

6 BUILT HERITAGE

6.1 Introduction

- 6.1.1 This chapter provides an assessment of built heritage receptors on the application site and considers the impacts of the development proposal as described in chapter 2 of this Environmental Statement (ES).
- 6.1.2 This built heritage chapter is an updated version that is submitted in respect of appeal reference CAS-02641-G8G7M5 in September 2024. It addresses the comments made by PEDW in its *ES Completeness Report* issued in June 2023. The updates in relation to built heritage are:
- The baseline has been reviewed it has been deemed that no update is required;
 - The *ES Completeness Report* did not identify any built heritage matters for update;
 - The assessment of effects has been reviewed and updated as necessary in light of any updates to the baseline and EIA guidelines; and
 - The cumulative effects assessment in relation to built heritage matters has been updated to consider the current position.
- 6.1.3 Built heritage can include a wide range of features resulting from human intervention in the landscape and can be summarised as below:
- Conservation Areas (statutory);
 - Listed Buildings (Grades I, II* and II) (statutory);
 - Locally listed and non-designated built heritage assets (non-statutory); and
 - Registered and non-statutory Parks and Gardens.
- 6.1.4 Registered and non-statutory Parks and Gardens, Historic Battlefields, Shipwrecks and World Heritage sites are not considered within this chapter as no such designated assets lie within, or adjacent, to the application site.

6.2 Methodology and Assessment Criteria

- 6.2.1 This section provides an assessment of the method(s) used to establish the baseline and sources of baseline data.
- 6.2.2 Assessment of impact on built heritage resources of the development proposal has been conducted in line with the latest and most comprehensive guidance. These documents do not provide a prescriptive approach to assessment but identify principles and good practice that have been applied in the methodology for this assessment. These documents comprise:
- Technical Advice Note 24: The Historic Environment (TAN24: Welsh Government 2017);
 - Conservation Principles for the Sustainable Management of the Historic Environment in Wales (Welsh Assembly Government, published by Cadw in 2011);
 - Setting of Heritage Assets in Wales (May 2017); and,
 - Heritage Impact Assessment in Wales (May 2017).
- 6.2.3 This chapter describes the methods used to establish baseline conditions currently existing on the application site; the methodology used to determine potential impacts and the mitigation measures required to prevent, reduce or offset (where possible) any significant adverse impacts; and the likely residual impacts after these measures have been implemented.

- 6.2.4 Previous and recent field studies implemented within the application site have been used to inform the preparation of this chapter. This comprises:
- Built Heritage Statement (CgMs 2019; ref JCH00781 and contained at **Appendix 6.1**);
- 6.2.5 The determination of the magnitude of change is based on the level of effect of the development proposal upon built heritage receptors e.g. alteration to views or experience; and the current state of survival/condition of the asset e.g. the nature of past development or management effects.
- 6.2.6 Development impacts can be characterised as to whether they would be:
- Direct or Indirect or secondary impacts;
 - Short, medium or Long Term;
 - **P**ermanent or temporary; and/or
 - Cumulative.
- 6.2.7 The magnitude of impact is assessed by taking into consideration the extent/proportion of the site/receptor affected, its type, its survival/condition, its fragility/vulnerability and its potential amenity value. In considering the above factors the criteria for assessing the magnitude of predicted change on cultural heritage receptors are given in Table 6.1 which is set out in the Design Manual for Roads and Bridges (2007 Vol 11 Section 3 Part 2).

Table 6.1: Criteria for assessing magnitude of change on assets

Magnitude of Change	Definition
High	Change to key historic building elements, such that the resource is totally altered. Comprehensive changes to the setting.
Moderate	Change to many key historic building elements, such that the resource is significantly modified. Changes to the setting of an historic building, such that it is significantly modified.
Minor	Change to key historic building elements, such that the asset is slightly different. Change to setting of an historic building, such that it is noticeably changed.
Negligible	Slight changes to historic buildings elements or setting that hardly affect it.
No Change	No change to fabric or setting.

- 6.2.8 The sensitivity of the built heritage receptor will depend on factors such as the condition of the site/receptor and the perceived heritage value/importance of the site/asset. The sensitivity of the asset (built heritage receptor) is defined by its importance in terms of national, regional or local statutory or non-statutory protection and grading of the asset.

