

---

28<sup>th</sup> September 2018

# Dorset Innovation Park

## Landscape and Visual Impact Assessment

Report Number: 11286\_R01b\_JC\_HB

Author: Jennifer Cawood CMLI

Checked By: Clare Brockhurst FLI



Tyler Grange

Birmingham • Cotswolds • Exeter • London • Manchester

# Contents

Section 1: Introduction and Scope .....	1
Section 2: Baseline Appraisal .....	6
Section 3: Classification of Resources .....	22
Section 4: Assessment of Effects .....	26
Section 5: Conclusion .....	36
Glossary	

## Appendices

- Appendix 1:** Tables defining the Thresholds and Definitions of the Terminology used in this assessment
- Appendix 2:** Field survey sheet
- Appendix 3:** Email relating to viewpoint and study area
- Appendix 4:** Heritage Assessment

## Plans & Photoviewpoints

### **Plan 1: Topography**

11286/P01 January 2018

### **Plan 2a: Zone of Theoretic Visibility (ZTV) 5 metres**

11286/P013 September 2018

### **Plan 2b: Zone of Theoretic Visibility (ZTV) 9 metres**

11286/P014 September 2018

### **Plan 2c Zone of Theoretic Visibility (ZTV) 14 metres**

11286/P015 September 2018

### **Plan 3: Photoviewpoint Locations and Field Verified Visual Envelope**

11286/P03 January 2018

### **Plan 4: Landscape Character**

11286/P04 January 2018

### **Plan 5: Landscape Planning Policies**

11286/P05 January 2018

### **Plan 6: Landscape Analysis**

11286/P06 February 2018

### **Plan 7: Photoviewpoints 1-21**

11286/P07 February 2018

### **Plan 8: Visual Context**

11286/P16 September 2018



# Section 1: Introduction and Scope

- 1.1. Tyler Grange (TG) LLP has been appointed to undertake an assessment of the potential landscape and visual effects associated with the Dorset Innovation Park Project (DIP), hereby referred to as the 'site'. TG are sub consultants to Stride Treglown who have been appointed by Purbeck District Council to deliver a Local Development Order (DLO) to guide the future development of the Dorset Innovation Park.
- 1.2. The assessment contained within this report has been prepared by a Chartered Member of the Landscape Institute (CMLI) and has been reviewed by a Fellow of the Landscape Institute (FLI).
- 1.3. Pre-application consultation with regard to landscape and visual matters has been undertaken with Tony Harris, Landscape Services Manager at Dorset County Council and Helen Liley Landscape Officer at Purbeck District Council in relation to the study area and viewpoint location in January 2018.
- 1.4. The subsequent screening opinion is that this is not an EIA development, and this was confirmed on 21 June 2018.
- 1.5. The site lies in a low-lying area of heathland and valley pasture of the River Frome with substantial landforms to the south formed by clay and chalk downland and to the north rising heathland forest (refer to **Plan 1 Topography**).
- 1.6. The site is in public ownership and is the former UK Atomic Energy Authority (UKAEA) Civil Nuclear research facility that has been subject to a long term nuclear decontamination programme. Land ownership falls between Dorset County Council and Purbeck District Council. Land to the immediate west of the site is owned by the Nuclear Decommissioning Authority which is leased to Magnox, and Dorset Police Headquarters occupies an area to the east of the site. Many buildings have been demolished over the past years leaving an essentially brownfield site. Some buildings however, remain in use, some are vacant and a number of new buildings (starter units) have been introduced. Dorset Local Enterprise Partnership, Dorset County Council and Purbeck District Council have achieved Enterprise Zone status for the site which will become the major focus for economic regeneration in South Dorset.
- 1.7. Large-scale built form, lighting, road and other associated infrastructure occupy the site with areas of tree blocks, grasslands and some formal landscape features. The adjacent Magnox and Dorset Police Headquarters buildings are substantial developments that contribute to visual enclosure and screening of the site from the west and east while providing context. Large, mature, evergreen plantation blocks within the Magnox site and to a lesser extent woodland and linear tree planting at the police HQ add further to the visual enclosure of the site itself and to the softening and screening functions they provide. **Plan 8 Visual Context** illustrates the elements that influence visibility. The Zone of Theoretical Visibility (ZTV) mapped using computer software which takes no account of built form or other elements offers a first sieve of the visibility of a potential building height. Originally run at a 12m ridge height, the ZTV has been re-run and assessed with greater focus on the following building parameters - 5m, 9m and 14m. **Plan 2a Zone of Theoretical Visibility (5m), Plan 2b Zone of Theoretical Visibility (9m), and Plan 2c Zone of Theoretical Visibility (14m)** all indicate where no visibility is afforded (blue areas) and potential visibility (red areas). **Plan 3 Proposed Viewpoint Locations and Field Verified Visual Envelope** takes the ZTV to a refined level and the very limited visual envelope is mapped. This is largely the immediate surroundings of the site only but with some limited long-distance visibility afforded on elevated land to the south.



1.8. The landscape context of the site is represented by 5 landscape character bands as illustrated on **Plan 4 Landscape Character** derived from the Dorset Landscape Character Assessment, and the landscape of the site is afforded no value designation at either a local or national level. The Dorset Area of Outstanding Natural Beauty (AONB) lies to the south of the site (refer to **Plan 5 Landscape Planning Policies**). A Heathland Buffer Zone washes over the western area of the site and other areas of ecological interest are set out in the Ecological Assessment that accompanies this planning application. A heritage assessment is appended to the LVIA (Appendix 4).

1.9. To assist the reader in understanding the purpose for undertaking landscape assessment work, the definition of 'landscape' as defined by the European Landscape Convention (ELC, 2000) is set out below.

*"Landscape" means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors.*

1.10. This definition applies to all urban, peri-urban landscapes, towns, villages and rural areas. It applies to ordinary or degraded landscape as well as those that are outstanding or protected.

1.11. In the context of this definition the assessment process seeks to consider the effects in an objective and systematic manner whilst recognising the perceptual and therefore subjective response to the landscape. Whilst subjectivity can never be removed from the assessment process, by following a systematic and structured framework of assessment, a more robust assessment can be performed, and more rational and transparent conclusions drawn.

1.12. Furthermore, the Landscape and Visual Impact Assessment (LVIA) process deals with the separate but interlinked issues of:

- **Landscape Character:** The effects of the proposed development upon discrete character areas and/or character types comprising features possessing a particular quality or merit; and
- **Visual Context:** The effects of the proposed development on views from visual receptors, and upon the amenity value of the views.

1.13. Landscape character is defined in the Landscape Institute's guidance ('Guidelines for Landscape and Visual Impact Assessment', Landscape Institute (LI) and Institute of Environmental Management and Assessment (IEMA) 2013) as:

*"A distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse."*

1.14. Changes to the landscape character can arise as a result of:

- Changes to the fabric of the landscape including either the loss of key elements or introduction of new features which alter the distinct character of the landscape; and
- Changes which alter the way in which the landscape is perceived or appreciated.

1.15. Changes to views will occur where there is:

- Alteration of the view in terms of elements present and the overall composition;
- A change to the skyline; and/or
- There is a change to the distribution or dominance of features.



- 1.16. Such changes may or may not have a significant effect on the visual amenity of identified visual receptors.

## Methodology

- 1.17. The methodology and guidelines used in the preparation of this assessment have been developed from the following:

- An Approach to Landscape Character Assessment, Natural England, 2014; and
- Guidelines for Landscape and Visual Impact Assessment Third Edition (GLVIA3), LI and IEMA.

- 1.18. The assessment process is set out in further detail below but involves the following steps:

- Baseline Appraisal;
- Classification of Resources; and
- Assessment of Effects.

## Baseline Appraisal

- 1.19. The baseline appraisal process is a crucial part of any assessment and includes:

- An overview of statutory plans and other data regarding relevant designations and landscape and visual related planning policies for the area;
- An assessment of the landscape character of the site and surroundings with reference to published works and checked and verified through fieldwork. This includes the classification of the landscape into units of distinct and recognisable character and land use at a site-specific level;
- Field work to determine the extent to which the site can be seen from the wider area, taking into account any significant vegetation or built form which restricts or limits the extent of visibility; and
- Identification of representative viewpoints and determination of likely visual receptors.

## Classification of Resources

- 1.20. **Appendix 1** contains the threshold and definitions of the terms used in this process.

- 1.21. This stage seeks to classify the landscape resources in terms of their individual or collective sensitivity to change. This is dependent on:

- The susceptibility of the landscape;
- The type of change proposed; and
- The value placed on the landscape.

- 1.22. As a general rule those landscape resources which make a notable contribution to the character and are highly valued and cannot be replaced or substituted will be of high sensitivity, those resources



which are replaceable or contribute little to the overall character of the landscape and have low value will be of low sensitivity.

- 1.23. The classification of the representative viewpoints in terms of their sensitivity to change and the sensitivity of the visual receptors will be dependent on:
  - The location and context of the viewpoint;
  - The expectations and occupation or activity of the receptors; and
  - The importance of the view.
- 1.24. Those receptors that are classified as being of high sensitivity to change may include users of public rights of way or nearby residents, those of low sensitivity to change may include people in their place of work or travelling through the landscape in cars, trains or other modes of transport.
- 1.25. In order to assist in understanding the application of sensitivity to landscape and visual receptors, the tables at **Appendix 1** set out a number of Assessment Criteria. These allow for the separate consideration of both value and susceptibility factors in order to establish a balanced assessment.

## **Assessment of Effects**

- 1.26. The assessment of effects is undertaken in the knowledge of the scheme proposals and the existing baseline situation.
- 1.27. The importance of any landscape and visual effect is a function of the sensitivity of the affected landscape resources and visual receptors (see above) against the magnitude of change that they would experience.
- 1.28. The magnitude of effect lies along a continuum from high, where there is a prominent and notable change to the landscape character or view, to low where the change is barely perceptible.
- 1.29. The consideration of further mitigation with the aim where possible, of avoiding, reducing or offsetting important adverse landscape or visual effects is determined during the course of the assessment where this can be addressed through a suitably worded condition.
- 1.30. The evaluation of landscape and visual effects following mitigation, are known as residual impacts.
- 1.31. The assessment of the nature of the landscape and visual effects depends on the degree to which the development:
  - Complements, respects and fits into the existing scale, landform and pattern of the landscape context;
  - Enables enhancement, restoration or retention of the landscape character and visual amenity and delivers policy aspirations; and
  - Affects strategic and important views in addition to the visual context of receptors.
- 1.32. For the purposes of this report, the term 'impact' refers to the causation of change and 'effects' are the results of the changes on the landscape and visual context.

## Criteria

- 1.33. Best practice guidelines stipulate that the importance of any landscape related impact should be evaluated, both during the construction works and following completion of the development. As such, the assessment of potential and residual effects is based upon the following thresholds:

**Major beneficial:** The development would fit well with the scale, landform and pattern of the landscape, and enhance the existing landscape character. The development would create a highly improved change in the view;

**Moderate beneficial:** The development would fit well with the scale, landform and pattern of the landscape, maintain and/or enhance the existing landscape character. The development would create a noticeable but improved change in the view;

**Minor beneficial:** The development would complement the scale, landform and pattern of the landscape, whilst maintaining the existing character. The development would result in minor improvements to the existing views;

**Negligible:** The development would cause very limited changes to the landscape and/or views but creates no important effects;

**Minor adverse:** The development would cause minor permanent and/or temporary loss or alteration to one or more key elements or features of the landscape, to include the introduction of elements that may not be uncharacteristic of the surrounding landscape. The development would cause limited visual intrusion;

**Moderate adverse:** The development would cause permanent loss or alteration to one or more key elements of the landscape, to include the introduction of elements that are prominent but may not be substantially uncharacteristic with the surrounding landscape. The development would be clearly visible; and

**Major adverse:** The development would cause total permanent loss or major alteration to key elements and features of the landscape, to include the introduction of elements totally uncharacteristic of the surrounding landscape. The development would be clearly evident and would disrupt fine and valued views both into and across the area.

- 1.34. There are instances where the impact results in an effect which is neither adverse nor beneficial. These effects are considered to be **neutral**. Negligible and minor effects are not considered to be important. Other effects may be important and need to be considered in the planning balance.
- 1.35. For clarity, criteria that relate to receptor sensitivity and magnitude of change have been set out in more detail and contained at **Appendix 1**. These will be referenced as part of the assessment process set out within Section 4 of this report. It is also important to note that GLVIA3 places greater emphasis on professional judgement and less emphasis on a formulaic approach; however, a transparent assessment process should still be evident. While all effects may be important in consideration of the planning merits, only those that are above moderate, are considered to be significant.



# Section 2: Baseline Appraisal

## Planning Policy Context

- 2.1. The site falls within the administrative borough of Purbeck District Council. The specific local level policy designations applicable to the site in relation to landscape and visual matters are illustrated on **Plan 5 Landscape Planning Policies**.

### ***National Planning Policy Framework 2012***

- 2.2. The National Planning Policy Framework (NPPF) outlines the Government's planning policies for England, setting out how these are expected to be applied. The NPPF is a material consideration in planning decisions and any development would need to accord with the following planning provisions.
- 2.3. At the heart of the NPPF is a presumption in favour of sustainable development. The NPPF sets out three dimensions to sustainable development: economic, social and environmental. For plan making, this means that local planning authorities "*should positively seek opportunities to meet the development needs for their area*", with "*sufficient flexibility to adapt to rapid change unless any adverse impact of doing so would significantly and demonstrably outweigh the benefits when assessed against NPPF policies*".
- 2.4. For decision making, development that accords with a current development plan should be approved without delay; and, where the development plan is absent, silent or relevant policies are out-of-date, permission should be granted unless any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in the NPPF as a whole. Paragraph 11 states the need to determine this against development plan policies.
- 2.5. Paragraph 14, footnote 9 indicates those designated areas where development should be restricted, namely:
- Sites of Special Scientific Interest;
  - Green Belt;
  - Local Green Space;
  - Areas of Outstanding Natural Beauty (AONB);
  - Heritage Coasts;
  - National Parks;
  - Designated Heritage Assets; and
  - Areas at Risk of Flooding or Coastal Erosion.
- 2.6. The site is not subject to any of the above designations.
- 2.7. Section 1 seeks to promote a strong and competitive economy and paragraph 21 states that investment in business should not be over-burdened by the combined requirements of planning policy expectations.



- 2.8. At paragraph 17, the NPPF outlines twelve Core Planning Principles including an aim to “*always seek to secure high quality design and a good standard of amenity for all existing and future occupants of land and buildings*” and to “*take account of the different roles and character of different areas, promoting the vitality of our main urban areas, recognising the intrinsic character and beauty of the countryside and supporting thriving rural communities within it.*” Another aim is to contribute to “*conserving and enhancing the natural environment.*”
- 2.9. Section 7, Paragraph 58 of the NPPF relates to delivering high quality design. Of relevance to this assessment is the fourth bullet point:
- “.....Respond to local character and history, and reflect the identity of local surroundings and materials, while not preventing or discouraging appropriate innovation...”*
- 2.10. Paragraph 60 states the need to promote or reinforce “local distinctiveness”, whilst paragraph 64 adds that “*Permission should be refused for development of poor design that fails to take the opportunities available for improving the character and quality of an area and the way it functions.*”
- 2.11. Paragraph 69 states that planning policies and decisions should aim to achieve places that promote:
- “Safe and accessible developments, containing clear and legible pedestrian routes, and high quality public spaces which encourage the active and continued use of public areas.”
- 2.12. Paragraph 75 considers the importance of public rights of way, stating that “*planning policies should protect and enhance public rights of way and access. Local authorities should seek opportunities to provide better facilities for users, for example by adding links to existing rights of way networks including National Trails.*”
- 2.13. Public Rights of Way (PRoW) are located within the general context but with none on site. The site is secure. A PRoW follows the site boundary in the south eastern corner. Promoted trails are located to the north and south (Jubilee Trail, Lawrence of Arabia Trail, Hardy Way).
- 2.14. Paragraph 109 references the need to protect and enhance “*valued landscapes*” no definition of a valued landscape is provided in the NPPF or PPG. This is explored later in this report.
- 2.15. Attention is drawn to the difference between international, national and local landscape designations at paragraph 113 with regards to the criteria-based policies against which development proposals should be judged where it states:
- “Distinctions should be made between the hierarchy of international, national and locally designated sites, so that protection is commensurate with their status and gives appropriate weight to their importance and the contribution that they make to the wider ecological network.”*

### **National Planning Practice Guidance**

- 2.16. The National Planning Practice Guidance (NPPG) does not preclude development. Those categories within the NPPG that are of particular relevance to landscape and visual matters in relation to this site are set out below:

#### *Design*

- 2.17. NPPG emphasises the need for development to be integrated with its surrounding context, reinforces local distinctiveness, reduces impacts on nature and sense of place, and considers views into and out of sites. This includes the use of local building forms and ensuring that development reflects the

layout, scale, pattern and materials within new development. At paragraph 007 Reference ID: 26-007-20140306, it states:

*“planning should promote local character (including landscape setting). Development should seek to promote character in townscape and landscape by responding to and reinforcing locally distinctive patterns of development, local man-made and natural heritage and culture, while not preventing or discouraging appropriate innovation.”*

- 2.18. The use of high quality hard and soft landscape design to help successfully integrate development into the wider environment is also emphasised as being important to consider from the outset, in order to ensure proposals improve the overall quality of the townscape and landscape.

### **Local Planning Policy**

- 2.19. The site is a designated strategic employment site in the Dorset Local Enterprise Partnership area and recognised as a major focus for the economic regeneration of South Dorset.
- 2.20. Purbeck District Council is in the process of preparing the Purbeck District Local Plan and policies within the District consist of current adopted policies and emerging policies. All the documents identified as relevant to the site and landscape and visual matters fall within the ‘adopted’ category.
- 2.21. Relevant Development Plan documents include the following:
- Purbeck Local Plan Part 1: Planning Purbeck’s Future (adopted 13<sup>th</sup> November 2012); and
  - Purbeck Local Plan Proposals Maps (adopted 13<sup>th</sup> November 2012).
- 2.22. The policies set out within the above Development Plan documents are supported by the following supplementary planning guidance and documents which are of relevance to landscape and visual matters:
- District Design Guide Supplementary Planning Document (January 2014);
  - Purbeck Heritage Network Priorities 2017- 2021 (2010);
  - Dorset AONB Landscape Character Assessment (2008);
  - Landscape Character Assessment – Non AONB (2008); and
  - Dorset Heathlands (2016).

