Redevelopment of Porthcawl Waterfront

CHAPTER 6 – Transport

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Written by –

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6.1. Introduction

Background

6.1.1. The following Chapter has been prepared by Link Transport Planning.

6.1.2. This Chapter of the Environmental Statement (ES) assesses the likely significant effects of the Proposed Development, as described in Volume 1, Chapter 4 of this ES, in terms of Traffic and Movement.

6.1.3. This Chapter is supported by the following Figures:

- Volume 2, Figure 6.1: Study Network Link and Node Coding Diagram

6.1.4. This Chapter should also be read in conjunction with the following Technical Appendices:

- Volume 3, Appendix 6.1: Transport Assessment

Site Location and Description

6.1.5. The Proposed Development is situated within the Porthcawl Waterfront Regeneration Area on the southern edge of Porthcawl in Bridgend County Borough. The site extends between Porthcawl Harbour and Trecco Bay, bounded to the south by the coastline and existing coastal defences, and to the north by The Portway and New Road, which connect to the A4106 (Pyle Road / Bridgend Road) and A4229 corridors providing strategic access to the M4 at Junction 37 (Pyle). It lies immediately south of the established town centre and Harbour Quarter, with tourism and residential uses to the east associated with Trecco Bay Holiday Park. The recently completed Porthcawl Metrolink bus interchange on The Portway forms the main public transport hub for the area and is within walking distance of the site, offering local and regional services to Bridgend, Pyle and Cardiff. The surrounding area is predominantly level and well served by existing footways and cycle links. The Bridgend Active Travel Network Map identifies current and planned walking and cycling routes that adjoin or pass through the site, providing connections to the Wales Coast Path, Griffin Park, local schools and neighbourhoods at Nottage and Newton.

Proposed Development

6.1.6. Within the ES, the development is referred to as the *"Proposed Development"*. It comprises:

- Up to 980 homes.

- Approximately 20 hectares of open space, including a series of new significant public open spaces with different offers.
- 2.2 hectares of land for educational use.
- Approximately 130,000 square feet of commercial and leisure floorspace, including retail uses, a hotel, Lido and Gym / Studio Space.
- Enhancement of Porthcawl Harbour environment.
- New coastal defence works.
- A flexible meanwhile leisure use space (approximately 23,500 square feet).
- Approximately 6,500 square feet of flexible community / civic space.
- Provision of up to 600 public parking spaces within the site area.
- A new spine road access from the Eastern Promenade to Sandy Bay.
- Enhancement of Griffin Park and proposed new facilities including a MUGA.

6.1.7. Outline planning permission is sought for all elements except the Spine Road, for which full planning permission is sought.

Legislation and Policy Framework

6.1.8. The assessment has been prepared with reference to the key legislation, national policy and local planning framework relevant to transport and movement in Wales. This section summarises the principal documents that inform the Environmental Impact Assessment for this topic.

6.1.9. The primary legislation is as follows:

- Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 – establish the requirement to assess likely significant effects of development on traffic and movement as part of the EIA process.
- Well-being of Future Generations (Wales) Act 2015 – places a duty on public bodies to pursue sustainable development, encouraging long-term and integrated decision-making.
- Active Travel (Wales) Act 2013 and Active Travel Act Guidance (2021) – require consideration of walking and cycling in new development, including continuity with

routes identified on Active Travel Network Maps and provision of appropriate infrastructure and crossings.

6.1.10. The relevant national planning policy documents are:

- Planning Policy Wales (Edition 12, 2023/24) – sets out the sustainable transport hierarchy and seeks compact, accessible development that reduces the need to travel.
- Technical Advice Note (TAN) 18: Transport – guidance on integrating transport and land use, accessibility assessment, parking and the preparation of Transport Assessments and Travel Plans.
- Future Wales: The National Plan 2040 and Llwybr Newydd – The Wales Transport Strategy (2021) – establishes national objectives for modal shift and decarbonising transport.

6.1.11. The key local policy documents are:

- Bridgend County Borough Council Replacement Local Development Plan (2018–2033, adopted 2024) – allocates the Porthcawl Waterfront Regeneration Area and requires delivery of a new roundabout and link road between Eastern Promenade and Sandy Bay, off-site improvements identified through the Transport Assessment, a bus terminus, and connections to the active travel network.
- Bridgend Active Travel Network Map (latest) – identifies existing and proposed walking and cycling routes that adjoin or pass through the site and connect to the town centre, Harbour Quarter and surrounding neighbourhoods.

6.1.12. A fuller policy review and compliance narrative is set out in the **Transport Assessment (Volume 3, Appendix 6.1)**.

6.2. Assessment Methodology

Good Practice Guidance

6.2.1. The assessment has been undertaken in accordance with the following good-practice guidance:

- Institute of Environmental Management and Assessment (IEMA), Environmental Assessment of Traffic and Movement (July 2023);
- Active Travel (Wales) Act Guidance (Welsh Government, 2021);
- Manual for Streets (DfT, 2007) and Manual for Streets 2 (CIHT, 2010);
- Design Manual for Roads and Bridges (DMRB) – applied proportionately where relevant to the strategic highway context in Wales; and
- Welsh Transport Appraisal Guidance (WelTAG) – to ensure alignment with national transport-appraisal principles.

6.2.2. The assessment follows the Guidelines for the Environmental Assessment of Road Traffic published by IEMA and applies the most recent IEMA (2023) Environmental Assessment of Traffic and Movement recommendations (Ref. 6.1) (the "IEMA guidance").

6.2.3. In accordance with the IEMA guidance, the study focuses on the parts of the transport network where the Proposed Development is expected to result in material changes in traffic or movement patterns.

6.2.4. Two screening criteria (known as "Rule 1" and "Rule 2") are applied in identifying links requiring further assessment:

- **Rule 1:** Highway links where total traffic or HGV flows are forecast to increase by more than 30 per cent as a result of the development.
- **Rule 2:** Sensitive links or locations (for example, residential streets, town centre corridors or roads past schools) where traffic flows are expected to increase by 10 per cent or more.

6.2.5. These thresholds, derived from IEMA guidance, represent the levels at which changes in traffic flows could potentially give rise to perceptible environmental effects.

6.2.6. The IEMA guidance sets out at paragraphs 2.18-2.21 further rationale regarding the use of these thresholds and confirms: "It is generally accepted that accuracies greater than

10% are not achievable. It should also be noted that the day-to-day variation of traffic on a road is frequently at least + or -10%. At a basic level, it should therefore be assumed that projected changes in traffic of less than 10% create no discernible environmental impact. In summary, it is recommended that, as a starting point, a 30% change in traffic flow represents a reasonable threshold for including a highway link within an environmental assessment…The competent traffic and movement expert should include any other link or location where it is felt specific environmental or population sensitivities may occur… Normally, it would not be appropriate to consider links where traffic flows have changed by less than 10%."

6.2.7. For robustness, Rule 1 (a change of 30 percent or more in total or HGV flows) and Rule 2 (a change of 10 percent or more on sensitive routes such as residential streets, town centre corridors, or roads adjacent to schools or community facilities) have been applied in respect to the changes in traffic between the 2026 future baseline and the 2026 with development scenarios, given that this represents the assessment year with the greatest percentage change from baseline as a consequence of the Proposed Development (i.e. baseline traffic flows are lower in 2026 than in 2033).

6.2.8. Those links that are screened in for assessment following this process are, however, then assessed for both 2026 and 2033.

6.2.9. As is also noted in the IEMA guidance however, it is generally accepted that the above rules should not be applied to assessments of road safety and driver delay (or assessments relating to air quality and noise, which are covered under separate Chapters of this ES). A separate study area and assessment criteria has therefore been agreed with Bridgend County Borough Council (BCBC) Highway Officers in relation to the road safety and driver delay impact pathways, as detailed in the **Transport Assessment (Appendix 6.1)**.

6.2.10. The detailed traffic analysis, including the identification of screened-in highway links, is presented in **Chapter 4: Assessment of potential Effects, Mitigation Measures and Residual Effects**, which summarises base and forecast traffic conditions in 2026 and identifies those parts of the network taken forward for detailed assessment.

6.2.11. This excludes the road safety and driver delay impact pathways, which are screened and assessed based on the findings set out within the **Transport Assessment (Appendix 6.1)**.

Consultation and Scoping Process

6.2.12. A request for scoping opinion (reference P/25/462/ESO) was submitted by the applicant on 28 July 2025 which included input from Link Transport Planning setting out the proposed methodology, study network and datasets for the Environmental Statement (ES). The note confirmed that the approach would follow the IEMA guidance and would draw upon the evidence base developed through the accompanying TA.

6.2.13. BCBC issued its formal Scoping Opinion on 3 October 2025. In accordance with Regulation 17(4)(c), the Council confirmed that Transport should remain a scoped-in topic and that the ES must be prepared in line with the Scoping Opinion. The Council accepted the methodology proposed and requested that updates to the highway layout, trip generation forecasts and cumulative development assumptions be incorporated as design work progressed.

6.2.14. Continual engagement has since taken place between Link Transport Planning, BCBC Highway Officers, and other stakeholders to agree on assessment parameters, including assessment years of 2026 (base year) and 2036 (future year), both before and after the full quantum of development.

6.2.15. The following diagram extract displays the study network with the link and node coding used for this assessment. The diagram is also provided in **Volume 2, Figure 6.1.**

Data Sources

6.2.16. The assessment draws on a combination of new and existing data sources to establish baseline traffic and movement conditions and to inform the forecast analysis presented in **Section 3 (Baseline Conditions)** and **Section 4 (Assessment of Potential Effects, Mitigation Measures and Residual Effects)**.

6.2.17. The key datasets and references are as follows:

- Traffic survey data: new turning movement counts, and automatic traffic counts at key junctions and links in the study area were undertaken in 2025 to supplement surveys from 2024.
- TEMPro: Growth factors were derived using TEMPro (version 8.1). Local traffic growth estimations were calculated from the NTEM version 8.0 datasets, using the 'NRTP 2022 core' scenario of the national transport model.

- Strategic modelling: Transport for Wales South East Wales Transport Model (latest validated version) was used to supplement the new traffic survey data and extend the dataset beyond the core study area.
- DfT count-point data: used to cross-validate or supplement local ATC data.
- Active travel data: Bridgend County Borough Council Active Travel Network Maps (ATNMs) obtained from publicly available sources (DataMapWales).
- Road-safety data: five-year Stats19 personal-injury-collision records (obtained from the Department for Transport).
- Public transport: latest bus timetables, service routing and frequencies (obtained from Transport for Wales).
- Other references: mapping, land-use and planning datasets used to define the study area and receptor sensitivity.

Impact Pathways

6.2.18. The assessment considers the environmental pathways through which the Proposed Development may influence movement, safety and amenity on the surrounding network. Seven principal pathways are assessed, consistent with the IEMA guidance:

- Severance of communities.
- Driver and passenger delay (motorised users).
- Non-motorised-user (NMU) delay.
- NMU amenity.
- Fear and intimidation.
- Road safety.
- Construction-phase effects from hazardous or abnormal loads (where relevant).

6.2.19. For each screened in link, the magnitude of impact for each pathway is established as per the methodology set out at Section 2.7.

Sensitivity of Receptors

6.2.20. Receptor sensitivity is defined according to the nature of activity, vulnerability to change and ability to adapt. The following categories will be applied:

Sensitivity Band	Definition	Typical Receptors
Very High	Critical safety or health functions; cannot relocate; highly vulnerable to small traffic changes.	Emergency service depots, A&E entrances, primary schools on strategic active travel routes, and collision-cluster sites under investigation.
High	Vulnerable users; material amenity or safety effects are likely.	Schools, colleges, playgrounds, retirement homes, footway-less village streets, town centre retail frontages, high-footfall public transport hubs.
Medium	Change is noticeable, but normal activity continues with adaptation.	Congested junctions, non-emergency hospital frontages, roadside shopping parades, narrow footways or un-segregated cycle links, community parks.
Low	Some tolerance or buffer; suitable infrastructure in place.	Residential streets with continuous footways and cycle provision, listed buildings set back from the carriageway, internal public open space, and rural distributor roads with limited active travel demand.
Negligible	Distant or screened; change unlikely to be perceived.	Isolated properties, farmland, grade-separated junctions with minimal pedestrian or cyclist activity.

Table 6.1: Sensitivity of Receptor Bands

6.2.21. The receptor sensitivity bands defined above are applied to study the area's individual links within **Section 3: Baseline Conditions**.

Significance Evaluation

6.2.22. The overall significance of each potential effect is determined by combining the sensitivity of the receptor with the magnitude of impact using the matrix set out below. The matrix provides a consistent framework for evaluating both adverse and beneficial effects across all assessment pathways.

Sensitivity	Magnitude of Impact				
	No Change	**Negligible**	**Low**	**Medium**	**High**
Negligible	No Change	Negligible	Negligible or Minor	Negligible or Minor	Minor
Low	No Change	Negligible or Minor	Negligible or Minor	Minor	Minor or Moderate
Medium	No Change	Negligible or Minor	Minor	Moderate	Moderate or Major
High	No Change	Minor	Minor or Moderate	Moderate or Major	Major or Substantial
Very High	No Change	Minor	Moderate or Major	Major or Substantial	Substantial

Table 6.2: Significance Matrix

6.2.23. The resulting significance levels represent the overall environmental importance of an effect and its relevance to decision making. Unless otherwise defined for specific impact pathways within this Chapter, the following scale is applied:

- Substantial – Only adverse effects are normally assigned this level of significance. They represent key factors in the decision-making process for planning consent and are generally associated with sites or receptors of international, national or regional importance that could experience severe or irreversible impact and loss of integrity.
- Major – These beneficial or adverse effects are considered to be very important considerations and are likely to be material in the decision-making process.
- Moderate – These beneficial or adverse effects may be important, but are not likely to be key decision-making factors. However, cumulative moderate effects could influence the overall environmental outcome and may require targeted mitigation.
- Minor – These beneficial or adverse effects may be raised as local factors. They are unlikely to be critical in the decision-making process but can inform enhancement and design refinement.
- Negligible – No effects, or those beneath levels of perception, within normal bounds of variation, or within the margin of forecasting error.