- 6.2.9 Determination of the significance of heritage receptors takes account of existing statutory designations and, for non-designated heritage receptors, professional judgement. For built heritage the assessment of value is based upon the Design Manual for Roads and Bridges (2007) and the application of professional judgement. Table 6.2 sets out the criteria for assessing sensitivity.

Table 6.2: Criteria for assessing sensitivity of assets

Sensitivity	Definition
Very High	World Heritage Sites;
High	Scheduled Monuments; Grade I and II * Listed Buildings and their settings; Grade I and II* Registered Historic Landscapes and their settings.
Medium	Grade II Listed Buildings and their settings Grade II Registered Historic Landscape and their settings Conservation Areas
Low	Local Authority designated buildings of local importance

- 6.2.10 The sensitivity of the receiving environment, together with the magnitude of change, defines the significance of the impact as set out in Table 6.3 below. This table and methodology sit broadly in accordance with the Design Manual for Roads and Bridges. However, only impacts of major significance and moderate significance are considered to equate to significant impacts in the context of EIA Regulations. Assessment of the effect of development on the setting of heritage assets follows Setting of Heritage Assets in Wales (May 2017) guidance.

Table 6.3: Determination of significance of effect

Sensitivity	Magnitude of Change				
	No change	Negligible	Minor	Moderate	Major
Very High	Neutral	Neutral	Minor/ Moderate	Moderate /Major	Major
High	Neutral	Neutral	Minor/ Neutral	Minor/ Moderate	Moderate/ Major
Medium	Neutral	Neutral	Neutral	Minor	Minor/ Moderate
Low	Neutral	Neutral	Neutral	Neutral	Neutral/ Minor
Negligible	Neutral	Neutral	Neutral	Neutral	Neutral

- 6.2.11 For the purposes of this EIA the impact significance criteria are described as follows:
- Major Significance: Extremely noteworthy or material;
 - Moderate Significance: Noteworthy, material;
 - Minor Significance: Not noteworthy or material;
 - Neutral Significance: effects which are not considered to be material to the decision-making process;
- 6.2.12 Please note that identified levels of harm for each built heritage receptor in the baseline Built Heritage Statement at **Appendix 6.1** relates to the magnitude of change in this ES chapter and not significance of effect.
- 6.2.13 Climate change and population and human health have been considered as part of this ES chapter and it is determined that none are relevant in respect of built heritage and no further consideration will be given to these issues in this chapter.

6.3 Legislative and Policy Context

National Planning Legislation and Policy

- 6.3.1 Planning policy and guidance provides advice concerning how the historic environment should be addressed within the planning process. This is set out in detail within **Appendix 6.1**.
- 6.3.2 Where any development may affect designated heritage assets, there is a legislative framework to ensure proposed works are developed and considered with due regard to their impact on the historic environment. This extends from primary legislation under the Planning (Listed Buildings and Conservation Areas) Act 1990 and the Planning (Listed Buildings and Conservation Areas) (Wales) (Amendment No.2) Regulations 2017 and the Historic Environment (Wales) Act 2016. Within the Planning (Listed Buildings and Conservation Areas) Act 1990, Section 66(1) states that special regard must be given by the planning authority in the exercise of planning functions to the desirability of preserving listed buildings and their setting.
- 6.3.3 Additionally, Section 72 of the 1990 Act states that in exercising all planning functions, local planning authorities must pay special attention to the desirability of preserving or enhancing conservation areas, with this duty applying to any buildings or land within a conservation area.
- 6.3.4 The principal national planning policy relevant to this assessment is Planning Policy Wales (Edition 12, Welsh Government, February 2024), (PPW12). Chapter 6 of PPW12 (Distinctive and Natural Places) includes a section (6.1) on The Historic Environment. This establishes Welsh Government objectives with regard to the protection of the historic environment and explains that responsibility for caring for the historic environment lies with all those that have an interest in the planning system. In summary section 6.1 defines the objectives regarding the historic environment as follows:
- protect the Outstanding Universal Value of the World Heritage Sites;
 - conserve archaeological remains, both for their own sake and for their role in education, leisure and the economy;
 - safeguard the character of historic buildings and manage change so that their special architectural and historic interest is preserved;
 - preserve or enhance the character or appearance of conservation areas, while at the same time helping them remain vibrant and prosperous;
 - preserve the special interest of sites on the register of historic parks and gardens; and

- protect areas on the register of historic landscapes in Wales.