### **Purbeck Local Plan Part 1: Planning Purbeck’s Future (November 2012)**

- 2.23. This document sets out the strategic vision for the Council within the period between 2006 – 2027. Policies within the document are grouped under the following Spatial Objectives:
1. *“Respect the character and distinctiveness of Purbeck’s settlements and countryside.*
  2. *Meet as much of Purbeck’s housing need as is possible.*
  3. *Conserve and enhance Purbeck’s natural habitat.*
  4. *Support local communities.*



5. *Reduce vulnerability to climate change and dependence upon fossil fuels.*
6. *Ensure high quality, sustainable design.*
7. *Conserve and enhance the landscape, historic environment and cultural heritage of the District.*
8. *Promote a prosperous local economy.*
9. *Provide an integrated transport system and better accessibility to services for everyday needs.”*

2.24. **Policy SD – Presumption in favour of sustainable development** confirms the Council’s approach in favour of sustainable development. **Policy LD – General location of development** identifies the site as an exception within the settlement hierarchy and **Policy ELS – Employment land supply** considers that new employment development accords with **Policy LD**.

2.25. Policies of relevance to landscape and visual matters are as follows:

- Policy SW: South West Purbeck;
- Policy BIO: Biodiversity & Geodiversity;
- Policy GI: Green Infrastructure, Recreation and Sports Facilities;
- Policy D: Design; and
- Policy LHH: Landscape, Historic Environment and Heritage.

**Policy SW: South West Purbeck**

2.26. The site is identified as “available employment land.” Text within this policy sets out the vision for development of South West Purbeck where new employment development will be focussed at the site to provide local and wider job opportunities. The existing allocation will be safeguarded on the Proposals Map and reviewed through the partial review of the Local Plan, Site Allocations Plan or Neighbourhood Plan.

2.27. Of relevance to landscape and visual matters and the site, rural heaths are to be protected and enhanced.

2.28. Development of the site should look to avoid detrimental impacts upon the adjacent rural heaths and provide enhancement where possible.

**Policy BIO: Biodiversity & Geodiversity**

2.29. This policy falls within “Spatial Objective 3: Conserve and enhance Purbeck’s natural habitat” and is considered in more detail within the Ecology Assessment that accompanies this application. The aim of the policy is to ensure “*Purbeck’s biodiversity and geodiversity will be protected, managed and enhanced*” through a series of measures which are provided within the policy text. The following are of relevance to the site and landscape and visual matters:

- *The promotion and Strategic Nature Areas;*
- *Efforts to enhance, link and create habitats to enable adaption to climate change; and*



- *Encouraging development proposals to incorporate biodiversity having regard to district design guidance.*

2.30. It is stated within the policy *“In considering the acceptability of proposals, the Council will assess their direct, indirect and cumulative impacts relative to the significance of the nature conservation value and balance them against other sustainable development objectives”.*

**Policy GI: Green Infrastructure, Recreation and Sports Facilities**

2.31. Of relevance to the site, development of employment areas should look to include informal open spaces and walking/cycling routes. Inclusion of these features would enhance the appearance of the site and provide opportunities for informal recreation within the work environment.

2.32. Development of the site will need to demonstrate how Green Infrastructure, proposed as part of the development, will be managed as part of *“a connected, coherent and functional network of new and enhanced green spaces, corridors and public rights of way in accordance with the Green Infrastructure Strategy standards.”*

**Policy D: Design**

2.33. This policy falls within *“Spatial Objective 6: Ensure high quality, sustainable design”.* Development proposals need to demonstrate how development of the site will *“reinforce local distinctiveness”* and development within the District *“must generally integrate into the existing context, paying equal regard to environmental quality and residential amenity.”* Guidance as to how this can be achieved set out within the Purbeck District Design Supplementary Planning Document and further information regarding the content of this document is provided under the Supplementary Planning Guidance and Documents sub-section of this report.

2.34. The Council will assess the sustainability and design quality of development proposals against a suite of policies and supporting documents. In terms of landscape and visual aspects, the Council will expect conformity with the following:

- National policies for sustainable development;
- District design guidance;
- Policy LHH Landscape, Historic Environment and Heritage; and
- Townscape Character Appraisals.

2.35. Proposals for development of the site should demonstrate where sustainable development and high-quality design have been incorporated into the design development of the site.

**Policy LHH: Landscape, Historic Environment and Heritage**

2.36. This policy falls within *“Spatial Objective 7: Enhance the cultural heritage and landscape of the District.”* There are several designations within the District which seek to ensure the sensitive management of landscape and heritage assets within the District such as the Dorset AONB, Listed Buildings, Scheduled Ancient Monuments, Registered Parks and Gardens, and Conservation Areas. Through Policy LHH, the Council seeks to ensure the protection, conservation and enhancement of the landscape and heritage assets.



2.37. The District Design Guide and the Dorset Landscape Character Assessment will be explored in greater depth later within this report. Others relating to the historic environment are considered separately in the Heritage Assessment in **Appendix 5**.

2.38. With regards to development and landscape and heritage, it is stated within the policy:

*“Proposals for development and other works will be expected to conserve the appearance, setting, character, interest, integrity, health and vitality of landscape (including trees and hedgerows) and heritage assets – be these locally, nationally or internationally designated or otherwise formally identified by the Local Planning Authority. In considering the acceptability of proposals the Council will assess their direct, indirect and cumulative impacts relative to the significant of the assets affected and balance them against other sustainable development objectives,” and “proposals that would result in an unacceptable impact of light pollution from artificial light on intrinsically dark landscapes and nature conservation will not be permitted.”*

2.39. When considering development of the site and landscape and visual matters, proposals for development of the site should look to demonstrate how design development has sought to conserve the appearance, setting, character, interest, integrity, health and vitality of the landscape the site is located within. Should development of the site affect the landscape context, the proposals will need to demonstrate where enhancements and improved conservation can be delivered.

### **Supplementary Planning Documents / Guidance SPD/SPG**

#### **District Design Guide Supplementary Planning Document (January 2014)**

2.40. This SPD sets out how high-quality design can be achieved within the District and the information within it is used by the Council in the consideration of applications for development. The four key aims of this guide are as follows:

- *“To promote the highest standard of design in all types of development;*
- *To provide a ‘good practice’ benchmark to guide prospective developers;*
- *To assist in the assessment of planning proposals; and*
- *To help deliver a more attractive and sustainable environment in Purbeck”.*

2.41. Of relevance to landscape and visual matters and development of the site, the guidance covers the processes and principles of good design, the relationship between design and the environment; and architectural and landscape design.

#### *Good Design – The Process and Principles*

2.42. These sections provide information regarding the what should be considered within the design process and includes: designations, planning policy, planning history, surrounding development, landscape, drainage, ecology and archaeology. It also provides advice on the development of concept plans and what information the Council will expect within Design and Access Statements.

2.43. The Design Principles section provides guidance regarding: how new developments can strengthen and enhance local distinctiveness; consideration of the scale, mass and form of new development; consideration of layout and access; and protection and provision of neighbour amenity. Site development proposals should provide evidence within the application these principles have been considered and incorporated into the proposals.



### *Design and the Environment*

- 2.44. Of relevance to landscape and visual matters this section of the design guide provides information regarding trees and designations. In terms of trees, the guidance recommends the retention, protection and enhancement of trees within development sites and makes reference to the Council's technical guide on trees. A variety of species should be selected to reinforce existing character and positioned to ensure long-term suitability.
- In relation to Areas of Outstanding Natural Beauty – *“As the AONB was primarily designated on account of landscape character and quality, you should consider the way in which your development will impact upon, and relate to the landscape.”*
- 2.45. The site lies close to the Dorset AONB and in line with the design guidance, development of the site will need to take into account and respond positively to the special qualities of the AONB where relevant.

### *Architectural and Landscape Design*

- 2.46. The architectural section is concerned with the development of character and appearance within development and encourages the use of material and techniques which protect, conserve and enhance local architectural characteristics. Development of the site should take into account the character of local built form and ensure the design proposals for the site are considerate and responsive to the local context.
- 2.47. The landscape design section provides guidance regarding development and, 'hard' and 'soft' landscape works, and those in rural areas and open spaces. In terms of landscape design, the following guidelines are provided:
- *Use hard and soft landscaping to help integrate your development into its setting and reinforce local character;*
  - *Ensure that open spaces have a purpose, are safe and well-integrated with your development;*
  - *Consider ways in which landscaping can be used to achieve design objectives related to surface water management, and support wildlife;*
  - *Plan for the management and maintenance of soft landscaping; and*
  - *Refer to the Council's design guidance. “Managing and Using the Landscape and Landscaping in Purbeck.”*
- 2.48. Overall, the design guidance encourages high quality design within the district which complements and responds positively to the existing context around the site. This document should be consulted during the design development process to ensure the Council is provided with all the necessary information to make an informed assessment of the application for development.

### **Dorset AONB Management Plan (2014-2019)**

- 2.49. The site lies outside of the Dorset AONB, a nationally important protected landscape, to the immediate north of its boundary. AONB's are designated for the fine quality of their landscape, their outstanding natural beauty. The Dorset AONB Management Plan set out the vision for the landscape and how it may be achieved.



- 2.50. The statement of significance set out in the Framework for the Future, identifies the importance of the chalk escarpments from where observers may enjoy uninterrupted panoramic views to appreciate the pattern and textures of the surrounding landscapes. Views towards and those from the AONB are particularly important together with potential effects arising within the setting of this landscape asset.

#### **Landscape Character Assessment – Non AONB (2008)**

- 2.51. The Dorset Landscape Character Assessment provides guidance which can contribute to the conservation and enhancement of the special characteristics of the county as a whole and the distinctiveness of its individual character types.
- 2.52. The Draft Landscape Character Assessment and Guidance for Purbeck places the site within a “Crossways / Winfrith Lowland Farmland and Heath” landscape character area where condition, management and development objectives are drafted.

#### **Dorset Landscape Change Strategy Report (January 2010)**

- 2.53. Dorset County Council are currently developing and testing a methodology to develop a Landscape Change Strategy for Dorset based on a Pilot Study Area.

#### ***Public Rights of Way (PRoW)***

- 2.54. As shown on **Plan 5 Landscape Planning Policies** there are no Public Rights of Way located within the site. The nearest footpath is located to the south east of the site close to a section of perimeter fence. There is a network of other local footpaths with potential visibility towards the site, representative views from these receptors are included with **Plan 7 Photoviewpoints** and their effects are assessed within **Section 4** of this report.

#### ***Conservation Areas and Listed Buildings***

- 2.55. The site itself does not contain any nationally or locally valued heritage assets but more detail is found within the accompanying Heritage Assessment found in **Appendix 4** of this LVIA.

#### **Summary of Planning Policy**

- 2.56. A site-specific policy promotes the site for employment development. Supported by a positive approach to employment and economic growth as set out in NPPG, the planning policy framework against which the site will be considered is positively inclined towards the uses the Council wish to promote within the site.
- 2.57. The site is not covered by a qualitative landscape designation (NPPF footnote 9 listed designations) but consideration will be taken of its relationship with the AONB designation to the south.

#### **Landscape Character**

- 2.58. This section considers the existing landscape character and visual context of the site and its environs.
- 2.59. In order to establish the degree of change arising from the development of the site and the extent to which the change will affect local receptors, it is important to understand the existing situation and



site context in terms of amenity, availability of views and the landscape character areas and types associated with the local area.

- 2.60. The characterisation process is a non-value judgement process; therefore, classifying landscape into distinct areas does not suggest that one character is more sensitive than another or valued by people more or less.
- 2.61. The landscape character appraisal process reviews the wider landscape character type at a national level and then explores more detail character features at a district / local level, before analysing site specific land use that informs local distinctiveness and sense of place.

### **National Landscape Character**

2.62. Natural England's National Character Areas (NCA's) identify broad, strategic character areas for the whole of England. At a national level, the site lies within the '**Area 135 – Dorset Heaths** (NCA135)'.

2.63. The key characteristics of NCA135 are outlined below and only those relevant to the site and local context are set out below:

- *“The landscape is predominantly of low relief;*
- *There are large tracts of gently undulating, less-fertile marginal land dominated by conifer plantations or by heathlands of international importance;*
- *The area hosts two significant military training areas;*
- *The heathlands can provide a real sense of remoteness combined with bleakness or tranquillity, depending on the weather.”*

2.64. For the purpose of assessing the effects of development, the National Character Areas are of limited significance as the classification covers such a wide area. It does not provide an appreciation of the specific issues which need to be taken into account in the determination process. That said, some of the characteristics described above are evident in relation to the wider area surrounding the site, for example heathland and military presence. Whilst there would be a localised effect following development of the site, there would be no perceptible effect upon the wider character area or any particular features of merit described within the study area.

### **Local Landscape Character**

2.65. The Landscape Character Assessment of Dorset identifies and describes the key features and characteristics of the landscape within Dorset. The study area encompasses a number of Landscape Character Types (LCT)s where the site is almost totally located within the **Heath / farmland mosaic** with just the entrance road falling within the **Valley Pastures** LCT as illustrated on **Plan 4 Landscape Character**. As a neighbouring LCT the Valley Pastures is set out below.

2.66. Key characteristics of the **Heath / farmland mosaic** LCT include:

- *“Mosaic of mixed farmland, heathland and scrub which creates a patchwork landscape;*
- *Generally flat landform, which drains to the adjacent river basins;*
- *Heavily influenced and fragmented by urban and urban fringe land uses such as industrial, commercial & leisure uses as well as transport corridors, quarrying, power lines and 'horsiculture';*





- *Some large areas of open heath and small fragmented pockets;*
- *Straight roads and lanes often lined with thick hedges;*
- *Mixed agriculture with some areas of estate farmland;*
- *Woodland and plantations create key features, which helps to integrate development; and*
- *Winfrith Technology Centre creates an adverse impact.”*

2.67. Key characteristics of the **Valley Pastures** LCT include:

- *“Flat and open valley floor landscape with distinctively meandering river channels which often floods;*
- *Typically, a grazed pastoral landscape based on deep alluvial and gravel soils;*
- *Generally large fields with a mosaic of smaller fields abutting the river edges;*
- *Groups of riverside trees follow the watercourses creating key features along the valleys;*
- *Old water meadow systems and features are common;*
- *Settlements and transport corridors follow the valley floor;*
- *Historic river crossings points are often over old bridges;*
- *The valleys provide the historic and cultural setting to many county towns; and*
- *Widens out towards the coast and merges with the harbour side landscapes at Poole and Christchurch.”*

2.68. The management objectives for the **Heath / farmland mosaic** LCT are *“to reduce heathland fragmentation, control and enhance urban fringe uses and hard edges, manage and enhance existing tree belts and promote informal recreation.”*

2.69. The management objectives for the Valley Pastures LCT are *“to conserve the strong visual unity of the valley, the diversity of semi-natural habitats and to restore features such as wet woodlands pastures, water meadows, boundary features and historical lanes and bridges. Opportunities for large-scale multi-functional landscape restoration and creation should be promoted and explored particularly in the Frome Valley.”*

2.70. The Historic Landscape Character Assessment provides an outline for the historic environment for each defined Landscape Character Type and is to be read in conjunction with the Dorset Landscape Character Assessment. This assessment details the historic landscape commentary for each LCT, as set out below:

- **Heath / farmland mosaic** LCT: *“Large areas of woodland, generally modern plantation, interspersed with a mixture of heathland and small-scale enclosure, particularly in the vicinity of the older (i.e. at least medieval) settlements. Some disruption from modern uses such as recreation and military use.”*



- **Valley Pastures** LCT: *“Tends to vary depending on local circumstances. Water meadows predominate.”*

- 2.71. The Draft (unpublished) Landscape Character Assessment and Management Guidance for Purbeck (Non-AONB) places the site within **Crossways / Winfrith Lowland Farmland and Heath** Landscape Character Area. One of the key identified characteristics includes “Winfrith Technology Centre creates a significant negative impact.” The urban influence that results has been identified as an opportunity to improve urban fringe landscapes which otherwise detract from an overall landscape condition.
- 2.72. Whilst the character information set out above does provide some context relevant to the site, it does not address the characteristics specific to the site. In response to fieldwork and desktop research, further observations have been made with regards the site and its immediate surroundings below.

### ***Site Specific Landscape Character***

- 2.73. The appraisal of the existing land use is another useful tool for determining how the landscape has changed. It does not involve the application of sensitivity or value but does assist in exploring the suitability and ability of the landscape to absorb further change, restoration and enhancement in relation to such matters as condition, scale, relationship with other uses and spatial arrangement.
- 2.74. Unlike the published landscape character, the site itself displays few published LCT characteristics due to its historic and current land use. Until the 1940’s the site comprised open heathland, however, during the second world war the heathland vegetation was removed, and the site was used as a decoy airfield.
- 2.75. The site (formerly known as the Winfrith Campus) was originally opened in 1957 as part of the UK’s civil nuclear research programme and was decommissioned in the late 1990’s following the closure of the last operational reactor in 1995. The site has been used as a technology park since. The Dorset Police Head Quarters occupies a separate area within the Dorset Innovation Park but lies outside of the site boundary, identified by a number of large scale buildings and other associated infrastructure. A number of nuclear reactors that are to be decommissioned, remain within the Magnox site (Dragon and SGHWR) buildings of large industrial scale that occupy locations to the west and south west of the site. There are currently a number of other buildings within the site, some are currently in use and others are vacant and some newly occupied. Due to the decommissioning and demolition programme in the immediate context of the site, it has a damaged and industrial developed character as a result.
- 2.76. The Chesil House building that remains on site sits at approximately 12m in height and is 4 storeys tall with other buildings at 2 and 3 storeys scattered over the site. The nearby Dragon and SGHWR reactors are 26m and 27m tall respectively.
- 2.77. The site is secured by perimeter fencing and the existing road system is a grid iron pattern. Demolished sites are either roughly gravelled surface or grassland. Built form is represented by bland industrial scale buildings and ancillary structures with car parking. Lighting columns are frequent roadside elements and it is understood they are in operation in hours of darkness.
- 2.78. The site is generally open with some views towards the downland skyline of the AONB to the south, however intervening mature evergreen and deciduous tree blocks and belts filter views out and in. A pond that is darkened by enclosing dense tree canopies is a single feature in the landscape and a number of tired formal planting remnants are scattered throughout. The River Win crosses to the east of the site boundary as it flows into the River Frome and the **Valley pasture** LCT to the north east and the low-lying floodplain.

