Candwr Solar Farm

Pre Application Consultation

Environmental Statement

Chapter 11: Transport and Access

2 July 2026

TotalEnergies

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11. Draft Chapter Transport and Access

11.1. Introduction

11.1.1. This draft Chapter provided for Statutory Consultation considers the likely significant effects of the Proposed Development in terms of Transport and Access.

11.2. Assessment Approach

Legislative and Policy Framework

Legislation

11.2.1. The assessment has been undertaken in accordance with the following legislation:

- The Highways Act (1980)[1].
- Traffic Management Act (2004)[2].

11.2.2. The process for applying for a DNS is set out in the Planning Act 2008 [Ref. 5-1]. Under Section 104 of the Act, a decision must be made with regard to the local impact report, matters prescribed in relation to the Proposed Development and any other matters regarded as important and relevant. Following their designation on 17 January 2024, there are three NPSs which are considered to be 'relevant NPS' under Section 104 of the Act.

National planning policy

11.2.3. The proposals have also been considered in the context of the following national planning policy and guidance:

- Planning Policy Wales[3] (2024), with specific reference to Section 4 which sets out the policies that necessitate assessing the travel patterns generated by a proposed development and the consequent environmental effects.
- Future Wales: The National Plan 2040[4] (2021), with specific reference to Policies 1, 2 and 12 which prioritise sustainable transport networks, decarbonization and the integration of active travel.

[1] UK Parliament (1980) Highways Act 1980. London: The Stationery Office. Available at: https://www.legislation.gov.uk/ukpga/1980/66

[2] UK Parliament (2004) Traffic Management Act 2004. London: The Stationery Office. Available at: https://www.legislation.gov.uk/ukpga/2004/18

[3] Welsh Government (2024) Planning Policy Wales. Edition 12. Cardiff: Welsh Government. Available at: https://www.gov.wales/planning-policy-wales

[4] Welsh Government. (2021) *Future Wales: The National Plan 2040*. Cardiff: Welsh Government. Available at: https://www.gov.wales/future-wales-national-plan-2040

- Draft National Development Framework 2020 to 2040[5] (2020), with regard to Policy 17 which requires assessing whether environmental and cumulative impacts including HGV construction traffic can be addressed satisfactorily; and

- Technical Advice Note (TAN) 18: Transport[6] (2007) with reference to Section 3 relating to sustainable transport, Section 5 relating to the suitable design of the development and Section 8, assessing the traffic impacts and management and mitigation measures.

Local Planning Policy

11.2.4. The proposals have also been considered in the context of the following local planning policy and guidance:

- Torfaen Local Development Plan[7] (2017), the key policies considered in this ES are Policy S1, Policy S2 and Policy T1 which primarily relate to safe and sustainable travel to minimise the environmental impacts including to reduce reliance on the use of private car.

- Monmouthshire County Council Our Local Transport Strategy 2024-2029[8]. This document provides details on decarbonisation, the sustainable transport hierarchy and land use planning policies which have been accounted for in this ES.

- Newport City Council Adopted Local Development Plan 2011-2026 (2015)[9], the key policies considered in this ES are Policy GP2 to ensure construction traffic doesn't cause unacceptable harm, Policy GP4 relating to safe and appropriate access arrangements, GP5 to mitigate the impacts of the development on sensitive areas and SP1 to promote sustainability such as minimizing vehicle trips.

- Newport City Council Sustainable Travel Supplementary Planning Guidance[10] (2020) with key reference to Policy T2 which relates to the Road Hierarchy and Accessibility, with regard to large, slow moving construction vehicles and the transportation of heavy plant and material.

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[5] Welsh Government (2020) *Draft National Development Framework 2020 to 2040*. Cardiff: Welsh Government. Available at: https://www.gov.wales/draft-national-development-framework-2020-2040

[6] Welsh Government (2007) *Technical Advice Note (TAN) 18: Transport*. Cardiff: Welsh Government. Available at: https://www.gov.wales/technical-advice-note-tan-18-transport

[7] Torfaen County Borough Council (2017) *Local Development Plan: Review Report*. Pontypool: Torfaen County Borough Council. Available at: https://www.torfaen.gov.uk/en/PlanningAndDevelopment/Planningpolicy/LocalDevelopmentPlan/Local-Development-Plan.aspx

[8] Monmouthshire County Council (2024) *Local transport strategy 2024-2029*. Available at: https://www.monmouthshire.gov.uk/app/uploads/2024/10/Local-Transport-Strategy-24-29.pdf

[9] Newport City Council (2015) *Newport Local Development Plan 2011–2026: Adopted Plan*. Available at: https://www.newport.gov.uk/planning/planning-policy/local-development-plan

[10] Newport City Council (2020) *Sustainable travel: supplementary planning guidance*. Available at: https://www.newport.gov.uk/planning/planning-policy/local-development-plan/supplementary-planning-guidance

- Torfaen Council Updated Planning Obligations SPG – Annex 2 – Highways & Transport[11] (2025) general details are provided in this document regarding sustainable travel and accessibility, site access and mitigation which inform this ES.

Guidance

11.2.5. The proposals have been considered in the context of the following guidance documents:

- The Institute of Environmental Management and Assessment (IEMA) Guidelines: Environmental Assessment of Traffic and Movement (2023).
- Design Manual for Roads and Bridges, Standards for Highways.

Methodology

11.2.6. The transport and access assessment has considered the impacts of traffic generated by the Proposed Development on the local highway network in the vicinity of the Site during the construction phases. It has been carried out in accordance with the Institute of Environmental Management and Assessment (IEMA, now ISEP) Guidelines: Environmental Assessment of Traffic and Movement' document, (referred to as the 'ISEP traffic guidelines' throughout this chapter).

11.2.7. The pertinent issues for the ES in terms of transportation are the magnitude and consequences of changes at the highways links within the study area because of the construction and operational phases of the Proposed Development. With reference to the categories listed in the ISEP traffic guidelines, the impacts assessed are as follows:

- Severance (barriers for accessibility from infrastructure).
- Driver delay (changes in journey times and congestion experienced by vehicle drivers).
- Non-motorised user delay (changes in journey times for pedestrians, cyclists and other non-motorised users).
- Non-motorised user amenity (the overall quality of the environment experienced by pedestrians and cyclists, including traffic flow, noise and air quality).
- Fear and intimidation (he perceived safety and comfort of non-motorised users in the presence of traffic).

