

ENVIRONMENTAL STATEMENT

Axis 50, near Willington, South Derbyshire

Chapter 10: Landscape and Visual Impact

July 2019

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10.1 INTRODUCTION

- 10.1.1 This Landscape and Visual Impact Assessment (LVIA) has been carried out for the proposed development by FPCR Environment and Design Ltd (FPCR). The purpose of this LVIA study is to provide an assessment of the likely landscape and visual effects of the proposed development. The landscape and visual effects have been considered in relation to the proposals detailed in the planning application and Design and Access Statement (DAS).
- 10.1.2 FPCR are a multi-disciplinary environmental and design consultancy with over 50 years' experience of architecture, landscape, ecology, urban design, masterplanning and environmental impact assessment. The practice is a member of the Landscape Institute and Institute of Environmental Management and Assessment and is frequently called upon to provide expert evidence on landscape and visual issues at Public and Local Plan Inquiries.
- 10.1.3 This assessment is based on the description of development as set out at Chapter 3: The Proposed Development and as shown on the EIA Parameters Plan (Figure 3.1).

10.2 METHODOLOGY

10.2.1 This Landscape and Visual Impact Assessment has been prepared based upon the Guidelines for Landscape and Visual Impact Assessment, third edition (GLVIA3), published by the Landscape Institute and the Institute of Environmental Management and Assessment, in 2013.

10.2.2 In summary, the GLVIA3 states:

“Landscape and Visual impact assessment (LVIA), is a tool used to identify and assess the significance of and the effects of change resulting from development on both landscape as an environmental resource in its own right and on people’s views and visual amenity.” (GLVIA3 paragraph 1.1.)

10.2.3 There are two components of LVIA:

- *“Assessment of landscape effects; assessing effects on the landscape as a resource in its own right;*
- *Assessment of visual effects: assessing effects on specific views and on the general visual amenity experienced by people.” (GLVIA3 paragraph 2.21.)*

10.2.4 The components of this report include: baseline studies; description and details of the landscape proposals and mitigation measures to be adopted as part of the scheme; identification and description of likely effects arising from the proposed development; and an assessment of the significance of these effects.

10.2.5 In terms of baseline studies, the assessment provides an understanding of the landscape which may be affected, its constituent elements, character, condition and value. For the visual baseline, this includes an understanding of the area in which the development may be visible, the people who may experience views, and the nature of views.

Assessment of Landscape Effects

10.2.6 GLVIA3 states that *“An assessment of landscape effects deals with the effects of change and development on landscape as a resource” (GLVIA3 paragraph 5.1).*

10.2.7 The baseline landscape is described by reference to existing published Landscape Character Assessments and by a description of the site and its context.

10.2.8 A range of landscape effects can arise through development. These can include:

- Change or loss of elements, features, aesthetic or perceptual aspects that contribute to the character and distinctiveness of the landscape;
- Addition of new elements that influence character and distinctiveness of the landscape;
- Combined effects of these changes.

10.2.9 The characteristics of the existing landscape resource are considered in respect of the susceptibility of the landscape resource to the change arising from this development. The value of the existing landscape is also considered.

10.2.10 Each effect on landscape receptors is assessed in terms of size or scale, the geographical extent of the area influenced and its duration and reversibility. In terms of size or scale of

change, the judgement takes account of the extent of the existing landscape elements that will be lost or changed, and the degree to which the aesthetic or perceptual aspects or key characteristics of the landscape will be altered by removal or addition of new elements.

10.2.11 The level of effect is determined by considering the sensitivity of the landscape receptors and the magnitude of effect on the landscape. Final conclusions on the overall landscape effects are drawn from the assessment components described. This assessment describes the nature of the landscape effects, and whether these are adverse or beneficial, at the following stages of development; construction, completion (year 1) and longer term (year 15).

10.2.12 The criteria used in the assessment are set out in Appendix 10.1.

Assessment of Visual Effects

10.2.13 An assessment of visual effects deals with the effects of change and development on the views available to people and their visual amenity. This assessment describes the nature of the visual effects, and whether these are adverse or beneficial, at the following stages of development; construction, completion (year 1 winter) and longer term (year 15 summer).

10.2.14 The first stage in the assessment is to identify approximate visibility/ visibility mapping. This is done by either a computerised Zone of Theoretical Visibility (ZTV)¹, or by manual methods using map study and field evaluation. A series of viewpoints are included within the assessment that are representative of views towards the site from surrounding visual receptors. Other views of the site are included where it supports the description and understanding of the site's landscape and visual characteristics.

10.2.15 The views also typically represent what can be seen from a variety of distances from the development and different viewing experiences.

10.2.16 It is important to remember that visual receptors are all people. For each affected viewpoint, the assessment considers both the susceptibility to change in views and the value attached to views.

"The visual receptors most susceptible to change are generally likely to include:

- *Residents at home;*
- *People, whether residents or visitors who are engaged in outdoor recreation, including use of public rights of way, whose attention or interest is likely to be focused on the landscape and on particular views;*
- *Visitors to heritage assets or to other attractions, where views of the surroundings are an important contributor to the experience;*
- *Communities where views contribute to the landscape setting enjoyed by residents in the area;*

¹ Zone of Theoretical Visibility (ZTV): A map usually digitally produced, showing areas of land within which a development is theoretically visible. [GLVIA3]

- *Travellers on road, rail or other transport routes tend to fall into an intermediate category of moderate susceptibility to change. Where travel involves recognised scenic routes awareness of views is likely to be particularly high.” (GLVIA3 paragraph 6.33.)*

“Visual receptors likely to be less sensitive to change include:

- *People engaged in outdoor sport or recreation which does not involve or depend upon appreciation of views of the landscape;*
- *People at their place of work whose attention may be focused on their work or activity, not on their surroundings, and where the setting is not important to the quality of working life (although there may on occasion be cases where views are an important contributor to the setting and to the quality of working life).” (GLVIA3 paragraph 6.34.)*

10.2.17 Each of the visual effects is evaluated in terms of its size or scale, the geographical extent of the area influenced and its duration or reversibility.

10.2.18 In terms of size or scale, the magnitude of visual effects takes account of:

- *The scale of the change in the view with respect to the loss or addition of features in the view and changes in its composition, including proportion of the view occupied by the proposed development;*
- *The degree of contrast or integration of any new features or changes in the landscape with the existing or remaining landscape elements and characteristics in terms of form, scale and mass, line height, colour and texture;*
- *The nature of the view of the proposed development, in terms of the relative amount of time over which it will be experienced and whether views will be full, partial or glimpses. (GLVIA paragraph 6.39).*

10.2.19 The geographical extent of the visual effect in each viewpoint is likely to reflect:

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

10.2.20 As with landscape effects, the duration of the effect could be short to long term or permanent and the same definitions apply. The criteria used in the assessment are set out in Appendix 10.1.

Overall Landscape and Visual Effects

10.2.21 The final conclusions on effects, whether adverse or beneficial, are drawn from the separate judgements on the sensitivity of the receptors and the magnitude of the effects. This overall judgement is formed from a reasoned professional overview of the individual judgements against the assessment criteria.

10.2.22 GLVIA3 notes, at paragraphs 5.56 and 6.44, that there are no hard and fast rules with regard to the level of effects, therefore the following descriptive thresholds have been used for this appraisal:

- **Major;**
- **Moderate;**
- **Minor;**
- **Negligible**

10.2.23 Where it is determined that the assessment falls between or encompasses two of the defined criteria terms, then the judgement may be described as, for example, Major/ Moderate or Moderate/ Minor. This indicates that the effect is assessed to lie between the respective definitions or to encompass aspects of both.

Judging Overall Significance

10.2.24 A judgement is reached, based on the assessment, as to whether an effect is significant or not. Those degrees of effects that are considered to be *significant* by the assessor for *this* LVIA are judged to be effects that are either Major or Major/ Moderate.

10.2.25 GLVIA3 Statement of Clarification 1/13 (2013)² notes that:

"Concerning 'significance', it is for the assessor to define what the assessor considers significant...Depending on the means of judgment and terminology (which should be explicitly set out), effects of varying degrees of change (or levels of change), may be derived. The assessor should then establish (and it is for the assessor to decide and explain) the degree or level of change that is considered to be significant." (GLVIA3 Statement of Clarification, § 3.)

Significance of Landscape Effects

10.2.26 GLVIA3 states, at paragraph 5.56, that:

"There are no hard and fast rules about what makes a significant effect, and there cannot be a standard approach since circumstances vary with the location and context and with the type of proposal. At opposite ends of the spectrum it is reasonable to say that:

- *Major loss or irreversible negative effects, over an extensive area, on elements and/ or aesthetic and perceptual aspects that are key to the character of nationally valued landscapes are likely to be of the greatest significance;*
- *Reversible negative effects of short duration, over a restricted area, on elements and/ or aesthetic and perceptual aspects that contribute to but are not key characteristics of the character of landscapes of community value are likely to be of the least significance and may, depending on the circumstances, be judged as not significant;*

² Landscape Institute and the Institute of Environmental Management (10th June 2013) **GLVIA3 Statement of Clarification 1/13**

- *Where assessments of significance place landscape effects between these extremes, judgements must be made about whether or not they are significant, with full explanations of why these conclusions have been reached.” (GLVIA3 paragraph 5.56.)*

Significance of Visual Effects

10.2.27 GLVIA3 states, at paragraph 6.44, that:

“There are no hard and fast rules about what makes a significant effect, and there cannot be a standard approach since circumstances vary with the location and context and with the type of proposal. In making a judgement about the significance of visual effects the following points should be noted:

- *Effects on people who are particularly sensitive to changes in views and visual amenity are more likely to be significant;*
- *Effects on people at recognised and important viewpoints or from recognised scenic routes are more likely to be significant;*
- *Large-scale changes which introduce new, non-characteristic or discordant or intrusive elements into the view are more likely to be significant than small changes or changes involving features already present within the view.” (GLVIA3 paragraph 6.44.)*

10.3 BASELINE CONDITIONS

National Planning Policy

National Planning Policy Framework (NPPF, 24 July 2018)

- 10.3.1 The NPPF sets out the Government's economic, environmental and social planning policy and in combination these policies give the Government's vision of sustainable development. The NPPF emphasises the need for well-designed places, promoting healthy and safe communities and conserving and enhancing the natural environment.
- 10.3.2 Regarding landscape and green infrastructure, the Natural Environment section of the NPPF provides a policy context for the countryside and green infrastructure. The key objectives include to protect and enhance valued landscapes and, minimising impacts on and providing net gains in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.
- 10.3.3 Paragraph 170 states at part a) that planning policies and decisions should protect and enhance valued landscapes and goes on to clarify that this should be in a manner commensurate with their statutory status or identified quality in the development plan. Part b) states that planning policies and decisions should recognise the intrinsic character and beauty of the countryside.
- 10.3.4 Paragraph 171 advises that:
- "Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries".*
- 10.3.5 Paragraph 172 goes on to add:
- "Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty, which have the highest status of protection in relation to these issues".*
- 10.3.6 The site is within an undesignated landscape with no special protected status. This LVIA Chapter considers how the intrinsic character of the countryside has been recognised. The potential to enhance green infrastructure networks is also considered.

Planning Practice Guidance (PPG, 2014)

- 10.3.7 The PPG came into force on the 6th March 2014 and is an online planning resource which provides guidance on the NPPF and the planning system. With regard to the assessment of landscape character being used to inform plan-making and planning decisions, the PPG³ states that (paragraph 001):

³ DCLG (March 2014) **National Planning Practice Guidance**

"Where appropriate, landscape character assessments should be prepared to complement Natural England's National Character Area profiles. Landscape Character Assessment is a tool to help understand the character and local distinctiveness of the landscape and identify the features that give it a sense of place. It can help to inform, plan and manage change and may be undertaken at a scale appropriate to local and neighbourhood plan-making."

10.3.8 The PPG also provides a brief description of Green Infrastructure (paragraph 015):

"Green infrastructure is a network of multi-functional green space, urban and rural, which is capable of delivering a wide range of environmental and quality of life benefits for local communities. Green infrastructure includes parks, open spaces, playing fields, woodlands, street trees, allotments and private gardens."

Local Planning Policy

South Derbyshire Local Plan Part 1 (Adopted 2016)

10.3.9 This sets the long-term vision, objectives and strategy for the spatial development of South Derbyshire.

10.3.10 The following policies are relevant to landscape and visual matters and the site;

Policy BNE4: Landscape Character and Local Distinctiveness

10.3.11 This policy states the character, quality and local distinctiveness of South Derbyshire's landscape should be protected and enhanced by sensitive and careful design.

10.3.12 In particular, it stipulates *"B Developers will be expected to retain key valued landscape components such as mature trees, established hedgerows and topographical features within development sites unless it can be demonstrated that the loss of features will not give rise to unacceptable effects on local landscape character..."*

10.3.13 Developers will be expected to demonstrate that attention has been paid to the landscape character areas as identified in the published character assessment The Landscape Character of Derbyshire, and that proposals should have regard to their significance including the guidance given on habitats, woodland and tree planting and landscape management and that mitigation proposals are appropriate to the character of the landscape.

Policy INF7 Green Infrastructure

10.3.14 This policy sets out to conserve, enhance and extend green infrastructure, including the continued and enhanced protection of ecological, biological and geological assets, in addition to creating new opportunities to increase access to green infrastructure.

10.3.15 The District Council supports development of the Green Infrastructure Network as proposed by the 6Cs Green Infrastructure Strategy, and will in particular promote improved GI provision in the Trent Strategic River / Trent & Mersey Canal Corridor. In particular, it states *"B. Within the Trent Valley, or other locally determined Nature Improvement Area, the District Council will support and help deliver the landscape scale change as promoted by the Lowland Derbyshire and Nottinghamshire Local Nature Partnership. Any development within the area defined by the Trent Valley Vision will be expected to contribute towards and assist*

in delivering the vision in accordance with the strategy. Such contributions may be in the form of appropriate design, suitable form and function, the delivery of Green Infrastructure, landscape and habitat enhancement, financial contributions or other mechanisms as appropriate, to deliver an overall benefit within the Trent Valley Vision area.”

South Derbyshire Local Plan Part 2 (Adopted 2017)

- 10.3.16 Local Plan Part 2 provides the more detailed Development Management policies, of which the following is relevant to landscape and visual matters;

BNE7: Trees, Woodland and Hedgerows

- 10.3.17 This policy sets out to protect trees, woodland and /or hedgerows which are deemed important in terms of amenity, ecological, landscape or historic value.
- 10.3.18 Development layouts should be informed by appropriate arboricultural surveys and should ensure appropriate measures to ensure adequate root protection areas and buffers are included.
- 10.3.19 In particular it states *“C. Development proposals which will have a detrimental effect on important trees, woodland or hedgerows must satisfactorily demonstrate how the impact on biodiversity has been minimised and, wherever possible, a net biodiversity gain delivered through appropriate mitigation, compensation or offsetting, including through new planting or improved management of retained trees and hedgerows. New planting will be expected to be adequately managed to reach full maturity.”*
- 10.3.20 Furthermore new development tree planting will be expected to be in keeping with the rural or urban context.

Other Relevant Strategies

6Cs Green Infrastructure Strategy Volume 4: Strategic GI Network for the Derby Principal Urban Area and Sub-Regional Centre

- 10.3.21 This is a regional level strategy for developing green infrastructure networks across the counties of the East Midlands.

The site sits within the Sub-Regional GI Corridor ‘B: Trent Strategic River Corridor’. However there are no specific proposed schemes which affect the site and surrounding context.

Green Infrastructure – A Prospectus for Lowland Derbyshire & Nottinghamshire Jan 2017 Lowland Derbyshire & Nottinghamshire Local Nature Partnership

- 10.3.22 This is a strategic document outlining a ‘starting point’ to a planning and delivery framework for Green Infrastructure in Lowland Derbyshire and Nottinghamshire.
- 10.3.23 The site sits within the Sub-Regional GI Corridor ‘A’ category, in particular the Trent Strategic Corridor. Other than a high level strategic aspiration this prospectus does not show any specific proposed schemes which affect the site and surrounding context.

Landscape Character

National Character

10.3.24 National Character Area (NCA) profiles have prepared by Natural England for the 159 NCAs defined across England. These NCA profiles include a description of the natural and cultural features that shape the landscape, how the landscape has changed over time, the current key drivers for ongoing change, and a broad analysis of each area's characteristics. Figure 10.3 illustrates the NCAs and other defined character areas within the context of the site.

10.3.25 At this very broad landscape scale, the site, lies within Natural England's National Character Area (NCA) 69: 'Trent Valley Washlands'. Extracts from the profile of this NCA are included at Appendix 10.2. This NCA stretches along a pronounced loop from the outskirts of Sutton Coldfield in the west up through Burton Upon Trent along the southern parts of Derby and Nottingham before passing through Loughborough and extending to the outskirts of Leicester in the east. It therefore covers a very extensive landscape tract.

10.3.26 Under Key Characteristics the NCA description includes the following references:-

- *A landscape strongly defined by its rivers and their flood plains with the extensive canal network adding significantly to the watery character and providing major recreational assets for the area.*
- *Rich history of human settlement and activity reflected in the archaeology and historic buildings with a particular focus on river crossing points and the gravel terraces, as well as being significant for early Christianity in the Midlands, and later for its canal and brewing heritage.*
- *Settlement pattern heavily influenced by flood risk, confining villages to the gravel river terraces and to rising ground at the edges of the flood plains.*
- *Traditional buildings are characteristically of red brick and clay plain tile with earlier timber frame and grander dwellings and churches typically built from sandstone. Red brick and Welsh slate of 19th- and early 20th-century urban expansion prominent in larger settlements along with modern housing and development.*
- *A landscape heavily used as transport and communication corridors along the rivers and canals, for major roads and railways, and for power lines.*
- *A landscape marked by extensive sand and gravel extraction, power stations and prominent urban-edge industrial and commercial development.*

10.3.27 The description also states:-

"...A unifying thread throughout the Washlands is provided by the rivers, their flood plain tracts of pasture and the bordering higher ground; however, it is also a landscape that is heavily fragmented and intruded upon by modern built development, communication and transport infrastructure. It is greatly influenced by past and present industry, from energy generation to aggregate extraction. The landscape is experiencing significant forces for change over short timescales from housing, infrastructure, the sand and gravel industry, agriculture and commercial 'big shed' development which detracts from the established character."

10.3.28 The NCA has the following relevant Statement of Environmental Opportunity:-

“SE01:: Carefully plan and manage new development within the NCA to ensure that landscape character and ecosystem services are strengthened, that heritage features, wildlife habitats, woodland and the hedgerow network are enhanced, and that opportunities for creation of multifunctional green infrastructure are realised so that this landscape is resilient to the forces of change that it is experiencing.

- 10.3.29 Since this NCA follows a fairly narrow tract of washlands along the course of the Trent, there are adjacent NCA character areas which lie to the north and south.
- 10.3.30 NCA 68: *Needwood and South Derbyshire Claylands* lies directly north. It is described as predominantly pastoral landscape of rolling countryside that is still largely rural and relatively tranquil, featuring distinctive field boundary patterns and characteristic hedgerows with hedgerow trees, with an overall wooded character.
- 10.3.31 The NCA70: *Melbourne Parklands* lies approximately 1.8km to the south, and is described as gently rolling lowland plateau of productive, reddish clay soils suitable for agriculture, also with unimproved pasture with woodland on some steep, undulating sandstone slopes and small, clustered red-brick villages retaining a rural character.
- 10.3.32 It is considered these adjacent NCAs do not resemble the landscape character of the site or its immediate context and as such NCA 69: *Trent Valley Washlands* constitutes the national scale study that sets the very broad landscape character context for the development site.

Derbyshire Landscape Character Assessment

- 10.3.33 The Derbyshire Landscape Character Assessment has been undertaken at a County level. It subdivides the landscape into 39 Landscape Character Types spread across the 10 National Character Areas which are present within Derbyshire.
- 10.3.34 Within the context of the Derbyshire Assessment, the development site lies within the *Trent Valley Washlands* character area, specifically within the *Lowland Village Farmlands* LCT, which is summarised as;

‘This is a large scale, open, gently rolling lowland landscape associated with the lower slopes and terraces of broad flood plains. A mixed farming landscape defined by medium to large regular fields with thorn hedges, punctuated by villages.’

- 10.3.35 Key Characteristics are stated as;

- *‘Gently rolling, almost flat, lowland with river terraces*
- *Low slopes and summits give a sense of elevation over a broad flood plain*
- *Mixed farming with arable cropping and improved pasture*
- *Thinly scattered hedgerow trees including some willow pollards*
- *Scattered, locally dense, watercourse trees*
- *Medium to large regular fields with thorn hedgerows*
- *Discrete red brick villages with farms and cottages*
- *Large red brick outlying farms’*

10.3.36 The description also states;

'...Soils reflect the geological variation, with heavy seasonally waterlogged soils over mudstone, and more permeable soils over localised drift and river terrace deposits. The resultant land-use is typically mixed, with cropping on the flatter, more cultivable, soils and improved pasture in damper areas.

... Immediately adjacent to the villages, fields are medium size, semi-regular, with areas of ridge and furrow reflecting the enclosure of medieval open fields. The hedges that enclose these fields are species-rich. Beyond the villages there is a more regular pattern of fields suggesting a period of later enclosure and typically, the hedgerows are single species hawthorn. The more regular fields are most obvious in areas of former common like Etwall Common and Egginton Common.

Much of the original character of this landscape has been seriously impacted upon by modern large scale development. Large power stations dominate views across the landscape as do the many pylons carrying the resultant electricity. The gentle topography above the flood plain has always been attractive for road construction and modern roads, like the A50 and A52, pass through this landscape. The underlying mineral deposits have resulted in sand and gravel extraction, and the restoration of these sites has created areas of immature agricultural land and large water bodies...'

10.3.37 The following Planting and Management Guidelines are stated;

- *'Ensure the use of indigenous tree and shrub species, including a proportion of large, long-lived species.*
- *Conserve and enhance the tree groups that occur within and around rural settlements and isolated farmsteads.*
- *Encourage the continuing practice of pollarding to maintain the traditional riparian character of the landscape.*
- *Ensure new woodland does not conflict with features (e.g. ridge and furrow) that help to define landscape character.'*

10.3.38 As with the NCA, there are adjacent LCTs, with Riverside Meadows LCT located 1km to the south, which is described as;

'Broad, flat flood plains, containing meandering rivers and streams with scattered trees along riverbanks. A pastoral landscape of large, hedged fields with trees scattered along boundaries.'

