

## 7 TRAFFIC AND TRANSPORT

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### 7.1 INTRODUCTION

- 7.1.1. This chapter of the ES sets out the assessment of likely significant traffic and transport effects of the Project. The chapter sets out a summary of relevant policy and baseline information for the traffic and transport study area, identifies highways receptors and presents an assessment of effects and identifies mitigation measures to minimise the impact of the Project on highways receptors.
- 7.1.2. This chapter is accompanied by two appendices as follows:
- **Appendix 7A** – Outline Construction Traffic Management Plan (CTMP); and
  - **Appendix 7B** – Outline Public Rights of Way Management Plan (PRoWMP).
- 7.1.3. This chapter should be read in conjunction with the project description provided within **Chapter 4: Description of the Project**.

### 7.2 LIMITATIONS OF THIS ASSESSMENT

- 7.2.1. To ensure transparency within the EIA process, the following limitations and assumptions have been identified relating to the traffic and transport assessment.
- 7.2.2. Detailed information regarding the Project design is not currently known, such as the locations of specific Project access points and the locations of materials suppliers. Therefore, the traffic and transport assessment is based on reasonable assumptions and currently known information. As the Project design and programming develops and further information becomes available through the appointment of contractors, the Outline CTMP and Outline PRoWMP will be updated into 'full' versions which will be consulted upon and agreed with the relevant local highway authorities (LHAs) to ensure that appropriate mitigation is in place to minimise the impacts of construction traffic and facilitate safe and efficient movements.
- 7.2.3. As set out in detail within **Section 7.6**, this traffic and transport assessment has been based on Department for Transport (DfT) average annual daily flow (AADF) data<sup>30</sup> from count point locations on the local road network (LRN) within the traffic and transport study area. Ideally, manual count data from 2019 or from 2023 (post COVID pandemic in the UK and its associated travel restrictions) would be used as reasonably recent and accurate data. However, only one road to be assessed has 2019 manual count data (Neath Road (B4282)), other LRN roads have older and/or estimated traffic data. For the assessment within this ES chapter the available DfT count data for LRN roads has been utilised for the latest available data (excluding data between 2020 and 2022 as this period does not reflect 'normal' travel conditions due to the COVID pandemic UK travel restrictions). This is a limitation on the robustness of the traffic and transport baseline traffic flow data and therefore, it is

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<sup>30</sup> Department for Transport, (2025). Road traffic statistics. Available online at: <https://roadtraffic.dft.gov.uk/#/6/55.254/-6.053/basemap-regions-countpoints> [Accessed February 2025]

intended to undertake Automatic Traffic Counts (ATCs) on the LRN at three key locations in March 2025 to obtain 2025 baseline traffic flows to supplement the assessment. This chapter will be updated in due course with this additional traffic flow information.

## 7.3 POLICY, LEGISLATION AND GUIDANCE

### POLICY

- 7.3.1. **Table 7-1** lists the key relevant national and local policy and plans to the Project in relation to traffic and transport.

**Table 7-1 – National and Local Planning Policies**

Policy reference	Policy issues
Planning Policy Wales (PPW) Section 4.1: Transport (2024)	Section 4.1 - This policy provides guidance on the integration of land use, planning and transport matters to promote more sustainable transport choices for people and freight, thus reducing the need to travel, particularly by private transport.
National Planning Statement EN-1 (2023)	This guidance sets out the methodologies to be used should the development in question be considered to give rise to significant transport effects. Travel Plans should be provided should the development generate significant numbers of vehicle movements during operation.
TAN 18 Transport (2007)	<p>Paragraph 9.16 - Many proposed developments will require access to the existing highway network. The type of access provided should reflect the type and nature of the road and the volume and character of traffic likely to use the access.</p> <p>Paragraph 9.18 - The extra trips generated by a proposed development may bring forward the need for transportation improvements in the vicinity of the scheme and beyond.</p>
Neath Port Talbot County Borough Council Local Development Plan (2011-2026) (2016)	<p>Policy SP 20 - This policy states that proposals will be resisted if they are considered to cause unacceptable impact on highway safety.</p> <p>Policy TR2 - This policy states that a proposal will only be permitted if: "The development does not compromise the safe, effective and efficient use of the highway network and does not have an adverse impact on highway safety or create unacceptable levels of traffic generation".</p> <p>Policy TR 4 - This policy states that proposals that would inhibit the use of certain freight facilities will be resisted "unless it can be demonstrated that the use of the route for movement of freight is not realistic or necessary".</p> <p>Achieving Sustainable Accessibility objectives -            Objective 21: "Increase accessibility, promote active travel and encourage a shift to more sustainable modes of transport for people and freight."            Objective 22: "Reduce impacts of traffic growth and congestion and promote the efficient and effective use of the transport network."</p>

Policy reference	Policy issues
Bridgend County Borough Council Local Development Plan 2018-2033 (2024)	<p>PLA6 – “New development proposals must be located in areas which can be effectively accessed so that the impact of road freight movement on the environment is minimised.”</p> <p>“The following transport corridors are identified as the main routes in the County Borough for the movement of people and goods”: PLA6(1), M4 PLA6(2), Lynfi PLA6(3), Garw PLA6(4), Ogmores PLA6(5), Aberkenfig-Brynmenyn PLA6(6), Pyle-Aberkenfig PLA6(7), Pencoed-Pyle PLA6(8) Porthcawl-Cornelly” developments must not result in adverse impact on the main transport corridors within the County Borough, where adverse impacts are predicted these must be mitigated.</p>

## LEGISLATION

As set out in the CTMP (**Appendix 7A**) there are various legislations regarding the co-ordination and notification of street works and movement of goods. The full CTMP will set out the works required for the construction of the Project and the contractor will comply with the LHA procedures and legislation regarding traffic management and accommodation works.

## TECHNICAL GUIDANCE

7.3.2. A summary of the technical guidance referenced in the projection of the traffic and transport assessment is as follows:

- Institute of Environmental Management and Assessment (IEMA) Guidelines: Environmental Assessment of Traffic and Movement (EATM) (IEMA, 2023) which is the current guidance for assessing potentially significant environmental impacts.<sup>31</sup>

## 7.4 CONSULTATION

7.4.1. A traffic and transport scoping chapter was produced as part of the ES scoping documentation. With regard to traffic and transport, the following is a summary of responses from the local authorities (**Appendix 2B**):

- NPTCBC – Noted that there is an agreement to install Permissive PRowS for the lifetime of the Foel Trawsnant Windfarm and that the Project interacts with the proposed permissive Bridleway. The response, also, confirmed Footpath 73.PT. interacts with the Project and notes that the Public Right of Way (PRow) ‘shall be protected at all times and any damage caused to the Right of Way shall be rectified to the satisfaction of this authority. No alteration or change to the

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<sup>31</sup> Davis, S., Hoare, D., Howard, R. and Ross, A., (2023). Institute of Environmental Management and Assessment (IEMA) Guidelines: Environmental Assessment of Road Traffic and Movements (EATM).

