelgarth application. These included:
- Ref:14/01586/SCO Land at former Cherry Knowle and
 - Ref:15/00138/SCO Land at South Willow Farm
- 7.5 At the time of writing, no information on these two developments was available in the public domain to undertake an assessment of the cumulative effects.
- 7.6 However, the Chapelgarth site abuts the next parcel of land within the SSGA along its eastern boundary, referred to as 'Land at Burdon Lane'. This piece of land is also being developed as residential use, from existing agricultural use. A developer has detailed a design for this scheme and it is currently the subject of a valid planning application, which has not yet been determined.

- 7.7 This additional adjacent development is considered important as it is likely to extend and intensify the landscape and visual effect of the project. As such, the next section reviews the cumulative and in-combination effects of these two developments.
- 7.8 Please refer to drawing L-1515-PRP-046 for the cumulative development plan.

Description of adjacent development

- 7.9 The proposals for Land at Burdon Lane are illustrated on drawings, which are appended to this assessment:-
- ROBERTSON LANDSCAPE DESIGN. Landscape Masterplan, 5562-99-001 [Rev F]
 - ID PARTNERSHIP. Proposed site layout - Southern Part (Footprint version), SL-01K [Rev K]
 - ID PARTNERSHIP. Proposed site layout - Northern Part (Footprint version), SL-02K [Rev K]
- 7.10 In summary, the proposals are for a 115 dwelling residential development including a mix of 3, 4 and 5 bedroom properties with the higher proportion of the mix being the 5 bedroom properties. The scheme includes the associated street network and areas of public open space laid out along a narrow linear site which widens a little to the eastern extremity. The proposals are to be serviced from a single vehicle access from Burdon Road to the east creating a long cul-de-sac off which shorter cul-de-sacs and shared surfaced areas provide access to small groups of dwellings. The arrangement means that most of the properties to the south of the site back onto Burdon Lane with their back gardens creating the new boundary along the lane.
- 7.11 Few new trees are illustrated along this edge. New tree planting is illustrated within the new public open spaces, along the new streets and a proposed area of woodland is illustrated to the developments western boundary which it shares with the Chapelgarth site.

Study area

- 7.12 The eastern most edge of the Land at Burdon Lane lies within a 1.4km radius of the centre of the Chapel Garth site. The site falls within the same National Character Area

type of Durham Magnesian Limestone Plateau and the same City of Sunderland Landscape Character Type of the Clay Plateau.

7.13 On review of the viewpoints identified for assessment of the Chapelgarth proposals, many of these have combined visibility of the Land at Burdon Lane. The exception of these are viewpoint 02, 03, 08 and 09 where no visibility of the additional site would be seen.

7.14 As a result, the assessment of the cumulative and in-combination effects uses the same defined study area.

Baseline for assessing cumulative landscape effects

7.15 As described above the Land at Burdon Lane lies adjacent to the proposed development site, falling within the same character areas and shares the same existing arable agricultural land-use. The site is more open than the Chapelgarth site particularly to the south with only one existing field boundary dividing the site. Refer to table 13.

Baseline for assessing cumulative visual effects

7.16 The visual baseline uses viewpoint analysis as per the assessed project. Viewpoints 01, 04, 05, 06 and 07 are relevant to the assessment. The baseline characteristics of the view and the receptor types are discussed in table 14.

7.17 As the development type is known to be residential land-use, the duration of the change is long-term or permanent.

Identification and assessment of landscape effects

- 7.18 The cumulative and in-combination landscape effects of the two developments include-
- Increased change of use of land from agricultural use to residential use, with further loss of fields,
 - Increased growth of Sunderland urban extent southwards
 - Increased structural woodland, specimen tree and ornamental planting
 - Increased recreational access opportunities.
 - Increased activity within the construction periods.
 - Possible increase to lighting during the construction period for security or winter working.
 - Increased lighting and activity from car and streetlights on completion.

Description of landscape baseline and predicted cumulative effects.

Table 14 - Visual baseline and predicted cumulative effects							
Landscape Resource	Baseline description	Value	Duration and reversibility	Sensitivity	Description of cumulative effect taking into consideration of Primary mitigation measures of the proposed scheme	Predicted Magnitude	Significance of effect
National Character Area: NCA 15 Durham Magnesian Limestone Plateau	Gently undulating plateau - open arable fields and grazing pasture - low hedges and few trees - large urban and industrial context - A19 transport corridor is a prominent feature - Disused colliery railways and other footpaths provide good opportunities for outdoor recreation and enable commuting by bike.	Low / local	Long term permanent	Low	Urban expansion of Sunderland to the south. Change in land use of arable agricultural land to mixed residential developments with associated infrastructure and open space. At a national level whilst the Durham Magnesian Limestone Plateau is predominately an agricultural landscape, the sites lies adjacent to the City of Sunderland so has a low sensitivity to change. The proposals result in the loss of open arable fields typical of the character type. However, within the scale of the national character area, the proposed change of character of the site from agriculture to mixed residential use is considered to be minor adverse.	Moderate adverse	Minor adverse
Local character Area: Clay Plateau	Elevated plateau between 100m and 170m - Glacial till underlain by rocks of the Magnesian Limestone series.- Mature hedgerows and field boundary features provide a legibility of past land use - Agricultural landscape - Little above-ground drainage evident - small stream flows through Blakeney Woods - Urban fringe.	Low / local	Long term permanent	Low	Urban expansion of Sunderland to the south. Change in land use of arable agricultural land to mixed residential developments with associated infrastructure and open space. Loss of arable fields and introduction to more built form.	Major adverse	Moderate adverse
Fields	The Chapelgarth site is largely formed of three arable fields and two areas of rough grassland over moderately sloping land, which generally falls in North - North easterly direction. Steeper embankments exist to the northerly edge with Weymouth Road. The Land at Burdon Lane is also in arable agriculture use and falls in a north-north-easterly direction.	Low - medium	Long term. Non reversible	Moderate	Increased loss of agricultural across both developments through a change of use from arable fields and rough grassland to: <ul style="list-style-type: none">• Residential development• Small neighbourhood centre - Integration of Sustainable Urban Drainage - Availability of outward views will be less open and constrained to those directed along street network, and glimpsed between houses and over rooftops. - Major earth works are proposed along the 'Embankment' and 'Plateau' areas to form the new surface water drainage attenuation basins and the footpath network around these, - Major earth works are proposed along the southern boundary with the A19 to form a raised earth bund as part of the noise mitigation measures - Major earth works are proposed to raise and sculpt the Panoramic Park - Moderate earth works are proposed to create the new road junction to the west of Weymouth Way - Moderate earth works are proposed to construct the new road and street infrastructure and integrate the new dwelling plots onto the existing topography. - Minor earth works are proposed to integrate the new development with the vegetation buffers.	Major adverse	Major adverse

					<p>- Two new road accesses will be formed onto the Chapelgarth site by extending the existing fourth stumps to the two mini roundabouts on Weymouth Road.</p> <p>A third road access is proposed to the western end of Weymouth Road via a new junction and right-hand filter lane. These roads will extend to provide a network of residential streets across the site.</p> <p>A further new road access is required to be formed from Burdon Road to service the Land at Burdon Lane site.</p> <p>Re-provision and proposed gain in accessible green open space in the form of new suitable alternative natural greenspace [SANG], parks and play facilities</p>		
Landscape Structure (Including vegetation / visual character & landmark features / pattern)	<p>The Chapelgarth site has a strong landscape structure of mature field boundaries. Adjacent to the north eastern corner of the site is Blakeney Woods. Tree lined edges and woodland areas are also found to the south east of the site and the west and north west boundaries.</p> <p>The most striking feature is a wind thrown Beech tree which partially leans to east and is found at the end of the western tree lined field boundary.</p> <p>The landscape structure creates a mixed sense of enclosure across the site. The site is open to the north along Weymouth Road. It is most open to the southern elevated fields which benefit from long and mid distant views of the coast, local land marks and the City of Sunderland. The areas which experience the most enclosure are to the west and the northern edges of the fields.</p> <p>The Land at Burdon Lane has very little sense of enclosure with only one dividing hedgerow field boundary and a tree lined edge to its northern boundary with the Hall Farm residential estate. Outward views are experienced to the south of rural landscape, to the east of Ryhope and the coast and to the west of the Chapelgarth site.</p>	Medium	Long term. Non reversible	Moderate	<p>Loss of a few short sections of hedges to allow for direct development of dwellings or to allow for new roads, street networks and paths to be fed between existing field boundaries, and the associated re-levelling.</p> <p>Increased change in enclosure from solely natural field boundaries to field boundaries and buildings and street trees.</p> <p>Extension and 'gapping-up' of some existing hedgerows and extension to the woodland at Burdon Lane.</p> <p>Substantial tree planting of specimen trees to streets and landscape designed open spaces and new areas of native woodland planting to both developments</p> <ul style="list-style-type: none"> - New native woodland planting to southern face of acoustic bund, around the southern margin with the Panoramic Park and extension to the woodland at Burdon Lane. - New wildflower, meadow grass planting and wetland planting to the natural open spaces and areas around the SUD's features. - New living screen to acoustic treatment [mix of woven and planted willow]. 	Moderate benefit	Moderate benefit
Site Drainage	<p>No water bodies were viewed during the site visit although we understand from consultations with residents that standing water / flooding occurs in this area. A small stream also runs through Blakeney Woods,</p>	Low	Long term. Non reversible	Low	<ul style="list-style-type: none"> - Creation of two large natural attenuation basins with swales to the north of the site alongside Weymouth Road. - Integration of swales along many residential streets and lower lying edges of open space margins. - It is not known what the drainage / SUD's proposals are for the Land at Burdon Vale. 	Major beneficial	Major beneficial
Public Rights of Way	<p>No public rights of way exist on the Chapelgarth site. However, many informal desire lines / well-trodden paths dissect the area leading from Weymouth Road to the edge of Blakeney Woods and south following the field boundaries.</p> <p>A footpath runs north to south through Blakeney Woods along the adjoining boundary of the two developments.</p> <p>A footpath also runs along the northern edge of the Land at Burdon Vale site to the south of the Hall Farm estate</p>	Medium	Long term. Non reversible	Moderate	<p>A section of the W2W cycleway and bridleway is proposed to be diverted from its current route running parallel with the A19 to the south side of the existing hedgerow to bring it north side of the existing hedgerow and along the acoustic bund.</p> <p>New enhanced network of recreational routes are proposed as part of the residential development at Chapelgarth which link through to proposed streets and paths illustrated on the Land at Burdon Lane development.</p>	Major beneficial	Major beneficial

Tranquillity	<p>The Chapelgarth site experiences a variable sense of tranquillity.</p> <p>The southern half of the site is highly effected by the constant background noise from the A19 corridor.</p> <p>The rest of the site is quite quiet with low activity. Higher activity exists around Weymouth Road at peak times.</p> <p>Agricultural operations would also change this experience on limited occasions.</p> <p>The Land at Burdon Lane experiences busy traffic and noise from Burdon Lane which fluctuates during Peak times.</p>	Low	Long term. Non reversible	Moderate	<p>Reduced road noise and movement from A19 corridor mitigated by acoustic bund and living screen.</p> <ul style="list-style-type: none"> - Increased vehicular movement and pedestrian activity associated from both the new residential areas. - Further activity to Weymouth Road and feeder roads from Doxford Park Highway [further background noise and movement] - Increase street lighting and lights from resident's cars from both developments. 	minor adverse	minor adverse

Identification and assessment of visual effects

7.19 The cumulative and in-combination of the visual effects of the two developments include:-

- Intervisibility between the two; both in terms of outward views by residents and recreational users from within the Chapelgarth towards the adjacent development (and)
- Inward views of the Chapelgarth site being intercepted or viewed in combination with the neighbouring development by:-
- Travelling public using Burdon Lane from the east.
- Residents of the southern edge of Burdon Vale and traveling public on Weymouth Road
- Recreational users of Tunstall Hills Local Nature Reserve and long distance footpath bridleway (Great North Forest Trail).

7.20 The additional development lies to the south of the neighbouring Hall Farm estate. The properties on this estate back onto the site

Description of visual baseline and predicted cumulative effects.

Table 13 - Landscape baseline and predicted cumulative effects									
Viewpoint No.	Summary of viewpoint location & drawing reference	Description of baseline view	Type of receptor and number of viewers	Value of View	Degree of visibility of site	Sensitivity to the visual receptor to change	Description of cumulative effect taking into consideration of Primary mitigation measures of the proposed scheme	Predicted magnitude	Significance of effect
1	L-1515-EXP-001 L-1515-PRP-047 South facing view from southern edge of Burdon Vale residential area at the eastern junction of Englemann Way with the roundabout on Weymouth Road.	Local open view of a planted round about on Weymouth road, including traffic signs, street signage and lighting columns in near distance and site beyond. The viewpoint is fully of the site although only a small part of the full extent of the development is visible notably the site character areas of, embankment, plateau and large field. Within the site both the plateau to the left and the embankment to the right of the view are rough grassland. A hedgerow and individual trees break the onward view to the right to the skyline forming the field boundary to the top of the embankment. Further east two field boundaries converge to form a grouping of vegetation and trees. To the left of the view a slim wedge of the slope of the large arable field is visible in the middle distance with	The viewpoint represents the outlook of the dwellings, which back onto the site and motorists leaving Burdon Vale. This viewpoint is also representative of dog walkers and other people crossing from Burdon Vale to use the green networks on the site. Burdon Vale is a small estate so a medium number of viewers will experience this view.	Medium	Very prominent	High	Those with properties on the southern edge of Burdon Vale, which back onto or have their end elevation facing Weymouth Road will have views from their upstairs windows across the intervening green open space and attenuation basins which include tree planting to the proposed dwellings. Views will also be of the new extended road access from the roundabout up to the proposed development of 2 and 3 storey dwellings and glimpses of the community centre. Street tree planting is proposed to both sides. Motorists and pedestrians on Weymouth Road from the west and those joining from Engleman Way will have views along the 'embankment area'. The landform in this area would be noticeably altered to incorporate a surface attenuation basin and footpath around the new landform. The existing planting to the top of the embankment is to be retained where possible. The proposed development will be visible between the trees beyond this. Across the lower level eastern site edge [to the left of the view], there will be views across a broad green verge, beyond that of residential properties Longer views looking SSE will be shortened with the addition of proposed dwellings. This will also break up the current view	Minor adverse	Moderate adverse

		<p>a predominately tree lined skyline beyond.</p> <p>Within the skyline there is a gap between the southern edge of Blakeney woods and the woodland edge at Burdon Lane. This gap presents the only visible edge of the Land at Burdon Lane.</p> <p>A well-trodden informal footpath is visible leading up the embankment from the crossing on Weymouth Road.</p> <p>Approximate distance to the site perimeter 18m.</p>					<p>of the skyline. The sloping natural form of the fields will be interrupted with the addition of dwellings, gardens, roads and tree planting.</p> <p>The view will become busier with the movements of new residents and the street light levels will also increase with the phasing of the development.</p> <p>A glimpsed view of the rooftops of the proposed dwellings of the Land at Burdon Lane is predicted between the edge of Blakeney Woods and the southern woodland edge along Burdon Lane. Both developments propose new tree planting along this boundary which when the trees mature will soften this view.</p>		
4	<p>L-1515-EXP-004</p> <p>L-1515-PRP-019</p> <p>Burdon Lane looking south west just east of the old road through Blakeney Woods.</p>	<p>Open view of rising agricultural land with hedgerows and individual trees to field boundaries. The combined sites form most of the view. The hedgerow which marks the eastern extent of the Chapelgarth site and the adjoining boundary obscures part of the view into the proposed site. The woodland edge to Burdon Lane hides the view of the most southern extent of the Chapelgarthsite. Roofs of the residential estate of Burdon Vale are visible to the right of the view, setting the site on the edge of the suburbs of Sunderland. Telegraph poles follow Burdon Lane to the skyline of the view where a farm steading is visible on the left of the lane.</p> <p>Approximate distance to the site perimeter 400m.</p>	<p>Medium number of road users, Low number of agricultural workers of adjacent agricultural fields. Low number of walkers / cyclists [local residents].</p>	Low	Very prominent	Low	<p>Users of this stretch of Burdon Lane will have views of the back gardens and boundary treatments and rear of the proposed dwellings of the Land at Burdon Lane development.</p> <p>Some proposed trees are illustrated to the edge of Burdon Lane which will help to soften the impact a little</p> <p>The existing woodland strip to the south, the established hedgerow to the eastern site boundary and Blakeney Woods are to be retained so this will offer some screening of the Chapelgarth development and will break-up the view and change from arable land to housing.</p> <p>It should be noted that views into the Chapelgarth site are likely to be largely screened by the proposed development at Land at Burdon Lane.</p> <p>Longer view up to the higher elevations of the site and current field will be shortened by the proposed dwellings in the foreground.</p>	Major adverse	Moderate adverse
5	<p>L-1515-EXP-005</p> <p>L-1515-PRP-048</p> <p>View north from designated long distance footpath and bridleway (Great North Forest Trail) to the south of the site. The viewpoint is from a section</p>	<p>Long distance open, panoramic view of agricultural land in the foreground falling away to the tree lined corridor of the A19 in the mid ground to Sunderland City, South Tyneside, Ryhope and views to the sea in the distance. A few steadings, kennels and stable buildings are visible in the mid distance along with a glimpsed view of traffic on the A19 to the right of the view and the fly over of Burdon Lane. The tree plantation along Burdon Lane along with trees to the embankments of the A19 cutting</p>	<p>Medium number of users of the Great North Forest Trail including local residents, exercising dogs and horses and visitors. Low number of agricultural workers of adjacent agricultural fields.</p>	Medium	Not prominent	High	<p>The proposed Chapel development is not predicted to be visible from this viewpoint.</p> <p>The proposed development of Lane at Burdon Lane might be glimpsed to the east of the Woodland edge but only a small portion is likely to be visible and it is not likely to change the view or the character significantly.</p> <p>Light levels will increase with the phasing of the development which will cause a barely perceptual increase to the glow above the woods in the mid distance when read with the rest of Sunderland City.</p>	Neutral	Negligible

	of route just north of the North East Karting Track	completely block any views into the Chapelgarth site. Glimpsed views may be possible of the Land at Burdon Lane site The viewpoint is quite local to the site at approximately 800m distance to the site perimeter, however the site is not visible.							
6	L-1515-EXP-006 L-1515-PRP-020 Burdon Lane looking south west at the junction with Burdon Village Road.	Medium open view of Burdon Lane in foreground with agricultural land to both sides. A mix of timber post and wire mesh, hedgerows and individual trees mark the field boundaries. Pylons cross the view in the mid-distance. The land raises to two hillocks in the distance to the left of the view. To the middle and right of the view tree cover to the skyline shortens the view. A small gap between the southern extent of Blakeney woods and the woodland edge further south allows a glimpse of the Chapelgarth site. Only a very small portion of the 'large field' can be seen of the site and the site itself plays a small part of the proportion of the viewpoint. Most of the adjacent development site at Land of Burdon Lane is visible in the foreground of the view in advance of the view of the Chapelgarth site. Approximate distance to the site perimeter 1.1km.	Medium number of road users, Low number of agricultural workers of adjacent agricultural fields. Low number of walkers / cyclists, especially on Burdon Village Road [local residents on their daily routine].	Low	Very Prominent	Low	Users of this stretch of Burdon Lane will have an open view of the Land at Burdon Lane development and potentially a glimpsed view of the upper elevations of the southern portion of the Chapelgarth site. New street tree planting and planting to the proposed open space are illustrated on the Land at Burdon Lane proposals, which will help, soften and break up the view of the proposals. Light levels will increase with the phasing of the development which will cause a moderate increase to the glow above Blakeney Woods.	Major Adverse	Moderate adverse
7	L-1515-EXP-007 L-1515-PRP-048 View south west from Tunstall Hills SSSI and local nature reserve elevation marker.	There will be distant views of the proposed dwellings and infrastructure from this viewpoint. It is unlikely that the viewer would focus on any element of the completed development as the land use will be an extension of the adjacent character. The skyline of the view is unlikely to be effected by the proposals which maintains a rural 'green' edge.	Medium number of users for recreational purposes including local residents, exercising dogs and visitors for the geology and botany interest. Views from the elevated landscape are likely to be an important contributor to the experience of the visitor.	Medium	Reasonably prominent	High	There will be distant views of the proposed dwellings and infrastructure from this viewpoint. It is unlikely that the viewer would focus on any element of the completed development as the land use will be an extension of the adjacent character. The skyline of the view is unlikely to be effected by the proposals which maintains a rural 'green' edge. As trees within the development establish, they will reduce and soften the built forms of the new residential development and help blend it into the existing suburban character.	Neutral	Negligible

