

Parc Busnes Porth Cymru

Port Road, Rhose



Environmental Statement

Chapter 6 – Built Heritage

July 2019

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 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.
- 6.1.3 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;

- permanent 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 10, Welsh Government, December 2018), (PPW10). Chapter 6 of PPW10 (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, Rhoose (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 assets 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 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 Asset 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 assets 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:

“Outline application comprising demolition of existing buildings and erection of 44.79ha Class B1/B2/B8 Business Park, car parking, landscaping, drainage infrastructure, ecological mitigation and ancillary works. All matters reserved aside from access”.

- 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 site 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 Cumulative Effects

- 6.8.1 Whilst this assessment concentrates on the environmental effects on heritage assets by the development proposal, consideration must also be given to the cumulative effects of the development proposal on the application site in relation to other proposed schemes within its vicinity.
- 6.8.2 The Vale of Glamorgan Council has confirmed it does not consider there are any other development proposals under consideration in the locality at this time which would need to be assessed cumulatively. Notwithstanding this however, 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 lands outside of the Site but within this Development Zone.
- 6.8.3 The additional development identified as part of the wider Gateway Development Zone is proposed to the north of the application site and east of the main built development associated with Cardiff Airport. This further land progressively drops away from Port Road which separates the application site and this additional land.
- 6.8.4 At this time there are no details as to likely build heights for any development on the additional Development Zone land however if development is built to a height commensurate with that proposed on the Application site then, taken together, it is likely that with this identified cumulative site coming forward, it will result in no change to the significance of effect of the built heritage receptors.
- 6.8.5 However, if build heights in the additional Development Zone are higher than that proposed on the application site it is likely that they will be visible on the horizon from several built heritage receptors namely, Porthkerry Conservation Area, Church Farmhouse and associated Outbuilding (HB4, HB5 & HB7). It is likely that greater build heights will further compound the urbanising effect of the development proposal on the application site. This would be visible behind the application site when viewed from these Built Heritage Receptors. This may cancel out any built-in design

measures such as planting along the southern edge of the application site and thus retaining a permanent long-term neutral/minor adverse significance of effect for built heritage receptors HB4, HB5 & HB7.

6.9 Conclusion

- 6.9.1 This section of the ES summarises the potential effects of the development proposal on built heritage receptors.
- 6.9.2 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.
- 6.9.3 The designated 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.
- 6.9.4 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.
- 6.9.5 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.
- 6.9.6 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.
- 6.9.7 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).
- 6.9.8 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.
- 6.9.9 In respect of residual effects there would be no change to the previous identified significance of effect for the construction phase and operational phase.
- 6.9.10 In respect of cumulative effects the Vale of Glamorgan Council have identified no cumulative sites however the application site forms part of a larger Gateway Development Zone (Policy MG10 of the Local Development Plan). If development in the remainder of the Development Zone is built to a height not exceeding the development proposal on the application site it is likely that

there will be no adverse change to the significance of effect of built heritage receptors. If build heights exceed that which is proposed on the application site then it is likely that this will compound the urbanising effect of the development proposal and may remove any gains otherwise made in applying the afore mentioned mitigation measures. Accordingly, several of the previously identified built heritage receptors with significance of effects that are significant in EIA terms (HB4 & HB5 and HB7) will likely remain.

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
-----------------------	---	---------------------	-------------------------	------------------------	---------------------	-----------------	---------------------

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

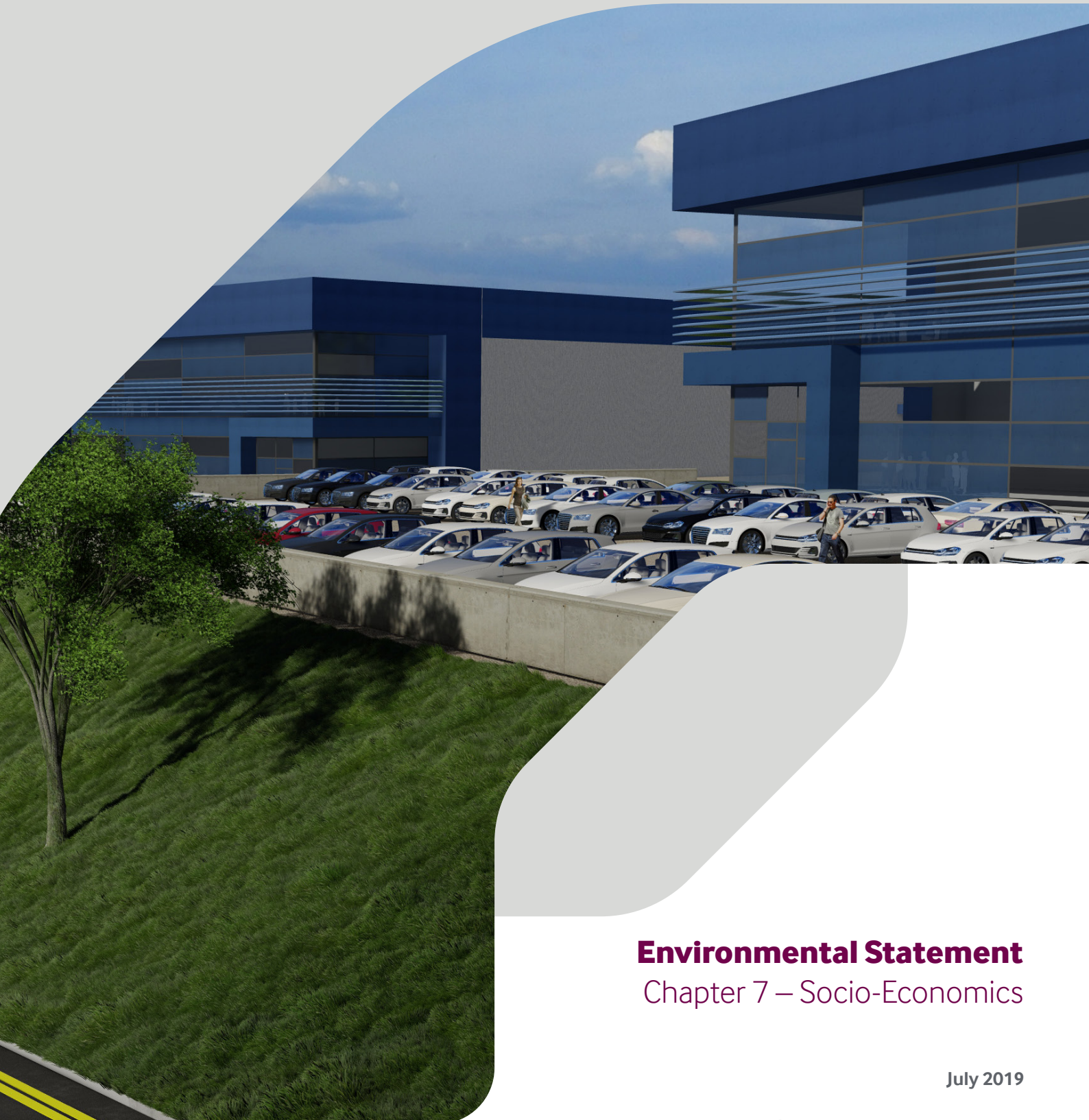
HB1, HB2, HB3 Built form, traffic and light spill	Additional woodland planting	Moderate	Low to medium	Long-term permanent neutral to minor adverse	N/A	No Change	N/A
HB4 and HB5 Built form and light spill	Additional woodland planting	Minor	High	Long-term permanent Minor /neutral adverse	N/A	No Change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

Parc Busnes Porth Cymru

Port Road, Rhose



Environmental Statement Chapter 7 – Socio-Economics

July 2019

7 SOCIO-ECONOMICS

Glossary

Term	Definition
Gross Value Added	Gross Value Added (GVA) is the measure of the value of goods and services produced in an area, industry or sector of an economy.
Location Quotient	Location quotient (LQ) is a way of quantifying how concentrated a particular sector is in a specific area as compared to the national average. An LQ above 1 indicates an above average concentration, whilst an LQ below 1 indicates a below average concentration.
Standard Occupational Classification	The standard occupational classification is a common classification of occupational information for the UK

Acronyms

Acronym/Initialism	Definition
aGVA	Approximate Gross Value Added
BRES	Business Register and Employment Survey
CIA	Cumulative Impact Assessment
DEFRA	Department for Environment Food & Rural Affairs
EIA	Environmental Impact Assessment
ES	Environmental Statement
FTE	Full Time Equivalent
GB	Great Britain
GVA	Gross Value Added
HCA	Homes and Communities Agency
HJA	Hardisty Jones Associates
HQ	Headquarters
HRT	Herbert R Thomas
LDP	Local Development Plan
LQ	Location Quotient
MRO	Maintenance, Repair, and Overhaul
ONS	Office for National Statistics
PPF	People, Places, Futures
PPW	Planning Policy Wales
R&D	Research and Development

Acronym/Initialism	Definition
SME	Small and Medium Sized Enterprise
SOC	Standard Occupational Classification
TAN	Technical Advice Note
UK	United Kingdom
VoG	Vale of Glamorgan
WG	Welsh Government

7.1 Introduction

- 7.1.1 This chapter has been produced by Hardisty Jones Associates (HJA) and presents the approach and findings of the assessment of potential effects on economic receptors. It firstly presents the methodology, then provides a review of the existing legislative and policy position, and the baseline conditions in the vicinity of the Application Site and surrounding area. It then presents the results of the assessment of the effect of the development proposal on the baseline assessment scenarios in order to determine the anticipated magnitude and significance of effects.