*condition to the PRow is to be undertaken without further consultation with the Countryside Team.'*

- BCBC – confirmed agreement with the methodology proposed within Section 3.6 of the traffic and transport scoping chapter (**Appendix 2A**) which included elements of the Project to be scoped out of the assessment and a commitment to produce a CTMP and PRowMP to provide a framework for packages of measures to minimise the impact of the Project in the construction phase on the highway and PRow networks.

7.4.2. This chapter is accompanied by an Outline CTMP (**Appendix 7A**) and Outline PRowMP (**Appendix 7B**) and therefore addresses the provided local authority comments.

## 7.5 DATA GATHERING METHODOLOGY

Baseline data collection has been undertaken to obtain information over the traffic and transport study area. The description of the baseline conditions presented in **Section 7.6** is based on currently available data from within the study area. A summary of the data sources referenced is provided in **Table 7-2**.

**Table 7-2 – Data sources used to inform the traffic and transport assessment**

Source	Description
Google Maps <sup>32</sup> /Streetview/Google Earth Pro	Mapping data and imagery.
Neath Port Talbot Council <sup>33</sup>	PRow information.
Bridgend County Borough Council <sup>34</sup>	PRow and highways status information.
National Rail <sup>35</sup>	Rail service information.
First Bus <sup>36</sup>	Bus service information.
Sustrans <sup>37</sup>	National Cycle Network (NCN) route information.
Bing Maps <sup>38</sup>	Mapping data including OS map layer.

<sup>32</sup> Google, (2025). Google Maps. Available online at: <https://www.google.co.uk/maps> [Accessed February 2025].

<sup>33</sup> Neath Port Talbot Neath Port Talbot County Borough Council (2016) Online mapping (online) Available at: [https://maps.npt.gov.uk/rights\\_of\\_way/index.html](https://maps.npt.gov.uk/rights_of_way/index.html) [Accessed February 2025]

<sup>34</sup> Bridgend County Borough Council (2024) Bridgend County Borough Council: Web Mapping <https://maps.bridgend.gov.uk/webmap9/Map.aspx?MapName=OSWMTSBasemap> [Accessed February 2025]

<sup>35</sup> National Rail, (2025). National Rail. Available online at: <https://www.nationalrail.co.uk/> [Accessed February 2025].

<sup>36</sup> FirstBus, (2025). Timetables (online). Available at: <https://www.firstbus.co.uk/south-west-wales/plan-journey/timetables> [Accessed February 2025]

<sup>37</sup> Sustrans, (2025). The National Cycle Network (online). Available at: <https://www.sustrans.org.uk/national-cycle-network/> [Accessed February 2025]

<sup>38</sup> Bing Maps and Ordnance Survey data (2025) Bing Maps Ordnance Survey Layer (online) Available at: <https://www.bing.com/maps/> (Accessed February 2025)

Source	Description
DfT <sup>30</sup>	Traffic flow data.
DfT <sup>39</sup>	Trip End Model Presentation Program
WSP (in-house WSP tool known as Collision – Analysis – UK Wide Dashboard – which uses DfT STATS 19 data) <sup>40</sup>	Highways collision data.
Crashmap <sup>41</sup>	Highways collision data.
Welsh Government, Natural Resources Wales <sup>42</sup>	Open Access Land (OAL) information.

## 7.6 OVERALL BASELINE

7.6.1. This section briefly outlines the transport network in the vicinity of the Project.

### STRATEGIC ROAD NETWORK

7.6.2. The nearest roads on the strategic road network (SRN), which is maintained by the Welsh Government, are the M4, (south of the Project) and the A465 (northwest of the Project). The M4 provides connections to the east and west and the A465 to the northeast.

### LOCAL ROAD NETWORK

7.6.3. This section describes the LRN within the traffic and transport study area. The traffic and transport study area spatial scope is further defined within **Section 7.7**, in summary it consists of LRN roads on the proposed construction traffic routes, which connect the Project access points to each other and the SRN. The LRN roads within the study area are identified in **Figure 7-1**.

### A4063

7.6.4. The section of A4063 within the traffic and transport study area, routes between the M4 and Neath Road (B4282), a distance of approximately 12.3km. It is a dual carriageway road between the A4061/A4063 roundabout and the A4063/B4281 roundabout, the rest of the A4063 on the study area route is single carriageway road. Within the study area, the road is subject to a 50mph speed limit on the dual carriageway section and a 20mph to 30mph speed limit for the single carriageway sections. For the dualled section, southbound vehicular traffic from the Project have to travel approximately 1.5km along the A4063 before being able to make a U-turn at the nearest roundabout

<sup>39</sup> Department for Transport (2023) Trip End Model Presentation Program (TEMPro) Version 8.1 Available at: <https://www.gov.uk/government/publications/tempo-downloads>

<sup>40</sup> In-house WSP tool known as Collision – Analysis – UK Wide Dashboard – which uses DfT STATS 19 data

<sup>41</sup> Department for Transport data published by [www.crashmap.co.uk](https://www.crashmap.co.uk) (2025) crashmap data: Great Britain 1999-2023 (verified) (online) Available at: <https://www.crashmap.co.uk> [Accessed February 2025]

<sup>42</sup> Welsh Government, Natural Resources Wales (2016) DataMapWales Open Access – Open Country (online) Available at: [https://datamap.gov.wales/layers/inspire-nrw:NRW\\_OPEN\\_COUNTRY\\_2014](https://datamap.gov.wales/layers/inspire-nrw:NRW_OPEN_COUNTRY_2014) [Accessed February 2025]

to the south. This section of the A4063 has streetlighting and intermittent footway provision. There are signalised pedestrian crossings along the road.

#### **Neath Road (B4282)**

- 7.6.5. The section of Neath Road (B4282), within the traffic and transport study area, routes between an unnamed road south of Maesteg Golf Club to A4063 (Commercial Street) and is a single carriageway road. The road section within the traffic and transport study area is approximately 900m in length. The western section of the road is subject to the national speed limit (NSL) of 60mph, and the eastern section is subject to a 30mph speed limit as the road routes through an urban residential area. Neath Road (B4282) has footways on both sides of the carriageway, streetlighting and bus stops. The Neath Road (B4282) / A4063 / Llynfi Road crossroads is a signalised junction with pedestrian phases.

#### **Unnamed Road to Sychbant Farm**

- 7.6.6. There is a narrow single-track road which routes between a private access track and a priority junction with Neath Road (B4282). The road is subject to the NSL and is predominately rural without footways and street lighting. From the B4282 the road routes in a southwest direction for approximately 2.4km.

#### **Llan Road**

- 7.6.7. Llan Road routes west from the Llan Road/A4063/Station Road junction to the Llan Road/A4063/Bryn Celyn junction and is approximately 2.51km in length. It routes mainly through rural areas, however both terminuses route through residential areas. Llan Road routes through a small settlement to the east of Llangynwyd. It is evident that some turning movements on junctions with Llan Road in the vicinity of the settlement are restricted in visibility. Llan Road is a single carriageway subject to a 30mph speed limit; it has very narrow single-track sections and is marked as 'unsuitable for HGVs' in some sections. Llan Road has some streetlighting and intermittent footway provision in the residential areas at either end though is predominantly without footway or streetlighting.