10.3.39 Located 1km to the north east is the Needwood and South Derbyshire Claylands: Settled Farmlands LCT, which is described as;

'An undulating to gently rolling, dairy farming landscape with hedgerow trees, dense watercourse trees and occasional small woodlands. A well-settled landscape of red brick farmsteads and cottages along winding country lanes.'

10.3.40 Again, it is considered these adjacent LCTs are not generally representative of the site's context.

Designations

- 10.3.41 There are no landscape designations which apply to the site or its immediate context.
- 10.3.42 In relation to other environmental designations, a listed grade II building (Willington Hill Farmhouse) is located close to the east of the site on the opposite side of Etwall Road B5008.
- 10.3.43 The Trent & Mersey Canal Conservation Area is located 325m to the south of the site and navigates north east to south west along the northern settlement edge of Willington.
- 10.3.44 These heritage designations are addressed in the Heritage Assessment.
- 10.3.45 A Public Right of Way Willington-SD50 9/1 (after crossing the railway line) enters the site at the southern boundary and traverses to the western site boundary where it links with the A38 corridor.
- 10.3.46 Figure 10.4 illustrates the location of these designations and features.

Topography

- 10.3.47 The following should be read in conjunction with Figure 10.5.

Context – Landform

- 10.3.48 The topography of the site's context is predominantly flat low lying land of the Trent Valley Washlands. The Trent & Mersey Canal navigates through Willington to the south of the site, whilst the River Trent itself meanders north east to south west across the valley floodplain further south, characterised by a series of gravel extraction pits. Beyond Repton to the south the land rises more markedly to form the higher ground of the Melbourne Parklands, where undulating sloping farmlands allow extensive views back over the Trent Valley.

Site - Landform

- 10.3.49 The northern site boundary sits at the base of an engineered landform related to the Burnaston Cross A50 interchange, with adjacent land rising up next to the north western and north eastern site corners to accommodate slip roads. The site itself is relatively flat in the northern section, ranging from 57mAOD in the north west corner to 55m AOD in the north east corner, but which rises to a gentle crown within the central section of the site at approx. 60m AOD (possibly a legacy of past landfill operations). This land falls away towards the south with a series of localised dips and ridges, with the south east corner at 50m AOD and the south west corner at 47m AOD.
- 10.3.50 The linear rail corridor forms an embankment to the southern site boundary before gently falling towards the settlement of Willington in the south. A small ditch runs adjacent the hedgerow along the western verge side of Etwall Road.

Landscape of the Site and Immediate Context

- 10.3.51 An assessment of landscape character of the site and its immediate context has been carried out, providing a finer level of assessment than the published studies.

Immediate Context

- 10.3.52 The site lies 4km southwest of Derby and 3.6km northeast of Burton upon Trent, just to the south of the A50 Burnaston Cross interchange, known as the Toyota roundabout. The Toyota factory is an extensive industrial complex which lies to the north of the A50. The small settlements of Etwall and Findern also lie to the north of the A50 corridor.
- 10.3.53 Directly north-east of the site lies Burnaston Cross services, which includes the Cherry Tree Farm pub, petrol filling services in addition to a hotel and fast food restaurant.
- 10.3.54 The nearest settlement is Willington, located to the south. A recent residential development off James Clarke Road has extended the settlement edge up to the railway corridor to the south east of the site. The Trent & Mersey Canal is a designated Conservation Area which traverses north east to south west, and passes around the northern edge of Willington.
- 10.3.55 There are two canal bridges at entrances into Willington. The Castle Way bridge in the west and the Etwall Road bridge in the north. To the east of the latter there is public open space which forms part of the Canal Conservation Area, along with a towpath which continues along the southern side of the canal.
- 10.3.56 Mercia Marina lies approximately 500m to the east of the site and is a large canal basin with circular walk and visitor centre facilities. This is not located within the Canal Conservation Area. Repton lies approximately 2km to the south of Willington.
- 10.3.57 Power infrastructure is prominent within the landscape, with the Willington Power Station cooling towers occupying the skyline to the east and with overhead power lines within and around the site's context. The site itself is traversed by high voltage overhead power lines with two pylons located within the site.
- 10.3.58 A grade II listed building Hill Farm lies to the east of Etwall Road and includes a tree lined driveway to Etwall Road.
- 10.3.59 There are also properties which lie directly north of the site, accessed by a narrow lane just south of the services roundabout. These include a residential property and premises known as 'Danes Lodge'. There appear to be commercial activities associated with both premises (such as HGV parking, recycling and caravan/mobile homes).

Site

- 10.3.60 The site itself is bounded by transport infrastructure, with Etwall Road (B5008) to the east, the A38 dual carriageway to the west and with the southern boundary formed by a rail corridor.
- 10.3.61 The site comprises gently undulating farmland used as grazing pasture. The majority of field hedgerows have been either removed or are now substantially fragmented and replaced with agricultural post and wire fences. There are a very small number of existing field trees and two agricultural buildings. The latter are located within the eastern part of the site and are accessed from a track from off Etwall Road.
- 10.3.62 Site boundaries are defined by hedgerows along the northern and eastern boundaries along Etwall Road and are reasonably intact. The western boundary comprises a hedgerow and

structural roadside planting beyond to the A38. This is similarly intact with just a couple of localised 'gappy' sections. The southern site boundary is formed by an agricultural post and wire fence, adjacent the railway line.

- 10.3.63 A Public Right of Way traverses the site, crossing the railway line and entering the site to the south and proceeding in a north westerly direction to exit along the western site boundary adjacent the A38 corridor. There is no made track with little to demarcate its route across the farmland.

Landscape Value

- 10.3.64 In terms of 'landscape value' it is appropriate to examine the role of the site and its immediate context in terms of the range of local factors as set out in the GLVIA3 (Box 5.1, page 84), and summarised in the methodology. This considers the landscape in terms of a range of factors as set out below. As a starting point, landscape designations have been considered.
- 10.3.65 Landscape Designations: The site and its wider landscape context are not subject to any national, local or other landscape designations.
- 10.3.66 Landscape Quality (Condition): Some field amalgamation has occurred across the site resulting in larger scale and regular fields. The site is composed of open farmland with field boundaries predominantly of agricultural post and wire with some fragmented hedgerows. The hedgerow boundaries within the site are not intact and are presently limited and fragmented at best. The Etwall Road hedgerow boundary is more intact with sporadic hedgerow trees and the roadside planting along the A38 corridor to the west of the site is also more consistent and continuous.
- 10.3.67 Given the landform and landscape changes associated with the surrounding major roads and A50 junction the landscape of the immediate context has also been disturbed over the years.
- 10.3.68 Scenic Quality: The site occupies a varied landscape context that comprises both rural characteristics and features and also large scale transport and urbanising infrastructure and development. Whilst the site comprises open pasture farmland it is also strongly influenced by the nearby A50 junction, the A38 and Etwall Road. Willington and the Willington Power Station are also visible as part of its context.
- 10.3.69 It is a landscape that includes a mixture of positive and negative elements and characteristics in scenic terms.
- 10.3.70 Rarity and Representativeness: The site is relatively flat open farmland sub-divided into medium scale fields with most of the field boundary vegetation prevalent along the western, northern and eastern site boundaries, with minimal internal hedgerows. The site landscape and that of its immediate context is considered to be largely unremarkable and it does not contain any notable or rare landscape features or characteristics.
- 10.3.71 It is a landscape that is broadly representative of the wider landscape in that it is quite varied, low lying, relatively flat and includes the influences of major power and transport corridors. It does not however include particularly strong or good examples of these representative features or characteristics.

- 10.3.72 Conservation Interest: The heritage and ecological appraisals undertaken for the proposed development indicate that conservation interest is not high or significant. In terms of the site itself this interest is limited with relatively greater interest found in the wider context. A listed building lies to the east of the site and the canal to the south is a Conservation Area.
- 10.3.73 Recreational Value: The site is traversed by Public Right of Way SD50 9/1 which runs from Etwall Road in the south east linking to A38 in the west. The site is not used for any other recreational activity.
- 10.3.74 Perceptual Aspects and Associations: There are no notable or obvious perceptual qualities to the site or its immediate context and it is not a tranquil or a wild landscape. Major transport, power and urbanising uses impart an influence over the character of this local landscape to differing degrees.
- 10.3.75 No relevant associations between the landscape of the site and its immediate context and any artists, writers or other people of interest, or with significant events in history have been identified.
- 10.3.76 Landscape Value - Conclusion
- 10.3.77 In conclusion and having appraised the above factors it is judged that the site and its immediate context is of Low/ Medium landscape value.

Visual Baseline

- 10.3.78 A visual appraisal has been undertaken for the site. This has explored the nature of the existing visual amenity of the area and sought to establish the approximate visibility of the site from surrounding locations and receptors. A series of photo viewpoints have been selected which support this analysis.
- 10.3.79 Photographs have been taken to illustrate a view from a specific vantage point, or to demonstrate a representative view for those receptors that are moving through the landscape, e.g. rights of way users. The photographs may demonstrate varying degrees of visibility and include both short and long range views. The photographs were taken on the 16th March and 22nd May 2018 and seasonal differences have been taken into account when determining the visual effects on these receptors.

Photo Viewpoints

- 10.3.80 An assessment of the likely visual effects of the proposed development upon surrounding receptors is detailed in the subsequent section. Figures 10.6 and 10.7 detail the location of the Photo Viewpoints and Figures 10.8 to 10.18 illustrate the photo viewpoints. They are briefly described below.

Viewpoint 1

- 10.3.81 Viewpoint 1 is a close range view taken from the site boundary through a gap within the hedgerow along Etwall Road, just south of the Burnaston Cross Services. The site is evident in a filtered view as gently undulating pasture with structural planting alongside the A38 forming the backdrop.

Viewpoint 2

- 10.3.82 This is a close range view taken along Etwall Road outside the entrance gateway to Hill Farm. The immediate scene is the hedgerow site boundary and verge along Etwall Road, punctuated by sporadic hedgerow trees. The site is seen beyond the roadside hedgerow and includes fragmented hedgerows and overhead power lines traversing the fields. Agricultural buildings within the site are evident within the southern field, with mature trees along the A38 visible beyond the site.

Viewpoint 3

- 10.3.83 Viewpoint 3 is a close range view taken along Etwall Road looking through the gated farm access with a track seen heading west. The scene is similar to Viewpoint 2, a relatively flat area of farmland bounded to the west by the A38 roadside planting. The existing agricultural buildings and power infrastructure are visible within the site.

Viewpoint 4

- 10.3.84 Viewpoint 4 has been taken from just south of the rail line crossing close to the edge of the recent residential development along James Clarke Road. The site is evident in the middle distance as a thin band of farmland with higher ground to the north, set against the backdrop of roadside planting to the A38 corridor. The low embankment of the rail line is seen traversing east to west along the site's southern boundary. Agricultural buildings and overhead power lines are again visible within the site.

Viewpoint 5

- 10.3.85 This is a view from the public footpath (PROW SD50 9/1, close to Etwall Rd looking northwards across farmland towards the site with the rail line visible traversing east to west. The existing planting along the A38 corridor occupies the skyline beyond and to the west and south west of the site.

Viewpoint 6

- 10.3.86 This is a close range view taken from the pedestrian rail crossing along PROW SD50 9/1 at the southern site boundary. The south eastern part of the site is evident in the foreground and includes the agricultural buildings and pylons and power lines. The hedgerow to Etwall Road and the eastern side of the site is visible to the right, with mature trees evident at Hill Farm. The roof of the Cherry Tree Farm pub at Burnaston Cross is evident protruding above trees to the north, whilst roadside planting along the A38 corridor is also visible to the west.

Viewpoint 7

- 10.3.87 This viewpoint has been taken within the site along PROW SD50 9/1 looking generally to the north and east. The line of the PROW is not evident across the field. The roof of Hill Farm is visible beyond trees largely surrounding the property and to the east of Etwall Road. Partial views are also possible of Burnaston Cross Services and the Cherry Tree Farm pub above existing vegetation. The A50 roundabout junction is also visible and includes a large

number of lighting columns. The highest parts of the Toyota complex are evident beyond the junction.

Viewpoint 8

- 10.3.88 This is a close range view taken from the point where the public footpath (PROW SD50 9/1) enters the site from the A38. The stile opening allows a channelled view across the site, with agricultural buildings and overhead power lines seen towards the eastern side of the site.

Viewpoint 9

- 10.3.89 Viewpoint 9 is a close range view from the side of the A38 north bound carriageway looking north east towards the site. The view is dominated by highway infrastructure and existing roadside planting along the western site boundary. The site is partially visible through and between the existing roadside trees and hedgerow.

Viewpoint 10

- 10.3.90 This view from the canal road bridge, approximately 550 metres to the south of the site on the approach into Willington on the A5132 (The Castle Way). The site is evident in the middle distance on the right half of the viewpoint and includes the agricultural buildings and pylons and power lines.
- 10.3.91 The Toyota complex and features and buildings close to the A50 junction are can be glimpsed beyond mature trees and planting.

Viewpoint 11

- 10.3.92 Viewpoint 11 is taken from the Trent & Mersey Canal towpath looking northwards towards the site. The foreground comprises the canal and gradually rising farmland bounded by hedgerows. Beyond this, the site is partially visible in the middle distance, with further matures trees and planting forming a backdrop to the partial view of the site. The stack at the Toyota complex is visible on the horizon beyond the site and the A50 junction.

Viewpoint 12

- 10.3.93 This view is taken from mid-range at 480m along the canal towpath looking north from Willington settlement edge. The foreground is dominated by the Trent & Mersey Canal and various moored long boats, with hedgerow and mature hedgerow trees lining its northern banks. There are filtered and partial views beyond to the north, primarily of farmland located just south of the site. The site itself is discernible as the furthestmost farm field seen set against the structural planting associated with Burnaston Cross. The Toyota Factory complex protrudes above this woodland cover visually referenced by its iconic chimney.

Viewpoint 13

- 10.3.94 Viewpoint 13 is taken from Etwall Road (B5008) near the canal bridge on the northern edge of Willington. The site is evident in the middle distance lying beyond intervening farmland

and the rail line that traverses east to west. The A38 roadside planting is visible on the site's western boundary whilst other mature trees and planting around Burnaston Cross to the north and with the stack at the Toyota complex visible beyond.

Viewpoint 14

10.3.95 This view is taken approximately 800m away at the Mercia Marina looking west towards the site. The foreground is dominated by the canal basin and long boat moorings, with mature trees and woodland forming a strong planted edge to the marinas western side. The site lies beyond the woodland, with the pylon and overhead power lines providing a visual reference to the site's location. The Toyota complex is evident to the right of the view.

Viewpoint 15

10.3.96 Viewpoint 15 is a long range view from approximately 2.7km and is a representative view from Askew Hill, north east of Repton. The view is taken along public footpath (PROW Repton-SD37 29/1) through a gap in the hedgerow. The view from this elevated position is expansive across the landscape to the north of Repton, with the view dominated by the Willington Power Station and the wide Trent Valley and also including the Toyota complex, major roads and power lines, and a plethora of electricity pylons. The site lies just in front of and to the left of the Toyota complex.

Viewpoint 16

10.3.97 This view is from approximately 3.2km away along Repton Road (B5008) at the edge of Newton Solney. The general direction and location of the site can be discerned although it is effectively screened and filtered by existing planting. This is a broad, varied and expansive view northwards across the Trent valley.

Viewpoints 17 - 21

10.3.98 Viewpoints 17 -21 provide further long ranging and expansive views northwards across the Trent Valley from various locations typically 4- 6 km from the site. In all of these views and where it is possible to discern the site it is seen as a very minor element within a panoramic view dominated by a combination of predominantly rural areas yet containing major infrastructure and urbanising features eg Willington Power Station.

10.3.99 The Toyota complex is visible in most of these views and assists in providing a reference to the general location of the site.

Summary of Visual Baseline

10.3.100 The baseline analysis results in a number of reasoned conclusions which are summarised below:-

- The site is visually well contained from the west, north and east by the nature of the underlying landform and the mature landscape and planting surroundings.

- The site can be seen more widely yet distantly from the higher ground to the south at typically 3 – 6km. In these views and where discernible it forms a very minor component of wide ranging and varied views that include Willington Power Station and the Toyota complex.
- The Site is visible in closer views, principally from the south and immediately to the east, including from the edge of Willington and the Trent and Mersey Canal and from Etwall Road and a public footpath (PROW SD50 9/10). The latter crosses the site. There is a Glimpsed and partial views of the site are also possible from the A38 immediately to the west.
- Close to the boundary of the site, there are some views to varying extents from a limited number of properties and premises immediately to the north and close to the east of the site, including Hill Farm.

10.4 LANDSCAPE DESIGN AND EMBEDDED MITIGATION MEASURES

Introduction

10.4.1 The development proposals are described in the Design and Access Statement (DAS) and other information accompanying the planning application. The existing landscape resource and the visual receptors and amenity of the site have been considered by the planning and design process and have informed the resultant scheme. This approach has entailed collaboration between landscape, ecological and other professionals. The landscape components of the scheme are an important integral part of the proposals.

Landscape Design and GI Objectives

10.4.2 The key objectives of the landscape and GI proposals for the scheme are to:

- Respect and recognise existing landscape character;
- Create a high quality and robust new landscape framework, including woodland and structure planting, hedgerows, other mixed habitats, open spaces and water features;
- Provide significant new planting as part of a thorough and long term approach to the growth and management of the overall landscape framework;
- Minimise any potential adverse landscape or visual effects through the application of best practice design principles and careful attention to design through all stages of the development process; and
- Adopt specific landscape measures to mitigate any potential adverse landscape, visual or other environmental effects (e.g. noise mitigation).

10.4.3 There are a number of key landscape design issues to be addressed by the proposals. These can be summarised as follows:-

- Screening and relieving the visual extent of the built development wherever practicable. Minimising the visual presence of the built development and its potential visual effects upon surrounding receptors.
- Positively assimilating the necessary ground modelling and earthworks proposals and proposed building platforms with the existing landscape and topography.
- Establishing a landscape that is sufficiently robust and extensive to form a 'green framework' to the built development (rather than vice versa) and establish a suitable buffer to the neighbouring settlement and uses.
- Addressing views towards the proposed development, particularly from those receptors in the south and from the properties close to the north and east, including Hill Farm.

Landscape and Green Infrastructure (GI) Proposals

10.4.4 An extensive Green Infrastructure framework will be established as part of the proposed development. This will comprise the conservation of some of the existing perimeter hedgerows and trees. These existing features would be reinforced by new tree, hedgerow

and shrub planting together with the provision of mixed habitats (including wetland areas as part of the sustainable drainage strategy).

10.4.5 The site wide landscape proposals extend to approximately 8.20 ha and equates to approximately a quarter of the total site area. The proposals will include significant landscaped bunding and extensive areas of woodland planting along the eastern and southern parts of the site.

10.4.6 This new green infrastructure will provide an effective landscape “buffer” between the development and Hill Farm to the east and Willington to the south. New planting will also add to the existing “buffering” of premises directly to the north. The existing public right of way through the site will be retained, yet realigned through the green infrastructure areas around the southern and western sides of the site.

10.4.7 In addition to the primary objective of providing effective landscape and visual mitigation through the provision of the bunding and woodland planting, the following landscape features are proposed:

- Semi mature trees to the development entrance and main internal access road.
- Landscaped gateway entrance to the site from Etwall Road – to include specimen tree groups and meadow grassland with mown verges;
- An extensive network of drainage swales and attenuation basins across the site forming a network of wetland habitats, also providing visual amenity and landscape interest;
- New native hedgerow planting to extend the existing perimeter hedgerows and provide ecological corridors in between development units;
- A mosaic of meadow grassland and wild flower meadows extending across the site, including a green corridor to accommodate the diverted public footpath and a mown pathway(s) to extend public access;
- The south eastern corner of the site includes a large drainage attenuation basin. This will be designed to include some permanent water and a variety of wetland and other habitats to maximise its contribution in biodiversity and landscape amenity terms;
- Inclusive access for site users along surfaced and mown footpaths within and surrounding the built development area;
- Enhancement and infill planting to gaps and weakened sections of site boundary hedgerows.

10.4.8 Woodland planting and new native hedgerows will be specified to reflect those in the existing locality and as recommended in the landscape character assessment guidelines of the ‘Lowland Village Farmlands’ LCT, Derbyshire Landscape Character (4th Ed. March 2014), refer to Appendix 10.2

10.4.9 The woodland planting mix will include some faster growing pioneer species to facilitate a quick establishment. In addition the smaller whip/ transplant plants will be interspersed

with larger feathered and standard trees in some areas, thereby assisting in the early visual screening and filtering of the development.

- 10.4.10 Overall, it is considered the scheme, with its accessible green infrastructure provision to the south east corner of the site, also supports the aims and objectives of Lowland Derbyshire & Nottinghamshire Local Nature Partnership GI Strategy.

Landscape Management

- 10.4.11 All of the landscape areas and public open space features will be managed and maintained. This would be achieved through the implementation of a comprehensive Landscape Management Plan (LMP), to ensure the successful establishment and continued thriving of the landscape proposals.

10.5 POTENTIAL EFFECTS

Demolition and Construction

- 10.5.1 Construction and phasing details of the project are included elsewhere within the planning application.
- 10.5.2 Throughout the course of the construction process, the approaches and methodologies adopted will endeavour to minimise any unnecessary effects upon the environment and surrounding receptors. For example, the location and design of site compounds, lighting, signage and perimeter mounding will all take these issues into account.
- 10.5.3 Combined with effective project management and liaison and communication with the relevant authorities and the local community, the potential effects of construction will be mitigated and minimised as far as practicable. Construction working methods will also adopt best practices wherever practicable.
- 10.5.4 The following are temporary activities and works that will have potential implications in landscape and visual terms;
- Site set up including erection of any site fencing / gates, site offices and amenity facilities/ storage compounds;
 - Construction related traffic to and from the site including staff and materials;
 - Breaking out foundations of existing agricultural buildings and hard standings;
 - Earthworks including earth moving machinery activities;
 - Cranes and erection of steel building frames.