6.2.24. For the purposes of this Chapter, effects assessed as Moderate, Major or Substantial are considered significant in EIA terms.

Significance Criteria

6.2.25. The significance of transport and movement effects has been evaluated using a combination of quantitative thresholds, derived from the IEMA guidance and other authoritative guidance, together with professional judgement informed by the supporting Transport Assessment (TA). The approach is consistent with the impact pathways defined in Section 2.4 and focuses on those areas where the Proposed Development may lead to a material change.

Severance of Communities

6.2.26. Severance refers to the perceived division of communities by traffic, affecting ease of crossing and social connectivity. It is measured in part by changes in traffic flow. Indicative thresholds from IEMA guidance suggest that increases in total traffic of approximately 30%, 60% and 90% represent 'slight', 'moderate' and 'substantial' changes in severance, respectively. In sensitive locations such as residential streets, schools or high pedestrian-activity areas, even smaller increases of 10–20% may be noteworthy. The assessment, therefore, considers whether an increase in traffic flow could materially hinder pedestrian movement or access to community facilities.

6.2.27. The IEMA guidance also states, however, that the measurement and prediction of severance is "extremely difficult" and there are "no predictive *formulae that give simple relationships between traffic factors and levels of severance*."

6.2.28. Whilst the 30%, 60% and 90% guidelines provide a useful starting point, the IEMA guidance confirms that caution needs to be observed when applying these thresholds as very low baseline flows are unlikely to experience severance impacts even with high percentage changes in traffic. The IEMA guidance suggests, therefore, that an assessment of severance should aim to "*estimate the current severance caused by traffic and related factors, and the extent to which additional traffic will exacerbate this problem*."

6.2.29. On this basis, guidance set out in DMRB Vol 11, Section 3, Part 8 (Ref. 6.2) has been considered. Whilst this document has now been withdrawn, it provides a useful set of guidelines for identifying existing and future levels of pedestrian severance in terms of the total two-way AADT of a given link and the level of pedestrian diversion required. The table below outlines the thresholds of community severance as prescribed by DMRB.

Severance Level	Traffic Flow (AADT)	Diversion
Slight	<8,000	<250m
Moderate	8,000 – 16,000	250 – 500m
Severe	>16,000	>500m

Table 6.3: Pedestrian Severance Thresholds (DMRB Vol 11, Section 3, Part 8)

6.2.30. Changes between the above ranges have therefore been considered alongside professional judgement in order to determine the magnitude of impact relating to pedestrian severance.

6.2.31. Additional factors considered include road type, traffic speeds, the availability of crossing facilities and the likely level of user demand across the affected link. This is considered in the context of the Active Travel Act Guidance (2021).

Driver and Passenger Delay (Motorised Users)

6.2.32. Driver delay is evaluated using standard capacity-assessment tools, as described in the TA. The Ratio of Flow to Capacity (RFC) or Degree of Saturation (DoS) is examined for key junctions during peak hours. An RFC/DoS approaching or exceeding 1.0 (100% of capacity) indicates congestion. Significance is determined by the extent to which development traffic is expected to cause or exacerbate congestion, delay or queuing.

6.2.33. For example, an increase from free-flow to near-capacity operation, or a rise in RFC from well below capacity to close to or above 1.0, would constitute a potentially significant effect. Small increases where junctions remain comfortably within capacity are typically negligible or minor.

Non-Motorised-User (NMU) Delay

6.2.34. NMU delay relates to the time and difficulty pedestrians and other NMUs experience when crossing or travelling alongside roads. This impact pathway is closely related to severance. Increased traffic may reduce the availability of safe crossing gaps, particularly on routes without controlled crossings.

6.2.35. A significant adverse effect may occur where development traffic causes flows to exceed these indicative thresholds on routes with high pedestrian or cyclist activity and limited crossing opportunities.

6.2.36. The IEMA guidance suggests that given the range of local factors and conditions that can influence pedestrian delay, it is not possible to set down definitive thresholds relating to changes in traffic flows and that professional judgement should be applied to determine

whether pedestrian delay constitutes a significant effect. The IEMA guidance refers to DMRB LA 112 (Ref. 6.3) which sets out the following magnitude of impact for NMUs based on changes in journey length.

Magnitude of Impact	Change in NMU Journey Length
Major	>500m
Moderate	>250m – 500m
Minor	>50m – 250m
Negligible	<50m
No Change	0

Table 6.4: Magnitude of NMU Delay Impact Based on Change in NMU Diversion Length (DMRB LA 112)

6.2.37. Given that NMU delay is closely related to severance, the traffic flow ranges detailed in Table 6.3 (i.e. relating to the severance) have been considered alongside the changes in NMU journey length as set out in Table 6.4 in order to determine the magnitude of impact relating to NMU delay.

Non-Motorised-User (NMU) Amenity

6.2.38. NMU amenity refers to the overall quality and comfort of walking and cycling environments, considering factors such as vehicle speed, traffic composition (especially heavy vehicles), air quality, noise, and visual intrusion. A deterioration in amenity is considered significant where development traffic materially reduces the attractiveness, safety or comfort of key walking or cycling routes, particularly those identified on the Active Travel Network Map or used by school pupils and visitors to community facilities.

6.2.39. The IEMA guidance notes that changes in NMU amenity may be considered significant where the traffic flow is halved or doubled, with the former being beneficial and the latter being adverse. This threshold is therefore used in the first instance, with a more precise impact subsequently established by way of professional judgement as appropriate.

Fear and Intimidation

6.2.40. Fear and intimidation effects arise where increased traffic, particularly HGVs, reduce the perceived safety of pedestrians and cyclists. The assessment considers qualitative factors such as speed of the environment, proportion of HGVs, and presence of vulnerable users. Significant effects may occur where increased traffic materially alters the character of a route used by pedestrians or cyclists, especially in the absence of segregated facilities.

6.2.41. Again, there is no formal, quantitative guidance on the assessment of fear and intimidation of pedestrians and cyclists. A professional judgement is used to determine the impact on this pathway, and the assessment is undertaken in the context of both the quality of the infrastructure (that could reduce fear and intimidation) and the volume and speed of traffic (that could increase fear and intimidation), to determine the significance of impact.

6.2.42. A weighting system has, however, been defined in the IEMA guidance to help assessors provide an initial indicator of the likelihood of the degree of pedestrian fear and intimidation. The degree of hazard is assessed with reference to the established thresholds, and a score is provided for each combination on a highway link under consideration. The fear and intimidation degree of hazard as set out in the IEMA guidance is shown below.

Fear and Intimidation Degree of Hazard			
Average Traffic Flow over 18-hour day – all vehicles/hour 2-way (a)	**Total 18-hour heavy vehicle flow (b)**	**Average vehicle speed mph (c)**	**Degree of hazard score**
+1,800	+3,000	->40	30
1,200-1,800	2,000-3,000	30-40	20
600-1,200	1,000-2,000	20-30	10
<600	<1,000	<20	0

Table 6.5: Fear and Intimidation Degree of Hazard (IEMA Guidance)

6.2.43. Average vehicle speed in this instance has been estimated based on the posted speed limit where no vehicle speed data is available. Where data is available, this is based on the direction of travel with the greater recorded speed.

6.2.44. The total score from all three elements is then combined to establish a 'level' of fear and intimidation. This is shown in the following table.

Levels of Fear and Intimidation	
Level of fear and intimidation	**Total hazard score (a) + (b) + (c)**
Extreme	71+
Great	41-70
Moderate	21-40
Small	0-20

Table 6.6: Levels of Fear and Intimidation (IEMA Guidance)

6.2.45. The magnitude of impact is then approximated through references to changes in the level of fear and intimidation when considered against the baseline level, as shown in the following table.

Fear and Intimidation: Magnitude of Impact	
Magnitude of Impact	**Change in step/traffic flows (AADT) from baseline conditions**
High	Two step changes in level
Medium	One step change in level, but with: - >400 veh increase in average 18hr AV two-way all vehicle flow; and/or - >500 HV increase in total 18hr HV flow
Low	One step change in level with: - <400 veh increase in average 18hr AV two-way all vehicle flow; and/or - <500 HV increase in total 18hr HV flow
Negligible	No change in step changes

Table 6.7: Fear and Intimidation Magnitude of Impact (IEMA Guidance)

6.2.46. The above step-change process has been used in establishing the degree of impact relating to fear and intimidation.

Road-User and Pedestrian Safety

6.2.47. Baseline five-year personal-injury-collision (PIC) data for the local network has been reviewed in the **Transport Assessment (Appendix 6.1)** to identify trends, severities and cluster locations. An effect is considered significant where development traffic is likely to increase collision risk, such as by adding substantial flow to a known high-collision

location or introducing a new junction layout that could confuse users. Where traffic interacts with identified accident clusters, a qualitative assessment of potential risk change has been undertaken.

6.2.48. Consistent with IEMA guidance, road safety effects are considered separately from overall traffic increases, focusing on specific safety implications rather than percentage flow changes alone.

Construction Phase Effects

6.2.49. At this stage, detailed information on construction programming, material import and export volumes, staffing numbers, and plant requirements is not yet available. The focus of this Chapter is therefore on operational effects, which are expected to represent the greatest magnitude of change on the transport network.

6.2.50. Construction-phase effects will be assessed qualitatively based on the anticipated scale and type of activities, likely vehicle types and haul routes. Potential temporary changes in amenity, safety and journey times arising from construction traffic or traffic management measures will be described.

6.2.51. It is assumed that a detailed Construction Traffic Management Plan (CTMP) will be secured by a planning condition to control construction vehicle activity. The CTMP will include daily vehicle limits, designated routing, sustainable travel planning for the workforce, and vehicle-size controls to ensure that construction traffic does not give rise to a significant adverse impact.

6.2.52. Abnormal or hazardous load movements are not anticipated. If any are required, they will be planned and managed in consultation with the relevant highway authority and South Wales Police.

Mitigation Hierarchy

6.2.53. Where significant effects are predicted, mitigation will follow the sustainable transport hierarchy. Measures will prioritise avoiding or reducing adverse impacts through design and embedded features before considering additional management or off-site interventions.

Cumulative Assessment

6.2.54. As agreed with the Highway Authority, no committed development was required to be specifically included in the assessment.

6.2.55. Committed and future developments in the area (such as other planned housing or retail in surrounding areas) are included in the traffic growth assumptions for 2026 and 2033. The **Transport Assessment (Appendix 6.1)** traffic forecasting inherently accounts for regional traffic growth and known committed projects, ensuring the future baseline is robust.

6.3. Baseline Conditions

Highway Network and Traffic Flows

6.3.1. Porthcawl is a coastal settlement in Bridgend County Borough with a resident population of around 16,000. It lies approximately 12 km south-west of Bridgend and 4 km south of Junction 37 of the M4 Motorway. The town does not have a railway station; the nearest is Bridgend on the South Wales Main Line. Consequently, Porthcawl relies primarily on the highway network for regional connectivity.

6.3.2. Access to Porthcawl is principally via the A4106 and A4229, which connect the town to the M4 (J37) and the A48 corridor. The A4106 (Bridgend Road) forms the main east–west approach into the town from Bridgend, while the A4229 (Pyle Road) provides a high-capacity link running north-south. The M4 at J37 carries over 80,000 vehicles per day, offering regional access to Cardiff, Swansea and beyond.

6.3.3. Within Porthcawl, the main distributor roads include The Portway, Eastern Promenade, New Road, Lias Road, and Bridgend Road, which serve the town centre, seafront and residential areas. The Portway and Eastern Promenade directly front the Salt Lake portion of the Proposed Development, while New Road provides access to the Sandy Bay area. Residential and local streets link these principal corridors to neighbourhoods and community facilities.

6.3.4. Baseline traffic data has been derived from a comprehensive package of surveys and model datasets, which inform the **Transport Assessment (Appendix 6.1)**.

6.3.5. ATCs (7-day speed and classified volumetric data collection) were installed at key locations on the A4106, A4229, The Portway and New Road in July 2025, with strategic corridor surveys continuing through to mid-September 2025. Manual Classified Counts (MCCs) were undertaken at principal junctions across the study area in July and September 2025.

6.3.6. Supplementary car park occupancy and accumulation surveys were also completed at Council car parks throughout the school summer holiday period of 2025, following similar surveys from previous years.

6.3.7. The 2025 survey results were supplemented by regional traffic patterns obtained from the Transport for Wales South East Wales Transport Model (SEWTM). The SEWTM dataset provided origin-destination movements for areas outside of the original study area (as agreed with the local highway authority) to enable additional highway links to be assessed if deemed necessary by the traffic forecasting and threshold tests. All survey methodologies and data processes are described in detail within the **Transport Assessment (Appendix 6.1)**.

6.3.8. The following table provides, in Annual Average Daily Traffic (AADT) format, the future baseline 2026 and 2033 traffic flows for each link. Heavy Duty Vehicles (HDVs) comprise OGV1, OGV2 and buses.