Mitigating cumulative effects

7.21 Consideration for secondary mitigation includes-

- Review of the back garden boundary treatments to the properties backing onto Burdon Lane so that a sensitive treatment is developed in keeping with the rural edge.
- Provision of greening and a robust landscape structure to the area between Burdon Lane and the proposed dwellings back gardens to help soften the edge to the new developments and reduce the visual impact of the change for recreational and users and traveling public on Burdon Lane.
- Design coding of the streets to the Land at Burdon Lane to ensure that street trees are planting to public open spaces is delivered to assist breaking up the massing of the built form.

7.22 These measures are out with the scope of the assessed project so further consideration and the method of implementation would need to be discussed between developers and with the support of the City of Sunderland planning authority.

8. Primary Mitigation Measures

Introduction

- 8.1 The landscape and visual impact assessment has informed primary mitigation measures for the Chapelgarth residential development, which have been considered within the design development process and would be incorporated as an integral part of the masterplan design.
- 8.2 This section sets out the type of primary mitigation, which has been incorporated into the masterplan to minimise the effects arising from the proposed development. Mitigation measures are described and then the previous section's assessment is repeated taking into account the proposed mitigation.
- 8.3 Mitigation measures are described in:
- Table 13 - Revisited Landscape effects - post-mitigation and
 - Table 14 - Revisited Visual effects - post-mitigation, which follow.
- 8.4 These respond to key adverse significant effects arising from the initial assessments detailed in tables 11 and 12.
- 8.5 Much of the proposed primary mitigation is centred on the landscape structure, sensitive alterations to topography and landforms associated with acoustic treatments, sustainable urban drainage and creation of accessible spaces and recreational routes. The iterative design process has also considered form, layout, materials and lighting.
- 8.6 Substantial new street tree planting and tree and shrub planting is proposed to local parks. New native woodland planting to the southern face of the acoustic bund and around the southern margin with the Panoramic Park and extension of the woodland at Burdon Lane is proposed. Wildflower planting, meadow grass planting and wetland planting to the natural open spaces and areas around the SUDs features are proposed along with a living screen as part of the acoustic treatment. The living barrier would be a mix of part woven and planted willow.
- 8.7 Refer to drawings:

- L-1515-PRP-043 for a summary and "Illustration of the location of primary mitigation measures".
- L-1515-PRP-044 for a "List of primary mitigation measures"
- L-1515-PRP-027 - "Green networks - Proposed onsite routes & connections to off-site networks with existing well-trodden paths overlaid (in white)"
- L-1515-PRP-028 - "Open space strategy & ratio of provision"

Description of landscape mitigation measures and predicted effect.

Table 15 - Revisited Landscape effects - post-mitigation						
Landscape Resource	Sensitivity	Description of effect prior to mitigation	Description of proposed mitigation measure	Changes in predicted Magnitude	Changes in Significance	Residual Effects
Fields	Moderate	<p>Loss of agricultural green open space and change of use from arable fields and rough grassland to:</p> <ul style="list-style-type: none"> Residential development Small neighbourhood centre <p>- Integration of Sustainable Urban Drainage</p> <p>- Limited change to the 'Undulating Meadows area'</p> <p>- Availability of outward views will be less open and constrained to those directed along street network, and glimpsed between houses and over rooftops.</p> <p>- Major earth works are proposed along the 'Embankment' and 'Plateau' areas to form the new surface water drainage attenuation basins and the footpath network around these,</p> <p>- Major earth works are proposed along the southern boundary with the A19 to form a raised earth bund as part of the noise mitigation measures</p> <p>- Major earth works are proposed to raise and sculpt the Panoramic Park</p> <p>- Moderate earth works are proposed to create the new road junction to the west of Weymouth Way</p> <p>- Moderate earth works are proposed to construct the new road and street infrastructure and integrate the new dwelling plots onto the existing topography.</p> <p>- Minor earth works are proposed to integrate the new development with the vegetation buffers.</p> <p>- Two new road accesses will be formed onto the site by extending the existing fourth stumps to the two mini roundabouts on Weymouth Road. A third road access is proposed to the western end of Weymouth Road via a new junction and right-hand filter lane. These roads will extend to provide a network of residential streets across the site.</p>	<p>- Re-provision and proposed gain in accessible green open space in the form of new suitable alternative natural greenspace [SANG], parks and play facilities</p> <p>Ensure engineered landforms are sensitively integrated into the landscape proposals. Use of planting to soften the proposed landforms where they are not being designed as a sculptural intervention.</p> <p>Ensure new gradients are suitable for access and maintenance.</p> <p>Reuse of site won material from excavations where possible to form raised landforms to balance and lessen disposal of materials from site.</p>	Changes from major adverse to moderate adverse.	Changes from major adverse to moderate adverse	<p>Change of use from arable agriculture to mixed residential results in a loss of agricultural use but gain in more publically accessible and diverse open space.</p> <p>As part of the habitat regulations and provision of SANG the developer has to set up a management company associated with the management and maintenance of the natural green spaces so it is likely that the area will be more regularly maintained than the current condition.</p> <p>Major earth remodelling and regrading of parts of the site are required to facilitate access, drainage storage, noise mitigation proposals and building plots onto the moderately to majorly steep topography of the existing landscape. The proposals provide the opportunity to integrate these landform changes into the enhanced residential character and public open space features of the development will improve accessibility.</p>
Landscape Structure (Including vegetation / visual character & landmark features / pattern)	Moderate	<p>Loss of a few short sections of hedges to allow for direct development of dwellings or to allow for new roads, street networks and paths to be fed between existing field boundaries, and the associated re-levelling.</p> <p>Increased change in enclosure from solely natural field boundaries to field boundaries and buildings and street trees.</p>	<p>Extension and 'gapping-up' of some existing hedgerows and extension to the woodland at Burdon Lane.</p> <p>Substantial tree planting of specimen trees to streets and landscape designed open spaces and new areas of native woodland planting.</p> <p>- New native woodland planting to southern face of acoustic bund, around</p>	Changes from minor adverse moderate beneficial	Changes from minor adverse to moderate benefit	<p>Overall gain in vegetation associated with 'gapping up' of existing hedges and extension to hedges and new tree planting to residential streets and open spaces with greater species diversity and associated biodiversity benefits.</p> <p>New areas of native woodland structure planting is also proposed.</p> <p>Increased enclosure and shelter provided by the structure from the new built form and new tree planting</p>

			<p>the southern margin with the Panoramic Park and extension to the woodland at Burdon Lane.</p> <ul style="list-style-type: none"> - New wildflower, meadow grass planting and wetland planting to the natural open spaces and areas around the SUD's features. - New living screen to acoustic treatment [mix of woven and planted willow]. <p>Ensure management proposals are undertaken</p>			<p>Outward views are predicted to be more constrained from the development due to introduction of residential streets and associated built form.</p>
Site Drainage	Low	<ul style="list-style-type: none"> - Creation of two large natural attenuation basins with swales to the north of the site alongside Weymouth Road. - Integration of swales along many residential streets and lower lying edges of open space margins. 	<p>Ensure maintenance proposals are undertaken.</p>	Remains at major beneficial	Remains at major benefit	<p>The development will result in more positive drainage interventions through a system of sustainable urban drainage, thus controlling and minimising flood risk.</p>
Public Rights of Way	Moderate	<p>A section of the W2W cycleway and bridleway is proposed to be diverted from its current route running parallel with the A19 to the south side of the existing hedgerow to bring it north side of the existing hedgerow and along the acoustic bund.</p>	<p>New enhanced network of recreational routes are proposed as part of the residential development</p>	Remains at major beneficial	Remains at major benefit	<p>Increase in network of onsite recreational routes and connections off-site</p>
Tranquillity	Moderate	<p>Reduced Road noise and movement from A19 corridor mitigated by acoustic bund and living screen.</p> <ul style="list-style-type: none"> - Increased vehicular movement and pedestrian activity associated from the new residential areas. - Further activity to Weymouth Road and feeder roads from Doxford Park Highway [further background noise and movement] - Increase street lighting and lights from resident's cars. 	<p>Ensure that measures are in place within road design to lessen vehicle speed</p> <p>Ensure that 'cut off lighting' is used and responsive lighting is considered where areas are ecologically sensitive.</p>	Remains at minor adverse	Remains at minor adverse	<p>Reduction in the site's tranquillity due to the associated activity and street lights from the residential development</p>

Description of visual mitigation measures and predicted effect

Table 16 - Revisited visual effects - post mitigation								
Viewpoint No,	Summary of viewpoint location & drawing reference	Degree of visibility and length of view	Sensitivity of visual receptor to change	Description of effect prior to mitigation	Description of proposed mitigation measure	Changes in predicted Magnitude	Changes in Significance	Residual Effects
1	L-1515-EXP-001 South facing view from southern edge of Burdon Vale residential area at the eastern junction of Englemann Way with the roundabout on Weymouth Road.	Very prominent	High	<p>Those with properties on the southern edge of Burdon Vale which back onto or have their end elevation facing Weymouth Road will have views from their upstairs windows across the intervening green open space and attenuation basin to the proposed dwellings.</p> <p>Motorists and pedestrians on Weymouth Road from the west and those joining from Engleman Way will have views along the 'embankment area'. The landform in this area would to be noticeably altered to incorporate a surface attenuation basin and footpath around the new landform.</p> <p>The existing planting to the top of the embankment is to be retained where possible. The proposed development will be visible between the trees beyond this. Views into the estate will be experienced up the new primary road, which extends from the existing roundabout stump.</p> <p>Across the lower level eastern site edge [to the left of the view], there will be views across a broad green verge, beyond that of residential properties</p> <p>Longer views looking SSE will be shortened with the addition of proposed dwellings. This will also break up the current view of the skyline. The sloping natural form of the fields will be interrupted with the addition of dwellings, gardens, roads and tree planting. The view will become busier with the movements of new residents and the street light levels will also increase with the phasing of the development.</p>	<p>Creation of a tree lined frontage to Weymouth Road with an avenue of trees extending up from the extended access off the existing roundabout stump. New hedgerow planting and tree planting</p> <p>New tree groups to be planted around the attenuation basin.</p> <p>Establishment of a tree lined secondary route between the 'Plateau' and the large field to create a leafy break to the view.</p> <p>Ensure appropriate tree planting conditions and maintenance</p>	Change from major adverse to minor adverse	Change from Major adverse to moderate adverse	<p>Those with properties on the southern edge of Burdon Vale, which back onto or have their end elevation facing Weymouth Road will have views from their upstairs windows across the intervening green open space and attenuation basins.</p> <p>Views will also be of the new extended road access from the roundabout up to the proposed development of 2 and 3 storey dwellings and glimpses of the community centre</p>
2	L-1515-EXP-002 South facing view from southern edge of Burdon Vale residential area at the western junction of Englemann Way onto Weymouth Road.	Very prominent	High	<p>Those with properties on the southern edge of Burdon Vale, which face onto Weymouth Road will have views of the reinstated greenspace which would include a swale and footpath. Beyond this there will be views of the proposed dwellings between and above the existing tree and hedge planting to the top of the embankment.</p> <p>To the right of the view it is likely that the new road junction will be visible. To create this, a section of the landscape structure to the top of the embankment including a section of hedge and individual hedgerow trees will be removed. Because of this new opening there may be glimpsed views at street level into the new development.</p> <p>Those with properties which back onto Weymouth Road will have views from their upstairs windows across the new junction and into the residential extension.</p>	<p>Creation of a tree lined frontage to Weymouth Road. Reinforcement planting of existing hedgerow to the ridge of the 'embankment' including replacement planting where earth remodelling may result in the loss of existing planting.</p> <p>Roadside planting and landscape planting to new entrance.</p> <p>Ensure appropriate tree planting conditions and maintenance</p>	Major adverse changes to minor adverse on completion	Major adverse changes to moderate adverse effect	<p>Longer-term views will be of the reinstated greenspace in the foreground to the other side of Weymouth Road, which is would include an attenuation basin / swale, footpath and tree planting. Beyond this, there will be filtered views of the proposed dwellings between and above tree and hedge planting and the new access road.</p>

3	<p>L-1515-EXP-003</p> <p>View north from designated long distance cycle way [W2W Cycleway]. The view point is from a point on the southern boundary of the site at the junction between the large and middle fields. The viewpoint is fairly level with the site at this point but the site falls away to the north and east.</p>	Very prominent	High	<p>The view from the multi-user route would significantly change with the addition of new houses and streets to the large field.</p> <p>To the left of the view the proposals include a 1.5m high-engineered earth bund and 2.5 m high living screen, which forms part of the acoustic mitigation measures. This would reduce the view into and across the 'middle field' which would also be shortened by the new houses.</p>	<p>The proposals would include a diversion of the W2W cycle route inbound of the site boundary. The route is proposed to be integrated into the north face of the raised engineered earth bund. The new elevated multi-user route would give rise to new views which would include that of the residential development and enhanced green infrastructure.</p> <p>Views north would be experienced and framed by the rises - residential streets running down the fields which maintain outward views.</p> <p>Establishment of a mixed native tree planting along the southern face of the 1.5m high earth bund and behind the 2.5m high living barrier would screen views of the A19 and direct views northwards to the panoramic city and sea views.</p> <p>Ensure appropriate tree planting conditions and maintenance</p>	Major adverse changes to minor beneficial	Major adverse changes to moderate benefit on completion	<p>In time, the native tree planting will establish to provide a visual screen of the A19 from the new elevated multi-user route, The trees to the diverted cycleway will establish and provide direction and setting to the new route.</p>
4	<p>L-1515-EXP-004</p> <p>Burdon Lane looking south west just east of the old road through Blakeney Woods.</p>	Reasonably prominent	Low	<p>Users of this stretch of Burdon Lane will have views over the site of the proposed residential properties. The existing woodland strip to the south, the established hedgerow to the eastern site boundary and Blakeney Woods are to be retained so this will offer some screening of the development and will break-up the view and change from arable land to housing.</p> <p>Longer view up to the higher elevations of the site and current field will be shortened by the proposed dwellings in the foreground.</p>	<p>Reinforcement planting to existing hedge to eastern boundary and creation of a tree lined edge, to link the woodland edges and provide a leafy canopy at a higher level to break the view of the site.</p> <p>Ensure appropriate tree planting conditions and maintenance</p>	Major adverse changed to moderate	Moderate adverse changes to minor adverse	<p>In time, the gapped up hedge to the eastern boundary will establish and fill out and the new tree planting will provide a leafy canopy at a higher level to provide filtered views of the dwellings. If the neighbouring development north of Burdon Lane proceeds then this development will be in the foreground thus dominating any views beyond.</p> <p>Refer to drawing L-1515-PRP-019.</p>
5	<p>L-1515-EXP-005</p> <p>View north from designated long distance footpath and bridleway (Great North Forest Trail) to the south of the site. The viewpoint is from a section</p>	Not prominent	Moderate	<p>The proposed development is not predicted to be visible from this view point.</p> <p>Light levels will increase with the phasing of the development which will cause a barely perceptual increase to the glow above the woods in the mid distance when read with the rest of Sunderland City.</p>	No further mitigation proposed	Remains Neutral	Remains Negligible	<p>The proposed development is not predicted to be visible from this View Point.</p>

	of route just north of the North East Karting Track.							
6	L-1515-EXP-006 Burdon Lane looking south west at the junction with Burdon Village Road.	Not prominent	Low	Users of this stretch of Burdon Lane will have glimpsed views into the site at this viewpoint of the proposed residential expansion. The existing woodland strip to the south at Burdon Lane, the established hedgerow to the eastern site boundary and Blakeney Woods are to be retained so this will offer substantial screening of the development from this direction. Light levels will increase with the phasing of the development which will cause a small increase to the glow above Blakeney Woods.	Reinforcement planting to existing hedge to eastern boundary and creation of a tree lined edge, to link the woodland edges and provide a leafy canopy at a higher level to break the view of the site. Ensure appropriate tree planting conditions and maintenance	Moderate adverse changes to minor adverse	Remains at minor	In time the gapped up hedge to the eastern boundary will establish and fill out and the new tree planting will provide a leafy canopy at a higher level to provide filtered views of the dwellings. If the neighbouring development north of Burdon Lane proceeds then this development will be in the foreground thus dominating any views beyond. Refer to drawing L-1515-PRP-020
7	L-1515-EXP-007 View south west from Tunstall Hills SSSI and local nature reserve elevation marker.	Reasonably prominent	High	There will be distant views of the proposed dwellings and infrastructure from this viewpoint. It is unlikely that the viewer would focus on any element of the completed development as the land use will be an extension of the adjacent character. The skyline of the view is unlikely to be effected by the proposals which maintains a rural 'green' edge.	The establishment of tree lined streets and groups of trees within parks would soften the view of the residential built form. Ensure appropriate tree planting conditions and maintenance	Minor adverse changes to Neutral	Moderate adverse changes to Negligible	As trees within the development establish, they will reduce and soften the built forms of the new residential development and help blend it into the existing suburban character.
8	L-1515-EXP-008 View south east from Penshaw Monument.	Not prominent	High	The proposed development is not predicted to be visible from this view point. Light levels will increase with the phasing of the development which will cause a barely perceptual increase to the glow above the woods to the skyline when read with the rest of Sunderland City and Doxford Enterprise Park.	No further mitigation proposed	Remains Neutral	Not visible	The proposed development is not predicted to be visible from this viewpoint.
9	L-1515-EXP-009 View south from Robertson Road a residential street in Sunderland.	Not prominent	High	There would be a limited and distant glimpsed view of the proposed residential properties which will form an extension of the current landscape character and view.	No further mitigation proposed	Remains Neutral	Not visible	The proposed development is not predicted to be visible from this viewpoint.