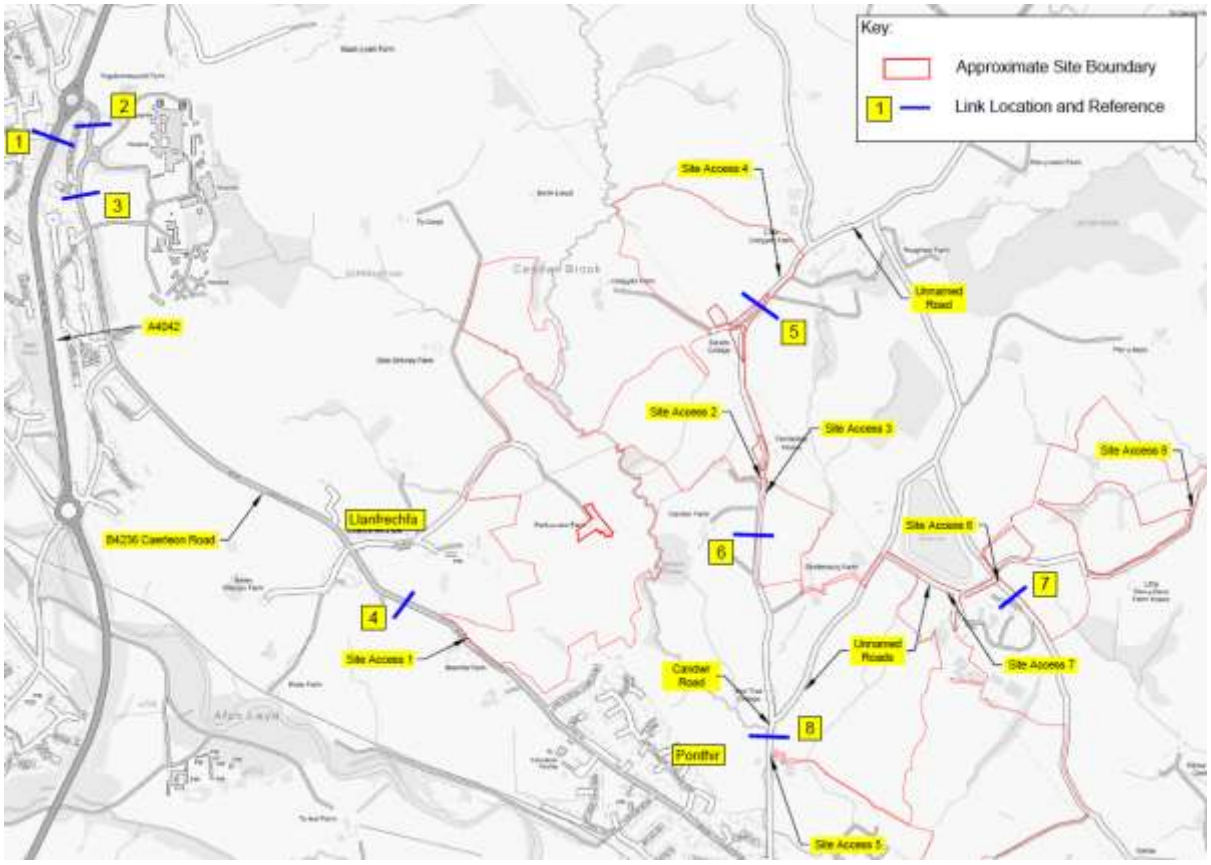
[11] Torfaen County Borough Council. (2025) *Updated Planning Obligations Supplementary Planning Guidance (SPG) – Annex 2 – Highways & Transport*. Available at: https://www.torfaen.gov.uk/en/Related-Documents/Forward-Planning/SPG-Annex-2-Highways-and-Transport.pdf

- Road safety (the potential for changes in the frequency and severity of collisions); and
- Hazardous/Large Loads (the routing and movement of large or unusual loads that may require specific management measures).

Study Area

11.2.8. The study area for the assessment comprises the local highway network in the immediate vicinity of the Site as well as the B4236 and the A4042. The study area and the highway links assessed are shown at **Plate 11.1** of the ES**.** The study area does not extend to the Strategic Road Network based on the low percentage change in traffic flows calculated on the local highway network.

Plate 11.1 – Link Location Plan



Surveys

11.2.9. Automatic Traffic Count (ATC) surveys and Manual Classified Count (MCC) surveys have been carried out across the local highway network at the following locations:

- ATC - B4236 Caerleon Road (51.62965, -2.97189)
- ATC - B4236 Caerleon Road (51.63563, -2.9844)
- ATC - B4236 Caerleon Road (51.63525, -2.98324)

- ATC - Church Road, Llanfrechfa (51.63767, -2.9852)
- ATC - Candwr Road (51,62967, -2.96866)
- ATC - Unnamed Road (51.62965, -2.97189)
- ATC - Unnamed Road (51.63648, -2.95778)
- ATC - Unnamed Road (51.64463, -2.96924)
- MCC - Grange Hospital Roundabout
- MCC - A4042 Turnpike Roundabout

Modelling

11.2.10. No modelling has been undertaken in respect of Transport and Access.

Cumulative Effects Assessment Methodology

11.2.11. The following local sites have been identified from the cumulative short list as having the biggest potential impact due to potential overlapping construction phases with the proposed development:

- 22/P/0446/OUT - Still yet to be constructed although permission is granted. Potential for overlap in construction dates.
- DNS Application DNS/3239190 – Pentre Bach Solar Farm - approved March 2026. Documentation does not confirm anticipated construction start date, however approval will mean development shall not begin no later than 5 years of March 2026. Potential for overlap in construction dates.
- DNS Application DNS/3276725 – Mynydd Maen Wind Farm - construction start date not confirmed in documentation. Expected decision in Summer 2026. Construction estimated to be 15 months. Potential for overlap in construction dates.

11.2.12. Each of these sites has been reviewed and the proposed construction traffic routes have been identified.

22/P/0446/OUT - New Unit at Grange Hospital

11.2.13. This application was supported by a Transport Statement (TS), but a Construction Traffic Management Plan (CTMP) is not available at this stage. Therefore, there are no forecast construction vehicle movements available for consideration within a cumulative assessment.

DNS/3239190 - Pentre Bach Solar Farm

11.2.14. This application was supported by a TS which included some details normally contained within a CTMP, but a full CTMP is not yet available. The TS confirms construction delivery numbers and advises that construction traffic would route from the A4042, onto the A4051 then Pentre Lane. Whilst construction traffic from the two sites would use the A4042, traffic associated with the Pentre Bach site would leave the A4042 approximately 3km south of the Turnpike Roundabout, where construction traffic associated with the proposed development would turn off. Therefore, the Pentre Bach Solar farm does not require further cumulative assessment and no cumulative significant effects are identified.

DNS/3276725 - Mynydd Maen Wind Farm (blue site)

11.2.15. This application was supported by a Transport Chapter in an Environmental Statement which contained some details relating to delivery numbers and routing. The only shared section of construction route between the Mynydd Maen site and the proposed Site is the M4 motorway. As the M4 is part of the strategic road network (SRN) and accommodates large volumes of traffic including HGVs on a day-to-day basis, this scheme is not considered necessary to assess as a cumulative impact.

Assessment of Significance

Criteria for Receptor Sensitivity

11.2.16. The sensitivity of each the highway links has been determined using professional judgement and with reference to the principles set out in ISEP traffic guidelines (paragraph 1.30) for the categories of effect assessed in this chapter.

11.2.17. User groups that may be affected by a change in conditions include non-motorised users, PRoW users, motorists and freight vehicles, public transport and the emergency services.

11.2.18. Geographic locations are also considered including people at home, people at work, sensitive and vulnerable groups, locations with concentrations of vulnerable groups (such as schools and hospitals), retail areas, recreational areas, tourist attractions, collision clusters, and junction and highway links at or over capacity.

11.2.19. The criteria for assessing the sensitivity of a receptor are set out in **Table 11-1**.

Table 11-1: Criteria for sensitivity of receptor

Receptor Sensitivity	Receptor Type
High	Receptors of greatest sensitivity to traffic flows, such as schools, playgrounds, accident blackspots, retirement homes, areas with no footways with high pedestrian footfall.

Medium	Traffic flow sensitive receptors, such as congested junctions, hospitals, shopping areas with active frontages, narrow footways, parks, and recreational areas.
Low	Receptors with some sensitivity to traffic flow, such as conservation areas, listed buildings, tourist attractions, and residential areas.
Negligible	Receptors with low sensitivity to traffic flows, and those distant from affected roads such as rural roads which serve a small number of dwellings which are typically set back from the road.

11.2.20. The identified sensitivity of each highway link considered in the assessment according to professional judgment and ISEP traffic guidance is set out in **Table 11-2** of this chapter below. For this assessment, links with a Medium or High Sensitivity are 'sensitive'.