- 2.79. Outside of the site boundary, but close to it, lies the open access land of Winfrith Heath, Knighton Heath and Blacknoll Hill. They occupy a landform of local hill shapes with typical heathland landcover in contrast to the evergreen and mature plantations of geometric shapes within the Magnox site that abut the site's western and southwestern boundaries.
- 2.80. The railway line runs close to the northern site boundary on embankment with a station in the nearby settlement of Wool to the east, however the site lies in a setting that is outside of residential settlements with East Burton and Giddy Green being the closest areas but separated from it.
- 2.81. The site is brownfield and of an industrial character. It's partly derelict status provides great scope for landscape enhancement through the delivery of a comprehensive Green Infrastructure strategy. This would be in accordance with the Draft Landscape Character Assessment and Management Guidance for Purbeck where urban fringe improvements and softening of conifer belt edges have been identified as objectives.

### **Heritage Assessment** (refer to **Appendix 4**).

- 2.82. The site and its environs were visited by the Heritage consultant in February 2018 in order to check for recorded or other heritage features and current land use and topography. The site visit allowed consideration of designated heritage assets in the vicinity of the site to ascertain whether these might be affected by development.
- 2.83. No evidence of any Second World War elements was evident during the site visit and the decoy site was presumably cleared post-war or during the site's construction, with any bomb craters infilled.
- 2.84. Beyond the site, East Burton and Giddy Green were visited and this indicated that none of these settlements' listed buildings would be adversely affected. The assets include a chapel to the south and cottages at Giddy Green, but none have a visual or other relationship with the site itself. It was also clear that any listed buildings and the conservation area in Wool, further to the east, would be unaffected by any change within the site.
- 2.85. The sites of a late prehistoric and Roman settlement and West Burton medieval settlement were checked from nearby highways. As both lie on higher ground than the site, there is potential inter-visibility with taller new structures. However, there is now no evidence of above ground features at either of these sites which lie in a much-changed landscape under arable and pasture respectively.
- 2.86. A single round barrow lies between the medieval settlement site and access road to the site, but was not visible from the site's edge, with a thick hedgerow between the two. The field in which the barrow lies is the limit of its setting which enhances its significance and an appreciation of that significance.
- 2.87. To the north of the site, two barrows lie on knolls on higher ground, but belts of woodland screen both from the site. The barrows' significant setting is the field in which each lies and the valley of the Frome to their north.
- 2.88. To the north west of the site, Broomhill Bridge lies in the valley of the River Frome which it crosses. The bridge's setting includes the surrounding pasture fields and river itself. The nearby listed farmhouse lies further to the north and is surrounded by related buildings and the farm's fields. It has no inter-visibility or relationship with the site.
- 2.89. The scheduled and listed obelisk atop Fir Hill can just be glimpsed on high points of the road running east west north of the site. This is the only indication of Moreton Park visible in this area. Although it is a local landmark, the obelisk cannot be viewed from the site itself and no part of it or any area beyond was ever intended to have a relationship with any part of Moreton Park.

- 2.90. A large number of prehistoric barrows lie well to the west of the site and the former AEA Winfrith too. From the vicinity of Whitcombe Hill, any views east are screened by blocks of coniferous woodland, although a large reactor building can be glimpsed. Blacknoll Hill screens views east from the discrete barrows west of the hill.
- 2.91. The group of six barrows atop Blacknoll Hill could not be readily distinguished in an area which is covered in heather. Apparent 'mounds' under heather were inspected and proved to simply be caused by the shape of the vegetation. Within the predominantly heathland and woodland landscape visible from the hilltop, a large AEA reactor and associated pylons dominate. In this context, changes within the site would not affect the significance of any prehistoric barrows further.
- 2.92. Beyond Blacknoll Hill, a number of Grade II listed cottages at Blacknoll nestle in a shallow valley. They have very limited settings constrained by topography, vegetation and later buildings and no relationship with the site area itself. Changes within the site would not harm the significance of any of these assets.
- 2.93. To the south west of the site, listed buildings in East Knighton are also at a lower elevation, but more distant from the site. All have adjacent later structures which limit their settings. To the east of East Knighton itself, the listed Longcutts Farm and West Burton Farm farmhouses are also either at a lower elevation or surrounded by planting such that changes within the site would not affect either's significance.
- 2.94. In almost all cases, the topography and intervening vegetation means that the significance of heritage assets is not enhanced by the site itself. It is also the case that, the park is currently well screened by site and peripheral vegetation as well as topography. The existing structures are likely to be less than sympathetic in scale and materials than what will be built. In summary, there are sensitive heritage receptors in the study area, but their locations, the local topography and vegetation mean that they do not have a relationship with the site, or the proposals offer an opportunity to enhance this relationship.

## Visual Context and Visual Receptors

### *Extent of Visibility*

- 2.95. In order to determine the extent of the area from which the development has the potential to be seen Geographic Information System (GIS) and Ordnance Survey Terrain data are modelled to create a topographical plan (refer to **Plan 1 Topography**) and this is followed by the Zone of Theoretical Visibility (ZTV) mapping (refer to **Plans 2a, 2b and 2c Zone of Theoretical Visibility**). The computer generated ZTV is created using bare earth OS 3D modelling data and does not take into consideration the screening effect of built form, trees and vegetation and how this may influence the visibility of the site and development upon it. It does however record visibility at 3 ridge height ranges of 5m, 9m and 14m where areas of blue on plan would have no visibility at all and those that are red would have the potential for visibility for each of the 3 heights. Refer to the Design Guide Part 1 for proposed plot heights. **Plan 2a** represents a height of up to 5m for Zone A (Chapman plot), **Plan 2b** for heights up to 9m for Zone B (Zenith and Steamer), and for heights up to 14m for **Zone C** (Juno, Nero, Dimple, Dragon, Quadrant, Hector, Nucleus, Zebra, Atlas, Pavilion and Nestor). There are a number of buildings on site that will remain within it and a selection immediately around the site. As a useful reference, the height of Chesil House on site is in the region of 12m, the Dragon Reactor is 26m and the SGHWR Reactor is 27m located to the west of the site. Dorset Police buildings provide the bookend of existing built form to the east with a diverse collection of buildings of some scale. This information provides a starting point for the fieldwork in terms of determining the extent of visibility and the likely receptors.



- 2.96. Field verification is essential in establishing the extent of the actual visual envelope for the development. The extent of the Visual Envelope of the site as verified in the field is shown on **Plan 3 Photoviewpoint Locations and Field Verified Visual Envelope**. The field verification process enables the assessor to view the site and define the limits of the visual envelope, so it only includes those locations from which the site is evident in views, excluding those that are barely discernible and taking into account vegetation and built form.
- 2.97. As is demonstrated, the field verified visual envelope of the site is largely limited to those views close to the northern and southern site boundaries due to the effect of intervening vegetation and existing built form (Magnarox (reactors) and Dorset Police HQ). Further afield views of the site are only achieved from elevated landform such as Blacknoll Hill and limited publicly accessible locations on the elevated downland in the AONB further south. The presence of such a quantum of mature plantations, woodland belts and industrial blocks within or close to the site significantly reduce visibility of it as shown by the visual envelope with little seasonal variation. For reference, **Plan 8 Visual Context** provides an overview of the features on or near to the site that will affect visibility. This largely focuses on the mature and often large scale mixed coniferous plantations and other woodland blocks, but also the 2 large reactors in particular – Dragon Reactor (26m) and SGHWR (27m). In addition, the collection of large scale and mixed sized buildings at the Dorset Police headquarters provides even more context in terms of built form in the visual environment.

### ***Viewpoints and Visual Receptors***

- 2.98. Typically, representative views of the site from a variety of receptors in the local area are determined on the basis of the first sieve GIS mapping and subsequent fieldwork. The identification of views is carried out from external spaces within the public domain, and not from buildings or private spaces.
- 2.99. The photographs included in this report have been taken using an SLR digital camera using a focal length equivalent to 50mm, they are intended to provide an indication of the composition of the view and extent of visibility, it is recognised that such views are best experienced in the field. The photographs were taken during February 2018 during two site visits where visibility was good with intermittent light cloud and are located on **Plan 7 Photoviewpoints 1-21**. The chosen viewpoints and extent of the study area have been discussed and agreed with Tony Harris of Dorset County Council (see **Appendix 3** for comment and approval), in accordance with best practise.
- 2.100. The 21 selected viewpoints are as follows:
- **Photoviewpoint 1:** Taken from the public car park area off the tank training ground on Bovington Heath on high ground.
  - **Photoviewpoint 2:** Taken from PRoW Jubilee Trail as it passes through Moreton Plantation on high ground.
  - **Photoviewpoint 3:** Taken from PRoW junction of Jubilee Trail and Lawrence of Arabia Trail as it crossed a tributary of the River Frome.
  - **Photoviewpoint 4:** Taken from the centre of Moreton Conservation Area.
  - **Photoviewpoint 5:** Taken from the Tank Museum at Bovington Camp.
  - **Photoviewpoint 6:** Taken from Gatemore Road on the Jubilee Trail in Moreton Conservation Area.
  - **Photoviewpoint 7:** Taken from open access land on Whitcombe Hill within Winfrith Heath.



- **Photoviewpoint 8:** Taken through a field gate gap on East Burton Road.
- **Photoviewpoint 9:** Taken from the perimeter road and PRoW adjacent to the Dorset Police HQ.
- **Photoviewpoint 10:** Taken from PRoW in the River Frome floodplain.
- **Photoviewpoint 11:** Taken from Bindon Lane on the edge of Bindon Abbey.
- **Photoviewpoint 12:** Taken from the footbridge in Wool over the railway line.
- **Photoviewpoint 13:** Taken from PRoW on the edge of Wool.
- **Photoviewpoint 14:** Taken from PRoW on the perimeter fence.
- **Photoviewpoint 15:** Taken from PRoW looking towards the site.
- **Photoviewpoint 16:** Taken from PRoW looking across agricultural land towards the site.
- **Photoviewpoint 17.** Taken from PRoW on the edge of East Knighton.
- **Photoviewpoint 18.** Taken from the top of Blacknoll Hill.
- **Photoviewpoint 19.** Taken from the corner of minor road close to Five Mary's Tumuli in the AONB.
- **Photoviewpoint 20.** Taken from PRoW Winfrith Drove bridleway close to Drove Dairy in the AONB.
- **Photoviewpoint 21.** Taken from permitted route on the down land in the AONB.

2.101. See **Plan 7 Photoviewpoints 1-21** for full descriptions of the viewpoint compositions.

2.102. View location general descriptions are as follows:

- From the **North**. All but close views near the northern site boundary are screened by the mass of intervening vegetation on the River Frome valley floor, vegetated boundaries but mostly by the plantations and other vegetation in the **Heath forest mosaic** LCT. There is no intervisibility with the settlement of Moreton and its Conservation Area.
- From the **East**. The site is not discernible in views from the east due to intervening vegetation and built form that includes the Dorset Police HQ. From the railway bridge crossing at Wool, only the very top of the Magnox reactor is visible (note 26m and 27m height of reactors).
- From the **South**. Close views of part of the site only are afforded on the site perimeter fencing that is followed by the PRoW in part. Views from residential areas of East Knighton, West Burton and Winfrith Newburgh (Conservation Area) are not afforded. Distant views from PRoW in the AONB are afforded but the site is a small component in a much wider panorama that is extensive in nature. The visible Magnox buildings (26m and 27m heights) and Dorset Police HQ buildings (that include a taller antenna element) are just discernible and locate the site and a few site buildings but only ever in part in the distant panoramic view. On site vegetation and intervening vegetation provides a screening and softening element in views. Only limited views are afforded from a small number of locations where public access is available in the AONB.



- From the **West**. Such is the density of the plantations around the Magnox site that the site is not clearly visible from either close-range views or those more distant. Only from the very elevated location on top of Blacknoll Hill are views afforded into the site but even so, the foreground Magnox buildings are of such a scale that they mask what lies behind. As the plantations are evergreen visibility is similar throughout the year with little seasonal variation if any.

2.103. Having conducted the site visit and analysed the views from the 21 locations the following viewpoints have been identified as being relevant for consideration of visual effects within this LVIA:

- **Viewpoint 8:** Taken through a field gate gap on East Burton Road.
- **Viewpoint 14:** Taken from PRoW on the perimeter fence.
- **Viewpoint 15:** Taken from PRoW looking towards the site.
- **Viewpoint 16:** Taken from PRoW looking across agricultural land towards the site.
- **Viewpoint 17:** Taken from PRoW on the edge of East Knighton.
- **Viewpoint 18:** Taken from the top of Blacknoll Hill.
- **Viewpoint 19:** Taken from the corner of minor road close to Five Mary's Tumuli in the AONB.
- **Viewpoint 20:** Taken from PRoW Winfrith Drove bridleway close to Drove Dairy in the AONB.
- **Viewpoint 21:** Taken from permitted route on the down land in the AONB.

### ***Landscape and Visual Analysis.***

2.104. In order to provide input into the masterplanning development process, a landscape analysis plan was produced that was informed by the baseline studies and this is illustrated on **Plan 6 Landscape Analysis Plan**. Existing built form on site or nearby, intervening vegetation combined with landform all play an important role in terms of understanding the landscape and visual baseline. Refer also to **Plan 8 Visual Context** for more detail of elements affecting the visual environment.

# Section 3: Classification of Resources

## Landscape Character and Landscape Resources

- 3.1. The thresholds and terminology referred to in this section are set out in **Appendix 1**. As discussed at the introduction to the LVIA, the classification of sensitivity of the landscape character and landscape resources is related to:
- The susceptibility of the landscape;
  - The type of change proposed; and
  - The value placed on the landscape.
- 3.2. During the site visit a field survey sheet was completed. This sheet identifies the landscape elements, character and condition within the site area and is attached as **Appendix 2**.

### *Landscape Susceptibility*

- 3.3. This means the ability of the landscape to accommodate the development proposed without undue consequences for the maintenance of the baseline situation.
- 3.4. The proposals have been designed in order to respond to the landscape and visual context and to minimise adverse effects and this is clearly illustrated in the suite of plans that accompany this planning application. The masterplan is located in **Appendix 4** for reference.
- 3.5. Therefore, when considering the susceptibility of the site to accommodate development, it is in the context not only of the site itself and existing infrastructure but also the context of built form and land use on the adjacent Dorset Police HQ (immediately east) and the Magnox former Winfrith nuclear energy test facility (immediately west). In relation to the classification of susceptibility to change and based on our experience as professional landscape practitioners, we apply the thresholds of susceptibility as high, medium and low.
- 3.6. High susceptibility. The landscape is such that changes (in terms of the development as proposed) would be entirely at odds with the character of the local area.
- 3.7. Medium susceptibility. The landscape is capable of receiving a considered scheme where a degree of consistency is sought in relation to the existing scale, pattern, grain and use. Mitigation may be appropriate to enhance assimilation.
- 3.8. Low susceptibility. The landscape has the ability to receive the development as proposed without undue negative consequences and would be consistent with the local area.
- 3.9. Considering the character assessment in section 2 and the prevailing context, the susceptibility of the receiving landscape to accommodate the development is **low**. This reflects the scale of proposed development and the site's relationship to the existing context. Potential for landscape improvements, scale and massing of buildings together with any mitigation measures are considered in more detail later.



## Landscape Value

3.10. The site is not the subject of a statutory landscape designation which is based on the quality of the landscape, however, it does lie close to the Dorset AONB to the south. In order to determine whether the landscape of the site itself and its immediate surroundings are valued, the GLVIA3 approach has been adopted within this LVIA. This is analysed in accordance with GLVIA3 table 5.1 as set out below.

3.11. In considering the value of the site landscape the following aspects of the landscape are noted as relevant in the assessment process:

**“Landscape Quality (condition):** A measure of the physical state of the landscape. It may include the extent to which typical character is represented in individual areas, the intactness of the landscape and the condition of individual elements;

**Scenic Quality:** The term used to describe landscapes which appeal primarily to the senses (primarily but not wholly the visual senses);

**Rarity:** The presence of rare features and elements in the landscape or the presence of a rare Landscape Character Type;

**Representativeness:** Whether the landscape contains a particular character, and/or features and elements, which are considered particularly important examples;

**Conservation interests:** The presence of features of wildlife, earth science or archaeological or historical and cultural interest can add to the value of a landscape as well as having value in their own right;

**Recreation value:** Evidence that the landscape is valued for recreational activity where experience of the landscape is important;

**Perceptual aspects:** A landscape may be valued for its perceptual qualities and/or tranquillity; and

**Associations:** Some landscapes are associated with particular people, such as artists or writers, or event in history that contribute to perceptions of natural beauty of the area.”

3.12. For each of these considerations there is a range from ‘good’ through ‘ordinary’ to ‘poor’ in terms of the landscapes performance against these criteria. In the table below these issues are considered in relation to the site and the nature of the proposed development.