Link	Name	AADT 2026 Base (No Dev)		AADT 2033 Base (No Dev)	
		Total	HDV	Total	HDV
A	Esplanade	8990	679	9568	723
B	The Portway (South)	6855	526	7274	558
C	Lias Road	7204	544	7667	579
D	Eastern Promenade (West)	7281	550	7749	585
E	Eastern Promenade (North)	7551	570	8036	607
F	New Road (West)	4338	328	4617	349
G	New Road (N3-N4)	4865	368	5177	391
H	New Road (N4 - Rhych Ave)	3245	245	3454	261
I	New Road (Rhych Ave - N5)	4119	311	4384	331
J	New Road (East)	4614	349	4911	371
K	Aldenham Road	6034	456	6422	485
L	Bridgend Road (South)	6568	496	6990	528
M	Bridgend Road (North)	9929	750	10567	798
N	A4106 (N9a-N6)	10081	773	10697	820
O	A4106 (N6-N15)	10569	811	11215	860
P	A48	15502	1189	16449	1262
Q	A473	11022	845	11695	897
R	A4106 (N2-N7)	13882	1065	14730	1130
S	Fulmar Road	13135	992	13980	1056
T	A4106 (N7-Heol Y Goedwig)	15438	1184	16381	1256
U	A4229 (N7-N12)	15805	1212	16771	1286
V	M4 (West of J37)	73048	4461	79731	4869
W	B4283	9402	710	10006	756
X	A4229 (North of M4)	16185	1241	17174	1317
Y	M4 (East of J37)	80784	4933	88174	5385
Z	New Link Road	0	0	0	0

Table 6.8: 2026 and 2033 Baseline Traffic Flows (AADT)

6.3.9. The following table provides, in 18-hour Annual Average Weekday Traffic (AAWT) format, the future baseline 2026 and future baseline 2033 traffic flows.

Link	Name	18-Hour AAWT 2026 Base (No Dev)		18-Hour AAWT 2033 Base (No Dev)	
		Total	HDV	Total	HDV
A	Esplanade	9402	710	10006	756
B	The Portway (South)	6775	520	7189	551
C	Lias Road	7534	569	8018	606
D	Eastern Promenade (West)	7614	575	8104	612
E	Eastern Promenade (North)	7897	597	8404	635
F	New Road (West)	4536	343	4828	365
G	New Road (N3-N4)	5087	384	5414	409
H	New Road (N4 - Rhych Ave)	3394	256	3612	273
I	New Road (Rhych Ave - N5)	4308	325	4585	346
J	New Road (East)	4825	365	5135	388
K	Aldenham Road	6310	477	6716	507
L	Bridgend Road (South)	6868	519	7310	552
M	Bridgend Road (North)	10383	784	11050	835
N	A4106 (N9a-N6)	9964	764	10573	811
O	A4106 (N6-N15)	10446	801	11084	850
P	A48	15321	1175	16257	1247
Q	A473	10893	835	11559	887
R	A4106 (N2-N7)	13720	1052	14558	1117
S	Fulmar Road	13737	1038	14619	1104
T	A4106 (N7-Heol Y Goedwig)	15258	1170	16190	1242
U	A4229 (N7-N12)	15621	1198	16575	1271
V	M4 (West of J37)	72198	4409	78803	4812
W	B4283	9832	743	10464	791
X	A4229 (North of M4)	15997	1227	16974	1302
Y	M4 (East of J37)	79844	4876	87149	5322
Z	New Link Road	0	0	0	0

Table 6.9: 2026 and 2033 Baseline Traffic Flows (18-Hour AAWT)

Highway Safety (Collision History)

6.3.10. The **Transport Assessment (Appendix 6.1)** provides a detailed review of the latest available five-year (2020-2024) Personal Injury Collision (PIC) records in this area.

6.3.11. PIC data was obtained from the Department for Transport (DfT) using the STATS19 database. This database contains information on PICs on public roads which are reported to the police. STATS19 includes an array of details for each incident, such as the location, severity of the accident, number of vehicles involved, weather conditions, and details about the individuals involved (including age and gender).

6.3.12. PICs are classified into three main categories of 'fatal', 'serious', and 'slight', as defined by the STATS19 data collection form. A 'fatal' PIC is one where the casualty dies within 30 days as a result of the PIC. 'Serious' and 'slight' PICs are differentiated based on the medical attention required, adhering to the guidelines set by the DfT.

6.3.13. A plot map showing the PIC data within the vicinity of the site over the five-year study period is included within the **Transport Assessment (Appendix 6.1)**. The study area was agreed with BCBC Highway Development Control.

6.3.14. A total of 36 PICs occurred in the study area across the five-year assessment period. Of these 36 PICs, four were classified as 'serious' and the remaining 32 were classified as 'slight', with no fatalities. Of the 36 PICs, a total of 17 (47%) involved active travel users (pedestrians/cyclists).

6.3.15. The quantum and severity of PICs recorded is not considered to be in excess of the level that may be expected on an equivalent section of the highway network over a five-year period. Indeed, during the 2020-2024 period, the Killed or Seriously Injured (KSI) ratio is 11%, which is below Great Britain's average of 22% (as per the Reported road casualties Great Britain, annual report: 2022).

6.3.16. Furthermore, there have been no PIC cluster sites within the study area (a closely defined area of five or more PICs) and therefore no incidences of excessive numbers of PICs at a given section of the road network that may otherwise have suggested an underlying road safety issue at that location.

6.3.17. Despite being outside of the study area, it is noted that there is a PIC cluster at the A48/A4106 roundabout junction, approximately 1km northeast of the edge of the study area. Whilst we do not have access to detailed police reports, it is recommended that mitigation at this location is considered through discussions with the Highway Authority's road safety team. This is discussed further in the **Transport Assessment (Appendix 6.1).**

6.3.18. It should be noted that the proposed site access strategy has been designed in line with Manual for Streets principles and would ensure safe access and egress for all users. The site access design will be subject to detailed refinement in due course as part of the road safety audit process.

6.3.19. It should also be noted that on 17th September 2023, Wales introduced a nationwide default 20mph speed limit in built-up areas. This was implemented with the expectation that highway safety for all users would be enhanced. This is not reflected in the latest

available dataset. However, the Welsh government has recently released data stating that the number of 'all severity' road collisions has dropped by 26% from 2023 to 2024.

6.3.20. In summary, it is considered that there are no underlying road safety issues in the vicinity of the site that may be exacerbated by the Proposed Development. Notwithstanding this, a range of road safety enhancements have been identified in any event as part of the **Transport Assessment (Appendix 6.1)**.

Sustainable Transport and Accessibility

Walking and Cycling

6.3.21. The site is centrally located within Porthcawl, immediately adjacent to the town centre and seafront promenade. Continuous footways exist along The Portway, New Road and Bridgend Road, and pedestrian crossings are present at key points in the town centre and near schools. The Esplanade and Eastern Promenade form a flat, high-quality walking corridor that links the Harbour Quarter with Coney Beach and Sandy Bay. Baseline conditions and active travel audits are summarised in the **Transport Assessment (Appendix 6.1)**.

6.3.22. Cycling levels are modest but supported by a favourable topography and leisure routes along the coast. Sections of National Cycle Network Route 885 connect Porthcawl to Bridgend and neighbouring communities. The Bridgend Active Travel Network Map (2023) identifies upgraded routes along Eastern Promenade and through the Proposed Development site to the town centre.

Public Transport

6.3.23. Bus services represent the main public transport mode. The new Porthcawl Metrolink interchange on The Portway opened in November 2024 and accommodates up to four buses under cover with real-time information, shelters and seating. Principal services include the First Cymru 63 (local service to Bridgend circa every 20 minutes on weekdays) and the First Cymru X2 inter-urban service to Cardiff (circa 30-minute weekday frequency). The 861 shuttle and other local routes also operate from the Metrolink. The nearest rail access is via Bridgend station (circa 12 km), served by regular regional and intercity services. Full baseline service information is provided in the **Transport Assessment (Appendix 6.1)**.

Car Ownership and Accessibility

6.3.24. Census 2021 data show that central Porthcawl has a higher proportion of no-car and single-car households than the county average, reflecting the compact urban form and access to local amenities. Public car parks and on-street parking opportunities are available throughout Porthcawl.

Accessibility Summary

6.3.25. The baseline accessibility is therefore considered good for walking and cycling and reasonable for public transport, although there remains scope for enhanced Active Travel links and bus connectivity to regional destinations.

Link Sensitivity Classification

6.3.26. Each highway link within the study area has been assigned a receptor sensitivity band (Very High to Negligible) based on the criteria in Section 2 (Table 6.10). This classification considers the function of the route, frontage uses, active travel activity and presence of vulnerable users.

6.3.27. The IEMA guidance provides guidance on the special interests that need to be considered when defining the sensitivity of a link in the context of the highway environment. For example, the IEMA guidance notes that pedestrians are less sensitive to changes in traffic if there are adequate footways and crossing facilities.

Link	Road / Corridor	Context / Frontage	Sensitivity Band	Justification
A	Esplanade	Seafront promenade with pedestrian priority and tourist frontage	**High**	High active travel activity, although with a good standard of infrastructure and crossing density.
B	The Portway	Adjacent to the Metrolink bus station and Salt Lake site	**High**	Mixed-use corridor with frequent crossings and a Metrolink bus station.
C	Lias Road	Town centre retail frontage	**Medium**	Link between the town centre and the waterfront. Controlled crossing present.

D	Eastern Promenade (West)	Seafront recreational route	**High**	Key pedestrian and cycle corridor, although with low pedestrian crossing demand and a high standard of active travel provision on the development side (south). Access for Porthcawl fire and ambulance station, although the site is not subject to high levels of public access relative to other emergency centre types.
E	Eastern Promenade (North)	Link to Harbour Quarter	**Medium**	Prominent Active Travel connection
F	New Road (West)	Residential frontage near schools	**Medium**	Moderate pedestrian use and on-street parking
G	New Road (N3–N4)	Residential distributor	**High**	Serves local traffic and provides frontage for Newton Primary School
H	New Road (N4–Rhych Ave)	Residential corridor	**High**	Serves local traffic and provides frontage for Newton Primary School. The school does, however, benefit from separate access via Mackworth Road to the rear. A 20mph frontage and a number of pedestrian crossings and traffic calming features mean the sensitivity has not been classified as 'very high'.
I	New Road (Rhych Ave-N5)	Residential corridor	**Medium**	Sensitive frontages and school access
J	New Road (East)	Edge-of-town link to Newton	**Medium**	Moderate flows, pedestrian links present
K	Aldenham Road	Local residential street	**Medium**	Fronted by housing with footways
L	Bridgend Road (South)	Residential approach to town	**Medium**	Footways and bus stops present

M	Bridgend Road (North)	Approach to A4106 roundabout	**Low**	Few frontages, moderate speed limit
N	A4106 (N9a–N6)	Urban arterial	**Low**	Strategic corridor with limited frontage
O	A4106 (N6–N15)	Strategic approach to M4 J37	**Low**	Distributor role with footway provision
P	A48	Strategic connection to Bridgend	**Negligible**	High-capacity arterial with no frontage access
Q	A473	Strategic connection to Bridgend via Laleston	**Negligible**	Inter-urban route with limited frontage
R	A4106 (N2–N7)	Main approach to Porthcawl from the M4	**Low**	Strategic, high-capacity highway link, but with some pedestrian demand.
S	Fulmar Road	Local residential street	**Medium**	Local frontage with pedestrian use
T	A4106 (N7–Heol Y Goedwig)	Outer-urban corridor	**Medium**	Strategic function and low active travel usage and crossing demand. Some scope for severance due to a small residential area to the north of the road has increased the sensitivity category.
U	A4229 (N7–N12)	Primary link to M4	**Negligible**	Strategic function and low active travel usage and crossing demand
V	M4 (West of J37)	Motorway section	**Negligible**	Motorway designed for through traffic
W	B4283	Rural link towards North Cornelly	**Medium**	Active travel link between North Cornelly and South Cornelly

X	A4229 (North of M4)	Strategic dual carriageway	**Negligible**	High speed and highway capacity road link
Y	M4 (East of J37)	Motorway section	**Negligible**	Motorway designed for through traffic
Z	New Link Road	Proposed site access	**High**	Within development frontage serving Active Travel connections

Table 6.10: Link Sensitivity Classification

6.3.28. The classification reflects the relative exposure of each link to potential changes in traffic and the presence of vulnerable road users and active travel infrastructure. Higher sensitivities are associated with links fronted by residential uses or Active Travel routes (Esplanade, Eastern Promenade, New Road, The Portway), while strategic routes such as the A4229 and M4 have been assigned Low or Negligible sensitivities due to their limited frontage and separation from pedestrian activity.

6.3.29. These sensitivity bands form the basis for the impact-pathway assessment presented in **Section 4**, where forecast traffic changes are compared against the baseline flows to determine the significance of effects for each receptor.

6.4. Assessment of potential Effects, Mitigation Measures and Residual Effects

Potential Effects

Operational Phase

Road-User and Pedestrian Safety

6.4.1. Matters relating to road user and pedestrian safety are addressed in detail in the **Transport Assessment (Appendix 6.1)** with the PIC data also summarised earlier in this Chapter (Section 3.2).

6.4.2. From review of the PIC data, it is evident that the local road network is not subject to any underlying road safety issues that may be exacerbated by the Proposed Development – particularly after accounting for the road improvement measures that will be implemented as part of the Proposed Development.

6.4.3. On the basis of the above, it is projected that there will be no significant effects caused by the Proposed Development in respect to road user and pedestrian safety and this factor has therefore been screened out of any further assessment as part of this Chapter.

Driver and Passenger Delay (Motorised Users)

6.4.4. Driver and passenger delay is principally governed by the way in which key junctions on the surrounding network perform under forecast traffic conditions. This matter is comprehensively assessed within the **Transport Assessment (Appendix 6.1)**, which employs deterministic modelling for key nodes in the study area for the 2026 and 2033 weekday morning and afternoon peak hours. The assessment adopts deliberately conservative assumptions, with no reductions for expected modal shift or travel plan measures. This provides a robust basis for understanding the potential for delay.

6.4.5. The results confirm that all modelled junctions, including the proposed site access arrangements, continue to operate within acceptable capacity, queue and delay thresholds when tested against forecast Total Traffic scenarios. RFC values remain below levels at which material congestion effects typically arise, and only minor changes in queueing are observed relative to baseline forecasts. No off-site mitigation is required on capacity grounds, and the proposed access junctions retain substantial residual capacity under both assessment years.

6.4.6. On this basis, the Proposed Development is not anticipated to result in any significant effects in respect of driver or passenger delay. This impact pathway has therefore been screened out of any further assessment within this Chapter.

Remaining Impact Pathways

6.4.7. The links have been screened as below. It should be noted that no link would see an increase of more than 10% in relation to HGVs. As such, the screening process is based on total traffic flows.