#### **Unnamed Road 1 - west of Llangynwyd (Llan Road to near Pentre Farm)**

- 7.6.8. Unnamed road 1 routes west from Llan Road it is subject to the NSL aside from on approach to the settlement at its eastern end. It is a narrow single-track road without footways and streetlighting. At the northern extent of this road is a private access track connecting to the unnamed road to Sychbant Farm.

#### **Unnamed Road 2 - west of Llangynwyd (approximately 730m south of Pentre Farm to Unnamed Road 3)**

- 7.6.9. Unnamed road 2 routes through a rural area in a northeast-southwest orientation. It is a narrow single-track road without footways and streetlighting

#### **Unnamed Road 3 - west of Llangynwyd (Unnamed Road 2 to Unnamed Road near Green Meadow Bus Stop)**



- 7.6.10. Unnamed Road 3 routes through a rural area between the unnamed road 2 and the unnamed road near Green Meadow bus stop. It is a narrow single-track road without footway or streetlighting and is subject to the NSL.
- 7.6.11. Unnamed Road near Green Meadow bus stop routes through a rural area between the unnamed road 3 and the A4063. It is a narrow single-track road without footway or streetlighting. There is a gated section of the road extending approximately 630m at its western extent. At its priority junction with the A4063 there is a bus stop.

#### **Heol Ty Gwyn**

- 7.6.12. Heol Ty Gwyn is approximately routes between Neath Road (B4282) and Garnwen Road. It is a single carriageway road subject to a 30mph speed limit. Heol Ty Gwyn has streetlighting and footway on both sides of the carriageway, the footway varies in width. There is a series of parking bays parallel to the carriageway.

#### **Garnwen Road**

- 7.6.13. Garnwen Road routes between Heol Ty Gwyn and Davies Terrace, through a residential area. It is a single carriageway road subject to a 30mph speed limit. It has streetlighting and has footway both sides of the carriageway.

#### **Davies Terrace**

- 7.6.14. Davies Terrace routes between Garnwen Road and Nantyffyllon Terrace and is approximately 70m in length. It is a single carriageway road subject to a 30mph speed limit and has streetlighting. Footway is present on both sides of the carriageway.

#### **Kings Terrace and Unnamed Road**

- 7.6.15. Kings Terrace is connected to Davies Terrace via an unnamed road. Both roads provide access to a residential area to the west of Davies Terrace / Nantyffyllon Terrace. The road is single carriageway subject to a 30mph speed limit, with footway on both sides and streetlighting. Google maps streetview indicated both sides of the carriageways are used for on-street car parking.

### **PUBLIC TRANSPORT**

- 7.6.16. The nearest railway stations to the Project are Maesteg, Maesteg (Ewenny Road) and Garth (Bridgend) which are all on the same railway line. They are served by services to Cardiff Central and Ebbw Vale Town. The railway station locations are shown in **Figure 7.2**.
- 7.6.17. The three stations are managed by Transport for Wales. Maesteg railway station has 12 car parking spaces<sup>35</sup>.
- 7.6.18. The nearest bus stops to the Project are on the B4282 (Neath Road) and the A4063. The local bus services that route near the Project are as follows<sup>36</sup>:
  - **70 (Firstbus)** – operates between Cymmer and Bridgend, with a minimum of 13 services per day per direction Monday to Saturday and ten services per direction on Sunday;
  - **71 (Firstbus)** – operated between Cymmer and Bridgend, Monday to Saturday with 11 services per day per direction; and

- **X3 (Firstbus)** – operates between Port Talbot and Maesteg, Monday to Saturday with eight services per day per direction.

## ACTIVE TRAVEL

- 7.6.19. The nearest NCN route 13 to the Project is the 885 which currently routes between Maesteg and Cymmer. The majority of the 885 route is off-carriageway with some sections of on-carriageway route. At Cymmer there is connection to NCN route 887, which links to Port Talbot, Aafan Forest Park and other NCN routes. Route 885 is planned to connect south to Bridgend; however, this section is still under development. The section of route 885 near the Project is shown in **Figure 7-2**.
- 7.6.20. In general, within the traffic and transport study area there are footways provided within urban areas and no footway provision through rural areas.
- 7.6.21. There are PRowS in the vicinity of the Project, those that interact with the Project are outlined within the accompanying PRowMP (**Appendix 7B**).

## TRAFFIC FLOW DATA

- 7.6.22. Traffic flow data has been sourced from DfT traffic counts for locations within the traffic and transport study area. Ideally, manual count data from 2019 or from 2023 (post the COVID pandemic in the UK and its associated travel restrictions) would be used as reasonably recent and accurate data. However, only one road to be assessed has 2019 manual count data (Neath Road (B4282)), other LRN roads have older and/or estimated traffic data. For the assessment within this ES chapter the available DfT count data for LRN roads has been utilised for the latest available data (excluding data between 2020 and 2022 as this period does not reflect 'normal' travel conditions due to the COVID pandemic UK travel restrictions). **Table 7-3** summarises the latest available data. This shows for each survey site (the 'Count ID') the road and location of the traffic count survey on that road, the date and type of the traffic count (where stated as 'estimated', this is based on the previous year's AADF), the daily traffic flow (AADF) for all vehicles and just HGVs.

**Table 7-3 – Baseline Traffic Flow Data**

Count ID	99578	99579	91272	30640	950829	950844
Road	A4063	A4063	A4063	A4063	Neath Road (B4282)	Unnamed Road to Sychbant Farm
Location	Tondu between Bryn Road and the B4281	Between the B4281 and the M4 Junction 36	Between Llangynwyd and Coytrahean	Maesteg (north of Llan Road north)	Between Heol Ty Gwyn and the A4063)	Between Keir Hardie Road and Neath Road (B4282)
Date and Type of Count	2023 - estimated	2023 - estimated	2023 - estimated	2023 - estimated	2019 - manual count	2017 - manual count
AADF - all vehicles	15,235	14,462	11,679	11,536	9,145	60



Count ID	99578	99579	91272	30640	950829	950844
AADF HVs	471	577	409	293	180	1

Data source: DfT Road Traffic Statistics<sup>30</sup>; growth rates derived using TEMPro<sup>39</sup>

7.6.23. As noted previously, it is intended to undertake ATCs on the LRN at three key locations in March 2025 to obtain 2025 baseline traffic flows to supplement the assessment. This chapter will be updated in due course with this additional traffic flow information. The ATCs will be located on:

- Heol Ty Gwyn;
- A6043 (south of Llan Road north); and
- A6043 (in Tondy).

### HIGHWAY COLLISION DATA

7.6.24. Personal Injury Accident (PIA) data has been sourced from Crashmap<sup>41</sup> (DfT data published by [www.crashmap.co.uk](http://www.crashmap.co.uk)) and WSP's in-house tool known as Collision – Analysis – UK Wide Dashboard – which uses DfT STATS 19 data<sup>40</sup>. The latest available and verified five-year period of PIA data is 2019-2023 inclusive.