Table 11-2: Sensitivity of Highway Links

Link	Name	Sensitivity	Rationale
1	A4042 south of Turnpike roundabout	Negligible	-
2	B4236 Caerleon Road north of Grange Hospital roundabout	Medium	The Grange Hospital
3	B4236 Caerleon Road south of Grange Hospital roundabout	Medium	The Grange Hospital
4	B4236 Caerleon Road west of Site Access 1	Negligible	Routes through a residential area
5	Unnamed Road north of Site Access 2	Low	Road with no footways that may be used by pedestrians
6	Unnamed Road south of Site Access 3	Negligible	Road with no footways that may be used by pedestrians

Link	Name	Sensitivity	Rationale
7	Unnamed Road north of Site Access 6	Medium	Road with no footways that may be used by pedestrians
8	Unnamed Road north of Site Access 5	Medium	Road with no footways that may be used by pedestrians

Criteria for Magnitude of Change

11.2.21. There are four levels of impact magnitude considered which are negligible, low, medium, and high. The ISEP traffic guidance sets out two rules to be considered when assessing the impact of development traffic on a highway link as follows:

- Rule 1: include highway links where traffic flows are predicted to increase by more than 30% (or where the number of HGVs is predicted to increase by more than 30%); and
- Rule 2: include any other specifically sensitive areas where traffic flows (or HGV component) are predicted to increase by more than 10%.

11.2.22. The 30% threshold is based upon research and experience and the ISEP guidelines suggest that less than a 30% increase results in imperceptible changes in the environmental effects of traffic, apart from in sensitive locations.

11.2.23. Definitions of magnitude have been based on the ISEP traffic guidelines and are shown in **Table 11-3.** Negligible, Low, Medium, and High Magnitudes of Impact can have either a beneficial or adverse Significance.

Table 11-3: Criteria for Magnitude of Impact

Impact	Magnitude of Impact/Threshold			
	Negligible	Low	Medium	High
Traffic Flow	Change in 24 hr traffic (or HGV numbers) within study area by less than 5%	Change in 24 hr traffic (or HGV numbers) within study area between 5% and 15%	Change in 24 hr traffic (or HGV numbers) within study area between 15% and 30%	Change in 24 hr traffic (or HGV numbers) within study area by 30% or more

Impact	Magnitude of Impact/Threshold			
	Negligible	Low	Medium	High
Severance	Change in peak or 24 hr traffic within study area by less than 30%	Change in peak or 24 hr traffic within study area of 30%-60%	Change in peak or 24 hr traffic within study area of 60% - 90%	Change in peak or 24 hr traffic within study area by 90% or more
Driver Delay	Change in peak or 24 hr traffic within study area by less than 5%	Change in peak or 24 hr traffic within study area between 5% and 15%	Change in peak or 24 hr traffic within study area between 15% and 30%	Change in peak or 24 hr traffic within study area by 30% or more
Non-motorised user Delay	The guidance recommends that professional judgement is used to determine the impact on Pedestrian Delay, considering local factors such as pedestrian activity, visibility, and the physical conditions of the Site.			
Non-motorised user Amenity	Pedestrian Amenity is impacted by traffic flow, composition and width of pavement and is related to fear and intimidation thresholds. As suggested by national guidance a threshold of where traffic or HGV flows have halved or doubled will be used to indicate whether there is a significant effect.			
Fear and Intimidation	With reference to paragraphs 3.32 to 3.40 and Tables 3.1 – 3.3 of the ISEP Guidance, the level of fear and intimidation is based on a degree of hazard score for both the with and without development scenarios. The difference between the scenarios results in the Magnitude of Impact as categorised below.			
	There is no change in steps between with and without development.	There is one step change in level with: <400 veh increase in average 18 hour two-way flow and/or <500 HV increase in	There is one step change in level but with: >400 veh increase in average 18 hour two-way flow and/or >500 HV	Two step changes in level

Impact	Magnitude of Impact/Threshold			
	Negligible	Low	Medium	High
		total 18 hour HV flow.	increase in total 18 hour HV flow.	
Road Safety	The ISEP traffic guidelines suggests that accident and safety impacts can be assessed by reviewing collision data to identify any emerging patterns or factors that could be exacerbated by traffic or movement generation.			

Fear and Intimidation

11.2.24. The effects on fear and intimidation are based upon a degree of hazard score determined using: Average traffic flow over 18-hour day (all vehicles/hour two-way); Total 18-hour heavy vehicle flow; and Average vehicle speed. The degree of hazard thresholds from the ISEP traffic guidelines are set out in **Table 11-4** below.

Table 11-4: 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 (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

11.2.25. The total degree of hazard score is calculated by summing the score for each element (a, b and c) from **Table 11-4**. This enables a level of fear and intimidation to be determined, which is set out in **Table 11-5**. A step change would be a change between a level of fear and intimidation (e.g., from Small to Moderate).

Table 11-5: Level of Fear and Intimidation

Level of fear and intimidation	Total hazard score
Extreme	71+
Great	41 – 70
Moderate	21 – 40
Small	0 - 20

Assessment of Significance

11.2.26. The Significance of Effect is determined by combining the predicted magnitude of impact with the assigned sensitivity of the receptor. The Significance of Effect is set out in **Table 11-6**.

11.2.27. The Significance of Effect thresholds can be categorised as beneficial (positive, i.e., reduction in traffic flows), negligible (no real impact) or adverse (negative i.e., increase in traffic flows). For the purpose of this chapter, major and moderate significance of effects are considered 'significant', as indicated by the shading in **Table 11-6,** and negligible to minor significance of effects are considered 'not significant'.

Table 11-6: Significance Matrix

Magnitude of Change	Sensitivity of Receptor			
	High	**Medium**	**Low**	**Negligible**
High	Major	Major	Moderate	Negligible
Medium	Major	Moderate	Minor to Moderate	Negligible
Low	Moderate	Minor to Moderate	Minor	Negligible
Negligible	Negligible	Negligible	Negligible	Negligible

11.2.28. Significance thresholds can also be categorised as temporary or permanent and can have an effect for the short, medium, or long term. The relevant definitions in terms of the longevity of the effect are set out below:

- A short-term effect – an effect that will be experienced for 0-5 years.
- A medium-term effect – an effect that will be experienced for 5-15 years; and
- A long-term effect – an effect that will be experienced for 15 years onwards.

Consultation

11.2.29. This ES Chapter 11 Transport and Access has been informed by consultation responses received to date.

11.2.30. The following transport and access comments were provided in the **EIA Scoping Direction** (**Appendix 2.2**) issued by the PEDW dated 11th February 2026 and via pre-application consultation with Local Highway Authorities. Further details are set out in **Chapter 2.**

Table 11-7: Summary of Scoping Opinion on Transport and Access

Consultee	Summary of Comments	Applicant Response
Monmouthshire County Council (MCC), Newport City Council (NCC) and Torfaen County Borough Council (TCBC)	MS Teams Meeting held in November 2025 between the Applicant team and the three local highway authorities. The initial routing strategy and reasoning behind discounted routes was presented along with forecast vehicle trips associated with the construction phase. MCC officers confirmed that routing to the site from the north-east via the A449 through Usk is not possible due to the weight restrictions and a narrow bridge. MCC officers advised that although construction traffic could technically route along Tre-Herbet Road to the northwest of the site, the unnamed roads leading to the site from Tre-Herbet Road are not suitable for use by large HGVs. NCC officers were strongly opposed to construction traffic routing from the south through Caerleon noting that the main one-way system through the town is narrow	The Applicant has considered the construction traffic routing and this is set out in **Section 11.4**.