7.2 Methodology and Assessment Criteria

Legislative and Policy Context

- 7.2.1 The legislative and policy documents that cover relevant issues relating to the development proposal are summarised in Table 7.1 below.

Table 7.1 – Summary of relevant legislative and policy documents

Title	Year	Source(s)
UK		
UK Industrial Strategy	2017	HM Government
Wales		
Well-being of Future Generations (Wales) Act 2015	2015	Welsh Government
Prosperity for All: the national strategy	2017	Welsh Government
Prosperity for All: Economic Action Plan	2018	Welsh Government
Planning Policy Wales	2018	Welsh Government
Technical Advice Note 23: Economic Development	2014	Welsh Government
People, Places, Futures – The Wales Spatial Plan	2008	Welsh Assembly Government
Cardiff Capital Region Industrial and Economic Plan	2019	Cardiff Capital Region Economic Growth Partnership
Vale of Glamorgan		
Local Development Plan	2017	Vale of Glamorgan Council
Employment Land and Premises Study	2013	Vale of Glamorgan Council
Cardiff Airport 2040 Masterplan	2019	Cardiff International Airport Ltd

Relevant Guidance

- 7.2.2 This assessment draws on a range of source information, including best practice guidance on the assessment of economic impact (e.g. Additionality Guide, Fourth Edition, HCA, 2013; Employment Density Guide, Third Edition, HCA, 2015).

Study Area

- 7.2.3 This assessment considers impacts upon the site level and the Vale of Glamorgan local authority area.

Baseline Methodology

- 7.2.4 Information on the economic baseline conditions within the Vale of Glamorgan has been collected through a detailed desktop review of existing studies and datasets. These are summarised in Table 7.2 below.

Table 7.2 – Summary of key baseline sources

Title	Year	Source(s)
Annual Population Survey	2018	ONS
Annual Survey of Hours and Earnings	2018	ONS
Business Demography	2017	ONS
Business Register and Employment Survey	2018	ONS
Census of Population	2011	ONS
Jobs Density	2018	ONS
Local authority population projections	2014-based	Statistics Wales
Mid year population estimates	2018	ONS
Regional Gross Value Added	2018	ONS
Regional Gross Value Added by Local Authority	2017	ONS
UK Business Counts	2018	ONS

- 7.2.5 There is no established list of baseline environment indicators for economic receptors. The baseline receptors have therefore been informed by the professional judgment of HJA.

Consultation

- 7.2.6 Consultation activities have been undertaken for the development proposal. Of the key issues raised during the consultation phase, comments have been made as to the basis for calculating the number of jobs the development proposal might support. This chapter sets out the methodology for estimating economic impacts, including the number of jobs the development proposal will have capacity to accommodate. None are specific to economics. Therefore, there are no key issues to be considered in the production of this Environmental Statement chapter on the basis of the consultation responses.

Assessment Criteria and Assignment of Significance

- 7.2.7 This section describes the approach taken to identifying the magnitude of an impact and the value of the receptor.

- 7.2.8 The criteria for determining the significance of effects is a two-stage process that involves defining the value of the receptors and the magnitude of the impacts. This section describes the criteria applied in this chapter to assign values to the value of receptors and the magnitude of potential impacts. The definitions used for value and magnitude are presented in Tables 7.3 and 7.4, respectively.

Receptor Value

Table 7.3: Definitions of Value

Value	Descriptors
High	The receptor is identified as a policy priority (as a result of economic potential and/or need) and/or There is evidence that economic performance is currently facing major challenges and areas of major weakness currently exist.
Medium	There is evidence that economic performance is currently facing challenges and elements of weakness currently exist.
Low	There is evidence that economic performance is currently resilient and minimal weaknesses or challenges exist.
Negligible	There is evidence of good overall economic performance and no particular weaknesses or challenges exist.

Magnitude of Impact

Table 7.4: Definitions of Magnitude

Magnitude		Descriptors
High	Negative	Large scale or major loss of economic resource resulting in severe damage to key economic receptors
	Positive	Large scale or major gain in economic resource, resulting in major improvement to key economic receptors
Medium	Negative	Loss of economic resource resulting in some damage to key economic receptors
	Positive	Gain in economic resource resulting in some improvement to key economic receptors
Low	Negative	Small loss of economic resource resulting in minimal damage to economic receptors
	Positive	Small gain in economic resource resulting in minimal improvement to economic receptors
Negligible	Negative	Nil or very small loss of economic resource resulting in very minor or no observable damage to economic receptors
	Positive	Nil or very small gain in economic resource resulting in very minor or no observable improvement to economic receptors

Significance of Effects

- 7.2.9 The significance of the effect upon the economy is determined by correlating the magnitude of the impact and the value of the receptor. The particular method employed for this assessment is presented in Table 7.5.

Table 7.5: Assessment Matrix

Value	Magnitude			
	Negligible	Low	Medium	High
Negligible	Negligible	Negligible or minor	Negligible or minor	Minor
Low	Negligible or minor	Negligible or minor	Minor	Minor or moderate
Medium	Negligible or minor	Minor	Moderate	Moderate or major
High	Minor	Minor or moderate	Moderate or major	Major

- 7.2.10 For the purposes of this assessment, any effects with a significance level of minor or less have been concluded to be not significant in terms of the EIA Regulations.
- 7.2.11 The impacts identified below have been selected as those with the potential to result in the greatest effect on economic conditions during the construction phase:
- Employment (person years)
 - Wages
 - GVA
- 7.2.12 The impacts identified below have been selected as those with the potential to result in the greatest effect on economic conditions during the operational phase:
- FTE Employment
 - Wages
 - GVA

Limitations of the Assessment

- 7.2.13 There are no formal measures of effect significance for economic receptors. The assessment has therefore been informed by the professional judgment of the chapter authors.
- 7.2.14 The data sources used in this chapter are detailed above. The data used are the most up to date publicly available information which can be obtained from the applicable data sources as cited. The data is therefore limited by what is available and by what has been made available, at the time of writing the Environmental Statement.
- 7.2.15 It is considered that the data employed in the assessment are of a robust nature and are sufficient for the purposes of the assessment presented.
- 7.2.16 The economic receptors and effects under consideration in this chapter do not intersect directly with the issues of climate change and population and human health. Therefore a consideration of these issues is not required as part of this chapter.

7.3 Legislative and Policy Context

- 7.3.1 This section covers the national, regional, and local legislative and policy provisions that relate to the economic impacts of the development proposal. These are summarised in Table 7.6 at the end of the section.

UK

UK Industrial Strategy

- 7.3.2 The UK Industrial Strategy sets out the long-term policy by which the UK Government plans to boost the productivity performance of the UK economy. It sets an overarching context within which economic development takes place, and therefore is relevant to a Welsh context.
- 7.3.3 The Strategy sets out five 'foundations of productivity' which set out a framework for working towards a transformed economy:
- Ideas – become the world's most innovative economy
 - People – create good jobs and greater earning power for all
 - Infrastructure – deliver a major upgrade to the UK's infrastructure
 - Business environment – make the UK the best place to start and grow a business
 - Places – foster prosperous communities across the UK
- 7.3.4 On the final one of these five foundations, the Strategy sets out some of the key attributes of strong local economies. These key attributes include a good supply of skilled labour, and being well connected with land available for offices, factories, and homes.