7.6.25. The purpose of assessing recorded PIAs is to determine if there is a history of accidents in proximity to the Site and to investigate any patterns or contributing factors to the accidents recorded. Clusters of accidents could indicate that improvements are required to enable development on the Site to come forward. Consideration, during this assessment, has been given to accidents involving vulnerable road users (cyclists / pedestrians).

7.6.26. The impact of casualties differs according to the severity of the injuries sustained:

- Fatal: any death that occurs within 30 days from causes arising out of the accident.
- Serious: records casualties who require hospital treatment and have lasting injuries, but who do not die within the recording period for a fatality.
- Slight: injury severity is defined as injuries that do not require hospital treatment, or, if they do, the effects of the injuries quickly subside.

7.6.27. **Figure 7.3** shows the PIA study area. **Table 7-4** summarises the recorded accidents on links and junctions in the PIA study area. No accidents were recorded between 2019 and 2023 on: Garnwen Road and Kings Terrace.

**Table 7-4 – PIA Summary: 2019 - 2023**

Link/Junction	Casualty Injury Severity			Total	Average Accident Rate Per Annum	No. PIA with Vulnerable Road User Casualties*
	Slight	Serious	Fatal			
A4063 – between the M4 and Neath Road (B4282)	29	9	3	41	8.2	3 x pedestrian (slight) 1 x pedestrian (fatal) 1 x cyclist (serious) 1 x cyclist (fatal)
Llan Road	0	1	0	1	0.2	1 x cyclist (serious)
Unnamed Road (west of LLangynwyd)	0	1	0	1	0.2	-
Neath Road (B4282) including junctions with Heol Ty Gwyn & A4063	5	1	0	6	1.2	1 x cyclist (serious)
Heol Ty Gwyn	2	0	0	2	0.4	-
Davies Terrace	1	0	0	1	0.2	-

\*Vulnerable road users are pedestrians and cyclists, where these vulnerable road users are child has also been noted.  
Data source: Department for Transport data published by [www.crashmap.co.uk](http://www.crashmap.co.uk)

7.6.28. In total, 52 accidents were recorded in the PIA study area between 2019 and 2023, three of which resulted in a fatality (all located on the A4063), 12 of which resulted in serious injuries and 37 in slight injuries. Approximately 80% of accidents in the study area occurred along the A4063, along the approximately 12.3km section in the PIA area. Six accidents involved vulnerable road user casualties, which resulted in two fatal accidents, one accident resulting in serious injuries and three injuries rated slight in severity.

## 7.7 SCOPE OF THE ASSESSMENT

The scope of the traffic and transport was set out within the ES Scoping Report Chapter 3 Traffic and Transport (**Appendix 2A**) and agreed by BCBC in their scoping response. For reference **Table 7-5** summarises the elements scoped out of the traffic and transport assessment.

**Table 7-5 – Elements scoped in and out of the assessment of traffic and transport effects**

Project Element	Scoped In or Scoped Out and Rationale
Impacts of construction traffic during the construction phase of the Project on highways that form the traffic and transport study area during the construction phase.	Scoped in – as further detailed within this <b>Section 7.7</b>
Impacts on the PRow/OALs/Other Routes with Public Access (ORPAs).	Identified within the accompanying <b>Appendix 7B</b> Outline PRowMP along with mitigation measures to minimise impacts.
Impacts on the highway due to in carriageway works and crossing of highways by the Project.	Identified within the accompanying <b>Appendix 7A</b> Outline CTMP along with mitigation measures to minimise impacts.
Impacts during the construction phase on navigable waterways and the rail network.	Scoped out – as none are crossed by the Project route.

Impacts during the operational phase of the development.	Scoped out – due to minimal traffic movements generated during this phase. (as further detailed within this <b>Section 7.7</b> ).
Impacts during the decommissioning phase of the development.	Scoped out - due to the lower traffic movements generated during this phase than in the construction traffic phase (as further detailed within this <b>Section 7.7</b> ).
Impacts resulting from AIL movements of the movement of hazardous loads.	Scoped out – as none are anticipated as part of the Project.

## TEMPORAL SCOPE

- 7.7.1. EATM advises that the greatest environmental change will generally be when the project traffic is at the largest proportion of the total flow. As set out below, the phase of the Project that will generate the most traffic movements will be the construction phase, therefore only the construction phase has been assessed with respect to traffic and transport effects as this represents the worst-case scenario of traffic and transport effects.

### Construction Phase

- 7.7.2. The construction phase of the development represents the worst-case phase of development for traffic and transport effects and therefore is the basis for the assessment of likely significant traffic and transport effects.
- 7.7.3. **Section 7.10** sets out the anticipated construction traffic movements based on known information, to allow an assessment of a reasonable worst-case scenario of peak construction traffic flow for the Project's construction phase.
- 7.7.4. The year in which the peak daily construction traffic movements is anticipated to occur will be the year of assessment of traffic and transport effects (the future year). It is currently anticipated that construction will commence in January 2028 and is expected to be nine months in duration.
- 7.7.5. The baseline traffic flows set out in **Table 7-3** have been growthed (increased based on forecasts of future traffic), using growth factors derived from the DfT's TEMPro to 2025 (the current year). The traffic flows have been growthed to 2025 in order to create a baseline traffic flow which will be aligned to the year the ATCs will be undertaken. Each traffic count has been growthed using the DfT's TEMPro version 8.1 to the current year, 2025, the results of which are summarised in **Table 7-6**. The growth rates were derived for the Bridgend authority area using the 'Core' scenario.

**Table 7-6 – 2025 Baseline Traffic Flows**

Count ID	99578	99579	91272	30640	950829	950844
Road	A4063	A4063	A4063	A4063	Neath Road (B4282)	Unnamed Road to Sychbant Farm
Location	Tondu between Bryn	Between the B4281 and	Between Llangynwyd	Maesteg (north of	Between Heol Ty	Between Keir Hardie Road and

	Road and the B4281	the M4 Junction 36	and Coytrahen	Llan Road north)	Gwyn and the A4063)	Neath Road (B4282)
<b>TEMPro Growth Rate to 2025</b>	2023 to 2025 = 1.0120	2023 to 2025 = 1.0120	2023 to 2025 = 1.0120	2023 to 2025 = 1.0120	2019 to 2025 = 1.0380	2017 to 2025 = 1.0522
<b>2025 AADF - all vehicles</b>	15,418	14,635	11,819	11,674	9,493	63
<b>2025 AADF HVs</b>	477	584	414	297	187	1

7.7.6. The 2025 baseline traffic flows have been growthed to 2028, the future year. The resultant 2028 baseline traffic flows are presented in **Table 7-7**. The percentage change between the 2028 baseline traffic flow and 2028 baseline traffic flow with the addition Project peak construction traffic is assessed (in **Section 7.10**) against the EATM Rule 1 and Rule 2 thresholds, to determine which highways sections required detailed assessment.