**Table TG1**

Criteria	Observations/Comments
Landscape Quality	The site generally reflects the character of the former Winfrith nuclear energy test facility that is in the process of decommissioning, and other industrial and business uses on site. It has a degraded quality. It bears no resemblance to published character or to the context of the landscape within which it sits. The rating is <b>poor</b> .
Scenic Quality	The site is of a degraded industrial appearance. Of the few landscape elements within the site or it’s setting, the non-native mature tree screens or groups do perform a useful softening function. The rating is <b>poor</b> .

Rarity	The <b>non-developed</b> areas of the site include ecological features relating to both fauna and flora that are noted in the ecology documentation for their importance (acid grassland for example). The rating (for the non-developed areas) is <b>good</b> .
Representativeness	The site is unlike the wider landscape context due to its land use. The rating is <b>poor</b> .
Conservation Interests	Apart from any ecological features noted in the ecology documentation, the site is not known for any rarity. The rating is <b>ordinary</b> (elevated only because of ecological interests).
Recreational Value	There is no public access, the site is secure. The rating is <b>poor</b> .
Perceptual Aspects	Because there is no public access and only limited visibility, perceptual aspects are low. Activity within the site and adjacent uses that include the railway line on the northern boundary negate any potential for tranquillity. The rating is <b>poor</b> .
Associations	The site has no associations that link it to the perception of natural beauty in the area. Associations lie with the nuclear industry. The rating is <b>poor</b> .

- 3.13. Having considered the key elements related to value there is nothing apart for an interest in ecology (limited to non-developed areas only) within the site itself that would make this land as a whole more than a **poor** rating. It represents a degraded landscape, brownfield in nature.
- 3.14. Combining the susceptibility and value of the landscape of the site the landscape is considered to be of **low sensitivity** to change.
- 3.15. As noted above the landscape resources of relevance to the site and the development proposals are:
- Heath/farmland mosaic LCT (Landscape Character Assessment of Dorset).
  - Valley pastures LCT (Landscape Character Assessment of Dorset).
  - Managed site landscape (grassland, ornamental shrubs, trees).
  - Unmanaged site landscape (grassland, vacant sites, other areas).
  - Built form (existing buildings on site).
- 3.16. These characteristic features are of local importance and are of **medium/low sensitivity** to change in terms of landscape character assessment.

## Visual Receptors

### *Susceptibility*

- 3.17. This means the ability of the visual receptor to view the development proposed without undue negative consequences.
- 3.18. This LVIA considers:
- **High** visual susceptibility to be defined as: The visual composition following the development as proposed will include discordant and incongruent elements;



- **Medium** visual susceptibility to be defined as: The visual composition following the development as proposed will be consistent with the baseline situation, although some aspects may be at odds with the visual composition; and
  - **Low** visual susceptibility to be defined as: The visual composition following the development as proposed will be in harmony with the existing composition.
- 3.19. Considering the visual context in section 2, the susceptibility of the receiving landscape to accommodate the development is **low**. This reflects the site's existing visual baseline composition within the existing context, and the type of development proposed.
- 3.20. Having undertaken fieldwork to ascertain the visibility of the site and analyse the views from a selection of representative viewpoints, the following people (visual receptors) have been identified as having the potential to be affected by development of the site.
- **Road users: Viewpoint 8:** Taken through a field gate gap on East Burton Road
  - **Footpath users: Viewpoint 14:** Taken from PRow on the perimeter fence.
  - **Footpath users: Viewpoint 15:** Taken from PRow looking towards the site.
  - **Footpath users: Viewpoint 16:** Taken from PRow looking across agricultural land towards the site.
  - **Footpath users: Viewpoint 17:** Taken from PRow on the edge of East Knighton.
  - **Recreational users: Viewpoint 18:** Taken from the top of Blacknoll Hill.
  - **Footpath users: Viewpoint 19:** Taken from the corner of minor road close to Five Mary's Tumuli in the AONB.
  - **Footpath users: Viewpoint 20:** Taken from PRow Winfrith Drove bridleway close to Drove Dairy in the AONB
  - **Footpath users: Viewpoint 21:** Taken from permitted route on the downland in the AONB
- 3.21. In general, residents overlooking a development site who experience views of it on a daily basis would be considered to have a high sensitivity to visual change. However, there are no residents identified so this receptor group is scoped out. People using PRow will have their attention focussed on the landscape and as a result, their sensitivity to visual change will also be **high**.
- 3.22. Those recreational users within the open access land around Blacknoll Hill will have their attention focussed on the landscape and as a result, these people will be of **high** sensitivity to visual change.
- 3.23. Those using the local road network either in/on vehicles will have a different focus to their activities and drivers will be moving through the landscape at some speed and generally concentrating on the road ahead. These people will be of **medium** sensitivity to visual change.
- 3.24. Where receptors overlap at locations (usually PRow users crossing road users) the higher sensitivity group will be used (in this case PRow users).

# Section 4: Assessment of Effects

## The Proposals

- 4.1 In order to identify and describe the effects that are likely to occur it is necessary to understand the changes that may potentially affect the landscape and visual resources specifically. The proposals are illustrated on the concept masterplan that accompanies this application.
- 4.2 The Dorset Innovation Park Local Development Order is a Purbeck District Council and Dorset Local Enterprise Partnership initiative that seeks to attract inward investment and new jobs as part of a managed development programme. This covers large parts of the former Winfrith Nuclear Energy site and is the second largest employment allocation in Dorset. By securing a Local Development Order (LDO) the development principles are set at an early stage with specific details to follow. The masterplan and Design Guide (including Design Codes) forms part of this submission.
- 4.3 The Dorset Innovation Park has the potential to accommodate 55,355m<sup>2</sup> of net new build employment floorspace in conjunction with the retention of 22,855m<sup>2</sup> of existing commercial floor space. The end state is a potential 75,000m<sup>2</sup> floor area. As a stimulus for employment it is expected to facilitate 2,000 new jobs while attracting many new businesses to the area.
- 4.4 Employment and commercial uses considered to be appropriate within the Dorset Innovation Park Site, include – research and development, light and general industrial processes (including manufacturing), storage and distribution and supporting office, training, education and ancillary welfare uses.
- 4.5 The site area is defined by a boundary that encompasses 40 hectares of land. It is a secure site with a gate house. While many original buildings have been demolished there is still active employment activity arising from Atlas Elektronik, Weatherford Laboratories, QinetiQ and Chesil House. 20 new start up units have recently been delivered close to Chesil House.
- 4.6 A demolition process has been underway since the 1980's as decommissioning, decontamination and demolition at Winfrith has taken place. Large scale, large mass buildings have been components in the landscape at this location for many decades and while demolition has now rendered some of them to ground level, the building heights still include a number of buildings that are in fact up to 6 storeys in height. The "Dragon" reactor for example, that is subject to decommissioning, is a single structure of 26m in height and the "SGHWR" reactor is 27m in height but sits on a plateau that is in fact elevated higher than the site levels. Chesil House at 4 storeys is the tallest building within the site itself (approximately 12m) with Atlas close by in height. The Dorset Police HQ antenna is a narrow element that reaches above the nearby complex of buildings.
- 4.7 Proposed building heights across the site will be relatively low (compared to the reactors in particular). However, it is envisaged that the majority of single buildings will be double height volumes to reflect the B1(b), B1(c), B2 and B8 types being promoted at the Dorset Innovation Park. Proposed plot heights are described in detail within the application package. It is recognised that the southern part of the site is the most visually sensitive due to the distant elevated landform in the Dorset AONB and nearby PRow that pass close to the southern site boundary. In response, building heights will be staggered back from the southern edge. As a result, the ZTV has been run and assessed to align with the following building parameters - 5m, 9m and 14m and they are shown on the following plans - **Plan 2a** represents a height of up to 5m for Zone A (Chapman plot) and discreetly located furthest south; **Plan 2b** for heights up to 9m for Zone B (Zenith and Steamer) and located along the southern



boundary; and for heights up to 14m for Zone C (Juno, Nero, Dimple, Dragon, Quadrant, Hector, Nucleus, Zebra, Atlas, Pavilion and Nestor) and located more centrally. All plans indicate where no visibility is afforded (blue areas) and potential visibility (red areas). **Plan 3 Proposed Viewpoint Locations and Field Verified Visual Envelope** takes the ZTV to a refined level and the very limited visual envelope is mapped. For even greater detail **Plan 8 Visual Context** provides more visual evidence.

- 4.8 Analysis in the field is supported by the 3 ZTV's to guide plot height parameters on site and to consider the effects of elements limiting visibility.
- To the north the wooded nature of the Frome Valley and the effect of the dense tree cover of the Heath Forest Mosaic on rising land around Bovington Camp is the same for all 3 height ranges and the visual envelope remains close to the environs of the northern boundary.
  - To both the west and east the effect of the combination of the Magnox reactors, the mixed plantations and the Dorset Police buildings is the same for all 3 height ranges and the visual envelope remains close to the environs of both eastern and western boundaries.
  - To the south **Plan 2a** (5m ZTV height), indicates an area of potential visibility less than the others and in particular much smaller than **Plan 2c** (14m ZTV height). However, from the elevated vantage points within the AONB all 3 plans show how limited potential visibility is and how similar the ZTV results are recorded for them all. It is important to note that field work identifies the effect of topography and tree cover in terms of visibility from the south and records the more exposed nature of the site along the southern boundary in closer views (Zone A and Zone B).
- 4.9 The site utilises some of the infrastructure left from a time when the site was very well developed as a nuclear facility that supported a work force of some 2000, the road network is a good example. It is also noted that a significant number of lighting appliances are still in service within the site, providing light in hours of darkness despite the building demolition programme. The legacy of a lit industrial land use is clearly evident within the landscape at this location today.
- 4.10 The proposals for the Dorset Innovation Park seek to provide an attractive employment environment that is appropriately set within the wider Dorset landscape. The masterplan proposes a flexible development framework comprising a number of development plots that are unified by the existing and designed landscape infrastructure.
- 4.11 The proposal will promote wellbeing for everyone working and visiting, particularly important for those requiring a secure environment. People will be able to enjoy a variety of green spaces for different activities within an attractively designed landscape that fits well with its surroundings.
- 4.12 The character of the surrounding landscape and environmental importance are key attributes to the landscape proposals of the site. The Dorset Innovation Park will be transformed from being perceived as having a negative urban impact on the surrounding landscape to a site that better reflects some of the characteristics of its setting. The surrounding Heath/farmland mosaic published landscape character within which almost all the site lies, will be an overriding influence on the site landscape character itself.
- 4.13 The following sets out the changes (impacts) that are predicted to occur as a result of the proposals which relate to the landscape and visual context.

### *Construction Phase*

- 4.14 There will be a number of activities associated with the construction phase and a number more associated with the occupation or development stage. They include the following temporary impacts relevant to the LVIA:
- Demolition of some buildings and alterations to associated infrastructure;
  - Excavation and storage of spoil material;
  - Lighting of the construction site, as necessary during the winter months, subject to a Construction Environmental Management Plan (CEMP) and compliance with appropriate conditions;
  - Vehicles associated with the delivery of materials and staff, and movements within the site necessary for moving building materials;
  - Fencing of the site for health and safety purposes and to protect existing vegetation from construction activities;
  - Construction of infrastructure and new buildings;
  - Removal of localised vegetation in order to implement the proposals; and
  - Implementation of new landscape proposals incorporating new landscape framework, pond enhancement, and green space provision.

### *Development Phase*

- 4.15 Given the scale of development, environmental background and importance of creating an attractive employment setting, the Design Guide is a vital tool with which to encourage and regulate detailed development responses appropriate to their economic, environmental and social demands. The Design Guide is an illustrated compendium of the necessary and optional components of a particular development with instructions and advice about how they relate in order to deliver a masterplan or other site-based vision. Design Guides are particularly valuable when phased development is likely to take place (as at the Dorset Innovation Park).
- 4.16 The completed development will be phased within the 25-year life cycle of the Local Development Order but would still be subject to accordance with the concept masterplan and the parameters and embedded principles set out in the Design Guide.
- 4.17 In essence, landscape proposals include and provide for:
- New landscapes;
  - Restoration/relocation, retention and enhancement of existing landscape features (acid grassland, pond, tree clumps/groups and other vegetation for example);
  - Recreation/health and well-being opportunities;
  - Bio-diversity initiatives;
  - Opportunities for art installations (to continue the existing legacy);



- Strengthening of southern boundaries (specifically) that are visually sensitive;
- The introduction of non-vehicular routes for recreation and exercise (there is long-term potential to open up a new controlled pedestrian and cycle gate that would be subject to further studies); and
- Commitment and funding for the long-term management of the landscape components and open spaces to ensure achievement of the immediate design objectives and longevity of the landscape character and qualities essential for assimilation of the developed components.

## Mitigation Measures

4.18 Mitigation Measures are those measures proposed to prevent, avoid, reduce and where possible offset or remedy (or compensate for) any significant adverse landscape and visual effects. In terms of this application, every effort has been made to embed them within the concept masterplan and the Design Guide.

### *Mitigation during Construction*

4.19 Where possible, existing tree structure is retained throughout the scheme based upon a recently undertaken tree survey, design constraints and a desirability to maintain beneficial visual screening. A tree survey has been undertaken by Sound Wood arboriculture consultants in 2018 and forms part of the application package. Measures will be implemented to ensure that trees/hedgerows which will not be removed do not suffer direct damage through operations on site or indirect damage from spillages within the root zone or storage causing root compaction in accordance with BS 5837:2012 and the Habitat Regulations, 2010.

4.20 Lighting that is necessary during the winter months of construction will minimise sky glow, light spill and glare. The following mitigation will be delivered through an appropriately worded condition:

- Lighting will only focus on the area needed for construction activity, public amenity and safety;
- Up lighting will be kept to a minimum. Lighting equipment will be chosen to minimise the upward spread of light where possible, minimising the use of lighting columns; and
- To reduce the glare of lighting, the main beam angle will be adjusted so as not to be directed towards potential observers.

### *Mitigation Incorporated Within the Development*

4.21 The site is positioned within an important Dorset Heathland environment which adds to the unique setting for a strategically important employment site. It is the protection and enhancement of this environmental setting which is at the heart of the public realm and parkland design principles as set out in the Design Guide.

4.22 Given the number of landscape and ecological assets that exist, the character will reflect the local natural landscape, incorporating existing trees and tree groups, acid grassland areas and Dorset Heathland features. The landscape character parameters set out in the Design Guide will ensure that the concept masterplan is delivered as agreed.

4.23 Retention and reinforcement of the vegetation on site as illustrated in the Design Guide will strengthen landscape structure, soften the built edges and filter views of the proposals. It will deliver



extensive GI opportunities in the form of green spaces, access, bio-diversity enhancement, and improved visual amenity. The interface between the site and the landscape within which it sits, in particular on the more exposed southern boundary, will see the introduction of a green edge that contains locally occurring heathland species. Any loss of trees and hedgerows will be mitigated by the new green spaces and quantum of new features that are proposed.

- 4.24 The collection of large scale and large mass built forms has been part of the landscape at Winfrith for several decades and continues to be so. The combination of built form and bulk planting provide a strong framework within which to locate new buildings. Already the reactors to the west (26m and 27m height) and the pine plantations nearby (at a similar height) provide an existing book-end to the west of the site, while the collection of 2 and 3 storey Dorset Police HQ buildings (with the taller antenna element) to the east provide a built and vegetated book-end to the east. The heavily vegetated northern edge that follows both the railway and river corridors beyond largely denies intervisibility with the site from public areas. Where limited glimpses do occur in few publicly accessible locations, they already include existing buildings of the type proposed (Atlas Elektronik, Chesil House and the array of buildings at the Dorset Police HQ), including the massing and heights.
- 4.25 As already described, of the larger existing buildings, the “Dragon” reactor is a single structure of 26m, the “SGHWR” reactor 27m, and Chesil House is approximately 12m. Parameter zones have been carefully identified in order to locate built form that will provide a good visual fit within the wider landscape context. The variation in building heights shown in zones from up to 5m, up to 9m and up to 14m respond respectfully to the southern boundary sensitivities and to the existing heights of repurposed buildings (i.e. Chesil). The interspersing of the landscape framework within the layout, and the strengthening of the southern boundary interface will interleave development within views.
- 4.26 There exists the potential for “elements” of buildings to exceed the 14m building height within the 14m parameter zones. Considered on a case by case basis this LVIA is of the opinion that there is scope to accommodate such “elements” within this proposal should the desire arise without undue harm arising as a result. The in-built mitigation, as described, that delivers a visual interleaving of soft landscape elements (existing and new) with a building height that rises from a low edge to a higher centre will provide a canvas for some “elements” to exceed the 14m parameter.
- 4.27 The sensitivity of the various receptors is set out in Section 3 of this report. This sub section now considers the magnitude of change, based on the planning application proposed. Reference should be made to **Appendix 1** for the terms referred to in this section.
- 4.28 As recommended by professional guidance (GLVIA3) this report avoids the use of matrices and tables and sets out the assessment in a narrative format.

## Magnitude of Change

### *Landscape Character*

### **Construction Phase**

- 4.29 Notwithstanding the above, during the construction phase, the activities and machinery on site will introduce uncharacteristic elements into the landscape, resulting in a **temporary, high** magnitude of change that would be limited to the site area and immediate surrounds. It is noted that de-commissioning of the wider development has been undertaken on this scale continuously for a number of decades. To some extent this has become a characteristic of this location.