Wales and Regional

Well-being of Future Generations Act (Wales)

- 7.3.5 In the Well-being of Future Generations (Wales) Act 2015, the Welsh Government (WG) commits to the aim of delivering 'sustainable development', which the Act defines as "the process of improving the economic, social, environmental and cultural well-being of Wales by taking action, in accordance with the sustainable development principle, aimed at achieving the well-being goals."
- 7.3.6 As part of its well-being goals, the Act sets out the goal of promoting a 'prosperous' Wales. This means working towards "an innovative, productive and low carbon society which, develops a skilled and well-educated population in an economy which generates wealth and provides employment opportunities, allowing people to take advantage of the wealth generated through securing decent work."

Prosperity for All: the national strategy

- 7.3.7 Prosperity for All takes the key commitments from the WG Programme for Government, and places them in a long-term context, setting out how they fit within the work of the Welsh public service.
- 7.3.8 There are a number of important commitments that fall under the strategy's first aim to provide 'prosperous and secure' economic growth, including:
- Use business support to build capacity and innovation within home grown businesses along local supply chains;
 - Provide more effective support for the development of local supply chains and clusters, so that economic value is retained locally, and more employment opportunities are created closer to home; and
 - Establish a bespoke infrastructure consenting process that is responsive to business and community needs, to support sustainable economic growth.

Prosperity for All: Economic Action Plan

7.3.9 WG has developed an Economic Action Plan in line with the Prosperity for All national strategy. It outlines the actions WG will take to promote economic growth in Wales. The action plan also highlights a number of ways in which WG can respond to the challenges facing the Welsh economy.

1.1.1 The Plan sets out seven wellbeing objectives that act as a delivery framework:

- Support people and businesses to drive prosperity.
- Tackle regional inequality and promote fair work.
- Drive sustainable growth and combat climate change.
- Build ambition and encourage learning for life.
- Equip everyone with the right skills for a changing world.
- Deliver modern and connected infrastructure.
- Promote and protect Wales' place in the world.

Planning Policy Wales

7.3.10 WG defines economic development as "...the development of land and buildings for activities that generate sustainable long term prosperity, jobs and incomes." Land uses that can be considered to deliver economic growth include traditional employment land uses such as B1a office, B1b research and development, B1c and B2 industrial, and B8 warehousing.

7.3.11 A number of key factors should be considered when assessing the sustainability benefits of a development, including:

- The numbers and types of long term jobs expected to be created or retained;
- How the development will help redress economic disadvantage or support regeneration priorities, for example by enhancing local employment opportunities;
- The contribution the development would make to achieving wider strategies, for example the growth or regeneration of certain areas; and
- How the proposal would support the achievement of a more prosperous, low carbon, innovative and resource efficient Wales.

Technical Advice Note 23: Economic Development (2014)

7.3.12 The Welsh Government provides a number of technical advice notes that provide detailed planning guidance. These notes are taken into account during the preparation of local development plans by local authorities. Technical Advice Note (TAN) 23 provides guidance on the role of land use planning in promoting economic growth. It takes a 'whole economy' view of sustainable economic growth - it does not assume that economic objectives are necessarily in conflict with social and environmental ones, with physical development able to simultaneously contribute to these different dimensions of sustainability. TAN 23 recognises the importance of developing B1-B8 land uses as part of this process.

7.3.13 There are three primary questions that TAN 23 requires planning authorities to ask when considering a planning application.

- 7.3.14 Firstly, if the application is refused, is it likely the demand could be met on an alternative site where development would cause less harm? Alternative locations will not necessarily be confined to the same local authority. If the subject site does not possess any unique characteristics, it should be possible to find alternative locations nearby. Where a subject site possesses distinct advantages, it may be necessary to look much further afield for suitable alternative locations.
- 7.3.15 Secondly, how many direct jobs will be based at the site? TAN 23 requires consideration of the approximate measure of a development's contribution to the local economy. Such an assessment can also include indirect job creation.
- 7.3.16 Thirdly, would the development make any special contribution to policy objectives? This makes it necessary to consider policy objectives listed in PPW. Developments that contribute positively to these categories count as making special policy contributions.

People, Places, Futures – The Wales Spatial Plan

- 7.3.17 Note: the Welsh Planning Directorate are currently producing a National Development Framework for Wales, which will set out a 20-year land use framework for Wales and will replace the current Wales Spatial Plan when published.
- 7.3.18 People, Places, Futures (PPF) guidance states that a sustainable future "depends on the vitality of our communities as attractive places to live and work. We need to reduce inequalities between communities whilst retaining their character and distinctiveness" (para 10).

Cardiff Capital Region Industrial and Economic Plan

- 7.3.19 The Cardiff Capital Region Economic Growth Partnership have published the Plan in order to identify and address the priorities facing the Region.
- 7.3.20 The Plan sets out an approach based on:
- Cohesion – Policy collaboration and delivery partnerships ensuring there is cumulative impact delivered by investments and interventions
 - Scale – A limited number of significant interventions, rather than a disparate range of loosely connected small-scale activities.
 - Leverage – Maximise investments by attracting co-investors with complementary funding and resources.
 - Return on Investment – Demonstrable impact and benefit will be expected from all investments and interventions.
 - Ecosystem Development – Supporting the development of a strong economic and innovation ecosystem to deliver the Plan and develop clusters of excellence.
- 7.3.21 The Plan outlines the investment and intervention framework that will drive decision making. This framework consists of three investment priorities: Innovation, Infrastructure, and 'Challenge'.
- 7.3.22 Innovation-centred investments will focus on opportunities where a competitive strength exists, and will aim to provide a significant contribution to jobs growth, investment, and GVA uplift.
- 7.3.23 The Plan lists a number of strategic sectors that will be strategically targeted for support, including 'Transport Engineering', which includes aircraft related activities.
- 7.3.24 The importance of infrastructure fit for the modern economy is also emphasised in the Plan. Reliable infrastructure is needed that connects the region both internally and with other areas, thereby boosting productivity. Part of this will be to develop a series of 'strategic employment

spaces' across the region to meet the needs of businesses. The Cardiff Airport and St Athan Enterprise Zone is listed as one of the Plan's 'Strategic Hubs and Opportunity Areas'.

Vale of Glamorgan

Local Development Plan

- 7.3.25 The purpose of the LDP is to guide the decision-making process of the Vale of Glamorgan Council, with the aim of ensuring the most efficient use of land and other resources and promote the regeneration and stimulation of the local economy.
- 7.3.26 The vision set out in the LDP includes the aim to:
- 7.3.27 *"Develop a diverse and sustainable economy that maximises the Vale of Glamorgan's assets and the potential of its position within the region, to provide opportunities for working that benefit residents and businesses and attracts visitors and investment"*
- 7.3.28 The LDP also outlines a number of key strategic objectives that support the social, economic, and sustainability themes that form a key part of the LDP Strategy, including:
- 7.3.29 *"To foster the development of a diverse and sustainable local economy that meets the needs of the Vale of Glamorgan and that of the wider South East Wales Region."*
- 7.3.30 The need to provide employment opportunities and attract investment is seen as an essential component of truly sustainable communities. Capitalising on the opportunity at the St Athan – Cardiff Airport Enterprise Zone is seen as an important part of meeting this objective. In meeting this objective, the LDP commits to prioritising 'new high quality employment that increases prosperity but reduces local deprivation and daily out-commuting'.
- 7.3.31 Policy MG9 outlines the land allocated for employment, which includes the land adjacent to Cardiff Airport and Port Road on which the Site is located. Policy MG10 outlines the scope of uses at the site as new 'aerospace, education, research and development, manufacturing, office and other ancillary development'. The LDP emphasises the importance of Cardiff Airport to the future prosperity of the Vale of Glamorgan.
- 7.3.32 The purpose of allocating this land for development as employment floorspace is to cater specifically for the needs of the aerospace and defence industries, and 'high tech' manufacturing. The site is not allocated to meet local demand – instead it is hoped development will encourage inward investment and consolidate the role of the Vale of Glamorgan within the Capital Region.

Employment Land and Premises Study (2013)

- 7.3.33 The report assesses the supply, need and demand for employment land and premises in Vale of Glamorgan.
- 7.3.34 The Study makes a series of area specific recommendations. Relevant to the Site is the recommendation regarding the St Athan – Cardiff Airport Enterprise Zone. The recommendation for this area, which includes the Site, is to work with Welsh Government and other stakeholders to bring forward development and market land and property to potential occupiers.
- 7.3.35 The report outlines the strategic context for employment land at Cardiff Airport.
- 7.3.36 The land and facilities close to the airport are available for possible MRO and related supply chain operators, activities that will complement the existing British Airways maintenance facility. A quarter of the UK's MRO activity is located in Wales, with the majority of this activity based at Cardiff Airport or St Athan. The aim of the developing the land that comprises the Enterprise Zone is to grow a critical mass of MRO related activity in the area. The Vale of Glamorgan Council see the Enterprise Zone as an important strategic site within the Vale, with a focus on high value engineering.