Operation (following completion)

- 10.5.5 The following are permanent changes that will have potential implications in landscape and visual terms;
- Loss of open farmland and alteration of landscape character to primarily employment uses;
 - Loss of existing landscape features eg hedgerow planting and pasture
 - Changes to the existing landform to include bunding and broadly level development plateaus;
 - Changes to road infrastructure to include a new access roundabout;
 - New structural landscape proposals to include extensive new planting;
 - Other indirect effects.

10.6 ASSESSMENT OF EFFECTS

- 10.6.1 The following section outlines the likely landscape and visual effects that would arise from the proposed development on the site. Schedules detailing these likely landscape and visual effects for the identified receptors are included in Appendices 10.3 and 10.4 respectively. Please refer to these in conjunction with the following descriptions.

Landscape Effects

Construction

- 10.6.2 The construction phase will give rise to short term direct and indirect landscape effects resulting from alterations to the landscape. Operations will be phased over a planned period of time and as such the overall impact of construction will vary and the duration of the resulting landscape effects will be short term, transitional and temporary.
- 10.6.3 The activities identified above will result in some temporary adverse effects on the landscape character of the 'Lowland Village Farmlands' LCT. The significance of effects depends on their nature, magnitude and duration but is assessed as Minor Adverse/ Negligible at worst with construction activity at its peak.
- 10.6.4 The effect of construction upon the landscape of the site and its immediate context will be Moderate/ Major Adverse during this relatively short period. This is to be expected on a site where employment buildings will be progressively constructed and will replace existing farmland. It should be noted that limited existing planting will be removed during this period and thus the effects upon planting will be minimal, even at a localised scale.

Operation (following completion)

National and County Scale

- 10.6.5 In the context of the national scale landscape character assessment study covering extensive landscape tracts as defined by the National Character Areas (NCA's), the completed and operational development will have no discernible effects at this very large geographic scale.
- 10.6.6 At a county level, the site falls within the '*Trent Valley Washlands*' Character Area of the Derbyshire Landscape Character Assessment. At this scale of assessment the effects will be relatively greater, yet will still occur over a small localised part of a more extensive landscape character area. At this scale, the wider and indirect operational effects of the Proposed Development will generally dissipate with distance from the Site.
- 10.6.7 The existing presence of urban and other active infrastructure and influences (eg A50 and junction, A38, Willington Power Station) within this broader landscape will also moderate to some degree the resulting landscape effect of the Proposed Development, at this scale.
- 10.6.8 The operational effect of the Proposed Development upon the '*Trent Valley Washlands*' Character Area will be at most Minor Adverse, upon completion of the proposed development.

Local and Site Landscape

- 10.6.9 The proposed development will change the character of the site from one dominated by pasture farmland including agricultural buildings to one dominated by employment units, and associated infrastructure set within a significant new landscape and planted setting.
- 10.6.10 The loss of the existing farmland would be permanent and irreversible. The new landscape will however include a notable landscape and green infrastructure component, which will become increasingly apparent and visible as it matures. This will extend to approximately 25% of the total site and will include broad landscape corridors (including bunding and woodland planting) along its eastern and southern sides.
- 10.6.11 The magnitude of the landscape change arising at this localised scale will be Medium/ High, yet it will not all be adverse. The conservation of existing hedgerows and trees coupled with the new planting and habitat proposals will extend across the major part of the site's outer landscape and include a significant number of new native trees, shrubs and other plants that will draw upon the planting guidelines contained within the published landscape character and biodiversity studies. These landscape proposals will be valuable and beneficial in local landscape terms.
- 10.6.12 The resultant landscape effect of the proposed development upon the site and its immediate context will be Moderate Adverse. However, this will reduce in the longer term to a Minor/ Moderate Adverse effect as the existing and new planting matures and is appropriately managed.

Landscape Features

- 10.6.13 Landform: Upon completion of the Proposed Development, the landform of the site will have been modified by the construction works. The resultant landform within the site will include changes arising from the formation of the broadly flat development plots and the formation of some locally significant perimeter bunding (mounding). Proposed woodland and tree planting along and across these bunds will assist in integrating these changes.
- 10.6.14 The resultant changes to the landform will result in largely localised and contained changes to the landform characteristics of the site.
- 10.6.15 Woodland, Trees and other Vegetation: Careful attention has been paid throughout the design process the potential effects upon existing trees and hedgerows as part of a balanced and well considered development solution.
- 10.6.16 A significant number of new woodland areas, other trees and tree groups, hedgerows and planting will be implemented as part of the proposed development. All of this new and existing planting will form an extensive and well connected framework of planted corridors and green spaces stretching around the new built development area. This new planting will comprise predominantly native and indigenous species that is appropriate to the Site's location and landscape characteristics and will satisfy other biodiversity aims.
- 10.6.17 Upon completion of the proposed development there will be a significant net gain in the areas of woodland, trees and lengths of hedgerow across the site. Whilst this does not directly replace for the loss of existing mature trees and hedgerows, this loss will be very limited and the proposals will extend the age profile of the existing site wide planting and will be supported by a comprehensive and long term management regime.

10.6.18 In the medium to longer term and as the existing and new planting matures and is appropriately managed there will be a Minor Beneficial effect in terms of planting within the site

10.6.19 Water Features and Watercourses: The proposed development will include the formation of a number of water features and wetland areas as part of a Sustainable Drainage Strategy (SuDS). These features will be designed to maximise their contribution in landscape and biodiversity terms alongside the drainage requirements. These features will similarly offer a Minor Beneficial landscape effect in terms of wetlands and water features.

Visual Effects

10.6.20 A comprehensive visual impact assessment of the proposed development has been undertaken to determine the potential effects upon surrounding receptors. This has considered the specific effects arising during the operational stage. Two assessments have been conducted for receptors during the operational stage of the Proposed Development. The first considers the effects upon full completion of the development and in the winter period (i.e. the screening effects of any deciduous foliage in the summer is not taken into account) and the second predicts the residual effects 15 years after completion and in the summer period (thus enabling the effectiveness of any planting to be evaluated).

Zone of Theoretical Visibility (ZTV)

10.6.21 The ZTV of the proposed development is the theoretical area from within which the Proposed Development will be visible. It is representative and is not an indicator of the significance of the visual effect. A computer modelled ZTV for the proposed development was initially prepared based upon landform data and proposed building heights. This has then been reviewed and 'tested' on site and refined to take account of the visual 'screening' provided by surrounding settlement, buildings, trees, hedgerows and other features.

10.6.22 The ZTV of this proposed development is primarily defined by the topography surrounding the site, with existing woodland, hedgerows and trees and settlement areas also interrupting and screening potential views. The ZTV of the proposed development is generally contained relatively close to the site yet then encompasses elevated distant areas on the southern side of the Trent Valley.

Photomontages

10.6.23 In addition to the Photo Viewpoints that support the baseline description of the landscape and visual amenity of the site and its surroundings, a number of Photomontages for the Proposed Development have been prepared and are included at Figures 10.20 – 10.23

10.6.24 The location of the Photomontages were agreed with South Derbyshire District Council and comprise the following locations:

- A looking (i) south and (ii) north from Etwall Road at the entrance to Hill Farm- see Fig 6.20
- B looking north west from Etwall Road at Willington Settlement Edge- see Fig 6.21

- C looking north east from A5132 The Castle Way canal bridge- see Fig 6.22
- D looking north from the Trent & Mersey heritage canal towpath- see Fig 6.23

10.6.25 The Photomontages aim to simulate the likely visual changes that will result from the proposed development adopting the Development Parameters and Illustrative Masterplan. They have been prepared in accordance with accepted guidance, as set out in The Landscape Institute Advice Note 01/11 '*Photography and photomontage in landscape and visual impact assessment*'.

10.6.26 The proposed development illustrated within the Photomontages is based upon the Illustrative Masterplan and depicts the proposed maximum height of the buildings as detailed on the Proposed Development Parameters Plan. In this regard, the results present the potentially worst case scenario in terms of the visible extent of the proposals within the views.

10.6.27 At this stage, the design and elevational treatments of the proposed buildings is illustrative only and the subsequent design and detailing of the buildings and other structures (elevational treatments, colours, rooflines etc.) will be subject to subsequent approvals.

10.6.28 The photomontages depict the scheme upon full completion of all the earthworks, buildings, and landscape proposals. Two photomontages are included for each viewpoint, namely;

- Upon full completion; and
- 15 years post full completion.

10.6.29 The 15 years post full completion photomontage is used to convey the residual effect of the landscape and planting proposals after 15 years of growth and appropriate management. Within these views the proposed woodland and trees are shown at 7 – 10 m high and reflects generally accepted growth rates.

Effects upon Visual Receptors

Construction

10.6.30 The visual effects of the proposed development during construction will vary throughout this stage. Construction activities and plant movements within the site will be visible at times from all of those receptors with views towards the completed and operational development.

10.6.31 In general, the clearest views towards the construction activities and plant movements etc. will be experienced by residents and users of those properties, roads, rights of way and other receptors in closest proximity and with the clearest existing views towards the Site areas. More distant views will also be possible to construction activity, although in these instances these will be more limited.

10.6.32 The significance of the visual effects for all of the receptors will vary during the course of construction and will generally be most notable during construction of those works closest to the respective receptor, including the formation of some of the mounding proposals. At these times, the significance of the visual effects arising for some receptors may exceed

those resulting from the completed and operational development, although these construction visual effects will only occur for a temporary period. The formation and planting of the perimeter mounding, once completed and particularly to the south and east of the site will help to restrict and screen some of the views towards lower level construction activities.

- 10.6.33 Overall, the construction effects on the surrounding visual receptors will vary from Negligible to Moderate/ Major Adverse (as detailed within the Visual Effects Table), with the receptors with the closest and clearest views towards the construction activity generally experiencing the most significant visual effects at the peak of construction activity.

Operation (following completion)

- 10.6.34 The effects of the proposed development upon visual receptors are set out in the Visual Effects Table (Appendix 10.4). The following summarises the visual effects of the proposed development upon full completion and prior to the growth and management of the proposed planting and habitats. The assessment does not however take into account the subsequent management and maturing of the existing and new landscape and planting proposals which is covered in the following residual effects section. Receptor references are included in brackets and refer to the Visual Effects Table and the location of the Visual Receptors are shown on Figures 10.6 and 10.7.

Residential Properties and Settlement

- 10.6.35 Views towards the completed development will be possible from settlement areas and properties surrounding the site and will range from close and clear views to distant and restricted views.
- 10.6.36 The most notable visual effects upon residential properties and settlement will arise for a limited number of properties close to the north and east of the site and from other properties on the northern edge of Willington with existing views northwards towards the site. Views from these properties will result in some Medium/ High and Medium magnitudes of visual change.
- 10.6.37 The resultant visual effects upon completion will be reduced from those during the construction phase as the perimeter bunding and associated planting will be in place and effective in screening the lower level and more active parts of the development. The higher parts of the buildings will be clearly evident from some of these properties at this stage yet will be increasingly screened and filtered as the planting matures and is managed.
- 10.6.38 Receptor B (Hill Farm): The primary aspect of Hill Farm is understood to be towards the south and not in the direction of the site. Notwithstanding this there will be opportunities for filtered and partial views westwards and south westwards towards the nearest buildings within the proposed development from this property.
- 10.6.39 The significance of the visual effects upon the Hill Farm property(s) will be Moderate Adverse upon completion of the Proposed Development.
- 10.6.40 Receptor C (North East Willington - recent residential development): Some properties largely on the edge of this recent development have views northwards and north westwards towards the site on gradually rising ground. Upon completion of the proposed development

the perimeter bunding and associated planting will form an effective visual 'buffer' and filter to views from those properties with views in this direction.

- 10.6.41 The higher parts of the built development proposals will be visible but much of the lower level activity within the development area will be effectively screened and hidden from view.
- 10.6.42 The significance of the visual effects upon the properties with the clearest views towards the site will be Moderate Adverse upon completion of the Proposed Development.
- 10.6.43 Receptor D (Premises North of the Site): Premises/ properties immediately to the north of the site will experience some potentially notable visual change as a result of the proposed development. These premises/ properties do appear to be varied in terms of their use and relationship to the site. Residential parts to these premises do exist but are relatively more removed than some other parts of the premises which appear to encompass commercial activities.
- 10.6.44 At the Bungalow, Etwall Road, it is believed that there are commercial activities associated with or located adjacent this dwelling. The upper elevations and roofs of new development units will be visible beyond the intervening hedgerows and hedgerow trees which lie to the south of the property.
- 10.6.45 Danes Lodge lies to the north east of the site and it is believed that this includes both residential and commercial uses (unconfirmed). It should be noted that for both of these receptors, there are existing visual detractors at close range including the A50 junction and connecting roads.
- 10.6.46 Thus the susceptibility to change of these properties/ premises do appear to vary and this has an affect upon the consequential significance of the visual effect. It is predicted that upon completion of the proposed development, the significance of the visual effects upon will be up to Moderate Adverse.
- 10.6.47 Receptor E (Willington; close to canal): A relatively limited number of properties close to and alongside the canal on the northern edge of Willington have views northwards towards the site on gradually rising ground. Upon completion of the proposed development the perimeter bunding and associated planting will form an effective visual 'buffer' and filter to views from those properties with views in this direction.
- 10.6.48 The higher parts of the built development proposals will be visible, nevertheless much of the lower level activity within the development area will be effectively screened and hidden from the outset
- 10.6.49 The significance of the visual effects upon the properties with the clearest views towards the site will be Minor/ Moderate Adverse upon completion of the Proposed Development.
- 10.6.50 Receptor F (Properties North West Willington): Residential dwellings along the north western settlement edge have varying views but typically these are more restricted towards the site and the north/ north east. Where views are possible these are generally more oblique. One large modern residence with main windows generally orientated towards the south east will potentially have angled views towards the southern and south eastern part of the proposed development.

- 10.6.51 From this property, significance of the visual effect will be potentially Moderate Adverse upon completion. From other properties in this general location the significance of the visual effects will be up to Minor/ Moderate Adverse.
- 10.6.52 Receptors Q, R and S (Newton Solney, Repton and Winshill): From the edges of a few of the settlement situated on the more elevated southern slopes of the Trent Valley, distant views of the proposed development will be possible. These will be from limited locations and properties largely situated on the norther edge of the respective settlement.
- 10.6.53 Where visible the proposed development will be seen distantly as a minor element with an expansive and varied valley landscape and will not constitute a significant change.
- 10.6.54 The significance of the visual effects upon the properties with distant views towards the site will be Negligible/ Minor Adverse upon completion of the Proposed Development.

Public Rights of Way (PROW) and Other Footpaths etc

- 10.6.55 Receptor A (Users of PROW SD50 9/1): The proposals include the diversion of this footpath which presently crosses the site. Views from the realigned public footpath and its approach from Willington to the south will undergo significant change as a result of the proposed development.
- 10.6.56 It is important however to bear in mind that existing views from this relatively short stretch of PROW encompass some major power and road infrastructure, including the nearby Power Station, Toyota Complex and A50 and A38 road corridors and junctions. Existing views are thus varied and encompass both rural and urbanising features and characteristics.
- 10.6.57 The realigned PROW will extend around the southern and western perimeter of the site within a broad landscape corridor and to the south views towards the built development proposals will be effectively screened by the bunding and planting proposals. There will be a significant change to views for users of this PROW, though this will not all be adverse as the siting of the realigned route of the PROW through the perimeter landscape area will limit views towards the buildings and enable a suitable setting to be formed.
- 10.6.58 Prior to the maturing of the planting proposals, the significance of the visual effects upon users of PROW SD50 9/1 will be Moderate Adverse upon completion of the Proposed Development.
- 10.6.59 Receptor M and N (Users of PROW SD37 29/1 - Askew Hill and PROW SD50 9/1 off Knight's Lane): Distant and elevated views towards the proposed development will be possible from stretches of these PROW and potential a small number of other nearby PROW. The visual effects of the proposed development upon users of these PROW will be limited, largely given the distances involved and the expansive and varied nature of the existing cross valley views, which encompass settlement and major transport and power infrastructure.
- 10.6.60 The significance of the visual effects upon these users with views towards the site will be Negligible/ Minor Adverse upon completion of the Proposed Development.

Roads

- 10.6.61 Receptor G (Users of Etwall Road): The existing road is predominantly enclosed towards its northern end approaching Burnaston Cross with tall hedgerows and hedgerow trees limiting views outwards. These road users will have close and clear views towards the eastern edge of the proposed development and the nearest buildings will be visible beyond the proposed bunding and the conserved and new planting.
- 10.6.62 Travelling along the eastern site boundary there will be filtered views of the proposed development comprising predominantly the upper parts of the nearest buildings. Lower level activity surrounding the buildings (eg service yards and car parks) will be largely screened from these road views.
- 10.6.63 A section of hedgerow will be removed to towards the north to facilitate construction of the new roundabout and access into the site.
- 10.6.64 The significance of the visual effects upon these road users will be Moderate Adverse upon completion of the Proposed Development.
- 10.6.65 Receptor H (Users of the A38 Burton Road): Views towards the proposed development will be possible for users of this major road. However, these views will generally be relatively brief and filtered and seen within a context of other sequential roadside views of the A50, the major road junction and the Toyota Complex.
- 10.6.66 The significance of the visual effects upon these road users will be Minor Adverse upon completion of the Proposed Development.
- 10.6.67 Receptor I (Users of A5132 The Castle Way): Brief glimpsed views northwards towards the site where the carriageway rises to bridge the canal at the Castle Way are possible and views to the north from further west on the approach into Willington are generally contained by roadside hedgerows and residential properties.
- 10.6.68 From the canal bridge the visual effect for road users with views towards the proposed development will be Minor Adverse.
- 10.6.69 Receptors T - W (Knight's Lane, Repton Road, Newton Lane and Newton Road): All of these roads will offer the opportunity for distant glimpsed views at certain points. From most stretches of these roads no views towards the proposed development will however be possible.
- 10.6.70 Where any distant and glimpsed views are possible the significance of the visual effects upon these road users will be Negligible/ Minor Adverse upon completion of the Proposed Development.

Other Visual Receptors

- 10.6.71 Receptor J (Rail line users): It is believed this rail corridor is used primarily for freight, however should passenger services also pass the site, then the proposed development will be briefly visible over a very short stretch of this line. Due to the close proximity of the rail line to the site boundary, the proposed bunding will be effective in screening much of the built development including the lower level activities and services yards/ car parking around the buildings.

10.6.72 The significance of the visual effects upon these rail users will be Minor/ Moderate Adverse upon completion of the Proposed Development.

10.6.73 Receptor K (Trent & Mersey Canal users): There will be views towards the proposed development from a short stretch of the canal between the Etwall Rd and Castle Way bridges. The upper elevations and roofs of the proposed buildings will be visible beyond the perimeter bunding and planting on the southern edge of the site.

10.6.74 The significance of the visual effects upon these canal users will be Minor/ Moderate Adverse upon completion of the Proposed Development.

10.6.75 Receptor L (Mercia Marina): It is predicted that there will be limited opportunities to see the proposed development from Mercia Marina, largely as a result of the mature woodland enclosing the western side of the marina and the changes in the landform. It is likely that from some positions within the marina it will be possible to see the very highest parts of the building(s) closest to the eastern side of the site.

10.6.76 The significance of the visual effects upon users and visitors to the marina that are able to view the proposed development will be Minor Adverse upon completion. From much of the marina no views towards the proposed development are considered likely.

Night Time Visual Effects

10.6.77 Overall, the night time visual effects of the Proposed Development will be minimised through the adoption of a Lighting Strategy and further attention at the detailed design stage to the lighting proposals. The presence of existing light sources (e.g. surrounding major roads and nearby employment and settlement areas) in the Site's context will moderate any resultant adverse night time visual effects. Any effects of lighting are also likely to be moderated by the presence of the perimeter bunding and planting.

10.7 RESIDUAL EFFECTS

- 10.7.1 The residual effects consider the effects after the incorporation of the mitigation measures. In the context of the landscape and visual assessment, primary mitigation measures and considerations have been incorporated as an integral (or 'embedded') part of the design and layout of the Proposed Development. This has included attention to the siting, layout and heights of the Proposed Development and consideration of the earthworks and ground modelling proposals. All of these aspects and features have been taken into account in the design of the Proposed Development and the development parameters and have therefore been assessed as part of the construction and operational stages.
- 10.7.2 The residual operational effects assessment considers the Proposed Development 15 years after completion and takes into account the growth of the proposed and conserved planting over this time. These effects are detailed in the Effects Tables at Appendices 10.3 and 10.4 and outlined below.

Landscape

- 10.7.3 In general, the landscape effects of the completed and operational Proposed Development will reduce over time following the establishment and subsequent maturing of the proposed planting and habitat creation. The management of not only the proposed planting and habitats but also the existing conserved trees and hedgerows will also assist in reducing the initial operational landscape effects.
- 10.7.4 The main residual change and benefits in landscape terms will arise from the maturing and management of the outer and perimeter landscape and planting (proposed and existing) which will assist at a localised level in assimilating the built development proposals in the site's landscape context.

Visual

- 10.7.5 The majority of the visual effects of the completed Proposed Development will reduce over time with the maturing and management of the existing and proposed planting. The management of not only the proposed planting and habitats but also the existing mature trees and hedgerows would also assist in reducing the initial operational visual effects.
- 10.7.6 The maturing and management of the existing and new planting will offer the most notable visual improvements to some of the receptors immediately surrounding the Site or with close views encompassing proposed planting and mounding in between the receptor and the proposed buildings or other infrastructure.
- 10.7.7 An assessment of the residual visual effects of the Proposed Development (15 years post completion) on the identified receptors is included in the Visual Effects Table at Appendix 10.4.

10.8 LANDSCAPE & VISUAL CUMULATIVE EFFECTS

10.8.1 This Landscape and Visual Impact Assessment (LVIA) has been carried out for the proposed development by FPCR Environment and Design Ltd (FPCR). The purpose of this LVIA study is to provide an assessment of the likely landscape and visual effects of the proposed development. The landscape and visual effects have been considered in relation to the proposals detailed in the planning application and Design and Access Statement (DAS).