Link	Road / Corridor	Sensitivity	AADT 2026 Base	Proposed Dev Traffic	% increase in 2026	Screen in?	Basis
A	Esplanade	High	8990	254	3%	No	<10%
B	The Portway (South)	High	6855	4316	63%	**Yes**	Rule 1
C	Lias Road	Medium	7204	336	5%	No	<10%
D	Eastern Promenade (West)	High	7281	3600	49%	**Yes**	Rule 1
E	Eastern Promenade (North)	Medium	7551	794	11%	**Yes**	Rule 2 (sensitive)
F	New Road (West)	Medium	4338	0	0%	No	<10%
G	New Road (N3–N4)	High	4865	794	16%	**Yes**	Rule 2 (sensitive)
H	New Road (N4–Rhych Ave)	High	3245	1454	45%	**Yes**	Rule 1
I	New Road (Rhych Ave–N5)	Medium	4119	1454	35%	**Yes**	Rule 1
J	New Road (East)	Medium	4614	0	0%	No	<10%
K	Aldenham Road	Medium	6034	1454	24%	**Yes**	Rule 2 (sensitive)
L	Bridgend Road (South)	Medium	6568	1454	22%	**Yes**	Rule 2 (sensitive)

M	Bridgend Road (North)	Low	9929	1454	15%	No	Low sensitivity - Rule 2 not triggered
N	A4106 (N9a–N6)	Low	10081	3325	33%	**Yes**	Rule 1
O	A4106 (N6–N15)	Low	10569	4779	45%	**Yes**	Rule 1
P	A48	Negligible	15502	1875	12%	No	Negligible sensitivity - Rule 2 not triggered
Q	A473	Negligible	11022	2904	26%	No	Negligible sensitivity - Rule 2 not triggered
R	A4106 (N2–N7)	Low	13882	7715	56%	**Yes**	Rule 1
S	Fulmar Road	Medium	13135	398	3%	No	<10%
T	A4106 (N7–Heol Y Goedwig)	Medium	15438	3325	22%	**Yes**	Rule 2 (sensitive)
U	A4229 (N7–N12)	Negligible	15805	5171	33%	**Yes**	Rule 1
V	M4 (West of J37)	Negligible	73048	1311	2%	No	<10%
W	B4283	Medium	9402	551	6%	No	<10%
X	A4229 (North of M4)	Negligible	16185	1016	6%	No	<10%
Y	M4 (East of J37)	Negligible	80784	2293	3%	No	<10%
Z	New Link Road	High	0	8959	n/a	**Yes**	New infrastructure - include by default

Table 6.11: IEMA Screening Process (Operational Phase)

6.4.8. Application of the IEMA guidance screening thresholds to the 2026 baseline traffic data indicates that a total of fourteen links warrant inclusion in the detailed environmental assessment.

6.4.9. Under **Rule 1**, the following links record forecast increases exceeding 30 per cent and are therefore taken forward for detailed assessment:

- The Portway (South) (B)
- Eastern Promenade (West) (D)
- New Road (N4–Rhych Avenue) (H)
- New Road (Rhych Avenue–N5) (I)
- A4106 (N9a–N6) (N)
- A4106 (N6–N15) (O)
- A4106 (N2–N7) (R)
- A4229 (N7–N12) (U)

6.4.10. These represent the main approach and distributor routes most affected by the redistribution of traffic associated with the Proposed Development.

6.4.11. Under **Rule 2**, a further five links are included on the basis of their higher environmental sensitivity combined with forecast traffic increases between 10 per cent and 30 per cent. These comprise:

- Eastern Promenade (North) (E)
- New Road (N3–N4) (G)
- Aldenham Road (K)
- Bridgend Road (South) (L)
- A4106 (N7–Heol y Goedwig) (T)

6.4.12. All remaining links record increases below the IEMA guidance threshold levels and are not considered sensitive in land-use or functional terms. These are therefore screened out of further assessment in respect to the majority of impact pathways, as the magnitude of change is not sufficient to give rise to perceptible environmental effects.

6.4.13. The **New Link Road (Z)**, although new infrastructure with no direct baseline comparator, is automatically included in the detailed assessment given its role as the principal site access and the presence of proposed active travel connections.

6.4.14. The abovementioned screened in links have been assessed further below in relation to the following impact pathways, as per the respective methodologies set out at Section 2.7:

- Severance of communities.
- Non-motorised-user (NMU) delay.
- NMU amenity.
- Fear and intimidation.

Link B - The Portway (South)

Severance of Communities

6.4.15. The following table summarises the level of severance anticipated in 2026 and 2033.

2026 Baseline		2026 With Development		2033 Baseline		2033 With Development	
Total Vehicles (AADT)	**Severance**	**Total Vehicles (AADT)**	**Severance**	**Total Vehicles (AADT)**	**Severance**	**Total Vehicles (AADT)**	**Severance**
6,855	Slight	11,170	Moderate	7,274	Slight	11,589	Moderate

Table 6.12: Severance – Link B - The Portway (South)

6.4.16. There would be a change in severance from 'slight' to 'moderate' as a result of the Proposed Development in both the 2026 and 2033 assessment years, alongside a notable increase in traffic amounting to over 4,300 AADT as a result of the Proposed Development.

6.4.17. There is, however, an existing controlled crossing directly south of The Portway roundabout and a zebra crossing to the south of the bus station, which offer safe opportunities for pedestrians crossing the link. Traffic speeds are relatively low, with a 20mph speed limit in place. We are also aware of an advanced scheme for a new controlled crossing on the desire line of Metrolink bus station users on The Portway.

6.4.18. The overall magnitude of impact is considered to be **low adverse**. The sensitivity of the receptor is **high**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Non-Motorised User (NMU) Delay

6.4.19. The Proposed Development would not result in any material change in NMU journey length at this link, although there would be a notable increase in traffic flows on this link as a consequence of the Proposed Development.

6.4.20. As noted above, there is an existing controlled crossing directly south of The Portway roundabout and a zebra crossing to the south of the bus station, which offer safe opportunities for pedestrians crossing the link. Traffic speeds are relatively low, with a 20mph speed limit in place. We are also aware of an advanced scheme for a new controlled crossing on the desire line of Metrolink bus station users on The Portway.

6.4.21. The overall impact is considered to be **low adverse**. The sensitivity of the receptor is **high**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Non-Motorised User (NMU) Amenity

6.4.22. The Proposed Development would not halve or double traffic on this link, although the increase in traffic would be material (over 4,300 AADT) and would represent an increase of 63% in the 2026 assessment year, with the percentage change in the 2033 assessment year being lower than this.

6.4.23. The link experiences relatively low traffic speeds and is provided with good quality, lit footways on both sides of the link that are segregated from the carriageway on both sides by way of grass verges. The proportion of HGVs amounts to some 5%. The surrounding environment is pleasant. The overall impact is considered to be **low adverse**.

6.4.24. The sensitivity of the receptor is **high**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Fear and Intimidation

6.4.25. The projected impact relating to fear and intimidation on this link is set out below.

Fear and Intimidation Impact Summary				
Assessment Scenario	**Average Traffic Flow over 18-hour day – all vehicles/hour 2-way (a)**	**Total 18-hour heavy vehicle flow (b)**	**Average vehicle speed mph (c)**	**Degree of hazard score**
2026 Base	376	520	27.8	10
2026 With Dev	605	561	27.8	20
2033 Base	399	551	27.8	10
2033 With Dev	628	592	27.8	20

Table 6.13: Fear and Intimidation – Link B - The Portway (South)

6.4.26. There would be a slight increase in the degree of hazard score as a result of the Proposed Development, although the score would remain below 21 (i.e. 'small') in all scenarios. The magnitude of impact would be **negligible adverse**.

6.4.27. The sensitivity of the receptor is **high**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Link D - Eastern Promenade (West)

Severance of Communities

6.4.28. The following table summarises the level of severance anticipated in 2026 and 2033.

2026 Baseline		2026 With Development		2033 Baseline		2033 With Development	
Total Vehicles (AADT)	**Severance**	**Total Vehicles (AADT)**	**Severance**	**Total Vehicles (AADT)**	**Severance**	**Total Vehicles (AADT)**	**Severance**
7,281	Slight	10,881	Moderate	7,749	Slight	11,348	Moderate

Table 6.14: Severance – Link D – Eastern Promenade (West)

6.4.29. There would be a change in severance from 'slight' to 'moderate' as a result of the Proposed Development in both the 2026 and 2033 assessment years alongside a notable increase in traffic amounting to over 3,600 AADT as a result of the Proposed Development.

6.4.30. There are limited formal pedestrian crossing facilities along the link, although uncontrolled dropped-kerb crossings are present at either end of the link. The overall magnitude of impact is considered to be **medium adverse**.

6.4.31. The sensitivity of the receptor is **high**. The potential effects prior to mitigation are therefore **moderate (significant)**.

Non-Motorised User (NMU) Delay

6.4.32. The Proposed Development would not result in any material change in NMU journey length at this link, although there would be a notable increase in traffic flows on this link as a consequence of the Proposed Development. There are no controlled pedestrian crossing facilities along the link, although uncontrolled dropped-kerb crossings are present at both ends of the link and demand is low. The overall impact is considered to be **low adverse**.

6.4.33. The sensitivity of the receptor is **high**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Non-Motorised User (NMU) Amenity

6.4.34. The Proposed Development would not halve or double traffic on this link, although the increase in traffic would be material (approximately 3,600 AADT) and would represent an increase of 49% in the 2026 assessment year, with the percentage change in the 2033 assessment year being lower than this.

6.4.35. The link is provided with good quality, lit footways on both sides, segregated from the carriageway on both sides by way of grass verges. The proportion of HGVs amounts to some 5%. The surrounding environment is pleasant. The overall impact is considered to be **low adverse**.

6.4.36. The sensitivity of the receptor is **high**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Fear and Intimidation

6.4.37. The projected impact relating to fear and intimidation on this link is set out below.

Fear and Intimidation Impact Summary				
Assessment Scenario	**Average Traffic Flow over 18-hour day – all vehicles/hour 2-way (a)**	**Total 18-hour heavy vehicle flow (b)**	**Average vehicle speed mph (c)**	**Degree of hazard score**
2026 Base	423	575	20	10
2026 With Dev	614	610	20	20
2033 Base	450	612	20	10
2033 With Dev	641	647	20	20

Table 6.15: Fear and Intimidation – Link D - Eastern Promenade (West)

6.4.38. There would be a slight increase in the degree of hazard score as a result of the Proposed Development, although the score would remain below 21 (i.e. 'small') in all scenarios. The magnitude of impact would be **negligible adverse**.

6.4.39. The sensitivity of the receptor is **high**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Link E - Eastern Promenade (North)

Severance of Communities

6.4.40. The following table summarises the level of severance anticipated in 2026 and 2033.

2026 Baseline		2026 With Development		2033 Baseline		2033 With Development	
Total Vehicles (AADT)	**Severance**	**Total Vehicles (AADT)**	**Severance**	**Total Vehicles (AADT)**	**Severance**	**Total Vehicles (AADT)**	**Severance**
7,551	Slight	8,345	Moderate	8,036	Moderate	8,830	Moderate

Table 6.16: Severance – Link E – Eastern Promenade (North)

6.4.41. There would be a change in severance from 'slight' to 'moderate' as a result of the Proposed Development in the 2026 assessment year alongside a moderate increase in traffic amounting to 794 AADT as a result of the Proposed Development.

6.4.42. There are no controlled pedestrian crossing facilities along the link, although an uncontrolled dropped-kerb crossing is present at the northern end of the link. The overall magnitude of impact is considered to be **low adverse**.

6.4.43. The sensitivity of the receptor is **medium**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Non-Motorised User (NMU) Delay

6.4.44. The Proposed Development would not result in any material change in NMU journey length at this link, although there would be a moderate increase in traffic flows on this link as a consequence of the Proposed Development. There are no controlled pedestrian crossing facilities, although an uncontrolled dropped-kerb crossing is present at the northern end of the link. The overall impact is considered to be **low adverse**.

6.4.45. The sensitivity of the receptor is **medium**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Non-Motorised User (NMU) Amenity

6.4.46. The Proposed Development would not halve or double traffic on this link, although the increase in traffic would be material (794 AADT) and would represent an increase of 11% in the 2026 assessment year, with the percentage change in the 2033 assessment year being lower than this.

6.4.47. The link is provided with good quality, lit footways on both sides, segregated from the carriageway on part of the western side by way of a grass verge at its northern end. The proportion of HGVs amounts to some 7%. The surrounding environment is pleasant. The overall impact is considered to be **negligible adverse**.

6.4.48. The sensitivity of the receptor is **medium**. The potential effects prior to mitigation are therefore **negligible (not significant)**.

Fear and Intimidation

6.4.49. The projected impact relating to fear and intimidation on this link is set out below.

Fear and Intimidation Impact Summary				
Assessment Scenario	**Average Traffic Flow over 18-hour day – all vehicles/hour 2-way (a)**	**Total 18-hour heavy vehicle flow (b)**	**Average vehicle speed mph (c)**	**Degree of hazard score**
2026 Base	439	597	20	10
2026 With Dev	481	604	20	10
2033 Base	467	635	20	10
2033 With Dev	509	643	20	10

Table 6.17: Fear and Intimidation – Link E - Eastern Promenade (North)

6.4.50. There would be no change in the degree of hazard score as a result of the Proposed Development with the score being 10 (i.e. 'small') in all scenarios. The magnitude of impact would be **negligible adverse**.

6.4.51. The sensitivity of the receptor is **medium**. The potential effects prior to mitigation are therefore **negligible (not significant)**.