## Operational Phase

- 4.30 Beneficially, the opportunity to deliver improvements to the existing baseline can be realised through the implementation of the proposals as set out in the Design Guide.
- 4.31 On balance, the completed development is assessed as resulting in a **low** magnitude of change, reflecting the legacy of a developed context within which the proposal lies and the retention of existing features and their enhancement where possible. The proposals introduce characteristic development that is similar in terms of the scale, type and pattern of the landscape. No uncharacteristic development will be introduced into this landscape.
- 4.32 As noted above the key landscape features which relate to the site are the pasture grassland, vegetation, landform and the existing residential edge to the south and west of the site. The uses of the land and the adjoining townscape affect the character as considered above.
- Heath/farmland mosaic LCT (Landscape Character Assessment of Dorset);
  - Managed site landscape (grassland, ornamental shrubs, trees, the pond);
  - Unmanaged site landscape (grassland, vacant sites, other areas); and
  - Built form (existing buildings and their infrastructure on site).
- 4.33 Heath/farmland mosaic LCT (Landscape Character Assessment of Dorset). As described earlier the landscape proposals are very much driven by the surrounding landscape character and other environmental assets found on the site, this is reported on in the Ecological Assessment. In order to respect this and to provide a good landscape “fit” the Heath/farmland mosaic character is to be brought into masterplanning. The magnitude of change is **medium**.
- 4.34 Managed site landscape (grassland, ornamental shrubs, trees, the pond). As set out in the Design Guide and as shown on the landscape masterplan, the vision to deliver a landscape framework that enhances and introduces a well thought out proposal can only deliver a refreshing benefit over the existing baseline. The magnitude of change is **medium**.
- 4.35 Unmanaged site landscape (grassland, vacant sites, other areas). Ecologically sensitive acid grassland (or other features identified in the ecology assessment) have been carefully considered from the outset together with any necessary mitigating measures required as the design development process has progressed. The Design Guide and landscape masterplan sets out the vision for the delivery of the proposal that draws in all of the existing elements of the site baseline. The magnitude of change is **medium**.
- 4.36 Built form (existing buildings and their infrastructure on site). The legacy of the site and its wider context means that the proposal introduces no new built forms into the landscape than already exist. Those that have been demolished and those that remain will form part of a well-designed Innovation Park of high quality. This is reflected in the Design Guide. As a result, the magnitude of change is **low**.

## Visual

- 4.37 As discussed at the beginning of this section when describing the proposal, visual mitigation is in-built within the proposal itself and has formed a very important part during its progress through the design development stages. The interspersing of the landscape framework within the layout and the

strengthening of the southern boundary interface (in particular) will interleave with development at the Dorset Innovation Park. This is clearly illustrated within the Design Guide.

- 4.38 As the baseline has shown, the visual envelope is restricted to areas close to the site boundaries and in particular the southern boundary. The receptor pool is small in number; restricted to those using footpaths on the PRow system that are again close to the site to the south; and some footpath/road users within the Dorset AONB on elevated land further to the south (again very limited and distant in wide panoramas). There are no residential receptors identified.

#### **Construction Phase.**

- 4.39 During the construction phase, activity on the site and movement of materials and construction traffic will introduce movement and incongruous elements including scaffolding, fencing, machinery and construction workers. Considering the above factors, the magnitude of change across all receptor groups during the construction phases will be **high**, reflecting the low receptor numbers affected and the degree of change in the context and composition of the view. These effects would be **temporary** in nature.

**Operational Phase.** This is long term and permanent and likely to be phased.

- 4.40 Road users: **Viewpoint 8:** (Taken through a field gate gap on East Burton Road). Built form on site is already within the view though well filtered by boundary tree planting that contain a significant element of evergreen species. New landscape infrastructure will be introduced within the view and built form similar to what already exists will also be added, however, glimpses from the roadside are just that. There will be some change, but the overall magnitude would be **low**.
- 4.41 Footpath users: **Viewpoint 14:** Taken from PRow on the perimeter fence. The perimeter fence allows views through it to the entrance zone of the new development that will be an improvement on the existing baseline through the delivery of new landscape proposals. The overall magnitude of change will be **low**.
- 4.42 Footpath users: **Viewpoint 15:** Taken from PRow looking towards the site. Views from the PRow network to the south of the site are close but only partial areas of the development are visible. In response building heights along the southern edge, these will be generally limited to up to 9m height. However, the "Chapman plot" (see building in photoviewpoint 15) will be restricted further to a 5m height and the edges bolstered by significantly more tree and other planting. The interfaces to the south of the site are to be sympathetic to the Heath/farmland mosaic LCT in terms of planting palette and design. The overall magnitude of change will be **low**.
- 4.43 Footpath users: **Viewpoint 16:** Taken from PRow looking across agricultural land towards the site. Walking further from the site only partial views of buildings will be afforded as intervening hedgerow features and other vegetation interleaves. Building heights along the southern edge are intended to be kept low and will be generally limited to up to 9m height set within a strengthened landscape framework. The overall magnitude of change will be **low**.
- 4.44 Footpath users: **Viewpoint 17:** Taken from PRow on the edge of East Knighton. Built form (SGHWR reactor) that is being decommissioned outside of the site boundary is evident in the view as are the blocks of evergreen plantations centrally located in the area of the proposal. Any built form will sit within the view inserted behind the plantations and between the Dorset Police HQ buildings (in view to the right) and the reactor complex. The overall magnitude of change will be **low**.
- 4.45 Recreational users: **Viewpoint 18:** Taken from the top of Blacknoll Hill. Built form, (SGHWR reactor 27m height) that is being decommissioned, outside of the site boundary is evident in the elevated

view as are the blocks of evergreen plantations centrally located in the area of the proposal. The upper parts only of Chesil House (at 12m height) sits within the view as do the tall vertical pylons dotted through the landscape together with outlines of other buildings. Intervening heathland vegetation and on-site planting provides a softening framework to accommodate the proposals that will themselves sit within a strengthened landscape structure with buildings not fully in view. The overall magnitude of change will be **medium**.

- 4.46 **Footpath users: Viewpoint 19:** Taken from the corner of minor road close to Five Mary's Tumuli in the AONB. Within the panorama the decommissioning nuclear reactors are only partly visible above the intervening vegetation and landforms around Blacknoll Hill. It is noted that they are 26m and 27m in height some 12-13m taller than any proposed. While built forms just visible at 4km, they are only small components in the wide view. The overall magnitude of change will be **low**.
- 4.47 **Footpath users: Viewpoint 20:** Taken from PRoW Winfrith Drove bridleway close to Drove Dairy in the AONB. The nature of the bridleway is one that is generally enclosed by vegetation. However, in limited gaps, the upper parts of development, that includes the decommissioning nuclear reactors (26m and 27m in height, some 12-13m taller than any proposed) and the Bovington Base buildings, are just visible at 2.6km from the proposal. Intervening vegetation, existing site vegetation and new structure planting will assist in mitigation with adherence to the height parameters with lower buildings up to 5m and 9m in the foreground and those up to 14m set back in views. The overall magnitude of change will be **low**.
- 4.48 **Footpath users: Viewpoint 21:** Taken from the permitted route on the downland in the AONB at 3.5km distance, the very wide panorama is long reaching, expansive and varied. While the upper parts of buildings on the former Winfrith site are visible (the decommissioning nuclear reactor) together with Chesil House and the Dorset Police HQ, the Heath/farmland mosaic LCT offers a very wooded appearance from this elevation. It is noted that the reactors are 26m and 27m in height some 12-13m taller than any proposed. The on-site mixed vegetation, the nearby plantations, the wooded clumps of the heathland all combine to present a beneficial framework for the proposals. Additional planting to bolster visual mitigation will assist in this strengthening. The overall magnitude of change will be **low**.

## Importance of Effect

- 4.49 As noted above the importance of any landscape and visual effect is a function of the sensitivity of the affected landscape resources and visual receptors against the magnitude of change (see above) that they would experience. As appropriate and in accordance with the published guidance, professional judgement is used in the assessment of effects and we are reminded that this is screened as a non-EIA development.
- 4.50 The assessment of potential and residual effects is based upon the following threshold sequence as described in section 1 and set out in **Appendix 1: major beneficial, moderate beneficial, minor beneficial, negligible, minor adverse, moderate adverse and major adverse**.

### Construction Phase

#### *Landscape Character and Visual Resource*

- 4.51 During the construction phase there will be change in terms of both landscape and visual amenity. It is generally recognised that this is the most disruptive phase of the development, but it is temporary



in nature and maintains the ongoing changing situation to some extent. For both landscape and visual amenity, the level of importance is considered to be **minor adverse**.

## Permanent Development

### *Landscape Character Effects*

4.52 In all cases (see below) the delivery of the landscape masterplan in line with the Design Guide, will result in a level of importance that is **moderate beneficial**, reinforced as the landscape setting matures.

- Heath/farmland mosaic LCT (Landscape Character Assessment of Dorset);
- Managed site landscape (grassland, ornamental shrubs, trees, the pond);
- Unmanaged site landscape (grassland, vacant sites, other areas); and
- Built form (existing buildings and their infrastructure on site).

### *Visual Effects*

4.53 In general, the changes will be permanent although the maturation of the landscape infrastructure and in-built mitigation measures within the Design Guide will assist with the visual assimilation of the development over time and reinforce the integration with the wider character of the landscape. For the purposes of the assessment it is considered that new vegetation will be effective in terms of landscape and visual contribution within 15 years of planting.

- Road users: Viewpoint 8: Taken through a field gate gap on East Burton Road. The importance in terms of sensitivity for road users is assessed as being **negligible**.
- Footpath users: Viewpoint 14: Taken from PRoW on the perimeter fence. The importance in terms of sensitivity for footpath users is assessed as being **moderate beneficial**.
- Footpath users: Viewpoint 15: Taken from PRoW looking towards the site. The importance in terms of sensitivity for footpath users is assessed as being **minor beneficial**.
- Footpath users: Viewpoint 16: Taken from PRoW looking across agricultural land towards the site. The importance in terms of sensitivity for footpath users is assessed as being **minor adverse**.
- Footpath users: Viewpoint 17: Taken from PRoW on the edge of East Knighton. The importance in terms of sensitivity for footpath users is assessed as being **minor adverse**.
- Recreational users: Viewpoint 18: Taken from the top of Blacknoll Hill. The importance in terms of sensitivity for footpath users is assessed as being **minor adverse**.
- Footpath users: Viewpoint 19: Taken from the corner of minor road close to Five Mary's Tumuli in the AONB. The importance in terms of sensitivity for footpath users is assessed as being **minor adverse**.



- Footpath users: Viewpoint 20: Taken from PRow Winfrith Drove bridleway close to Drove Dairy in the AONB. The importance in terms of sensitivity for footpath users is assessed as being **negligible**.
- Footpath users: Viewpoint 21: Taken from permitted route on the downland in the AONB. The importance in terms of sensitivity for footpath users is assessed as being **negligible**.

4.54 In all cases, as enhancement planting is managed and matures and views become more filtered then the effect will further soften the appearance of built form. It is also worth bearing in mind that in all cases, the visual receptor pool is small where few receptors are likely to be affected, and that there are no identified residential receptor groups affected.

### *Policy*

4.55 The Local Development Order provides a set of development principles and guidance to inform detailed development proposals and also a framework for Purbeck District Council to make expedient development management decisions for projects that accord with the provisions of the LDO.

4.56 The following text identifies the relevant policies with respect to the development proposals set out within the Purbeck Local Plan Part 1:

- Policy SW: South West Purbeck;
- Policy BIO: Biodiversity & Geodiversity;
- Policy GI: Green Infrastructure, Recreation and Sports Facilities;
- Policy D: Design; and
- Policy LHH: Landscape, Historic Environment and Heritage.

4.57 In all instances the proposals are policy compliant. The proposals seek to protect and enhance local heaths; avoid detrimental impact on heaths; respect landscape character, the environment and heritage assets; GI is enhanced, habitats linked, bio-diversity protected, GI assets are coherent, functional and connected and quality will be delivered through the DIP Design Guide.

## Section 5: Conclusion

- 5.1 The LVIA has been carried out in accordance with industry standard guidance including the Guidelines for Landscape and Visual Impact Assessment (GLVIA3), Third Edition (2013).
- 5.2 There are no local or national landscape designations that wash over the site, there are none beyond the site that would be negatively affected and there is no “value” attributed to this site.
- 5.3 The assessment has found that there will be no important landscape or visual effects arising as a result of the proposals when occupied and that in fact mostly effects of a beneficial nature will follow. The beneficial landscape effects are as a result of the replacement of an existing degraded baseline with a well-designed, high quality landscape that responds sensitively to its heathland setting.
- 5.4 The site is positioned within an important Dorset heathland environment which adds to the unique setting for a strategically important employment site. It is the protection and enhancement of this environmental setting which is at the heart of the public realm and parkland design principles as set out in the accompanying Design Guide.
- 5.5 Given the number of landscape and ecological assets that exist, the character will reflect the local natural landscape, incorporating existing trees and tree groups, acid grassland areas and Dorset Heathland features. The landscape character parameters set out in the Design Guide will ensure that the landscape masterplan is delivered as set out.
- 5.6 The site utilises some of the infrastructure and a legacy left from a time when the site was very well developed as a nuclear facility that supported a work force of some 2000.

The contents of this report are valid at the time of writing. Tyler Grange shall not be liable for any use of this report other than for the purposes for which it was produced. Owing to the dynamic nature of ecological, landscape, and arboricultural resources, if more than twelve months have elapsed since the date of this report, further advice must be taken before you rely on the contents of this report. Notwithstanding any provision of the Tyler Grange LLP Terms & Conditions, Tyler Grange LLP shall not be liable for any losses (howsoever incurred) arising as a result of reliance by the client or any third party on this report more than twelve months after the date of this report.



# Glossary

As defined in the Glossary contained in the 'Guidelines for Landscape and Visual Impact Assessment', Landscape Institute (LI) and Institute of Environmental Management and Assessment - Third Edition, Routledge (GLVIA3)

1. **Access Land:** Land where the public have access either by legal right or by formal agreement.
2. **Baseline Studies:** Work done to determine and describe the environmental conditions against which any future changes can be measured or predicted and assessed.
3. **Characterisation:** The process of identifying areas of similar landscape character, classifying and mapping them and describing their character.
4. **Characteristics:** Elements, or combinations of elements, which make a contribution to distinctive landscape character.
5. **Designated Landscape:** Areas of landscape identified as being of importance at international, national or local levels, either defined by statute or identified in development plans or other documents.
6. **Development:** Any proposal that results in a change to the landscape and/or visual environment.
7. **Elements:** Individual parts which make up the landscape, such as, for example, trees, hedges and buildings.
8. **Enhancement:** Proposals that seek to improve the landscape resource and the visual amenity of the proposed development site and its wider setting, over and above its baseline condition.
9. **Feature:** Particularly prominent or eye-catching elements in the landscape, such as tree clumps, church towers or wooded skylines OR a particular aspect of the project proposal.
10. **Geographical Information System (GIS):** A system that captures, stores, analyses, manages and present data linked to location. It links spatial information to a digital database.
11. **Green Infrastructure:** Networks of green spaces and watercourses and water bodies that connect rural areas, villages, towns and cities.
12. **Heritage:** The historic environment and especially valued assets and qualities such as historic buildings and cultural traditions.
13. **Iterative Design Process:** The process by which project design is amended and improved by successive stages of refinement which respond to growing understanding of environmental issues.
14. **Key Characteristics:** Those combinations of elements which are particularly important to the current character of the landscape and help to give an area its particularly distinctive sense of place.
15. **Land Cover:** The surface cover of the land, usually expressed in terms of vegetation cover or lack of it. Related to but not the same as land use.
16. **Land Use:** What land is used for, based on broad categories or functional land cover, such as urban and industrial use and the different types of agriculture and forestry.
17. **Landform:** The shape and form of the land surface which has resulted from combinations of geology, geomorphology, slope, elevation and physical process.



18. **Landscape:** An area, as perceived by people, the character of which is the result of the action and interaction of natural and/or human factors.
19. **Landscape and Visual Impact Assessment (LVIA):** A tool used to identify and assess the likely significance of the effects of change resulting from development both on the landscape as an environmental resource in its own right and on people's views and visual amenity.
20. **Landscape Character:** A distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse.
21. **Landscape Character Areas (LCAs):** These are single unique areas which are the discrete geographical areas of a particular landscape type.
22. **Landscape Character Assessment (LCA):** the process of identifying and describing variation in the character of the landscape and using this information to assist in managing change in the landscape. It seeks to identify and explain the unique combination of elements and features that make landscapes distinctive. The process results in the production of a Landscape Character Assessment.
23. **Landscape Character Types (LCTs):** These are distinctive types of landscape that are relatively homogenous in character. They are generic in nature in that they may occur in different areas in different parts of the country, but wherever they occur they share broadly similar combinations of geology, topography, drainage patterns, vegetation and historical land use and settlement pattern, and perceptual and aesthetic attributes.
24. **Landscape Classification:** A process of sorting the landscape into different types using selected criteria but without attaching relative values to different sorts of landscape.
25. **Landscape Effects:** Effects on the landscape as a resource in its own right.
26. **Landscape Quality (Condition):** A measure of the physical state of the landscape. It may include the extent to which typical character is represented in individual areas, the intactness of the landscape and the condition of individual elements.
27. **Landscape Receptors:** Defined aspects of the landscape resource that have the potential to be affected by a proposal.
28. **Landscape Strategy:** The overall vision and objectives for what the landscape should be like in the future, and what is thought to be desirable for a particular landscape type or area as a whole, usually expressed in formally adopted plans and programmes or related documents.
29. **Landscape Value:** The relative value that is attached to different landscapes by society. A landscape may be valued by different stakeholders for a whole variety of reasons.
30. **Magnitude (of effect):** A term that combines judgements about the size and scale of the effect, the extent of the area over which it occurs, whether it is reversible or irreversible and whether it is short or long term in duration.
31. **Parameters:** A limit or boundary which defines the scope of a particular process or activity.
32. **Perception:** Combines the sensory (that we receive through our senses) with the cognitive (our knowledge and understanding gained from many sources and experiences).
33. **Sensitivity:** A term applied to specific receptors, combining judgments of the susceptibility of the receptor to the specific type of change or development proposed and the value related to that receptor.