Consultee	Summary of Comments	Applicant Response
	and can get heavily congested. NCC officers also advised that Caerleon is an Air Quality Management Area (AQMA) and there are restrictions placed on HGVs routing through the AQMA. The consensus among highway officers from all three authorities was that routing HGVs along the unnamed rural lanes surrounding the site directly to the construction compounds was undesirable. It was suggested by highway officers that a potential haul route could be implemented from the A4042 or the B4236 directly to the site in order to limit the impact of construction traffic on the local highway network. TCBC highway officers advised that evidence would need to be provided to prove that the impact on the A4042 and B4236 roundabouts near the Grange Hospital would not be severe.	
MCC, NCC and TCBC	MS Teams meeting held in March 2026 between the Applicant team and the three local highway authorities. Following the November pre-application meeting, the routing strategy was revised after the Applicant secured additional land for a haul road. The majority of construction traffic would	The Applicant has considered the construction traffic routing suggestions and this is set out in **Section 11.4**.

Consultee	Summary of Comments	Applicant Response
	access the site via a new haul road from the B4236 Caerleon Road, approached from the west via the A4042, before loads were decanted at a primary compound and distributed internally by smaller vehicles. A limited number of smaller construction deliveries were also proposed from the north via Tre-Herbet Road to Land Parcel 3, with no 16.5m HGVs using this route. This revised routing strategy was presented along with the forecast vehicle trips associated with the construction phase. MCC and NCC highway officers supported the proposed haul road but opposed using the northern route to access Land Parcel 3, reiterating that it was unsuitable for HGVs of any size. TCBC noted that the revised route offered advantages over previous options but raised concerns about construction traffic passing the Grange Hospital. Pegasus Group outlined potential mitigation measures, which TCBC	

Consultee	Summary of Comments	Applicant Response
	considered sensible subject to review of full details and supporting traffic survey data.	
TCBC	Further to the March 2026 meeting, the TCBC Planning Case Officer (who was not able to attend the full meeting) wrote an email to Pegasus Group which raised concerns about the proposed construction access route past the Grange Hospital, and stated that the submission will need to justify why this is the best route, include liaison with the hospital and provide a robust management plan. Concern about the suitability of the roundabout for HGVs, potential impacts on listed buildings and construction compounds, and the practical limitations of relying on measures to control deliveries.	The Applicant has considered the construction traffic routing and this is set out in **Section 11.4**. Mitigation measures are contained in the **draft oCTMP** and will be secured in the CTMP as described at **Section 11.7.**
PEDW (Table 1 (5.4))	NCC highlight that there may be potential significant effects related to transport and access during construction and decommissioning due to the nature of the local highway network. It is noted that the SR suggests standalone technical reports, including a	All three local authorities advised that further information is required to assess the impact of the development. A **draft oCTMP** has been prepared as part of the wider DNS application. The CTMP addresses the following points raised by the

Consultee	Summary of Comments	Applicant Response
	Construction Traffic Management Plan (CTMP), that will be prepared to assess transport impacts, however, NCC raise concerns in regard to the assessment of impacts prior to identifying routes, a construction programme, likely traffic generation profiles, enabling and mitigation measures. NCC consider there to be insufficient information to rule out significant impacts as suggested by the SR. They add that the extent of highway requirements is not known at this stage and should be considered cumulatively to other impacts. NCC state that they would not accept that it can be assumed that highway impacts are insignificant until the TA and CEMP have been completed, and mitigation measures agreed. In terms of HGV movements during construction, NCC suggest that more information will be required regarding prolonged peak activity and more detailed profile of movements to ascertain the true impacts as averages will not demonstrate a true representation. MCC suggest further transport and access related points for consideration in their response in Appendix 1. They include that it would be useful to include contingency	local highway authorities of NCC, MCC and TCBC as well as other third party groups and individuals: - Construction Programme (details as accurate as possible but ultimately indicative at this early stage in the DNS process). - Forecast vehicle trip generation during the construction and operational phases. - Mitigation measures to limit impact on the local highway network during the construction phase, supported by empirical evidence in the form of traffic surveys. - Delivery and operational hours. - Details of contingency planning for unforeseen circumstances e.g. adverse weather, road closures and emergency situations. - Details relating to the proposed Site access arrangements including any vegetation loss. - Number and locations of Site construction compounds; and - Proposed construction traffic routing including assessment of other potential routes.

Consultee	Summary of Comments	Applicant Response
	planning for adverse weather, road closures or other disruptions common in rural areas within the CTMP. They also suggest what they consider to be the most appropriate primary access routes consideration in their response in Appendix 1. MCC advises the applicant to consider timings of deliveries to avoid peak traffic flows to minimise further congestion of the proposed routes. Detailed analysis of all traffic movements will be required. TCBC agree that transport and access should be scoped in. They state that traffic surveys will be necessary to assess direct, indirect and cumulative impacts upon the existing road networks and cycle paths. TCBC add that traffic assessments should include all routes that were considered and reasons why those routes have been discounted. Both TCBC and NCC require details of vegetation that would be removed to allow vehicles to access the Site, TCBC adds that the location of the proposed compound need to be fully justified to demonstrate how their siting have reduced traffic movements. NCC add that other measures needed to provide access routes are not known at this stage but could impact further hedge row,	

Consultee	Summary of Comments	Applicant Response
	drainage culverts, congestion, public rights of way users etc TCBC include that hours of operation will need to be outlined within the Transport chapter, and that the ES should consider construction and operational phases, along with a draft CEMP that considers matters of dust, noise and smell. The applicant's attention is also drawn to the 'Access options Assessment Report' included in Appendix 1, prepared on behalf of "Protect Candwr and Ponthir Countryside Group" (PCPCG). This assessment should be considered when selecting construction vehicle routes and Site access. A number of Interested Parties raise concerns in their responses included in Appendix 1. The Applicant's attention is drawn to these comments in regard to Transport and Access. Their concerns relate to the impact of HGV traffic during construction along country lanes for residents, highway safety and amenity use etc. The applicant's attention is also drawn to comments from K. Jackson which includes concerns related to each of the proposed routes. These comments should be considered during the route selection process.	

Consultee	Summary of Comments	Applicant Response
	Transport and Access are therefore scoped into the assessment, due to insufficient information, unless robust justification or evidence of agreement the relevant Local Authorities is included in the ES. Any documents which contain mitigation measures to prevent potential significant effects such as a CTMP or CEMP should be included (even if in draft form) as technical appendices to the ES.	

Scoping Criteria

Technical Scope

11.2.31. This chapter of the ES deals specifically with the transport and access issues pertinent to an EIA. This includes assessing the magnitude and consequences of changes in traffic flows on the local road network during the construction phase and decommissioning phase including operational and safety impacts because of the Proposed Development. All categories within the ISEP traffic guidelines are assessed within this chapter. No categories have been scoped out.

Receptors

11.2.32. All highway links that form part of the construction traffic route to the primary and secondary construction compounds set out in the **draft oCTMP** have been assessed.

Temporal Scope

11.2.33. The Proposed Development will have its greatest effect on the local highway network during its construction and decommissioning phases with the deliveries of materials, plant and equipment, transported by heavy goods vehicles (HGVs), expected over a 12 to 18 month construction period.

11.2.34. Once operational there could be around four trips to the Site per month for equipment maintenance.

11.2.35. As mentioned above, the Site will have an operational lifespan of 40 years. Upon decommissioning, there would be a similar number of traffic movements associated with the removal (and recycling, as appropriate) of material arising from removal.

However, vehicle numbers are not expected to be any higher than those experienced during the construction period.

11.2.36. This ES chapter therefore considers the significance of effect on Transport and Access during the construction and decommissioning phases.

Limitations to the Assessment

11.2.37. No limitations or difficulties have been identified.

11.3. Baseline Conditions

Site Description and Context

11.3.1. The Proposed Development is located approximately 1.5 kilometres north of Ponthir, three kilometres east of Cwmbran and six kilometres northeast of Newport. The Site comprises 16 land parcels of open agricultural land.