9 Residual Effects

Introduction

9.1 This section outlines the predicted residual effects arising from the proposed development following completion. Residual effects are the effects remaining after mitigation measures have been implemented.

Residual landscape effects.

9.2 The below table 14 identifies the potential residual effects to the landscape resources.

Table 17- Identification of potential landscape residual effects	
Landscape resource	Description of Residual Effect
Fields	<p>Change of use from arable agriculture to mixed residential results in a loss of agricultural use but gain in more publically accessible and diverse open space.</p> <p>As part of the habitat regulations and provision of SANG the developer has to set up a management company associated with the management and maintenance of the natural green spaces so it is likely that the area will be more regularly maintained than the current condition.</p> <p>Major earth remodelling and regrading of parts of the site are required to facilitate access, drainage storage, noise mitigation proposals and building plots onto the moderately to majorly steep topography of the existing landscape. The proposals provide the opportunity to integrate these landform changes into the enhanced residential character and public open space features of the development will improve accessibility.</p>
Landscape Structure (Including vegetation / visual character & landmark features / pattern)	<p>Overall gain in vegetation associated with 'gapping up' of existing hedges and extension to hedges and new tree planting to residential streets and open spaces with greater species diversity and associated biodiversity benefits.</p> <p>New areas of native woodland structure planting is also proposed.</p> <p>Increased enclosure and shelter provided by the structure from the new built form and new tree planting</p> <p>Outward views are predicted to be more constrained from the development due to introduction of residential streets and associated built form.</p>
Site Drainage	The development will result in more positive drainage interventions through a system of sustainable urban drainage, thus controlling and minimising flood risk.
Public Rights of Way	Increase in network of recreational routes and connections off-site
Tranquillity	Reduction in the site's tranquillity due to the associated vehicle and pedestrian activity and street lights from the residential development.

Built development and character of nearby area	Extension of urban character to Sunderland's south west through the creation of a new neighbourhood with a strong landscape framework.
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Residual visual effects

9.3 The below table 15 identifies the potential residual effects to the visual receptors.

Table 18 - Identification of potential visual residual effects		
Visual receptor [Sample viewpoint No]	Summary of viewpoint location and drawing reference	Description of Residual Effect
1	L-1515-EXP-001 South facing view from southern edge of Burdon Vale residential area at the eastern junction of Englemann Way with the roundabout on Weymouth Road.	Those with properties on the southern edge of Burdon Vale, which back onto or have their end elevation facing Weymouth Road will have views from their upstairs windows across the intervening green open space and attenuation basins. Views will also be of the new extended road access from the roundabout up to the proposed development of 2 and 3 storey dwellings and glimpses of the community centre
2	L-1515-EXP-002 South facing view from southern edge of Burdon Vale residential area at the western junction of Englemann Way onto Weymouth Road.	Longer-term views will be of the reinstated greenspace in the foreground to the other side of Weymouth Road, which would include a attenuation basin / swale, footpath and tree planting. Beyond this there will be filtered views of the proposed dwellings between and above tree and hedge planting and the new access road.
3	L-1515-EXP-003 View north from designated long distance cycle way [W2W Cycleway]. The view point is from a point on the southern boundary of the site at the junction between the large and middle fields. The viewpoint is fairly level with the site at this point but the site falls away to the north and east.	In time, the native tree planting will establish to provide a visual screen of the A19 from the new elevated multi-user route, The trees to the diverted cycleway will establish and provide direction and setting to the new route.
4	L-1515-EXP-004 Burdon Lane looking south west just east of the old road through Blakeney Woods.	In time, the gapped up hedge to the eastern boundary will establish and fill out and the new tree planting will provide a leafy canopy at a higher level to provide filtered views of the dwellings. If the neighbouring development north of Burdon Lane proceeds then this development will be

		<p>in the foreground thus dominating any views beyond.</p> <p>Refer to drawing L-1515-PRP-019.</p>
5	<p>L-1515-EXP-005</p> <p>View north from designated long distance footpath and bridal way (Great North Forest Trail) to the south of the site. The viewpoint is from a section of route just north of the North East Karting Track.</p>	<p>The proposed development is not predicted to be visible from this View Point.</p>
6	<p>L-1515-EXP-006</p> <p>Burdon Lane looking south west at the junction with Burdon Village Road.</p>	<p>In time the gapped up hedge to the eastern boundary will establish and fill out and the new tree planting will provide a leafy canopy at a higher level to provide filtered views of the dwellings. If the neighbouring development north of Burdon Lane proceeds then this development will be in the foreground thus dominating any views beyond.</p> <p>Refer to drawing L-1515-PRP-020</p>
7	<p>L-1515-EXP-007</p> <p>View southwest from Tunstall Hills SSSI and local nature reserve elevation marker.</p>	<p>As trees within the development establish, they will reduce and soften the built forms of the new residential development and help blend it into the existing suburban character.</p>
8	<p>L-1515-EXP-008</p> <p>View southeast from Penshaw Monument.</p>	<p>The proposed development is not predicted to be visible from this View Point.</p>
9	<p>L-1515-EXP-009</p> <p>View south from Robertson Road a residential street in Sunderland.</p>	<p>The proposed development is not predicted to be visible from this View Point.</p>

10 Summary & Conclusions

Introduction

10.0 This chapter has assessed the potential landscape and visual effects of the proposed residential development at Chapelgarth to the south west of Sunderland. The predicted effects are outlined below.

Summary of key issues: Landscape Effects

10.1 The predicted effects for landscape resources have been thoroughly assessed through a combination of desk study research and site surveys of the site and the study area. The effects have been considered at both stages: construction and completion.

During construction

- Temporary moderate adverse effects are predicted for local recreational users who use the informal networks around the field boundaries due to safety precautions regarding the operations, so restrictions and diverted routes are likely to be put in place until permanent new footpaths and cycle ways are constructed.
- Minor adverse effects are predicted to the local field character and landscape structure due to the removal of sections of hedges and felling of the occasional tree and tree group for construction access. This will be mitigated as part of the main works where substantial replanting is proposed.

On completion

- The predicted major adverse effect of the fields is the loss of agricultural land and landform changes relating to the accommodating the residential plots and associated access and infrastructure. However, the residual effect would be reduced to moderate adverse by the re-provision of open space as alternative natural greenspace and space for play, recreation and allotments. Earth modelling would be sensitively designed and integrated as a feature of the site. Site won materials from excavations would be used were regrading for access or raising for acoustic mitigation is required.
- The predicted minor adverse effect on landscape structure is due to the loss of a few short sections of hedgerows and removal of sections of existing field boundary hedges and individual trees to allow new roads to be constructed. Through mitigation of

'gapping up' existing hedgerows and extending others as well as a major tree planting strategy of street trees and strips of native woodland planting the predicted effect increases to moderate benefit.

- The predicted minor adverse effect on the perceived tranquillity of the site for recreational users is the increase in activity; both vehicular and pedestrian associated with the residential expansion. Increased lighting through street lighting and introduction of car usage to the site adds to this. The proposed acoustic treatment to the A19 would help to mitigate existing traffic noise and sight of the dual carriageway substantially however the net effect remains predicted to be minor adverse.

In combination

- The predicted effect of both the Chapelgarth and Land at Burdon Lane residential developments is major adverse on the loss of arable fields. However, it is considered that the change to the local character is less adverse due to the proximity of the developments to existing residential neighbourhoods and the introduction of new landscape structure and open space provision.

Summary of key issues: Visual Effects

10.2 Nine viewpoints were selected agreed with SCC landscape officer and assessed at the stages of the project life cycle including construction and completion.

During construction

- Major adverse effects are predicted for residents and recreational users along Weymouth Road during the initial enabling works of the new road junction, excavations of the drainage ponds and services installations. These are predicted to lessen with the completion of the works and the establishment of the new planting.
- Temporary moderate adverse effects are predicted from the stockpiling of excavated materials, the construction hoarding, the general construction works visible above hoarding of taller plant and machinery and lighting. These are predicted to lesson as the construction phases move further south into the site away from the existing residential areas and beyond the existing boundary vegetation.

- Minor adverse effects are also predicted from the of deliveries and movement of HGV's onto the site. This will be mitigated by the control of the working hours and the containment of vehicles within a site compound.
- Viewpoint 3 is experienced by recreational users of the long distance cycleway was assessed as having a major adverse significant effect arising from the construction of the 1.5m high acoustic earth bund, as the panoramic view of the city and coastal views would be temporarily lost and the remaining outlook would be over the A19 road corridor. The multi-user route is proposed to be diverted to the north side of the bund and routed over the raised earth form which would result in a minor benefit as the outward views would be re- establishing. New tree planting is also proposed along this route along with a living acoustic barrier. The final residual predicted effect of these works is a moderate benefit.

On completion

- Viewpoint 1 is predicted to experience a major adverse effect due to the sensitivity of the residential receptor, the prominence of the development to the viewpoint and the magnitude of change of the view from green open space to residential development and associated infrastructure works. Proposed mitigation measures including maintaining a section of green open space between the existing residents and the new development and creating a tree-lined frontage with tree-lined streets extending from this is predicted to reduce the residual effect to moderate adverse. The predicted magnitude of the effect was reduced from Major to Minor in consideration of the long term and the existing residential estate context.
- Viewpoint 2 is also predicted to have an initial major adverse effect on completion due to impact of constructing the new vehicular junction and changes to landform to accommodate a drainage attenuation basin. Sections of the existing landscape structure of the vegetation to the embankment would need to be removed to aid with access and changes in level. Through mitigation of landscape design to replant the embankment and add trees to the Weymouth road frontage it is predicted that the residual effect of the change would be moderate adverse with the establishment of the planting.
- Viewpoints 4 and 6 from Burdon Lane looking south west towards the site are predicted to have a respective moderate and minor adverse effect due to the change in the view from fields to residential. This view of the development is less prominent from these viewpoints due to the intervening existing landscape

structure of Blakeney Woods and the woods at Burdon Lane, which conceal part of the site. A hedge line also extends along the eastern boundary between the woods with is proposed to be 'gapped up' and a tree line added to mitigate to soften the view of the site further and lessen the residual effect to minor.

- Viewpoint 7 looking south from the Tunstall Hills SSSI and local nature reserve has been predicted as moderate adverse in the short to midterm due to the distant views of the proposed development within the setting of the visitor attraction. The proposed tree planting to the new street trees and open spaces within the development are predicted to lesson this effect to negligible as when they establish they are predicted to reduce and soften the views of the built forms. This would also help to blend it into the character of the adjacent residential areas.
- Three viewpoints (five, eight & nine) were assessed not predicted to have a view of the proposed development or the view is so distant or glimpsed that the effect would be negligible or have no significant effect.

In combination

- Viewpoints four and six are effected by the combined views of both the Chapelgarth and Land at Burdon Lane developments from Burdon Lane which is experienced mostly by the traveling public but also used by recreational users. The change in overall significance of the in combination effects of both developments is Minor adverse to Moderate adverse.

Conclusion

- 10.3 The significance of the potential landscape and visual effects have been assessed. These have informed primary mitigation which has been integrated into the design development of the proposed masterplan for the residential expansion.
- 10.4 Following mitigation, the residual effects arising for landscape resources are moderate adverse significance for the loss of fields in place of increased road network and built development. There would also be a minor adverse significance for the loss of openness of views from the site and decreased tranquillity of the spaces. The other assessed landscape resources were concluded to be a moderate benefit for the vegetation mitigation and enhancements to the landscape structure and major benefit for the increased network of recreational routes and site drainage.

- 10.5 Overall, the predicted visual effects arising from the development are major adverse for the visual amenity of residents with properties on the southern edge of the Burdon Vale neighbouring development during the initial construction operations. This will improve to moderate adverse significance on completion of the development.
- 10.6 Similarly for recreational receptors using the W2W cycleway the effect of the temporary views of construction works are predicted be major adverse and increasing to moderate benefit on completion.
- 10.7 For all other viewpoints the change would be minor or negligible or the development is predicted to be not visible.

11. Abbreviations

- SCC - Sunderland City Council
- EIA - Environmental Impact Assessment
- ES - Environmental Statement
- LVIA - Landscape and Visual Impact Assessment
- SSGA - South Sunderland Growth Area
- SANG - Suitable Alternative Natural Greenspace
- SSSI - Sites of Special Scientific Interest
- SAC - Special Area of Conservation
- SPA - Special Protection Area
- LNR - Local Nature Reserve
- LWS - Local Wildlife Site
- SNCI's - Sites of Nature Conservation Importance
- RPA - Root Protection Area [For Trees]

12. References

- Cundall, 2015. Phase 1 Preliminary Geotechnical and Geoenvironmental Assessment - Appendix A, Historical Maps and Plans, pp38-91.
- Landscape Institute and Institute of Environmental Management & Assessment, 2013. Guidelines for Landscape and Visual Impact Assessment. Third Edition. Oxon: Routledge
- Landscape Institute, 2011. Photography and photomontage in landscape and visual impact assessment - Advice note 01/11 [pdf]. Available at:
<http://www.landscapeinstitute.org/PDF/Contribute/LIPhotographyAdviceNote01-11.pdf>
- LUC, 2015. South Sunderland Growth Area Landscape Character Assessment. Prepared for Sunderland City Council. Edinburgh: LUC
- LUC, 2015. City of Sunderland Landscape Character Assessment, DRAFT. Prepared for Sunderland City Council. Edinburgh: LUC
- Magic Map. [online] Available at: <http://www.magic.gov.uk/MagicMap.aspx>
- Natural England, 2013. National Character Area Profile - 14: Tyne and Wear Lowlands [pdf]. Available at:
<http://publications.naturalengland.org.uk/publication/4683608954503168?category=587130>
- Natural England, 2013. National Character Area Profile - 15: Durham Magnesian Limestone Plateau [pdf]. Available at:
<http://publications.naturalengland.org.uk/publication/8308038?category=587130>
- Ordnance Survey, 2000. Durham & Sunderland. Explorer series, Sheet 308, 1:25000. Southampton: Ordnance Survey
- Sunderland City Council, UDP, 1998. Available at:
<http://www.cartogold.co.uk/sunderland/text/00cont.htm>
- Sunderland City Council, Jan, 2016. South Sunderland Growth Area - Draft Supplementary Planning Document
- Sunderland City Council, UDP Proposal Map, 1998. [online] Available at:
<http://www.cartogold.co.uk/sunderland/sunderland.htm>
- Tnei, 2014. SCC Sunderland South - Ecological Assessment, Management Plan & Design Strategy. Prepared for Sunderland City Council. Newcastle upon Tyne: tnei
- URS, 2015. South Sunderland Growth Area SPD: Appropriate Assessment. Prepared for Sunderland City Council. Edinburgh: URS

APPENDIX 1 - Assessment tables

Table 06 - Landscape Baseline									
Landscape Resources	Baseline Description						Value of landscape	Susceptibility to change	Duration and reversibility
National Character Area: NCA 15 Durham Magnesian Limestone Plateau	Gently undulating plateau - open arable fields and grazing pasture - low hedges and few trees - large urban and industrial context - A19 transport corridor is a prominent feature - Disused colliery railways and other footpaths provide good opportunities for outdoor recreation and enable commuting by bike.						Low / local	Moderate	Long term permanent
Local character Area: Clay Plateau	Elevated plateau between 100m and 170m - Glacial till underlain by rocks of the Magnesian Limestone series.- Mature hedgerows and field boundary features provide a legibility of past land use - Agricultural landscape - Little above-ground drainage evident - small stream flows through Blakeney Woods - Urban fringe.						Low / local	Moderate	Long term permanent
	Existing site character areas								
	Plateau	Embankment	Square Field	Middle Field	Large Field	Undulating Meadow [Inc. sunken area]			
Fields	<p>The plateau functions as unmanaged open space. Rough grassland, with ruderal weeds and self-set young - infrequently managed</p> <p>Includes a reasonably level area of land. This area is the lowest point on the site to the north east with the roundabout on Weymouth Road at 106.2m AOD. The land rises quickly from the roundabout to the level area and then more steeply to its southern and western boundaries. The embankment to the west is split level creating a smaller level section prior to rising to the ridge of the 'Embankment'.</p>	<p>The embankment functions as unmanaged open space. Rough grassland - Infrequently managed</p> <p>Faces north and addresses Weymouth Road, following the road west to east. It is steeply graded varying from 1:5 to the west, 1:8 to the central area and 1:3 to the eastern extent.</p>	<p>Agricultural use only. Arable- cultivated and harvested regularly during the year Desire lines follow the field boundaries.</p> <p>This field has a slightly gentler slope than the others do.</p> <p>The highest elevation of the is to its southern corner at 128.0m AOD, falling to the lowest corner to the north at 115.5m AOD. The field also falls to the east to 124m AOD and to the west at 124.9m AOD.</p>	<p>Generally agricultural use only. Arable - cultivated and harvested regularly during the year</p> <p>Desire lines follow the field boundaries. A wider area of fallow land has been maintained to the southern edge of the field following the hedge line.</p> <p>The greatest elevation is to the south eastern corner at 139.0m AOD. It falls way to the west to 128.0m AOD and to the north at approximately 124.0m AOD. The steepest section of this field is through the middle falling at a grade of 1:15.</p>	<p>Generally agricultural use only. Arable - cultivated and harvested regularly during the year</p> <p>Desire lines follow the field boundaries. A wider area of fallow land has been maintained to the southern edge of the field following the woodland.</p> <p>Sits across the greatest elevation of the site at 139.5m AOD at its southern point with the W2W cycleway. It falls to the north western corner to an elevation of 121.5m AOD with the lowest point to the north eastern corner with Blakeney Woods at 112.5m AOD. Falls across the field range from 1:16 to 1:24.</p>	<p>This area functions as unmanaged open space. Rough grassland with some tree groupings - infrequently managed.</p> <p>The highest elevation is to the south east at 138.0 m AOD falling to the north western corner to 125.8m AOD. A localised Knoll exists to the southern half of the site and the land generally falls towards the western boundary with the disused railway cutting.</p>	Low - medium	Moderate	Long term. Non reversible