- 7.3.37 The proximity of the airport and its runway will allow for the rapid transit of cargo, making nearby land an optimal location for storage and freight-related businesses as well.
- 7.3.38 The report also identifies a number of emerging property trends that should inform the development process. It highlights that in both the office and industrial market, companies are looking for higher quality accommodation. Modern premises need to accommodate research-based manufacturing space with an element of office space. This is important in encouraging an innovative environment, as well as clustering related business activities.

Cardiff Airport 2040 Masterplan

- 7.3.39 Cardiff International Airport Ltd has published a Masterplan setting out plans for growth over the next 20 years.
- 7.3.40 The Masterplan highlights the importance of being located within the Cardiff Airport and St Athan Enterprise Zone, and the opportunity it presents for the development of bespoke facilities and investment in employment accommodation. The airport facilities currently accommodate a variety of aviation and aerospace businesses and related activities, including the British Airways maintenance facility, Cardiff Aviation Training Centre, and the International Centre for Aerospace Training.
- 7.3.41 One of the priorities set out in the Masterplan is to deliver a complementary land use strategy that supports business, innovation, and commercial activities. This includes expansion of cargo facilities and services, and a new business and education campus. The Masterplan highlights the potential for the airport's cargo facilities to accommodate growth.
- 7.3.42 The Masterplan sets out a development strategy, a primary component of which is a new terminal. The driving force for this new terminal is to allow for integration with the Enterprise Zone and associated business and commercial developments. It is hoped this expansion will support more jobs, both directly and throughout the wider aviation sector supply chain. The Enterprise Zone is referenced as a key component for creating the conditions required to attract aviation and aerospace related businesses. Further development of the airport will also create opportunities for education and innovation.

Summary

- 7.3.43 This section has considered the national, sub-regional, and local context in terms of legislation, planning and economic development policy, strategy, and research relevant to the development proposal.
- 7.3.44 The key themes present in the legislation and policy documents discussed in this chapter are summarised in Table 7.6 below.

Table 7.6 – Summary of key legislation and policy themes

Theme	Sources
Achieving sustainable economic growth through the creation of good quality employment opportunities, thereby increasing the earning potential of every individual and redressing economic disadvantage.	UK Industrial Strategy Well-being of Future Generations (Wales) Act Prosperity for All: the national strategy Planning Policy Wales Technical Advice Note 23: Economic Development People, Places, Futures – The Wales Spatial Plan Cardiff Capital Region Industrial and Economic Plan Local Development Plan: Written Statement
Increasing innovation and research and development activities throughout the economy by encouraging the establishment of	UK Industrial Strategy Well-being of Future Generations (Wales) Act Prosperity for All: the national strategy Planning Policy Wales Cardiff Capital Region Industrial and Economic Plan

sectoral clusters, in part to drive productivity gains.	Employment Land and Premises Study Local Development Plan Cardiff Airport 2040 Masterplan
Deliver modern infrastructure and ensure a well-connected economy to ensure Wales and the Vale of Glamorgan are attractive locations to 'do businesses'	UK Industrial Strategy Prosperity for All: the national strategy Prosperity for All: Economic Action Plan Cardiff Capital Region Industrial and Economic Plan Employment Land and Premises Study Local Development Plan Cardiff Airport 2040 Masterplan

7.4 Existing Baseline Conditions

- 7.4.1 This section considers the existing economic conditions at the site level and at the Vale of Glamorgan local authority level. Information on the economic baseline conditions within the Vale of Glamorgan has been collected through a detailed desktop review of existing studies and datasets. These are summarised in Table 1.2. A summary of the key baseline indicators is provided at the end of the section.

Site Level ('Reference Case')

- 7.4.2 The HRT submission to the Vale of Glamorgan Council provides information on the existing economic activity at the site level.
- 7.4.3 The Site is currently used for the running of an agricultural business which consists of approximately 113.4 ha made up of 99.5 ha of permanent pasture, and some farm buildings and woodland areas (unspecified coverage).
- 7.4.4 Using DEFRA Farming Statistics an indicative figure for hectare per employee has been calculated using the quotient of 'Total area on agricultural holdings' and 'Total number of people working on commercial agricultural holdings' (30.3 ha per employee).
- 7.4.5 Using this indicative density figure, it is estimated that the farm would support 4 employees in the Agriculture sector as a going concern.
- 7.4.6 Data from the Annual Survey of Hours and Earnings (ONS, 2018) has been used to determine the earnings impacts associated with this level of employment in the Agriculture sector (£24,073 median annual earnings). The anticipated level of employment could support approximately £96,300 in wages.
- 7.4.7 Data from the Annual Business Survey (ONS, 2019) has been used to determine the GVA impacts associated with this level of employment in the Agriculture sector (£51,347 GVA per worker). Based on these parameters, the anticipated level of employment could support approximately £205,400 in GVA.
- 7.4.8 The assumptions relating to Net Additional Economic Impacts (Operational) outlined later on in this section have been applied to the above gross direct impacts to derive the net additional impacts of the continued operation of the farm.
- 7.4.9 In the event of the development proposal proceeding, it is assumed all of these economic impacts would be lost in their entirety.

Local Authority Level

GVA

- 7.4.10 The Vale of Glamorgan economy contributed approximately £2.0 billion in GVA to the Welsh economy in 2015, which was around 3.6% of the Welsh economy as a whole that year (ONS). Of the 22 local authorities in Wales, Vale of Glamorgan ranked 13th in total GVA output.

- 7.4.11 The ONS reports that, in 2015, GVA per job in the Vale of Glamorgan was £41,400 (analysis of *Regional Gross Value Added, Regional and by Local Authority and Jobs Density*) compared to an average of £41,917 in Wales and £51,619 in the UK (*Regional and Subregional Productivity*).

Population

- 7.4.12 The Office for National Statistics (ONS) *Mid-Year Population Estimates* report a resident population of 130,700 persons in Vale of Glamorgan in 2017 (latest available).
- 7.4.13 The population of the Vale of Glamorgan has increased by 4.8% over the ten-year period 2007-17 (*Mid-Year Population Estimates*, ONS).

Industry

- 7.4.14 There are 4,220 businesses in the Vale of Glamorgan.
- 7.4.15 The Vale of Glamorgan economy is dominated by micro businesses. This is not too dissimilar to the business base of Wales and the UK as a whole, although it is slightly more pronounced in the Vale of Glamorgan.

Table 7.7 – Business base by business size

Business size	Vale Glamorgan	of Wales	UK
Micro (0–9 employees)	90%	89%	89%
SME (10–249 employees)	10%	11%	10%
Large (250+ employees)	0.1%	0.3%	0.4%

Source: *UK Business Counts*, ONS (Note – figures may not sum due to rounding)

- 7.4.16 The number of micro and small-medium size enterprises (SME) in the Vale of Glamorgan increased between 2014 and 2018 (*UK Business Counts*, ONS). It is difficult to make an accurate assessment of the change in the number of large businesses in the Vale of Glamorgan as ONS figures are rounded to the nearest five. However, the data shows there are very few.

Table 7.8 – Change in size band distribution of businesses 2014–2018, Vale of Glamorgan

Business size	2014	2018
Micro (0–9 employees)	3,300	3,800
SME (10–249 employees)	380	405
Large (250+ employees)	5	5

Source: *UK Business Counts*, ONS

- 7.4.17 Overall, the Vale of Glamorgan's business base is less 'active' when compared to the picture across Wales and the UK. The number of enterprises in the Vale of Glamorgan increased by 13.1% between 2013-17, compared to an increase of 14.6% in Wales and 19.5% in the UK as a whole (*Business Demography*, ONS).

Employment and Economic Activity

- 7.4.18 The most comprehensive measure of jobs in an area is the ONS Jobs Density measure. This reports 49,000 jobs in the Vale of Glamorgan in 2017.
- 7.4.19 The economic activity rate in Vale of Glamorgan is 81.5%. This is higher than the Wales average (76.7%) and GB average (78.5%) (ONS *Annual Population Survey*, Jan 2018 – Dec 2018).