Local Highway Network

Unnamed Roads

11.3.2. There are a number of unnamed roads within the vicinity of the Site. These roads are generally around 3.5 to five metres in width and are typically unlit, single carriageway rural lanes subject to the national speed limit (60mph). There is no pedestrian or cyclist infrastructure along these roads.

Candwr Road

11.3.3. Candwr Road is an unlit single carriageway which measures approximately four to five metres wide. It connects onto the B4236 Caerleon Road in the south and becomes an unnamed road to the north. Between the junction with Stokes Drive and the B4236 Caerleon Road, it is subject to a 30mph speed limit which increases to the National Speed Limit (60mph) north of the junction with Stokes Drive. Within the vicinity of the B4236 Caerleon Road junction, a footway is provided on the eastern side of the carriageway extending for approximately 60 metres north of the junction with the B4236 Caerleon Road.

B4236 Caerleon Road

11.3.4. The B4236 Caerleon Road is a lit, single carriageway B-Road measuring between six and seven metres wide. It is subject to a 40mph speed limit in the vicinity of Site Access 1, which reduces to 20mph northwest of Llanfrechfa. The B4236 Caerleon Road connects onto the A4042 to the north via the Turnpike Roundabout and to the south it becomes the B4596. A continuous footway is provided on the southern Site of the carriageway within the vicinity of the Site.

A4042

11.3.5. The A4042 is a lit, dual carriageway A-Road which forms part of the Welsh Government / Traffic Wales trunk road network. The carriageway measures approximately 7.5 metres wide in each direction. It is subject to the National Speed Limit and provides a connection to the A48 in Newport to the south and the A465 and the A40 to the north.

Public Rights of Way

11.3.6. A network of unsurfaced Public Rights of Way (PRoW) exists within the vicinity of the Site which provides connections between local roads and settlements. All the PRoW are footpaths. The approximate PRoW alignments and reference numbers are shown on **Figure 2.2** of the **draft oCTMP**. Those that route through the Site are summarised below.

Newport City Council

i. ST339924

Torfaen County Borough Council

ii. 424/19/1

iii. 424/20/1

iv. 424/26/1

Monmouthshire County Council

v. 367/29/1

vi. 367/37/1

vii. 367/40/1

viii. 367/46/1

ix. 367/47/1

Baseline Survey Information

11.3.7. The sources of baseline information are included at **Table 11-8.**

Table 11-8: Baseline Information

Baseline Topic	Data Source	Date
Automatic Traffic Count Surveys	PCC Traffic Information Consultancy	12/09/2025
Manual Classified Count Surveys	PCC Traffic Information Consultancy	09/12/2025
Highway Search	Monmouthshire County Council Torfaen County Borough Council	January 2025 – January 2026
Personal Injury Collision Data	Crashmap Database	15/05/2026
Topographical Survey	Anthony Brookes Surveys Ltd	June 2025

Baseline Traffic Flows

11.3.8. **Table 11-9** sets out the recorded baseline two-way flows for the links assessed as part of this ES chapter. Whilst the surveys were undertaken in 2025, for the purpose of this assessment it is assumed to provide a 2026 base year.

Table 11-9: 2026 Baseline AADT Flows

Highway Link	2026 Baseline Two-Way AADT	Baseline Number of HGV (%)
Link 1 - A4042 South of Turnpike Roundabout	28619	723 (2.5%)
Link 2- B4236 Caerleon Road North of Grange Hospital Roundabout	13238	227 (1.7%)
Link 3 - B4236 Caerleon Road South of Grange Hospital Roundabout	8870	215 (2.4%)
Link 4 - B4236 Caerleon Road West of Site Access 1	7551	154 (2.0%)
Link 5 - Unnamed Road North of Site Access 2	103	5 (5.3%)
Link 6 - Unnamed Road South of Site Access 3	284	5 (1.8%)

Highway Link	2026 Baseline Two-Way AADT	Baseline Number of HGV (%)
Link 7 - Unnamed Road North of Site Access 6	62	4 (5.7%)
Link 8 - Candwr Road North of Site Access 5	560	12 (2.2%)

NOTE: HGVs included within total traffic flow. Link flows are two-way.

Personal Injury Collisions

11.3.9. Personal Injury Collision (PIC) data has been obtained from the online crashmap.com database for the most recent three years of available records from 2022 to 2024. The selected time period of three years is considered to be appropriate on the basis that the study area is not considered to be a high collision area. The study area includes the B4236 Caerleon Road up to and including the Turnpike Roundabout and Site Access 1 as well as 250 metres either side of each proposed access point.

11.3.10. The data confirms that two slight incidents and two serious incidents were recorded within the study area in the most recent three year period. No PIC incidents were recorded on any of the unnamed roads serving the Site during the study period. A summary of the data is provided below, with the full reports contained within the **draft oCTMP**.

11.3.11. The first incident occurred at the A4042 Turnpike Roundabout on the 6th June 2022 at 15:45. The conditions were light, dry, and fine without high winds. The incident involved one car and one motorcycle and resulted in one slight injury.

11.3.12. The second incident occurred at the A4042 Turnpike Roundabout on the 20th November 2022 at 11:30. The conditions were light, wet, and without high winds. The incident involved one motorcycle and one car and resulted in one serious injury.

11.3.13. The third incident occurred on the B4236 Caerleon Road approximately 60 metres south of the junction with Edgehill on the 2nd February 2024 at 16:20. The conditions were light, dry, and fine without high winds. This incident involved two cars and resulted in one slight injury.

11.3.14. The fourth incident occurred at the A4042 Turnpike Roundabout on the 27th June 2024 at 19:50. The conditions were light, dry, and fine without high winds. The incident involved one motorcycle and one car and resulted in one serious injury.

11.3.15. It is noted that three of the incidents occurred at the Turnpike Roundabout and involved motorcycles, which may suggest a localised pattern at this junction. However, given the low number of incidents recorded over the three-year study period and the absence of a broader pattern elsewhere within the study area, this is not considered to indicate an existing highway safety issue associated with the local highway network.

11.3.16. Data from the most recent five-year period shows that there are not any existing highway safety issues on the local highway network that would be exacerbated by the Proposed Development .

Future Baseline

11.3.17. It is noted that the construction of the Proposed Development could take 12 to 18 months. However, for the purpose of this assessment no growth to the baseline traffic flows has been assumed on the basis that the magnitude of change in construction traffic is calculated based upon the percentage impact against the baseline flows. This therefore provides a robust assessment as any growth added to the baseline flows would increase the base flow and therefore reduce the overall percentage impact of the proposals.

11.4. Assessment of Likely Significant Effects

Effects During Construction

11.4.1. This section summarises the potential effects associated with the movement of construction traffic.

11.4.2. The development comprises the operation and maintenance of a ground mounted solar photovoltaic (PV) farm which will produce approximately 46 Mega Watts (MW). The proposal is seeking an operational lifetime of 40 years.

11.4.3. Eight access points are proposed to serve the Proposed Development for the construction and operational purposes. All accesses are shown to be suitable for their proposed uses, with improvements provided where necessary.

11.4.4. The proposed route for all construction traffic associated with the Proposed Development is summarised below:

i. Exit the M4 at Junction 25A turning north onto the A4042.

ii. Follow the A4042 north for approximately five kilometres.

iii. At the Turnpike Roundabout turn right onto B4236 Caerleon Road following it southeast before turning left into the Site via Site Access 1.