- 6.3.5 In relation to built heritage, Paragraph 6.1.9 states that any planning decisions must fully consider the impact on the historic environment and on the significance of individual heritage assets and their contribution to the character of place. Further, in Paragraph 6.1.10 there should be a general presumption in favour of the preservation or enhancement of a listed building and its setting, which might extend beyond its curtilage. It advises that for any development proposal affecting a listed building or its setting, the primary material consideration is the statutory requirement to have special regard to the desirability of preserving the building, its setting or any features of special architectural or historic interest which it possesses.
- 6.3.6 Concerning conservation areas, Paragraph 6.1.14 states that there should be a general presumption in favour of the preservation or enhancement of the character or appearance of a conservation area or its setting. Paragraph 6.1.15 states that there will be a strong presumption against the granting of planning permission for developments which damage the character or appearance of a conservation area or its setting to an unacceptable level. This section does however note that in exceptional cases, the presumption may be overridden in favour of development considered desirable on public interest grounds.
- 6.3.7 Paragraph 6.1.29 concerns the impact of proposals on non-designated heritage assets. It states that planning authorities may develop lists of historic assets of local interest that do not have statutory protection. Where a planning authority chooses to identify historic assets of special local interest, policies for the conservation and enhancement of those assets must be included in the development plan and will be a material consideration when determining an application.

Local Planning Policy

- 6.3.8 The Vale of Glamorgan Local Development Plan 2011-2026 (June 2017) currently sets the long-term planning and land use policies for the area.
- 6.3.9 The following policies are contained within the Local Development Plan documents, and are relevant to this assessment:

Policy SP10 - Built and Natural Environment

Development proposals must preserve and where appropriate enhance the rich and diverse built and natural environment and heritage of the Vale of Glamorgan including:

- 1. The architectural and / or historic qualities of buildings or conservation areas, including locally listed buildings;*
- 2. Historic landscapes, parks and gardens;*
- 3. Special landscape areas;*
- 4. The Glamorgan Heritage Coast;*
- 5. Sites designated for their local, national and European nature conservation importance; and*
- 6. Important archaeological and geological features.*

Policy MG10 - St Athan - Cardiff Airport Enterprise Zone

Land is allocated adjacent to Cardiff Airport and Port Road, Rhooose (77 ha) and at the aerospace business park St Athan (305ha) for the development of 382 hectares of strategic employment land (class B1, B2 and B8) forming part of the St Athan – Cardiff Airport Enterprise Zone.

The development of the enterprise zone will be guided by a masterplan to include the following elements:

- The refurbishment of the existing 70,000 sqm hanger at St Athan (17.95 ha);
- An aerospace business park north and south of the runway at St Athan;
- A business park for aviation support services at Picketston (11.79 ha);
- A new northern access road at the St Athan Enterprise Zone (Policy MG16 refers);
- New aerospace, education, research and development, manufacturing, office and other ancillary development at the Cardiff Airport and gateway development zone (77 ha);
- A 42-hectare extension to Porthkerry Country Park (Policy MG28 refers);
- Provision of sustainable transport infrastructure; and
- The incorporation of sustainable energy centre at the Cardiff Airport and gateway development zone.

Policy MD8 - Historic Environment

Development proposals must protect the qualities of the built and historic environment of the Vale of Glamorgan, specifically [inter alia]:

1. Within conservation areas, development proposals must preserve or enhance the character or appearance of the area;
2. For listed and locally listed buildings, development proposals must preserve or enhance the building, its setting and any features of significance it possesses.

6.4 Existing Baseline Conditions

- 6.4.1 The results of previous field study conducted within the application site has served to investigate and identify its potential to contain built heritage receptors of interest, and the detailed results of the survey work is presented at **Appendix 6.1** of this ES. Accordingly, this section of the ES summarises those resources identified.
- 6.4.2 Accompanying this ES chapter, therefore, are the following Figures and Appendices:
- **Figure 6.1:** Built Heritage Receptors Plan; and
 - **Appendix 6.1:** Built Heritage Statement (CgMs/RPS ref. JCH00781 June 2019).

Consultation

- 6.4.3 A summary of all consultations held with stakeholders or consultees (such as the local planning authority) to inform this assessment is provided in Table 6.4.