<p>Landscape Structure (Including vegetation / visual character & landmark features / pattern)</p>	<p>Very little sense of enclosure Semi improved grassland with some self-set young trees. Blakeney Woods lies to the eastern boundary of this area. The areas landform is its most distinctive feature. Views are limited to the near views of Weymouth Road and the neighbouring residential area of Burdon Vale and Portland Academy.</p>	<p>The steep landform is its most distinctive feature Rough grassland to embankment with hedgerow and trees to the top of the western half of the embankment and self-set trees to the eastern half of the embankment. Very little sense of enclosure Views are limited to the near views of Weymouth Road and the neighbouring residential area of Burdon Vale.</p>	<p>Considerable sense of enclosure due to the presence of the historic field boundaries which are the most distinctive feature for this area. Enclosed to the north east and the south east by a hedgerow field boundary with hedgerow trees. Enclosed to the north west by a linear grouping of trees [the canopy layer of the sunken area]. Enclosed to the north west by the woodland edge running parallel to Moorside Road. The enclosed nature of this field results in very few outward views.</p>	<p>Moderate sense of enclosure due to partial field boundaries. Sense of enclosure is greatest to the north and least to the elevated south. Partially enclosed to the north west and north east by hedgerow boundaries which include hedgerow trees. Partially enclosed to the east by a tree grouping to the centre of the site and a hedgerow boundary which extends south of this. A species rich hedgerow also runs the length of the southern boundary of the field. The most striking feature is a wind thrown Beech tree which partially leans to east and is found at the end of the western tree lined field boundary. Outward views to the coast to the east and Sunderland City to the north can be experienced above tree tops. Field boundaries intervene. The most open and long views are from the elevated southern edge.</p>	<p>Very open. No sense of enclosure. A hedgerow marks the eastern edge of the field. The linear plantation woodland north of Burdon Lane marks the southern extent of the field. The field is partially contained to the west by a tree grouping to the centre of the site and a hedgerow boundary which extends south of this. Has the most open and longest outward views particularly from the southern and south eastern boundaries of the field. Mid distant views to the north and east are valued of the Tunstall Hills and historic Ryhope Pumping Station Chimney. Long distant views to the north and east include the Cleadon Hills and Water Tower, Sunderland City and associated landmarks including the Stadium of light and the North Sea. Distant views of the outline of the Cheviot Hills are also visible on a clear day from some viewpoints look the north west</p>	<p>Considerable sense of enclosure due to long narrow space and tree lined field boundaries. Sense of enclosure is greatest to the north and least to the elevated south. Rough grassland with one isolated tree grouping to the top of a small knoll. The northern extent of this area is marked by the woodland edge of Moorside Road. Tree groupings mark the eastern extent with a wider grouping within the sunken area. Woodland planting mark the western edge of the area and follow the line of the disused railway cutting. Heavily filtered views are experienced of the Doxford Business Park through the western tree lined edge. Some long distance views can be experienced north eastwards between the large gap in the field boundaries to the southern edge of the area.</p>	<p>Medium</p>	<p>Moderate</p>	<p>Long term. Non reversible</p>
<p>Site Drainage</p>	<p>No water bodies were viewed during the site visit although we understand from consultations with residents that standing water / flooding occurs in this area.</p>	<p>No water bodies viewed during site visit.</p>	<p>No water bodies viewed during site visit.</p>	<p>No water bodies were viewed during the site visit. However historic maps refer to pond locations central to this field and also within the tree grouping to the centre of the site.</p>	<p>No active water bodies were found to be present during the site visit, an area of standing water was evident within the southern edge by the woodland north of Burdon Lane.</p>	<p>No water bodies viewed during site visit.</p>	<p>Low</p>	<p>Low</p>	<p>Long term. Non reversible</p>

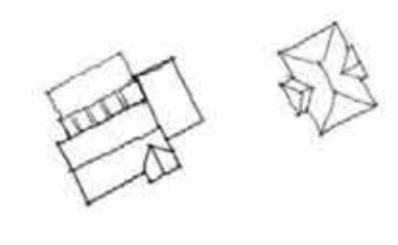
Public Rights of Way	No public rights of way exist, however many informal desire lines / well-trodden paths criss-cross the area leading from Weymouth Road to the edge of Blakeney Woods and south following the field boundaries.	No public rights of way exist, however many informal desire lines / well-trodden paths lead up from Weymouth Road and follow the field boundaries.	No public rights of way exist, however informal desire lines / well-trodden paths follow the field boundaries and connect into paths within the woodland edge to Moorside Road.	No public rights of way exist, however informal desire lines / well-trodden paths follow the field boundaries and pass between the central grouping of trees to the eastern field onwards to the multiuser route to the south of the site.	No public rights of way exist, however informal desire lines / well-trodden paths follow the field boundaries and pass between the central grouping of trees to the western field and onwards to the multiuser route to the south of the site. A desire line follows the woodland edge to the south of the site east - west connecting the track through Blakeney with the Multi-user route.	No public rights of way exist, however informal desire lines / well-trodden paths run the full length of the area connecting the woodland edge on Moorside Road with the Multi-user route to the south	Medium	Moderate	Long term. Non reversible
Tranquillity	Quite quiet with low activity. Higher activity around Weymouth Road at peak times.	Quite quiet with low activity. Higher activity around Weymouth Road at peak times.	Calm in general, with some background noise from traffic along road corridors. Agricultural operations would change this experience on limited occasions.	The northern half of this area is generally calmer with little activity other than a few recreational users. The southern half of the site is highly effected by the constant background noise from the A19 corridor. Agricultural operations would also change this experience on limited occasions.	The northern half of this area is generally calmer with little activity other than a few recreational users. The southern half of the site is highly effected by the constant background noise from the A19 corridor. Agricultural operations would also change this experience on limited occasions.	Calm in general with some background noise from traffic along road corridors and some distraction from glimpsed views and noise from the Doxford Business Park. The area is frequented by recreational uses.	Low	Moderate	Long term. Non reversible

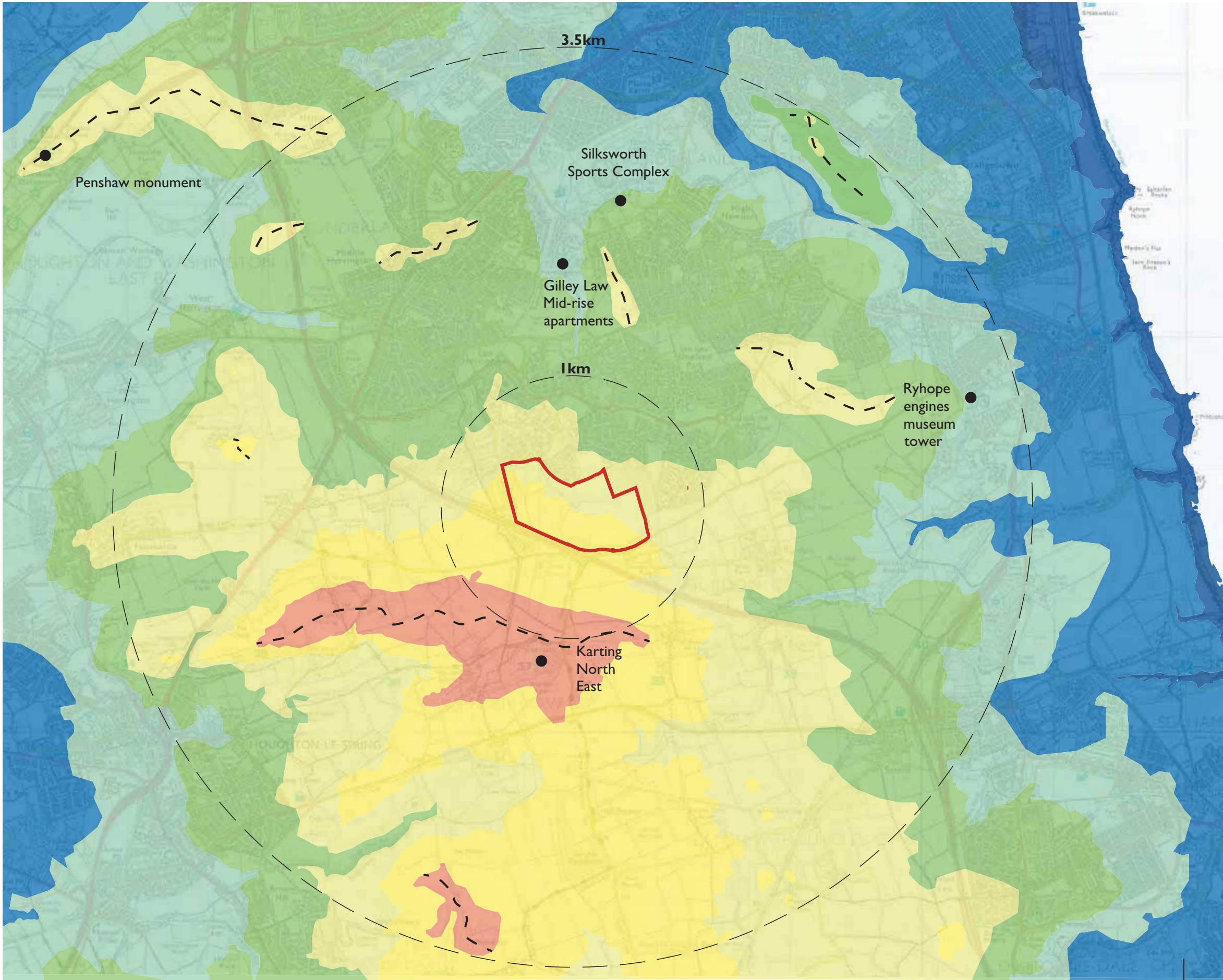
Table 08: Visual Baseline						
Viewpoint No.	Figure Reference	Description of viewpoint location	Description of baseline view	Type of receptor and number of viewers	Value of View	Degree of visibility of site
1	L-1515-EXP-001	South facing view from southern edge of Burdon Vale residential area at the eastern junction of Engleman Way with the roundabout on Weymouth Road. Burdon Vale is a suburban residential area to the north of the development site. The viewpoint is relatively level with the northern edge of the development site. The site slopes up steeply to the right of the view, remaining more level in the foreground of the left of the view before rising steeply in the middle and then a more gradual climb in the distance.	Local open view of a planted round about on Weymouth road, including traffic signs, street signage and lighting columns in near distance and site beyond. The viewpoint is fully of the site although only a small part of the full extent of the development is visible notably the site character areas of, embankment, plateau and large field. Within the site both the plateau to the left and the embankment to the right of the view are rough grassland. A hedgerow and individual trees break the onward view to the right to the skyline forming the field boundary to the top of the embankment. Further east two field boundaries converge to form a grouping of vegetation and trees. To the left of the view a slim wedge of the slope of the large arable field is visible in the middle distance with a predominately tree lined skyline beyond. Within the skyline there is a gap between the southern edge of Blakeney woods and the southern woodland edge.	The viewpoint represents the outlook of the dwellings, which back onto the site and motorists leaving Burdon Vale. This viewpoint is also representative of dog walkers and other people crossing from Burdon Vale to use the green networks on the site. Burdon Vale is a small estate so a medium number of viewers will experience this view.	Medium	Very prominent

			A well-trodden informal footpath is visible leading up the embankment from the crossing on Weymouth Road. Approximate distance to the site perimeter 18m.			
2	L-1515-EXP-002	South facing view from southern edge of Burdon Vale residential area at the western junction of Engleman Way onto Weymouth Road. Burdon Vale is a suburban residential area to the north of the development site. The viewpoint is relatively level across Weymouth Road then rises steeply within the site.	Local focused view of Weymouth Road and lighting columns, with rough grass embankment rising steeply from verge to hedgerow with hedgerow trees forming skyline. Although the view is fully of the site only a very small section of the site is visible from this viewpoint. The hedgerow breaks the view of the 'square' field which rises beyond. Approximate distance to the site perimeter 18m.	The viewpoint represents the outlook of the dwellings which form a crescent around the junction. The degree of outlook varies with the plot location. A small portion of dwellings face the view, others are side on and the remaining back onto the site where only upstairs windows would look out onto the site. This viewpoint is also representative of motorists leaving Burdon Vale and dog walkers and other people crossing from Burdon Vale to use the green networks on the site. Burdon Vale is a small estate so a medium number of viewers will experience this view.	Medium	Very prominent
3	L-1515-EXP-003	View north from designated long distance cycle way [W2W Cycleway]. The viewpoint is from a point on the southern boundary of the site at the junction between the large and middle fields. The viewpoint is fairly level with the site at this point but the site falls away to the north and east.	The view is fully of the site, its southern boundaries and setting to the north, however only a portion of two of the site character areas are visible, notably part of the 'middle field' and 'large field'. The view is divided into three parts by the established hedgerows of the field boundaries and tree lined edge to the south of the site. To the far left of the view is the continuation of the W2W cycleway and southern hedgerow. A tractor access gap between field boundaries provides a view into the middle arable field. The length of view is constrained by the next hedge lined field boundary with individual trees. The large arable field falls away in the foreground to the centre and right of the view to open up wider longer views of the southern suburbs, Sunderland City, Silksworth and Tunstall Hills and distant views of the South Tyneside and the sea. Noise, vehicle fumes and rapid movement of the A19 which is to the rear of the viewpoint is a negative experience.	Medium number of users of the W2W cycleway including local residents, exercising dogs and horses and visitors. Their attention is likely to be focused on the enjoyment of the landscape and views.	Medium	Very prominent
4	L-1515-EXP-004	Burdon Lane looking south west just east of the old road through Blakeney Woods. The view point is taken from the same viewpoints identified within the Unitary Development Plan (UDP) in Chapter 19, SA38.5 as being of particular importance. However, the direction of the view is towards the Chapelgarth site, which differs from those, listed which are 'northwards from highest points on road, eastwards to North Sea and south to Burdon Village'. The viewpoint is from the highest point on this section of road and shares its elevation with a mid point within the site.	Local distance, open view of rising agricultural land with hedgerows and individual trees to field boundaries. The site forms a large part of the view although only a small area of the site is visible, notably an oblique angle of the 'large field' The hedgerow which marks the eastern extent of the site obscures part of the view into the site. The woodland edge to the south of the site also hides the view of the most southern extent of the site. Roofs of the residential estate of Burdon Vale are visible to the right of the view, setting the site on the edge of the suburbs of Sunderland. Telegraph poles follow Burdon Lane to the skyline of the view where a farm steading is visible on the left of the lane. Approximate distance to the site perimeter 400m.	Medium number of road users, Low number of agricultural workers of adjacent agricultural fields. Low number of walkers / cyclists [local residents].	Low	Reasonably prominent

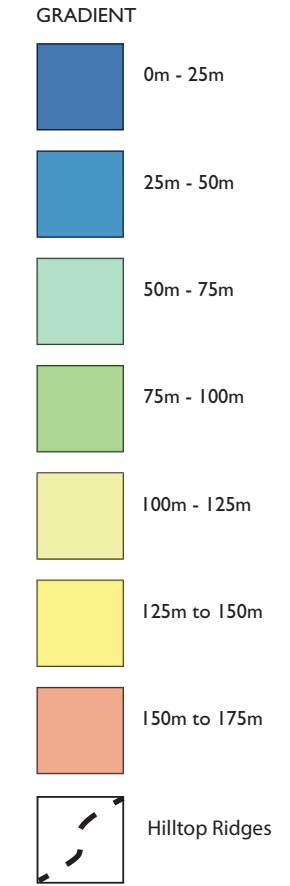
5	L-1515-EXP-005	View north from designated long distance footpath and bridle way (Great North Forest Trail) to the south of the site. The viewpoint is from a section of route just north of the North East Karting Track. The viewpoint is from an elevated position above the level of the site.	<p>Long distance open, panoramic view of agricultural land in the foreground falling away to the tree lined corridor of the A19 in the mid ground to Sunderland City, South Tyneside, Ryhope and views to the sea in the distance. A few steadings, kennels and stable buildings are visible in the mid distance along with a glimpsed view of traffic on the A19 to the right of the view and the fly over of Burdon Lane. Tree planting to the south of the site along with trees to the embankments of the A19 cutting completely block any views into the site.</p> <p>The viewpoint is quite local to the site at approximately 800m distance to the site perimeter, however the site is not visible.</p>	Medium number of users of the Great North Forest Trail including local residents, exercising dogs and horses and visitors. Low number of agricultural workers of adjacent agricultural fields.	Medium	Not prominent
6	L-1515-EXP-006	Burdon Lane looking south west at the junction with Burdon Village Road. The view point is taken from the same viewpoints identified within the Unitary Development Plan (UDP) in Chapter 19, SA38.5 as being of particular importance. However, the direction of the view is towards the Chapelgarth site, which differs from those, listed which are 'northwards from highest points on road, eastwards to North Sea and south to Burdon Village'. The viewpoint is from the highest point on this section of road with the view looking up to the site,	<p>Medium open view of Burdon Lane in foreground with agricultural land to both sides. A mix of timber post and wire mesh, hedgerows and individual trees mark the field boundaries. Pylons cross the view in the mid-distance. The land raises to two hillocks in the distance to the left of the view. To the middle and right of the view tree cover to the skyline shortens the view. A small gap between the southern extent of Blakeney woods and the woodland edge further south allows a glimpse of the site. Only a very small portion of the 'large field' can be seen of the site and the site itself plays a small part of the proportion of the view point. Approximate distance to the site perimeter 1.1km.</p>	Medium number of road users, Low number of agricultural workers of adjacent agricultural fields. Low number of walkers / cyclists, especially on Burdon Village Road [local residents on their daily routine].	Low	Not prominent
7	L-1515-EXP-007	View south west from Tunstall Hills SSSI and local nature reserve elevation marker. The view point is lower than the upper elevation of the site.	<p>Medium distance elevated open view with arable agricultural fields stretching from the foreground to mid distance in the centre of the view, flanked to either side by wooded denes. Residential use rises beyond to the right of the view and is punctuated by the Gilley Law apartments with a more rural setting beyond.</p> <p>Residential land- use rises also from the centre of the view with a school and playing fields sitting at an elevated position to the left of the view. The skyline features wind turbines and pylons.</p> <p>Portions of the arable fields of the site are visible between woodland and rural land use rises further behind the site in the distance. The site forms part of a wider view and is flanked by existing residential land use. Approximate distance to the site perimeter 2.9km.</p>	Medium number of users for recreational purposes including local residents, exercising dogs and visitors for the geology and botany interest. Views from the elevated landscape are likely to be an important contributor to the experience of the visitor.	Medium	Reasonably prominent
8	L-1515-EXP-008	View south east from Penshaw Monument. The view point is only slightly more elevated than the upper areas of the site.	<p>Long distance elevated view overlooking wide valley with Herrington Country Park in the foreground and rooftops of Doxford Park and Sunderland City in the distance. A varied patchwork of agricultural fields, with hedge lined boundaries, woodland areas and smaller villages and steadings feature in the mid ground. Pylons cross the view in the mid ground and skyline along with wind turbines on the skyline of the right of the view.</p> <p>Site not visible long distance, obscured by Doxford enterprise park and woodland planting. Approximate distance to the site perimeter 4.1km.</p>	The number of viewers is seasonally variable reflecting its status as a local landmark and visitor attraction. Viewers include local residents as part of a daily routine and visitors which can include coach trips. Overall a high number of viewers experience this view which contributes to the experience of visiting the monument.	Medium	Not prominent