- 7.4.20 The employment rate in the Vale of Glamorgan is measured at 78.5% compared to Wales (73.1%) and GB (75.1%). Self-employment is high in the Vale of Glamorgan, at 11.4% compared to 9.3% in Wales and 10.6% in GB. Unemployment is low in the Vale of Glamorgan (3.6%) compared to Wales (4.6%) and GB (4.3%); all figures ONS *Annual Population Survey*, 2018).
- 7.4.21 Table 7.9 shows the share of Vale of Glamorgan residents employed in occupation categories 1-3 (higher order occupations) is much higher than the Wales average (*Annual Population Survey*, ONS). The number employed in occupation categories 4-6 (middle order occupations) is slightly lower than the Wales average. The number employed in occupation categories 7-9 (lower order occupations) is also slightly lower than the Wales average.

Table 7.9 – Resident employment by SOC, Vale of Glamorgan (2018)

Occupation	Total employment	Share employment (VoG)	of Share employment (Wales)
1: Managers, directors and senior officials	9,000	14%	10%
2: Professional occupations	13,600	21%	19%
3: Associate prof & tech occupations	11,600	18%	14%
4: Administrative and secretarial occupations	5,200	8%	10%
5: Skilled trades occupations	5,400	9%	12%
6: Caring, leisure and other service occupations	6,300	10%	10%
7: Sales and customer service occupations	5,100	8%	8%
8: Process, plant and machine operatives	1,900	3%	7%
9: Elementary occupations	4,700	8%	11%

Source: HJA analysis based on *Annual Population Survey*, ONS (figures may not sum due to rounding)

- 7.4.22 The proportion of the Vale of Glamorgan population aged 16–64 with NVQ4+ as a highest level of qualification is reported at 45.0% compared to 35.4% in Wales and 39.3% in GB (*Annual Population Survey*, ONS). This data on occupational and skills indicates a relatively high concentration of high-skill residents working in high-order occupations.
- 7.4.23 38.5% of jobs in the Vale of Glamorgan are part time (ONS, BRES). This compares to 35.1% in Wales and 32.5% GB.
- 7.4.24 Whilst the employment and economic activity rates in the Vale of Glamorgan indicate labour market participation levels in the Vale of Glamorgan are at or above the Welsh average, this is also based to some extent on higher levels of self-employment and part time working.

Sector Profile

- 7.4.25 Location Quotients (LQ) show the concentration of sectors in an area, relative to the UK economy. An LQ of 1 indicates the sector has an equal concentration to GB, an LQ>1 shows a relative concentration of activity in that sector. An LQ<1 shows an under-representation of that sector.
- 7.4.26 Table 7.10 reports the number of businesses and level of employment of each sector in the Vale of Glamorgan, along with the equivalent LQ for each metric.
- 7.4.27 In terms of business numbers and concentration, the Vale of Glamorgan has a relatively strong business base in Manufacturing (LQ = 1.19), Accommodation and food services (1.21), Real

estate (1.14), Human health and social work (1.15), Arts, entertainment and recreation (1.23), and Other services (1.13).

- 7.4.28 In terms of employment numbers and concentration, the Vale of Glamorgan has a relatively strong representation in Agriculture, forestry and fishing (1.50), Accommodation and food services (1.12), Public administration and defence (1.16), Education (1.24), Human health and social work (1.47), Arts, entertainment and recreation (1.17), and Other services (1.16).

Table 7.10 – Total business LQ by sector, Vale of Glamorgan (2017)

Sector	Total bus.	LQ	Total emp.	LQ
A : Agriculture, forestry and fishing	175	0.82	1,000	1.50
B : Mining and quarrying	5	2.84	50	0.73
C : Manufacturing	255	1.19	3,000	0.90
D : Energy	0	0.00	250	1.35
E : Water supply	20	1.70	150	0.53
F : Construction	500	0.99	2,250	1.09
G : Wholesale and retail trade	630	1.06	5,000	0.79
H : Transportation and storage	125	0.71	1,500	0.77
I : Accommodation and food services	290	1.21	3,500	1.12
J : Information and communication	280	0.80	1,750	0.98
K : Financial and insurance activities	80	0.90	450	0.32
L : Real estate	170	1.14	700	0.94
M : Professional, scientific and technical activities	725	0.94	3,000	0.84
N : Administrative and support service activities	360	0.97	1,750	0.47
O : Public administration and defence	20	1.72	2,000	1.16
P : Education	90	1.15	4,500	1.24
Q : Human health and social work activities	220	1.15	8,000	1.47
R : Arts, entertainment and recreation	125	1.23	1,250	1.17
S : Other service activities	190	1.13	1,000	1.16
Total	4,250		42,000	

Source: HJA analysis based on *UK Business Counts* and *BRES*, both ONS (Note – figures may not sum due to rounding)

- 7.4.29 Using an indicative definition of the aerospace sector (SIC codes 30.30 and 33.16), the Vale of Glamorgan has a very high concentration of businesses (14.74) and employment (10.20) in this industry. The same is true of defence (SIC code 84.22) which has an LQ of 3.24 in employment terms (business figure unavailable due to data suppression). The Vale of Glamorgan also has a relatively high concentration of businesses (1.25) and employment (1.83) in advanced engineering and manufacturing (SIC codes 20, 21, 26, 27, 28, 29, 30, 33, and 71.12). It is possible that the development proposal will feature activities related to these sectors.

Income

- 7.4.30 The *Annual Survey of Hours and Earnings* reports a significant disparity between resident and workplace earnings in the Vale of Glamorgan. The median annual salary of a Vale of Glamorgan resident in full-time employment is £30,578, compared to £27,039 for Wales. Conversely, workplace-based measures report the median annual salary of someone working full-time in the Vale of Glamorgan is £24,960, lower than the figure for Wales (£26,346) and significantly lower than the resident based figure.
- 7.4.31 This is evidence of out-commuting amongst the high-skill residents of the Vale of Glamorgan, working in high-order occupations outside the area.

Commuting

- 7.4.32 Resident based travel to work patterns suggest the Vale of Glamorgan is part of a functional economic area with strong out-commuting links to Cardiff. Census 2011 data on Origin Destination indicates that 55% of Vale of Glamorgan residents that are in employment have a workplace located within the Vale of Glamorgan. This data also indicates that 30% of Vale of Glamorgan residents that are in employment have a workplace located in Cardiff.
- 7.4.33 Workplace based travel to work patterns indicate that 71% of workers who work in the Vale of Glamorgan are also residents of the Vale of Glamorgan, with 12% living in Cardiff.
- 7.4.34 Of the 55,899 Vale of Glamorgan residents in employment, 10% work mainly at or from home and 7% have no fixed place of work (Census 2011, ONS).
- 7.4.35 In the Vale of Glamorgan, 63% of jobs with a fixed workplace outside the home (i.e. excluding those categorised as working from home or 'no fixed place' of work) are filled by residents of the Vale of Glamorgan, and 37% are taken by in-commuters (Cardiff = 16%; Census 2011, ONS).

Summary

- 7.4.36 This section has considered the existing economic conditions at the site level and at the Vale of Glamorgan local authority level.
- 7.4.37 The farm is currently operating as a going concern is anticipated to support 4 employees in the Agriculture sector. This level of employment is estimated to support approximately £96,300 in gross wages and £205,400 in gross GVA.
- 7.4.38 Overall, the Vale of Glamorgan economy contributed approximately £2.0 billion in GVA to the Welsh economy in 2015, with a GVA per job figure almost equal to the Wales average.
- 7.4.39 The Vale of Glamorgan has a very strong concentration of businesses and employment in the aerospace and defence sectors, with a relatively high concentration of these indices in the advanced manufacturing and engineering sector.
- 7.4.40 As far as Vale of Glamorgan residents are concerned, there is a relatively high concentration of high-skill residents of the Vale of Glamorgan working in high-order occupations. Employment and economic activity rates in the Vale of Glamorgan are above the Welsh average. The median annual pay of Vale of Glamorgan residents is significantly higher than the Wales average (resident-based), but the median annual pay of someone working full-time in the Vale of Glamorgan is lower than the Wales average (workplace-based). Resident-based travel to work patterns suggest the Vale of Glamorgan is part of a functional economic area characterised by heavy out-commuting to Cardiff.
- 7.4.41 These conditions suggest there is a shortfall of high-order occupations and high value employment opportunities for the residents of the Vale of Glamorgan to occupy, such that residents of the area are forced to travel outside the local authority in order to find suitable employment.