34. **Significance:** A measure of the importance or gravity of the environmental effect, defined by significance criteria specific to the environmental topic.
35. **Susceptibility:** The ability of a defined landscape or visual receptor to accommodate the specific proposed development without undue negative consequences.
36. **Tranquillity:** A state of calm and quietude associated with peace, considered to be a significant asset of landscape.
37. **Visual Amenity:** The overall pleasantness of the views people enjoy of their surroundings, which provides an attractive visual setting or backdrop for the enjoyment of activities of the people living, working, recreating, visiting or travelling through an area.
38. **Visual Effects:** Effects on specific views and on the general visual amenity experienced by people.
39. **Visual Receptors:** Individuals and/or defined groups of people who have the potential to be affected by a proposal.
40. **Zone of Theoretical Visibility (ZTV; sometimes Zone of Visual Influence):** A map, usually digitally produced, showing areas of land within which a development is theoretically visible.



# Appendix 1

---

**Tables Defining the Thresholds and Definitions of the Terminology used in the assessment**



## **Appendix 1. Landscape and Visual Impact Assessment Methodology summary of Approach and Criteria Tables**

The key terms used within assessments are:

- Susceptibility and Value – Which contribute to Sensitivity;
- Scale, Geographical Extent, Duration and Reversibility – which contribute to the Magnitude of change; and
- Significance of Effect – a judgement of the level of significance of effect when Sensitivity and Magnitude are combined.

### **Sensitivity**

Overall sensitivity lies along a continuum of low to high. The *Value and Susceptibility* of a receptor are both considered understanding its overall sensitivity.

**Susceptibility** is assessed for both landscape receptors including, landscape character areas, and for visual receptors (people). It indicates the ability of a defined landscape or visual receptor to accommodate the proposed development “without undue consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies.” (GLVIA, 3rd version, para 5.40). An example of how Susceptibility can be described at each end of the continuum of low to high is provided in the following tables below A and B for both landscape and visual receptors.

Landscape **Value** is “the relative value that is attached to different landscapes by society” (GLVIA, 3rd version, page 157). Box 5.1 (GLVIA 3<sup>rd</sup> version, page 84) sets out factors to be considered in the identification of valued landscapes. These can be broadly described as: Landscapes recognised and valued for their quality and and/or cultural associations; key characteristics and features as recognised in published landscape character assessments; Landscape constrictions and the degree to which the landscape is intact and legible. An example of how Value can be described at each end of the continuum of low to high is provided in the following table 1 for landscape receptors. In visual terms, Value relates to that attached to views experienced by receptors (people). An example of how Value can be described at each end of the continuum of low to high is provided below for visual receptors in the following table 2.

### **Magnitude of Change**

Overall magnitude of change lies along a continuum of low to high. Together the *Scale, Geographical Extent, and Duration and Reversibility* of effect are all considered in understanding the overall Magnitude of change.

**Scale** of effect is assessed for both landscape and visual receptors and identifies the degree of change which would arise from the development. An example of how Scale of effect can be described at each end of the continuum of low to high is provided in the following tables 3 and 4 for both landscape and visual receptors.

**Geographical Extent** of effect is assessed for both landscape and visual receptors and indicates the geographic area over which the effects will be felt. An example of how Geographical Extent can be described at each end of the continuum of low to high is provided in the following tables 3 and 4 for both landscape and visual receptors.

**Duration and Reversibility** of effect is assessed for all landscape and visual receptors and identifies the time period over which the change to the receptor would arise as a result of the development. An example of how Duration and Reversibility can be described at each end of the continuum of low to high is provided in the following tables 3 and 4 for both landscape and visual receptors.

### **Significance of Effect**

Best practice guidelines stipulate that the significance of any landscape related impact should be evaluated, both during the construction works and following completion of the development. The significance of any landscape and visual effect is a function of the sensitivity of the affected landscape resources and visual receptors against the magnitude of change that they would experience. As such, the assessment of potential and residual effects can be described as: negligible, minor, moderate, and major. A description is set out in table.5

The following terms will be used to define residual landscape/townscape effects:

**Adverse:** the proposed development may result in direct loss of physical landscape/townscape resources, weaken key characteristics or negatively affect the integrity of a landscape/townscape designation; and

**Beneficial:** the proposed development may replace poor quality elements of the existing landscape/townscape or strengthen existing landscape/townscape characteristics.

The following terms have been used to define residual visual effects:


**Adverse:** the proposed development reduces visual amenity; and

**Beneficial:** the visual amenity is improved by the proposed development.

**1.**

**Table.1 Sensitivity of Receptors: Landscape/Townscape Receptors**

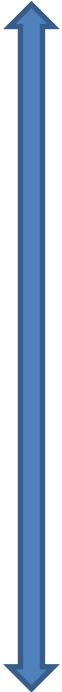
As set out below, the Sensitivity lies along a continuum of low to high. The Value and Susceptibility of a receptor are both considered in understanding its overall Sensitivity.

	<b>Landscape Value</b>			<b>Landscape Susceptibility</b>
	<b>Designations and Conservation Interests/Associations</b> <i>Landscapes recognised and valued for their quality and / or cultural associations / recreational value</i>	<b>Key Characteristics and Features</b> <i>As recognised in published Landscape Character Assessments or policy</i>	<b>Landscape Condition</b> <i>Degree to which the landscape is intact and legible &amp; its scenic quality</i>	<i>The ability of a defined landscape to accommodate the specific proposed development without undue negative consequences</i>
<p><b>High</b></p>  <p><b>Low</b></p>	National / Regional Importance (e.g. AONB, National Park, Registered Parks and Gardens)	<p>Features which are dominant within the landscape and are fundamental to defining the distinct landscape character of an area.</p> <p>Important characteristics and features recognised as forming intrinsic part of nationally and regionally designated landscapes.</p> <p>Distinctive individual or rare features.</p>	<p>Distinct landscape structure with strong pattern and intact features.</p> <p>Few detractors or uncharacteristic features or elements present.</p>	The landscape is such that changes in terms of the proposed development would be entirely at odds with the character of the local area, related to matters including pattern, grain, use, scale and mass.
	Local importance (e.g. Conservation Areas, Special Landscape Areas / Features)	<p>Locally important and notable features that contribute to the overall character of an area.</p> <p>Features and elements protected by local policy.</p>	<p>Landscape exhibits recognisable structure and characteristic patterns.</p> <p>Some detracting features present.</p>	The proposed development has a degree of consistency with the existing scale, pattern, grain, land use of the prevailing character, although mitigation may be appropriate to enhance assimilation.
	No Designation	<p>Features or elements that are uncharacteristic and detract from the landscape character of an area.</p>	<p>Degraded landscape structure with fragmented pattern and poor legibility of character.</p> <p>Detracting features notable within the landscape.</p>	The proposed development is entirely consistent with the character of the local area, related to matters including pattern, grain, use, scale and mass.

e.g. Medium – Landscape Character Area does not include a designation but includes important characteristics and features that create a distinct landscape structure with strong pattern and intact features. The proposed development has a degree of consistency with the existing scale, pattern, grain, land use of the prevailing character, although mitigation may be appropriate to enhance assimilation.

**Table.2 Sensitivity of Receptors: Visual Receptors**

As set out below, the Sensitivity lies along a continuum of low to high. The Value and Susceptibility of a receptor are both considered understanding its overall Sensitivity.

	<b><i>Value (attached to views)</i></b>	<b><i>Visual Susceptibility (the ability of the receptor to view the proposed development without undue negative consequences)</i></b>
 <p><b>High</b></p>	Recognised national / Important Viewpoints, including those identified within and protected by policy.	The visual composition following the development as proposed will include discordant and incongruent elements.
	These viewpoints may be tourist destinations and marked on maps.	
	Designed views, including from within historic landscapes.	The visual composition following the development as proposed will be consistent with the baseline situation although some aspects may be at odds with the visual composition.
	Users of nationally recognized routes e.g. National Cycle Network, National Trails.	
	Land with public access (i.e. Open Access Land and National Trust Land).	
	Locally important views/ views.	
	Views from within locally designated landscapes e.g. Conservation Areas and local planning policy.	The visual composition following the development as proposed will be in harmony with the existing composition.
	Views from local routes identified on maps	
Permissive routes, not recognised by policy or identified on maps.		
<b>Low</b>	No designations present	

e.g. Medium - views of the landscape are part of, but not the sole purpose of the receptors activities along local routes.

**Table.3 Magnitude of Change: Landscape/Townscape Receptors**


As set out below, magnitude of change lies along a continuum of low to high. Together the Scale, Geographical extent, and Duration and Reversibility of effect are all considered in understanding the overall magnitude of change.

	<b>Scale</b>	<b>Geographical Extent</b>	<b>Duration and Reversibility</b>
	<i>identifies the degree of change which would arise from the development</i>	<i>of effect indicates the geographic area over which the effects will be felt</i>	<i>of effect identifies the time period over which the change to the receptor would arise as a result of the development.</i>
<b>High</b>	Highly noticeable change, affecting most key characteristics and dominating the experience of the Landscape/Townscape; introduction of highly conspicuous new development; and the baseline situation will be fundamentally changed.	Extensive affecting the majority or all the Landscape/Townscape Character Area.	Long-term or permanent, the change is expected to be in place for 10+ years and there may be no intention for it to be reversed or only partially reversed.
	Partial alteration to key elements, features, qualities or characteristics, such that post development the baseline situation will be largely unchanged but noticeable despite discernible differences.	Localised, affecting the site and a proportion of the wider Landscape/Townscape Character Area.	Medium-term, the change is expected to be in place for 5-10 years and the effects may be reversed or partially reversed.
<b>Low</b>	Minor alteration to few elements, features qualities or characteristics resulting in a barely perceptible change.	Affecting the site and immediate setting only.	Short-term, the change is expected to be in place for 0-5 years and the effects are likely to be reversed.

e.g. Medium – Highly noticeable change with introduction of highly conspicuous development which will affect the site and a proportion of the character area for a short-term during construction. The effects are likely to be reversed.

**Table.4 Magnitude of Change: Visual Receptors**


As set out below, magnitude of change lies along a continuum of low to high. Together the Scale, Geographical extent, and Duration and Reversibility of effect are all considered in understanding the overall magnitude of change.

	<b>Scale</b>	<b>Geographical Extent</b>	<b>Duration and Reversibility</b>
	<i>identifies the degree of change which would arise from the development</i>	<i>Wide, and/or within close proximity, and/or open views.</i>	<i>identifies the time period over which the change to the receptor would arise as a result of the development.</i>
<b>High</b>			
	Intensive/dominant or major alteration to key elements of the baseline view.	Extensive, open and/or close proximity, and/or direct and/or affecting unscreened views.	Long-term or permanent, the change is expected to be in place for 10+ years and there may be no intention for it to be reversed or only partially reversed.
	Partial/noticeable or minor alteration to key elements of the baseline view.	Framed, and/or contained, and/or medium distance, and/or partially screened views.	Medium-term, the change is expected to be in place for 5-10 years and the effects may be reversed or partially reversed.
	Minor alteration to few elements of the baseline view.	Narrow, and/or fragmented, and/or long distance, and/or heavily screened views.	Short-term, the change is expected to be in place for 0-5 years and the effects are likely to be reversed.
<b>Low</b>			

e.g. Medium – Intensive and major alteration to key elements of the framed baseline view over a medium distance for a short period of time during construction. The effects are likely to be reversible.

**Table.5 Level of Significance of Effect**

Landscape/Townscape or visual effects above moderate adverse (i.e. Major) are considered to be significant; all other effects are considered not significant.



<b>Major beneficial:</b>	The development would fit well with the scale, landform and pattern of the landscape and bring substantial enhancements. The development would create a major improvement in views;
<b>Moderate beneficial:</b>	The development would fit well with the scale, landform and pattern of the landscape, maintain and/or enhance the existing landscape character. The development would create a noticeable but improved change in the view;
<b>Minor beneficial:</b>	The development would complement the scale, landform and pattern of the landscape, whilst maintaining the existing character. The development would result in minor improvements to the existing views;
<b>Negligible:</b>	The development would cause very limited changes to the landscape and/or views but creates no significant effects; the development would create neither an adverse or beneficial change to the landscape or visual receptor;
<b>Minor adverse:</b>	The development would cause minor permanent and/or temporary loss or alteration to one or more key elements or features of the landscape, to include the introduction of elements that may not be uncharacteristic of the surrounding landscape. The development would cause limited visual intrusion;
<b>Moderate adverse:</b>	The development would cause substantial permanent loss or alteration to one or more key elements of the landscape, to include the introduction of elements that are prominent but may not be substantially uncharacteristic with the surrounding landscape. The development would be clearly visible and would result in adverse effects upon the landscape;
<b>Major adverse:</b>	The development would irrevocably damage, degrade or badly diminish landscape character features, elements and their setting. The development would be irrevocably visually intrusive and would disrupt fine and valued views both into and across the area.



# Appendix 2

---

## Field Survey Sheet



**Field Survey Sheet - Landscape Character**

**Project Number & Name:** 11286 DORSET INNOVATION PARK

**Date:** 1 FEBRUARY 2018

**Landscape Factors**

**Landscape Elements:**

Circle / list the dominant landscape elements that are present in the landscape.

Landform	Flat, Plain, Dry valley, Undulating, Rolling lowland, Deep gorge, Rolling, Plateau, Broad valley, Steep, Scarp/cliffs, Narrow valley, Vertical, Hills...
Buildings	Farmsteads, Masts/Poles, Pylons, Industry, Settlement, Urban, Follies, Military...
Heritage	Vernacular buildings, Country house, Field systems, Prehistoric ritual, Hill top enclosure / fort, Ecclesiastic, Monuments of war, Coppice...
Farming	Walls, Fences, Hedges, Fields, Arable, Improved pasture, Rough grazing, Hedge banks, Orchard...
Land cover	Designed parkland, Scrub Marsh, Peat bog, Moor/heath, Rough grassland, Water meadows, Grassland, Species rich grassland...
Woodland/Trees	Deciduous woodland, Coniferous plantation, Mixed woodland, Shelter belt, Hedge trees, Orchard, Clumps, Isolated trees...
Hydrology	River, Stream, Reservoir, Dry valley, Winterbourne, Pond, Lake, Drainage ditch...
Human Influence	Road, Track, Footpaths, Lane, Railway, Military, Pylons, Communication masts...
Other	DORSET TECHNOLOGY PARK / WINFRITH NUCLEAR FACILITY / MAGNIX BEING DECOMMISSIONED, DORSET POLICE HQ BUILDINGS.

**Landscape Character:**

Describe the main elements and features on site and in the views out from it, noting any key characteristics of the landscape. INDUSTRIAL SCALE. DEMOLITION. BROWNFIELD. MASSIVE BUILT FORM. AROUND 12M HT. POOR INFRASTRUCTURE. MAGNIX - NUMEROUS LARGE SCALE SIMPLE BUILT FORM. ASSORTED GENERIC BUILDINGS. 20 NEW START-UP UNITS. SOME DEMOLITION - GRAINED OR GRAVELLED. DORSET POLICE HQ - NUMEROUS BUILDINGS. ROADS / LIGHTING COLUMNS. THESE HOUSE. WITH CAR PARKING. INDUSTRIAL CHAIN LINK FENCING. \*LARGE VIEWS TO MONSIEUR LINE - SOUTH.

**Landscape Condition:**

Describe the landscape condition of the site and its immediate surroundings and note any potential enhancement measures that might be appropriate to improve landscape character. THE IMMEDIATE SURROUNDINGS - HEATHLAND - PINE / BIRCH / WILDER / PINE PLANTATIONS IN GEOMETRIC SHAPES. LIKE HEATHLAND - MIDLANDS INTERIOR - DERELICTION BUT REMAINING IS WELL MAINTAINED BUT IS VERY Tired & DATED. MUNICIPAL TREE. UNINTERESTING. DULL. SOME TREE GROUPS USEFUL TO RETAIN IN SCREENING DARK POND.

**Annotated Sketch/ Photograph**

Demonstrate the landscape character with a graphic representation.

MATURE PINE LINEAR FEATURES.

NEW UNITS.

ROADLINE PLANTING -

- PERMANENT PLANTING
- LILIPUP TREES
- LINES
- EVERGREEN MIX

BRIDIRON ROAD PATTERN.

OPEN GRASSLANDS

ASTRVEY

12M THESE HSE.

SLD.

**Aesthetic Factors:**

Circle / list any special aesthetic factors to describe the landscape of the site and immediate surroundings

Pattern	Random	Organised	Regular	Formal
Scale	Intimate	Small	Large	Vast
Texture	Smooth	Textured	Rough	Very Rough
Colour	Monochrome	Muted	Colourful	Garish
Diversity	Uniform	Simple	Diverse	Complex
Balance	Harmonious	Balanced	Discordant	Chaotic
Form	Vertical	Sloping	Rolling	Horizontal
Enclosure	Confined	Enclosed	Open	Exposed
Other	IMMEDIATE SURROUNDINGS - HEATHLAND / POLICE HQ / INDUSTRIAL			

**Perceptual Factors:**

Circle / list any perceptual factors to describe the landscape of the site and immediate surroundings

Security	Intimate	Comfortable	Safe	Unsettling	Threatening
Stimulus	Monotonous	Bland	Interesting	Challenging	Inspiring
Tranquillity	Inaccessible	Remote	Vacant	Peaceful	Busy
Pleasure	Unpleasant	Pleasant	Attractive	Beautiful	
Other	HAS AIR OF NEGLECT DUE TO DEMOLITION + AGE.				

**Architecture:**

Describe the nearby architecture noting vernacular style, settlement pattern, building materials and condition.

ON SITE - NO VERNACULAR STYLE / MATERIALS. NOT ATTRACTIVE.  
 BUSINESS / INDUSTRIAL NOT PREVALENT IN SURROUNDING L/S.  
 LOOK LIKE SURROUNDING LAND USE.  
 ALL MIXED.

**Additional Comments:**

Note any other information that may be useful or that may influence the development on site.

HEATHLAND CONTEXT.  
 BOUNDARY FENCING - ALLOWS SOME VIEWS IN / OUT  
~~SEE~~ DOWNLANDS - ROAD - ATTRACTIVE LONG VIEWS.  
 MATURE TREE BELTS / LUSH PINK STRUCTURE FOR  
 LARGE SCALE DEVELOPMENT TO FIT WITHIN.

