

## 9. Socio-Economics and Human Health

### Introduction

- 9.1 This Chapter reports the outcome of the assessment of likely significant environmental effects arising from the Proposed Scheme in relation to Socio-Economics and Human Health.
- 9.2 The Chapter describes the technical consultation that has been undertaken during the EIA, the scope of the assessment and assessment methodology, and a summary of the baseline information that has informed the assessment.
- 9.3 In line with **Chapter 2: Approach to EIA**, the assessment reports on the likely significant environmental effects, the further mitigation measures required to prevent, reduce or offset any significant adverse effects, or measures to further enhance beneficial effects. The conclusions are provided both in terms of the residual effects and whether these are considered significant. The assessment of effects takes into consideration both primary and tertiary mitigation (see **Chapter 2: Approach to EIA** for further details) and is informed by the EIA Scoping process (**Appendix 2.1**) and iterative scoping process where applicable.
- 9.4 This Chapter, and its associated **Figure 9.1** is intended to be read as part of the wider ES with particular reference to the introductory Chapters of this ES (**Chapters 1 – 5**).
- 9.5 As set out within **Chapter 2: Approach to EIA**, and originally set out through the EIA Scoping Report (**Appendix 2.1**), ‘human health’ has been considered across the EIA and ES, rather than being addressed as a sole technical topic within the ES. On this basis, this Chapter should be read in conjunction with **Table 2.2** within **Chapter 2: Approach to EIA**, which sign posts the human health related effects considered across the EIA and ES.
- 9.6 In addition, this Chapter should be read in conjunction with **Chapter 14: Assessment of Cumulative Effects**.

### Summary of Consultation

- 9.7 No direct technical consultation has been undertaken specifically as part of the preparation of this ES Chapter. The scoping process is considered in the following section.

### Scope of the Assessment

- 9.8 As set out in **Chapter 2: Approach to EIA**, the scoping of the EIA and ES has utilised a combination of informal consultation with Neath Port Talbot County Borough Council (NPTCBC), culminating in a formal request for an EIA Scoping Opinion in June 2023, supported by an EIA Scoping Report (**Appendix 2.1**). At the point of submission of PAC, an EIA Scoping Opinion from NPTCBC was pending.
- 9.9 Although the EIA Scoping Report looked to establish the overall framework of the EIA and ES, an iterative scoping process has been adopted in order to respond to the evolving engineering design of the Proposed Scheme. In a similar manner, a number of changes have occurred to the Proposed Scheme since the preparation and submission of the EIA Scoping

Report, as set out within **Chapter 1: Introduction** and **Chapter 2: Approach to EIA**. As a result, it has been necessary to review the scope of assessment proposed.

9.10 As such, this section provides a review, validation and update, where necessary, on the scope of the assessment presented within this Chapter.

#### **Effects Not Considered to be Significant**

9.11 The following effects were not considered significant as part of the EIA Scoping Report (**Appendix 2.1**) and, taking account of the changes occurring to the Proposed Scheme, are considered to remain unchanged and therefore not considered further in this Chapter (with detailed justification provided within the EIA Scoping Report):

- Access to quality housing, healthcare services, open space and nature, and other social infrastructure;
- Access to healthy food;
- Accessibility and active travel;
- Social cohesion and lifetime neighbourhoods;
- Crime reduction and community safety;
- Access to work and training; and
- Environmental conditions and climate change<sup>a</sup>.

9.12 There are no additional effects that have been identified as part of the iterative review process that are now considered unlikely to be significant.

#### **Effects Considered Likely to be Significant**

9.13 The following effects (**Table 9.1**) were considered likely to be significant at the EIA Scoping stage. That position is not affected by the changes to the Proposed Scheme since submission of the EIA Scoping Report, and therefore these have been assessed and reported within this Chapter.

**Table 9.1: Effects Considered Likely to be Significant**

Likely Significant Effect	Receptors	Applicable Development Stage
Employment generated in the construction stage	Local labour force Vulnerable Groups	Construction
Employment generated in the operation stage	Local labour force Vulnerable Groups	Operation

<sup>a</sup> This effect is appropriately accounted by other technical chapters.