Table 6.4: Consultation Responses Relevant to this Chapter

Date	Consultee and Issues Raised	How/ Where Addressed
May 2019	Vale of Glamorgan Council Screening Opinion	Built Heritage Statement prepared and enclosed at Appendix 6.1

- 6.4.4 The Scoping Opinion from the Vale of Glamorgan Council (dated 1st May 2019) states in relation to built heritage that:

“It is possible that the development would be visible from some of the several Ancient Monument sites that lie within a 5km radius of the site and this impact will require further

consideration. The visual impact would be permanent, with limited mitigation by way of screening for the tallest parts of the development from the most wide-ranging views. There would also be some cumulative impact with the other built development that surrounds Cardiff Airport. The views are, nevertheless likely to be distant in nature.

There are several other structures and areas in relative close proximity to the site that, although not sensitive as defined by the EIA Regulations, are of significance and could be affected permanently. It would be possible to reduce the likely impact through high quality design, by adopting appropriate scale parameters, layout and landscaping. The listed buildings at Upper and Lower Porthkerry Farmhouse are of particular sensitivity given their proximity to the site.

These listed buildings are examples of traditional rural farmhouses and agricultural buildings. Further assessment of the extent of their setting would be required; however the allocation of land to extend Porthkerry Country Park is likely to ensure that a significant degree of the openness and the rural character to their settings can be retained. This impact clearly requires further consideration, as well as the extent to which the development would be visible from part of the Porthkerry Conservation Area, which is at a distance of some 700m.

It is indicated that a Built Heritage Statement would be submitted as part of a planning application. The statement would address the significance of these historic assets and their settings and the extent of impact from the development, including the potential for mitigation. In view of the aforementioned size, density and overall scale of the development this impact is considered to also require EIA”.

- 6.4.5 Please note any assessment of Scheduled Monuments has been undertaken as part of the Archaeological Desk Based Assessment prepared by CgMs (ref. JAC24500, dated June 2019) which has been submitted as part of this wider planning application. The baseline Built Heritage Statement does not assess any impacts upon the significance of Scheduled Monuments and correspondingly this Built Heritage ES chapter also has not assessed these heritage receptors.
- 6.4.6 Designated and non-designated built heritage assets are identified in the baseline report and are presented in detail in **Appendix 6.1** (Built Heritage Statement). Within this baseline report the scope of the assessment is also set out and should be referred to. Please note that the baseline report identified that the significance of the Porthkerry Viaduct would not be materially impacted by the development proposal. As such, and to avoid unnecessary repetition, it will not be considered as part of this Built Heritage ES chapter.
- 6.4.7 The built heritage receptors potentially affected are illustrated in **Figure 6.1** and are also set out below in Table 6.5. Table 6.5 sets out the identified sensitivity of assets to change at the application site identified by the baseline conditions in accordance with the defined criteria for assessing sensitivity as set out in Table 6.3 above:

Table 6.5 – Designated Heritage Assets Considered within this Section

Heritage Receptor Reference	Title	Designation	Sensitivity
HB1	Lower Porthkerry Farmhouse (Cadw ref. 19576)	Grade II	Medium

HB2	Upper Porthkerry Farmhouse (Cadw ref. 13621)	Grade II	Medium
HB3	Upper Porthkerry Farmhouse Stables (County Treasure ref. 475),	Non-designated heritage asset	Low
HB4	Church Farmhouse (Cadw ref. 83147)	Grade II*	High
HB5	Outbuilding north of Church Farmhouse (Cadw ref. 83157)	Grade II*	High
HB6	Church of St Curig (Cadw ref. 13619)	Grade II*	High
HB7	Porthkerry Conservation Area	Conservation Area	Medium
HB8	Former Egerton Grey House Hotel	Non-designated heritage asset	Low

6.4.8 Several of the built heritage receptors have a largely shared and overlapping setting, particularly in how they are experienced relative to the application site, given their close proximity and/or functional associations. To avoid repetition these will be considered collectively where relevant. These comprise the Grade II* Church Farmhouse and associated Grade II* listed Outbuilding which will be considered under the title *Church Farmhouse Grouping*. The Grade II listed Lower Porthkerry Farmhouse and Upper Porthkerry Farmhouse and the former stables (locally listed) all sit within close proximity and share broadly the same setting. All three will be considered under the title *Porthkerry Farmhouse Grouping*.