**Box 5.1 valued landscapes**

1. LANDSCAPE QUALITY – typical character represented? Y/N intactness? Y/N good condition? Y/N
2. SCENIC QUALITY – visually attractive? Y/N
3. RARITY – presence of rare landscape elements? Y/N
4. REPRESENTATIVENESS – are landscape characteristics/features particularly important examples? Y/N
5. CONSERVATION INTERESTS – presence of heritage/wildlife/cultural interest? Y/N
6. RECREATION VALUE – landscape valued for recreation? Y/N NO PUBLIC ACCESS.
7. PERCEPTUAL ASPECTS – landscape valued for wildness or tranquillity? Y/N
8. ASSOCIATIONS – artists/cultural events/writers etc? Y/N

NO

# Appendix 3

---

Email relation to viewpoint and study area



Original message -----

From: Tony Harris <t.harris@dorsetcc.gov.uk>

Date: 17/01/2018 12:06 (GMT+00:00)

To: Anneliese Walker <a.walker@tylergrange.co.uk>

Subject: RE: Dorset Innovation Park - Landscape Inputs

Hi Anneliese

The viewpoints all seem to be fine with only a couple of suggestions.

Could VP 13 be relocated north slightly so it is at the point the existing public right of way crosses the access road into the Park? And maybe one more viewpoint is required from the right of way around the eastern edge of the site, as shown by the two grey ticks on the attached?

Hope that helps.

Regards

**Tony Harris CMLI**

Landscape Services Manager

Dorset County Council

County Hall, Colliton Park

Dorchester

Dorset DT1 1XG

01305 221699

# Appendix 4

---

## Heritage Assessment



# **Dorset Innovation Centre**

## **Heritage Assessment**

# Dorset Innovation Centre

## Heritage Assessment

**Clients:** Purbeck District Council

**Report no.:** BSA 1779\_1a

**Author:** Ben Stephenson

**Date:** July 2018

**Version:** Final



**E:** [info@bsaheritage.co.uk](mailto:info@bsaheritage.co.uk) **T:** 01235 536754 **Web:** [www.bsaheritage.co.uk](http://www.bsaheritage.co.uk)  
7 Spring Gardens, Abingdon, Oxon OX14 1AZ.

This report, all illustrations and other associated material remains the property of BSA Heritage until paid for in full. Copyright and intellectual property rights remain with BSA Heritage.



## Contents

Section 1: Introduction and Methodology.....	1
Section 2: Policy Context .....	2
Section 3: Previously Identified Heritage .....	5
Section 4: Documentary Sources .....	7
Section 5: Appraisal of Site and Environs.....	9
Section 6: Impact of Proposals .....	11
Section 7: References and Sources .....	12
.....	

## Appendix

Gazetteer of Designated Heritage Assets

## Plates

- Plate 1: View northwards **within** site area
- Plate 2: Original office block within site
- Plate 3: Former church at Giddy Green
- Plate 4: Typical cottages at Giddy Green
- Plate 5: Scheduled round barrow north of site
- Plate 6: Listed Broomhill Bridge
- Plate 7: View of AEA Winfrith reactor from Blacknoll Hill
- Plate 8: Listed cottages in East Knighton

## Figures

Figure 1: Identified Designated Heritage

## Section 1: Introduction and Methodology

- 1.1. This heritage assessment has been prepared by BSA Heritage Limited on behalf of Purbeck District Council to inform plans for redevelopment within the campus of the Dorset Innovation Centre, Dorset. The site is located in Purbeck District and west of Wool, in the east of the county.
- 1.2. The assessment considers a site centred at NGR SY 8225 8700 and as shown in Figure 1. The overall site area measures approximately fifty hectares. The site consists of the Dorset Innovation Centre campus and is currently a mix of office and research structures, open areas and woodland.
- 1.3. The former AEA Winfrith research site lies west of the site and includes two nuclear reactors. The Dorset Constabulary Headquarters lies to the immediate east of the site.
- 1.4. The underlying geology of the site is recorded by the British Geological Survey as a complex patchwork which includes mainly Poole Formation sands and West Park Formation sands in the east. Superficial deposits include river terrace deposit sands and gravels and Head deposits to the east. North of the site, in the valley of the River Frome, alluvial superficial deposits are recorded.
- 1.5. The site is relatively level, with an average height of 30m above Ordnance Datum. The land slopes downwards north of the site and towards the River Frome at circa 20m AOD. Higher land lies west of the site with high points at Whitcombe Hill (52m) and Blacknoll Hill (62m). The land rises more gently to the south of the site, but with high ground at Coombe Wood to the south east (50m).
- 1.6. A number of existing sources of information have been consulted to inform this assessment including the Dorset Historic Environment Record (HER) and Historic England's online National Heritage List for England which both hold records relating to designated heritage assets including scheduled monuments and listed buildings.
- 1.7. Purbeck District Council also holds information on conservation areas and locally designated heritage assets. Section 4 summarises the historical development of the area and was informed by sources consulted at Dorset History Centre in Dorchester, Historic England's Archive in Swindon and online. A site walkover was completed in February 2018 and findings are summarised in Section 5.
- 1.8. The above sources have allowed the potential impact of likely proposals on nearby designated heritage assets to be considered in line with relevant legislation, policy and guidance. The policy context is summarised in Section 2 and potential impacts in Section 6.

## Section 2: Policy Context

### Legislation

- 2.1. The 1990 Planning (Listed Buildings and Conservation Areas) Act, as amended, confirms that in reaching planning decisions the local planning authority should have special regard to preserving listed buildings and their settings and preserving or enhancing the character and appearance in conservation areas (HMSO 1990).
- 2.2. A 2014 Court of Appeal ruling in *Barnwell Manor Wind Energy Ltd v East Northants District Council*, English Heritage and the National Trust made clear that to discharge this responsibility, decision makers must give considerable importance and weight to the desirability of preserving the setting of listed buildings when carrying out the balancing exercise of judging harm against other planning considerations, as required under the National Planning Policy Framework. By implication and subsequent legal decision, preserving the character and appearance within conservation areas also has to be given considerable weight.
- 2.3. The 1979 Act relating to scheduled monuments does not require that their setting is preserved, but this is a requirement of the current policy and guidance.

### National Policy

- 2.4. The National Planning Policy Framework (NPPF) covers all aspects of planning in one document and focuses on Heritage in Section 12 (DCLG 2012). At Paragraph 17, under bullet point 10 of 12 'Core Principles' set out, it states planning should:  
  
*'Conserve heritage assets in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of this and future generations.'*
- 2.5. Heritage assets are defined in the NPPF glossary as any designated or undesignated element of the historic environment which is identified as being of such significance that it is a material consideration in the planning process. In determining applications which cause harm to heritage assets directly, or indirectly, through affecting a complementary setting, the NPPF recommends that considerable importance and weight should be given to their conservation when reaching a planning decision.
- 2.6. The more important the asset, the greater the weight that should be ascribed. As heritage assets are irreplaceable, it is noted that any harm or loss should require clear and convincing justification. It notes that 'substantial harm' to or loss of designated heritage assets of the highest significance should be wholly exceptional (Paragraph 133). Paragraphs 134 and 135 clarify that, where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including safeguarding its future.
- 2.7. Paragraph 135 also notes that effects on the significance of non-designated heritage assets require a balanced judgement weighing the scale of impact and the significance of the heritage asset against the benefits of the proposed development. Where heritage assets are to be lost, the final paragraph in Section 12, Paragraph 141, confirms that a record of the elements to be lost should be provided and disseminated by the developer.

## Local Policy

- 2.8. The adopted Purbeck Local Plan, Part 1 of 2012 contains Policy LHH: 'Landscape, Historic Environment and Heritage' (PDC 2012). This states that:

*'Proposals for development and other works will be expected to conserve the appearance, setting, character, interest, integrity, health and vitality of landscape (including trees and hedgerows) and heritage assets - be these locally, nationally or internationally designated or otherwise formally identified by the Local Planning Authority. In considering the acceptability of proposals the Council will assess their direct, indirect and cumulative impacts relative to the significance of the asset affected, and balance them against other sustainable development objectives.'*

Policy LHH also requires that these elements be enhanced wherever appropriate.

## Guidance

- 2.9. The Department for Communities and Local Government has produced Planning Practice Guidance which supports the NPPF (DCLG 2014). This includes a section titled *Conserving and Enhancing the Historic Environment*. More recently, Historic England has produced more detailed guidance on decision making: *Managing Significance in Decision-Taking in the Historic Environment* (Historic England 2015). Where relevant, this guidance has informed this assessment.
- 2.10. Historic England has also just released an updated version of its *The Setting of Heritage Assets* which is designed to guide their own staff, local planning advisors and specialists in determining what forms a setting and how it adds to or detracts from the significance of a heritage asset or assets (Historic England 2017). It also advises on assessing the effect of development proposals and how to avoid or minimise loss of or enhance significance.
- 2.11. The Guidance confirms that the consideration of setting is a matter of 'informed judgement' and sets out five stages involved in robust assessment of setting. The heritage assets which have a setting, whether designated or undesignated, have to be defined through a suitable level of research. However, the Guidance confirms that setting is not a heritage asset or designation in itself.
- 2.12. The Guidance highlights the fundamental basis of current policy; that although setting can cover a large area, not all of it is positive or anything other than neutral in relation to the significance of the heritage assets concerned. It sets out in detail the aspects of setting which may have a bearing on a heritage asset's significance.
- 2.13. The Guidance examines assessment of the effects of a development proposal on significant elements of setting and stresses that although visual impacts are at the heart of such effects, other factors including noise, vibration and dust can also harm setting. An understanding of the heritage assets and the significance of their setting at an early stage can influence proposals in order to minimise adverse effects. A proposal may be re-located, better screened or designed to complement an asset's character.
- 2.14. Historic England's Guidance also details enhancement of setting which can stem from development. This is noted to include the removal of a detrimental structure, or revealing a lost historic feature, enhancement or creation of public views and improving public access to and interpretation of an asset and its setting.

- 2.15. The Guidance sets out a five step approach to considering setting in relation to development proposals. The assets which might be affected have to be identified and then the degree to which their setting enhances their significance or an appreciation of that significance is to be assessed. Steps 3 and 4 require that the harm or benefits of the proposals are considered in relation to setting and that measures to avoid or minimise the harm are sought. A final step is the documenting of the decisions made and post-development monitoring to confirm how accurate the assessment had been.
- 2.16. Usefully, the new Guidance no longer suggests the assessment of setting be informed by the Heritage Values approach set out by English Heritage in their 2008 *Conservation Principles* document (English Heritage 2008).
- 2.17. Given recent Appeal decisions in relation to the effect of development on highly visible assets such as churches, the new Guidance includes specific reference to these and states:

*'Being tall structures, church towers and spires are often widely visible across land- and townscapes but, where development does not impact on the significance of heritage assets visible in a wider setting or where not allowing significance to be appreciated, they are unlikely to be affected by small-scale development, unless that development competes with them, as tower blocks and wind turbines may. Even then, such an impact is more likely to be on the landscape values of the tower or spire rather than the heritage values, unless the development impacts on its significance, for instance by impacting on a designed or associative view.'*

## Section 3: Previously Identified Heritage

### Designated Heritage

- 3.1. This section details the known designated heritage assets which lies in such close proximity to the site that they might be adversely affected by redevelopment within the site itself. The section has been informed by information provided by Dorset Historic Environment Record (HER) and also available via Historic England's online National Heritage List for England.
- 3.2. A study area of a minimum of a kilometre's radius centred on the site has been considered, although assets within a wider area have been considered where topography and their nature suggested that they might be affected.
- 3.3. Wool Conservation Area is the closest to the site, but it lies more than a mile east of the site area and surrounded by later built development. Neither the conservation area, nor the listed buildings it contains or any of the small number of listed buildings elsewhere in Wool would be harmed by change within the site itself.
- 3.4. The majority of scheduled monuments considered are round barrows or prehistoric burial mounds (*tumuli*) which are of late Neolithic or Bronze Age date and would have held single or multiple burials. All survive as upstanding earthwork mounds under heathland or pasture.
- 3.5. The closest to the site lies slightly more than 100m south of the site's access road in a pasture field (Figure 1, (1)). North of the site beyond woodland and a minor road lies another such barrow on a knoll, with another circa 600m to its north west ((2) & (3)).
- 3.6. A concentration of such monuments lies west of the site, with two on high heathland at Whitcombe Hill and a total of six grouped together at the summit of Blacknoll Hill (Figure 1, (4) & (5)). West of the group on Blacknoll Hill, four further barrows are more dispersed ((6)).
- 3.7. Three other monuments within a mile of the site are scheduled and include the wholly sub-surface remains of a late Iron Age and Roman settlement south east of the site ((7)). This site lies at least 700m from the site and was identified given the recovery of daub, 'concrete' and tile during the excavation of a service trench across the area and from an enclosure visible as a cropmark on aerial photographs.
- 3.8. Only 400m south of the site, the earthwork remains of West Burton medieval settlement are also scheduled ((8)). This settlement is recorded from the 13<sup>th</sup> century, but seems to have been deserted by the 16<sup>th</sup> century, possibly due to new landowners enclosing arable land for sheep pasture. More than a mile north west of the site, an 18<sup>th</sup> century stone obelisk atop Fir Hill and in Moreton Park is both scheduled and Grade II listed ((9)).
- 3.9. All listed buildings within a mile of the site are Grade II listed. They include four groups of principally residential listed buildings in the settlements of Blacknoll, East Knighton, East Burton and Giddy Green.
- 3.10. A minimum of 500m east of the site, a number of cottages and houses, including two farmhouses, lie at East Burton and Giddy Green to its south. Most are in the local vernacular materials of cob and brick, with thatched roofs ((15) & (16)). A small 19<sup>th</sup> century church south of these is now in commercial use ((14)).

- 3.11. Below Blacknoll Hill in a valley and a minimum of a kilometre south west of the site, a number of thatched and principally cob cottages are Grade II listed and lie off Blacknoll Lane ((10)). All are thought to be late 18<sup>th</sup> or early 19<sup>th</sup> century in date.
- 3.12. South of the cottages at Blacknoll and slightly further from the site, a wider range of cottages, houses and agricultural buildings are listed at East Knighton ((11)). Again, thatch and cob predominate, although some are thought to be 17<sup>th</sup> century in origin.
- 3.13. Other Grade II listed buildings considered as part of this assessment include two farmhouses located south of the site and east of East Knighton. These are Longcutts Farm and West Burton Farm ((12) & (13)). To the north west of the site, and in the river valley, the late 18<sup>th</sup> century stone Broomhill Bridge and a slightly earlier farmhouse at Broompond Dairy were also considered ((17)).

### **Other HER Records**

- 3.14. A large number of the HER entries for the study area relate to the designated heritage assets noted above. Within or close to the actual site area, the entries appear to be limited to HER 30342 which records a Second World War bombing decoy on Winfrith Heath. These sites included arrays of lights intended to replicate important sites at night and so confuse Luftwaffe crews into dropping their bombs on the decoy area rather than nearby populated, military or industrial areas. Fire pits were often part of the decoy and were lit during raids to suggest bombs had already hit. Such sites also had hardened control buildings for the operators.
- 3.15. That the decoy site on Winfrith Heath was at least partly effective is indicated by a number of HER records to (infilled) bomb craters. The majority of other HER records for the study area record the sites of quarries or extraction pits and historical field systems and boundaries noted on old maps and from aerial photographs. Such elements are likely to be post-medieval and of limited significance.
- 3.16. There are few HER records to pre-medieval remains for the study area. Roman pottery was found north of Broomhill Bridge, but without associated features, whilst an area of prehistoric settlement lies north of the site and River Frome.

## Section 4: Documentary Sources

- 4.1. Dorset History Centre and the Historic England Archive were visited and relevant documents were consulted. These and online sources allow the history of the site and its environs to be understood to a certain degree, but definitive site specific information can be sparse.
- 4.2. The earliest map available covering the site and wider area is Isaac Taylor's 1765 map of Dorset at small-scale. This shows settlements including West Burton and East Knighton as well as Winfrith Heath between. Moreton Park and 'Broomhill Mill' are also shown. Blacknoll is noted as 'Fryer's Land' at this time.
- 4.3. The Winfrith Newburgh Tithe map of 1839 confirms that the site and large areas around it was still uncultivated heathland at the time and included 'Winfrith Heath' extending from Blacknoll to include Whitcombe Hill and much of the land where reactors were later built. 'Burton Heath' is a smaller area covering much of what is now the site and to its north and 'Knighton Heath' lay east of Blacknoll and north of East Knighton.
- 4.4. Little change is evident on the late nineteenth century and pre-war Ordnance Survey maps. The railway had been built across Burton and Winfrith heaths and all the barrows were marked as 'tumulus'. The rural settlements had similar extents to now. Post-war it is likely that the sensitive nature of AEA Winfrith would have led to Ordnance Survey maps showing the pre-war landscape.
- 4.5. However, a pamphlet produced by AEA Winfrith in 1965 includes a plan of the site as built. This confirms that the round reactor in the west was known as DRAGON and that to its south as the S.G.H.W. reactor (AEE 1965). A further, much smaller reactor complex lay east of this latter and was noted as ZEBRA reactor. A range of technical buildings are noted across the main site to the east.

### Other Sources

- 4.6. Limited further information is available from secondary sources or other documents relating to the site with the exception of the detailed pamphlet produced by AEA Winfrith in 1965, shortly after construction (AEE 1965). This obviously seeks to 'sell' the site and its cutting edge technology, established through a 1957 Act.
- 4.7. The pamphlet confirms that a thousand acres of heathland were required to create the new atomic research centre employing two thousand staff. Interestingly, the pamphlet mentions the '*quiet blending of the old and new*', with '*pastel shaded structures*'. Images suggest the landscape planting had yet to establish by 1965.
- 4.8. Placename evidence confirms that, more widely, 'Wintrode' was mentioned in the Domesday Survey and likely means 'white stream' (Mills 1977). Both Broomhill, East Knighton and both East and West Burton are documented from the 13<sup>th</sup> century. The name 'Blacknoll' is only documented from 1811, which may explain 'Fryer's Land' on Isaac Taylor's map.
- 4.9. Pevsner mentions that nuclear power stations have been a source of great public disquiet post-war, but points out that they do not produce smoke nor have power lines (sic, Newman and Pevsner 2002). He confirms that little of AEA Winfrith is visible given careful design and planting: the SGHW reactor in the south west being the principal exception. However, he is scathing about the '*run of the mill*' buildings which lay in the site itself '*standing about haphazardly*'.