## Assessment Methodology

### Legislative Framework, Policy and Guidance

9.14 No legislative framework or policy have informed the assessment of affects within this Chapter. However, the following guidance has informed the assessment of effects within this Chapter:

- Homes and Communities Agency (HCA) (2014) Additionality Guide (4<sup>th</sup> Edition)<sup>1</sup>;
- HCA (2015) Employment Density Guide (3<sup>rd</sup> Edition)<sup>2</sup>;
- Wales Health Impact Assessment Support Group (WHIASU)<sup>3</sup>; and
- IEMA (2017). Health in Environmental Impact Assessment: A Primer for a Proportionate Approach<sup>4</sup>.

### Defining the Study Area

9.15 The technical study area was established by the EIA Scoping Report (**Appendix 2.1**). In the absence of guidance or policy available to inform the definition of appropriate study areas, it was considered reasonable to define study areas based on an understanding of relevant local and wider economic geographies, and the extent to which socio-economic and human health effects are likely to be contained within these geographies. A plan of the Study Area is included at **Figure 9.1**, and shows:

- A Local Impact Area based on the administrative area of NPTCBC. The 2011 Census indicates that 64% of people working in NPT also live within the authority. All effects assessed within the chapter are relevant to analyse at the scale of the local impact area; and
- A Wider Impact Area defined to cover Wales. The 2011 Census found that the majority (99%) of people working in NPTCBC lived within the wider impact area, suggesting a very high level of socio-economic containment within this geography.

### Background Studies to Inform the ES / Establishing the Baseline

9.16 **Table 9.2** summarises all analysis undertaken to inform the assessment presented within this Chapter.

**Table 9.2: Background Analysis**

Analysis	Overview	Date of Completion
Socio-economic and human health baseline analysis	Desk-based study of publicly accessible socio-economic and human health data <sup>b</sup> , which has informed the technical baseline set out within ' <i>Baseline Conditions</i> '	June 2023

<sup>b</sup> References are provided at the relevant points within the chapter.

Analysis	Overview	Date of Completion
Supply Chain Analysis (Appendix 9.1)	Economic modelling has been undertaken to estimate the scale of economic effects within the supply chain as a result of development. The assessment accounted for best practice guidance, drawing on information shared by the applicant as well as secondary datasets. This presents the quantifiable economic impacts generated during construction and operation.	June 2023

### Assessment Process

9.17 There is no overarching guidance which sets out the preferred methodology for the preparation of assessments of the likely significant effects of development proposals in terms of the identified socio-economic impacts (**Table 9.2**). However, there are several methodological guides which cover key elements of the assessment. These have been drawn upon as appropriate within the assessment including guidance published by the Wales Health Impact Assessment Support Unit (WHIASU) which advises on the steps to be taken in completing a human health impact assessment<sup>5</sup> and the HCA Additionally Guide<sup>6</sup>, alongside statistical evidence published by organisations such as the ONS being of particular relevance to the assessment of economic impacts.

9.18 Drawing on the above guidance, the following methodology was followed:

- **Employment generated during the construction stage** – An estimate of Gross full-time equivalent (FTE) construction jobs has been provided by the Applicant. This has then been divided by the length of the construction period (i.e. number of years) to estimate average gross FTE jobs supported on average throughout the construction stage. Allowances have then made for leakage<sup>c</sup> and displacement<sup>d</sup> in accordance with standards set out in recognised guidance<sup>7</sup>, in order to calculate net FTE jobs. Multipliers<sup>e</sup> have also been applied to estimate indirect and induced employment, drawing on guidance<sup>8</sup>. The extent to which employment supported by the construction of the Proposed Scheme impacts upon baseline levels and the growth of local employment in the context of wider economic trends has informed the level of effect against this indicator. The indirect health impacts of employment have also been considered in determining the level of effect;

<sup>c</sup> Leakage is defined by the HCA Additionality Guide as “The proportion of outputs that benefit those outside of the intervention’s target area or group”. For example, the number of jobs which would be held by those living outside of the respective impact areas.