6.5 Identification and Evaluation of Effects

6.5.1 A full description and drawings detailing the development proposal are presented in chapter 2 of the ES. In summary the development proposal comprises:

“Hybrid application comprising demolition of existing buildings and erection of 44.75ha Class B1/B2/B8 Business Park, car parking, landscaping, drainage infrastructure, ecological mitigation and ancillary works (all matters reserved aside from access) within Area A and change of use from agricultural land to country park (Use Class D2) within Area B”

6.5.2 On the basis of the proposals, sources of impacts on built heritage receptors may include:

- General hard and soft landscaping of the site;
- Increased traffic and construction noise;
- General construction site character; and
- Setting impacts.

- 6.5.3 This section examines the impacts of the development proposal on built heritage receptors during the 'construction' and 'operational' phases of the development (adverse, neutral or beneficial). It considers both direct, indirect and secondary impacts that may result from development proposal.
- 6.5.4 Indirect impacts of development proposal are considered in the context of their effects on the historic contextual setting of identified built heritage receptors.

Construction Effects

- 6.5.5 This section examines the effect of the development proposal on built heritage receptors during construction. During the construction phase, groundworks, landscaping and ancillary works and structures have an effect on the setting of built heritage receptors. Accordingly, an adverse effect on heritage receptors would result without appropriate mitigation.
- 6.5.6 The construction of the development proposal would have no direct impact upon the Grade II listed Porthkerry Farmhouse Grouping (HB1, HB2 and HB3), to the south of the application site. Nonetheless effects can arise due to changes to the setting of such receptors through, in this case, groundworks, which would result in increased construction traffic, dust, visual impacts and background noise. Most impact would be felt from the south-western reaches of the application site closest to the receptors. Both Upper and Lower Porthkerry Farmhouses are identified as being of medium sensitivity and the stables associated with Upper Porthkerry Farmhouse, Low sensitivity. The magnitude of the impact is deemed to be Moderate. The effect will, therefore, be of temporary short-term Minor adverse significance, for both Upper and Lower Porthkerry Farmhouses (HB1 and HB2) and for the Stables (HB3), temporary short-term neutral significance of effect, all of which are not significant in EIA terms. This would arise from short term adverse significance of effects from noise, dust and construction traffic.
- 6.5.7 The construction phase of the development proposal will have no direct impacts upon the Grade II* listed Church Farmhouse and associated Grade II* Outbuilding (HB4 & HB5). These receptors are noted as being of high sensitivity. The magnitude of impact is deemed to be minor, and the effect will therefore be a temporary short-term minor/neutral adverse significance which is not significant in EIA terms. Any magnitude of impact would arise from the short-term visual impacts such as traffic movement, possible noise and temporary site structures.
- 6.5.8 The development proposal will have no direct impacts upon the Grade II* Church of St Curig (HB6). This receptor is noted as being of high sensitivity. There will be some limited intervisibility with construction activity on the application site and this will result in a negligible magnitude of impact, and this will equate to a temporary short-term neutral significance of effect arising from the development proposal. This is not significant in EIA terms.
- 6.5.9 The development proposal will have no direct impact upon Porthkerry Conservation Area (HB7). The receptor is noted as being of medium sensitivity. There will likely be some noise and visual disturbance arising from the development works. This will however be viewed in the context of the intervening agricultural land and relative distance from the Site. The magnitude of impact arising from the development proposal will be moderate giving rise to a temporary short-term minor significance of effect. This is not significant in EIA terms.
- 6.5.10 The former Egerton Grey House Hotel will not be physically impacted by the development proposal. The receptor is noted as being of Low sensitivity (HB8). The construction activity on the application site is likely to equate to a Minor magnitude of change arising from construction noise and visual activity but viewed within the context of the relative distance and intervening screening. As such the impact from the development proposal will result in a temporary short-term neutral significance of effect. This is not significant in EIA terms.

Operational Effects

- 6.5.11 This section examines the effect of development proposal on built heritage assets once constructed; during the operation phase. During the operational phase, potential impacts may

arise through changes to the setting through built form, additional noise and light pollution. Accordingly, an adverse effect on built heritage receptors would result without appropriate mitigation.