10.8.2 The following committed development sites have been assessed in association with the development site for cumulative effects and are shown within Figure 10.24);

- Willington Power Station Gas Plant
- Associated Gas Plant Infrastructure Pipeline
- Hilton Business Park –Policy E1B Employment Allocation
- Housing Allocation Etwall Policies H10, H19 & H23B
- Hilton Housing Allocation Policy H23C
- Willington Housing Allocation Policies H12, H16, H23G & H23I
- Repton Housing Allocation Policy H23G

10.8.3 The parameters for selecting the above cumulative sites are all sites within a 5km radius of the proposed development which are either allocated under Parts 1 and 2 of the Local Plan, or that have received recent planning consent.

10.8.4 Please note that housing allocation policies Hilton H7 and Repton H9 and H23 are being constructed or have been completed and are therefore addressed as part of the baseline conditions.

10.8.5 Housing allocation policies Willington H12, H16 and Etwall H19 whilst large in scale represent urban extensions to the south western settlement edge of Derby, and as such are considered to be sufficiently disconnected from the proposed development as to have negligible cumulative effects both in terms of landscape and visual matters.

10.8.6 Housing allocation policies Willington H23I and Repton H23G are relatively small scale and disparate entities relating to minor additions to the settlement boundaries of Willington and Repton and are similarly considered to have negligible cumulative effects.

10.8.7 Housing allocation policies Etwall H10 and H23B form a larger scale extension of the eastern settlement edge of Etwall, however there is no inter-visibility with the proposed development due to the A50 road corridor and associated landform and planting. The local landscape character is also heavily influenced by the Toyota Factory complex which lies a short distance to the east.

10.8.8 The Hilton Business Park E1B employment allocation lies 3.1km to the west of the proposed development, and is an extension to an existing industrial estate. This committed development site and the proposed development cannot be seen within the same scene due to the flat nature of the Trent Washlands terrain and the visual containment afforded

by existing linear planting and trees, including along the A38 corridor. There are also no obvious opportunities for sequential inter-visibility afforded to road or footpath users.

- 10.8.9 The Additional Environmental Information (AEI) for the Willington Power Station ES (site 1.5km to the east) relates to an amendment on a previous planning consent, with the height of the proposed new gas plant being increased from 36 to 42m. The submitted photomontages show the cooling towers as being demolished at year 1 of operation. Overall therefore it is considered there will be potential beneficial effects as the new gas plant will be seen at a local landscape scale within its surrounding landscape, as opposed to the current situation where the power station cooling towers dominate at this scale.
- 10.8.10 It is considered the proposed development and the new power infrastructure site will not be clearly visible within the same scene, unless viewed at distance from the high ground to the south. However, there are likely to be some sequential inter-visibility afforded to users of the rail corridor and canal corridor, and to a lesser extent to users along Twyford Road who turn north at Willington and continue along Etwall Road. Cumulative sequential visual effects are considered to be at most moderate/minor falling to minor adverse once mitigation measures have established.
- 10.8.11 The associated gas pipeline will be an underground landscape intervention and therefore effects will be exerted during the construction phase, which will be temporary and localised in nature. Construction will be linear and managed in phases, thereby only receptors at close range will likely to be affected, principally residential receptors along the northern settlement edge of Willington and users of Etwall Road, rail users and to a lesser extent canal corridor users. Cumulative Effects for any concurrent working of this scheme at the same time as the proposed development are considered to range up to moderate/minor adverse during construction.
- 10.8.12 From the high ground in the south, the committed development sites along with the proposed development could potentially be visible within the same scene. However, this will be at notable distance and within a wide panoramic scene, with each site perceived within the surrounding mature landscape framework, and as such cumulative visual effects are considered to be negligible
- 10.8.13 This vantage point from the high ground of the Melbourne Parklands Character Area also shows the extent of the prevailing landscape character areas to the north (notably the Lowland Village Farmlands and Riverside Meadows of the Trent Valley Washlands and the Settled Farmlands of the Needwood and South Derbyshire Claylands), within which the cumulative sites will be seen alongside other existing residential and existing industrial/power infrastructure.
- 10.8.14 At the County and National scales any cumulative landscape effects are considered to be negligible with no resultant development or settlement cumulative effects.
- 10.8.15 In terms of landscape character at the site context scale, the cumulative sites are relatively self-contained and integrated within their own mature landscape framework and are considered sufficiently disparate and disconnected as to exert negligible cumulative effects in terms of landscape character.

10.9 SUMMARY

- 10.9.1 The site comprises gently undulating pasture farmland, bounded by transport infrastructure, with Etwall Road (B5008) to the east, the A38 dual carriageway to the west and with the southern boundary formed by a rail corridor. The majority of field hedgerows have been either removed or are now substantially fragmented and replaced with agricultural post and wire fences. There are a very small number of existing field trees and two agricultural buildings.
- 10.9.2 The nearest settlement is Willington, located to the south and The Trent & Mersey Canal passes around the northern edge of the settlement. Willington Power Station is prominent to the east of the site and the Toyota Complex lies to the north west of the site beyond the major A50/ A38 roundabout junction close to the north of the site.
- 10.9.3 Published landscape character assessments and relevant landscape studies covering the site and its context, characterise the landscape as being a large scale, gently rolling lowland landscape encompassing modern large scale development and major power and transport infrastructure.
- 10.9.4 There are no specific statutory landscape designations that cover the site or its immediate context and this assessment identifies the landscape within and immediately surrounding the site as being of Low/ Medium landscape value. This has been assessed in accordance with the Guidelines for Landscape and Visual Impact Assessment.
- 10.9.5 In landscape and visual terms, there are a number of important local issues and considerations that are relevant to the proposed development and its resultant effects, and to the landscape and mitigation proposals forming part of the overall proposed development. These can be summarised as follows:
- Potential direct and indirect effects upon the landscape character of the site and its wider context;
 - Potential direct effects upon existing trees and hedgerows within the site;
 - Potential effect upon views from the adjoining settlement edge and other surrounding properties and locations, including The Trent and Mersey Canal and small number of properties close to the north and east of the site;
 - Opportunity and potential measures to mitigate and minimise any adverse landscape and visual effects;
 - Opportunity to create new, enhanced and accessible landscape areas, habitats, public open space and green infrastructure;
- 10.9.6 The proposed development and accompanying landscape and Green Infrastructure (GI) proposals have been carefully considered and assessed in the context of the published and more detailed local landscape assessments. The proposals will include the creation of a significant landscape and GI framework stretching largely around the perimeter of the site and including broad green corridors to the southern and eastern perimeters. The proposed landscape and GI areas and corridors will extend to approximately 25% of the total site area.
- 10.9.7 Particular attention in devising the development and landscape proposals has been paid to the potential landscape and visual effects upon the nearby properties to the north and east

(and including Hill Farm) and upon Willington and the Trent and Mersey Canal and the landscape beyond to the south.

- 10.9.8 During construction, the landscape effects arising from the proposed development will vary from Negligible (for the effects upon the broad published landscape character areas) to Moderate/ Major Adverse (for the effects upon the landscape character of the site and its immediate context).
- 10.9.9 Upon completion of the proposed development, the landscape effects will vary between Negligible (for the effects upon the broad published landscape character areas) to Moderate Adverse (for the effects upon the landscape character of the site and its immediate context). The landscape proposals will however also include some beneficial effects, notably arising from the new woodland planting, open space, other habitats and public access. The commitment to and application of a comprehensive landscape management strategy across the site will also deliver some further residual and longer term landscape benefits.
- 10.9.10 In visual terms, the construction effects of the proposed development will vary depending on the location and extent of available views from each of the receptors. In general terms, the greatest visual effects will arise during the construction process for the Public Right of Way (PROW) that crosses the site and those properties in closest proximity to the site and with the clearest views.
- 10.9.11 Upon completion of the proposed development, the visual effects will generally be reduced from those experienced during the construction stage and as the new landscape and planting proposals establish and mature, the effects upon many of the surrounding receptors will lessen further. Views towards parts of the proposed development will be possible from the small number of existing properties close to the north and east of the site and from a relatively small number on the edge of Willington to the south. Views will also be possible from a short stretch of the Trent and Mersey Canal to the south and from Etwall Rd to the east.
- 10.9.12 The visual effects of the completed development will typically vary between Minor and Moderate Adverse, subject to the extent and nature of the available view. From most surrounding receptors, the perimeter bunding and planting along the southern and eastern sides of the site will form an effective visual 'buffer' to screen views, particularly towards the lower and active parts of the proposed development. In the longer term, the initial visual effects arising from the completed development will reduce with the maturing and management of the new planting and habitats.
- 10.9.13 In terms of cumulative landscape character effects, the cumulative sites are relatively self-contained and integrated within their own mature landscape framework and are considered sufficiently disparate and disconnected as to exert negligible cumulative effects in terms of landscape character.
- 10.9.14 Due to the low surrounding lying plains and the visually containing character of hedgerows and roadside planting, cumulative visual effects at close and mid range are not considered to be significant. From high ground in the south, committed development sites and the proposed development could potentially be seen within the same scene. However, this will be at a notable long distance and within a wide panoramic scene, with each site perceived

within the surrounding mature landscape framework, and as such cumulative visual effects are considered to be negligible

10.9.15 The proposals include an extensive landscape scheme that has been carefully devised to provide a robust “green” structure and effective mitigation for the new employment buildings. Subsequent care and attention to the detailed design, implementation and subsequent management of these landscape and associated GI proposals will be important to ensure that the likely identified effects are further minimised wherever possible and the identified opportunities for enhancement are maximised.

ENVIRONMENTAL STATEMENT

Axis 50, near Willington, South Derbyshire

Chapter 10: Landscape and Visual Impact

FIGURES

Fig 10.1 Site Location

Fig 10.2 Aerial Photograph Fig 6.3 Landscape Character

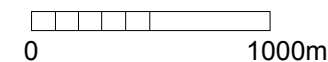
Fig 10.4 Landscape Designations Fig 6.5 Topography

Fig 10.6 Local Viewpoints & Visual Appraisal

Fig 10.7 Long Distance Viewpoint Location Plan

Fig 10.8-10.18 Photo Viewpoints

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SITE LOCATION

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Figure 10.1



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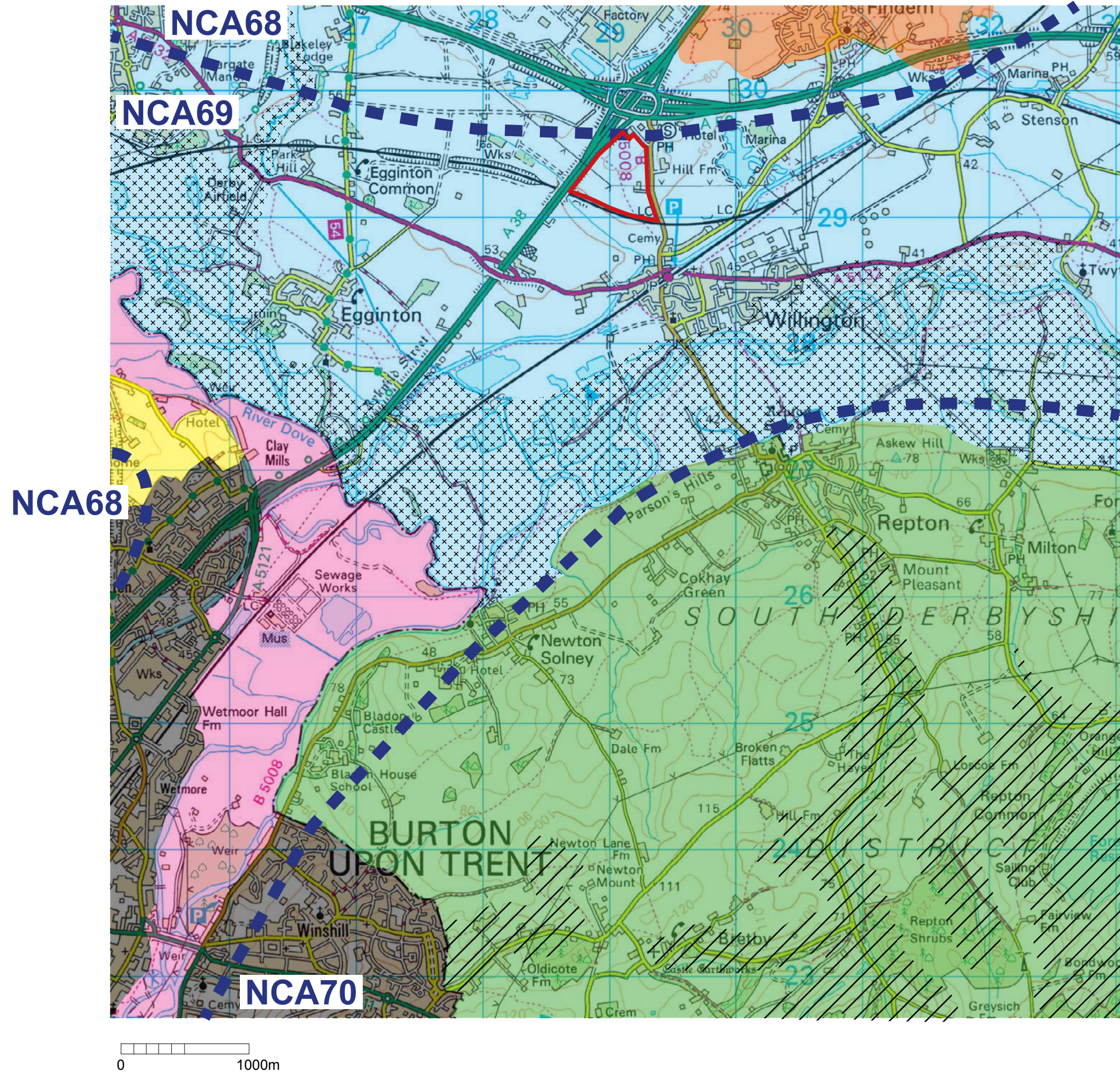
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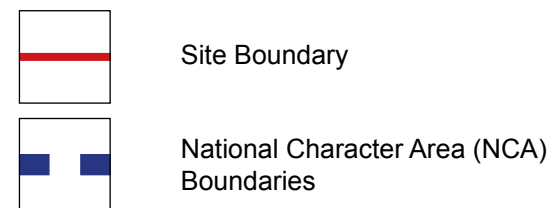
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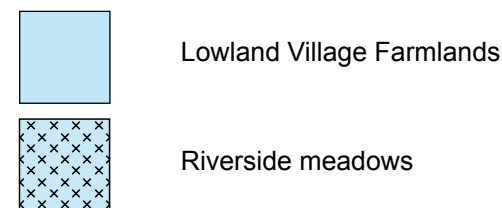
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NCA68 - Needwood and South Derbyshire Claylands
NCA69 - Trent Valley Washlands
NCA70 - Melbourne Parklands

Derbyshire Landscape Character Areas

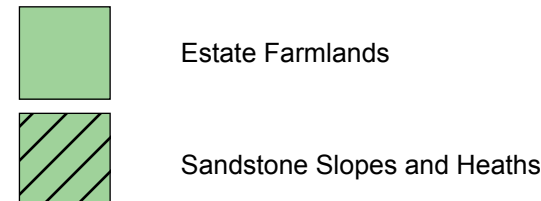
Trent Valley Washlands



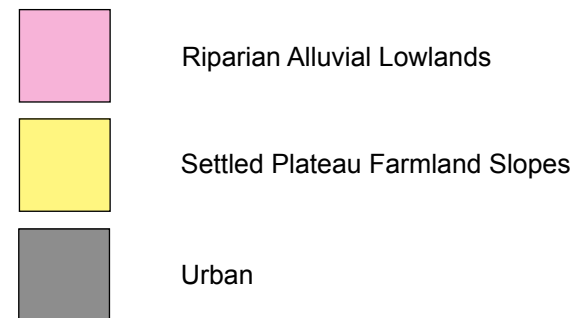
Needwood and South Derbyshire Claylands



Melbourne Parklands



Staffordshire Landscape Character Types



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LANDSCAPE CHARACTER

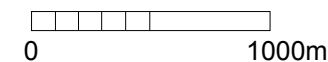
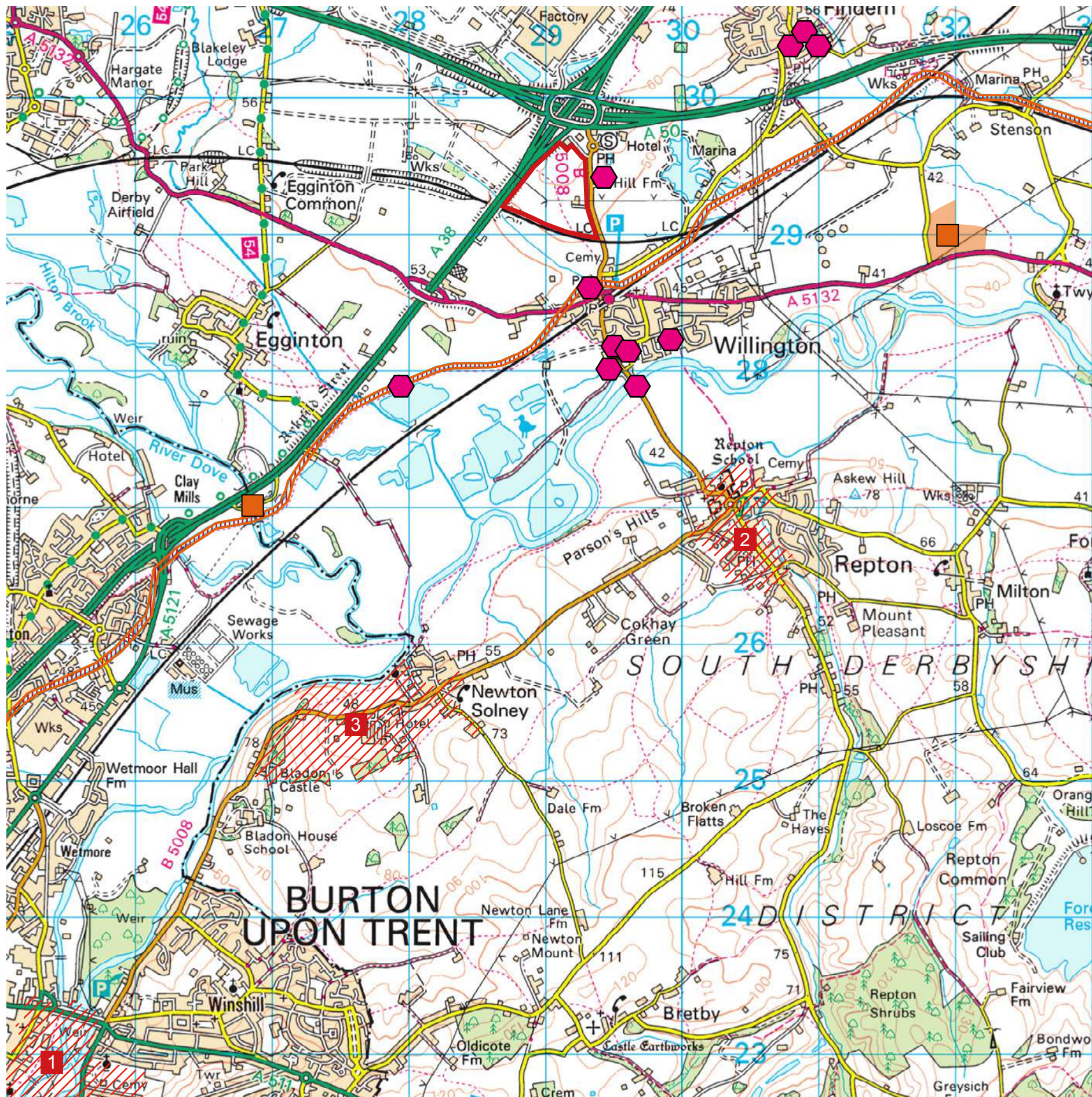
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Figure 10.3



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-  Site Boundary
-  Listed Buildings (within approximately 2km of the Site)
-  Trent & Mersey Canal Conservation Area
-  Scheduled Monuments
-  Conservation Area
1 - Burton Upon Trent
2 - Repton
3 - Newton Solney

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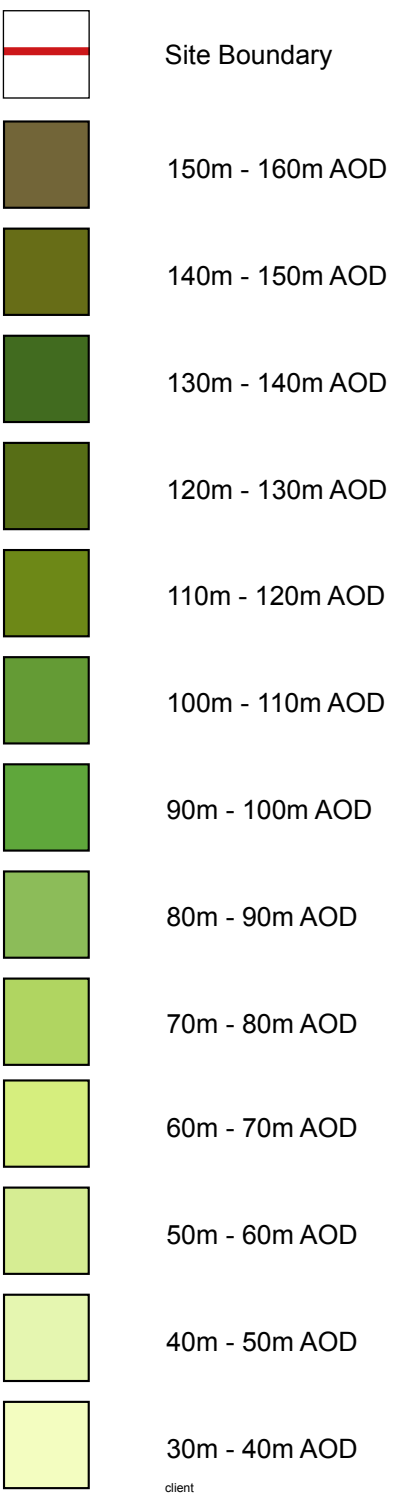