11.4.5. The Applicant has confirmed the construction period will take approximately 12 to 18 months. HGV deliveries will be made to a primary construction compound served via Site Access 1. HGVs will decant their loads in the primary compound and smaller vehicles (anticipated at this stage to consist of tractors with trailers) will distribute plant and material around the Site or, to one of two secondary compounds as required. It has been assumed that a total of two tractor and trailers are required for every HGV delivery. There will also be a small number of construction movements associated with smaller vehicles such as the collection of skips for waste management, the transport of construction workers and sub-contractors.

11.4.6. A maximum of 150 construction workers are forecast to be on site during peak times during the construction period, but it is expected that the number of workers will be lower outside of peak times. It is anticipated at this stage that the non-local workforce will stay at local accommodation, and general operatives will be transported to the site by minibuses where possible to minimise the impact on the local highway network. Although lift sharing initiative will be implemented to reduce the number of car trips by workers, for this ES a 'wort case' scenario has been assessed which assumes workers will travel to the Site individually. This is considered a robust assessment as in reality the number of movements will be much lower.

11.4.7. The percentage change between the 2026 baseline traffic and the scenario inclusive of the forecast construction traffic at each of the links along the construction routes are summarised at **Table 11-10**.

11.4.8. The links that require further assessment based on the ISEP traffic guidelines "rule of thumb" are highlighted in bold in **Table 11-10.** This includes cases where there is a 10% increase on sensitive links and a 30% increase elsewhere.

Table 11-10: 2026 with development total traffic flows

Link	2026 Baseline Two-Way AADT	With Dev Total Traffic Flow	Dev. Total Traffic Flow (%age impact shown in square brackets)		Traffic Flow Magnitude of Change	
			Total Veh	HGVs	Total Veh	HGVs
Link 1 A4202 South of Turnpike Roundabout	28,619 (723 HGVs)	28,922 (725 HGVs)	302 [1.06%]	2 [0.32%]	Negligible	Negligible
Link 2 B4236 Caerleon Road North of Grange Hospital Roundabout	13,238 (227 HGVs)	13,541 (229 HGVs)	302 [2.28%]	2 [1.01%]	Negligible	Negligible
Link 3 B4236 Caerleon Road South of Grange Hospital Roundabout	8,870 (215 HGVs)	9,173 (217 HGVs)	302 [3.41%]	2 [1.07%]	Negligible	Negligible

Link	2026 Baseline Two-Way AADT	With Dev Total Traffic Flow	Dev. Total Traffic Flow (%age impact shown in square brackets)		Traffic Flow Magnitude of Change	
			Total Veh	HGVs	Total Veh	HGVs
Link 4 B4236 Caerleon Road West of Site Access 1	7,551 (154 HGVs)	7853 (156 HGVs)	302 [4%]	2 [1.49%]	Negligible	Negligible
Link 5 Unnamed Road North of Site Access 2	103 (5 HGVs)	154 (6 HGVs)	50 [48.85%]	0 [7.16%]	High	Low
Link 6 Unnamed Road North of Site Access 3	284 (5 HGVs)	336 (7 HGVs)	52 [18.27%]	2 [37.95%]	Medium	High
Link 7 Unnamed Road North of Site Access 6	62 (4 HGVs)	114 (5 HGVs)	51 [81.99%]	1 [33.25%]	High	High
Link 8 Candwr Road North of Site Access 5	560 (12 HGVs)	611 (13 HGVs)	51 [9.09%]	1 [7.56%]	Low	Low

NOTE: *HGVs included within total traffic flow. Link flows are two-way.*

Traffic Flow

11.4.9. Links 5 and 7 are considered to be subject to a high magnitude of change in traffic flows based upon the increase of total traffic flows of over 30%. Link 6 also has an increase in HGV flows of over 30%. With reference to the ISEP traffic guidelines and the 'rules of thumb' set out at paragraph 11.2.21, only links 5, 6 and 7 need to be taken forward for further assessment.

11.4.10. The sensitivity of link 5 is low. Therefore, the significance of effect is considered to be **moderate adverse (significant)** when the thresholds at **Table 11-3** are applied.

11.4.11. The sensitivity of link 6 is negligible. Therefore, the significance of effect is **negligible adverse (not significant)** when the thresholds at **Table 11-3** are applied.

11.4.12. The sensitivity of link 7 is medium. Therefore, the significance of effect is **major adverse (significant)** when the thresholds at **Table 11-3** are applied.

11.4.13. It should be noted, as shown by the base flows in **Table 11-9**, links 5, 6 and 7 comprise quiet rural roads which are generally associated with low vehicle flows. Therefore, any increase in traffic would result in a high magnitude of change. However, this may not directly correspond with a significant effect in environmental terms.

Severance

11.4.14. Links 5 and 6 are subject to a low magnitude of change in severance based upon increase of vehicle traffic of between 30% and 60%. The sensitivity of link 5 is low. Therefore, the significance of effect is **minor adverse (not significant)** when the thresholds at **Table 11-3** are applied. The sensitivity of link 6 is negligible. Therefore, the significance of effect is **negligible adverse (not significant)** when the thresholds at **Table 11-3** are applied.

11.4.15. Link 7 is subject to a medium magnitude of change in severance based upon increase of vehicle traffic of between 60% and 90%. The sensitivity of the link is medium. Therefore, the significance of effect is **minor adverse (not significant)** when the thresholds at **Table 11-3** are applied.

Driver Delay

11.4.16. Links 5, 6 and 7 are subject to a high magnitude of change in driver delay based upon the increase of total flow and HGV traffic flows of over 30%.

11.4.17. The sensitivity of link 5 is low. Therefore, the significance of effect is **minor adverse (not significant)** when the thresholds at **Table 11-3** are applied.

11.4.18. The sensitivity of link 6 is negligible. Therefore, the significance of effect is **negligible adverse (not significant)** when the thresholds at **Table 11-3** are applied.

11.4.19. The sensitivity of link 7 is medium. Therefore, the significance of effect is **Major adverse (significant)** when the thresholds at **Table 11-3** are applied.

11.4.20. It should be noted, as shown by the base flows in **Table 11-9,** link 7 comprises a quiet rural road which is generally associated with low vehicle flows. Therefore, any increase in traffic would result in a high magnitude of change. However, this may not directly correspond with a significant effect in environmental terms.

Non-Motorised User Delay

11.4.21. The ISEP guidance suggests that non-motorised user delay should be based upon professional judgement. With reference to the change in HGV traffic flows because of the proposals, at an average of up to four two-way movements per day (i.e two arrivals and two departures), it is considered that there will be a low magnitude of change on non-motorised user delay.

11.4.22. The sensitivity of link 5 is low. Therefore, the significance of effect is **minor adverse (not significant)** when the thresholds at **Table 11-3** are applied.

11.4.23. The sensitivity of link 6 is negligible. Therefore, the significance of effect is **negligible adverse (not significant)** when the thresholds at **Table 11-3** are applied.

11.4.24. The sensitivity of link 7 is medium. Therefore, the significance of effect is **minor adverse (not significant)** when the thresholds at **Table 11-3** are applied.

Non-Motorised User Amenity

11.4.25. The ISEP traffic guidance suggests that a threshold for judging this would be '*where the traffic flows (or its lorry component) is halved or doubled*'. With reference to **Table 11-3,** total traffic flows or HGV movements will not increase by 100 percent across the course of 24 hours on any links and therefore it is considered that there will be a **negligible** effect on non-motorised user amenity and therefore **(not significant).**

Fear and Intimidation

11.4.26. The ISEP traffic guidance suggests that a threshold for judging this would be assessing the degree of hazard with reference to previously established thresholds.

11.4.27. None of links assessed would be associated with a step change in fear and intimidation because of construction traffic movements. Therefore, the significance of effect is **negligible adverse (not significant)** when the thresholds at **Table 11-3** are applied.