<sup>d</sup> Displacement is defined by the HCA Additionality Guide as “The proportion of intervention outputs/outcomes accounted for by reduced outputs/outcomes elsewhere in the target area”.

<sup>e</sup> Multipliers are defined by the HCA Additionality Guide as “Further economic activity (jobs, expenditure or income) associated with additional local income and local supplier purchases”.

- **Employment generated during the operational stage** – An estimate of Gross FTE on-site operational jobs has been provided by the Applicant. Allowances have then made for leakage and displacement in accordance with standards set out in recognised guidance<sup>9</sup>, in order to calculate net FTE jobs. Turley Economics have also undertaken a separate assessment relating to Supply Chain Employment (**Appendix 9.1**) that estimates the effect on indirect employment in the supply chain using estimated annual capital expenditure figures provided by the Applicant and publicly available data to generate an FTE employment estimate. The extent to which employment supported by the operation of the Proposed Scheme impacts upon baseline levels and growth of local employment in the context of wider economic trends has informed the level of effect against this indicator. The indirect health impacts of employment have also been considered in determining the level of effect.

## Reporting of the Environmental Effect and Significance Criteria

9.19 The assessment of likely significant environmental effects as a result of the Proposed Scheme has taken into account the construction stage and operational stage. The following sections define the approach adopted within the assessment for the determination of sensitivity (or value/importance), magnitude of change (or impact), the level of effect and significance.

### Determining Sensitivity of Receptor

9.20 The sensitivity of affected receptors has been considered on a scale of **high, medium, low or negligible**.

9.21 The sensitivity of receptors is determined through comparison with wider regional and national trends. Consideration is also given to the priority and value attributed to specific receptors in strategy and policy terms. The assessment is based on professional judgement.

9.22 **Table 9.3** provides a general overview of the sensitivity criteria which have been applied in the assessment. Given the broad range of effects assessed within the Chapter, it is not possible to define specific criteria that would be applicable across all receptors. The sensitivity of each specific receptor is therefore discussed and justified in turn within the main body of this Chapter, based on these general principles.

**Table 9.3: Definition of Sensitivity of Receptors**

Sensitivity	Definition
High	Receptor of national importance, with little ability to absorb, adapt to or recover from change
Medium	Receptor of regional or local importance, with medium ability to absorb, adapt to or recover from change
Low	Receptor of local importance, with some ability to absorb, adapt to or recover from change
Negligible	Receptor of limited or no importance

### Determining the Magnitude of Change

- 9.23 The magnitude of change has been considered as the change experienced from the current baseline conditions at the sensitive receptor and has been considered on a scale of **large, medium, small** or **negligible**.
- 9.24 **Table 9.4** provides a general overview of the magnitude criteria which have been applied in the assessment.
- 9.25 To determine magnitude, the absolute impact attributable to the Proposed Scheme is benchmarked (where relevant) against the average annual rate of change in the corresponding socio-economic and human health characteristics or baseline.

**Table 9.4: Definition of Magnitude of Change**

Magnitude	Definition
Large	The change will result in substantial changes to baseline conditions or will be highly likely to affect large numbers of people and/or businesses over the long-term (10+ years), and, as such, should be acknowledged as an important consideration which (depending on the sensitivity of the receptor) is likely to be material in the decision-making process.
Medium	The change can be demonstrated to baseline conditions and is likely to affect a reasonable number of people and/or businesses over a medium-term (1 – 10 years) duration. The change may be important, but is not likely to be a key decision-making factor unless the cumulative effects of such factors lead to an increase in the overall effect on a particular socio-economic resource or receptor.
Small	The change will result in a perceptible difference from baseline conditions and is likely to affect a small number of people and/or businesses over a short-term (less than 1 year) duration. The change may be raised as a local factor, but is unlikely to be critical in decision-making process.
Negligible	The change does not result in variation beyond baseline conditions, and is unlikely to measurably affect people and/or businesses.