Figure 10.4



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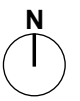
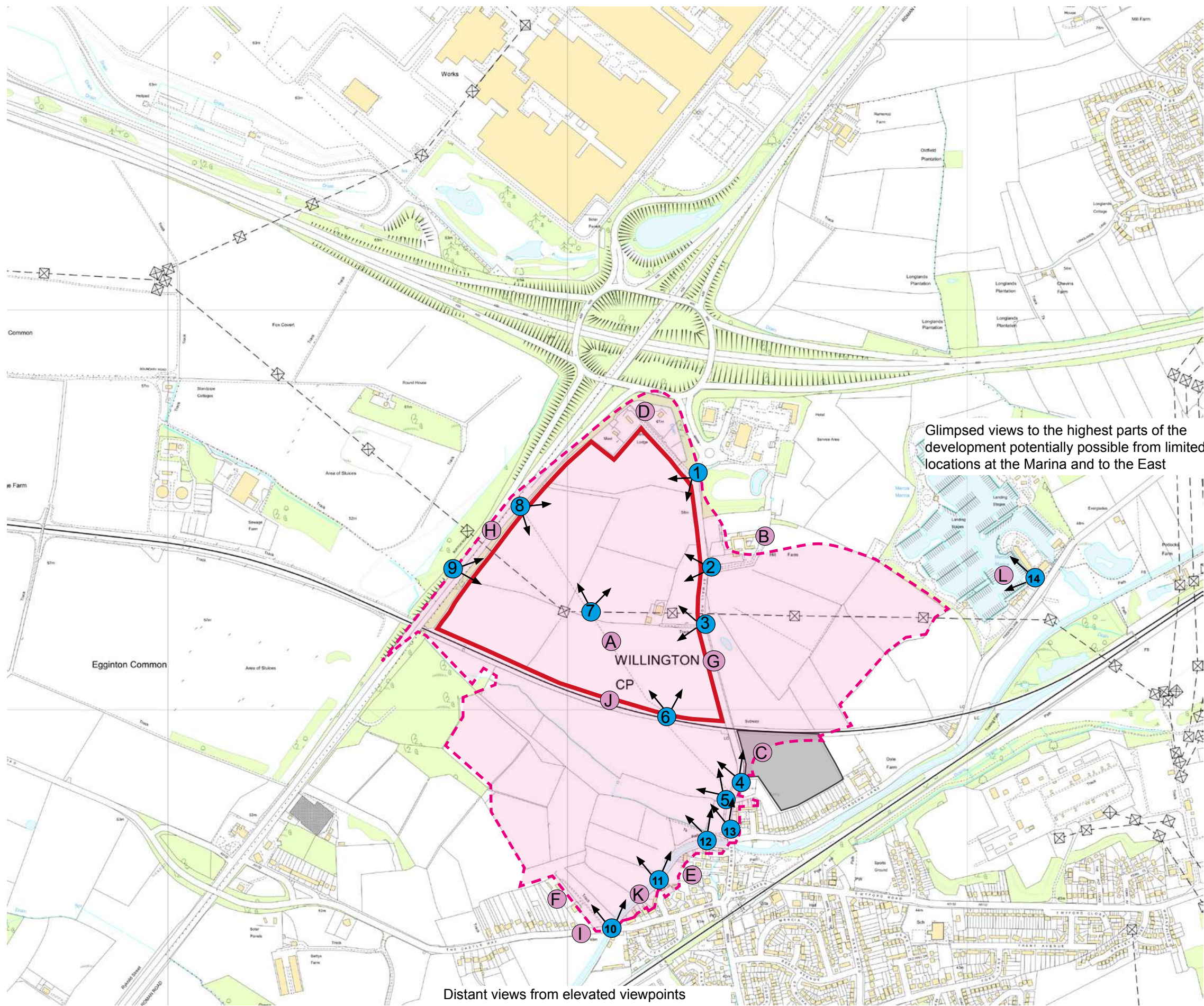


Figure 10.5



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Distant views from elevated viewpoints
approximately 3-6km to the south of the Site.

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-  Site Boundary
-  Recent Residential Development
-  Visual Receptor
-  Photo Viewpoint Location
-  Approximate Zone of Theoretical Visibility (ZTV)
(Proposed development visible from shaded areas. See notes below)

NOTES:

1. The ZTV provides a representative area from within which the proposed development would be visible.
2. The ZTV for the proposed development has been prepared based upon detailed site based analysis and review of topography and cross sections.
3. Other locations beyond the identified ZTV could potentially have views towards the proposed development. However, where present these would be distant and / or visual receptors are likely to experience no more than a negligible visual effect.

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VISUAL ANALYSIS

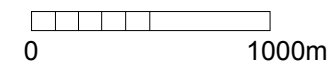
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Figure 10.6



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-  Site Boundary
-  Visual Receptor
-  Viewpoint Location



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**LONGER DISTANCE VIEWPOINTS
AND RECEPTORS**

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Figure 10.7



PHOTO VIEWPOINT 1: View from Etwall Road B5008 junction with lane leading to Danes Lodge



PHOTO VIEWPOINT 2: View from entrance to Hill Farm along Etwall Road B5008



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PHOTO VIEWPOINTS 1 & 2

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Figure 10.8 -



PHOTO VIEWPOINT 3: View from Etwall Road B5008 looking west into site at farm access

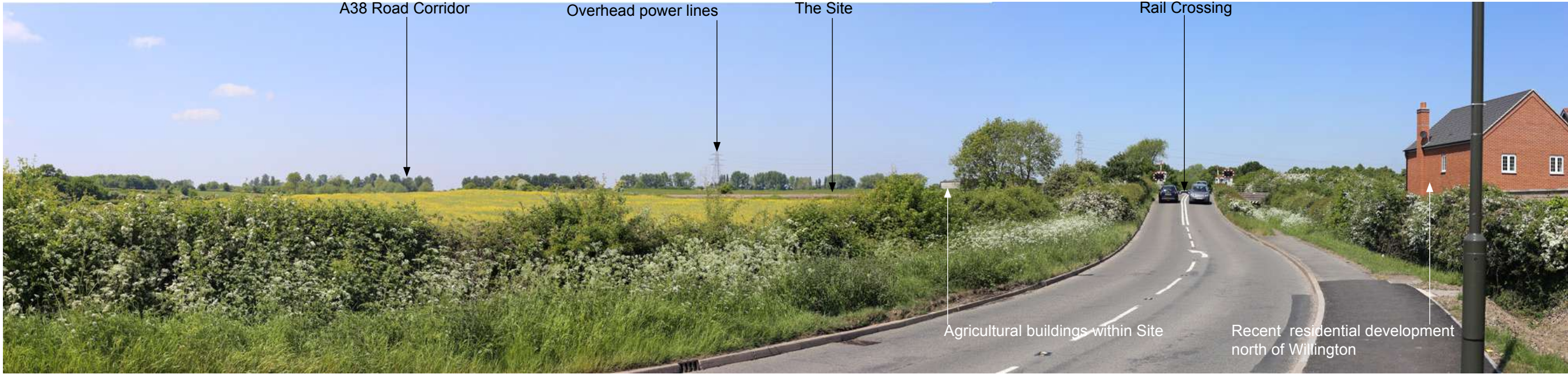


PHOTO VIEWPOINT 4: View from Etwall Road B5008, representative view from new residential housing



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PHOTO VIEWPOINTS 3 & 4

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Figure 10.9 -



PHOTO VIEWPOINT 5: View from Etwall Road B5008 near Willington settlement edge

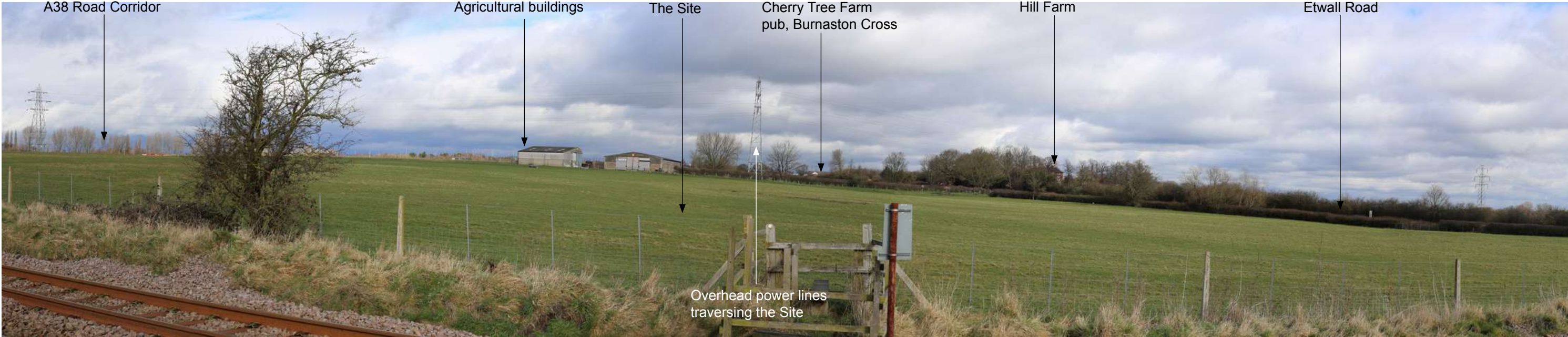


PHOTO VIEWPOINT 6: View from pedestrian rail crossing along PROW SD50 9/1 at site boundary

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Figure 10.10 -



PHOTO VIEWPOINT 7: View from PROW SD50 9/1 in open farmland within site

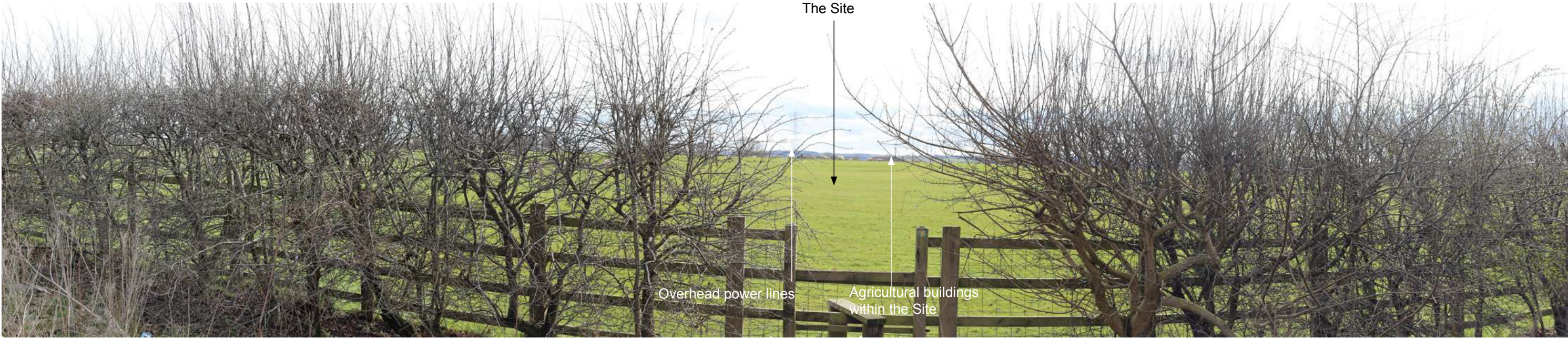


PHOTO VIEWPOINT 8: View from start of PROW SD50 9/1 along A38 Burton Road vergeside



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Figure 10.11



PHOTO VIEWPOINT 9: View from A38 Burton Road dual carriageway looking east into site



PHOTO VIEWPOINT 10: View from A5132 The Castle Way at canal bridge, Willington

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PHOTO VIEWPOINTS 9 & 10

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Figure 10.12 -



PHOTO VIEWPOINT 11: View from canal towpath looking north



PHOTO VIEWPOINT 12: View from canal towpath looking north



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Figure 10.13



PHOTO VIEWPOINT 13: View from Etwall Road B5008 near canal bridge at Willington



PHOTO VIEWPOINT 14: View from Mercia Marina looking west towards general direction of the site

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PHOTO VIEWPOINTS 13 & 14
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Figure 10.14 -

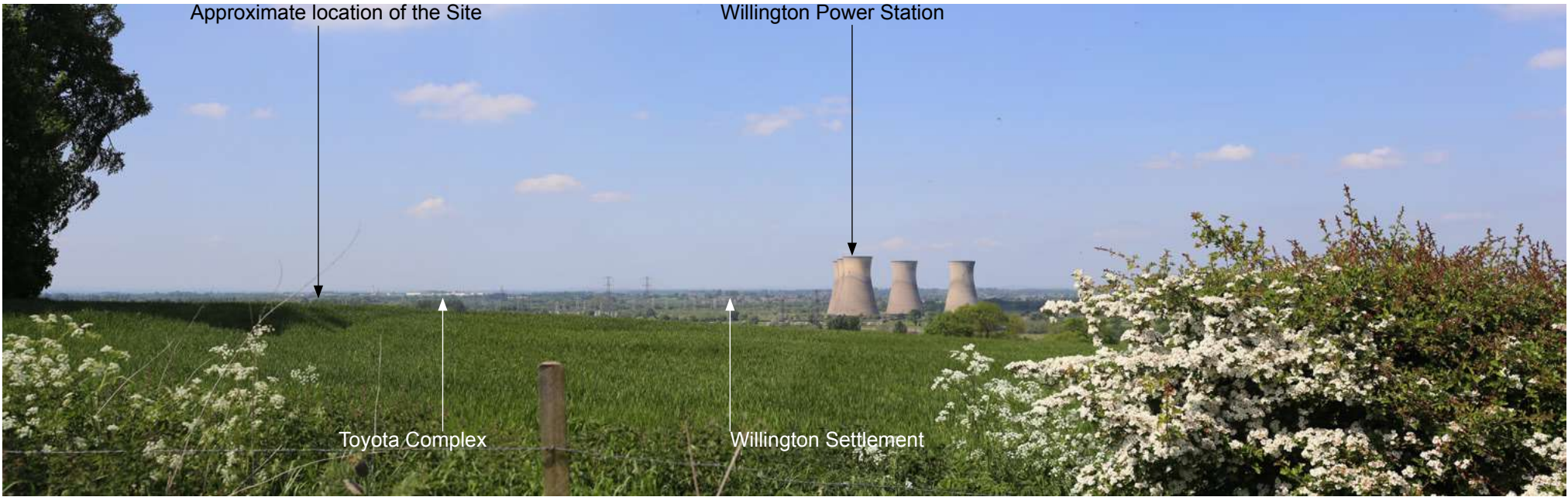


PHOTO VIEWPOINT 15: Representative view from Askew Hill, Repton taken along PROW Repton-SD37 29/1



PHOTO VIEWPOINT 16: View from Repton Road B5008 at Newton Solney looking north



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Figure 10.15



PHOTO VIEWPOINT 17: View from Newton Road along Bladon Hill.

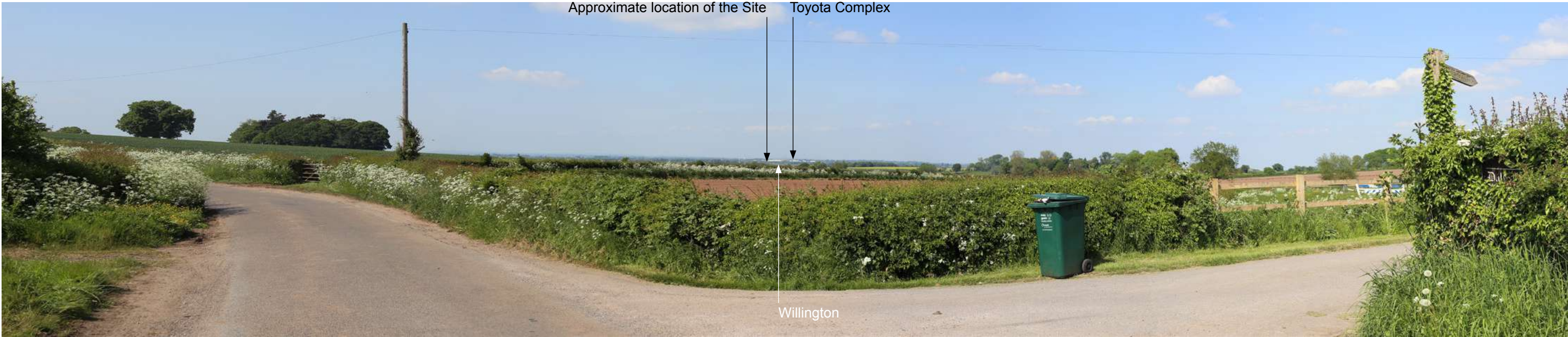


PHOTO VIEWPOINT 18: View from Newton Lane near start of PROW SD33 5/2 and Dale Farm



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PHOTO VIEWPOINTS 17 & 18

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Figure 10.16

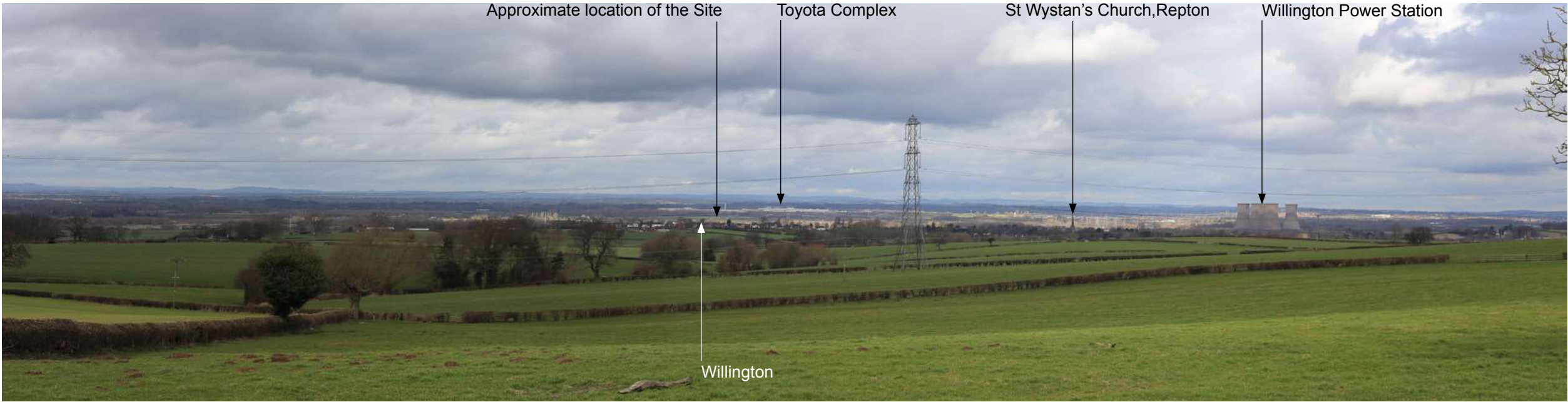


PHOTO VIEWPOINT 19: View from Knight's Lane vergeside at start of PROW SD37 38/2 looking north

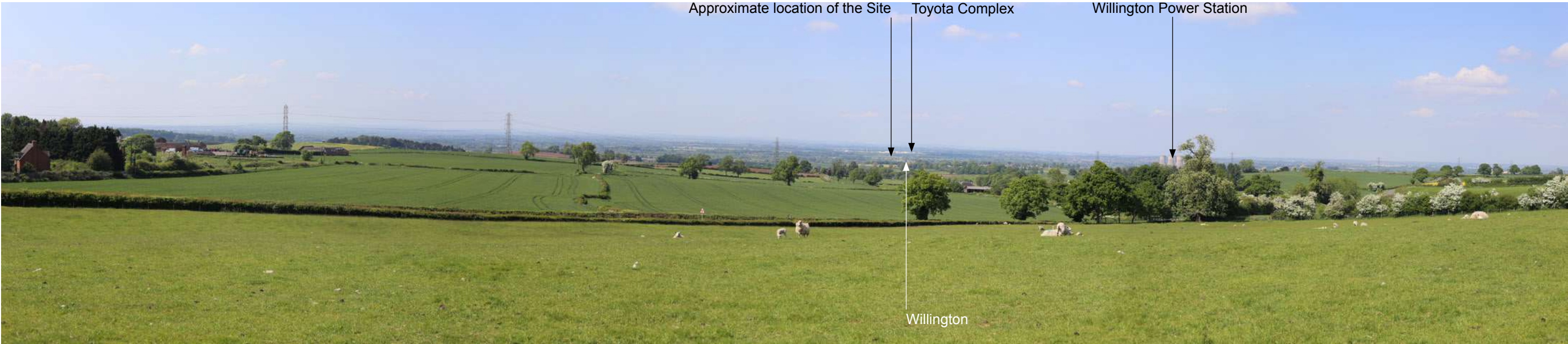


PHOTO VIEWPOINT 20: Representative view from PROW Bretby SD6 13/1 near Bretby Mount



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Figure 10.17



PHOTO VIEWPOINT 21: Representative view from settlement edge of Winshill, taken from Empire Road looking north east



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Figure 10.18

ENVIRONMENTAL STATEMENT

Axis 50, near Willington, South Derbyshire

Chapter 10: Landscape and Visual Impact

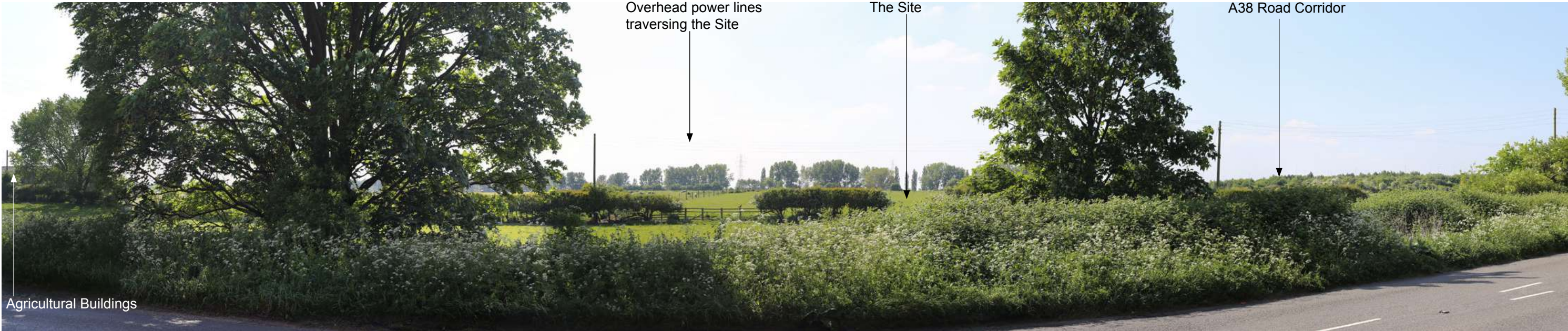
FIGURE 10.19.1-10.19.5

ADDITIONAL SUMMER VIEWPOINTS

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PHOTO VIEWPOINT 2 from visual baseline : View from entrance to Hill Farm along Etwall Road B5008