Road Safety

11.4.28. The collision records along each of the proposed construction traffic routes are summarised at **Section 11.3**. The records do not suggest that there is any inherent highway safety pattern or problem within the vicinity of any of the links.

11.4.29. Given that there is no existing highway safety pattern, the magnitude of change is negligible for all links.

11.4.30. The sensitivity of link 5 is low. Therefore, the significance of effect is **negligible adverse (not significant)** when the thresholds at **Table 11-3** are applied.

11.4.31. The sensitivity of link 6 is negligible. Therefore, the significance of effect is **negligible adverse (not significant)** when the thresholds at **Table 11-3** are applied.

11.4.32. The sensitivity of link 7 is medium. Therefore, the significance of effect is **negligible adverse (not significant)** when the thresholds at **Table 11-3** are applied.

Hazardous Loads / Large Loads

11.4.33. The Proposed Development is not forecast to be associated with any hazardous loads.

11.4.34. The ISEP traffic guidance suggests that where frequent abnormal load movements are anticipated that the impacts on fear and intimidation, driver delay etc should be considered.

11.4.35. As set out in the **draft oCTMP**, the construction of the Proposed Development will require Abnormal Indivisible Loads (AIL) for the onsite 132kv substation deliveries. The deliveries will be planned with an AIL route assessment and will be escorted and managed along the route from the port of entry into the UK and the Site.

11.4.36. The AILs will be so infrequent that the magnitude of change and significance in Access and traffic terms will be negligible. Appropriate management and mitigation measures will be put in place by the appointed haulier, in conjunction with the highway authorities and the Police, in due course.

11.4.37. It is important to note that the construction phase, and therefore its associated effects, will be temporary (short to medium term) and not permanent.

11.4.38. The Proposed Development will not be associated with frequent abnormal load movements and therefore there will be **No Significant** effects.

Effects during Operation

11.4.39. Due to the low level of vehicle movements during the operational phase at around four per month, the operational effects on Transport and Access has been scoped out of the assessment and is not considered further.

Effects during Decommissioning

11.4.40. The activities involved in the decommissioning process for the Proposed Development are not yet known in detail. It is anticipated that the Proposed Development will become fully operational in 2031 and is expected to be decommissioned in 2071, with an operational life of 40 years. There would be expected to be some traffic movements associated with the removal (and recycling, as appropriate) of material arising from removal. However, vehicle numbers are not expected to be any higher than those experienced during the construction period.

11.4.41. It is currently anticipated that the traffic movements associated with the decommissioning period will be largely the same as the construction period, noting that all materials delivered to the Site will be removed, and the Site will be returned to its current state. It is therefore anticipated that the forecast traffic associated with the decommissioning period will broadly reflect that associated with the construction period and the effects stated under 'Effects during Construction' for this chapter apply to the decommissioning period.

Summary of Significant of Effects (Before Mitigation)

11.4.42. A summary of the significance of effects on links 5, 6 and 7 is set out below.

Table 11-11: Significance of Effects (before Mitigation) – Link 5

Environmental Effect	Sensitivity of Receptor	Impact Magnitude	Nature of Impact (Permanent/ Temporary)	Effect and Significance
CONSTRUCTION				
Traffic Flow	Low	High	Temporary	**Moderate (Significant)**
Severance		Low		**Minor (Not Significant)**
Driver Delay		High		**Minor (Not Significant)**
Non motorised user delay		Low		**Minor (Not Significant)**
Non motorised user amenity		Negligible		**Negligible (Not Significant)**
Fear and Intimidation		Negligible		**Negligible (Not Significant)**
Road Safety		Negligible		**Negligible (Not Significant)**
Hazardous / large loads		Negligible		**Negligible (Not Significant)**
OPERATION				
All	Low	Negligible	Permanent	**Negligible (Not Significant)**
DECOMMISSIONING				
Traffic Flow	Low	High	Temporary	**Moderate (Significant)**
Severance		Low		**Minor (Not Significant)**
Driver Delay		High		**Minor (Not Significant)**

Environmental Effect	Sensitivity of Receptor	Impact Magnitude	Nature of Impact (Permanent/ Temporary)	Effect and Significance
Non motorised user delay		Low		**Minor (Not Significant)**
Non motorised user amenity		Negligible		**Negligible (Not Significant)**
Fear and Intimidation		Negligible		**Negligible (Not Significant)**
Road Safety		Negligible		**Negligible (Not Significant)**
Hazardous / large loads		Negligible		**Negligible (Not Significant)**

Table 11-12: Significance of Effects (before Mitigation) – Link 6

Environmental Effect	Sensitivity of Receptor	Impact Magnitude	Nature of Impact (Permanent/ Temporary)	Effect and Significance
CONSTRUCTION				
Traffic Flow	Negligible	High	Temporary	**Negligible (Not Significant)**
Severance		Low		**Negligible (Not Significant)**
Driver Delay		High		**Negligible (Not Significant)**
Non motorised user delay		Low		**Negligible (Not Significant)**
Non motorised user amenity		Negligible		**Negligible (Not Significant)**
Fear and Intimidation		Negligible		**Negligible (Not Significant)**
Road Safety		Negligible		**Negligible (Not Significant)**
Hazardous / large loads		Negligible		**Negligible (Not Significant)**
OPERATION				
All	Negligible	Negligible	Permanent	**Negligible (Not Significant)**
DECOMMISSIONING				

Environmental Effect	Sensitivity of Receptor	Impact Magnitude	Nature of Impact (Permanent/ Temporary)	Effect and Significance
Traffic Flow	Negligible	High	Temporary	**Negligible (Not Significant)**
Severance		Low		**Negligible (Not Significant)**
Driver Delay		High		**Negligible (Not Significant)**
Non motorised user delay		Low		**Negligible (Not Significant)**
Non motorised user amenity		Negligible		**Negligible (Not Significant)**
Fear and Intimidation		Negligible		**Negligible (Not Significant)**
Road Safety		Negligible		**Negligible (Not Significant)**
Hazardous / large loads		Negligible		**Negligible (Not Significant)**

Table 11-13: Significance of Effects (before Mitigation) – Link 7

Environmental Effect	Sensitivity of Receptor	Impact Magnitude	Nature of Impact (Permanent/ Temporary)	Effect and Significance
CONSTRUCTION				
Traffic Flow	Medium	High	Temporary	**Major (Significant)**
Severance		Medium		**Minor (Not significant)**
Driver Delay		High		**Major (Significant)**
Non motorised user delay		Low		**Minor (Not significant)**
Non motorised user amenity		Negligible		**Negligible (Not Significant)**
Fear and Intimidation		Negligible		**Negligible (Not Significant)**
Road Safety		Negligible		**Negligible (Not Significant)**
Hazardous / large loads		Negligible		**Negligible (Not Significant)**

Environmental Effect	Sensitivity of Receptor	Impact Magnitude	Nature of Impact (Permanent/ Temporary)	Effect and Significance
OPERATION				
All	Medium	Negligible	Permanent	**Negligible (Not Significant)**
DECOMMISSIONING				
Traffic Flow	Medium	High	Temporary	**Major (Significant)**
Severance		Medium		**Minor (Not significant)**
Driver Delay		High		**Major (Significant)**
Non motorised user delay		Low		**Minor (Not significant)**
Non motorised user amenity		Negligible		**Negligible (Not Significant)**
Fear and Intimidation		Negligible		**Negligible (Not Significant)**
Road Safety		Negligible		**Negligible (Not Significant)**
Hazardous / large loads		Negligible		**Negligible (Not Significant)**

11.5. Mitigation, Enhancement and Residual Effects

Construction Phase

Mitigation by Design

11.5.1. There is no specific mitigation by design that have been taken into as part of this Chapter of the ES.

Additional Mitigation.