- 6.5.12 The proximity of the business park to the Porthkerry Farmhouse Grouping (HB1, HB2 & HB3) means that it will be very visible viewing from the receptors and in views incorporating the receptors. This also includes the receptors being relatively close to the four and five-storey built development areas within the proposed business park. Limited vegetation screening is proposed between the receptors and the development proposal at its closest point along Porthkerry Road. Additional traffic may arise from the proposed commercial development as well as additional light spill. Both Lower and Upper Porthkerry Farmhouses are noted as being of Medium sensitivity. The Stables associated with Upper Porthkerry Farmhouse is noted as being of Low Sensitivity. The operational development on Site will equate to a Moderate magnitude of change for Lower and Upper Porthkerry Farmhouses and a minor magnitude of change for the Stables. This will result in a permanent long-term minor adverse significance of effect for Lower and Upper Porthkerry Farmhouses. This is not significant in EIA terms. For the Stables this will result in a permanent long-term Neutral significance of effect. This is not significant in EIA terms.
- 6.5.13 The operational phase of the development proposal will have no direct effect upon Church Farmhouse and associated Outbuilding (HB4 & HB5). Both built heritage receptors are identified as being High sensitivity. There will be intervisibility between the built heritage receptors and the operational development bringing an urbanised landscape closer to the receptors both visually and also in light spill. This will be partially offset over time with the screening provided by the additional proposed woodland planting, though there is still likely to be some intervisibility with the proposed built development. This will equate to a Minor magnitude of change and will result in a permanent long-term Minor/neutral adverse significance of effect for both receptors. This is not significant in EIA terms.
- 6.5.14 The operational phase of the development will have no direct effect upon the Church of St Curig (HB6). The receptor is identified as being High sensitivity. There will be some intervisibility between the church and the development proposal which will bring the urbanised extent currently limited to the airport, closer to the settlement of Porthkerry. Alongside the visual changes, this will likely introduce additional light spill. Proposed additional woodland planting complementing existing woodland will help over time to screen the proposed built development. This will equate to a negligible magnitude of change and will result in a permanent long-term neutral significance of effect. This is not significant in EIA terms.
- 6.5.15 The operational phase will have no physical effect upon the Porthkerry Conservation Area (HB7). The development proposal will be visible in the wider setting of the conservation area, and this will lessen the perceived rurality in bringing visible built development closer to the designation and furthermore introducing additional light spill. The additional woodland planting proposed will go some way to providing screening over time, though it is likely that there will still be some intervisibility. There will however be a buffer of retained land comprising the country park extension intervening. The receptor is identified as being medium sensitivity. The development proposal at operational phase will equate to a moderate magnitude of change and will result in a permanent long-term minor significance of effect. This is not significant in EIA terms.
- 6.5.16 The operational phase will have no physical effect upon the Former Egerton Grey House Hotel (HB8). Given the degree of screening around the house from mature tree planting there are limited views of the property however from the private grounds it is likely that there will be views of the development proposal and additional light spill. It will bring an urbanised environment closer to the receptor. This will be offset to a degree by the proposed woodland planting notably to the north of the receptor. This receptor is identified as being of Low sensitivity. The development proposal will equate to a minor magnitude of change and a permanent long-term neutral significance of effect. This is not significant in EIA terms.

6.6 Mitigation Measures

- 6.6.1 No mitigation in addition to those built-in design measures already accounted for are identified that would serve to reduce or off-set the low adverse significance of effect of development proposal on the built heritage receptors at Construction and Operational Phases.
- 6.6.2 This chapter has been brought forward with joint input from landscape consultants throughout the evolution of the development proposal and necessarily all mitigation is integrated and aligned to respond to this joint disciplinary work and the effects are respectively a cross-discipline response to any impacts.

Construction Phase

- 6.6.3 For built heritage receptors identified no mitigation in addition to those measures already accounted for will be identified that would serve to reduce or off-set the low adverse significance of effect of development proposal on the built heritage receptors at Construction Phase.

Operational Phase

- 6.6.4 For built heritage receptors identified no mitigation in addition to those measures already accounted for will be identified that would serve to reduce or off-set the low adverse significance of effect of development proposal on the built heritage receptors at Operational Phases.

6.7 Residual Effects

- 6.7.1 This section provides a description and assessment of the scale and significance of any effects that will remain after the proposed mitigation/design measures are applied.
- 6.7.2 No significant effects are identified and correspondingly no additional mitigation measures are proposed. In respect of residual effects there will be no change to the significance of effect for all identified built heritage receptors.

6.8 Risk of Accidents or Disasters

- 6.8.1 There are no anticipated accidents or disasters which would affect identified archaeological or built heritage assets.