7.5 Identification and Assessment of Effects

Construction Impacts

- 7.5.1 This section considers the economic impacts arising from the construction of the development proposal. This is considered separately to the operational phase impacts given the time-limited nature of the construction and engineering works.
- 7.5.2 Economic impacts will be felt through the employment of labour, purchase of materials, and the expenditure of workers and businesses in the local area.
- 7.5.3 All impacts are based on currently available information with any assumptions stated and sourced. The assessment of economic impact can be refined as detailed design work is undertaken. The figures quoted are therefore set out as indicative.
- 7.5.4 Impacts are considered at site level and Vale of Glamorgan local authority level.

Costs and Investment

- 7.5.5 The total cost of the development proposal is estimated as £118–181 million. This is based on Linesight (2018) average UK construction costs per sq m.
- 7.5.6 The total construction and installation period is estimated at 10 years.

Gross Direct Economic Impacts (Construction)

- 7.5.7 Gross direct economic impacts are included for fullness, although they are not assessed for significance as these figures have not been subjected to additionality factors as per HCA guidance. Therefore, only net additional impacts are assessed for significance.

Gross direct employment (person years)

- 7.5.8 Total construction phase capital expenditure is estimated at £118–£181 million.
- 7.5.9 Employment impacts are expressed as 'person years' of employment. This measure is used to represent one full time equivalent post for a single year. This approach captures the contract nature of much construction work, encompassing a range of trades on varying contract lengths. An estimate of person years is generated on the basis of average turnover per worker in the construction sector (£173,758) using the ONS Annual Business Survey (2017, latest available). Based on estimated turnover per worker for the UK construction sector the anticipated level of capital expenditure will support approximately 675–1,050 person years of construction sector employment. This gross direct impact will be spread across the anticipated 10 year construction phase. This equates to an average annual requirement for 68–104 person years of employment.

Gross direct wages

- 7.5.10 The latest data from the Annual Survey of Hours and Earnings (ONS, 2018) has been used to determine the earnings impacts associated with this employment, using the median annual full-time wage for the Construction sector (£32,623). Gross direct wages are estimated at £22–£34 million over the entire construction phase. This equates to average annual wages of £2.2–£3.4 million.

Gross direct GVA

- 7.5.11 Gross Value Added is a measure of local economic output. The latest data from the Annual Business Survey (ONS, 2019) has been used to determine the GVA impacts associated with this employment, using the quotient of aGVA and average employment during the year for the Construction sector (£66,691).
- 7.5.12 Gross direct GVA is estimated at £45–£69 million over the entire construction phase. This equates to average annual GVA of £4.5–£6.9 million.

Summary of gross direct construction phase economic impacts

- 7.5.13 It is estimated the development will generate the capacity to support an annual average of 68–104 person years of employment in the Vale of Glamorgan during the construction phase. This in turn could support £2.2–£3.4 million in wages and £4.5–£6.9 million in GVA annually for the estimated 10 years construction phase.

Table 7.11: Summary of gross direct construction phase economic impacts

Impact	Annual	Total
Jobs (person years)	68 –104	675–1,050
Wages	£2.2–£3.4 million	£22–£34 million
GVA	£4.5–£6.9 million	£45–£69 million

Source: HJA analysis

Net Additional Economic Impacts (Construction)

- 7.5.14 The impacts outlined above are gross direct impacts. It is best practice to allow for 'additionality' factors in order to arrive at a net additional local impact. This allows an assessment of the net effects at site level and Vale of Glamorgan area level. This assessment allows for leakage, deadweight, displacement and substitution, and multiplier effects. These are explained in more detail below. Unless otherwise stated assumptions are informed by HCA (2014) Additionality Guide: Fourth Edition.

Leakage

- 7.5.15 Leakage is a measure of the impacts which 'leak' outside the impact area being considered. For example, jobs which are taken by those living outside the Vale of Glamorgan.
- 7.5.16 A 10% reduction to gross direct employment has been made to allow for HQ and project management functions, assuming a lead contractor with a HQ outside the Vale of Glamorgan. The remainder are assumed to be site based.
- 7.5.17 For the remainder, the 2001 Census of Population provides detailed assessment of the origin and destination of workers by sector. Whilst this dataset is now somewhat out of date, it provides some insight into the workings of the economy. At 2001 some 64% of construction workers employed in the Vale of Glamorgan lived within this area. On this basis, leakage is assessed as 36%.
- 7.5.18 The 2011 Census of Population data does not provide the sectoral data. As per paragraph 1.5.34, the latest available Census-based commuting data indicates that 63% of jobs with a fixed workplace outside the home are filled by residents of the Vale of Glamorgan.

Deadweight

- 7.5.19 Deadweight is a measure of what impacts would have occurred without the development proposal. There is no major construction investment planned at the site in the absence of the development proposal. Therefore, for the construction phase there is no deadweight to be accounted for.

Displacement and substitution effects

- 7.5.20 Displacement and substitution effects are used to discount the proportion of gross impacts which offset other impacts which would otherwise have occurred. For example, a construction firm securing a contract to work on the development proposal therefore turns down another contract that would otherwise have kept the team gainfully employed. Or a new firm establishes a

construction operation to secure a contract and secures an opportunity that would otherwise have gone to another local construction firm.

- 7.5.21 The construction sector in the Vale of Glamorgan currently comprises 2,250 jobs. The average annual requirement for construction labour is therefore equivalent to up to 4.6% of the Vale of Glamorgan construction labour force.
- 7.5.22 The primary concern in this analysis is with substitution effects upon local construction firms - this is assumed as very low. Therefore, a 'very low' displacement deduction of 10% has been applied at the Vale of Glamorgan level.

Multipliers

- 7.5.23 Multipliers are a tool used to assess the ongoing and repeated effects of expenditure in the economy through supply chains and by workers. In this analysis we are using Type II multipliers which incorporate both the supply chain (indirect) effects of investment and the induced effects as incomes earned by workers are spent in the local economy.
- 7.5.24 The construction sector has particularly high multipliers, with high levels of locally retained expenditure. This reflects the local sourcing of labour and the expenditure of earned incomes in the local area, as well as the often localised purchase of building materials, particularly non-specialised materials.
- 7.5.25 A multiplier of 1.5 is therefore applied at the Vale of Glamorgan level.

Summary of net additional construction phase economic impacts

- 7.5.26 The assumptions outlined above are applied to the gross direct effects previously set out. It is estimated the development will generate the capacity to support an annual average of 53–81 person years of employment for the Vale of Glamorgan. This in turn could support £1.7–£2.6 million in wages and £3.5 million–£5.4 million in GVA annually for the estimated 10 year construction phase.

Table 7.12 – Summary of net additional construction phase economic impacts

Impact	Annual	Total
Employment (person years)	53–81	527–809
Wages	£1.7–£2.6 million	£17–£26 million
GVA	£3.5–£5.4 million	£35–£54 million

Source: HJA analysis

- Jobs (person years): There is no evidence of weakness in the Construction sector in the Vale of Glamorgan, and increasing employment opportunities in the sector is not seen as a policy priority. Therefore, the value of the receptor is considered to be low. It is estimated the development will generate 53–81 person years of employment for the Vale of Glamorgan on an annual basis for the 10 year construction phase. On the basis of the net figures for construction sector employment in Table 7.10, this is approximately 2.4%–3.6% of construction employment in the Vale of Glamorgan for a period of 10 years. Therefore, the magnitude of the impact is deemed to be medium beneficial. The effect is therefore assessed to be of minor (beneficial) significance, which is not significant in EIA terms. The effect is assessed as long term given that the construction phase is expected to last for 10 years.

- Wages: Overall, the value of the receptor is considered to be low and the magnitude of the impact is deemed to be medium beneficial. The effect is therefore assessed to be of minor (beneficial) significance, which is not significant in EIA terms. The effect is assessed as long term.
- GVA: Overall, the value of the receptor is considered to be low and the magnitude of the impact is deemed to be medium beneficial. The effect is therefore assessed to be of minor (beneficial) significance, which is not significant in EIA terms. The effect is assessed as long term.

Operational Impacts

- 7.5.27 This section considers the economic impacts arising from the on-going operation of the development proposal. There will be a range of direct on-site impacts including jobs, wages, and GVA arising from activities taking place within the employment premises delivered as part of the development proposal.

Reference Case

- 7.5.28 To gauge the benefit of the development proposal, it is necessary to establish the 'reference case' scenario in which the development proposal does not go ahead (TAN 23, 2014). In the event that the development proposal does not come forward, it is anticipated the application site will continue to support agricultural activities ('the farm').
- 7.5.29 The reference case is outline in more detail in section 7.5.
- 7.5.30 The assumptions relating to Net Additional Economic Impacts (Operational) outlined later on in this section have been applied to the conditions detailed in section 7.5 to derive the net additional impacts of the continued operation of the farm.
- 7.5.31 It is assumed that should the development go ahead the farm will cease to operate as a going concern and the associated economic impacts will be lost.