**Table 7-7 – 2028 Baseline Traffic Flows**

Count ID	99578	99579	91272	30640	950829	950844
<b>Road</b>	A4063	A4063	A4063	A4063	Neath Road (B4282)	Unnamed Road to Sychbant Farm
<b>Location</b>	Tondu between Bryn Road and the B4281	Between the B4281 and the M4 Junction 36	Between Llangynwyd and Coytrahen	Maesteg (north of Llan Road north)	Between Heol Ty Gwyn and the A4063)	Between Keir Hardie Road and Neath Road (B4282)
<b>TEMPro Growth Rate: 2025 to 2028</b>	1.0365	1.0365	1.0365	1.0365	1.0365	1.0365
<b>2028 AADF - all vehicles</b>	15,981	15,170	12,251	12,101	9,840	65
<b>2028 AADF HVs</b>	494	605	429	307	194	1

### Operational Phase

7.7.7. During the operational phase, traffic movements associated with the Project will be minimal, comprising trips for inspection, repair and maintenance purposes. Vehicles used for repair work are likely to be similar to those used during construction, however, these would be infrequent. The operational phase has been scoped out of the assessment of traffic and transport effects, this methodology has been agreed with BCBC via their scoping response.

## Decommissioning Phase

- 7.7.8. The operation life of the Project is anticipated to be up to 30 years. Post operation the above and below ground infrastructure is assumed to remain in situ. Therefore, the development traffic movements associated with the Project decommissioning phase will be lower than those associated with the construction phase. The decommissioning phase has been scoped out of the assessment of traffic and transport effects, this methodology has been agreed with BCBC via their scoping response.

## SPATIAL SCOPE

- 7.7.9. The spatial scope of the assessment (the traffic and transport study area) is based on the proposed construction traffic routes (shown in **Figure 7-1**), the routes on the LRN that construction traffic will use to access the Project access points. **Section 7.6** provides a summary description of the relevant transport context of the study area.
- 7.7.10. Transport receptors are the users or beneficiaries of the highways network assets and facilities. EATM identifies the following key user groups: non-motorised users, PRow users, motorists/freight vehicles, public transport and emergency services. The EATM further identifies sensitive locations or users that may be affected:
- *“People at home;*
  - *People at work;*
  - *Sensitive and/or vulnerable groups (including young age; older age; income; health status; social disadvantage; and access and geographic factors);*
  - *Locations with concentrations of vulnerable users (e.g. hospitals, places of worship, schools);*
  - *Retail areas;*
  - *Recreational areas;*
  - *Tourist attractions;*
  - *Collision clusters and routes with road safety concerns: and*
  - *Junctions and highway links at (or over) capacity”.*
- 7.7.11. Each of the DfT traffic count locations identified within **Table 7-3** will represent the highways receptors on associated sections of the LRN within the traffic and transport study area. Data is not available for every link in the study area, however, in general the roads without traffic data will have low baseline traffic flows as they are various unnamed single-track roads and management measures are set out in the Outline CTMP (**Appendix 7A**) to minimise impacts on these roads. Additionally three locations (including one to count flows along the Heol Ty Gwyn, Garwen Road and Davies Terrace route) are intended to be undertaken (as outlined in **Section 7.2**) to supplement the traffic and transport assessment set out within this Chapter.

## LIKELY SIGNIFICANT TRAFFIC AND TRANSPORT EFFECTS

- 7.7.12. The potential likely significant traffic and transport effects of the Project that are identified within EATM are summarised below:
- Severance: the separation of people from places and other people and places or impede pedestrian access to essential facilities;
  - Driver delay: traffic delays to non-development traffic;

- Non-motorised user amenity: the effect on the relative pleasantness of a pedestrian journey resulting from changes in traffic flow, traffic composition and pavement width/separation from traffic;
- Non-motorised user delay: the ability of people to crossroads as a result of changes in traffic volume, composition and speed, the level of pedestrian activity, visibility and general physical conditions of the Project;
- Fear and intimidation: the change in fear and intimidation levels experienced by people as a result of an increase in traffic volume and its proximity or the lack of protection caused by such factors as narrow pavement widths; and
- Road safety: the risk of accidents occurring where the Project is expected to produce a change in the character of traffic.

7.7.13. These effects will be assessed within this traffic and transport chapter for highway sections that are identified as requiring detailed assessment.

7.7.14. EATM, also, identifies the potential likely significant traffic and transport effects of the following:

- Impacts of Abnormal Indivisible Loads (AILs)<sup>43</sup>; and
- Impacts of Hazardous Loads.

7.7.15. These effects are scoped out of the assessment (as stated in the ES Scoping Report Chapter 3 Traffic and Transport and agreed by BCBC in their scoping response (**Appendix 2A** and **2B** respectively)) as no AIL or hazardous load movements are anticipated to be required for the Project.

## 7.8 EMBEDDED MEASURES

7.8.1. Two supporting documents have been prepared which include the key management and mitigation measures which related to traffic and transport:

- An Outline CTMP (**Appendix 7A**) - a CTMP sets out details of the impacts of the Project construction traffic on the road network and the mitigation measures and management strategy for the effects. The Outline CTMP will be developed into a full CTMP in consultation and agreement with the relevant local authority officers; and
- An Outline PRoWMP (**Appendix 7B**) – a PRoWMP sets out details of the impacts of the Project on the PRoW network and the mitigation measures and management strategy for the effects. The Outline PRoWMP will be developed into a full PRoWMP in consultation and agreement with the relevant local authority officers.

7.8.2. In addition, a Construction Environment Management Plan (CEMP) has been developed as part of the EIA (**Appendix 4A**).

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<sup>43</sup> AILs are long, wide or heavy loads that cannot reasonably be divided into smaller/lighter loads for road transport. In the UK there are set thresholds for these criteria. For a summary of criteria see National Highways (2024) Abnormal Loads and the ESDAL system <https://nationalhighways.co.uk/road-safety/abnormal-loads-and-the-esdal-system/>



## 7.9 ASSESSMENT METHODOLOGY

- 7.9.1. As outlined in **Section 7.7**, EATM outlines that the greatest environmental change will generally be when the project traffic is at the largest proportion of the total flow. Therefore, the assessment of traffic and transport effects, within this ES, will be undertaken for the construction phase of the Project.
- 7.9.2. EATM sets out two rules to establish the need for an environmental assessment of traffic and transport effects on highways receptors, relating to the proportional change in traffic flows on highways with the Project traffic:
- “Rule 1: Include highway links where traffic flows will increase by more than 30% (or where the number of heavy goods vehicles will increase by more than 30%).
  - Rule 2: Include highway links of high sensitivity where traffic flows have increased by 10% or more”.
- 7.9.3. Rule 1 and Rule 2 will be used to identify highways within the traffic and transport study area that required detail assessment within the EIA.
- 7.9.4. EATM outlines that predicted traffic flow increases below 10% are generally considered to be not significant as daily variations in background traffic flow may fluctuate by this amount. Changes in traffic flows below this level are, therefore, assumed to result in not significant environmental effects.

### DETERMINATION OF RECEPTOR SENSITIVITY

- 7.9.5. Each highway section that forms part of the construction traffic route will be assigned a receptor sensitivity of high, medium, low or negligible based on the guidance provided within EATM and professional judgement. This includes consideration of proximity of sensitive receptors to the roads to be used by construction traffic and the highway environment, as summarised in **Table 7-8**.