Link G - New Road (N3–N4)

Severance of Communities

6.4.52. The following table summarises the level of severance anticipated in 2026 and 2033.

2026 Baseline		2026 With Development		2033 Baseline		2033 With Development	
Total Vehicles (AADT)	**Severance**	**Total Vehicles (AADT)**	**Severance**	**Total Vehicles (AADT)**	**Severance**	**Total Vehicles (AADT)**	**Severance**
4,865	Slight	5,659	Slight	5,177	Slight	5,971	Slight

Table 6.18: Severance – Link G – New Road (N3-N4)

6.4.53. There would be no change in the severance category ('slight') as a result of the Proposed Development in both the 2026 and 2033 assessment years, although the additional traffic amounts to 794 AADT as a result of the Proposed Development, which is considered to be a material level of traffic.

6.4.54. There are a number of pedestrian crossing facilities along the link, including a signal-controlled crossing (Pelican crossing) and a number of raised table uncontrolled

crossings. Traffic speeds are low. The overall magnitude of impact is considered to be **negligible adverse**.

6.4.55. The sensitivity of the receptor is **high**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Non-Motorised User (NMU) Delay

6.4.56. The Proposed Development would not result in any material change in NMU journey length at this link, although there would be a material increase in traffic flows on this link as a consequence of the Proposed Development. There are a number of pedestrian crossing facilities. The overall impact is considered to be **negligible adverse**.

6.4.57. The sensitivity of the receptor is **high**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Non-Motorised User (NMU) Amenity

6.4.58. The Proposed Development would not halve or double traffic on this link, although the increase in traffic would be material (794 AADT) and would represent an increase of 16% in the 2026 assessment year, with the percentage change in the 2033 assessment year being lower than this.

6.4.59. The link is provided with good quality, lit footways on both sides – including a shared foot / cycleway on the southern side. The footway surface finishes are predominantly good quality and the area is generally pleasant. The proportion of HGVs amounts to 6.5%. The overall impact is considered to be **negligible adverse**.

6.4.60. The sensitivity of the receptor is **high**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Fear and Intimidation

6.4.61. The projected impact relating to fear and intimidation on this link is set out below.

Fear and Intimidation Impact Summary				
Assessment Scenario	**Average Traffic Flow over 18-hour day – all vehicles/hour 2-way (a)**	**Total 18-hour heavy vehicle flow (b)**	**Average vehicle speed mph (c)**	**Degree of hazard score**
2026 Base	283	384	20	10
2026 With Dev	325	392	20	10
2033 Base	301	409	20	10
2033 With Dev	343	417	20	10

Table 6.19: Fear and Intimidation – Link G - New Road (N3-N4)

6.4.62. There would be no change in the degree of hazard score as a result of the Proposed Development with the score being 10 (i.e. 'small') in all scenarios. The magnitude of impact would be **negligible adverse**.

6.4.63. The sensitivity of the receptor is **high**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Link H - New Road (N4–Rhych Avenue)

Severance of Communities

6.4.64. The following table summarises the level of severance anticipated in 2026 and 2033.

2026 Baseline		2026 With Development		2033 Baseline		2033 With Development	
Total Vehicles (AADT)	**Severance**	**Total Vehicles (AADT)**	**Severance**	**Total Vehicles (AADT)**	**Severance**	**Total Vehicles (AADT)**	**Severance**
3,245	Slight	4,699	Slight	3,454	Slight	4,907	Slight

Table 6.20: Severance – Link H – New Road (N4–Rhych Avenue)

6.4.65. There would be no change in the severance category ("slight") as a result of the Proposed Development in both the 2026 and 2033 assessment years, although the change in traffic amounts to 1,454 AADT as a result of the Proposed Development and as such is a material level of traffic.

6.4.66. There are a number of pedestrian crossing facilities along the link, including zebra crossings and raised table crossings. Traffic speeds are low. The overall magnitude of impact is considered to be **negligible adverse**.

6.4.67. The sensitivity of the receptor is **high**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Non-Motorised User (NMU) Delay

6.4.68. The Proposed Development would not result in any material change in NMU journey length at this link, although there would be a material increase in traffic flows on this link as a consequence of the Proposed Development. There are a number of pedestrian crossing facilities. The overall impact is considered to be **negligible adverse**.

6.4.69. The sensitivity of the receptor is **high**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Non-Motorised User (NMU) Amenity

6.4.70. The Proposed Development would not halve or double traffic on this link, although the increase in traffic would be material (1,454 AADT) and would represent an increase of 45% in the 2026 assessment year, with the percentage change in the 2033 assessment year being lower than this.

6.4.71. The link is provided with lit footways on both sides. The footway surface finishes are inconsistent, with a number of surface defects and pinch points, particularly on the northern side of the link. The proportion of HGVs amounts to some 5.5%. Traffic speeds are low. The overall impact is considered to be **low adverse**.

6.4.72. The sensitivity of the receptor is **high**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Fear and Intimidation

6.4.73. The projected impact relating to fear and intimidation on this link is set out below.

Fear and Intimidation Impact Summary				
Assessment Scenario	**Average Traffic Flow over 18-hour day – all vehicles/hour 2-way (a)**	**Total 18-hour heavy vehicle flow (b)**	**Average vehicle speed mph (c)**	**Degree of hazard score**
2026 Base	189	256	18.7	0
2026 With Dev	266	270	18.7	0
2033 Base	201	273	18.7	0
2033 With Dev	278	287	18.7	0

Table 6.21: Fear and Intimidation – Link H - New Road (N4–Rhych Avenue)

6.4.74. There would be no change in the degree of hazard score as a result of the Proposed Development with the score being 0 (i.e. 'small') in all scenarios. The magnitude of impact would be **negligible adverse**.

6.4.75. The sensitivity of the receptor is **high**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Link I - New Road (Rhych Ave–N5)

Severance of Communities

6.4.76. The following table summarises the level of severance anticipated in 2026 and 2033.

2026 Baseline		2026 With Development		2033 Baseline		2033 With Development	
Total Vehicles (AADT)	**Severance**	**Total Vehicles (AADT)**	**Severance**	**Total Vehicles (AADT)**	**Severance**	**Total Vehicles (AADT)**	**Severance**
4,119	Slight	5,573	Slight	4,384	Slight	5,838	Slight

Table 6.22: Severance – Link I – New Road (Rhych Avenue-N5)

6.4.77. There would be no change in the severance category ("slight") as a result of the Proposed Development in both the 2026 and 2033 assessment years, although the increase in traffic as a result of the Proposed Development amounts to 1,454 AADT which is considered to be a material level in traffic.

6.4.78. There are a small number of pedestrian crossing facilities along the link, comprising uncontrolled raised table crossings. The overall magnitude of impact is considered to be **low adverse**.

6.4.79. The sensitivity of the receptor is **medium**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Non-Motorised User (NMU) Delay

6.4.80. The Proposed Development would not result in any material change in NMU journey length at this link, although there would be a material increase in traffic flows on this link as a consequence of the Proposed Development. There are some pedestrian crossing facilities, although these are uncontrolled. The overall impact is considered to be **low adverse**.

6.4.81. The sensitivity of the receptor is **medium**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Non-Motorised User (NMU) Amenity

6.4.82. The Proposed Development would not halve or double traffic on this link, although the increase in traffic would be material (1,454 AADT) and would represent an increase of 35% in the 2026 assessment year, with the percentage change in the 2033 assessment year being lower than this.

6.4.83. The link is provided with reasonable quality, lit footways on both sides of the road, although these are narrow in parts. The footway surface finishes are inconsistent, with a number of surface defects and pinch points. The proportion of HGVs amounts to some 6%. The overall impact is considered to be **low adverse**.

6.4.84. The sensitivity of the receptor is **medium**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Fear and Intimidation

6.4.85. The projected impact relating to fear and intimidation on this link is set out below.

Fear and Intimidation Impact Summary				
Assessment Scenario	**Average Traffic Flow over 18-hour day – all vehicles/hour 2-way (a)**	**Total 18-hour heavy vehicle flow (b)**	**Average vehicle speed mph (c)**	**Degree of hazard score**
2026 Base	239	325	20	10
2026 With Dev	316	339	20	10
2033 Base	255	346	20	10
2033 With Dev	332	360	20	10

Table 6.23: Fear and Intimidation – Link I - New Road (Rhych Avenue-N5)

6.4.86. There would be no change in the degree of hazard score as a result of the Proposed Development with the score being 10 (i.e. 'small') in all scenarios. The magnitude of impact would be **negligible adverse**.

6.4.87. The sensitivity of the receptor is **medium**. The potential effects prior to mitigation are therefore **negligible (not significant)**.

Link K - Aldenham Road

Severance of Communities

4.1.71. The following table summarises the level of severance anticipated in 2026 and 2033.

2026 Baseline		2026 With Development		2033 Baseline		2033 With Development	
Total Vehicles (AADT)	**Severance**	**Total Vehicles (AADT)**	**Severance**	**Total Vehicles (AADT)**	**Severance**	**Total Vehicles (AADT)**	**Severance**
6,034	Slight	7,488	Slight	6,422	Slight	7,876	Slight

Table 6.24: Severance – Link K – Aldenham Road

6.4.88. There would be no change in the severance category ("slight") as a result of the Proposed Development in both the 2026 and 2033 assessment years, although the increase in traffic as a result of the Proposed Development amounts to 1,454 AADT which is considered to be a material level in traffic.

6.4.89. There are uncontrolled pedestrian crossing facilities along the link, comprising dropped kerb crossings with pedestrian refuge islands. The overall magnitude of impact is considered to be **low adverse**.

6.4.90. The sensitivity of the receptor is **medium**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Non-Motorised User (NMU) Delay

6.4.91. The Proposed Development would not result in any material change in NMU journey length at this link, although there would be a material increase in traffic flows on this link as a consequence of the Proposed Development. There are some pedestrian crossing facilities, although these are uncontrolled. The overall impact is considered to be **low adverse**.

6.4.92. The sensitivity of the receptor is **medium**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Non-Motorised User (NMU) Amenity

6.4.93. The Proposed Development would not halve or double traffic on this link, although the increase in traffic would be material (1,454 AADT) and would represent an increase of 24% in the 2026 assessment year, with the percentage change in the 2033 assessment year being lower than this.

6.4.94. The link is provided with reasonable quality, lit footways on both sides of the road. The footways are generally of good quality, and the surrounding area is generally pleasant. There are tree-lined grass verges and seating provided on the southern side of the link. The proportion of HGVs amounts to some 6%. The overall impact is considered to be **negligible adverse**.

6.4.95. The sensitivity of the receptor is **medium**. The potential effects prior to mitigation are therefore **negligible (not significant)**.

Fear and Intimidation

6.4.96. The projected impact relating to fear and intimidation on this link is set out below.

Fear and Intimidation Impact Summary				
Assessment Scenario	**Average Traffic Flow over 18-hour day – all vehicles/hour 2-way (a)**	**Total 18-hour heavy vehicle flow (b)**	**Average vehicle speed mph (c)**	**Degree of hazard score**
2026 Base	351	477	20	10
2026 With Dev	428	491	20	10
2033 Base	373	507	20	10
2033 With Dev	450	521	20	10

Table 6.25: Fear and Intimidation – Link K – Aldenham Road

6.4.97. There would be no change in the degree of hazard score as a result of the Proposed Development with the score being 10 (i.e. 'small') in all scenarios. The magnitude of impact would be **negligible adverse**.

6.4.98. The sensitivity of the receptor is medium. The potential effects prior to mitigation are therefore **negligible (not significant)**.

Link L - Bridgend Road (South)

Severance of Communities

6.4.99. The following table summarises the level of severance anticipated in 2026 and 2033.

2026 Baseline		2026 With Development		2033 Baseline		2033 With Development	
Total Vehicles (AADT)	**Severance**	**Total Vehicles (AADT)**	**Severance**	**Total Vehicles (AADT)**	**Severance**	**Total Vehicles (AADT)**	**Severance**
6,568	Slight	8,021	Moderate	6,990	Slight	8,443	Moderate

Table 6.26: Severance – Link L – Bridgend Road (South)

6.4.100. There would be a change in severance from 'slight' to 'moderate' as a result of the Proposed Development in both the 2026 and 2033 assessment years alongside a material increase in traffic amounting to 1,454 AADT as a result of the Proposed Development.

6.4.101. There is a footway on the eastern side of the link and an uncontrolled pedestrian crossing facility comprising dropped kerbs with a central pedestrian refuge island at the southern end of the link. Much of the western side of the link does not incorporate a footway,

although there appears to be little in the way of pedestrian desire line across the link and as such, the impact of the absence of a footway on the western side does not appear to be significant in practice. The overall magnitude of impact is considered to be **low adverse**.

6.4.102. The sensitivity of the receptor is **medium**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Non-Motorised User (NMU) Delay

6.4.103. The Proposed Development would not result in any material change in NMU journey length at this link, although there would be a material increase in traffic flows on this link as a consequence of the Proposed Development. There is a pedestrian crossing facility, although this is uncontrolled. There appears to be little in the way of pedestrian desire lines across the link. The overall impact is considered to be **low adverse**.

6.4.104. The sensitivity of the receptor is **medium**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Non-Motorised User (NMU) Amenity

6.4.105. The Proposed Development would not halve or double traffic on this link, although the increase in traffic would be material (1,454 AADT) and would represent an increase of 22% in the 2026 assessment year, with the percentage change in the 2033 assessment year being lower than this.

6.4.106. The link is provided with a reasonable quality, lit footway on the eastern side of the link, although narrow in parts. A small section of footway is provided on the western side of the link at its southern end. The footway network on the eastern side of the link is punctuated and inconsistent and may not be logical to all users.

6.4.107. The surrounding area is generally pleasant. There is a wide grass verge on the eastern side of the link and a bus stop with shelter and seating. The proportion of HGVs amounts to some 6%. The overall impact is considered to be **low adverse**.

6.4.108. The sensitivity of the receptor is **medium**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Fear and Intimidation

6.4.109. The projected impact relating to fear and intimidation on this link is set out below.

Fear and Intimidation Impact Summary				
Assessment Scenario	**Average Traffic Flow over 18-hour day – all vehicles/hour 2-way (a)**	**Total 18-hour heavy vehicle flow (b)**	**Average vehicle speed mph (c)**	**Degree of hazard score**
2026 Base	382	519	20	10
2026 With Dev	459	533	20	10
2033 Base	406	552	20	10
2033 With Dev	483	566	20	10

Table 6.27: Fear and Intimidation – Link L – Bridgend Road (South)

6.4.110. There would be no change in the degree of hazard score as a result of the Proposed Development with the score being 10 (i.e. 'small') in all scenarios. The magnitude of impact would be **negligible adverse**.