Assumptions

- 7.5.32 The economic impacts arising from the operation of the development proposal are derived from the 'Master Plan Plot Outlines' provided by RPS. The details relevant to this assessment are summarised in Table 7.13 below.

Table 7.13 – Plot use and floorspace assumptions

Use	Floorspace (sq ft)	Floorspace (sq m)
B1a Office	~300,000	~29,000
B8 Trade Counter	~125,000	~12,000
B1a/B8	~200,000	~20,000
B1c/B8	~325,000	~31,000
B2/B8	~750,000	~71,000

Source: RPS (sq m based on HJA calculations)

- 7.5.33 Table 7.14 outlines the indicative floorspace densities for each use class that have been applied to establish the level of FTE employment associated with the development proposal.

Table 7.14 – Indicative floorspace densities

Use	Per FTE	Area
B1a Office	12 sq m	NIA
B1c Industrial	47 sq m	NIA
B2	36 sq m	GIA
B8	77 sq m	GEA
B8 Trade Counter	70 sq m	GEA

Source: HCA

- 7.5.34 In order to assess the impact of the development proposal in terms of wages, an indicative wage by use class was established. This was achieved by, in the first instance, establishing a sector-based indicative distribution of employment by use class for the Vale of Glamorgan, using BRES data. Then, for each use class, this distribution was combined with the median annual gross pay figure for each sector from ASHE in order to establish an indicative wage by use class. The figures used are detailed in Table 7.15 below.

Table 7.15 – Indicative wage by use class

Use	Annual gross pay
B1a Office	£32,772
B1c Industrial	£28,323
B2	£30,003
B8 (inc. Trade Counter)	£26,117

Source: HJA analysis

- 7.5.35 A similar method was used to establish an indicative GVA per worker by use class. The same sector-based indicative distribution of employment by use class for the Vale of Glamorgan was combined with a sector-based GVA per worker figure derived from the ABS, establishing an indicative GVA per worker by use class. The figures used are detailed in Table 7.16 below.

Table 7.16

Use	GVA per worker
B1a Office	£61,671
B1c Industrial	£58,399
B2	£65,339
B8 (inc. Trade Counter)	£45,807

Source: HJA analysis

Gross Direct Economic Impacts (Operation)

- 7.5.36 Gross direct economic impacts are included for fullness, although are they are not assessed for significance as these figures have not been subjected to additionality factors as per HCA guidance. Therefore, only net additional impacts are assessed for significance.

Gross direct FTE employment

- 7.5.37 Based on standard workspace employment densities the anticipated level of employment floorspace could create the capacity to accommodate approximately 4,375 FTE jobs.

Gross direct wages

- 7.5.38 The method for establishing an indicative wage by use class is described in more detail in paragraph 1.7.8.
- 7.5.39 Based on these indicative figures, the anticipated level of employment could support approximately £127 million in wages.

Gross direct GVA

- 7.5.40 The method for establishing the GVA per worker by use class is described in more detail in paragraph 1.7.9.
- 7.5.41 Based on these indicative figures, the anticipated level of employment could support approximately £232 million in GVA.

Summary of gross direct operational phase economic impacts

- 7.5.42 It is estimated the development could generate capacity for approximately 4,375 FTE jobs in the Vale of Glamorgan, supporting approximately £127 in wages and £232 million in GVA annually.

Table 7.17 – Summary of gross direct operational phase economic impacts

Impact	Total
FTE jobs	~4,375
Wages	~£127 million
GVA	~£232 million

Source: HJA analysis

Net Additional Economic Impacts (Operation)

- 7.5.43 The impacts outlined above are gross direct impacts. It is best practice to allow for 'additionality' factors in order to arrive at a net additional local impact. This allows an assessment of the net effects at site level and Vale of Glamorgan area level. This assessment allows for leakage, deadweight, displacement and substitution, and multiplier effects. These are explained in more detail below. Unless otherwise stated assumptions are informed by HCA (2014) Additionality Guide: Fourth Edition.

Leakage

- 7.5.44 Leakage is a measure of the impacts which 'leak' outside the impact area being considered. For example, jobs which are taken by those living outside the Vale of Glamorgan.
- 7.5.45 The 2011 Census of Population indicated that 63% of all jobs with a fixed workplace outside the home in the Vale of Glamorgan are filled by residents of the county. Therefore, a leakage value of 37% has been adopted.

Deadweight

- 7.5.46 Deadweight is a measure of what impacts would have occurred without the development proposal. Following the application of all other additionality factors the assessed impacts of the reference case are deducted to arrive at a net additional figure. The reference case is discussed in more detail earlier in this section.

Displacement and substitution effects

- 7.5.47 Displacement and substitution effects are used to discount the proportion of gross impacts which offset other impacts which would otherwise have occurred. Some displacement and substitution effects are anticipated, however the intention is that the development proposal would primarily serve firms that currently operate outside the study area. Therefore, a 'very low' Displacement and Substitution value of 10% has been adopted.

Multipliers

- 7.5.48 Multipliers are a tool used to assess the ongoing and repeated effects of expenditure in the economy through supply chains and by workers. Type II multipliers are used in this analysis, which incorporate both the supply chain (indirect) effects of investment and the induced effects as incomes earned by workers are spent in the local economy. A medium multiplier factor is assumed, which is 1.3 at the Vale of Glamorgan level.

Summary of net additional operational phase economic impacts

- 7.5.49 The assumptions outlined above are applied to the gross direct impacts to derive net additional impacts at the Vale of Glamorgan level.
- 7.5.50 It is estimated the development will create capacity to accommodate around 3,225 net additional FTE jobs for the Vale of Glamorgan, supporting approximately £94 million in net additional wages and £171 million in net additional GVA.

Table 7.18 – Summary of net additional operational phase economic impacts

Impact	Total
FTE employment	~3,225
Wages	~£94 million
GVA	~£171 million

Source: HJA analysis

- FTE Employment: Achieving sustainable economic growth through the creation of good quality employment opportunities has been established as a policy priority. The baseline conditions have established there is an economic weakness by way of a shortfall in high value jobs within the local authority area available to residents of the Vale of Glamorgan. The development proposal has the capacity to accommodate a significant number of high value jobs, and support stronger connectivity between the Enterprise Zone and Cardiff Airport, therefore aligning with policy priorities and improving economic conditions in the Vale of Glamorgan. Therefore, the value of the receptor is considered to be high. It is estimated the development proposal will create capacity to accommodate approximately 3,225 net additional FTE jobs for the Vale of Glamorgan. On the basis of the figures for total employment in paragraph 7.5.17, this is approximately 6.6% of total employment in the Vale of Glamorgan. Therefore, the magnitude of the impact is deemed to be high beneficial. The effect is therefore assessed to be of major (beneficial) significance, which is significant in EIA terms. The effect is assessed as long term (i.e. over 5 years).

- **Wages:** Increasing the earning potential of every individual and redressing economic disadvantage has been established as a policy priority. The baseline conditions have established there is an economic weakness by way of a workplace-based median annual wage well below the Wales average. The development proposal has the capacity to support significant earning potential for employees in sectors that will pay in excess of the current average for the Vale of Glamorgan, therefore aligning with policy priorities and improving what is currently a weakness in the Vale of Glamorgan economy. Therefore, the value of the receptor is considered to be high. The magnitude of the impact is deemed to be high beneficial. The effect is therefore assessed to be of major (beneficial) significance, which is significant in EIA terms. The effect is assessed as long term.
- **GVA:** Increasing innovation and research and development activities throughout the economy by encouraging the establishment of sectoral clusters has been established as a policy priority. The baseline conditions have established there is an economic weakness in the Vale of Glamorgan by way of a GVA per job figure slightly below the Wales average but well below the UK average. Therefore, the value of the receptor is considered to be high. It is estimated the development proposal will create capacity to support approximately £171 million in GVA for the Vale of Glamorgan economy. On the basis of the figure for GVA in paragraph 7.5.9, this is approximately 8.4% of total GVA for the Vale of Glamorgan. Therefore, the magnitude of the impact is deemed to be high beneficial. The effect is therefore assessed to be of major (beneficial) significance, which is significant in EIA terms. The effect is assessed as long term.