- 4.10. A history of Dorset in the Second World War confirms the use of the heath for a 'decoy airfield' (Legg 2004). This apparently had moving lights and employed flares to successfully lure attacks away from Wormwell Airfield.

## Section 5: Appraisal of Site and Environs

- 5.1. The site and its environs were visited in February 2018 in order to check for recorded or other heritage features and current land use and topography. The site visit allowed consideration of designated heritage assets in the vicinity of the site to ascertain whether these might be affected by development.
- 5.2. Within the site itself, the land is a mix of open spaces where buildings were once sited and a range of 1960s' to modern structures (Plates 1 & 2). The site is also well planted with stands of trees and has a grid of surfaced roads.
- 5.3. No evidence of any Second World War elements was evident during the site visit and the decoy site was presumably cleared post-war or during the site's construction, with any bomb craters infilled.
- 5.4. East of the site, the antenna tower and buildings of Dorset Police HQ lie between the site and East Burton and Giddy Green. To the west, the land rises and contains surviving buildings of the AEA Winfrith site.
- 5.5. Beyond the site, East Burton and Giddy Green were visited and this indicated that none of these settlements' listed buildings would be adversely affected. The assets include a chapel to the south and cottages at Giddy Green, but none have a visual or other relationship with the site itself (Plates 3 & 4, sites 14 to 16). It was also clear that any listed buildings and the conservation area in Wool, further to the east, would be unaffected by any change within the site.
- 5.6. The sites of a late prehistoric and Roman settlement and West Burton medieval settlement were checked from nearby highways (sites 7 & 8). As both lie on higher ground than the site, there is potential inter-visibility with taller new structures. However, there is now no evidence of above ground features at either of these sites which lie in a much changed landscape under arable and pasture respectively.
- 5.7. A single round barrow lies between the medieval settlement site and access road to the site, but was not visible from the site's edge, with a thick hedgerow between the two (Site 1). The field in which the barrow lies is the limit of its setting which enhances its significance and an appreciation of that significance.
- 5.8. To the north of the site, two barrows lie on knolls on higher ground, but belts of woodland screen both from the site (Plate 5, sites 2 & 3). The barrows' significant setting is the field in which each lies and the valley of the Frome to their north.
- 5.9. To the north west of the site, Broomhill Bridge lies in the valley of the River Frome which it crosses (Site 17, Plate 6). The bridge's setting includes the surrounding pasture fields and river itself. The nearby listed farmhouse lies further to the north and is surrounded by related buildings and the farm's fields. It has no inter-visibility or relationship with the site.
- 5.10. The scheduled and listed obelisk atop Fir Hill can just be glimpsed on high points of the road running east west north of the site. This is the only indication of Moreton Park visible in this area. Although it is a local landmark, the obelisk cannot be viewed from the site itself and no part of it or any area beyond was ever intended to have a relationship with any part of Moreton Park.

- 5.11. A large number of prehistoric barrows lie well to the west of the site and the former AEA Winfrith too. From the vicinity of Whitcombe Hill, any views east are screened by blocks of coniferous woodland, although a large reactor building can be glimpsed (Site 4). Blacknoll Hill screens views east from the discrete barrows west of the hill (Site 6).
- 5.12. The group of six barrows atop Blacknoll Hill could not be readily distinguished in an area which is covered in heather (Site 5, Plate 7). Apparent 'mounds' under heather were inspected and proved to simply be caused by the shape of the vegetation. Within the predominantly heathland and woodland landscape visible from the hilltop, a large AEA reactor and associated pylons dominate (Plate 7). In this context, changes within the site would not affect the significance of any prehistoric barrows further.
- 5.13. Beyond Blacknoll Hill, a number of Grade II listed cottages at Blacknoll nestle in a shallow valley (Site 10). They have very limited settings constrained by topography, vegetation and later buildings and no relationship with the site area itself. Changes within the site would not harm the significance of any of these assets.
- 5.14. To the south west of the site, listed buildings in East Knighton are also at a lower elevation, but more distant from the site. All have adjacent later structures which limit their settings (Site 11, Plate 8). To the east of East Knighton itself, the listed Longcutts Farm and West Burton Farm farmhouses are also either at a lower elevation or surrounded by planting such that changes within the site would not affect either's significance.

## Section 6: Impact of Proposals

- 6.1 This heritage assessment has been prepared on behalf of Purbeck District Council to inform development at the Dorset Innovation Centre west of Wool, Dorset. This assessment accords with national and local planning policy and guidance.
- 6.2 The assessment has been informed by consultation with the Dorset Historic Environment Record and visits to Dorset History Centre in Dorchester and Historic England's Archive in Swindon. Historic England's National Heritage List for England and other online sources have complemented these sources. A walkover survey in February 2018 completed the work informing this report.
- 6.3 The site was visited, but does not contain any designated or otherwise significant heritage assets. Background research does not suggest the site has high potential for hitherto unknown sub-surface archaeological remains either.
- 6.4 The surrounding area does contain a number of designated heritage assets which include a range of scheduled monuments including prehistoric burial mounds to the west, north and south east. These small grass and heather covered round barrows are millennia old and their surroundings will have changed substantially since they were created.
- 6.5 Only a group of round barrows on Blacknoll Hill have inter-visibility with the site. However, none of these designated heritage assets is enhanced by the site area and proposed changes within it would not harm their significance or an appreciation of that significance.
- 6.6 Other scheduled monuments considered include West Burton medieval settlement remains and a late prehistoric and Roman area of sub-surface remains to the south east of the site. Again, the landscape surrounding these two has changed substantially in intervening centuries. Changes within the site, at a distance, would not affect either's significance. A lack of inter-visibility between the site and a scheduled and listed obelisk atop a hill north west of the site also precludes any harm to this monument.
- 6.7 Groups of post-medieval Grade II listed and principally domestic or agricultural listed buildings lie at Blacknoll, East Knighton, East Burton and north west of the site. These are all screened from the site by a combination of topography, other structures and vegetation. None have a designed, associative or functional relationship with the site. None has their significance or an appreciation of their significance enhanced by the site's land. In conclusion, proposed changes within the site would not harm the significance of any of these designated heritage assets.

## Section 7 References and Sources

Atomic Energy Establishment 1965 *Winfrith Heath* Winfrith

Department for Communities and Local Government (DCLG) 2012 *National Planning Policy Framework* London

English Heritage 2008 *Conservation Principles* London

Historic England 2015 *Historic Environment Good Practice Advice in Planning Note 2 – Managing Significance in Decision-Taking in the Historic Environment* London

Historic England 2017 *Historic Environment Good Practice Advice in Planning Note 3 – The Setting of Heritage Assets* London

HMSO 1990 *Planning (Listed Buildings and Conservation Areas) Act* London

Legg R. 2004 *Dorset's War Diary – Battle of Britain to D-Day* Wincanton

Mills A. D. 1977 *The Place-Names of Dorset* Cambridge

Newman J. & Pevsner N. 2002 *The Buildings of England – Dorset* New Haven

Purbeck District Council (PDC) 2012 *Planning Purbeck's Future – Purbeck Local Plan, Part 1* Wareham

Royal Commission on the Historic Monuments of England (RCHME) 1970 *An Inventory of the Historical Monuments in the County of Dorset, Volume II – South-East* London

### Maps

I. Taylor's Map of Dorset, 1765

Winfrith Newburgh Tithe map and apportionment of 1839

Six inch to the mile Ordnance Survey maps of 1902 (Sheets 49 NW & SW & 48 NE & SE)

### Web Sources

British Geological Survey Geology Viewer accessed at [www.bgs.ac.uk](http://www.bgs.ac.uk)

Historic England's National Heritage List for England accessed at [www.historic-england.org.uk/professional/protection/process/national-heritage-list-for-england](http://www.historic-england.org.uk/professional/protection/process/national-heritage-list-for-england)

OS maps of site accessed at National Library of Scotland at [www.nls.uk](http://www.nls.uk)

Purbeck District Council website accessed at [www.purbeck.gov.uk](http://www.purbeck.gov.uk)

Street Map Ordnance Survey map of site accessed at [www.streetmap.co.uk](http://www.streetmap.co.uk)

## Appendix: Gazetteer of Designated Heritage Assets

Figure/ HER Ref.	NGR (SY prefix)	Period	Notes
1 8342	8246 8629	Prehistoric	Scheduled bowl barrow of late Neolithic or Bronze Age date lying 350m NW of Gatehouse Farm. Some plough damage and now 0.5m high and 28m diameter, with now infilled ditch.
2 8344	8197 8749	Prehistoric	Scheduled bowl barrow of late Neolithic or Bronze Age date 300m SE of Hyford Cottage. Circa 15m diameter barrow on knoll has external ditch partially visible and some damage to top. 1.1m high.
3 8345	8136 8774	Prehistoric	Scheduled bowl barrow of late Neolithic or Bronze Age date 380m NW of Hyford Cottage. Circa 18m diameter barrow on knoll has external ditch partially visible and some damage to top. 1.5m high.
4 8305/06	8048 8742	Prehistoric	Two scheduled bowl barrows on Whitcombe Hill. Of 10m and 11m diameters and 0.65m and 0.8m heights respectively. May be linked to others to south (5 & 6). Ditches and outer bank remnants survive.
5 8297 & 8300 - 4	8063 8630	Prehistoric	Group of six scheduled bowl barrows on summit of Blacknoll Hill linked to others to west and north (4 & 6). The barrows range in diameter between 11 and 22m and in height between 0.75m and 1.5m and all would have had an outer ditch, albeit now infilled.
6 8298/9	8026 8622	Prehistoric	Group of four scheduled bowl barrows west of Blacknoll Hill. Linked to others to east and north (4 & 5). The barrows range in diameter between 9 and 15m and in height between 0.5m and 1m and all would have had an outer ditch, albeit now infilled. Damage to one suggests Antiquarian investigation.
7 8348	8358 8580	Roman	Scheduled site of Romano-British settlement and possibly Iron Age. Service trench revealed daub, tile and 'concrete'.
8 8290	8239 8591	Medieval	Scheduled remains of settlement at West Burton mentioned in late 13 <sup>th</sup> century and extend as earthworks under pasture across 4.5ha. Likely to have been deserted by 16 <sup>th</sup> century. Holloway joining a road between Dorchester and Wareham and at least ten tofts recorded.
9	8068 8848	18 <sup>th</sup> century	Scheduled and Grade II listed obelisk in Moreton Park sits atop planted hill and built by Captain John Houlton in 1780s. Stone, 70 feet high and surmounted by urn.
10 17315 – 23	8075 8615	Post- medieval	Total of five Grade II listed cottages and houses at Blacknoll. Most cob walled, thatch roofed with brick stacks. Most thought to be late 18 <sup>th</sup> or early 19 <sup>th</sup> century in date and includes terrace at 87 to 92 Blacknoll Lane.
11 17342, 48	8120 8555	Post- medieval	Numerous Grade II listed buildings at East Knighton include East Knighton farmhouse to east of village centre. Most structures are thatched and of stone, cob or brick and range from 17 <sup>th</sup> to 19 <sup>th</sup> century in date.
12	8152 8572	17 <sup>th</sup> century	Longcutts Farm farmhouse is Grade II listed and of stone, brick and with a thatched roof. One and a half storeys and later extensions.
13	8202 8953	18 <sup>th</sup> century	West Burton Farm farmhouse is Grade II listed brick and tile roofed building dated to 1714.
14	8318 8649	19 <sup>th</sup> century	Converted former church dates to 1839 and is Grade II listed in stone and slate roofed. Sites in walled churchyard with headstones within and is now in use as café.
15	8317 8659	18 <sup>th</sup> /19 <sup>th</sup> century	Three Grade II thatched cottages at Giddy Green with cob and brick walls and including 'Dizzy', 'Giddy' and 'Church' cottages.
16	8311 8700	Post- medieval	Group of Grade II cottages and two farmhouses at East Burton are principally cob and thatch and include also a brick, stone and tile barn. Thought to be 18 <sup>th</sup> or early 19 <sup>th</sup> century in origin.
17 7844	8105 8808	18 <sup>th</sup> century	Stone Broomhill Bridge of 1769 and 1738 Broom Pound Dairy to its north are both Grade II listed. Farmhouse is of brick and thatched.

# Plates



Plate 1: View northwards within site area



Plate 2: Original office block within site





Plate 3: Former church at Giddy Green



Plate 4: Typical cottages at Giddy Green



Plate 5: Scheduled round barrow north of site



Plate 6: Listed Broomhill Bridge

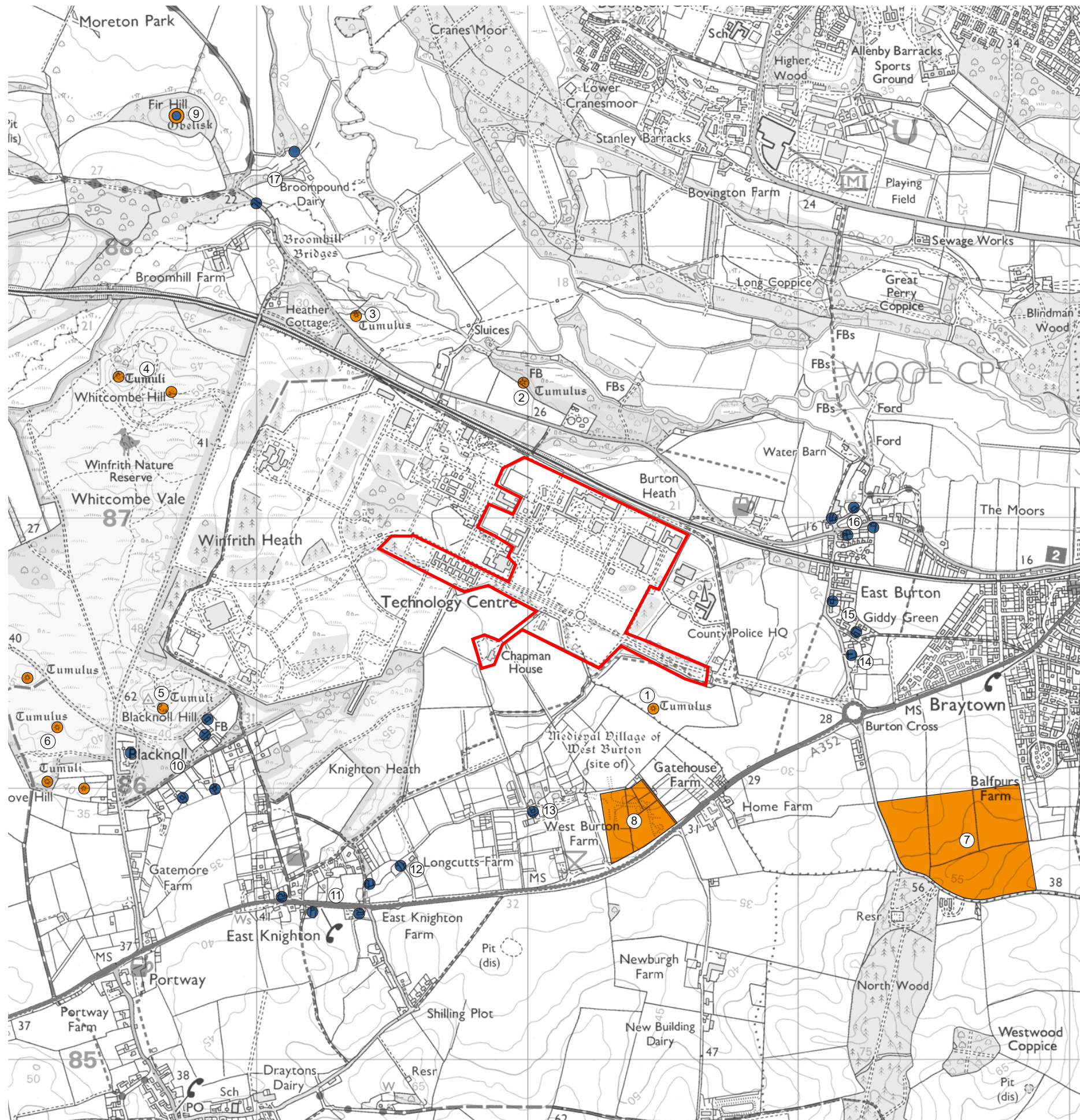


Plate 7: View of AEA Winfrith reactor from Blacknoll Hill



Plate 8: Listed cottages in East Knighton

## Figure 1: Identified Designated Heritage



- KEY
- Site boundary
  - ① Scheduled monument
  - ⑭ Listed building



Project Dorset Innovation Centre

Drawing Title **Figure 1: Identified Designated Heritage**

Scale As shown (approximate at A3)

Drawing No. BSA 1779/1

Date March 2018

Checked BS/KJ

**BSA** Archaeology & Historic Environment  
HERITAGE Consultancy

7 Spring Gardens, Abingdon, Oxon, OX14 1AZ  
T: 01235 536 754 E: info@bsaheritage.co.uk W: www.bsaheritage.co.uk

# Plans

---

**Plan 1:** Topography

11286/P01 January 2018

**Plan 2:** Zone of Theoretic Visibility (ZTV)

11286/P02 January 2018

**Plan 3:** Photoviewpoint Locations and Field Verified Visual Envelope

11286/P03 January 2018

**Plan 4:** Landscape Character

11286/P04 January 2018

**Plan 5:** Landscape Planning Policies

11286/P05 January 2018

**Plan 6:** Landscape Analysis

11286/P06 February 2018

**Plan 7:** Photoviewpoints 1-21

11286/P07 February 2018