### Determining the Level of Effect

- 9.26 The level of effect has been informed by the magnitude of change due to the Proposed Scheme and the evaluation of the sensitivity of the affected receptor. The level of effect has been determined using professional judgement and **Table 9.5** has been a tool which has assisted with this process.
- 9.27 Whilst **Table 9.5** provides ranges, the level of effect is confirmed as a single level and not a range, informed by professional judgement. For each effect, it has been concluded whether the effect is '*beneficial*' or '*adverse*'.

**Table 9.5: Matrix to Support Determining the Level of Effect**

		Sensitivity (or value / importance)			
		High	Medium	Low	Negligible
Magnitude of Change	Large	Major	Moderate to Major	Minor to Moderate	Negligible
	Medium	Moderate to Major	Moderate	Minor	Negligible
	Small	Minor to Moderate	Minor	Negligible to Minor	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

9.28 The following terms have been used to define the level of the effects identified and these can be ‘beneficial’ or ‘adverse’:

- **Major effect:** where the Proposed Scheme is likely to cause a considerable change from the baseline conditions and the receptor has limited adaptability, tolerance or recoverability or is of the highest sensitivity;
- **Moderate effect:** where the Proposed Scheme is likely to cause either a considerable change from the baseline conditions at a receptor which has a degree of adaptability, tolerance or recoverability or a less than considerable change at a receptor that has limited adaptability, tolerance or recoverability;
- **Minor effect:** where the Proposed Scheme is likely to cause a small, but noticeable change from the baseline conditions on a receptor which has limited adaptability, tolerance or recoverability or is of the highest sensitivity; or where the Proposed Scheme is likely to cause a considerable change from the baseline conditions at a receptor which can adapt, is tolerant of the change or/and can recover from the change; and
- **Negligible:** where the Proposed Scheme is unlikely to cause a noticeable change at a receptor, despite its level of sensitivity or there is a considerable change at a receptor which is not considered sensitive to a change.

9.29 The duration of the effect has been assessed as either ‘short-term’, ‘medium-term’ or ‘long-term’. Short-term is considered to be up to 1 year, medium-term is considered to be between 1 and 10 years and long-term is considered to be greater than 10 years.

#### **Determining Significance**

9.30 For each effect, a statement has been made as to whether the level of effect is ‘**Significant**’ or ‘**Not Significant**’. This determination has been based on professional judgement and/or relevant guidance where applicable.

9.31 Significance has only been concluded for residual effects (i.e., following the identification of secondary mitigation).

## Baseline Conditions

- 9.32 Analysis of economic activity, employment and unemployment rates provides an indication of the latent labour force either currently unemployed or available to start work immediately. Between January 2022 – December 2022, the ONS’s Annual Population Survey (APS)<sup>10</sup> indicates that economic activity rates amongst the working-age population (16–64-year-olds) of the local impact area of NPTCBC (73%) is lower than within Wales (76%) and Great Britain as a whole (79%). The employment rate in NPTCBC amongst the working age population, at 70%, is also lower than in Wales (73%) and Great Britain (76%).
- 9.33 The latest Claimant Count data published by the ONS<sup>11</sup> provides an up-to-date record of the number of people currently claiming benefits principally for the reason of being unemployed. As of April 2023, 2,815 people in NPTCBC were claiming out of work benefits. Of those aged 16-64, 3.2% were claiming out of work benefits in NPTCBC, which is lower than the rate of working age claimants in Wales (3.4%) and Great Britain (3.85%).
- 9.34 Analysis of ONS data regarding Jobseeker’s Allowance (JSA) claimants<sup>12</sup> (a sub-set of Claimant Count, which also captures the majority now claiming Universal Credit) highlights that circa 2,195 people were recorded as specifically seeking employment in construction-related trades in Wales in April 2023. Of which circa 85 construction-related jobseekers were recorded in NPTCBC. This indicates that there is available construction labour locally and in the wider area.
- 9.35 The social impact of skills and employment is far-reaching and has benefits at both the individual and wider societal levels. This is shown by the guidance published by the Wales Health Impact Assessment Support Group (WHIASU) which considers access to training and employment opportunities as a ‘primary determinant’ of health<sup>13</sup>.
- 9.36 Gaining employment can have significant economic and wellbeing benefits for both individuals and society. Health expenditure on an unemployed person is reported to be double the average expenditure of a person with overall good physical and mental health and wellbeing. Being healthy is strongly associated with being in fulfilling and stable employment<sup>14</sup>.
- 9.37 Research from the Government’s Office for Health Improvement and Disparities (OHID, formerly Public Health England, PHE)<sup>15</sup> highlights that employment helps secure a person the adequate economic resources which are essential for material wellbeing. Employment supports full participation in society and also meets important psychosocial needs in societies where employment is the norm and is central to individual identity, social roles and social status.
- 9.38 Conversely, research indicates that unemployment can cause psychological stressors related to status, self-esteem, identity and the loss of a core role in life. Unemployment, therefore, has a negative impact on health and is often associated with unhealthy behaviours including increased smoking and alcohol consumption and decreased physical exercise.
- 9.39 The ONS regularly monitors UK wellbeing and their research<sup>16</sup> highlights a correlation between unemployment and people experiencing feelings of loneliness. Unemployment poses a real threat not only to people’s economic means but also their health and wellbeing.