<p>9</p>	<p>L-1515-EXP-009</p>	<p>View south from Robertson Road a residential street in Sunderland. The viewpoint is lower than the site elevation.</p>	<p>Long distance open view over Wear Valley with rough grassed open space area in the foreground falling to River Wear. View over a mix of roof tops, of commercial and enterprise big sheds and residential properties with individual and pockets of trees, Land rises more sharply to the southern bank with a quarry in the centre of view and open space either side. This changes to residential to the right with more big sheds, residential and glimpses of Sunderland city to the left. The skyline is softly rolling and rising from the coast in the east. Features include a historic chimney, Tunstall Hills, Silksworth Hills, wind turbines and Penshaw Monument in its elevated position surrounded in agricultural fields to the west. Only a glimpsed view of site is visible in distant skyline between woodland. The site forms minor element in a panoramic view. Active view with A19, and Metro line visible. Approximate distance to the site perimeter 7km.</p>	<p>Few residents with houses with direct view. Moderate number of walkers (local residents on their daily routine) using the footpath along side the houses and open green space in front.</p>	<p>Medium</p>	<p>Not prominent</p>
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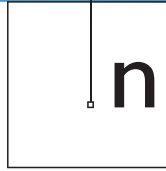


.03	Red line boundary updated	24.02.16	EF	SWM
.02	Amended for clarity	06.01.16	AH	SWM
.01	First Issue	04.08.15	JM	SWM
Rev	Amendments	Date	Drwn	Chkd

Project
 Chapelgarth, Sunderland
 Drawing Title
 Site Context
 Surrounding local topography

Project No. 1515	Scale @ A3 1:30,000	Project Status For Planning
Drawing No. L-1515-PRP-001		Revision 03

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Key

- + 139.5 Spot Heights
- Historic Pond
- Existing pond
- 100m Gradient
- 140m
- Steep sides to hidden hollow

03	Red line boundary updated	24.02.16	EF	SWM
02	Drawing paper size amended	06.01.16	AH	SWM
01	First Issue	04.08.15	JM	SWM
Rev	Amendments	Date	Drwn	Chkd

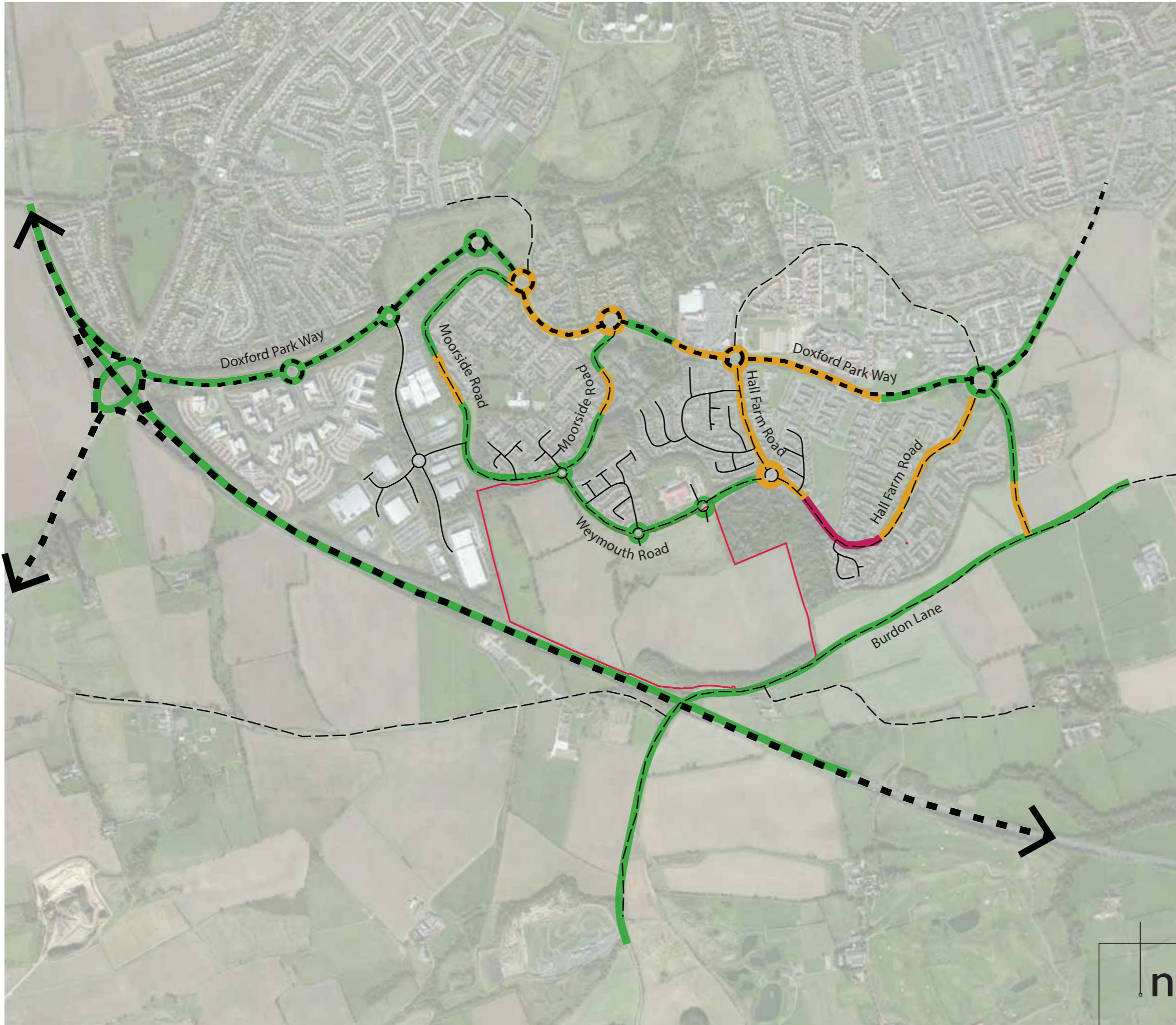
Project
 Chapelgarth, Sunderland
 Drawing Title
 Site level
 Topography, aspect & drainage

Project No. 1515	Scale @ A3 1:5000	Project Status For Planning
Drawing No. L-1515-PRP-002		Revision 03

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





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Landscape quality

-  **Good -**
Existing green landscape structure.
Could benefit from further enhancements to aid identity, landscape character and wayfinding
-  **Fair -**
Reasonably maintained amenity grass verges.
Could benefit from more landscape structure, tree planting to provide interest and create character and identity
-  **Poor -**
Lacks landscape structure and route is flanked by mix of residential boundaries of varying condition
-  'A' Road
-  'B' Road
-  Minor Road
-  Residential / access roads

.02	Issued for Planning	24.02.16	AH	SWM
.01	First Issue	04.08.15	SWM	PO
Rev	Amendments	Date	Drwn	Chkd

Project
Chapelgarth, Sunderland

Drawing Title
Landscape quality of principal vehicle approaches

Project No. 1515	Scale @ A3 1:12,500	Project Status Planning
Drawing No. L-1515-PRP-003		Revision 02

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-  Existing desire lines across site
[Well trodden paths]
With 10m green buffer
-  Off site footpaths
-  Public Right of Way
- [Footpath]
-  Public Right of Way
- [Bridleway]
-  Great North Forest Trail
-  National Route 70 /
Walney to Wear [W2W]
Long distance coast to coast
cycle route
-  Country Lane
-  Existing accesses to site.
Links and connections to surrounding
network.
Future gateways locations
-  Site adjacent to existing
footpath through Blakeney
Local Wildlife Site

.04	Red line boundary updated	24.02.16	EF	SWM
.03	Desire lines updated	22.02.16	SL	SWM
.02	Issued as part of LVIA	22.12.15	SWM	PO
.01	First Issue	04.08.15	JM	SWM
Rev	Amendments	Date	Drwn	Chkd

Project
Chapelgarth, Sunderland
Drawing Title
Recreational routes
Existing links and site desire lines

Project No. 1515	Scale @ A3 1:7500	Project Status FOR PLANNING
Drawing No. L-1515-PRP-004		Revision 04

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.03	Red line boundary updated	24.02.16	EF	SWM
.02	Issued as part of LVIA	22.12.15	SWM	PO
.01	First Issue	04.08.15	JM	SWM
Rev	Amendments	Date	Drwn	Chkd

Project
Chapelgarth, Sunderland

Drawing Title
Existing Site
Character Areas

Project No. 1515 Scale @ A3 1:5000 Project Status FOR PLANNING

Drawing No. L-1515-PRP-007 Revision 03

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Key

- Application Site
- Radius from the center of the site (distance as noted)
- 9
↖
↘
 Viewpoint locations
 Exact viewpoints to be reviewed on site and discussed with Sunderland City Councils Landscape Officer

.04	Site boundary updated	24.02.16	AH	SWM
.03	Viewpoint locations amended following further site visit analysis	01.12.15	AH	SWM
.02	Viewpoint #7 relocated further north to highest point in study area at SCC request	07.09.15	SWM	PO
.01	First Issue	04.08.15	SWM	PO
Rev	Amendments	Date	Drwn	Chkd

Project
 Chapel Garth, Sunderland

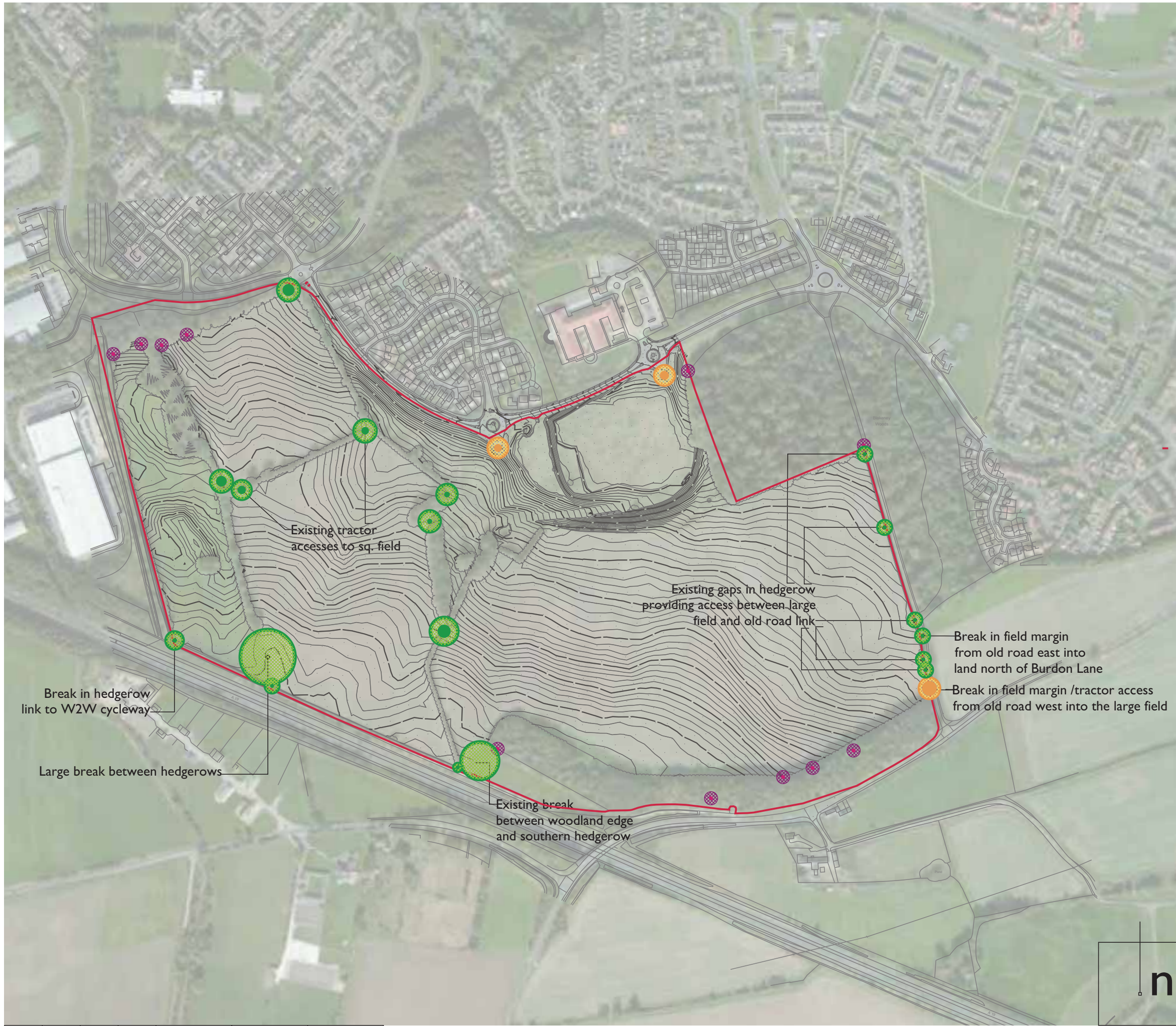
Drawing Title
 Viewpoint Locations

Project No. 1515	Scale @ A3 1:50,000	Project Status Planning
Drawing No. L-1515-PRP-009		Revision 04

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Hardworks

-  Existing vehicle access points
-  Existing gaps in hedgerows and breaks between field margins
-  Existing well worn accesses into woodland areas

02	Issued for Planning	24.02.16	AH	SWM
01	First Issue	04.09.15	SWM	PO
Rev	Amendments	Date	Drwn	Chkd

Project
Chapel Garth, Sunderland

Drawing Title
Existing site accesses
and gaps in hedgerows

Project No. 1515	Scale @ A3 1:5000	Project Status Planning
Drawing No. L-1515-PRP-010		Revision 02

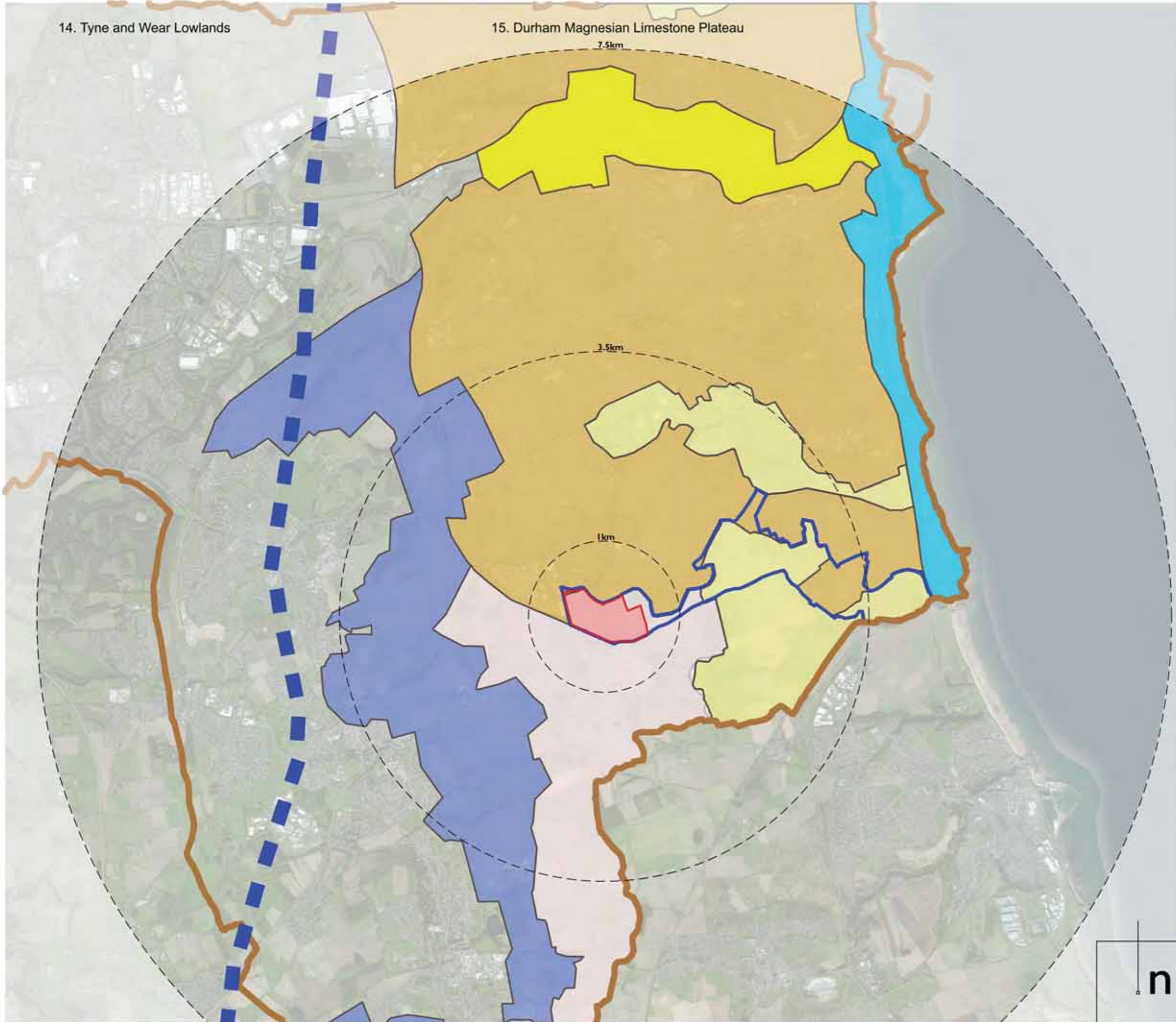
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14. Tyne and Wear Lowlands