**Table 7-8 – Receptor sensitivity summary**

Sensitivity	Description/Reason	Receptor
High.	<p>Highway links with a high sensitivity to changes in traffic flows includes routes:</p> <ul style="list-style-type: none"> <li>■ With sensitive receptors alongside them (such as schools, colleges and playgrounds); and/or</li> <li>■ Where there are land uses which result in high volumes of pedestrian/cycle users and the road is narrow and/or footway provision is poor or non-existent and/or existing traffic volumes are high for the type of road resulting in congestion and road safety issues.</li> </ul>	Occupants of land uses alongside the highway link and users of the highway link.
Medium.	<p>Highway links with a medium sensitivity to changes in traffic flows include routes:</p> <ul style="list-style-type: none"> <li>■ With some sensitive receptors alongside them (such as retail areas); and/or</li> <li>■ Where there are land uses which result in some pedestrian/cyclist users, road design and footway provision is adequate/appropriate</li> </ul>	Occupants of land uses alongside the highway link and users of the

Sensitivity	Description/Reason	Receptor
	and/or existing traffic volumes can be accommodated for the type of road by approaching capacity.	highway link.
Low.	<p>Highway links with low sensitivity to changes in traffic flows include routes:</p> <ul style="list-style-type: none"> <li>With no sensitive receptors and some land uses alongside and no/very limited pedestrian/cyclist users and/or road design and footway provision is appropriate and existing traffic volumes can be accommodated for the type of road.</li> </ul>	Occupants of land uses alongside the highway link and users of the highway link.
Negligible	<p>Highway links with negligible sensitivity to changes in traffic flows include routes:</p> <ul style="list-style-type: none"> <li>With no sensitive receptors and very few land uses alongside them, which have no direct access or are sufficiently set back from the carriageway, and no/very limited pedestrian/cyclist users and existing traffic volumes can be accommodated for the type of road.</li> </ul>	Users of the highway link.

- 7.9.5. For highways links where the sensitivity is judged as 'High' or 'Medium', Rule 2 is applied (sensitive areas where traffic flows are predicted to increase by 10% or more). For highway links where the sensitivity is judged as 'Low' or 'Negligible', Rule 1 is applied (areas where traffic flows are predicted to increase by more than 30% or where the number of heavy goods vehicles (HGVs, also referred to as 'Heavy Vehicles' [HVs]) is predicted to increase by more than 30%).

## DETERMINATION OF MAGNITUDE OF CHANGE

- 7.9.6. For each highway section that forms part of the construction traffic route, the magnitude of change will be determined (high, medium, low or negligible) based on the guidance provided within EATM and professional judgement. These criteria are summarised in **Table 7-9**.

**Table 7-9 – Magnitude of change summary**

Traffic and Transport Impact	Magnitude of Change			
	High	Medium	Low	Negligible
Severance	Change in total traffic or HGV flows over 91%.	Change in total traffic or HGV flow of 61% to 90%.	Change in total traffic or HGV flows of 31% to 60%	Change in total traffic or HGV flows of less than 30%.
	Context should, also, be considered including the local population and number of local facilities potentially impacted. EATM states caution should be applied when applying these thresholds to highway links with low baseline flows.			
Driver Delay	High increase in queuing at junctions and/or congestion on road links.	Medium increase in queuing at junctions and/or congestion on road links.	Low increase in queuing at junctions and/or congestion on road links.	Low or no increase in queuing at junctions and/or congestion road links.
Non-motorised User Amenity	A halving or doubling of traffic flow (or HGV flow) can be used as a broad threshold when considered in the local context and applied with caution. Assignment of magnitude is based on a variety of factors including general level of pedestrian activity, visibility, and physical conditions such as traffic flow, traffic composition, crossing points and pavement width/separation from traffic.			
Non-motorised User Delay	Generally, increases in traffic may lead to greater delay, though is dependent on the level of non-motorised users' activity in the area. Magnitude is assigned on pedestrian delay experienced when crossing highways links considering a range of factors including crossing type, pedestrian flows, traffic levels, visibility and general highway condition.			
Fear and Intimidation	Magnitude is assigned based on the scoring system provided in EATM (which is dependent on 18hr average HGV traffic flow and vehicle speed). The scores comprise extreme (71+); great (41 to 70); moderate (21 to 40) and small (0 to 20).			
	Two step change in level score of fear and intimidation.	One step change in level score of fear and intimidation and >400 average 18hr vehicle increase or >500 HGV 18hr vehicle increase	One step change in level score of fear and intimidation and <400 average 18hr vehicle increase or <500 HGV 18hr vehicle increase.	No change to step in level score of fear and intimidation.
Road Safety	Magnitude is assigned by reviewing exiting collision patterns and trends based upon existing personal injury accident records and the forecast increase in traffic that may change the risk of serious and fatal injuries.			

## SIGNIFICANCE OF EFFECT

- 7.9.7. Significance of likely traffic and transport impacts will be derived by considering the receptor sensitivity and the magnitude of change as defined within **Table 7-10** (shading denotes significant impacts).

**Table 7-10 – Traffic and transport significance evaluation matrix**

Receptor Sensitivity	Magnitude of Change			
	High	Medium	Low	Negligible
High	Major (Significant)	Major (Significant)	Moderate (Significant)	Negligible (Not Significant)
Medium	Major (Significant)	Moderate (Significant)	Minor (Not Significant)	Negligible (Not Significant)
Low	Moderate (Significant)	Minor (Not Significant)	Negligible (Not Significant)	Negligible (Not Significant)
Negligible	Negligible (Not Significant)	Negligible (Not Significant)	Negligible (Not Significant)	Negligible (Not Significant)

## CUMULATIVE EFFECTS

- 7.9.8. As outlined previously, TEMPro will be used to growth the baseline traffic flow data to the future year of assessment, 2028. DfT's TEMPro<sup>39</sup> forecasts of traffic growth take into account national projections of population, employment, housing, car ownership and trips rates. Therefore, TEMPro should account for all cumulative and anticipated development within the local plans at the time of its production.
- 7.9.9. Consideration will be given as to whether any of the identified receptor locations are likely to be subject to cumulative effects due to traffic and transport effects generated by other proposed developments in the area that are not included within the TEMPro growth factor (i.e. recently approved development that was not part of a local plan allocation or the construction phases of nearby local developments). The cumulative assessment for traffic and transport effects is presented in **Section 7.11**.

## 7.10 ASSESSMENT OF EFFECTS

### CONSTRUCTION TRAFFIC GENERATION AND DISTRIBUTION

- 7.10.1. Several elements of the Project will generate construction traffic movements through the construction programme. These movements will include both HV and LV movements. Calculations have been undertaken to estimate the construction traffic generation of the following Project elements:
- OHL works mobilisation (the set-up of a construction compound);
  - OHL line survey;
  - OHL tree cutting;
  - OHL access accommodation works;
  - OHL material deliveries to compound;
  - OHL conductor wire delivered to accesses;
  - OHL pole erection;
  - OHL conductor wire pulling;

- Scaffolding;
- UGC access accommodation works;
- UGC materials deliveries;
- UGC civils works;
- UGC installation;
- Reinstatement; and
- Temporary staff at the construction compound.