The need for workers to have the skills required to take up new job opportunities is, therefore, one which meets both an economic and a social need.

### Labour Market and Industry

- 9.40 The 2021 ONS Business Register and Employment Survey (BRES)<sup>17</sup> recorded that NPTCBC accommodates a total of 53,500 workforce jobs, which is approximately 4% of the 1.3 million jobs accommodated in Wales. As of 2015, NPTCBC accommodated 48,600 jobs, indicating that 4,750 additional jobs (an average of 800 per annum) were created in the area between 2015 and 2021.
- 9.41 BRES data indicates that as of 2021 NPTCBC supported employment for 2,000 people in the construction sector, equating to 3.8% of total employment in the area, which is lower than the sector's 4.5% contribution to the total workforce in Wales. In 2015, the construction industry supported 2,500 jobs in NPTCBC, indicating that there has been a modest decline of 500 jobs (an average of circa 80 per annum) in employment in the sector during this time.
- 9.42 Other key employment sectors in NPTCBC as of 2021 include manufacturing (accommodating 9,000 jobs, or 17% of employment); health (8,000, 15%) and public administration & defence (6,000, 11%). The number of manufacturing jobs in NPTCBC was also at 9,000 in 2015, displaying only minor fluctuations in the period to 2021.
- 9.43 Employment in 'Water supply; sewerage, waste management and remediation activities', indicated by the Applicant as one of the primary on-Site activities within the Supply Chain Employment analysis (**Appendix 9.1**) prepared for this application, has increased from 600 in 2015 to 1,000 in 2021, an average of 65 jobs per annum. Similarly, employment in the transportation and storage sector, again an on-site activity that the Applicant has indicated will be present on-Site, has increased from 2,000 in 2015 to 4,500 in 2021, an average increase of 415 jobs per annum.
- 9.44 The delivery of new employment, training and economic growth opportunities are local and UK Government policy priorities and are essential components of economic recovery following the impacts of macro-economic factors, including the Covid-19 pandemic, the war in Ukraine, the cost-of-living crisis, and also to respond to longstanding economic inequalities. As such, the Levelling Up White Paper<sup>18</sup> outlines that a key objective of the Government over the period to 2030 is to "...boost productivity, pay, jobs and living standards by growing the private sector" and to close the gap in economic opportunities and outcomes between areas.
- 9.45 The Welsh Government published their latest industrial strategy in April 2023, titled 'A Manufacturing Future for Wales: Our Journey to 'Wales 4.0'', within which there was a strategic objective to 'Develop the conditions to anchor key manufacturing companies in Wales, including provision of modern infrastructure and resilient supply chains'<sup>19</sup>. Having more localised supply chains is a specific element of this objective and the Proposed Scheme has the potential to contribute to this objective.
- 9.46 The need for new jobs and a boost to pay and living standards remain of vital importance in the current context of inflationary pressures and the cost-of-living crisis. ONS research indicates that 94% of adults in Great Britain reported an increase in their living costs over the year to February 2023<sup>20</sup>. Indeed, it is noted that the high level of inflation has led to 'real wages' (i.e. wages adjusted to take account of inflation) falling during 2022 and early 2023;

ONS data indicates that real wages were 3.0% lower in March 2023 compared with December 2022<sup>21</sup>.