6.9 Climate Change

- 6.9.1 The Met Office UK Carbon Projections ('UKCP18') dataset provides probabilistic projections of change in climatic parameters over time for 25 km grid squares across the UK. Projected changes during low, medium and high future global greenhouse gas emissions scenarios have been reviewed for the period from 2020 up to 2069, encompassing the potential construction and operational periods of the development.
- 6.9.2 The likely ranges of change in climatic parameters including precipitation, temperature, wind speed, humidity and frequency of extreme weather may affect the native flora. However, while this would not increase the sensitivity of built heritage receptors, it may affect the magnitude of impact, e.g. the development may be more visible from receptors where they are entirely screened or only have semi-screened views at present. As this aspect of the effects of climate change is uncertain, it is difficult to predict the significance of effect. Where there are known issues such as ash die back, where trees loss is likely to increase in the future, mitigation through new proposed planting in the form of native species mixes has avoided selection of vulnerable species like ash to avoid a reduction in visual screening which may potentially occur.

6.10 Cumulative Effects

- 6.10.1 Whilst this assessment concentrates on the environmental effects on built heritage receptors by the development itself, consideration must also be given to the cumulative effects of the development on the application site in relation to other proposed schemes within its vicinity.
- 6.10.2 Of the Cumulative Schemes listed in the 'Compiled Cumulative Assessment', the overwhelming majority have no effect on the sensitivity of the identified built heritage receptors. Such examples include those Cumulative Schemes located in Rhose and further west, and those in Barry to the east. The former are wholly screened from the identified receptors by Cardiff Airport and the latter are screened from the identified built heritage receptors by elevated topography south of New Farm and existing built form in Barry.
- 6.10.3 The application site is part of the wider 'Gateway Development Zone' allocation under Policy MG10 of the Vale of Glamorgan Local Development Plan 2011-2026 (June 2017) and accordingly consideration should be given to any cumulative effects that may arise from any further development of land outside of the application site but within this Development Zone. Listed Cumulative Schemes that potentially have an effect on the sensitivity of the identified built heritage receptors fall within the Gateway Development Zones and include:
- Ref Site 361: Land at Port Road, Rhose; and
 - Ref 2022/00660/SC1 Cardiff and Vale College Advanced Technology centre at Cardiff Airport.
- 6.10.4 Site 361 Land at Port Road, Rhose, currently a Stage 1 Candidate Site, is located to the north of the application site on the north-western side of Port Road. At its closest it is c.15, from the application site and is 2.67ha in area. It is positioned east of Blackton Lane adjacent to the grounds of the Celtic International Hotel to the northeast. As such, this site is largely screened from (by hedgerows, woodland and sloping topography) and distant from the identified built heritage receptors within the application site.
- 6.10.5 The nearest receptor is Lower Porthkerry Farm HB1 c.750m to the south. This is screened by hedgerows, woodland and by parts of the sloping topography. It is concluded that this potential cumulative site will deliver no cumulative effects with the application site; as such, any associated cumulative magnitude of change would be **No change**.
- 6.10.6 The site for planning application 2022/00660/SC1 Cardiff and Vale College Advanced Technology centre at Cardiff Airport, is positioned on the north-western side of Port Road on the north-eastern side of Cardiff Airport and, specifically, Cardiff Airport Business Park. The site of the Holiday Inn Express hotel, at the north-western corner of the application site, is to the immediate south. As such, this site is largely screened by the roadside hedgerows and is distant from the identified built heritage receptors within the application site.
- 6.10.7 The nearest receptor is Lower Porthkerry Farm HB1 c.650m to the south. This is screened in part by hedgerows and by parts of the sloping topography (with likely limited filtered views of the development from the receptor). It is also partly screened by the hotel site next to the application site's north-western corner. Though this development will be seen in some filtered views from parts of the north-western portion of the application site and potentially from built heritage receptor HB1, it is concluded that this potential cumulative site will deliver a low level of cumulative effects with the application site; as such, the associated cumulative magnitude of change would be **Minor Adverse** which, for this receptor, would not be significant.
- 6.10.8 In summary, the only Cumulative Scheme that is likely to result in a change of effect is the outline planning application for the Cardiff and Vale College Advanced Technology centre at Cardiff Airport 2022/00660/SC1. It is concluded, however, that this will not result in a significant level of effect in terms of change in any identified built heritage receptor. The only affected built heritage receptor, in terms of cumulative effects, is likely to be HB1 the Lower Porthkerry Farmhouse.