6.4.111. The sensitivity of the receptor is **medium**. The potential effects prior to mitigation are therefore **negligible (not significant)**.

Link N - A4106 (N9a–N6)

Severance of Communities

6.4.112. The following table summarises the level of severance anticipated in 2026 and 2033.

2026 Baseline		2026 With Development		2033 Baseline		2033 With Development	
Total Vehicles (AADT)	**Severance**	**Total Vehicles (AADT)**	**Severance**	**Total Vehicles (AADT)**	**Severance**	**Total Vehicles (AADT)**	**Severance**
10,081	Moderate	13,407	Moderate	10,697	Moderate	14,022	Moderate

Table 6.28: Severance – Link N – A4106 (N9a-N6)

6.4.113. There would be no change in severance as a result of the Proposed Development in both the 2026 and 2033 assessment years, with the severance level remaining at 'moderate', although there would be a material increase in traffic on the link amounting to 3,325 AADT as a result of the Proposed Development.

6.4.114. There are no footways or other formal pedestrian infrastructure along the link, and little in the way of active frontages. There appears to be minimal pedestrian desire lines across

the link, and as such, the impact of the absence of a footway does not appear to be an issue in practice. The link serves primarily as a strategic corridor for motorised vehicular traffic. The overall magnitude of impact is considered to be **negligible adverse**.

6.4.115. The sensitivity of the receptor is **low**. The potential effects prior to mitigation are therefore **negligible (not significant)**.

Non-Motorised User (NMU) Delay

6.4.116. The Proposed Development would not result in any material change in NMU journey length at this link, although there would be a material increase in traffic flows on this link as a consequence of the Proposed Development. There are no footways or associated pedestrian infrastructure along the link, such as crossing facilities.

6.4.117. There are minimal active frontages, and there appears to be little in the way of pedestrian desire lines across the link. The overall impact is considered to be **negligible adverse**.

6.4.118. The sensitivity of the receptor is **low**. The potential effects prior to mitigation are therefore **negligible (not significant)**.

Non-Motorised User (NMU) Amenity

6.4.119. The Proposed Development would not halve or double traffic on this link, although the increase in traffic would be material (3,325 AADT) and would represent an increase of 33% in the 2026 assessment year, with the percentage change in the 2033 assessment year being lower than this.

6.4.120. There are no footways or other formal pedestrian infrastructure along the link and little in the way of active frontages. There appears, however, to be minimal pedestrian desire line across the link, and as such, the impact of the absence of a footway does not appear to be an issue in practice. The link serves primarily as a strategic corridor for motorised vehicular traffic. The proportion of HGVs amounts to some 6%. The overall impact is considered to be **negligible adverse**.

6.4.121. The sensitivity of the receptor is **low**. The potential effects prior to mitigation are therefore **negligible (not significant)**.

Fear and Intimidation

6.4.122. The projected impact relating to fear and intimidation on this link is set out below.

Fear and Intimidation Impact Summary				
Assessment Scenario	**Average Traffic Flow over 18-hour day – all vehicles/hour 2-way (a)**	**Total 18-hour heavy vehicle flow (b)**	**Average vehicle speed mph (c)**	**Degree of hazard score**
2026 Base	554	764	50	30
2026 With Dev	730	796	50	40
2033 Base	587	811	50	30
2033 With Dev	764	843	50	40

Table 6.29: Fear and Intimidation – Link N – A4106 (N9a-N6)

6.4.123. There would be a slight increase in the degree of hazard score from 30 to 40 as a result of the Proposed Development in both 2026 and 2033; however, the subsequent degree of hazard level would remain within the 'moderate' range. The magnitude of impact would be **negligible adverse**.

6.4.124. The sensitivity of the receptor is **low**. The potential effects prior to mitigation are therefore **negligible (not significant)**.

Link O - A4106 (N6–N15)

Severance of Communities

6.4.125. The following table summarises the level of severance anticipated in 2026 and 2033.

2026 Baseline		2026 With Development		2033 Baseline		2033 With Development	
Total Vehicles (AADT)	**Severance**	**Total Vehicles (AADT)**	**Severance**	**Total Vehicles (AADT)**	**Severance**	**Total Vehicles (AADT)**	**Severance**
10,569	Moderate	15,348	Moderate	11,215	Moderate	15,994	Moderate

Table 6.30: Severance – Link O – A4106 (N6–N15)

6.4.126. There would be no change in severance as a result of the Proposed Development in both the 2026 and 2033 assessment years, with the severance level remaining at 'moderate', although there would be a material increase in traffic on the link amounting to 4,779 AADT as a result of the Proposed Development.

6.4.127. There are no footways or other formal pedestrian infrastructure along the northern side of the link, although footways are provided along much of the southern side of the link. There are bus stops on both sides, although overall there appears to be minimal pedestrian desire line across the link itself, and as such, the impact of the absence of a footway on the northern side and associated crossing facilities does not appear to be a significant issue in practice. The overall magnitude of impact is considered to be **low adverse**.

6.4.128. The sensitivity of the receptor is low. The potential effects prior to mitigation are therefore **negligible (not significant)**.

Non-Motorised User (NMU) Delay

6.4.129. The Proposed Development would not result in any material change in NMU journey length at this link, although there would be a material increase in traffic flows on this link as a consequence of the Proposed Development. There are no footways on the northern side of the link or crossing facilities. There appears to be little in the way of pedestrian desire lines across the link, aside from movements to/from the bus stops on the northern side of the link. The overall impact is considered to be **low adverse**.

6.4.130. The sensitivity of the receptor is **low**. The potential effects prior to mitigation are therefore **negligible (not significant)**.

Non-Motorised User (NMU) Amenity

6.4.131. The Proposed Development would not halve or double traffic on this link, although the increase in traffic would be material (4,779 AADT) and would represent an increase of 45% in the 2026 assessment year, with the percentage change in the 2033 assessment year being lower than this.

6.4.132. There are no footways or other formal pedestrian infrastructure along the northern side of the link and little in the way of active frontages. The link serves primarily as a strategic corridor for motorised vehicular traffic, although it does appear to accommodate some pedestrian movement within the vicinity of Tythegston with a lit footway along much of the southern side of the link. There are also bus stops on the link that generate some bus passenger movement. The link is therefore likely to accommodate some pedestrian trips along it.

6.4.133. The proportion of HGVs amounts to some 5.5%. The surrounding area is generally pleasant, although the footway is narrow and not continuous along the entire length of the link. There is also no segregation (verge) between the footway and carriageway with

pedestrians in close proximity to traffic. The overall impact is considered to be **low adverse**.

6.4.134. The sensitivity of the receptor is **low**. The potential effects prior to mitigation are therefore **negligible (not significant)**.

Fear and Intimidation

6.4.135. The projected impact relating to fear and intimidation on this link is set out below.

Fear and Intimidation Impact Summary				
Assessment Scenario	**Average Traffic Flow over 18-hour day – all vehicles/hour 2-way (a)**	**Total 18-hour heavy vehicle flow (b)**	**Average vehicle speed mph (c)**	**Degree of hazard score**
2026 Base	580	801	41.5	30
2026 With Dev	834	847	41.5	40
2033 Base	616	850	41.5	40
2033 With Dev	869	896	41.5	40

Table 6.31: Fear and Intimidation – Link O – A4106 (N6-N15)

6.4.136. There would be a slight increase in the degree of hazard score from 30 to 40 as a result of the Proposed Development in 2026; however, the subsequent degree of hazard level would remain within the 'moderate' range. The magnitude of impact would be **negligible adverse**.

6.4.137. The sensitivity of the receptor is **low**. The potential effects prior to mitigation are therefore **negligible (not significant)**.

Link R - A4106 (N2–N7)

Severance of Communities

6.4.138. The following table summarises the level of severance anticipated in 2026 and 2033.

2026 Baseline		2026 With Development		2033 Baseline		2033 With Development	
Total Vehicles (AADT)	**Severance**	**Total Vehicles (AADT)**	**Severance**	**Total Vehicles (AADT)**	**Severance**	**Total Vehicles (AADT)**	**Severance**
13,882	Moderate	21,597	Severe	14,730	Moderate	22,445	Severe

Table 6.32: Severance – Link R – A4106 (N2–N7)

6.4.139. There would be a change in severance from 'moderate' to 'severe' as a result of the Proposed Development in both the 2026 and 2033 assessment years, with a material increase in traffic on the link amounting to 7,715 AADT as a result of the Proposed Development.

6.4.140. There are no footways or other formal pedestrian infrastructure along the majority of the link, aside from short sections of footways and an associated uncontrolled dropped kerb crossing at the southern end of the link. North of this point, however (i.e. the majority of the link), pedestrian access is prohibited by signage. A subway does, however, provide grade-separated pedestrian access between Victoria Avenue and Old Station Road, further north on the link.

6.4.141. The uncontrolled, at-grade crossing facility at the southern end of the link serves a west-east pedestrian desire line between Eastern Promenade and Lias Road and is therefore likely to be subject to material levels of pedestrian movement. Given the volumes of traffic using this link and the proximity of the crossing facility to the roundabout, negotiating this crossing may pose difficulties for some users. Pedestrians are required to mix with traffic approaching and exiting the roundabout to the south and are required to cross a dual carriageway (two lanes in each carriageway). A pedestrian refuge is provided; however, this appears to be substandard in terms of its width and requires pedestrians to wait in close proximity to passing vehicles.

6.4.142. There are, however, alternative crossing points available – including the aforementioned subway further north under this link and at-grade crossing facilities further south at The Portway (Link B). Overall, the magnitude of impact would be **medium adverse**.

6.4.143. The sensitivity of the receptor is **low**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Non-Motorised User (NMU) Delay

6.4.144. The Proposed Development could result in a material change in NMU journey length at this link, as there would be a material increase in traffic flows on this link as a consequence of the Proposed Development. As set out previously, the uncontrolled, at-grade crossing facility at the southern end of the link serves a west-east pedestrian desire line between Eastern Promenade and Lias Road and is therefore likely to be subject to material levels of pedestrian movement and potential delay caused by the increase in traffic. The crossing facility and overall infrastructure provision for pedestrians is low.

6.4.145. There are, however, alternative crossing points available that are broadly along the same desire line. Measurement of the potential desire line between the southern junction of John Street and Lias Road to the southern side of Eastern Promenade (at the northern boundary of Aldi) shows a route distance of 184m. The diversion to the same points using the controlled crossings on Lias Road and The Portway results in a distance of 353m; a difference of 169m. The overall impact is considered to be **low adverse**.

6.4.146. The sensitivity of the receptor is **low**. The potential effects prior to mitigation are therefore **negligible (not significant)**.

Non-Motorised User (NMU) Amenity

6.4.147. The Proposed Development would not halve or double traffic on this link, although the increase in traffic would be material (7,715 AADT) and would represent an increase of 56% in the 2026 assessment year, with the percentage change in the 2033 assessment year being lower than this.

6.4.148. As set out previously, there are no footways or other formal pedestrian infrastructure along the majority of the link and little in the way of active frontages. The link serves primarily as a strategic corridor for motorised vehicular traffic, although it does appear to accommodate some pedestrian movement at its southern end, where footways and an uncontrolled crossing are in place.

6.4.149. This southern section of the link is lit; however, pedestrians are in close proximity to passing vehicles, and the overall quality of the pedestrian environment is low. Alternative crossing points are, however, available, which reduces the importance of the crossing. The proportion of HGVs amounts to circa 5%. The overall impact is considered to be **medium adverse**.

6.4.150. The sensitivity of the receptor is **low**. The potential effects prior to mitigation are therefore **negligible (not significant)**.

Fear and Intimidation

6.4.151. The projected impact relating to fear and intimidation on this link is set out below.

Fear and Intimidation Impact Summary				
Assessment Scenario	**Average Traffic Flow over 18-hour day – all vehicles/hour 2-way (a)**	**Total 18-hour heavy vehicle flow (b)**	**Average vehicle speed mph (c)**	**Degree of hazard score**
2026 Base	762	1,052	20	30
2026 With Dev	1,171	1,126	20	30
2033 Base	809	1,117	20	30
2033 With Dev	1,218	1,190	20	40

Table 6.33: Fear and Intimidation – Link R – A4106 (N2-N7)

6.4.152. There would be a slight increase in the degree of hazard score from 30 to 40 as a result of the Proposed Development in 2033; however, the subsequent degree of hazard level would remain within the 'moderate' range. The magnitude of impact would be **negligible adverse**.

6.4.153. The sensitivity of the receptor is **low**. The potential effects prior to mitigation are therefore **negligible (not significant)**.

Link T - A4106 (N7–Heol Y Goedwig)

Severance of Communities

6.4.154. The following table summarises the level of severance anticipated in 2026 and 2033.

2026 Baseline		2026 With Development		2033 Baseline		2033 With Development	
Total Vehicles (AADT)	**Severance**	**Total Vehicles (AADT)**	**Severance**	**Total Vehicles (AADT)**	**Severance**	**Total Vehicles (AADT)**	**Severance**
15,438	Moderate	18,763	Severe	16,381	Severe	19,706	Severe

Table 6.34: Severance – Link T – A4106 (N7–Heol Y Goedwig)

6.4.155. There would be a change in severance from 'moderate' to 'severe' as a result of the Proposed Development in the 2026 assessment year (no change in 2033), with a material

increase in traffic on the link amounting to 3,325 AADT as a result of the Proposed Development.

6.4.156. There is a footway along the link, which switches from the north side to the south side, and as such, there is likely to be pedestrian movements across the link where the footway switches sides. An uncontrolled pedestrian crossing facility comprising dropped kerbs with tactile paving is in place at this location.