15. Durham Magnesian Limestone Plateau









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Key

-  Application Site
-  Radius from the center of the site (distance as noted)
-  Sunderland City Boundary
-  SSGA Boundary
-  National Character Area Border between Area 14 - Tyne & Wear Lowlands & Area 15 - Durham Magnesium Limestone Plateau

City of Sunderland Landscape Character Types (within 7.5km radius of project)

-  Clay Plateau
-  Coastal Limestone Plateau
-  Limestone Coast
-  Limestone Escarpment
-  Urban Limestone Plateau
-  Limestone Gorge

02	Issued for Planning	24.02.16	AH	SWM
01	First Issue	10.12.15	AH	SWM
Rev	Amendments	Date	Drwn	Chkd

Project
 Chapel Garth, Sunderland
Drawing Title
 Landscape Character Types & Areas

Project No.	Scale @ A3	Project Status
1515	1:25,000	Planning
Drawing No.		Revision
L-1515-PRP-017		02

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Key

-  Application Site
-  Radius from the center of the site (distance as noted)
-  SSGA Boundary

Landscape designations & protected landscapes within 7.5km radius of project

-  Sites of Special Scientific Interest (SSSI)
-  Special Area of Conservation (SAC)
-  Special Protection Area (SPA)
-  Local Nature Reserve
-  Local Wildlife Site

02	Issued for Planning	24.02.16	AH	SWM
01	First Issue	05.01.16	AH	SWM
Rev	Amendments	Date	Drwn	Chkd

Project
 Chapel Garth, Sunderland
 Drawing Title
 Protected Landscapes within Study Area

Project No.	Scale @ A3	Project Status
1515	1:25,000	Planning
Drawing No.		Revision
L-1515-PRP-018		02

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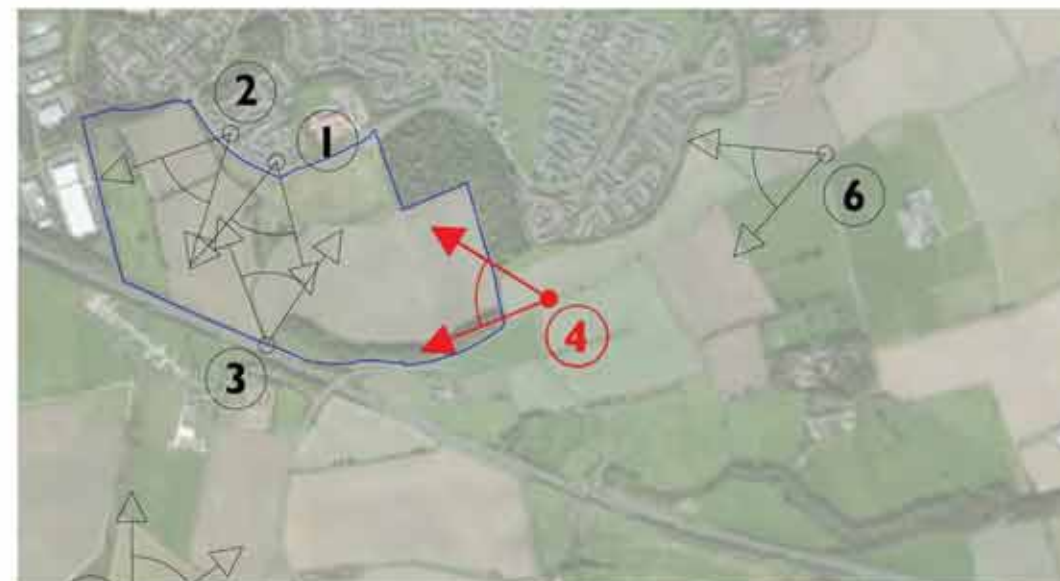
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LVIA Viewpoint 04 - View from verge off Burdon Lane - West Bound Traffic

-  Area of proposed development
-  Area of development at Burdon Lane



Viewpoint Location - Scale: 1:20,000

please also refer to drawing: L-1515-PRP-009

02	Issued for Planning	24.02.16	AH	SWM
01	First Issue	18.12.15	AH	SWM
Rev	Amendments	Date	Drwn	Chkd

Project
Chapel Garth, Sunderland
Drawing Title
Visible Area Of Development From Viewpoint 4

Project No. 1515	Scale @ A3 NTS	Project Status For Planning
Drawing No. L-1515-PRP-019		Revision 01

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LVIA Viewpoint 06 - View from Burdon Village Road junction with Burdon Lane - West Bound Traffic

-  Area of proposed development
-  Area of development at Burdon Lane



Viewpoint Location - Scale: 1:20,000

please also refer to drawing: L-1515-PRP-009

02	Issued for Planning	24.02.16	AH	SWM
01	First Issue	18.12.15	AH	SWM
Rev	Amendments	Date	Drwn	Chkd

Project
 Chapel Garth, Sunderland
 Drawing Title
 Visible Area of Development from Viewpoint 6

Project No. 1515	Scale @ A3 NTS	Project Status Planning
Drawing No. L-1515-PRP-020		Revision 02

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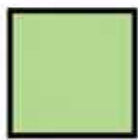

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LVIA Viewpoint 07 - View from Tunstall Hills - Elevation Marker

-  Area of proposed development
-  Area of development at Burdon Lane



Viewpoint Location - Scale: 1:20,000

please also refer to drawing: L-1515-PRP-009

01	First Issue	18.12.15	AH	SWM
Rev	Amendments	Date	Drwn	Chkd

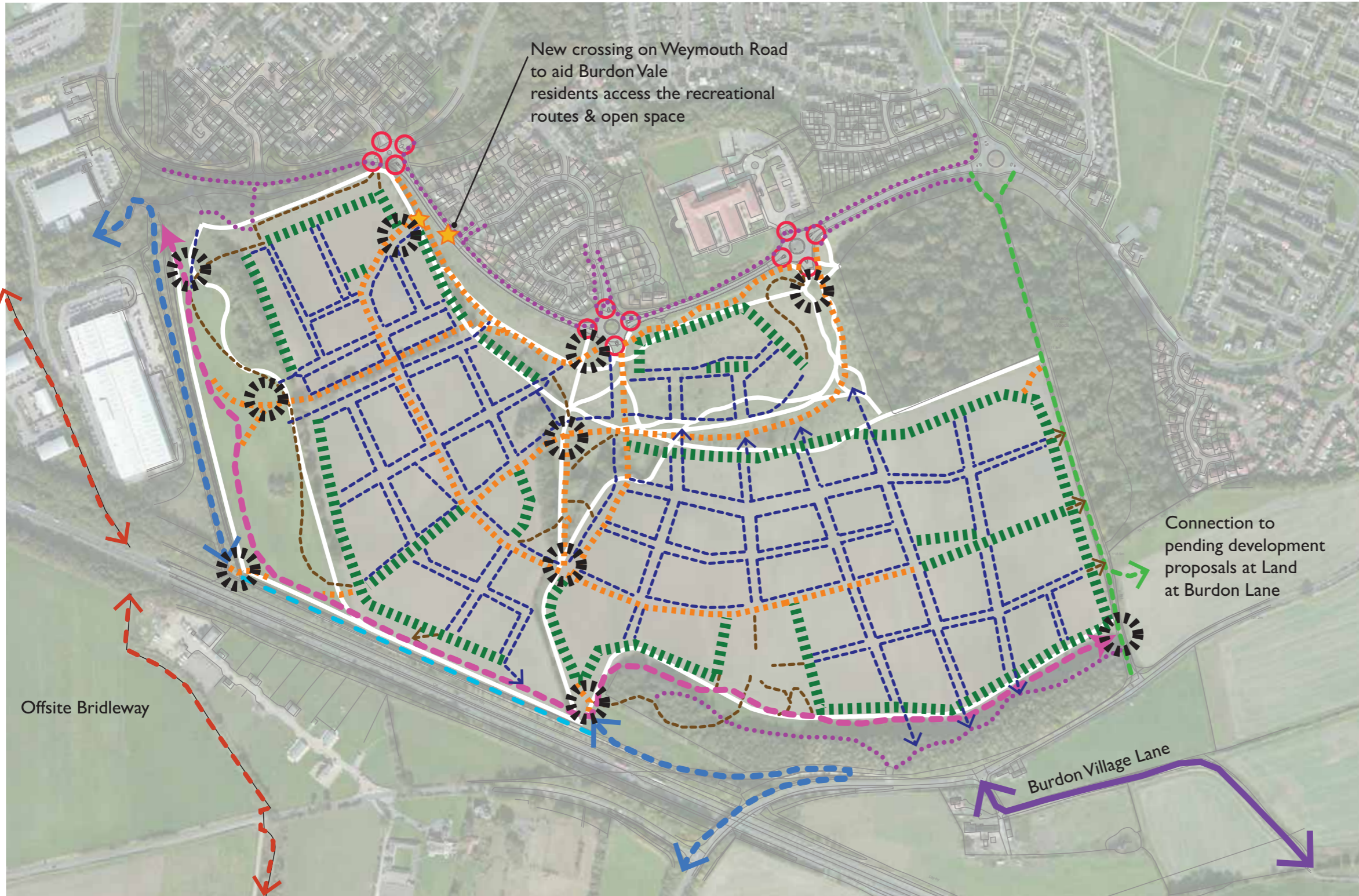
Project
 Chapel Garth, Sunderland
 Drawing Title
 Visible Area of Development from Viewpoint 7

Project No. 1515	Scale @ A3 NTS	Project Status For Planning
Drawing No. L-1515-PRP-021		Revision 01

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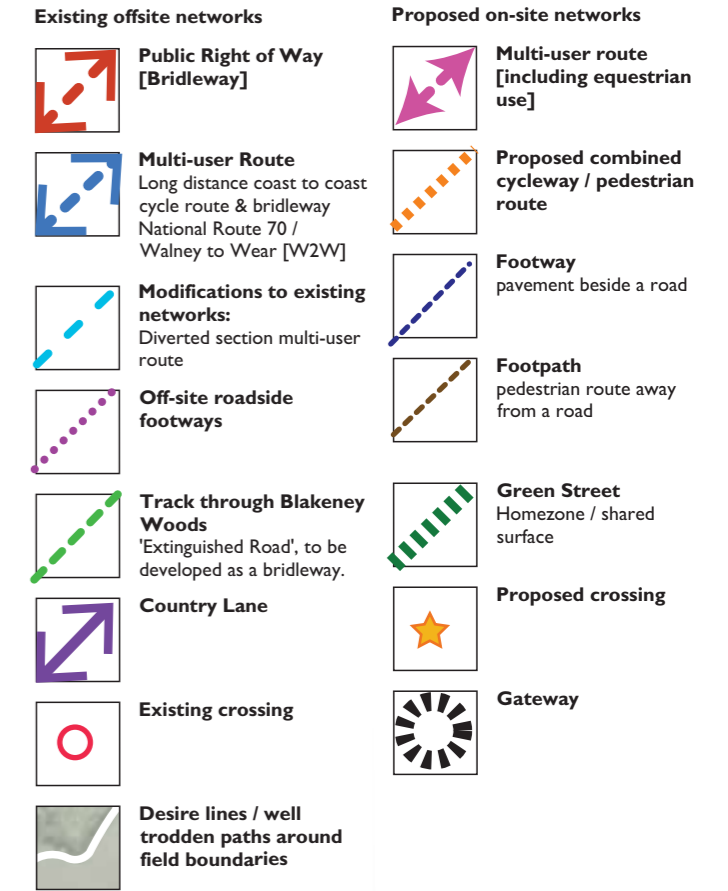
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04	Desire lines updated Updated inline with further comments from SCC Cycle Network & Public Rights of Way Officer + updated inline with masterplan changes	22.02.16	SL	SW-M
03		27.01.16	SW-M	-
Rev	Amendments	Date	Drwn	Chkv

Project
Chapelgarth, Sunderland

Drawing Title
Green networks - Proposed onsite routes & connections to off-site networks with existing well trodden paths overlaid [in white]

Project No. 1515 Scale @ A3 1:5000 Project Status INFORMATION

Drawing No. L-1515-PRP-027 Revision 04

Access to open space and neighbourhood assets:-

- Provision of a variety of community focused natural open spaces within a short walk of all residents.
- The new neighbourhood shall be developed around the existing landscape setting creating unique spaces.
- Elevated parts of the site shall be retained as public open space so that views can be enjoyed by all.

Promotion of a healthy lifestyle:-

- Creation of a residential destination where the ease of undertaking physical activity becomes a key character.

- Well-loved footpaths will be formalised and integrated within an enhanced network.
- Green traffic calmed streets will be created providing comfortable walking and cycling environment.
- Recreational networks will include natural play areas and green gyms.

Onward access to non-vehicle recreational networks:-

- New neighbourhood recreational circuits shall be connected into the offsite regional networks and wider established national leisure trails.
- Onsite cycle paths will be linked to cycle connections into Sunderland.

Connection to Route 1 Mineral Line [Green Link upgrade]

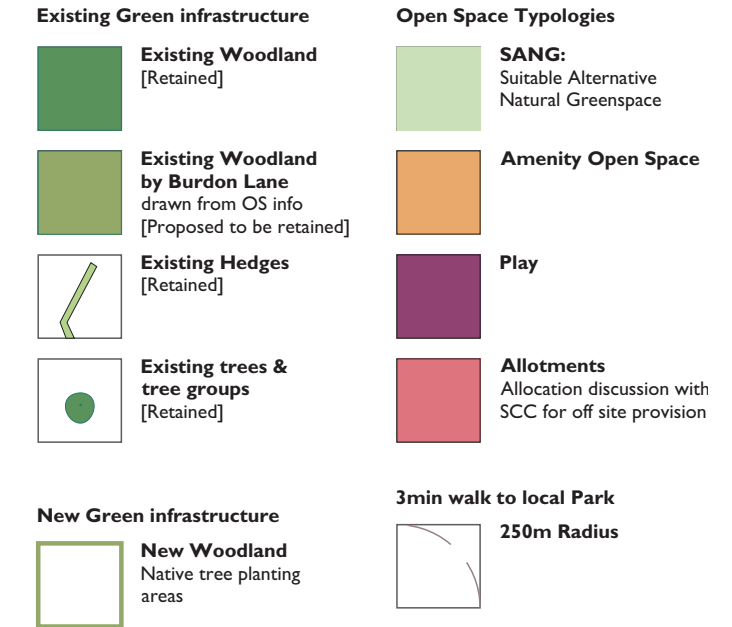


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03	Areas updated, key amended	19.02.16	AH	SWM
02	Area of SANG updated	15.02.16	JG	SWM
01	First Issue	26.01.16	SW-M	-
Rev	Amendments	Date	Drwn	Chkd

Project
Chapelgarth, Sunderland
Drawing Title
Open space strategy & ratio of provision

Project No. 1515	Scale @ A3 1:5000	Project Status INFORMATION
Drawing No. L-1515-PRP-028		Revision 03

SANG requirements [based on 750 units]	
Min required SANG [Ha]	Actual SANG [Ha]
13.50	14.13

SANG requirement for the site is 8 hectares per 1000 population.
Assuming an average household size of 2.25.
 $1000/2.25 = 444$ dwellings to generate 1000 population, therefore 8 hectares would be needed for 444 dwellings. Therefore 0.018 hectares needed per dwelling.

Amenity space guidance [based on 750 units]	
Guidance [Ha]	Proposed [Ha]
0.67	5.18

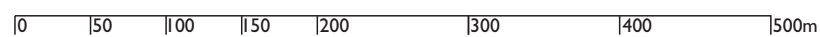
Amenity Open Space guidance for the site is 0.4 hectares per 1000 population.
Assuming an average household size of 2.25.
 $1000/2.25 = 444$ dwellings
 $0.4/444 = 0.0009$ ha of open space per dwelling
 $0.0009 \times 750 = 0.67$ Ha

Equipped play space guidance [based on 750 units]	
Guidance [Ha]	Proposed [Ha]
0.34	0.36

Equipped Play Space guidance for the site is 0.2 hectares per 1000 population.
Assuming an average household size of 2.25.
 $1000/2.25 = 444$ dwellings
 $0.2/444 = 0.00045$ ha of open space per dwelling
 $0.00045 \times 750 = 0.34$ Ha

Allotment space guidance [based on 750 units]	
Guidance [m ²]	Proposed [m ²]
3000.00	0.00

Allotments
Min provision of 15 plots per 1000 households
The National Society of Allotment and Leisure gardeners [NSALG] standard plot size is 250m²
 $750/1000 \times 15 = 11.25$ [12] plots
 $12 \times 250\text{m}^2 = 3000\text{m}^2$



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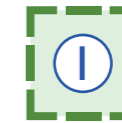
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Notes:

1/ Drawing base uses URBED Illustrative Masterplan, 944-M01 [Rev-]

2/ Drawing to be read in conjunction with drawing "list of primary mitigation measures" ref: L-1515-PRP-044.



SANG (Suitable Alternative Natural Greenspace)



01	First Issue	23.02.16	SL	SW-M
Rev	Amendments	Date	Drwn	Chkd

Project
Chapelgarth, Sunderland
 Drawing Title
Illustration of Location of Primary Mitigation Measures

Project No.	Scale @ A3	Project Status
1515	1:5000	Information
Drawing No.		Revision
L-1515-PRP-043		01

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Landscape Resources:

Fields//

- ① Re-provision and proposed gain in accessible green open space in the form of new suitable alternative natural greenspace [SANG], parks and play facilities. See also drawing "Open Space Strategy & ratio of provision". Ref: L-1515-PRP-028.
- ② Ensure engineered landforms are sensitively integrated into the landscape proposals. Use of planting to soften the proposed landforms where they are not being designed as a sculptural intervention.
- ③ Ensure new gradients are suitable for access and maintenance.
- ④ Reuse of site won material from excavations where possible to form raised landforms to balance and lessen disposal of materials from site.