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Figure 10.19.1 -



PHOTO VIEWPOINT 10 from visual baseline: View from A5132 The Castle Way at canal bridge, Willington western village gateway



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Figure 10.19.2 -



PHOTO VIEWPOINT 11 from visual baseline: View from further along canal towpath looking north from settlement edge



CORRESPONDING SUMMER VIEW



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PHOTO VIEWPOINT 11

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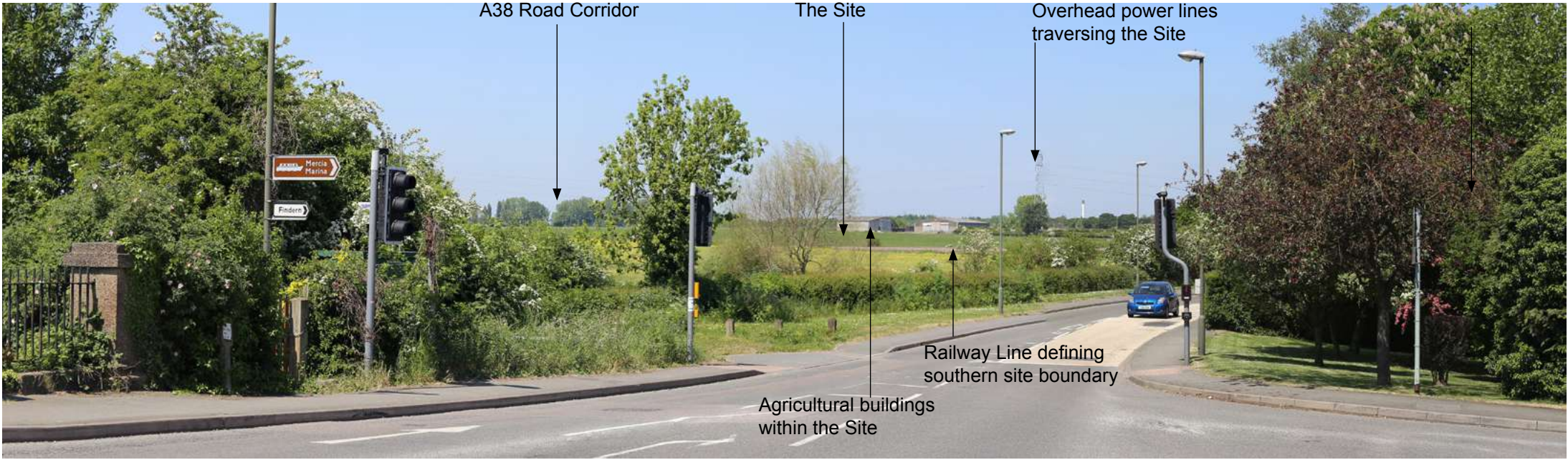
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Figure 10.19.3 -



PHOTO VIEWPOINT 13 from visual baseline: View from Etwell Road B5008 near canal bridge at Willington northern village gateway



CORRESPONDING SUMMER VIEW



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PHOTO VIEWPOINT 13

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Figure 10.19.4 -



PHOTO VIEWPOINT (additional to visual baseline): View from Etwall Road B5008 at Railway Crossing



CORRESPONDING SUMMER VIEW

ENVIRONMENTAL STATEMENT

Axis 50, near Willington, South Derbyshire

Chapter 10: Landscape and Visual Impact

FIGURES 10.20-23

PHOTOMONTAGES

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Elevation above ordnance datum (AOD): 58.824m
Camera height above AOD: 1.6m
Direction of view: 230 degrees (0=North)
Viewpoint Conditions:
Date: 16 March 2018 Time: 11:02
Weather: Cloudy

Modelled Parameters:
Modelling software: LSS
Origin of baseline height / 3D data: Terrain 5 DTM and 3D Topographical Survey
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Viewpoint Location:
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Elevation above ordnance datum (AOD): 58.824m
Camera height above AOD: 1.6m
Direction of view: 297 degrees (0=North)
Viewpoint Conditions:
Date: 16 March 2018 Time: 11:02
Weather: Cloudy

Modelled Parameters:
Modelling software: LSS
Origin of baseline height / 3D data: Terrain 5 DTM and 3D Topographical Survey
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Camera height above AOD: 1.6m
Direction of view: 297 degrees (0=North)
Viewpoint Conditions:
Date: 16 March 2018 Time: 11:02
Weather: Cloudy

Modelled Parameters:
Modelling software: LSS
Origin of baseline height / 3D data: Terrain 5 DTM and 3D Topographical Survey
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Camera Settings:
Camera: Canon EOS 6D SLR with fixed lens
Lens focal length: 50mm
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Viewpoint Location:
Ordnance Survey (OS) grid coordinates: 429409, 328693

Elevation above ordnance datum (AOD): 47.957m
Camera height above AOD: 1.6m
Direction of view: 330 degrees (0=North)
Viewpoint Conditions:
Date: 16 March 2018 Time: 11:41
Weather: Cloudy

Modelled Parameters:
Modelling software: LSS
Origin of baseline height / 3D data: Terrain 5 DTM and 3D Topographical Survey
Origin of baseline marker locations: Topographical Survey
Origin of layout: Burnaston Cross MP05 E WIP/ BNC-BWB-GEN-XX-M3-C-003
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Camera Settings:
Camera: Canon EOS 6D SLR with fixed lens
Lens focal length: 50mm
View images at a 'comfortable arm's length'.
Viewpoint Location:
Ordnance Survey (OS) grid coordinates: 429221.857, 328561.15

Elevation above ordnance datum (AOD): 45.576m
Camera height above AOD: 1.6m
Direction of view: 345 degrees (0=North)
Viewpoint Conditions:
Date: 16 March 2018 Time: 11:27
Weather: Cloudy

Modelled Parameters:
Modelling software: LSS
Origin of baseline height / 3D data: Terrain 5 DTM and 3D Topographical Survey
Origin of baseline marker locations: Topographical Survey
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Camera: Canon EOS 6D SLR with fixed lens
Lens focal length: 50mm
View images at a 'comfortable arm's length'.
Viewpoint Location:
Ordnance Survey (OS) grid coordinates: 429221.857, 328561.15

Elevation above ordnance datum (AOD): 45.576m
Camera height above AOD: 1.6m
Direction of view: 345 degrees (0=North)
Viewpoint Conditions:
Date: 16 March 2018 Time: 11:27
Weather: Cloudy

Modelled Parameters:
Modelling software: LSS
Origin of baseline height / 3D data: Terrain 5 DTM and 3D Topographical Survey
Origin of baseline marker locations: Topographical Survey
Origin of layout: Burnaston Cross MP05 E WIP/ BNC-BWB-GEN-XX-M3-C-003
Origin of building heights and FFLs: 16-078 A004B Parameters Plan



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- environmental assessment
- landscape design
- urban design
- ecology
- architecture
- arboriculture

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near Willington

drawing title
PHOTO MONTAGE C
YEAR 15

drawing / figure number
Figure 10.22C

scale
NTS @ A1

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Camera Settings:
Camera: Canon EOS 6D SLR with fixed lens
Lens focal length: 50mm
View images at a 'comfortable arm's length'.
Viewpoint Location:
Ordnance Survey (OS) grid coordinates: 429109.376, 328471.087

Elevation above ordnance datum (AOD): 46.725m
Camera height above AOD: 1.6m
Direction of view: 355 degrees (0=North)
Viewpoint Conditions:
Date: 16 March 2018 Time: 11:29
Weather: Cloudy

Modelled Parameters:
Modelling software: LSS
Origin of baseline height / 3D data: Terrain 5 DTM and 3D Topographical Survey
Origin of baseline marker locations: Topographical Survey
Origin of layout: Burnaston Cross MP05 E WIP/ BNC-BWB-GEN-XX-M3-C-003
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Camera Settings:
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Lens focal length: 50mm
View images at a 'comfortable arm's length'.
Viewpoint Location:
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Elevation above ordnance datum (AOD): 46.725m
Camera height above AOD: 1.6m
Direction of view: 355 degrees (0=North)
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Date: 16 March 2018 Time: 11:29
Weather: Cloudy

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Camera: Canon EOS 6D SLR with fixed lens
Lens focal length: 50mm
View images at a 'comfortable arm's length'.
Viewpoint Location:
Ordnance Survey (OS) grid coordinates: 429109.376, 328471.087

Elevation above ordnance datum (AOD): 46.725m
Camera height above AOD: 1.6m
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ENVIRONMENTAL STATEMENT

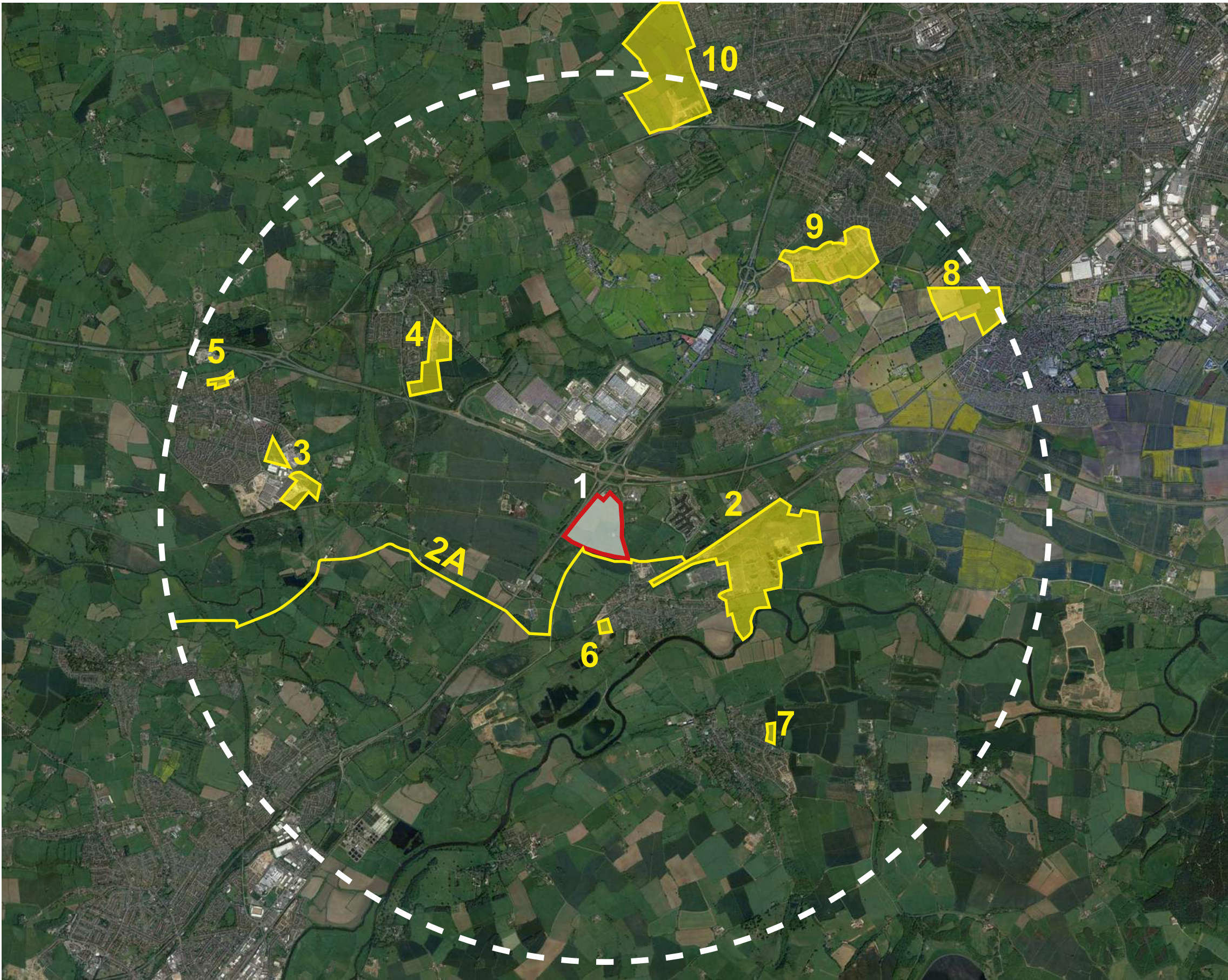
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Chapter 10: Landscape and Visual Impact

FIGURE 10.24

COMMITTED DEVELOPMENT SITES

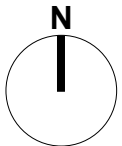
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Aerial imagery © 2017 Bluesky, DigitalGlobe, Getmapping plc, Infoterra Ltd and Bluesky. Map data © 2017 Google

1. Application Site Boundary
- 5km Radius from Site
- Committed Development Sites
2. Willington Power Station (Gas Works)
- 2A. Gas Works Pipeline
3. Hilton Bus Park - E1B Employment Land Allocation
4. Housing Allocation Etwall H10 & H23B
5. Hilton HSG Allocation H23C
6. Willington H23I
7. Repton H23G
8. Willington H16
9. Willington H12
10. Etwall H19



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ENVIRONMENTAL STATEMENT

Axis 50, near Willington, South Derbyshire

Chapter 10: Landscape and Visual Impact

APPENDICES

Appendix 10.1 Methodology & Assessment Criteria

Appendix 10.2 Extracts from Published Landscape Character Assessments

Appendix 10.3 Landscape Effects Table

Appendix 10.4 Visual Effects Table

July 2019

ENVIRONMENTAL STATEMENT

Axis 50, near Willington, South Derbyshire

Chapter 10: Landscape and Visual Impact

APPENDIX 10.1

Methodology & Assessment Criteria

July 2019

Appendix 10.1

Landscape and Visual Impact Assessment – Methodology and Assessment Criteria

Introduction

The methodology for the Landscape and Visual Impact Assessment undertaken for the proposed development is detailed in Chapter 3 of the Environmental Statement (ES). The following information is provided and should be read in conjunction with the overview methodology outlined in Chapter 10 of the ES:

As advised in the Guidelines for Landscape and Visual Impact Assessment (3rd Edition) (GLVIA3), the judgements made in respect of both landscape and visual effects are a combination of an assessment of the sensitivity of the receptor and the magnitude of the landscape or visual effect. The following details the definitions used in assessing sensitivity and magnitude for landscape and visual receptors.

Where it is determined that the assessment falls between or encompasses two of the defined criteria terms, then the judgement will be described as High/ Medium or Moderate/ Minor etc. This indicates that the assessment lies between the respective definitions or encompasses aspects of both.

Landscape

Landscape Sensitivity

Landscape receptors are assessed in terms of their 'Landscape Sensitivity'. This combines judgements on the value to be attached to the landscape and the susceptibility to change of the landscape from the type of change or development proposed. The definition and criteria adopted for these contributory factors is detailed below.

There can be complex relationships between the value attached to landscape receptors and their susceptibility to change which can be especially important when considering change within or close to designated landscapes. For example an internationally, nationally or locally valued landscape does not automatically or by definition have a high susceptibility to all types of change. The type of change or development proposed may not compromise the specific basis for the value attached to the landscape.

Landscape Value

Value can apply to a landscape area as a whole, or to the individual elements, features and aesthetic or perceptual dimensions which contribute to the character of the landscape. The following criteria have been used to categorise landscape value. Where there is no clear existing evidence on landscape value, an assessment is made based on the criteria/ factors identified below (based on the guidance in GLVIA3 Box 5.1 Page 84).

- Landscape quality (condition)
- Scenic quality
- Rarity
- Representativeness
- Conservation interest
- Recreation value
- Perceptual aspects
- Associations

Landscape Value	Definition
High	Landscape receptors of high importance based upon factors of quality, rarity, representativeness, conservation interest, recreational value, perceptual qualities and associations.
Medium	Landscape receptors of medium importance based upon factors of quality, rarity, representativeness, conservation interest, recreational value, perceptual qualities and associations.
Low	Landscape receptors of low importance based upon factors of quality, rarity, representativeness, conservation interest, recreational value, perceptual qualities and associations.

Landscape Susceptibility to Change

This means the ability of the landscape receptor (overall character type/ area or individual element/ feature) to accommodate the change (i.e. the proposed development without undue consequences for the maintenance of the baseline position and/ or the achievement of landscape planning policies and strategies. The definition and criteria for the assessment of Landscape Susceptibility to Change is as follows:

Landscape Susceptibility to Change	Definition
High	A highly distinctive and cohesive landscape receptor, with positive characteristics and features with no or very few detracting or intrusive elements. Landscape features intact and in very good condition and/ or rare. Limited capacity to accept the type of change/ development proposed.
Medium	Distinctive and more commonplace landscape receptor, with some positive characteristics/ features and some detracting or intrusive elements. Landscape features in moderate condition. Capacity to accept well planned and designed change/ development of the type proposed.
Low	Landscape receptor of mixed character with a lack of coherence and including detracting or intrusive elements. Landscape features that may be in poor or improving condition and few that could not be replaced. Greater capacity to accept the type of change/ development proposed.

Magnitude of Landscape Effects

The magnitude of landscape effects is the degree of change to the landscape receptor in terms of its size or scale of change, the geographical extent of the area influenced and its duration and reversibility. The table below sets out the categories and criteria adopted in respect of the separate considerations of Scale or Size of the Degree of Change and Reversibility. The geographical extent and duration of change are described where relevant in the assessment.

Scale or Size of the Degree of Landscape Change

Scale or Size of the Degree of Landscape Change	Definition
High	Total loss of or major alteration to key characteristics / features and the introduction of new elements totally uncharacteristic to the receiving landscape. Overall landscape receptor will be fundamentally changed.
Medium	Partial loss of or alteration to one or more key characteristics / features and the introduction of new elements that would be evident but not necessarily uncharacteristic to the receiving landscape. Overall landscape receptor will be obviously changed.
Low	Limited loss of, or alteration to one or more key characteristics/ features and the introduction of new elements evident and/ or characteristic to the receiving landscape. Overall landscape receptor will be perceptibly changed.
Negligible	Very minor alteration to one or more key characteristics/ features and the introduction of new elements characteristic to the receiving landscape. Overall landscape receptor will be minimally changed.
None	No loss or alteration to the key characteristics/ features, representing 'no change'.

Reversibility

Reversibility	Definition
Irreversible	The development would be permanent and the assessment site could not be returned to its current/ former use.
Reversible	The development could be deconstructed/ demolished and the assessment site could be returned to broadly its current/ historic use (although that may be subject to qualification depending on the nature of the development).

Visual

Sensitivity of Visual Receptors

Visual sensitivity assesses each visual receptor in terms of their susceptibility to change in views and visual amenity and also the value attached to particular views. The definition and criteria adopted for these contributory factors is detailed below.

Visual Susceptibility to Change

The susceptibility of different visual receptors to changes in views and visual amenity is mainly a function of; firstly, the occupation or activity of people experiencing the view at particular locations; and secondly, the extent to which their attention or interest may therefore be focussed on the views and visual amenity they experience.

Visual Susceptibility to Change	Definition
High	Residents at home with primary views from ground floor/garden and upper floors. Public rights of way/ footways where attention is primarily focussed on the landscape and on particular views. Visitors to heritage assets or other attractions whose attention or interest is likely to be focussed on the landscape and/ or on particular views. Communities where views make an important contribution to the landscape setting enjoyed by residents. Travellers on recognised scenic routes.
Medium	Residents at home with secondary views (primarily from first floor level). Public rights of way/ footways where attention is not primarily focussed on the landscape and/ or particular views. Travellers on road, rail or other transport routes.
Low	Users of outdoor recreational facilities where the view is less important to the activities (e.g. sports pitches). Travellers on road, rail or other transport where views are primarily focussed on the transport route. People at their place of work where views of the landscape are not important to the quality of the working life.

Value of Views

The value attached to a view takes account of any recognition attached to a particular view and/ or any indicators of the value attached to views, for example through guidebooks or defined viewpoints or references in literature or art.

Value of Views	Definition
High	A unique or identified view (eg. shown as such on Ordnance Survey map, guidebook or tourist map) or one noted in literature or art. A view where a heritage asset makes an important contribution to the view.
Medium	A typical and/ or representative view from a particular receptor.
Low	An undistinguished or unremarkable view from a particular receptor.

Magnitude of Visual Effects

Magnitude of Visual Effects evaluates each of the visual effects in terms of its size or scale, the geographical extent of the area influenced and its duration and reversibility. The table below sets out the categories and criteria adopted in respect of the Scale or Size (including the degree of contrast) of Visual Change. The distance and nature of the view and whether the view will be permanent or temporary are also detailed in the Visual Effects Table.

Scale or Size of the Degree of Visual Change	Definition
High	The proposal will result in a large and immediately apparent change in the view, being a dominant and new and/ or incongruous feature in the landscape.
Medium	The proposal will result in an obvious and recognisable change in the view and will be readily noticed by the viewer.
Low	The proposal will constitute a minor component of the wider view or a more recognisable component that reflects those apparent in the existing view. Awareness of the proposals will not have a marked effect on the overall nature of the view.
Negligible/ None	Only a very small part of the proposal will be discernible and it will have very little or no effect on the nature of the view.

Level of Effect

The final conclusions on effects, whether adverse or beneficial, are drawn from the separate judgements on the sensitivity of the receptors and the magnitude of the effects. This overall judgement is formed from a reasoned professional overview of the individual judgements against the assessment criteria.

GLVIA3 notes, at paragraphs 5.56 and 6.44, that there are no hard and fast rules with regard to the level of effects, therefore the following descriptive thresholds have been used for this appraisal:

- **Major;**
- **Moderate;**
- **Minor;**
- **Negligible.**

Where it is determined that the assessment falls between or encompasses two of the defined criteria terms, then the judgement may be described as, for example, Major/ Moderate or Moderate/ Minor. This indicates that the effect is assessed to lie between the respective definitions or to encompass aspects of both.

Judging Overall Significance

A judgement is reached, based on the assessment, as to whether an effect is significant or not. Those degrees of effects that are considered to be *significant* by the assessor for *this* LVIA are judged to be effects that are either Major or Major/ Moderate.