6.4.157. There appears to be a generally low level of pedestrian demand across the link, although there are some residential properties located nearby, and there are bus stops on A4229 Pyle Road (Link U) that are likely to generate some pedestrian movements across this link. Overall, the magnitude of impact would be **low adverse**.

6.4.158. The sensitivity of the receptor is **medium**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Non-Motorised User (NMU) Delay

6.4.159. The Proposed Development would not result in any material change in NMU journey length at this link, although there would be a material increase in traffic flows on this link as a consequence of the Proposed Development.

6.4.160. As set out previously, the uncontrolled crossing facility on the link serves a route between bus stops on A4229 Pyle Road (Link U) and residential properties located south-east of the link at St David's Way and as such there is likely to be some pedestrian movement and potential delay caused by the increase in traffic, although the overall level of pedestrian usage is likely to be relatively low. The overall impact is considered to be **low adverse**.

6.4.161. The sensitivity of the receptor is **medium**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Non-Motorised User (NMU) Amenity

6.4.162. The Proposed Development would not halve or double traffic on this link, although the increase in traffic would be material (3,325 AADT) and would represent an increase of 22% in the 2026 assessment year, with the percentage change in the 2033 assessment year being lower than this.

6.4.163. As set out previously, there is a footway provided along the link and some active frontages locally, although few along the link itself. The footway is lit and is of a

reasonable quality. The western end of the footway is segregated from the carriageway by a grass verge. There is seating provided along the link.

6.4.164. The proportion of HGVs amounts to some 6.5%. The overall impact is considered to be **negligible adverse**.

6.4.165. The sensitivity of the receptor is **medium**. The potential effects prior to mitigation are therefore **negligible (not significant)**.

Fear and Intimidation

6.4.166. The projected impact relating to fear and intimidation on this link is set out below.

Fear and Intimidation Impact Summary				
Assessment Scenario	**Average Traffic Flow over 18-hour day – all vehicles/hour 2-way (a)**	**Total 18-hour heavy vehicle flow (b)**	**Average vehicle speed mph (c)**	**Degree of hazard score**
2026 Base	848	1,170	20	30
2026 With Dev	1,024	1,202	20	30
2033 Base	899	1,242	20	30
2033 With Dev	1,076	1,273	20	30

Table 6.35: Fear and Intimidation – Link T – A4106 (N7–Heol Y Goedwig)

6.4.167. There would be no change in the degree of hazard score as a result of the Proposed Development with the score being 30 (i.e. 'moderate') in all scenarios. The magnitude of impact would be **negligible adverse**.

6.4.168. The sensitivity of the receptor is **medium**. The potential effects prior to mitigation are therefore **negligible (not significant)**.

Link U - A4229 (N7–N12)

Severance of Communities

6.4.169. The following table summarises the level of severance anticipated in 2026 and 2033.

2026 Baseline		2026 With Development		2033 Baseline		2033 With Development	
Total Vehicles (AADT)	Severance	Total Vehicles (AADT)	Severance	Total Vehicles (AADT)	Severance	Total Vehicles (AADT)	Severance
15,805	Moderate	20,976	Severe	16,771	Severe	21,941	Severe

Table 6.36: Severance – Link U – A4229 (N7–N12)

6.4.170. There would be a change in severance from 'moderate' to 'severe' as a result of the Proposed Development in the 2026 assessment year (no change in 2033), with a material increase in traffic on the link amounting to 5,171 AADT as a result of the Proposed Development.

6.4.171. There are no footways or other formal pedestrian infrastructure along the western side of the link although a footway is provided along the eastern side of the link. There are bus stops on both sides, although overall there appears to be minimal pedestrian desire line across the link itself, and as such the impact of the absence of a footway on the western side and associated crossing facilities does not appear to be a significant issue in practice. The overall magnitude of impact is considered to be **low adverse**.

6.4.172. The sensitivity of the receptor is **negligible**. The potential effects prior to mitigation are therefore **negligible (not significant)**.

Non-Motorised User (NMU) Delay

6.4.173. The Proposed Development would not result in any material change in NMU journey length at this link, although there would be a material increase in traffic flows on this link as a consequence of the Proposed Development. There are no footways on the western side of the link or crossing facilities. There appears to be little in the way of pedestrian desire lines across the link, aside from movements to/from the bus stops on the western side of the link. The overall impact is considered to be **low adverse**.

6.4.174. The sensitivity of the receptor is **negligible**. The potential effects prior to mitigation are therefore **negligible (not significant)**.

Non-Motorised User (NMU) Amenity

6.4.175. The Proposed Development would not halve or double traffic on this link, although the increase in traffic would be material (5,171 AADT) and would represent an increase of 33% in the 2026 assessment year, with the percentage change in the 2033 assessment year being lower than this.

6.4.176. There are no footways or other formal pedestrian infrastructure along the western side of the link and little in the way of active frontages. The link primarily serves as a strategic corridor for motorised vehicular traffic, although it appears to accommodate some pedestrian movement within the vicinity of South Cornelly, with a partly lit footway along the eastern side of the link. There are also bus stops on the link that generate some bus user movement. The link is therefore likely to accommodate some pedestrian trips along it.

6.4.177. The proportion of HGVs amounts to circa 6%. The surrounding area is generally pleasant, with some parts of the footway benefiting from segregation (grass verge) from the carriageway. The overall impact is considered to be **low adverse**.

6.4.178. The sensitivity of the receptor is **negligible**. The potential effects prior to mitigation are therefore **negligible (not significant)**.

Fear and Intimidation

6.4.179. The projected impact relating to fear and intimidation on this link is set out below.

Fear and Intimidation Impact Summary				
Assessment Scenario	**Average Traffic Flow over 18-hour day – all vehicles/hour 2-way (a)**	**Total 18-hour heavy vehicle flow (b)**	**Average vehicle speed mph (c)**	**Degree of hazard score**
2026 Base	868	1,198	30.3	40
2026 With Dev	1,142	1,247	30.3	40
2033 Base	921	1,271	30.3	40
2033 With Dev	1,195	1,321	30.3	40

Table 6.37: Fear and Intimidation – Link U – A4229 (N7-N12)

6.4.180. There would be no change in the degree of hazard score as a result of the Proposed Development with the score being 40 (i.e. 'moderate') in all scenarios. The magnitude of impact would be **negligible adverse**.

6.4.181. The sensitivity of the receptor is **negligible**. The potential effects prior to mitigation are therefore **negligible (not significant)**.

Link Z - New Link Road

Severance of Communities

6.4.182. Given that this link would constitute new infrastructure created as part of the Proposed Development, there are no baseline traffic flows against which the impact of the development scenarios can be compared.

6.4.183. The Proposed Development is anticipated to generate 8,959 AADT along this link, which would represent a 'moderate' severance level as per the thresholds set out previously.

6.4.184. The New Link Road would, however, be provided with comprehensive, high-quality active travel connections and crossing facilities and would be designed as a low-speed environment that places principal importance on NMU movement above motorised vehicle traffic movement and minimises severance. The magnitude of impact would therefore be **negligible adverse**.

6.4.185. The sensitivity of the receptor is **high**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Non-Motorised User (NMU) Delay

6.4.186. The Proposed Development would not result in any material increase in NMU journey length in this area, and would enhance north-south connectivity for existing NMUs in this area. There would, however, be a material level of traffic flows on this link as a consequence of the Proposed Development.

6.4.187. The New Link Road would be provided with comprehensive, high-quality active travel connections and crossing facilities and would be designed as a low-speed environment that minimises delay to NMUs. The magnitude of impact would therefore be **negligible adverse**.

6.4.188. The sensitivity of the receptor is **high**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Non-Motorised User (NMU) Amenity

6.4.189. The Proposed Development would not halve or double traffic on this link as there are no baseline flows against which the change can be quantified. However, the level of traffic along the link would be material (8,959 AADT).

6.4.190. As set out above, the New Link Road would be provided with comprehensive, high-quality active travel connections and crossing facilities and would be designed as a low-speed environment that places principal importance on NMU movement and experience, and

the overall 'place' function of the link. The proportion of HGVs would be very low (1%). The magnitude of impact would therefore be **negligible adverse**.

6.4.191. The sensitivity of the receptor is **high**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Fear and Intimidation

6.4.192. Again, given that this link represents new infrastructure to be delivered as part of the Proposed Development, there are no baseline traffic flows against which the potential change in the level of fear and intimidation can be established.

6.4.193. The projected level of fear and intimidation associated with the Proposed Development traffic flows in isolation is, however, set out below for reference.

Fear and Intimidation Impact Summary				
Assessment Scenario	**Average Traffic Flow over 18-hour day – all vehicles/hour 2-way (a)**	**Total 18-hour heavy vehicle flow (b)**	**Average vehicle speed mph (c)**	**Degree of hazard score**
Proposed Development Traffic	475	86	20	10

Table 6.38: Fear and Intimidation – Link Z – New Link Road

6.4.194. It is projected that this link would be subject to a low degree of hazard score of 10 (i.e. 'small'). The magnitude of impact would be **negligible adverse**.

6.4.195. The sensitivity of the receptor is **high**. The potential effects prior to mitigation are therefore **minor (not significant)**.

Summary of Potential Significant Effects (Prior to Mitigation) During Operational Phase

6.4.196. Based on the above assessments, the following links have been established as being potentially subject to effects that are significant (i.e. 'moderate' significance or greater) prior to mitigation.

- **Link D – Eastern Promenade (West) - Severance of Communities**: direct, permanent, long-term, moderate adverse (significant).

6.4.197. Measures are proposed to mitigate these potentially significant effects, as set out in Section 4.2.

Construction Phase

6.4.198. As set out earlier in this Chapter, at this stage detailed information on construction programming, material import and export volumes, staffing numbers, and plant requirements is not yet available.

6.4.199. The focus of this Chapter is therefore on operational effects, which are expected to represent the greatest magnitude of change on the transport network. Based on experience, it is anticipated that the level of daily traffic generated by the Proposed Development during the construction phase would be significantly less than that generated during the operational phase. The potential effects on any links are not projected to be significant and would likely be far lower than the effects that have been reported above in respect to the operational phase. Moreover, any such effects during the construction phase would be temporary and short/medium term in duration.

6.4.200. It is acknowledged that the construction phase is likely to generate a notably greater proportion of HGV movements than the operational phase. Such construction traffic movements will therefore be subject to strict routing arrangements and associated management and control measures in order to mitigate against the potential for significant effects.

6.4.201. It is assumed that a detailed Construction Traffic Management Plan (CTMP) will be secured by planning condition to control construction vehicle activity. The CTMP will include daily vehicle limits, designated routing, sustainable travel planning for the workforce, and vehicle-size controls.

6.4.202. At this stage, it is envisaged that all construction traffic will be routed directly north from the site via the A4106 and A4229 to M4 Junction 37, avoiding local roads and higher sensitivity links wherever possible. A range of further environmental control measures will be in place to further mitigate against the potential for significant effects during the construction phase.

6.4.203. Abnormal or hazardous load movements are not anticipated; however, if required, they will also be managed in consultation with BCBC and South Wales Police.

6.5. Mitigation and Enhancement Measures

6.5.1. As set out in the **Transport Assessment (Appendix 6.1)** a proportionate, policy-led package of mitigation and enhancement measures would be provided alongside the Proposed Development.

6.5.2. It should be noted that the Proposed Development traffic flows used for this assessment are highly robust. Unless specified, the following measures constitute 'non-primary' mitigation that has not been allowed for in the above assessments within this Chapter but will have the effect of reducing the Proposed Development traffic flows and associated effects below the levels that are set out in the previous Sections of this ES.

6.5.3. The measures are fully consistent with national, regional and local transport policy and are designed to achieve the following objectives:

- Maximise accessibility to and within the development by sustainable and non-car modes;
- Mitigate residual transport impacts through integrated design, supported by appropriate planning conditions and/or obligations; and,
- Contribute to wider objectives for improved accessibility, safety and modal shift in line with the Active Travel (Wales) Act and the Wales Transport Strategy.

6.5.4. The measures described below have been developed in discussion with the client team and informed by the findings of this ES, including the **Transport Assessment (Appendix 6.1)**. They are supported by initial, high-level cost estimates that remain subject to further detailed design and agreement with Bridgend County Borough Council. The package is presented without prejudice to assist consideration during the planning determination period and to inform potential Section 106 obligations and highway agreements.

Item Ref / Category	Mode of Travel	Mitigation Measure	Location	Delivery	Notes
1 / Local Active Travel Route Delivery	Walking & Cycling	High quality active travel routes (circa 4km of new and improved routes) and controlled crossings will be provided. These capture ATNM corridors (INM-POR-17, 14 and 26). These routes also enhance the Wales Coast Path route, removing the current detour through to New Road.	Throughout site	S38	Embedded within the masterplan. Internal active travel routes constitute **primary mitigation** in the context of this ES Chapter.
2 / Strategic Active Travel Contribution	Walking & Cycling	Financial contribution towards ongoing WelTAG studies and delivery of regional active travel links (Porthcawl–Bridgend / Pyle routes INM-POR-3, 16 and 12).	Off-site corridors	S106	To form match-funding with the Active Travel Fund and other schemes. These will also support future aspirations for national cycle network route enhancements.
3 / Comprehensive Travel Plan	All Sustainable Modes	Framework Travel Plan with measures, targets and monitoring; followed by phase-specific Travel Plans.	Site-wide	Planning Condition	To be updated through occupation and monitored via annual reports.
4 / Cycle Parking Provision	Cycling	Secure long-stay and short-stay cycle parking throughout development, including at Hillsboro North car park to support multimodal integration with the Porthcawl Metrolink station.	Site-wide	S50 / S106 / S278	Designs to be agreed with BCBC and Active Travel officers.

