

## 2 Design Evolution & Alternatives

### 2.1 Introduction

- 2.1.1 Chapter 2: Design Evolution and Alternatives of the EIA Report October 2023 describes the site selection, design evolution and consideration of alternatives, and the content of that chapter remains valid. The design strategy for the original proposed development is to balance achieving maximum energy yield whilst sensitively locating the wind turbines and the infrastructure required to facilitate the construction and operation of the original proposed development. The design strategy for the revised proposed development remains the same as set out in the EIA Report October 2023.
- 2.1.2 This AEI Report chapter sets out additional information in relation to changes made to the design of the revised proposed development following consultee responses received in relation to the section 36 application.
- 2.1.3 This chapter is supported by the following figures:
- **AEI Figure 2.1:** Turbine Layout Evolution
  - **AEI Figure 2.2:** Evolution of the Proposed Development
  - **AEI Figure 2.3:** Combined Constraints & Infrastructure Layout
  - **AEI Figure 2.4:** Viewpoint H1 – Longcroft, Fort (SM372) Illustrative Schemes Comparison
  - **AEI Figure 2.5:** Viewpoint H2 – Addinston, Fort (SM362) Illustrative Schemes Comparison
  - **AEI Figure 2.6:** Viewpoint H3 – Glenburnie, Fort (SM4473) Illustrative Schemes Comparison
  - **AEI Figure 2.7:** Viewpoint H9 – Blackchester, Fort (SM362) Illustrative Schemes Comparison

### 2.2 Design Changes to the Proposed Development

- 2.2.1 In February 2024, Historic Environment Scotland (HES) objected to the original proposed development on the grounds of adverse impact on the integrity of the setting of Addinston, Fort (SM362), Longcroft, Fort (SM372), Glenburnie, Fort (SM4473) and Longcroft Hill, Homestead (SM4480). HES considered that the original proposed development would affect the understanding, appreciation and experience of these scheduled monuments, which would amount to significant adverse impacts on the integrity of the setting of each asset. Whilst HES considered that a number of assets would be impacted by the original proposed development, they considered the greatest impact would be on the assets identified above.
- 2.2.2 The applicant subsequently reviewed the comments raised by HES and, as part of a post-submission design process, the opportunity has been taken to modify the layout, reducing it from a 19 wind turbine development to a 12 wind turbine development, which comprises the revised proposed development as shown in **AEI Figure 2.1**. The proposed wind turbine deletions comprise wind turbines T1 - T4 and T17 - T19, which were identified by HES as being of key concern.
- 2.2.3 **AEI Figure 2.2** presents the changes in the wind turbine and infrastructure layout between the original proposed development and the revised proposed development. **AEI Figure 2.3** presents the

revised proposed development overlain with the site constraints as described in Chapter 2: Design Evolution and Alternatives of the EIA Report October 2023.

- 2.2.4 A series of comparative wireline figures (**AEI Figures 2.4 – 2.7**) have been prepared to support this chapter, which are not fully compliant with NatureScot guidance *Visual Representations of Wind Farms* (Version 2.4, February 2017). This departure from best practice arises from a specific requirement to depict a greater vertical field of view than that permitted under the NatureScot guidance. This is necessary in order to illustrate the revisions to the original proposed development in the context of the assets identified above. Despite not conforming to all technical specifications, the visualisations remain accurate, providing an appropriate basis for the identification and understanding of the landscape around the revised proposed development. Fully compliant wirelines and photomontages are also provided as part of **AEI Chapter 7: Cultural Heritage & Archaeology**, which have been created from a 3-dimensional model of the revised proposed development.
- 2.2.5 **AEI Chapter 7: Cultural Heritage & Archaeology** provides a summary of assessment of the original proposed development, design amendments, a summary of HES' comments and an assessment of the revised proposed development for each of the assets listed above. Outline Biodiversity Enhancement and Restoration Plan
- 2.2.6 Beyond the layout design change and reduction of wind turbines described above, in line with HES's comments on the 24<sup>th</sup> of February 2024, revision to **AEI TA8.6** has respected the original 500 m buffer to the assets with no enhancement of biodiversity proposed within this buffer. Further to this, temporary fencing is proposed within 50 m of the assets within the site to ensure no accidental damage occurs during construction.