GLVIA3 Statement of Clarification 1/13 (2013)¹ notes that:

"Concerning 'significance', it is for the assessor to define what the assessor considers significant... Depending on the means of judgment and terminology (which should be explicitly set out), effects of varying degrees of change (or levels of change), may be derived. The assessor

¹ Landscape Institute and the Institute of Environmental Management (10th June 2013) **GLVIA3 Statement of Clarification 1/13**

should then establish (and it is for the assessor to decide and explain) the degree or level of change that is considered to be significant.” (GLVIA3 Statement of Clarification, § 3.)

Significance of Landscape Effects

GLVIA3 states, at paragraph 5.56, that:

“There are no hard and fast rules about what makes a significant effect, and there cannot be a standard approach since circumstances vary with the location and context and with the type of proposal. At opposite ends of the spectrum it is reasonable to say that:

- *Major loss or irreversible negative effects, over an extensive area, on elements and/ or aesthetic and perceptual aspects that are key to the character of nationally valued landscapes are likely to be of the greatest significance;*
- *Reversible negative effects of short duration, over a restricted area, on elements and/ or aesthetic and perceptual aspects that contribute to but are not key characteristics of the character of landscapes of community value are likely to be of the least significance and may, depending on the circumstances, be judged as not significant;*
- *Where assessments of significance place landscape effects between these extremes, judgements must be made about whether or not they are significant, with full explanations of why these conclusions have been reached.” (GLVIA3 paragraph 5.56.)*

Significance of Visual Effects

GLVIA3 states, at paragraph 6.44, that:

“There are no hard and fast rules about what makes a significant effect, and there cannot be a standard approach since circumstances vary with the location and context and with the type of proposal. In making a judgement about the significance of visual effects the following points should be noted:

- *Effects on people who are particularly sensitive to changes in views and visual amenity are more likely to be significant;*
- *Effects on people at recognised and important viewpoints or from recognised scenic routes are more likely to be significant;*

Large-scale changes which introduce new, non-characteristic or discordant or intrusive elements into the view are more likely to be significant than small changes or changes involving features already present within the view.” (GLVIA3 paragraph 6.44.)

ENVIRONMENTAL STATEMENT

Axis 50, near Willington, South Derbyshire

Chapter 10: Landscape and Visual Impact

APPENDIX 10.2

Extracts from Published Landscape Character Assessments

July 2019

Introduction & Summary

Description

Opportunities

Key facts
and data

Landscape
change

Analysis



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NATURAL
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Summary

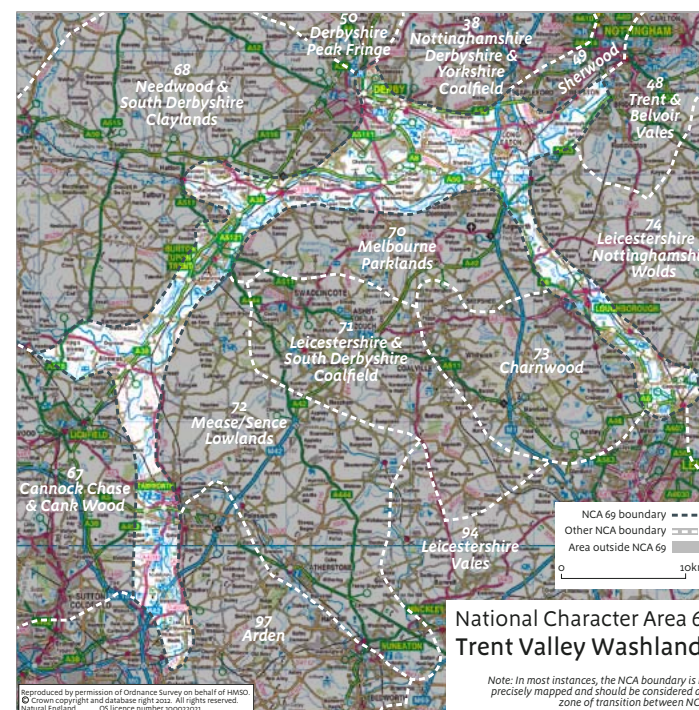
The Trent Valley Washlands National Character Area (NCA) comprises the river flood plain corridors of the middle reaches of the River Trent's catchment in the heart of England. It is a distinctly narrow, linear and low-lying landscape, often clearly delineated at its edges by higher ground, and it is largely comprised of the flat flood plains and gravel terraces of the rivers.

A washland is described as an area of flood plain that is allowed to flood or is deliberately flooded for flood management purposes.⁴ Thus the Trent Valley Washlands are strongly defined by the riverine environment and periodic inundation. The key ecosystem services provided are related to water, its availability and regulation of flow. Thick superficial deposits of alluvium and river terrace gravels dominate the Washlands' geology. Variations in these, the resultant soils and the differences in elevation above and below flood levels have determined both settlement pattern and agricultural land use. Arable crops are by and large located on the freely draining soils of the river terraces and on the higher ground where fields are big and hedgerows are small with few trees. Pastoral farming generally takes place on the river flood plains, where soils are subject to frequent flooding or are naturally wet. Here fields are usually smaller and the hedgerows fuller with more tree cover. Overall woodland cover in the Washlands is very limited, although riparian trees, especially willows, provide an important component of the landscape.

The broad rivers, their riparian vegetation and the semi-natural parts of the flood plain form the main habitats of the Washlands, with flooded former gravel extraction

sites introducing new wetland habitat into the area. Characteristic species are those associated with these wetlands such as grey heron, lapwing and kingfisher.

The rivers have attracted humans from the earliest times, especially the gravel terraces and crossing points. Traditional buildings are typically made of red brick with clay plain tile roofs with the occasional survival of some earlier timber-framed structures, while grander dwellings and churches are often built from sandstone.



⁴ *Working with Natural Processes to Manage Flood and Coastal Erosion Risk*, Environment Agency (2010)

Click map to enlarge; click again to reduce.

Statements of Environmental Opportunity

SEO 1: Carefully plan and manage new development within the NCA to ensure that landscape character and ecosystem services are strengthened, that heritage features, wildlife habitats, woodland and the hedgerow network are enhanced, and that opportunities for creation of multifunctional green infrastructure are realised so that this landscape is resilient to the forces of change that it is experiencing.

SEO 2: Manage and enhance the Trent Valley Washlands' river and flood plain landscape to combine its essential provision and regulation of water role with landscape enhancement, nature conservation, climate regulation, farming, recreation and a resource for understanding geodiversity.

SEO 3: Protect, manage and enhance the pastoral landscape of the Trent Valley Washlands, seeking to join up and expand areas of pasture and associated attributes and habitats, to preserve heritage features, enhance biodiversity and geodiversity, protect farmland and provide additional recreational opportunities.

SEO 4: Protect and enhance the historic environment of the Trent Valley Washlands and their characteristic historic landscape. Increase awareness of the richness of this resource, protect it from neglect and physical damage, and ensure that future development complements and enhances the sense of history of the NCA.



Pasture with willows in the Trent flood plain near Weston-on-Trent.

Key characteristics

- Distinctly narrow, linear and low-lying landscape largely comprised of the flat flood plains and gravel terraces of the rivers and defined at its edges by higher ground.
- Geology dominated by superficial alluvium and gravel river terrace deposits underpins the contrast in arable and pastoral agricultural use, arable crops predominating on the free-draining soils of the river terraces, with grassland more commonly located along the alluvial river flood plains where soils are subject to frequent flooding or are naturally wet.
- Flood plain pastoral areas where riverside pastures are subdivided by thick, full hedgerows with some trees contrast with arable areas with larger fields divided by low, small hedgerows with few trees.
- Limited tree cover, but local concentrations give the impression of a well-timbered landscape in many places. Riparian trees, especially willows, provide an important component.
- A landscape strongly defined by its rivers and their flood plains with the extensive canal network adding significantly to the watery character and providing major recreational assets for the area.
- Diverse range of wetland habitats supporting notable species such as spined loach and bullhead fish, otter, water vole, white-clawed crayfish, shoveler, bittern, lapwing, snipe and redshank.
- Rich history of human settlement and activity reflected in the archaeology and historic buildings with a particular focus on river crossing points and the gravel terraces, as well as being significant for early Christianity in the Midlands, and later for its canal and brewing heritage.
- Settlement pattern heavily influenced by flood risk, confining villages to

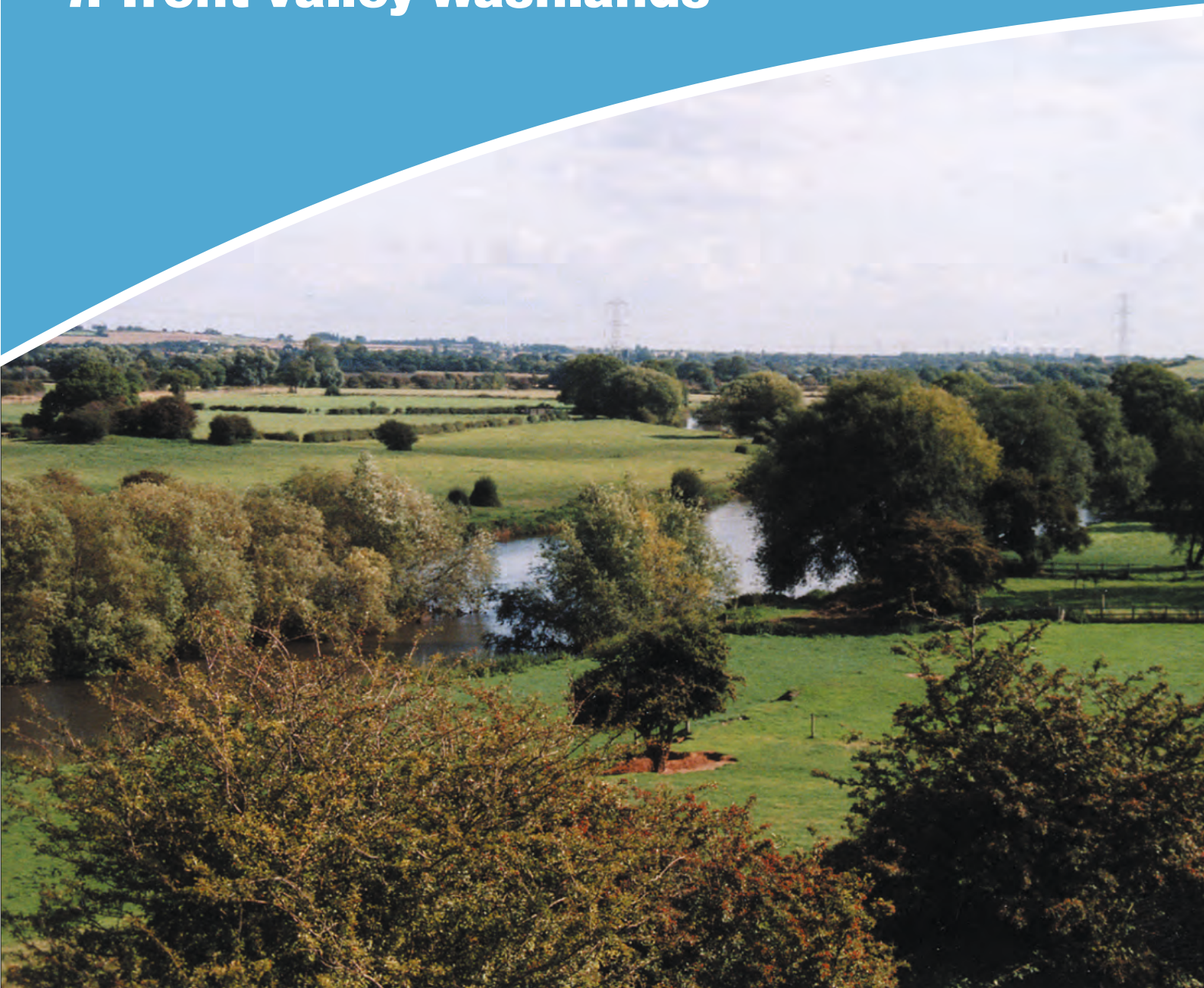
the gravel river terraces and to rising ground at the edges of the flood plains. Traditional buildings are characteristically of red brick and clay plain tile with earlier timber frame and grander dwellings and churches typically built from sandstone. Red brick and Welsh slate of 19th- and early 20th-century urban expansion prominent in larger settlements along with modern housing and development.

- A landscape heavily used as transport and communication corridors along the rivers and canals, for major roads and railways, and for power lines.
- A landscape marked by extensive sand and gravel extraction, power stations and prominent urban-edge industrial and commercial development.



The Soar Valley displaying some of the key characteristics of the Washlands.

7. Trent Valley Washlands



Landscape Character Types

- Lowland Village Farmlands 7.4
- Wet Pasture Meadows 7.9
- Riverside Meadows 7.13

Trent Valley Washlands

LANDSCAPE TYPE: LOWLAND VILLAGE FARMLANDS

This is a large scale, open, gently rolling lowland landscape associated with the lower slopes and terraces of broad flood plains. A mixed farming landscape defined by medium to large regular fields with thorn hedges, punctuated by villages.



Key Characteristics

- Gently rolling, almost flat, lowland with river terraces
- Low slopes and summits give a sense of elevation over a broad flood plain
- Mixed farming with arable cropping and improved pasture
- Thinly scattered hedgerow trees including some willow pollards
- Scattered, locally dense, watercourse trees
- Medium to large regular fields with thorn hedgerows
- Discrete red brick villages with farms and cottages
- Large red brick outlying farms

Geology and Landform

The underlying geology comprises alternating bands of Permo-Triassic Mudstones and Siltstones. Within the Trent Valley, the bedrock has been overlain with a variety of fluvioglacial drifts, river terrace deposits and alluvium.

Soils and Land-Use

The soils are variable, relating to the underlying geology and drift material. Soils developed from the fluvial drift and river terrace deposits are deep and permeable. They are variably affected by ground water which supports short-term grassland and cereals. Other soil

types are slowly permeable and seasonally waterlogged comprising of reddish, fine loamy clays and other clay soils derived from Permo-Triassic Mudstone and alluvium. These support winter cereals, short-term grassland, dairy and stock rearing. Fields respond well to under-drainage but the less permeable soils can suffer from cattle poaching and a limited autumn season for sowing crops.

The traditional land-use is mixed farming with arable crops and improved pasture, reflecting the variation in the underlying soils. Grassland is now restricted to the areas of heaviest soils and smaller field parcels associated with the

villages. The presence of fluvioglacial and river gravels has led to localised quarrying.

Ecology

With a long tradition of mixed farming with intensive cropping, this landscape is ecologically poor. Terrestrial corridors, in the form of hedgerows, streams and ditches persist but these are becoming poorer owing to neglect, drainage schemes and further agricultural intensification.



Developing habitat at Willington

Canals and standing open water provide additional habitat opportunities for wetland flora and fauna, such as those found at the Hilton Gravel Pits SSSI. Further gravel extraction is providing opportunities for increasing wetland habitats but there are constraints due to issues such as the proximity to East Midlands Airport, flood flows and availability of suitable fill.

Tree Cover

Tree cover is variable throughout this landscape character type, although it is rarely visually prominent. Sparsely scattered hedgerow trees are locally prominent where the fields are smaller, particularly in association with villages. Hedgerow trees are generally a mix of oak and ash with some willow. Many of the willows have been pollarded and form visually distinctive features. There are scattered, locally dense trees along watercourses; predominantly alder with some willow. There are localised parkland trees and avenues around Elvaston Park, and small amenity tree groups are found adjacent to scattered farmsteads. In areas of former common, tree cover is very sparse.

Woodland is largely absent from this landscape, or occurs as small, sparsely scattered blocks. There are some small estate woodlands in the proximity of Elvaston.

Enclosure

The enclosure pattern is an important characteristic in defining the scale of this landscape type. Hedgerows, predominantly hawthorn, enclose medium to large semi-regular and regular fields. In areas of former common, as at Etwall Common and around Hilton, the regular field pattern is particularly prominent. In areas of earliest enclosure, immediately surrounding settlements, hedgerows tend to be more mixed in composition and fields tend to be smaller and more sub-regular. Some of these smaller fields have patches of ridge and furrow, indicative of earlier medieval field systems. Many hedgerows are now

poorly managed being over-flailed and becoming gappy. Some hedgerows have been lost to agricultural intensification.

Transport

Country lanes are few and most are organic in character with irregular width verges. These lanes connect the villages and scattered farmsteads, and connect with crossing points in the Trent Valley. There are also lanes running parallel to the flood plain taking advantage of the slight elevation to avoid the risk of flooding.

The importance of this landscape as a transport corridor is still evident, with the expansion and construction of roads like the A50 and A52, both forming important east-west connections. These are busy routes and form a prominent visual intrusion in the landscape. Modern roads have also impacted on the character of the traditional lanes, many of which have been widened to pass over new roads or been truncated by them

The Trent and Mersey Canal was once a major industrial transport route. It now caters mainly for recreational water traffic crossing the area from south-east of Egginton eastwards to Swarkestone.

Built Environment

Settlements are generally nucleated and some are much extended. Early settlement in the flood plain was constrained by both flooding of the valley bottoms and by heavy clays. As a result, settlements are located on the gentle slopes and gravel river terraces, immediately off the flood plain, where drainage is

better. In fact, the gravel terraces were settled and utilised from early prehistoric times, particularly from the Neolithic onwards.

Villages are compact, with cottages and farms built in the vernacular style of red brick with Staffordshire blue clay tile roofs.



Aston-on-Trent

Between the villages there are sparsely scattered farmsteads, again built in red brick. Adjacent to former commons there are small collections of wayside cottages.

A significant feature within this landscape is Elvaston Castle with its formal grounds and estate plantations.

The combination of proximity to Derby and Nottingham, and location on good transport corridors, has led to the rapid expansion of many villages, particularly noticeable at Hatton, Hilton, Borrowash and Breaston. Today the urban fringes are characterised by large modern housing estates.

Other impacts in this landscape relate to power stations like that at Willington with its extensive plant, pylons and overhead power lines. There have also been major changes to landscape character as a result of large scale mineral extraction.

Summary

The soft rocks of Permo-Triassic Mudstones and Siltstones with drift deposits have weathered away to form a very subdued, gently rolling lowland landscape that has strongly influenced the cultural patterns of the landscape. Soils reflect the geological variation, with heavy seasonally waterlogged soils over mudstone, and more permeable soils over localised drift and river terrace deposits. The resultant land-use is typically mixed, with cropping on the flatter, more cultivable, soils and improved pasture in damper areas.

A key feature of this landscape is its nucleated settlement pattern. Villages like Hatton and Weston-on-Trent are located on relatively high spots or better drained land immediately off the flood plain, in order to reduce the risk of flooding. The enclosure pattern reflects a diverse history. Immediately adjacent to the villages, fields are medium size, semi-regular, with areas of ridge and furrow reflecting the enclosure of medieval open fields. The hedges that enclose these fields are species-rich. Beyond the villages there is a more regular pattern of fields suggesting a period of later enclosure and typically, the hedgerows are single species hawthorn. The more regular fields are most obvious in areas of former common like Etwall Common and Egginton Common.

Villages are traditionally compact with cottages and farmsteads built in the local material of red brick with Staffordshire blue clay tile roofs. Some of these settlements like Hatton, Hilton, Breaston and Borrowash have undergone rapid expansion with the construction of new housing estates to serve the city of Derby.

Much of the original character of this landscape has been seriously impacted upon by modern large scale development. Large power stations dominate views across the landscape as do the many pylons carrying the resultant electricity. The gentle topography above the flood plain has always been attractive for road construction and modern roads, like the A50 and A52, pass through this landscape. The underlying mineral deposits have resulted in sand and gravel extraction, and the restoration of these sites has created areas of immature agricultural land and large water bodies.

LANDSCAPE TYPE: LOWLAND VILLAGE FARMLANDS

Planting and Management Guidelines

Open, mixed farming landscape with thinly scattered plantations and hedgerow trees.

Primary woodland character:	Thinly scattered small plantations
Primary tree character:	Thinly scattered hedgerow trees
Woodland vision:	Widespread interconnecting woodland
Tree vision:	Thinly scattered hedgerow trees

Typical woodland size range:	0.5 - 10ha	small
Woodland pattern:	Regular plantations	

- Ensure the use of indigenous tree and shrub species, including a proportion of large, long-lived species.
- Conserve and enhance the tree groups that occur within and around rural settlements and isolated farmsteads.
- Encourage the continuing practice of pollarding to maintain the traditional riparian character of the landscape.
- Ensure new woodland does not conflict with features (e.g. ridge and furrow) that help to define landscape character.

Note

This guidance may be subject to variation following the emergence of the Trent Valley Vision and Strategy.

LANDSCAPE TYPE: LOWLAND VILLAGE FARMLANDS

Woodland Species Mix

Neutral/ Base-Rich Soils

Primary Tree Species 50%

<i>Fraxinus excelsior</i>	Ash
<i>Quercus robur</i>	Pedunculate Oak

Secondary Tree Species 20%

Major

<i>Acer campestre</i>	Field Maple
<i>Ilex aquifolium</i>	Holly

Minor

<i>Malus sylvestris</i>	Crab Apple
<i>Populus tremula</i>	Aspen
<i>Sorbus aucuparia</i>	Rowan
<i>Tilia cordata</i>	Small Leaved Lime

Shrubs 10-30%

Major

<i>Corylus avellana</i>	Hazel
<i>Crataegus monogyna</i>	Hawthorn

Minor

<i>Prunus spinosa</i>	Blackthorn
<i>Rhamnus cathartica</i>	Purging Buckthorn
<i>Salix cinerea</i>	Grey Willow

Open space 0-20%

† **Watercourse Trees** - tree species most appropriate for planting as watercourse trees.

* Plant only native Black Poplar (sub species *betulifolia*). Contact Derbyshire Wildlife Trust for more information.