5 / Bus Infrastructure (Shelters and Stops)	Bus	Provision of new bus shelters and associated infrastructure on the spine road once services commence. Interim bus stop improvements on New Road should also be provided.	Spine road and New Road	S106	To coincide with confirmed service routing to avoid premature maintenance obligations. New Road bus stop improvement should include seating, shelter, and a raised bus boarder.
6 / Bus Service Enhancements	Bus	Support for diversion of existing bus route to operate along New Road (eastbound, 7 days per week) to provide interim connectivity until internal services commence.	New Road corridor	S106 / Service Agreement	Positive discussions held with operators and BCBC; offers early benefit to new and existing residents. Eastbound movements along New Road provide operational benefits from the existing double yellow lining. Westbound bus services may require further traffic orders to protect journey time reliability.
7 / Local Road Safety Enhancements (New Road)	Highway Safety (All Users)	"Keep Clear" markings (TSRGD 1027.1) at Northways junction to reduce blocking back toward the roundabout.	New Road / Northways	S106 / S278	Non-enforceable advisory measure; improves local flow and visibility.
8 / A48/A4106 Junction Safety Scheme	Highway Safety (All Users)	Targeted safety works to consider signage, traffic-calming, visibility and surfacing (anti-skid) improvements.	A48 / A4106 roundabout	S106 / S278	Final scope to be agreed with BCBC Highways and Road Safety Audit.

9 / Car Club and Shared Mobility Provision	Car Share / Sustainable Car Use	Designated car club spaces within key development parcels and town centre car parks, including a contribution toward initial vehicle lease and promotion. Potential for the proposed bus hubs to support cycle hire schemes.	Site-wide	S106 / Management Company	To include EV-enabled bays and integration with Travel Plan incentives.
10 / Parking Management and Demand Reduction	Parking / Behaviour Change	Implementation of a managed parking strategy including: (a) decoupling private parking spaces from property sales to reflect true cost of car ownership; (b) on-street controls to manage overspill; (c) EV-ready infrastructure.	Site-wide & adjacent streets	S106 / Planning Condition	Strategy to be secured through Travel Plan and design codes.
11 / Traffic Orders and Resident Parking Support Fund	Parking / Traffic Management	Developer contribution to be held in a bond for a defined period to fund future Traffic Regulation Orders (TROs) and residents' parking schemes if required to mitigate displacement.	Surrounding residential areas	S106 (Bond Mechanism)	To be released upon implementation of agreed TROs or lapse of bond period.
12 / Overspill Parking Area	Parking / Traffic Management	To accommodate temporary seasonal demand peaks and events, the Council will ensure that additional off-site parking provision is provided, supported with sustainable transport connections to the town centre.	Various	On-going Event Management Planning	Previous events have utilised non-council car parks to accommodate temporary demand so is an established practice. The Council will continue to explore opportunities for this in the future.

Table 6.39: Proposed Development Mitigation

6.5.5. Together, these measures provide a balanced, policy-compliant and future-focused package that supports safe operation of the network while promoting modal shift and travel choice.

6.5.6. The mitigation package described above ensures that the Proposed Development can be delivered in a manner consistent with national and local transport objectives. It balances the operational needs of all users with wider goals to reduce car dependency and promote active and sustainable travel choices.

6.5.7. Notwithstanding the comprehensive measures proposed, it is recognised that during peak summer periods and major events, traffic demand within and around Porthcawl will continue to exceed the practical capacity of the highway network. These episodic conditions reflect the town's coastal and visitor economy and cannot realistically be mitigated in line with transport policy by providing additional highway capacity. Increasing capacity would risk inducing further car travel and undermining the modal shift objectives of the Wales Transport Strategy and the Active Travel (Wales) Act 2013. Accordingly, the strategy focuses on managing demand and providing genuine travel choice, rather than attempting to deliver year-round free-flow conditions.

6.5.8. The package therefore prioritises investment in walking, cycling and public transport infrastructure, alongside demand-management measures such as the car-club provision, parking "unbundling", and the Framework Travel Plan. These interventions ensure that residents, visitors and employees have practical alternatives to private-car use, reducing the need for unnecessary vehicle trips and supporting long-term behavioural change and inclusivity.

6.5.9. A robust monitoring and review framework will be secured through the Travel Plan. Key indicators will include:

- Mode-share performance against Welsh Government targets;
- Use of car-club vehicles and cycle parking occupancy;
- Bus service patronage and service reliability;
- Traffic volumes; and
- Feedback from residents and local stakeholders.

6.5.10. Annual monitoring reports will be submitted to BCBC, with agreed thresholds for remedial or adaptive measures.

6.5.11. Through this approach, the Proposed Development will operate within acceptable parameters for the vast majority of the time (i.e. neutral periods), while acknowledging that short-term seasonal congestion is a characteristic of a vibrant coastal resort rather than an indicator of deficiency. The emphasis on sustainable mobility, place quality and behavioural change ensures that, over time, non-car modes increasingly meet travel demand and that residual traffic impacts remain both manageable and consistent with the policy framework for sustainable growth.

Residual Effects

6.5.12. After accounting for the non-primary mitigation measures detailed in Table 39, the projected residual effects at each of the screened-in links are set out below. All listed effects are permanent, direct, and long-term.

Link	Significance of Effects Prior to Mitigation / Enhancement	Significance of Residual Effects (Following Mitigation / Enhancement)
Link B - The Portway (South)	Severance: minor (not significant) Driver and Passenger Delay (Motorised Users): minor (not significant) NMU Delay: minor (not significant) NMU Amenity: minor (not significant) Fear and Intimidation: minor (not significant) Road-User and Pedestrian Safety: minor (not significant)	Severance: minor (not significant) Driver and Passenger Delay (Motorised Users): minor (not significant) NMU Delay: minor (not significant) NMU Amenity: minor (not significant) Fear and Intimidation: minor (not significant) Road-User and Pedestrian Safety: minor (not significant)
Link D - Eastern Promenade (West)	Severance: **moderate (significant)** Driver and Passenger Delay (Motorised Users): minor (not significant) NMU Delay: minor (not significant) NMU Amenity: minor (not significant) Fear and Intimidation: minor (not significant) Road-User and Pedestrian Safety: minor (not significant)	Severance: minor (not significant) Driver and Passenger Delay (Motorised Users): minor (not significant) NMU Delay: minor (not significant) NMU Amenity: minor (not significant) Fear and Intimidation: minor (not significant) Road-User and Pedestrian Safety: minor (not significant)
Link E - Eastern Promenade (North)	Severance: minor (not significant) Driver and Passenger Delay (Motorised Users): minor (not significant) NMU Delay: minor (not significant) NMU Amenity: minor (not significant) Fear and Intimidation: minor (not significant) Road-User and Pedestrian Safety: minor (not significant)	Severance: minor (not significant) Driver and Passenger Delay (Motorised Users): minor (not significant) NMU Delay: minor (not significant) NMU Amenity: minor (not significant) Fear and Intimidation: minor (not significant) Road-User and Pedestrian Safety: minor (not significant)
Link G - New Road (N3-N4)	Severance: minor (not significant) Driver and Passenger Delay (Motorised Users): minor (not significant) NMU Delay: minor (not significant) NMU Amenity: minor (not significant) Fear and Intimidation: minor (not significant) Road-User and Pedestrian Safety: minor (not significant)	Severance: minor (not significant) Driver and Passenger Delay (Motorised Users): minor (not significant) NMU Delay: minor (not significant) NMU Amenity: minor (not significant) Fear and Intimidation: minor (not significant) Road-User and Pedestrian Safety: minor (not significant)

Link H - New Road (N4-Rhych Ave)	Severance: minor (not significant) Driver and Passenger Delay (Motorised Users): minor (not significant) NMU Delay: minor (not significant) NMU Amenity: minor (not significant) Fear and Intimidation: minor (not significant) Road-User and Pedestrian Safety: minor (not significant)	Severance: minor (not significant) Driver and Passenger Delay (Motorised Users): minor (not significant) NMU Delay: minor (not significant) NMU Amenity: minor (not significant) Fear and Intimidation: minor (not significant) Road-User and Pedestrian Safety: minor (not significant)
Link I - New Road (Rhych Ave-N5)	Severance: minor (not significant) Driver and Passenger Delay (Motorised Users): minor (not significant) NMU Delay: minor (not significant) NMU Amenity: minor (not significant) Fear and Intimidation: minor (not significant) Road-User and Pedestrian Safety: minor (not significant)	Severance: minor (not significant) Driver and Passenger Delay (Motorised Users): minor (not significant) NMU Delay: minor (not significant) NMU Amenity: minor (not significant) Fear and Intimidation: minor (not significant) Road-User and Pedestrian Safety: minor (not significant)
Link K - Aldenham Road	Severance: minor (not significant) Driver and Passenger Delay (Motorised Users): minor (not significant) NMU Delay: minor (not significant) NMU Amenity: minor (not significant) Fear and Intimidation: minor (not significant) Road-User and Pedestrian Safety: minor (not significant)	Severance: minor (not significant) Driver and Passenger Delay (Motorised Users): minor (not significant) NMU Delay: minor (not significant) NMU Amenity: minor (not significant) Fear and Intimidation: minor (not significant) Road-User and Pedestrian Safety: minor (not significant)
Link L - Bridgend Road (South)	Severance: minor (not significant) Driver and Passenger Delay (Motorised Users): minor (not significant) NMU Delay: minor (not significant) NMU Amenity: minor (not significant) Fear and Intimidation: minor (not significant) Road-User and Pedestrian Safety: minor (not significant)	Severance: minor (not significant) Driver and Passenger Delay (Motorised Users): minor (not significant) NMU Delay: minor (not significant) NMU Amenity: minor (not significant) Fear and Intimidation: minor (not significant) Road-User and Pedestrian Safety: minor (not significant)
Link N - A4106 (N9a-N6)	Severance: minor (not significant) Driver and Passenger Delay (Motorised Users): minor (not significant) NMU Delay: minor (not significant) NMU Amenity: minor (not significant) Fear and Intimidation: minor (not significant) Road-User and Pedestrian Safety: minor (not significant)	Severance: minor (not significant) Driver and Passenger Delay (Motorised Users): minor (not significant) NMU Delay: minor (not significant) NMU Amenity: minor (not significant) Fear and Intimidation: minor (not significant) Road-User and Pedestrian Safety: minor (not significant)

Link O - A4106 (N6-N15)	Severance: minor (not significant) Driver and Passenger Delay (Motorised Users): minor (not significant) NMU Delay: minor (not significant) NMU Amenity: minor (not significant) Fear and Intimidation: minor (not significant) Road-User and Pedestrian Safety: minor (not significant)	Severance: minor (not significant) Driver and Passenger Delay (Motorised Users): minor (not significant) NMU Delay: minor (not significant) NMU Amenity: minor (not significant) Fear and Intimidation: minor (not significant) Road-User and Pedestrian Safety: minor (not significant)
Link R - A4106 (N2-N7)	Severance: minor (not significant) Driver and Passenger Delay (Motorised Users): minor (not significant) NMU Delay: minor (not significant) NMU Amenity: minor (not significant) Fear and Intimidation: minor (not significant) Road-User and Pedestrian Safety: minor (not significant)	Severance: minor (not significant) Driver and Passenger Delay (Motorised Users): minor (not significant) NMU Delay: minor (not significant) NMU Amenity: minor (not significant) Fear and Intimidation: minor (not significant) Road-User and Pedestrian Safety: minor (not significant)
Link T - A4106 (N7-Heol Y Goedwig)	Severance: minor (not significant) Driver and Passenger Delay (Motorised Users): minor (not significant) NMU Delay: minor (not significant) NMU Amenity: minor (not significant) Fear and Intimidation: minor (not significant) Road-User and Pedestrian Safety: minor (not significant)	Severance: minor (not significant) Driver and Passenger Delay (Motorised Users): minor (not significant) NMU Delay: minor (not significant) NMU Amenity: minor (not significant) Fear and Intimidation: minor (not significant) Road-User and Pedestrian Safety: minor (not significant)
Link U - A4229 (N7-N12)	Severance: minor (not significant) Driver and Passenger Delay (Motorised Users): minor (not significant) NMU Delay: minor (not significant) NMU Amenity: minor (not significant) Fear and Intimidation: minor (not significant) Road-User and Pedestrian Safety: minor (not significant)	Severance: minor (not significant) Driver and Passenger Delay (Motorised Users): minor (not significant) NMU Delay: minor (not significant) NMU Amenity: minor (not significant) Fear and Intimidation: minor (not significant) Road-User and Pedestrian Safety: minor (not significant)
Link Z - New Link Road	Severance: minor (not significant) Driver and Passenger Delay (Motorised Users): minor (not significant) NMU Delay: minor (not significant) NMU Amenity: minor (not significant) Fear and Intimidation: minor (not significant) Road-User and Pedestrian Safety: minor (not significant)	Severance: minor (not significant) Driver and Passenger Delay (Motorised Users): minor (not significant) NMU Delay: minor (not significant) NMU Amenity: minor (not significant) Fear and Intimidation: minor (not significant) Road-User and Pedestrian Safety: minor (not significant)

Table 6.40: Summary of Residual Effects

6.5.13. As shown in Table 6.40, all potential effects would be 'not significant' following implementation of the mitigation measures set out in Section 4.2.

Cumulative Effects

6.5.14. As agreed with the Highway Authority, no specific committed development was required to be included in this assessment.

6.5.15. Committed and future developments in the area (such as other planned housing or retail in surrounding areas) are however included in the embedded traffic growth assumptions for 2026 and 2033. The traffic forecasting therefore accounts for regional traffic growth and known committed projects, ensuring the future baseline is robust. As a result, the assessments undertaken in this Chapter and the recorded effects are inherently cumulative.

6.6. Conclusions

6.6.1. This Chapter of the Environmental Statement (ES) has assessed the likely significant effects of the Proposed Development, as described in Volume 1, Chapter 4 of this ES, in terms of Traffic and Movement.

6.6.2. In summary, the assessments demonstrate that the potential effects with respect to all relevant transport impact pathways would not be significant in EIA terms, after accounting for the mitigation and enhancement measures, and are therefore considered to be acceptable.

6.7. References

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