6.11 Conclusion

- 6.11.1 This section of the ES summarises the potential effects of the development proposal on built heritage receptors.
- 6.11.2 The baseline survey identified a number of built heritage receptors, located within a search area of up to 1km of the application site that might be affected by the construction and operational phase effects arising out of the development proposal.
- 6.11.3 The designated **built** heritage receptors comprise:
- Grade II* Church Farmhouse;
 - Grade II* Outbuilding north of Church Farmhouse;
 - Grade II* Church of St Curig;
 - Grade II Lower Porthkerry Farmhouse;
 - Grade II Upper Porthkerry Farmhouse; and
 - Porthkerry Conservation Area.
- 6.11.4 The non-designated heritage receptors comprise:
- Non-designated Heritage Asset Upper Porthkerry Farmhouse Stables; and
 - Non-designated built heritage asset Former Egerton Grey House Hotel.
- 6.11.5 Examination of relevant data sources supplemented by site inspection and field studies have identified that there are no designated or non-designated built heritage receptors situated within the site application site itself. Several built heritage receptors sit within the vicinity of the site where the development proposal would have cause to harm their significance through change to their setting.
- 6.11.6 There will be changes to the settings of the identified built heritage receptors at construction phase and this will give rise to a range of significance of effects from neutral to minor adverse significance of effect. There will be no significant effects arising from the development proposal at construction phase.
- 6.11.7 There will be no significant effects on built heritage receptors arising out of the operational phase of the development proposal. Specifically, there will be a Minor Adverse significance of effect on Lower and Upper Porthkerry Farmhouses (HB1 & HB2) and the Porthkerry Conservation Area (HB7). There will be a Minor/Neutral significance of effect to Church Farmhouse and associated Outbuilding (HB4 & HB5). These are not significant in EIA terms. A neutral significance of effect on the former stables associated with Upper Porthkerry Farmhouse (HB3), The Church of St Curig (HB6) and the Former Egerton Grey House Hotel (HB8).
- 6.11.8 No mitigation in addition to those measures already accounted for are identified that would serve to reduce or off-set the low adverse significance of effect of development proposal on the built heritage receptors at Operational Phases.
- 6.11.9 In respect of residual effects there would be no change to the previous identified significance of effect for the construction phase and operational phase.
- 6.11.10 In respect of cumulative effects, there will be no significant adverse cumulative effects. Only one identified built heritage receptor will face any cumulative effect, HB1 the Lower Porthkerry Farmhouse.

SUMMARY TABLE

Description of impact	Measures adopted as part of the project	Magnitude of impact	Sensitivity of receptor	Significance of effect	Additional measures	Residual effect	Proposed monitoring
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Construction Phase

HB1, HB2 & HB3 Changes to setting through ground works, construction traffic, dust and background	N/A	Moderate	Low to medium	Short-term neutral to minor adverse	N/A	No Change	N/A
HB4 and HB5 Visual Impacts arising from temporary site structures, traffic movement and noise	N/A	Minor	High	Short-term neutral to minor	N/A	No Change	N/A
HB6 Some intervisibility	N/A	Negligible	High	Short-term Neutral	N/A	No Change	N/A
HB7 Noise and Visual disturbance	N/A	Moderate	Medium	Short-term Minor adverse	N/A	No Change	N/A
HB8 Construction noise and visual activity	N/A	Minor	Low	Short-term Neutral	N/A	No Change	N/A

Operational Phase

HB1, HB2, HB3 Built form, traffic and light spill	Additional woodland planting	Moderate	Low to medium	Long-term permanent neutral to minor adverse	N/A	No Change	N/A
HB4 and HB5 Built form and light spill	Additional woodland planting	Minor	High	Long-term permanent Minor /neutral adverse	N/A	No Change	N/A
HB6 Intervisibility and light spill	Additional woodland planting	Negligible	High	Permanent long-term Neutral	N/A	No Change	N/A

SUMMARY TABLE

Description of impact	Measures adopted as part of the project	Magnitude of impact	Sensitivity of receptor	Significance of effect	Additional measures	Residual effect	Proposed monitoring
HB7 Intervisibility and light spill	Additional woodland planting	Moderate	Medium	Permanent Long-term Minor	N/A	No Change	N/A
HB8 Intervisibility and light spill	Additional woodland planting	Minor	Low	Permanent Long-term Neutral	N/A	No Change	N/A