Landscape Structure (Including vegetation / visual character & landmark features / pattern)//

- ⑤ Extension and 'gapping-up' of some existing hedgerows and extension to the woodland at Burdon Lane.
- ⑥ Substantial tree planting of specimen trees to streets and landscape designed open spaces and new areas of native woodland planting.
- ⑦ New native woodland planting to southern face of acoustic bund, around the southern margin with the Panoramic Park and extension to the woodland at Burdon Lane.
- ⑧ New wildflower, meadow grass planting and wetland planting to the natural open spaces and areas around the SUD's features.
- ⑨ New living screen to acoustic treatment [mix of woven and planted willow].

Public Rights of Way//

- ⑩ New enhanced network of recreational routes are proposed as part of the residential development. See also drawing "Proposed onsite routes & connections to off-site networks with existing well-trodden paths overlaid (in white), ref: L-1515-PRP-027

Tranquillity//

- ⑪ Ensure that measures are in place within road design to lessen vehicle speed
- ⑫ Ensure that 'cut off lighting' is used and responsive lighting is considered where areas are ecologically sensitive.

Visual receptors / amenity:

Viewpoint 1//

- A Creation of a tree lined frontage to Weymouth Road with an avenue of trees extending up from the extended access off the existing roundabout stump. New hedgerow planting and tree planting.
- B New tree groups to be planted around the attenuation basin.
- C Establishment of a tree lined secondary route between the 'Plateau' and the large field to create a leafy break to the view.

Viewpoint 2//

- D Creation of a tree lined frontage to Weymouth Road. Reinforcement planting of existing hedgerow to the ridge of the 'embankment' including replacement planting where earth remodelling may result in the loss of existing planting.
- E Roadside planting and landscape planting to new entrance.

Viewpoint 3//

- F The proposals would include a diversion of the W2W cycle route inbound of the site boundary. The route is proposed to be integrated into the north face of the raised engineered earth bund. The new elevated multi-user route would give rise to new views which would include that of the residential development and enhanced green infrastructure.
- G Views north would be experienced and framed by the rises - residential streets running down the fields which maintain outward views.
- H Establishment of a mixed native tree planting along the southern face of the 1.5m high earth bund and behind the 2.5m high living barrier would screen views of the A19 and direct views northwards to the panoramic city and sea views.

Viewpoint 4//

- I Reinforcement planting to existing hedge to eastern boundary and creation of a tree lined edge, to link the woodland edges and provide a leafy canopy at a higher level to break the view of the site.

Viewpoint 6//

- J Reinforcement planting to existing hedge to eastern boundary and creation of a tree lined edge, to link the woodland edges and provide a leafy canopy at a higher level to break the view of the site.

Viewpoint 7//

- K The establishment of tree lined streets and groups of trees within parks would soften the view of the residential built form.

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01	First Issue	23.02.16	SL	SW-M
Rev	Amendments	Date	Drwn	Chkd

Project
Chapelgarth, Sunderland
Drawing Title
List of the Primary Mitigation Measures

Project No. 1515	Scale @ A3 1:5000	Project Status Information
Drawing No. L-1515-PRP-044		Revision 01



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Key Plan - Illustrating development boundaries over existing constraints - Scale 1:10,000

-  Chapelgarth development boundary
-  Land at Burdon Lane development boundary

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Indicative illustrated development proposals - Scale 1:7500

NOTE:
Drawing Illustrates:

1. Chapelgarth: URBED, Illustrate Masterplan 944-M01 [Rev -]
2. Land at Burdon lane: Robertson Landscape Design Landscape Masterplan 5562-99-001 [Rev F]

01	First Issue	24.02.16	SL	SW-M
Rev	Amendments	Date	Drwn	Chkd

Project
Chapelgarth, Sunderland
Drawing Title
Cumulative Development Plan

Project No.	Scale @ A3	Project Status
1515	As Shown	FOR PLANNING
Drawing No.		Revision
L-1515-PRP-046		01

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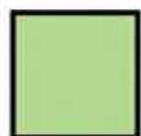

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LVIA Viewpoint 01 - View of site from Englemann Way

-  Area of proposed development
-  Area of development at Burdon Lane



Viewpoint Location - Scale: 1:20,000

please also refer to drawing: L-1515-PRP-009

01	First Issue	24.02.16	AH	SWM
Rev	Amendments	Date	Drwn	Chkd

Project
Chapel Garth, Sunderland
Drawing Title
Visible Area Of Development From Viewpoint 1

Project No. 1515	Scale @ A3 NTS	Project Status For Planning
Drawing No. L-1515-PRP-047		Revision 01

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LVIA Viewpoint 05 - View from Bridleway west off Hangmans Lane looking north towards Sunderland

-  Area of proposed development - Not Visible
-  Area of development at Burdon Lane



Viewpoint Location - Scale: 1:20,000

please also refer to drawing: L-1515-PRP-009

01	First Issue	24.02.16	AH	SWM
Rev	Amendments	Date	Drwn	Chkd

Project
Chapel Garth, Sunderland
Drawing Title
Visible Area Of Development From Viewpoint 5

Project No. 1515	Scale @ A3 NTS	Project Status For Planning
Drawing No. L-1515-PRP-048		Revision 01

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NEW PEDESTRIAN/
CYCLE ROUTE ALONG
BURDON ROAD

HALL FARM ESTATE

BLAKENEY WOODS

BURDON LANE

BURDON LANE

BURDON ROAD

LEGEND

-  Red Line Boundary
-  Existing Hedge Retained
-  Proposed Tree
-  Proposed Woodland with Understorey Scrub and Shrub planting. This area is to include the following species: Hawthorn, Hazel, Holly, Wild privet, Dog rose, Crab apple, Guelder rose, Field maple and Rowan
-  Proposed Native Hedge
-  Proposed Shrub Planting
-  Proposed Public Open Space
-  Proposed Private Gardens
-  Proposed Multi Surface Area
-  Proposed Paved Area
-  Proposed Driveways
-  Proposed Roads
-  Proposed Footpath

AMENDMENT



 Scale: A0 @ 1:1000	Project: Burdon Lane	Rev:	Drawn:	Date:	
	Drawing Name: Landscape Masterplan	Rev:	Drawn:	Date:	
	Drawing No: 5562-99-001	Rev:	Drawn:	Date:	
		Rev:	Drawn:	Date:	
		Rev:	Drawn:	Date:	
		Rev:	Drawn:	Date:	







BURDON LANE SUNDERLAND									
idp									
BELLWAY HOMES									
GROSS SITE AREA ha acres									
NETT SITE AREA 9.82 24.26									
14/Mar/2012									
HOUSE TYPE	BEDROOMS	PERSONS	STORIES	NO	MIX	SG FT	SG M	TOTAL SG FT	TOTAL SG M
BL10	3	5	1	9	8	1161	139.21	10509	487.78
BL17	4	6	1.5	3	3	1750	182.68	5290	487.74
BL14	4	6	2	3	4.24	1887	173.35	2425	876.5
BL02	4	6	2	15	17.71	1973	183.29	2255	2748.35
BL18	4	6	2	8	6.78	2101	199.18	15598	1561.44
BL15	6	9	2	8	4.24	2207	207.82	11185	1039.1
BL13	6	10	2	18	15.25	2388	222.39	43154	4010.61
BL03	5	9	2	20	16.05	2538	235.28	50760	4715.6
BL11	5	10	2	7	5.83	2920	268.41	18460	1703.8
BL05	5	10	2	21	17.80	2779	258.11	68359	6421.57
BL12	5	10	2	7	5.83	2850	264.77	19950	1863.89
TOTAL						116	100.09	272478	25406.92
OVERALL DENSITY									
UNITS / ha	19.21								
UNITS / ACRES	5.33								
SG M / ha	2845								
SG FT / ACRES	12038								
OVERALL MIX									
						TOTAL			
B-BED DWELLINGS						9	7.63		
E-BED DWELLINGS						31	28.27		
F-BED DWELLINGS						78	72.10		
						118	100.00		

DO NOT SCALE
All dimensions to be checked on site and Architect to be notified of any discrepancies prior to commencement

DESIGNER'S RISK ASSESSMENT
Created on 08/05/2012 at 10:00 AM

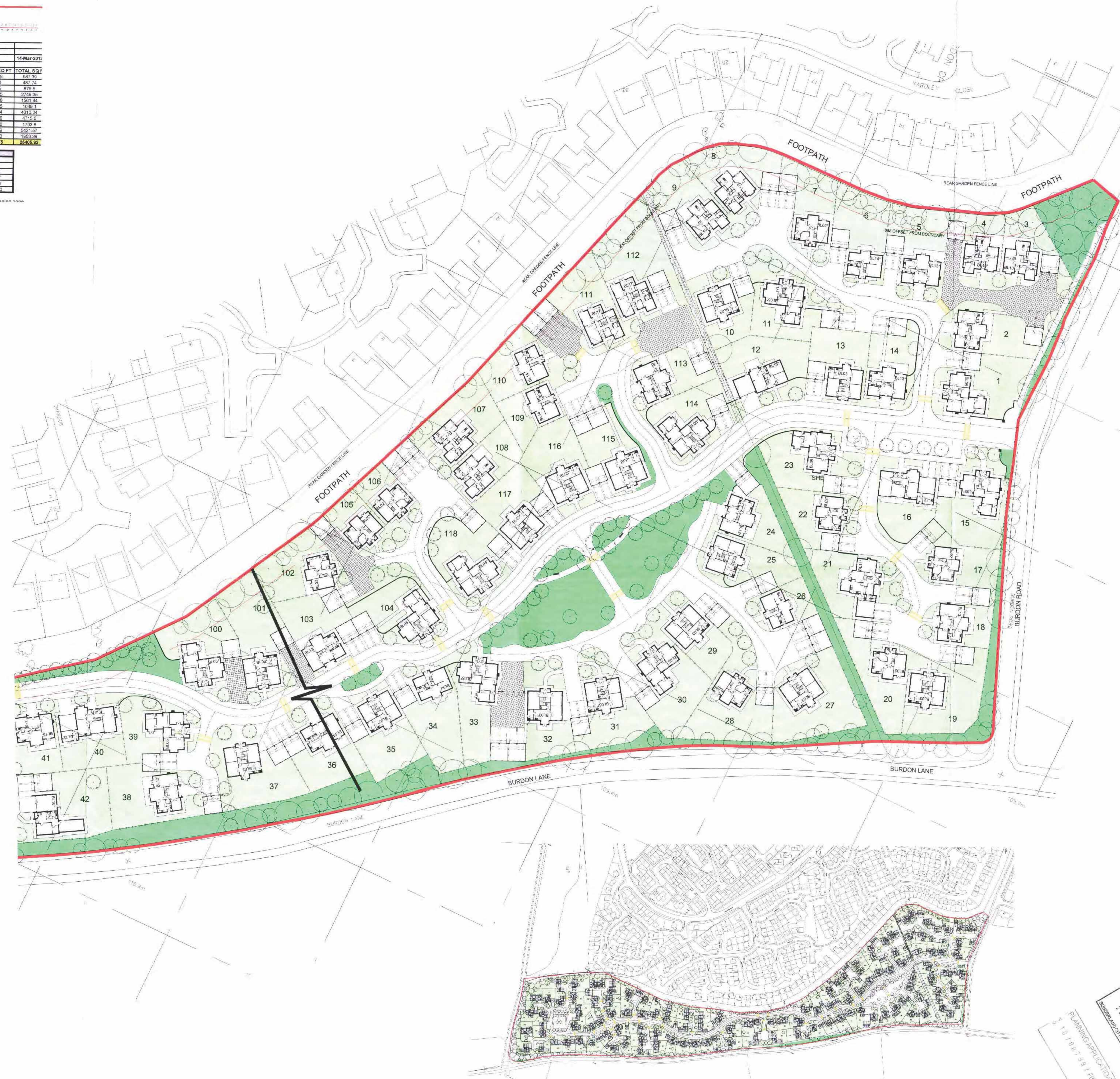
RESIDUAL RISKS

REF	DESCRIPTION	DATE

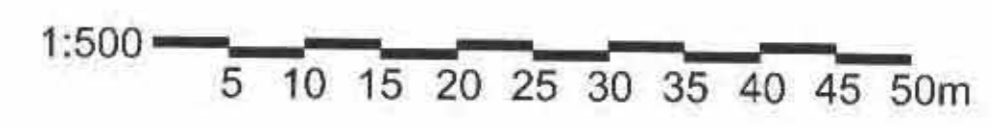
-  RED LINE BOUNDARY
-  PROPOSED FOOTPATH LINK TO WOODS
-  EXISTING POS BUFFER ZONE
-  PROPOSED PUBLIC OPEN SPACE
-  SHARED SURFACES
-  DENOTES CHANGE OF SURFACE MATERIAL LEVEL WITH MAIN ROAD SURFACE

NOTE:
ALL VISIBILITY SPLAYS SHOWN ARE 2.4 x 25 m EXCEPT FOR THE MAIN ENTRANCE TO SITE WHICH IS 2.4 x 43 m.

LANDSCAPING SHOWN ON THIS DRAWING IS INDICATIVE ONLY



OVERALL LAYOUT 1:2500



REV D 14/05/13 PLOTS 17, 18, 19 RECONFIGURED TO AVOID ROAD WEEDING ZONE. HT CHANGE TO PLOTS 38 & 39. ROAD REALIGNMENT TO MOVE PLOTS 42 & 43 AWAY FROM ROAD WEEDING ZONE. FENCE LINE AND BUFFER PLANTING TAKEN OUT OF ROAD WEEDING ZONE AND SCHEDULE UPDATED. SR.

REV C 03/03/13 PLOTS 10, 11 & 12 AMENDED. PLOTS 110, 111 & 112 MOVED WEST BY 2m. 28/02/13 400mm WIDE SEWER EASEMENT ADDED.

REV B 12/12/12 PLOTS 33 & 35 REVISED HTY ADDED. RED LINE BOUNDARY REVISED. PLOTS 36 & 37 400mm WIDE PPS.

REV A 04/12/12 UNIT NAMES AMENDED. AR.

REV 0 26/11/12 AMENDED TO SUIT CLIENT REQUIREMENTS. AR.

REV A 15/10/12 BOUNDARIES REVISED TO BURDON LANE. LANDSCAPING UPDATED TO MATCH RL D LAYOUTS.

REVISION	DATE	DESCRIPTION	CHECKED

idp
IAN DARBY PARTNERSHIP
NORTHERN

ST. JUDES, BARKER STREET, SHIELDFIELD, NEWCASTLE UPON TYNE, NE2 1AS
TEL: (0191) 261 4442 FAX: (0191) 261 1590 e-mail: info@idpartnership-northern.com

JOB/CLIENT: BURDON LANE BELLWAY

DRAWING TITLE: PROPOSED SITE LAYOUT NORTHERN PART (FOOTPRINT VERSION)

PROJECT ARCHITECT: RC	DRAWN BY: AR	CHECKED:
SCALE: 1:500 1:2500	PROJECT NO:	DRAWING NO:
DATE: MAY 2012	NB1:2166	SL-02D

DRAWING STATUS: SMY CONSULTATION TENDER CONSTRUCTION RECORD

DEVELOPMENT CONTROL
1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42
PLANNING APPLICATION
10/10/12 89/12R

BURDON LANE SUNDERLAND		idP PARTNERSHIP							
BELLWAY HOMES		GROSS SITE AREA							
		ha	acres						
		9.92	24.32						
		NETT SITE AREA							
		8.93	22.04						
		14-Mar-2012							
HOUSE TYPE	BEDROOMS	PERSONS	STOREYS	NO	MIX	SG FT	SG M	TOTAL SG FT	TOTAL SG M
BL10	3	5	1	9	8	1181	109.71	10625	987.32
BL17	4	6	1.5	3	3	1750	162.58	5250	487.74
BL14	4	6	2	6	4.24	1987	178.3	2459	226.9
BL02	4	6	2	15	12.71	1973	183.29	2595	240.35
BL16	4	6	2	8	6.78	2101	195.18	18908	1561.44
BL15	5	9	2	5	4.24	2027	207.62	11185	1029.1
BL13	5	10	2	18	15.25	2398	222.09	13164	1210.04
BL03	5	9	2	20	18.69	2638	235.78	50760	4715.6
BL11	5	10	2	7	6.63	2650	243.4	18340	1703.8
BL06	5	10	2	21	17.80	2779	258.17	38359	3429.57
BL12	5	10	2	7	6.63	2850	264.77	19650	1853.39
TOTAL		118	100.00			273475	25405.92		

OVERALL DENSITY	
UNITS / ha	13.21
UNITS / ACRE	5.35
SG M / ha	2845
SG FT / ACRE	12408

OVERALL MIX		
3 BED DWELLINGS	9	7.63
4 BED DWELLINGS	79	29.27
5 BED DWELLINGS	110	69.10
TOTAL	118	100.00

NOTE: Net area excludes all public open space and associated structural landscaping / buffer planting and road widening zone

- RED LINE BOUNDARY
- PROPOSED FOOTPATH LINK TO WOODS
- EXISTING POS BUFFER ZONE
- PROPOSED PUBLIC OPEN SPACE
- SHARED SURFACES
- DENOTES CHANGE OF SURFACE MATERIAL LEVEL WITH MAIN ROAD SURFACE

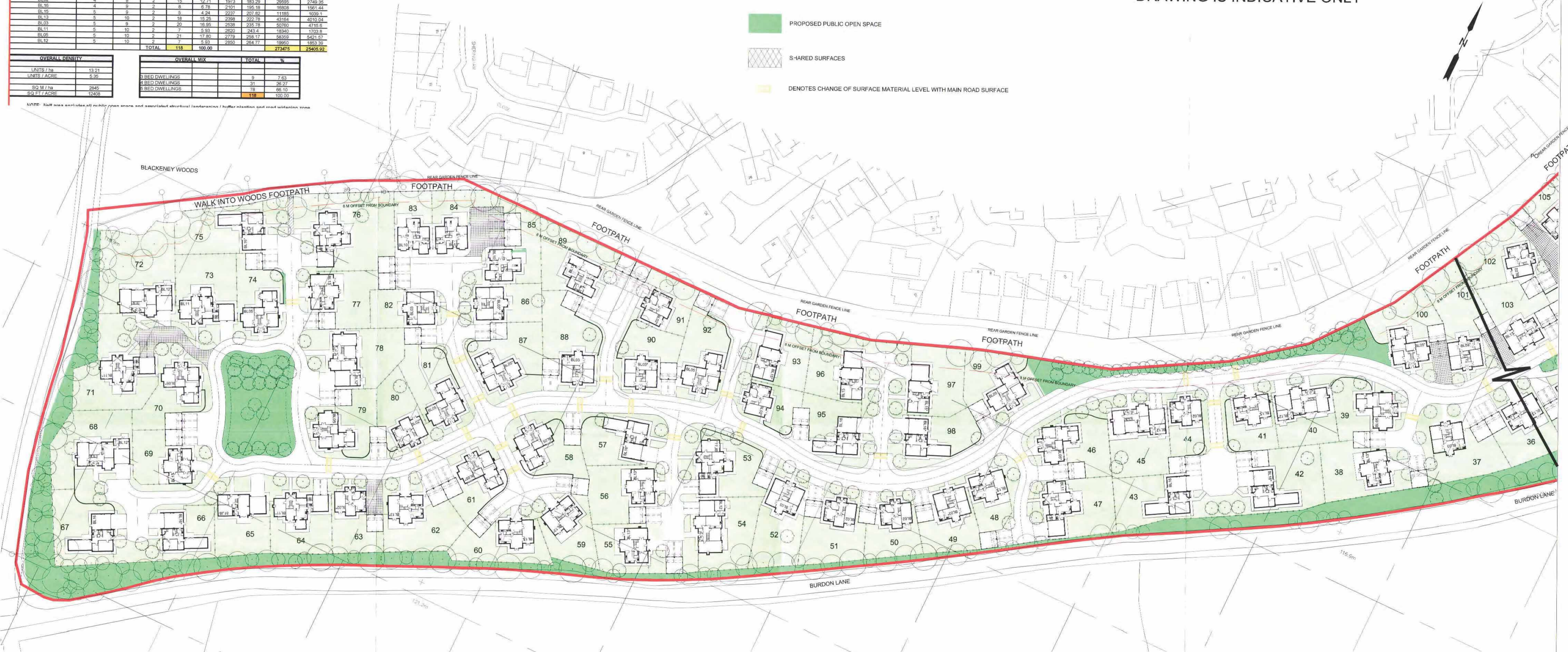
NOTE: ALL VISIBILITY SPLAYS SHOWN ARE 2.4 x 25 m EXCEPT FOR THE MAIN ENTRANCE TO SITE WHICH IS 2.4 x 43 m.