7.6 Cumulative Effects

- 7.6.1 With regard to cumulative impact, the Screening Report and associated correspondence included at **Appendix 1.1** and **Appendix 1.2** respectively is clear that there are no outstanding planning applications, approved or committed development on allocated land to the north of the application site and it could, feasibly proceed in isolation to the remainder of the allocation. Therefore it is appropriate to consider its impact in isolation of the remainder of the allocated land and there are no anticipated cumulative effects.

7.7 Mitigation Measures and Statement of Residual Effects

- 7.7.1 A loss of existing economic activity on the site will occur in the event of the development proposal going ahead. However, the value and magnitude of this activity is negligible, and is assessed to be vastly outweighed by the major beneficial economic effects arising from the development proposal. As such, the residual economic effects are long term major beneficial.

7.8 Conclusion

- 7.8.1 This chapter has provided an assessment of the economic impacts associated with the development proposal.
- 7.8.2 The legislative and policy positions presented in this chapter highlight the need to:

- Achieve sustainable economic growth through the creation of good quality employment opportunities, thereby increasing the earning potential of every individual and redressing economic disadvantage.
- Increase innovation and research and development activities throughout the economy by encouraging the establishment of sectoral clusters, in part to drive productivity gains.
- Deliver modern infrastructure and ensure a well-connected economy to ensure Wales and the Vale of Glamorgan are attractive locations to 'do businesses'

- 7.8.3 The development proposal provides an opportunity to contribute towards all three of these policy priorities.
- 7.8.4 The existing baseline conditions presented in this chapter indicate some weaknesses in the Vale of Glamorgan economy. These weaknesses include shortfalls in high value employment opportunities, low workplace-based wages, and a low workplace-based GVA per job figure. The development proposal provides an opportunity to address some of the weaknesses present in the Vale of Glamorgan economy.
- 7.8.5 The assessment of significance of effects has determined that the development proposal is likely to have a beneficial effect on economic receptors. In terms of the construction phase, the economic impacts of the development proposal on employment, wages, and GVA are assessed to be of minor significance. In terms of the operational phase, the economic impacts of the development proposal on employment, wages, and GVA are assessed to be of major significance.
- 7.8.6 On the basis of the economic impacts assessed in this chapter, there are no additional monitoring or mitigation measures required to minimise, reduce or offset the possible effects on the receiving environment i.e. the economy.

Table 7.19 – Summary of potential economic effects

Impact	Value	Magnitude	Significance	Duration
Construction Phase				
Employment (person years)	Low	Medium	Minor beneficial	Long term
Wages	Low	Medium	Minor beneficial	Long term
GVA	Low	Medium	Minor beneficial	Long term
Operational Phase				
FTE employment	High	High	Major beneficial	Long term
Wages	High	High	Major beneficial	Long term
GVA	High	High	Major beneficial	Long term

Parc Busnes Porth Cymru

Port Road, Rhooose



Environmental Statement Figures

July 2019

Parc Busnes Porth Cymru, Port Road, Rhoose Environmental Statement

Figures

Figure 2.1 - Site Location Plan

Figure 2.2 - Agricultural Land Classification

Figure 2.3 - Green Infrastructure Parameter Plan

Figure 2.4 - Movement and Access Parameter Plan

Figure 2.5 - Land Use and Storey Heights Parameter Plan

Figure 2.6 - Indicative Concept Masterplan

Figure 5.1 - Site Plan

Figure 5.2 - ZTV Plan

Figure 5.3a - 5.3p - Viewpoints

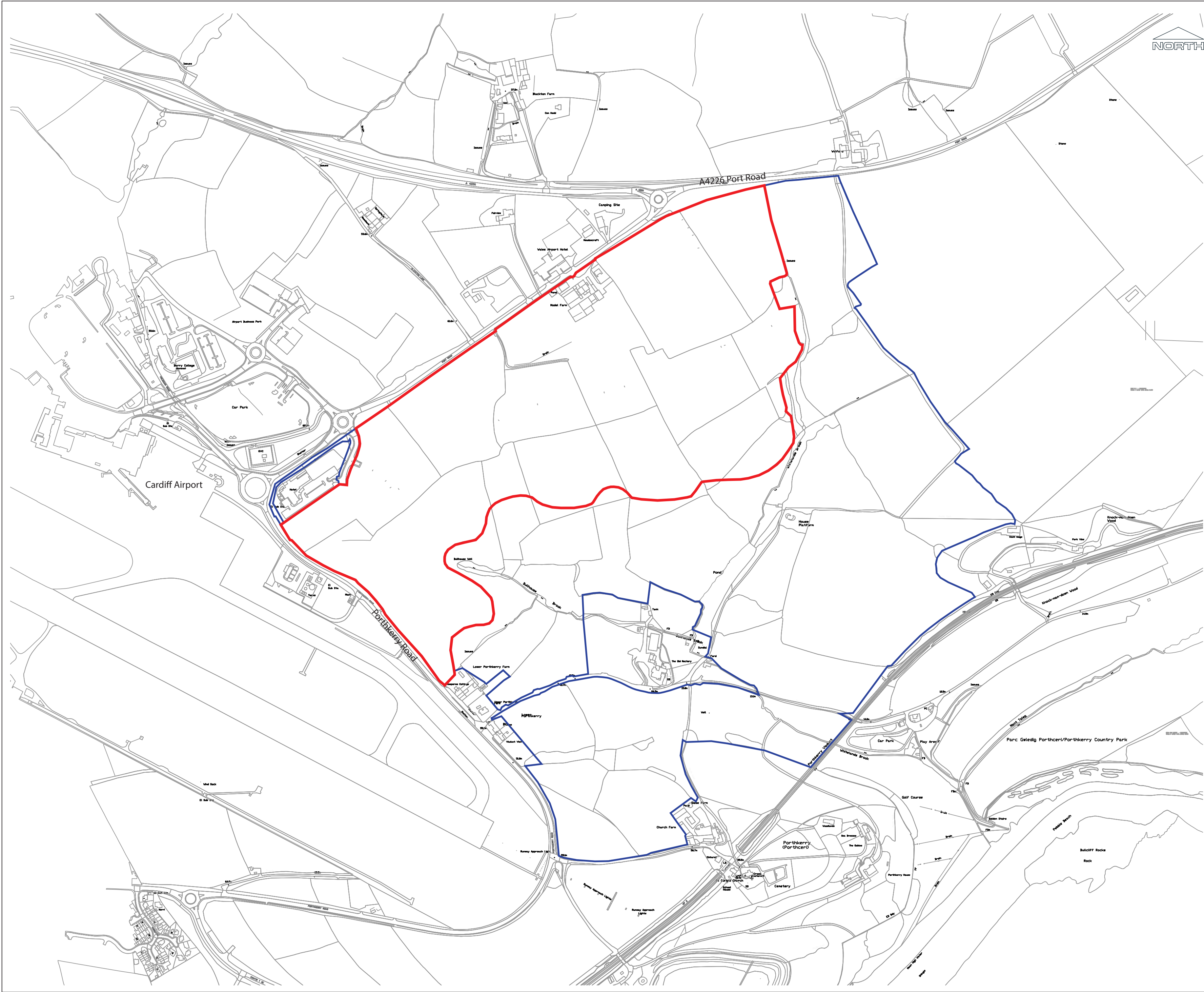
Figure 5.4a - 5.4d - Computer Generated Images

Figure 5.5 - Landscape Designation Plan

Figure 5.6 - Historic Designations Plan

Figure 5.7 - LANDMAP Aspect Areas

Figure 6.1 - Built Heritage Receptors Plan



© 2019 RPS Group

Notes

1. This drawing has been prepared in accordance with the scope of RPS's appointment with its client and is subject to the terms and conditions of that appointment. RPS accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided.

2. If received electronically it is the recipients responsibility to print to correct scale. Only written dimensions should be used.

Land In Ownership of L&G

Site Boundary

Rev	Description	Date	Initial	Checked

rps

MAKING
COMPLEX
EASY

Park House, Greyfriars Road, Cardiff, CF10 3AF
T: +44(0) 2920 668 662 E: rpsca@rpsgroup.com

Client

Legal and General
(Strategic Land) Ltd

Project

Parc Busnes Porth Cymru

Title

Site Boundary Plan

Status

DRAFT

Drawn By

PO

PM/Checked by

RL

Job Ref

JCD0064

Scale @ A2

1:5000

Date Created

MAY 2019

Drawing Number

JCD0064-001

Rev

C

rpsgroup.com

File path: 04 JOBS\01 OPEN JOBS\JCD00xx\JCD0064\4. Drawings\1. RPS Drawings\AI