7.10.2. Assumptions have been undertaken as to the number of days that each activity will occur, and likely traffic generated per day. This traffic generation has been distributed across the assumed nine-month construction programme. In order to generate a 'worst-case' scenario, traffic has been assumed to occur on five days per week, as opposed to the anticipated 5.5 days. **Table 7-11** summarises the average daily two-way traffic generation per week of the construction phase, demonstrating the peak construction traffic occurs across only nine weeks of the nine-month construction programme, between weeks 18 and 26. It should be noted that two-way traffic generation includes the trip to the Site and the return journey, for example an HV delivering materials would constitute two trips or traffic movements as the HV needs to return to its origin. Trips have been rounded to an even number to reflect this.

**Table 7-11 – Estimated Construction Traffic Generation**

Week	Weekly Construction Traffic Movements			Average Daily Construction Traffic Movements		
	HV	LV	Total	HV	LV	Total
1	10	100	110	2	20	22
2	74	126	200	16	26	42
3	74	68	142	16	14	30
4	104	98	202	22	20	42
5	104	98	202	22	20	42
6	146	98	244	30	20	50
7	102	60	162	20	12	32
8	44	56	100	10	12	22
9	44	56	100	10	12	22

Week	Weekly Construction Traffic Movements			Average Daily Construction Traffic Movements		
	HV	LV	Total	HV	LV	Total
10	44	96	140	10	20	30
11	44	96	140	10	20	30
12	48	108	156	10	22	32
13	44	66	110	10	14	24
14	52	76	128	10	16	26
15	52	76	128	10	16	26
16	52	76	128	10	16	26
17	52	76	128	10	16	26
18	120	86	206	24	18	42
19	120	86	206	24	18	42
20	120	86	206	24	18	42
21	120	86	206	24	18	42
22	120	86	206	24	18	42
23	120	86	206	24	18	42
24	120	86	206	24	18	42
25	120	86	206	24	18	42
26	120	86	206	24	18	42
27	76	86	162	16	18	34
28	8	50	58	2	10	12



Week	Weekly Construction Traffic Movements			Average Daily Construction Traffic Movements		
	HV	LV	Total	HV	LV	Total
29	8	50	58	2	10	12
30	8	50	58	2	10	12
31	10	50	60	2	10	12
32	10	50	60	2	10	12
33	10	50	60	2	10	12
34	10	50	60	2	10	12
35	10	50	60	2	10	12
36	10	50	60	2	10	12
37	10	50	60	2	10	12
38	10	50	60	2	10	12
39	10	50	60	2	10	12

Note: some values may not sum due to rounding.

7.10.3. Some traffic movements will occur between the SRN and the construction compound and the Project access points and some traffic movements will be inter-site. For example, the peak week of construction traffic has been estimated to occur during the following activities overlapping:

- UGC cable materials deliveries;
- UGC civils works;
- UGC installation; and
- Temporary staff at the construction compound.

7.10.4. The UGC materials deliveries traffic will route from the SRN to the construction compound. The UGC civils works activities will consist of delivery movements of the construction material to the Project access points along with staff movements and other material deliveries between the SRN, the compound and the Project access points.

## SENSITIVITY OF RECEPTOR

- 7.10.5. Each of the DfT count locations (set out in **Table 7-3**) have been assigned a sensitivity based on the criteria set out in **Table 7-8**, as summarised in **Table 7-12**.

**Table 7-12 – Highway Receptor Sensitivity**

Count ID	Road and Location	Applicable Area	Sensitivity	Rationale
99578	A4063 - Tondu between Bryn Road and the B4281	A4063 - between and the northern extent of Tondu	Low	The road routes through an urban area with residential and some commercial/hospitality land uses on either side of the carriageway. Near the B4281 there are no footways but pedestrians are prohibited. Other sections of the A4063 have footway provided.
99579	A4063 - Between the B4281 and the M4 Junction 36		Negligible	The road section is dual carriageway without sensitive receptors adjacent to the carriageway.
91272	A4063 - Between Llangynwyd and Coytrahen	A4063 - Between Llangynwyd and the northern extent of Tondu	Medium	The majority of this section of the A4063 routes through a rural area. However, it does route through the settlement of Coytrahen which is of medium sensitivity due to having narrow footway provision in some locations.
30640	A4063 - Maesteg (north of Llan Road north)	A4063 – between Llangynwyd and Neath Road (B4282)	High	There are high and medium sensitivity receptors adjacent to the carriageway such as education land uses and retail areas.
950829	Neath Road (B4282) - Between Heol Ty Gwyn and the A4063)		Low	Neath Road (B4282) within the study area routes through urban areas and has footway provision.
950844	Unnamed Road to Sychbant Farm -Between Keir Hardie Road and Neath Road (B4282)		Medium	The road routes through a rural area, without footways, there are a small number of trip attractor in the area which may result in pedestrian movements, particularly the Maesteg gold club.

- 7.10.6. For receptors identified in as negligible or low the EATM Rule 1 applies, for receptors identified as medium or high EATM Rule 2 applies.

## MAGNITUDE OF CHANGE

7.10.7. **Table 7-13** sets out the magnitude of change of the calculated peak daily (24-hour) development's construction traffic on the identified highways links and presented:

- 2028 future year baseline traffic (without the Project construction traffic) AADF for all motor vehicles and for HVs only;
- the estimated 2028 future year baseline traffic with the Project construction traffic AADF for all motor vehicles and for HVs only;
- the percentage change in AADF for all motor vehicles and for HVs only; and
- sets out if each highways link requires detailed assessment based on the EATM Rule 1 and Rule 2 thresholds. Where a highways link percentage change exceeds the EATM threshold it is set out in **red**.

**Table 7-13 – Magnitude of Change**

Count ID	Road and Location	2028 Baseline		2028 With Project Construction Traffic		2028 Compared to 2025		Requires Detailed Assessment
		AADF – All Motor Vehicles	AADF – HVs Only	AADF – All Motor Vehicles	AADF – HVs Only	% Change in AADF – All Motor Vehicles	% Change in AADF – HVs Only	
99578	A4063 - Tondy between Bryn Road and the B4281	15,981	494	16,020	516	0.25%	4.49%	No
99579	A4063 - Between the B4281 and the M4 Junction 36	15,170	605	15,209	627	0.26%	3.67%	No
91272	A4063 - Between Llangynwyd and Coytrahen	12,251	429	12,290	451	0.32%	5.17%	Yes
30640	A4063 - Maesteg (north of Llan Road north)	12,101	307	12,142	331	0.34%	7.74%	Yes
950829	Neath Road (B4282) - Between Heol Ty Gwyn and the A4063)	9,840	194	9,881	217	0.41%	12.29%	Yes
950844	Unnamed Road to Sychbant Farm -Between Keir Hardie Road and Neath Road (B4282)	65	1	91	16	39.73%	1375.30%	Yes

## SIGNIFICANCE OF EFFECT

7.10.8. As identified in **Table 7-13** two receptors require detailed assessment as follows:

- Neath Road (B4282) - Between Heol Ty Gwyn and the A4063); and
- Unnamed Road to Sychbant Farm -Between Keir Hardie Road and Neath Road (B4282).