Waterlogged Conditions on all soil types

Primary Tree Species 50%

† <i>Alnus glutinosa</i>	Alder
† <i>Salix fragilis</i>	Crack Willow

Secondary Tree Species 20%

Major

<i>Betula pubescens</i>	Downy Birch
<i>Fraxinus excelsior</i>	Ash

Minor

* <i>Populus nigra</i> ssp. <i>betulifolia</i>	Black Poplar
<i>Quercus robur</i>	Pedunculate Oak
<i>Salix caprea</i>	Goat Willow

Shrubs 10-30%

Major

<i>Salix cinerea</i>	Grey Willow
<i>Sambucus nigra</i>	Elder
<i>Salix aurita</i>	Eared Willow

Minor

<i>Crataegus monogyna</i>	Hawthorn
<i>Frangula alnus</i>	Alder Buckthorn
<i>Rhamnus cathartica</i>	Purging Buckthorn
<i>Salix viminalis</i>	Osier
<i>Viburnum opulus</i>	Guelder Rose

Open space 0-20%

Hedgerow Species Mix

Suitable hedgerow plants

Primary 70-75%

<i>Crataegus monogyna</i>	Hawthorn
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Secondary 25-30%

<i>Acer campestre</i>	Field Maple
<i>Corylus avellana</i>	Hazel
<i>Ilex aquifolium</i>	Holly
<i>Prunus spinosa</i>	Blackthorn

Occasional 0-5%

<i>Rhamnus cathartica</i>	Purging Buckthorn
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Suitable hedgerow trees

Primary 95-100%

<i>Fraxinus excelsior</i>	Ash
<i>Quercus robur</i>	Pedunculate Oak

Secondary 25-30%

<i>Acer campestre</i>	Field Maple
<i>Tilia cordata</i>	Small Leaved Lime

Occasional 0-5%*

<i>Malus sylvestris</i>	Crab Apple
<i>Populus tremula</i>	Aspen
<i>Sorbus aucuparia</i>	Rowan

* only to be used if occurring locally within the landscape character type

ENVIRONMENTAL STATEMENT

Axis 50, near Willington, South Derbyshire

Chapter 10: Landscape and Visual Impact

APPENDIX 10.3

Landscape Effects Table

July 2019

APPENDIX 10.3: LANDSCAPE EFFECTS TABLE (LET)									
Landscape Receptor and Reference	Judged Sensitivity of Landscape		Judged Magnitude of Landscape Effect		Description/ Notes	Overall Effect at Construction Phase	Overall Effect Upon Completion	Overall Residual Effect at 15 Years Post Completion	Is the Overall Effect Significant?
	Susceptibility to Change	Landscape Value	Scale or Size of the Degree of Change (including degree of contrast/ integration) at Stages of Project	Where applicable, are the Effects Reversible?		Major Moderate Minor Negligible None	Major Moderate Minor Negligible None	Major Moderate Minor Negligible None	Yes No
	High Medium Low	High Medium Low	High Medium Low Negligible None	Yes No N/A		Adverse Beneficial	Adverse Beneficial	Adverse Beneficial	
National Landscape Character									
Natural England, National Character Area (NCA) 69: <i>Trent Valley Washlands'</i>	Varies across this large NCA. Mainly Medium	Varies across this large NCA. Mainly Medium	Construction: Negligible Completion: Negligible Year 15: Negligible	No	In the context of the national scale landscape character assessment study covering extensive landscape tracts as defined by the National Character Areas (NCA`s), the completed and operational development will have no discernible effects at this very large geographic scale.	Negligible	Negligible	Negligible	No
Landscape Character Assessment (LCA): County/District									
Derbyshire Landscape Character Assessment <i>Trent Valley Washlands Character Area</i> <i>'Lowland Village Farmlands LCT'</i>	Varies across this LCA and LCT. Mainly Medium	Varies across this LCA and LCT. Mainly Medium	Construction: Low/Negligible Completion: Low/ Negligible Year 15: Low/ Negligible	No	At a county level, the site falls within the 'Trent Valley Washlands' Character Area and 'Lowland Village Farmlands' Landscape Type of the Derbyshire Landscape Character Assessment. At this scale of assessment the effects will be relatively greater, yet will still occur over a small localised part of a more extensive landscape character area. At this scale, the wider and indirect operational effects of the Proposed Development will generally dissipate with distance from the Site. The existing presence of urban and other active infrastructure and influences (eg A50 and junction, A38, Willington Power Station) within this broader landscape will also moderate to some degree the resulting landscape effect of the Proposed Development, at this scale.	Minor Adverse	Minor Adverse/ Negligible	Minor Adverse/ Negligible	No

APPENDIX 10.3: LANDSCAPE EFFECTS TABLE (LET)									
Landscape Receptor and Reference	Judged Sensitivity of Landscape		Judged Magnitude of Landscape Effect		Description/ Notes	Overall Effect at Construction Phase	Overall Effect Upon Completion	Overall Residual Effect at 15 Years Post Completion	Is the Overall Effect Significant?
	Susceptibility to Change	Landscape Value	Scale or Size of the Degree of Change (including degree of contrast/ integration) at Stages of Project	Where applicable, are the Effects Reversible?		Major Moderate Minor Negligible None	Major Moderate Minor Negligible None	Major Moderate Minor Negligible None	Yes No
	High Medium Low	High Medium Low	High Medium Low Negligible None	Yes No N/A		Adverse Beneficial	Adverse Beneficial	Adverse Beneficial	
Landscape Character: Site and Immediate Context									
Site and Immediate Context	Low/ Medium	Low/ Medium	Construction: High Completion: Medium/ High Year 15: Medium	No	The proposed development will change the character of the site from one dominated by pasture farmland including agricultural buildings to one dominated by employment units, and associated infrastructure set within a significant new landscape and planted setting. The loss of the existing farmland would be permanent and irreversible. The new landscape will however include a notable landscape and green infrastructure component, which will become increasingly apparent and visible as it matures. This will extend to approximately 25% of the total site and will include broad landscape corridors (including bunding and woodland planting) along its eastern and southern sides. The magnitude of the landscape change arising at this localised scale will be Medium/ High, yet it will not all be adverse. The conservation of existing hedgerows and trees coupled with the new planting and habitat proposals will extend across the major part of the site`s outer landscape and include a significant number of new native trees , shrubs and other plants that will draw upon the planting guidelines contained within the published landscape character and biodiversity studies. These landscape proposals will be valuable and beneficial in local landscape terms.	Moderate/ Major Adverse	Moderate Adverse	Minor/ Moderate Adverse	Yes (Construction stage only)

ENVIRONMENTAL STATEMENT

Axis 50, near Willington, South Derbyshire

Chapter 10: Landscape and Visual Impact

APPENDIX 10.4

Visual Effects Table

July 2019

APPENDIX 10.4: VISUAL EFFECTS TABLE (VET)												
Ref	Receptor Type and Location (including approx no. of dwellings where applicable)	Judged Sensitivity of Visual Receptor		Judged Magnitude of Visual Effects				Description/ Notes	Overall Effect at Construction Phase	Overall Effect Upon Completion	Overall Residual Effect at 15 Years Post Completion	Is the Overall Effect Significant?
		Susceptibility to Change	Value	Distance from Site Boundary (or Built Development where stated) (approx. m/km)	Nature of View	Is the View Permanent or Transient?	Size/Scale of Visual Effect (including degree of contrast/ integration) at Stages of Project		Major Moderate Minor Negligible None	Major Moderate Minor Negligible None	Major Moderate Minor Negligible None	Yes No
									High Medium Low	High Medium Low	Adverse or Beneficial	
A VPs 5,6,7,8	Public Right of Way PROW SD50 9/1	High	Medium	Varies from 140m, within site and 5m	Full	Transient	Construction: High Completion: Med Year 15: Low/ Med	The proposals include the diversion of this footpath which presently crosses the site. Views from the realigned public footpath and its approach from Willington to the south will undergo significant change as a result of the proposed development. It is important however to bear in mind that existing views from this relatively short stretch of PROW encompass some major power and road infrastructure, including the nearby Power Station, Toyota Complex and A50 and A38 road corridors and junctions. Existing views are thus varied and encompass both rural and urbanising features and characteristics. The realigned PROW will extend around the southern and western perimeter of the site within a broad landscape corridor and to the south views towards the built development proposals will be effectively screened by the bunding and planting proposals. There will be a significant change to views for users of this PROW, though this will not all be adverse as the siting of the realigned route of the PROW through the perimeter landscape area will limit views towards the buildings and enable a suitable setting to be formed.	Major Adverse	Moderate Adverse	Minor/ Moderate Adverse	Yes (Construction stage only)
B VP2	Hill Farm	Medium/ High	Medium	24m	Partial	Permanent	Construction: Med/High Completion: Med Year 15: Low/ Med	The primary aspect from Hill Farm is understood to be to the south, a view which includes existing visual detractors such as the Willington Power Station and overhead pylons. The recent, James Clarke Road residential development is also visible directly to the south. There will be opportunities for filtered and partial views westwards and south westwards towards the nearest buildings within the proposed development from this property. Existing mature trees, hedgerows and planting around the property and along Etwall Rd will however restrict the extent of available views. Once proposed woodland planting has established and is maturing the views will be very effectively filtered and screened from this receptor.	Moderate/Major Adverse	Moderate Adverse	Minor/ Moderate Adverse	Yes (Construction stage only)
C VP4	Residential dwellings James Clarke Road (up to approx.	Medium/ High	Medium	80m	Partial	Permanent	Construction: Med/High Completion: Med Year 15: Low	Some properties largely on the edge of this recent development and nearby housing have views northwards and north westwards towards the site on gradually rising ground. Upon completion of the proposed development the perimeter bunding and associated planting will form an	Moderate/Major Adverse	Moderate Adverse	Minor/ Moderate Adverse	Yes (Construction stage only)

	25 no. north & west) Also dwellings on Derwent Close (approx. 10 - 15 no. north & west)							effective visual 'buffer' and filter to views from those properties with views in this direction. The higher parts of the built development proposals will be visible but much of the lower level activity within the development area will be effectively screened and hidden from view. Once woodland bund planting to the south and south east has established and is maturing it will form an effective visual buffer to the built development.				
D (no viewpoint -within private grounds)	Properties north of the site -The Bungalow, Etwall Road -haulage & commercial recycling businesses -Danes Lodge (unclear but assumed to be commercial premises) -Auto services -Mobile home/ caravan park storage	Medium/ High (Residential use)	Low/ Medium	50m	Partial	Permanent	Construction: Med/High Completion: Med Year 15: Low/ Med	Premises/ properties immediately to the north of the site will experience some potentially notable visual change as a result of the proposed development. These premises/ properties do appear to be varied in terms of their use and relationship to the site. Residential parts to these premises do exist but are relatively more removed than some other parts of the premises which appear to encompass commercial activities.	Moderate/ Major Adverse	Moderate Adverse	Minor/ Moderate Adverse	Yes (Construction stage only)
		Low/ Medium (Other/ commercial use)	Low/ Medium	20m			Construction: High Completion: Med/High Year 15: Med	At the Bungalow, Etwall Road, it is believed that there are commercial activities associated with or located adjacent this dwelling. The upper elevations and roofs of new development units will be visible beyond the intervening hedgerows and hedgerow trees which lie to the south of the property. Danes Lodge lies to the north east of the site and it is believed that this includes both residential and commercial uses (unconfirmed). It should be noted that for both of these receptors, there are existing visual detractors at close range including the A50 junction and connecting roads. Thus the susceptibility to change of these properties/ premises does appear to vary and this has an effect upon the consequential significance of the visual effect.	Moderate Adverse	Minor/ Moderate Adverse	Minor Adverse	No
E VPs 12,13,11	Willington (northern settlement edge) (18 no. adjacent southern towpath of canal incl. pre-school nursery)	Medium/ High	Medium	Varies from 350-495m	Partial	Permanent	Construction: Med Completion: Low/Med Year 15:Low	A relatively limited number of properties close to and alongside the canal on the northern edge of Willington have views northwards towards the site on gradually rising ground. Upon completion of the proposed development the perimeter bunding and associated planting will form an effective visual 'buffer' and filter to views from those properties with views in this direction. The higher parts of the built development proposals will be visible; nevertheless much of the lower level activity within the development area will be effectively screened and hidden from the outset. Once woodland bund planting to the south and south has established and is maturing it will form an effective visual buffer to the built development.	Moderate Adverse	Minor/ Moderate Adverse	Minor Adverse	No
F VP 10	Residential -The Castle Way Approx. 20no.dwellings)	Medium/ High	Medium	Varies from 480-525m	Partial	Permanent	Construction: Med Completion: Low/Med Year 15:Neg/ Low	Residential dwellings along the north western settlement edge have varying views but typically these are more restricted towards the site and the north/ north east. Where views are possible these are generally more oblique. One large modern residence with main windows generally orientated towards the south east will potentially have angled views towards the southern and south eastern part of the proposed development.	Moderate Adverse	Minor/ Moderate Adverse	Minor Adverse	No
	-No. 54 The Castle Way	Medium/ High	Medium	Varies from 480-525m	Partial	Permanent	Construction: Med/High Completion: Med Year 15:Low	From this property, significance of the visual effect will be potentially Moderate Adverse upon completion. From other properties in this general location the significance of the visual effects will be up to Minor/ Moderate Adverse.	Moderate/Major Adverse	Moderate Adverse	Minor/ Moderate Adverse	Yes (Construction stage only)

G VPs 1,2,3,4,13	Etwall Road	Low/ Medium	Medium	Varies from 5m to 180m	Partial Glimpses	Transient	Construction: Up to High Completion: Med/ High Year 15: Low/ Med	The existing road is predominantly enclosed towards its northern end approaching Burnaston Cross with tall hedgerows and hedgerow trees limiting views outwards. These road users will have close and clear views towards the eastern edge of the proposed development and the nearest buildings will be visible beyond the proposed bunding and the conserved and new planting. Travelling along the eastern site boundary there will be filtered views of the proposed development comprising predominantly the upper parts of the nearest buildings. Lower level activity surrounding the buildings (eg service yards and car parks) will be largely screened from these road views. A section of hedgerow will be removed to towards the north to facilitate construction of the new roundabout and access into the site. After the bund woodland planting has established and is maturing it will form an effective visual buffer to these close views towards the built development.	Moderate/Major Adverse	Moderate Adverse	Minor Adverse	Yes (Construction stage only)
H VP 8, 9	A38 Burton Road	Low	Low/ Medium	10m	Partial Glimpses	Transient	Construction: Low /Med Completion: Low Year 15: Low/Neg	Views towards the proposed development will be possible for users of this major road. However, these views will generally be relatively brief and filtered and seen within a context of other sequential roadside views of the A50, the major road junction and the Toyota Complex.	Minor Adverse	Minor Adverse	Minor Adverse/ Negligible	No
I VP 10	A5132 The Castle Way	Medium/ Low	Medium	550m	Partial Glimpses	Transient	Construction: Low Completion: Low Year 15: Neg	Brief glimpsed views northwards towards the site where the carriageway rises to bridge the canal at the Castle Way are possible and views to the north from further west on the approach into Willington are generally contained by roadside hedgerows and residential properties. Visual effects afforded from the canal bridge are considered to be similar to receptor F.	Minor Adverse	Minor Adverse	Negligible	No
J VPs 6	Railway Passengers	Medium	Medium	5m	Full	Transient	Construction: Med Completion: Low/ Med Year 15: Low/ Neg	It is believed this rail corridor is used primarily for freight, however should passenger services also pass the site, then the proposed development will be briefly visible over a very short stretch of this line. Due to the close proximity of the rail line to the site boundary, the proposed bunding will be effective in screening much of the built development including the lower level activities and services yards/ car parking around the buildings.	Moderate Adverse	Minor/ Moderate Adverse	Minor Adverse	No
K VPs 11,12	Canal Users Trent & Mersey Boats and walkers (Along northern edge of Willington)	High	Medium	300-540m	Partial Glimpse	Transient	Construction: Med Completion: Low/ Med Year 15: Low	There will be views towards the proposed development from a short stretch of the canal between the Etwall Rd and Castle Way bridges. The upper elevations and roofs of the proposed buildings will be visible beyond the perimeter bunding and planting on the southern edge of the site. Once mitigation planting has established in year 15, it is considered the bund woodland structure will afford full visual containment of the development, albeit with some heavily filtered winter views. Once woodland bund planting to the south and south east has established and is maturing it will form an effective visual buffer to the built development.	Moderate / Major Adverse	Minor/ Moderate Adverse	Minor Adverse	Yes (Construction stage only)

L VP 14	Mercia Marina	High/ Medium	Medium	825m	Partial Glimpse	Transient/ Permanent	Construction: Low/ Neg Completion: Low/ Neg Year 15: Low/ Neg	It is predicted that there will be limited opportunities to see the proposed development from Mercia Marina, largely as a result of the mature woodland enclosing the western side of the marina and the changes in the landform. It is likely that from some positions within the marina it will be possible to see the very highest parts of the building(s) closest to the eastern side of the site.	Minor Adverse	Minor Adverse	Minor Adverse / Negligible	No
M VP 15	Public Right of Way PROW SD37 29/1 Askew Hill @70m AOD	High	Medium	2.7km	Partial Glimpse	Transient	Construction: Low/ Neg Completion: Low/Neg Year 15: Neg	Distant and elevated views towards the proposed development will be possible from limited stretches of this PROW and potentially a small number of other nearby PROW. The visual effects of the proposed development upon users of this PROW will be limited, largely given the distance involved and the expansive and varied nature of the existing cross valley views, which encompass settlement and major transport and power infrastructure.	Minor Adverse	Minor Adverse /Negligible	Minor Adverse /Negligible	No
N VP 19	Public Right of Way PROW SD50 9/1 off Knight's Lane @115m AOD	High	Medium	4.6km	Glimpse at distance	Transient	Construction: Low/ Neg Completion: Low/Neg Year 15: Neg	Distant and elevated views towards the proposed development will be possible from stretches of this PROW and potentially a small number of other nearby PROW. The visual effects of the proposed development upon users of this PROW will be limited, largely given the distance involved and the expansive and varied nature of the existing cross valley views, which encompass settlement and major transport and power infrastructure.	Minor Adverse	Minor Adverse /Negligible	Minor Adverse /Negligible	No
O VP 18	Public Right of Way PROW SD33 5/2 Off Newton Lane @ 70m AOD	High	Medium	4.0km	Glimpse at distance	Transient	Construction: Low/ Neg Completion: Low/Neg Year 15: Neg	Distant and elevated views towards the proposed development will be possible from limited stretches of this PROW and potential a small number of other nearby PROW. The visual effects of the proposed development upon users of this PROW will be limited, largely given the distance involved and the expansive and varied nature of the existing cross valley views, which encompass settlement and major transport and power infrastructure.	Minor Adverse	Minor Adverse /Negligible	Minor Adverse /Negligible	No
P VP 20	Public Right of Way PROW SD6 13/1 Bretby Mount @120m AOD	High	Medium	5.5km	Glimpse at distance	Transient	Construction: Low/ Neg Completion: Low/Neg Year 15: Neg	Distant and elevated views towards the proposed development will be possible from limited stretches of this PROW and potential a small number of other nearby PROW. The visual effects of the proposed development upon users of this PROW will be limited, largely given the distance involved and the expansive and varied nature of the existing cross valley views, which encompass settlement and major transport and power infrastructure.	Minor Adverse	Minor Adverse /Negligible	Minor Adverse /Negligible	No
Q VP 16	Newton Solney settlement edge (approx. 10 - 20 no. dwellings)	Medium/ High	Medium	2.7km	Glimpse at distance	Permanent	Construction: Low/ Neg Completion: Low/ Neg Year 15: Neg	From the edges of a few of the settlements situated on the more elevated southern slopes of the Trent Valley, distant views of the proposed development will be possible. These will be from limited locations and properties largely situated on the norther edge of the respective settlement. Where visible the proposed development will be seen distantly as a minor element with an expansive and varied valley landscape and will not constitute a significant change.	Minor Adverse /Negligible	Minor Adverse /Negligible	Negligible	No
R VP 15	Repton settlement edge (approx. 10 - 15 no. dwellings)	Medium/ High	Medium	3.2km	None to partial Glimpse at distance	Permanent	Construction: Low/Neg Completion: Low/ Neg Year 15: Neg	From the edges of a few of the settlements situated on the more elevated southern slopes of the Trent Valley, distant views of the proposed development will be possible. These will be from limited locations and properties largely situated on the norther edge of the respective settlement. Where visible the proposed development will be seen	Minor Adverse /Negligible	Minor Adverse /Negligible	Negligible	No

								distantly as a minor element with an expansive and varied valley landscape and will not constitute a significant change.				
S VP 21	Winshill settlement edge (approx. 10 - 15 no. dwellings) @110m AOD	Medium/ High	Medium	6.1km	Glimpse at distance	Permanent	Construction: Low/ Neg Completion: Low/ Neg Year 15: Neg	From the edges of a few of the settlements situated on the more elevated southern slopes of the Trent Valley, distant views of the proposed development will be possible. These will be from limited locations and properties largely situated on the norther edge of the respective settlement. Where visible the proposed development will be seen distantly as a minor element with an expansive and varied valley landscape and will not constitute a significant change.	Minor Adverse /Negligible	Minor Adverse /Negligible	Negligible	No
T VP 19	Knight's Lane	Medium	Medium	4.6km	Glimpse at distance	Transient	Construction: Low/ Neg Completion: Negligible Year 15: Negligible	This road will offer the opportunity for distant glimpsed views at certain points. From most stretches of this road, no views towards the proposed development will however be possible.	Minor Adverse /Negligible	Minor Adverse /Negligible	Negligible	No
U VP 16	B5008 Repton Road	Medium	Medium	3.2km	Glimpse at distance	Transient	Construction: Low/ Neg Completion: Low/ Neg Year 15: Neg	This road will offer the opportunity for distant glimpsed views at certain points. From most stretches of this road, no views towards the proposed development will however be possible.	Minor Adverse /Negligible	Minor Adverse /Negligible	Negligible	No
V VP 18	Newton Lane	Medium	Medium	4.0km	Glimpse at distance	Transient	Construction: Low/ Neg Completion: Low/ Neg Year 15: Neg	This road will offer the opportunity for distant glimpsed views at certain points. From most stretches of this road, no views towards the proposed development will however be possible.	Minor Adverse /Negligible	Minor Adverse /Negligible	Negligible	No
W VP 17	B5008 Newton Road @ 80m AOD	Medium	Medium	4.1km	Glimpse at distance	Transient	Construction: Low/ Neg Completion: Low/ Neg Year 15: Neg	This road will offer the opportunity for distant glimpsed views at certain points. From most stretches of this road, no views towards the proposed development will however be possible.	Minor Adverse /Negligible	Minor Adverse /Negligible	Negligible	No