DO NOT SCALE
All dimensions to be checked on site and Architect to be notified of any discrepancies prior to commencement

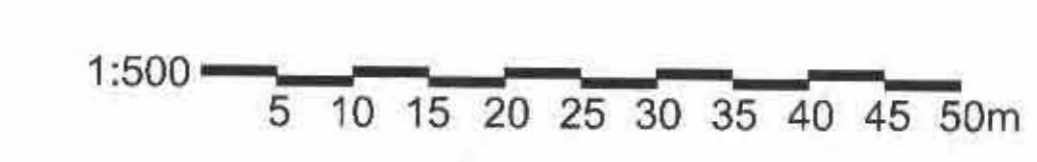
DESIGNERS RISK ASSESSMENT
Created on: 2012-03-14 10:00:00
RESIDUAL RISKS

REF	DESCRIPTION	DATE

LANDSCAPING SHOWN ON THIS DRAWING IS INDICATIVE ONLY



OVERALL LAYOUT 1:2500



REV D: 14-03-12 PLOTS 17-18 RECONFIGURED TO AVOID ROAD WIDENING ZONE. HT CHANGE TO PLOTS 38 & 39. ROAD REALIGNMENT TO MOVE PLOTS 42 & 43 AWAY FROM ROAD WIDENING ZONE. FENCE LINE AND BUFFER PLANTING TAKEN OUT OF ROAD WIDENING ZONE AND SCHEDULE UPDATED. SR
REV C: 12-12-12 PLOTS 83 & 85 REVISED HT'S ADDED. RED LINE BOUNDARY REVISED. PLOTS 96, 97 & 98 MOVED PLOT
REV B: 04-12-12 UNIT NAMES AMENDED AND
REV A: 28-11-12 AMENDED TO SUIT CLIENT REQUIREMENTS. AR

REVISION	DATE	DESCRIPTION	CHECKED

idP PARTNERSHIP
IAN DARBY PARTNERSHIP
NORTHERN

ST. JUDES, BARKER STREET, SHIELDFIELD, NEWCASTLE UPON TYNE, NE2 1AS
TEL: (0191) 261 4442 FAX: (0191) 261 1090 e-mail: info@idpartnership-northern.com

JOB / CLIENT: BURDON LANE BELLWAY

DRAWING TITLE: PROPOSED SITE LAYOUT SOUTHERN PART (FOOTPRINT VERSION)

PROJECT ARCHITECT: RC	DRAWN BY: AR	CHECKED:
SCALE: 1:500 1:2500	PROJECT NO:	DRAWING NO:
DATE: MAY 2012	N81:2166	SL-01D

DESIGNER: SALES GROUP: CONSULTANT: TENDER: CONTRACTOR: RECORD:

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02	Issued for Planning	24.02.16	AH	SWM
01	First Issue	01.12.15	AH	SWM
Rev	Amendments	Date	Drwn	Chkd

Project
Chapel Garth, Sunderland
Drawing Title
LVIA Viewpoint 01

Project No. 1515	Scale @ A3 NTS	Project Status For Planning
Drawing No. L-1515-EXV-001		Revision 02

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LVIA Viewpoint 01 - View of site from Engleman Way

Viewpoint Data

Grid Reference E 437333 N 551905
Elevation 117m Above Sea Level
Distance from site 18m

Photograph

Height above ground 1.58m
Camera & Lens Digital SLR with 50mm lens equivalent
View direction 140° from North
Time 12.30pm
Date 12/11/2015



Viewpoint Location - Scale: 1:20,000

please also refer to drawing: L-1515-PRP-009

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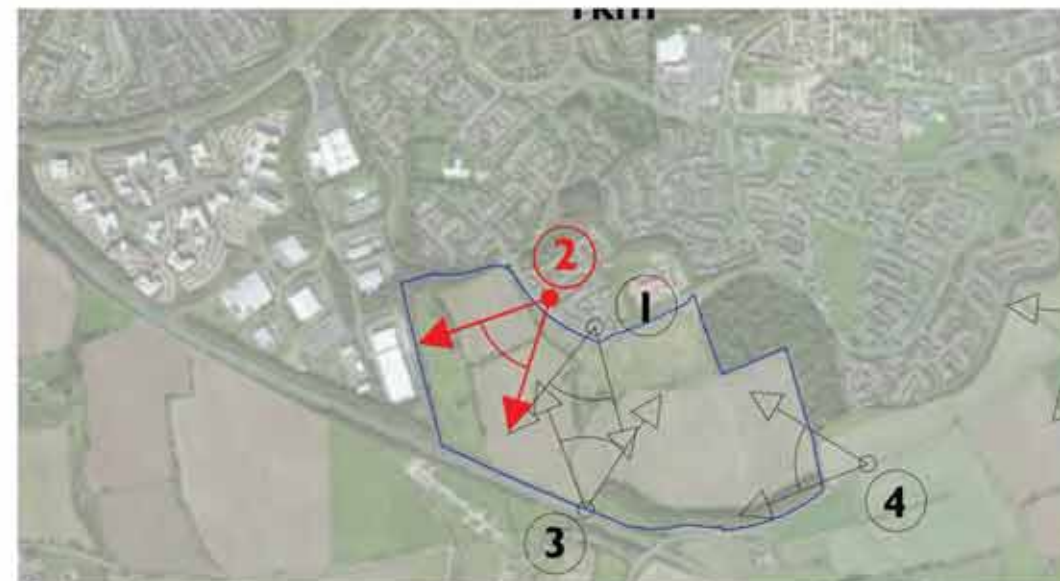
LVIA Viewpoint 02 - View from the junction exiting Englemann Way onto Weymouth Road

Viewpoint Data

Grid Reference E 437175 N 551991
 Elevation 107m Above Sea Level
 Distance from site 10m

Photograph

Height above ground 1.57m
 Camera & Lens Digital SLR with 50mm lens equivalent
 View direction 240° from North
 Time 12.45pm
 Date 12/11/2015



Viewpoint Location - Scale: 1:20,000

please also refer to drawing: L-1515-PRP-009

02	Issued for Planning	24.02.16	AH	SWM
01	First Issue	01.12.15	AH	SWM
Rev	Amendments	Date	Drwn	Chkd

Project
 Chapel Garth, Sunderland
 Drawing Title
 LVIA Viewpoint 02

Project No. 1515	Scale @ A3 NTS	Project Status For Planning
Drawing No. L-1515-EXV-002		Revision 02

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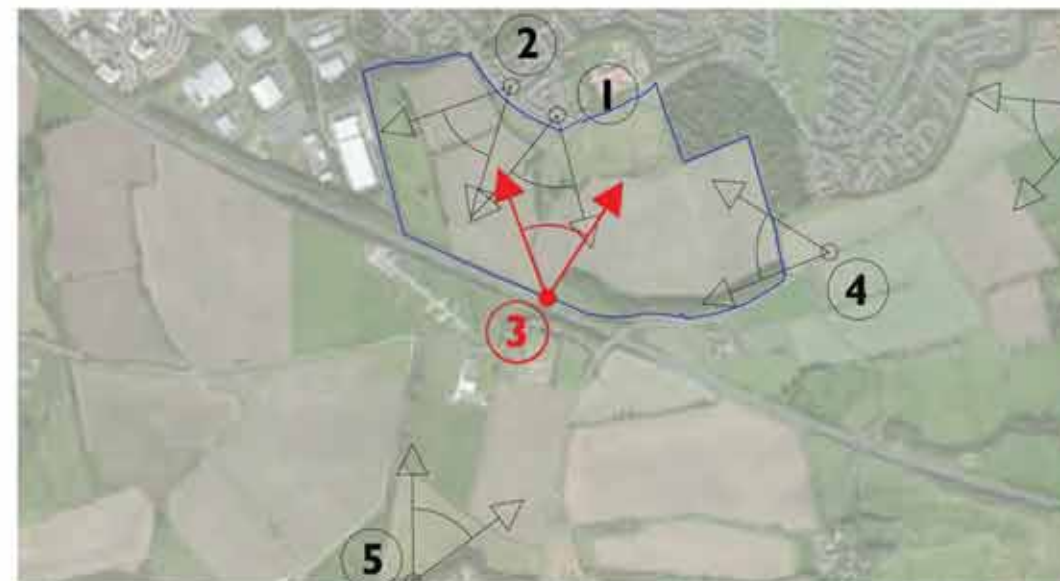
LVIA Viewpoint 03 - View from W2W Cycleway to south side of site adjacent A19

Viewpoint Data

Grid Reference E 437308 N 551422
 Elevation 138m Above Sea Level
 Distance From Site 0m

Photograph

Height above ground 1.57m
 Camera & Lens Digital SLR with 50mm lens equivalent
 View direction 0° from North
 Time 13.10pm
 Date 12/11/2015



Viewpoint Location - Scale: 1:20,000

please also refer to drawing: L-1515-PRP-009

02	Issued for Planning	24.02.16	AH	SWM
01	First Issue	01.12.15	AH	SWM
Rev	Amendments	Date	Drwn	Chkd

Project
 Chapel Garth, Sunderland
 Drawing Title
 LVIA Viewpoint 03

Project No. 1515	Scale @ A3 NTS	Project Status For Planning
Drawing No. L-1515-EXV-003		Revision 02

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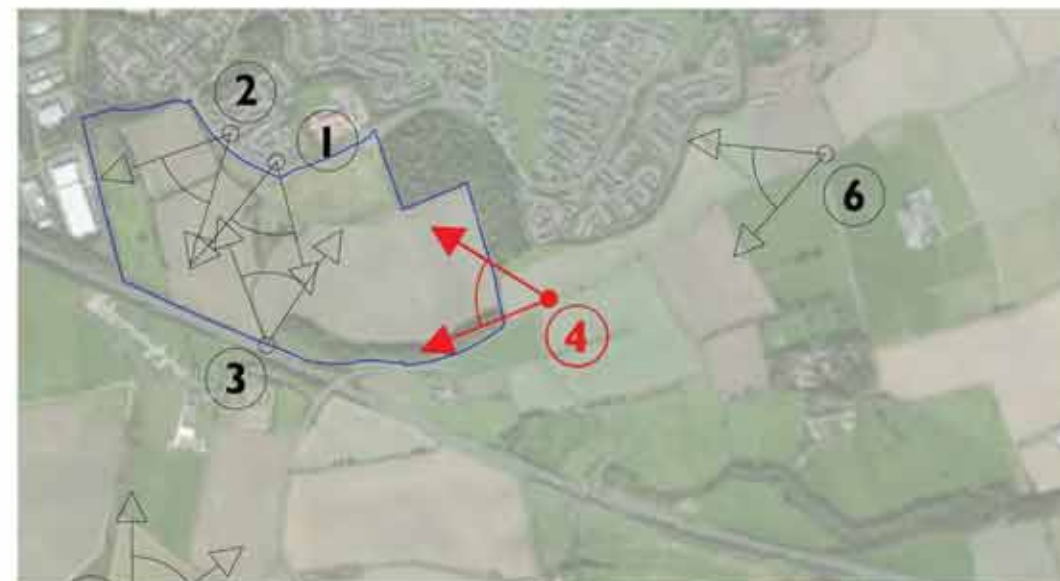
LVIA Viewpoint 04 - View from verge off Burdon Lane - West Bound Traffic

Viewpoint Data

Grid Reference E 438056 N 551544
 Elevation 121m Above Sea Level
 Distance from site 126m

Photograph

Height above ground 1.57m
 Camera & Lens Digital SLR with 50mm lens equivalent
 View direction 270° from North
 Time 12.10pm
 Date 12/11/2015



Viewpoint Location - Scale: 1:20,000

please also refer to drawing: L-1515-PRP-009

02	Issued for Planning	24.02.16	AH	SWM
01	First Issue	01.12.15	AH	SWM
Rev	Amendments	Date	Drwn	Chkd

Project
 Chapel Garth, Sunderland
 Drawing Title
 LVIA Viewpoint 04

Project No. 1515	Scale @ A3 NTS	Project Status For Planning
Drawing No. L-1515-EXV-004		Revision 02

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LVIA Viewpoint 05 - View from Bridleway west off Hangmans Lane looking north towards Sunderland

Viewpoint Data

Grid Reference E 436953 N 550672
 Elevation 176m Above Sea Level
 Distance From Site 833m

Photograph

Height above ground 1.54m
 Camera & Lens Digital SLR with 50mm lens equivalent
 View direction 30° from North
 Time 14.25pm
 Date 12/11/2015



Viewpoint Location - Scale: 1:20,000

please also refer to drawing: L-1515-PRP-009

02	Issued for Planning	24.02.16	AH	SWM
01	First Issue	01.12.15	AH	SWM
Rev	Amendments	Date	Drwn	Chkd

Project
 Chapel Garth, Sunderland
 Drawing Title
 LVIA Viewpoint 05

Project No. 1515	Scale @ A3 NTS	Project Status For Planning
Drawing No. L-1515-EXV-005		Revision 02

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02	Issued for Planning	24.02.16	AH	SWM
01	First Issue	01.12.15	AH	SWM
Rev	Amendments	Date	Drwn	Chkd

Project
Chapel Garth, Sunderland
Drawing Title
LVIA Viewpoint 06

Project No. 1515	Scale @ A3 NTS	Project Status For Planning
Drawing No. L-1515-EXV-006		Revision 02

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LVIA Viewpoint 06 - View from Burdon Village Road junction with Burdon Lane - West Bound Traffic

Viewpoint Data
Grid Reference E 438784 N 551926
Elevation 110m Above Sea Level
Distance From Site 927m

Photograph
Height above ground 1.56m
Camera & Lens Digital SLR with 50mm lens equivalent
View direction 235° from North
Time 11.55am
Date 12/11/2015



Viewpoint Location - Scale: 1:20,000

please also refer to drawing: L-1515-PRP-009

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LVIA Viewpoint 07 - View from Tunstall Hills - Elevation Marker

Viewpoint Data

Grid Reference E 439167 N 554473
 Elevation 112m Above Sea Level
 Distance From Site 2945m

Photograph

Height above ground 1.59m
 Camera & Lens Digital SLR with 50mm lens equivalent
 View direction 210° from North
 Time 11.25am
 Date 12/11/2015



Viewpoint Location - Scale: 1:20,000

please also refer to drawing: L-1515-PRP-009

01	First Issue	01.12.15	AH	SWM
Rev	Amendments	Date	Drwn	Chkd

Project
 Chapel Garth, Sunderland
 Drawing Title
 LVIA Viewpoint 07

Project No.	Scale @ A3	Project Status
1515	NTS	For Planning
Drawing No.		Revision
L-1515-EXV-007		01

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LVIA Viewpoint 08 - View from Penshaw Monument

Viewpoint Data

Grid Reference E 433410 N 554380
 Elevation 138m Above Sea Level
 Distance From Site 4187m

Photograph

Height above ground 1.56m
 Camera & Lens Digital SLR with 50mm lens equivalent
 View direction 125° from North
 Time 15.15pm
 Date 12/11/2015



Viewpoint Location - Scale: 1:20,000

please also refer to drawing: L-1515-PRP-009

01	First Issue	01.12.15	AH	SWM
Rev	Amendments	Date	Drwn	Chkd

Project
 Chapel Garth, Sunderland
 Drawing Title
 LVIA Viewpoint 08

Project No.	Scale @ A3	Project Status
1515	NTS	For Planning
Drawing No.	Revision	
L-1515-EXV-008	01	

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LVIA Viewpoint 09 - View from Robertson Road

Viewpoint Data

Grid Reference E 435901 N 558983
 Elevation 67m Above Sea Level
 Distance From Site 6980m

Photograph

Height above ground 1.58m
 Camera & Lens Digital SLR with 50mm lens equivalent
 View direction 170° from North
 Time 10.10am
 Date 12/11/2015



Viewpoint Location - Scale: 1:20,000

please also refer to drawing: L-1515-PRP-009

01	First Issue	01.12.15	AH	SWM
Rev	Amendments	Date	Drwn	Chkd

Project
 Chapel Garth, Sunderland
 Drawing Title
 LVIA Viewpoint 09

Project No. 1515	Scale @ A3 NTS	Project Status For Planning
Drawing No. L-1515-EXV-009		Revision 01

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