7.10.9. As the traffic and transport impact relates to the construction of the Project, the duration is temporary, with the peak HV flow being for a period of four weeks.

### **Neath Road (B4282) - Between Heol Ty Gwyn and the A4063)**

7.10.10. This receptor is identified as of low sensitivity and therefore EATM Rule 1 applies. The percentage change in total traffic, with the addition of the Project traffic, does not exceed the threshold however, the percentage change in HVs does exceed the 30% threshold. As such a further assessment of likely traffic and transport impacts is set out below:

- Severance – the change in HVs flows at this location is 12.29%, therefore based on the criteria in **Table 7-7** the magnitude of change is negligible. The significance of the effect is therefore negligible (**Not Significant**);
- Driver delay – an addition of 24 HVs would result in approximately three additional HVs per hour assuming a ten-hour working day, approximately one HV every 20 minutes in the peak week. The HV increase would be unlikely to result in delay to drivers and the total increase in traffic is well below 10% therefore the magnitude of change is low. The significance effect is therefore minor (**Not Significant**);
- Non-motorised user amenity and delay – Neath Road has footway provision within the traffic and transport study area. An addition of 24 HVs would result in approximately three additional HVs per hour assuming a ten-hour working day, approximately one HV every 20 minutes in the peak week is not likely to cause a significant impact on non-motorised user amenity at this location. The percentage change in total traffic and HV traffic do not result in a doubling in traffic levels, therefore the magnitude of change is low therefore the significance of effect is minor (**Not Significant**);
- Fear and intimidation – the impact on fear and intimidation is likely to be negligible due to no step change in the level of fear and intimidation score estimated on this road section with the introduction of the Project construction traffic based on known information. The magnitude of change is therefore negligible and the significance of the effect is therefore negligible (**Not Significant**); and
- Accidents and safety – while the section of Neath Road (B4282) within the study area has an average accident rate above one (1.2) for the last five years of available data there is not a hotspot to suggest that the level of increase in traffic due to the Project would exacerbate an existing highways issue. Two accidents occurred along Neath Road (B4282)'s length and two at each of the Neath Road (B4282)/Heol Ty Gwyn and Neath Road (B4282) / A4063 junctions. Therefore, the magnitude of change is considered to be low and the significance of the effect is therefore minor (**Not Significant**).

### **Unnamed Road to Sychbant Farm -Between Keir Hardie Road and Neath Road (B4282**

- 7.10.11. This receptor is identified as of medium sensitivity and therefore EATM Rule 2 applies. The percentage change in total traffic, with the addition of the Project traffic, and of HVs does exceed the threshold however this is due to the very low baseline flows on this link. It is therefore not appropriate to assess this link using the criteria set out within **Table 7-7**, instead the nature of the road has been considered alongside the baseline traffic flow and the context that peak day traffic would be an increase of 26 vehicle movements of which 15 would be HV movements. Given that this route is single track with low traffic flow levels there is unlikely to be significant effects on driver delay, severance, pedestrian delay fear and intimidation or road safety. The increase in HV proportion of the traffic may result in pedestrian amenity effects. This link will require appropriate mitigation which is outlined in **Section 7.12**.

## **7.11 ASSESSMENT OF CUMULATIVE EFFECTS**

- 7.11.1. Potentially significant developments within 5km of the Project are shown on **Figure 2.1**. These developments have been interrogated to establish any likely cumulative effects regarding traffic and transport. Of the potentially significant developments within 5km of the Project only two have significant traffic generation on road sections with the Project traffic and transport study area:
- Foel Trawsnant Wind Farm (planning reference: P2014/0825); and
  - Y Bryn Wind Farm (planning reference: P2024/0029).
- 7.11.2. The Foel Trawsnant Wind Farm will be fully constructed prior to any grid connection works (the Project) construction. Therefore, the construction traffic generations of the two developments will not overlap. Therefore, there are no cumulative traffic and transport effects with the consented Foel Trawsnant Wind Farm development and the Project.
- 7.11.3. The Y Bryn Wind Farm traffic and transport ES chapter outlines a 23-month construction programme commencing in 2025. This would result in the construction activities ending within 2027 which would not overlap the Project's construction phase. Should the development overrun into 2028 it is noted that peak construction traffic generation for the Y Bryn Wind Farm is anticipated to occur within month four or five of the construction phase and therefore any overlap with the Project would be at an intensity less than the Y Bryn Wind Farm peak construction traffic. Overall, there are no cumulative traffic and transport effects with the Y Bryn Wind Farm development and the Project.

## **7.12 MITIGATION AND RESIDUAL EFFECTS**

- 7.12.1. One road section requires specific mitigation to address potential significant effects:
- Unnamed Road to Sychbant Farm.
- 7.12.2. The additional mitigation measures for this road link will be incorporated within the full CTMP, to include the following.
- 7.12.3. The Contractor will consult / agree with the LHA for suitable mitigation measures for Unnamed Road to Sychbant Farm, along with the other narrow single-track roads proposed to be utilised by the Project construction traffic via the development and approval of the full CTMP. This will allow



location specific mitigation to be put in place. This will minimise traffic and transport impacts on these road links and therefore result in this effect being reduced to **Not Significant**.

- 7.12.4. The following sections of the A4063 are should also be highlighted for specific mitigation measures, despite not exceeding the EATM threshold for detailed assessment, based on the transport context of the receptor:
  - A4063 - Between Llangynwyd and Coytrahen; and
  - A4063 - Maesteg (north of Llan Road north).
- 7.12.5. Restriction of construction traffic movements on the A4063 Maesteg (north of Llan Road north) during peak school pick up and drop off times, to be discussed and agreed with the LHA to prevent Project construction traffic impacting on school children.
- 7.12.6. The section of the A4063 between Llangynwyd and the northern extent of Tondu should be highlighted, as part of mitigation measures, regarding its accident record and mitigation implemented such as driver information and training/awareness. This would be secured through the full CTMP.

## 7.13 CONCLUSIONS OF SIGNIFICANCE EVALUATION

- 7.13.1. The assessment of traffic and transport effects has been undertaken based on a reasonable estimate, based on currently available information regarding the Project, of peak day construction traffic, therefore presents an approximate worst-case daily traffic generation. It should be noted that all traffic and transport impacts will be temporary in nature, due to them occurring within the construction phase of the Project.
- 7.13.2. With the implementation of the full CTMP and full PRowMP there will be a package of measures in place to minimise the traffic and transport effects of the Project construction traffic. These mitigation measures will need to include specific measures to address the various single-track roads proposed to be used by Project construction traffic. With appropriate mitigation and management in place the impact of the Project on traffic and transport is likely to be **Not Significant**.

## 7.14 REFERENCES

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