## **Future Baseline**

- 9.47 It is anticipated that the Proposed Scheme will be delivered over a 2.5-year period between 2024 (the commencement of site preparation) and 2026 (the completion of all works on-Site and the Site becomes fully operational). The below therefore summarises (where possible) forecasts for the future baseline at the commencement of the construction stage and the anticipated date of full completion/operation in the absence of the Proposed Scheme.
- 9.48 Experian's latest employment forecasts<sup>22</sup> published in March 2023 indicated that total FTE employment is anticipated to decrease by 0.2% between 2023 and 2024 in NPTCBC and 0.1% in Wales. This trend is expected to be repeated again between 2024 and 2026.
- 9.49 NPTCBC's construction workforce is anticipated to remain level between 2023 and 2024, though drop by 6.7% between 2024 and 2026. There is expected to be a 0.5% drop in Wales' construction workforce between 2023 and 2024 and a 0.6% drop between 2024 and 2026.
- 9.50 Between 2023 and 2024, employment in the manufacturing sector is expected to decrease by 1.2% and then decrease by 1.8% between 2024 and 2026 in NPTCBC. However, employment in NPTCBC's Transport & Storage sector is anticipated to increase by 0.1% between 2023 and 2024 and a further 0.3% between 2024 and 2026.
- 9.51 Therefore, in the absence of the Proposed Scheme coming forward the future baseline is predicted to be worse than the existing baseline, with respect to employment within the relevant industries / sectors.

## **Primary and Tertiary Mitigation**

### **Construction Stage**

- 9.52 No primary or tertiary mitigation has been evaluated as part of the construction stage assessment because there is not any mitigative actions that are relevant to the assessed effects.

### **Operational Stage**

- 9.53 No primary or tertiary mitigation has been evaluated as part of the operational stage assessment because there is not any mitigative actions that are relevant to the assessed effects.

## **Assessment of Effects, Secondary Mitigation and Residual Effects**

### **Construction Stage**

#### ***Employment generated during the construction stage***

- 9.54 Based on information provided by the Applicant, it is estimated that the Proposed Scheme has the capacity to support an average of 450 full-time equivalent (FTE) on and off-site construction jobs during the construction stage.
- 9.55 Of the new construction jobs created, not all will be additional to the local and wider impact area. A proportion of jobs will be taken by those living outside of the local impact area of

NPTCBC or the wider impact area of Wales (referred to as ‘leakage’) and a proportion of jobs will be taken by those who, in the absence of the Proposed Scheme, could otherwise be working on alternative construction projects locally (referred to as ‘displacement’). After assumptions regarding leakage<sup>f</sup> and displacement<sup>g</sup> have been applied, in line with benchmarks set out in HCA guidance<sup>23</sup>, it is estimated that 340 FTE jobs will be directly supported across the wider impact area, of which 220 FTE jobs are likely to be taken by those living in the local impact area.

- 9.56 The beneficial economic impacts of the Proposed Scheme will extend beyond construction employment to include the generation of indirect benefits for the local economy. Investment in the Proposed Scheme will generate considerable expenditure on construction materials, goods and other services which will be purchased from a wide range of suppliers. This expenditure has far-reaching benefits both locally and further afield as it filters down the supply chain, and via the induced impacts of employment, through onward expenditure.
- 9.57 The result is that the initial investment in the Proposed Scheme is amplified in an economic ‘multiplier’ effect with linked benefits in terms of local expenditure on goods and services. This will bring ‘indirect’ employment and financial benefits for local individuals and firms involved in the skilled construction trades and associated professions, as well as supporting ‘induced’ employment through inward expenditure of wages by those who are directly and indirectly employed as a result of the Proposed Scheme.
- 9.58 The construction of the Proposed Scheme could be expected to support a further 170 FTE jobs within the wider impact area via indirect and induced effects, including contracts within the supply chain, salaries and onward expenditure, inclusive of 55 FTE jobs in the local impact area<sup>h</sup>.
- 9.59 The total net additional impact therefore accounts for the total economic impact of both direct and indirect/induced effects. The assessment finds that a total of 505 net additional FTE positions could be generated each year across the wider impact area during the construction stage, inclusive of 275 jobs in the local impact area (as summarised in **Table 9.6** below).

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<sup>f</sup> Rounded leakage rates of 35% and 0% respectively applied at the local and wider impact areas, in line with ONS data regarding labour force containment within the local and wider impact areas, as recorded by the 2011 Census. Note that Census 2011 data is considered more suitable than equivalent data recorded as part of the 2021 Census for these purposes, given that 2021 Census data was collected during the Covid-19 pandemic, with guidance at the time remaining for people to work at home where possible. It is likely that restrictions during the pandemic contributed to changes in travel to work patterns, including greater prevalence of home-working and fewer people using public transport,

<sup>g</sup> ‘Low’ displacement rate of 25% applied at the local and wider impact areas, based on HCA guidance. Low displacement rates applied given the available workforce capacity demonstrated by the number of people claiming JSA and seeking construction employment.

<sup>h</sup> Multipliers of 1.25 and 1.5 respectively applied at the local and wider impact areas, based on HCA guidance, reflecting that multipliers are higher regionally (i.e. resulting in greater impacts) than at the sub-regional scale.

**Table 9.6: Construction Stage Employment**

Employment Generated	Local Impact Area	Wider Impact Area (Inclusive of Local Impact Area)
Person-years of Employment		1,125
Construction Period (years)		2.5
Gross FTE Employment		450
Direct Net Additional FTE Employment	220	340
Indirect/Induced Net Additional FTE Employment	55	170
<b>Total Net Additional FTE Employment</b>	<b>275</b>	<b>505</b>

Source: Turley Economics, 2023

- 9.60 As set out under the ‘*Determining Sensitivity of Receptor*’ section above, the sensitivity of the labour force in the local and wider impact areas is considered to be high. In addition, this level of sensitivity acknowledges the importance of employment to people’s physical and mental health, wellbeing and socio-economic security. The magnitude of change is considered to be medium, relative to baseline change in construction employment in NPTCBC; an uplift of 275 direct and indirect/induced net additional FTE construction sector jobs would increase employment in the sector by a substantially greater rate to that which construction employment has been declining by, on average (80), in NPTCBC between 2015 and 2021. Employment will be supported on a temporary, medium-term basis (over a 2.5-year period), which is a factor considered in terms of the conclusion of magnitude. Therefore, there is likely to be a direct, temporary, medium-term, beneficial impact which is considered to be minor.

#### Secondary Mitigation or Enhancement

- 9.61 No secondary mitigation or enhancement is required, because there is not any mitigative actions that are relevant to the assessed effect.

#### Residual Effect

- 9.62 In the absence of secondary mitigation or enhancement, the residual effect is the same as that reported in the pre-mitigation scenario.

- 9.63 This effect is considered to be **Not Significant**.

### **Operational Stage**

#### ***Employment generated during the operational stage***

- 9.64 The Applicant has advised that permanent, gross on-Site employment at the Proposed Scheme will total 85 FTE jobs. After accounting for leakage and displacement (applied using equivalent assumptions as set out within the assessment of construction stage employment above), it is estimated that there will be an overall uplift in direct net additional FTE employment of 65 jobs in Wales, inclusive of 40 in NPTCBC.

- 9.65 In order to accommodate some of the demolition activities, some existing occupants will be permanently displaced. It is the intention for the activities of displaced occupants to remain within NPT, through mediation between occupants and Associated British Ports who own and operate the port of Port Talbot, and therefore there will be no impact on employment levels within the local impact area. Consequently, this will not be considered further.
- 9.66 Turley Economics have also produced a standalone Supply Chain Employment analysis (**Appendix 9.1**) for the Proposed Scheme, informed by information provided by the Applicant and the Business Population Estimates 2022 for Wales, which estimated that 130 FTE jobs would be supported in the supply chain predominantly in roles included within the industry sections ‘Mining and Quarrying; Electricity, Gas, Steam and Air Conditioning Supply; Water Supply; Sewerage, Waste Management and Remediation Activities’ and ‘Transportation and Storage’<sup>ij</sup>. After accounting for leakage and displacement, it is estimated that there will be an overall uplift in indirect net additional FTE employment of 100 jobs in Wales, inclusive of 65 in NPTCBC. In summary, there will be a total net additional FTE employment impact of 165 jobs in Wales, inclusive of 105 in NPTCBC as shown in **Table 9.7** below.

**Table 9.7: Operational Stage Employment**

Employment Generated	Local Impact Area	Wider Impact Area (Inclusive of Local Impact Area)
Gross FTE Employment		85
Direct Net Additional FTE Employment	40	65
Indirect Net Additional FTE Employment	65	100
<b>Total Net Additional FTE Employment</b>	<b>105</b>	<b>165</b>

Source: Turley Economics, 2023

- 9.67 As set out under the ‘*Determining Sensitivity of Receptor*’ section above, the sensitivity of the labour force in the local and wider impact areas is considered to be high. In addition, this level of sensitivity acknowledges the importance of employment to people’s physical and mental health and wellbeing and socio-economic security. The magnitude of change is considered to be large, given that the net total uplift in employment of 40 direct jobs and 65 indirect jobs in NPTCBC is equivalent to c. 15% of annual average employment growth in NPTCBC over the period 2015-2021, albeit it is also noted that the new jobs will be supported on a permanent basis over the long-term. Therefore, there is likely to be a direct, permanent, long-term, beneficial effect which is considered to be moderate.

Secondary Mitigation or Enhancement

- 9.68 No secondary mitigation or enhancement is required, because there is not any mitigative actions that are relevant to the assessed effect.

<sup>i</sup> Employment will predominantly be in activities relating to *Water Supply; Sewerage, Waste Management and Remediation Activities*, however these activities cannot be isolated in Business Population Estimates data.

<sup>j</sup> This has been estimated in place of multiplier effects due to significant deviation from standard guidance.

### Residual Effect

9.69 In the absence of secondary mitigation or enhancement, the residual effect is the same as that reported in the pre-mitigation scenario.

9.70 This effect is considered to be **Significant**.

### **Limitations and Assumptions**

9.71 To ensure transparency within the EIA process, the following limitations and assumptions have been identified.

- The assessment relies on secondary survey data such as the 2011 and 2021 Censuses, APS and BRES. Each data source has methodological limitations related to data collection and surveys only represent the socio-economic context at a specific point in time;
- The future baseline and assessment of future effects relies on Experian's employment forecast data. There are known uncertainties related to using trend-based analysis, however, this is the best available data for drawing conclusions about how the economy and labour market is likely to change in the future; and
- Estimates for construction and operational stage employment have been provided by the Applicant. These rely on assumptions and uncertainties and are subject to change as the scheme progresses throughout its lifetime.

### **Summary**

9.72 **Table 9.8** provides a summary of the effects, receptors, residual effects and conclusions of significance considered within the Chapter.

9.73 The table only provides a summary of the residual effects identified within the assessment and details of all primary, secondary and tertiary mitigation that has been taken into account is set out in detail within the Chapter and summarised within the Environmental Management Plan included within **Volume 3: Environmental Management Plan**.

**Table 9.8: Summary of Residual and Significant Effects**

Effect	Receptor	Residual Effect	Is the Effect Significant?
<b>Construction Stage</b>			
Employment generated in the construction stage	Local labour force Vulnerable Groups	Minor beneficial	NO
<b>Operational Stage</b>			
Employment generated in the operational stage	Local labour force Vulnerable Groups	Moderate beneficial	YES

## References

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