11.5.2. In order to mitigate the likely significant effects associated with the construction of the Proposed Development, a CTMP will be implemented. A **draft Outline CTMP** is provided with the DNS application, with the final CTMP produced at the condition stage to be broadly in line with the oCTMP.

11.5.3. The aim of the CTMP is to minimise the effect of the construction phase on local residents and the highway network. It will contain a package of agreed mitigation

measures such as traffic management, environmental control measures, environmental obligations and the responsibility of various parties.

11.5.4. An outline Construction Environmental Management Plan is a supporting document produced as part of the DNS application. This document sets out the various mitigation measures relating factors such as dust, noise, vibration etc. which could be associated with the development.

11.5.5. A Decommissioning Traffic Management Plan (DTMP) dealing with management and mitigation of traffic during the decommissioning of the Proposed Development can be secured by condition.

11.5.6. A summary of the mitigation proposed for Transport and Access is included in **Table 11-14**.

Table 11-14: Mitigation

Ref	Measure to avoid, reduce or manage any adverse effects and/or to deliver beneficial effects	How measure would be secured	
		By Design	By Condition
1	Construction Traffic Management Plan		x
2	Decommissioning Traffic Management Plan		x

Enhancements

11.5.7. Enhancements to the PRoW network within and around the Site are also proposed, as shown on the proposed **Indicative Landscape Strategy** at **Figure 5.5,** shown as permissive path routes. These enhancements will improve connectivity between the existing PRoW network, providing additional recreational opportunities for people in the local area. New proposed sections of footpath include:

- Two sections within the southeastern corner of Parcel 12.
- Lengths running along the south and west of Parcel 7, running northeast and south of Parcel 6A and connecting to existing footpath southwest of Parcel 5 and northeast of Parcel 6B; and
- Length to the south of Parcel 3, connecting to existing footpaths to the northwest and southeast of Parcel 3.

Operational Phase

Mitigation by Design

11.5.8. Visibility splays at the Site access points will be maintained to no more than 600mm in height once the Proposed Development is operational. This can be secured by condition. No other mitigation is proposed once the Proposed Development is operational due to the low vehicular movements associated with the Proposed Development.

Residual Effects

Construction Phase

11.5.9. The impact significance of the construction phase is considered to be of '**Negligible to Major Significance'** across the links assessed on a typical construction day. The mitigation measures discussed above are forecast to reduce the residual impact of the construction phase on each of the links by one level of significance, resulting in overall **Negligible** to **Moderate Temporary Adverse Impact**.

11.5.10. A summary of the residual effects on links 5, 6 and 7 is set out below.

Table 11-15: Significance of Effects (following Mitigation) – Link 5

Environmental Effect	Sensitivity of Receptor	Impact Magnitude	Nature of Impact (Permanent/ Temporary)	Effect and Significance
CONSTRUCTION				
Traffic Flow	Low	High	Temporary	**Minor (Not Significant)**
Severance		Low		**Negligible (Not Significant)**
Driver Delay		High		**Negligible (Not Significant)**
Non motorised user delay		Low		**Negligible (Not Significant)**
Non motorised user amenity		Negligible		**Negligible (Not Significant)**
Fear and Intimidation		Negligible		**Negligible (Not Significant)**
Road Safety		Negligible		**Negligible (Not Significant)**
Hazardous / large loads		Negligible		**Negligible (Not Significant)**
OPERATION				

Environmental Effect	Sensitivity of Receptor	Impact Magnitude	Nature of Impact (Permanent/ Temporary)	Effect and Significance
All	Low	Negligible	Permanent	**Negligible (Not Significant)**
DECOMMISSIONING				
Traffic Flow	Low	High	Temporary	**Minor (Not Significant)**
Severance		Low		**Negligible (Not Significant)**
Driver Delay		High		**Negligible (Not Significant)**
Non motorised user delay		Low		**Negligible (Not Significant)**
Non motorised user amenity		Negligible		**Negligible (Not Significant)**
Fear and Intimidation		Negligible		**Negligible (Not Significant)**
Road Safety		Negligible		**Negligible (Not Significant)**
Hazardous / large loads		Negligible		**Negligible (Not Significant)**

Table 11-16: Significance of Effects (following Mitigation) – Link 6

Environmental Effect	Sensitivity of Receptor	Impact Magnitude	Nature of Impact (Permanent/ Temporary)	Effect and Significance
CONSTRUCTION				
Traffic Flow	Negligible	High	Temporary	**Negligible (Not Significant)**
Severance		Low		**Negligible (Not Significant)**
Driver Delay		High		**Negligible (Not Significant)**
Non motorised user delay		Low		**Negligible (Not Significant)**
Non motorised user amenity		Negligible		**Negligible (Not Significant)**
Fear and Intimidation		Negligible		**Negligible (Not Significant)**

Environmental Effect	Sensitivity of Receptor	Impact Magnitude	Nature of Impact (Permanent/ Temporary)	Effect and Significance
Road Safety		Negligible		**Negligible (Not Significant)**
Hazardous / large loads		Negligible		**Negligible (Not Significant)**
OPERATION				
All	Negligible	Negligible	Permanent	**Negligible (Not Significant)**
DECOMMISSIONING				
Traffic Flow	Negligible	High	Temporary	**Negligible (Not Significant)**
Severance		Low		**Negligible (Not Significant)**
Driver Delay		High		**Negligible (Not Significant)**
Non motorised user delay		Low		**Negligible (Not Significant)**
Non motorised user amenity		Negligible		**Negligible (Not Significant)**
Fear and Intimidation		Negligible		**Negligible (Not Significant)**
Road Safety		Negligible		**Negligible (Not Significant)**
Hazardous / large loads		Negligible		**Negligible (Not Significant)**

Table 11-17: Significance of Effects (following Mitigation) – Link 7

Environmental Effect	Sensitivity of Receptor	Impact Magnitude	Nature of Impact (Permanent/ Temporary)	Effect and Significance
CONSTRUCTION				
Traffic Flow	Medium	High	Temporary	**Moderate (Significant)**
Severance		Medium		**Negligible (Not significant)**
Driver Delay		High		**Moderate (Significant)**
Non motorised user delay		Low		**Negligible (Not significant)**

Environmental Effect	Sensitivity of Receptor	Impact Magnitude	Nature of Impact (Permanent/ Temporary)	Effect and Significance
Non motorised user amenity		Negligible		**Negligible (Not Significant)**
Fear and Intimidation		Negligible		**Negligible (Not Significant)**
Road Safety		Negligible		**Negligible (Not Significant)**
Hazardous / large loads		Negligible		**Negligible (Not Significant)**
OPERATION				
All	Medium	Negligible	Permanent	**Negligible (Not Significant)**
DECOMMISSIONING				
Traffic Flow	Medium	High	Temporary	**Moderate (Significant)**
Severance		Medium		**Negligible (Not significant)**
Driver Delay		High		**Moderate (Significant)**
Non motorised user delay		Low		**Negligible (Not significant)**
Non motorised user amenity		Negligible		**Negligible (Not Significant)**
Fear and Intimidation		Negligible		**Negligible (Not Significant)**
Road Safety		Negligible		**Negligible (Not Significant)**
Hazardous / large loads		Negligible		**Negligible (Not Significant)**

11.5.11. It should be noted, as shown by the base flows in **Table 11-9,** many of the unnamed roads that have been assessed comprise quiet rural roads which are generally associated with low vehicle flows. Therefore, any increase in traffic would result in a high magnitude of change. However, this may not directly correspond with a significant effect in environmental terms.

Operational Phase

11.5.12. There are not considered to be any residual effect as a result of the operational phase.

Decommissioning Phase

11.5.13. The impact significance during decommissioning is considered to be similar to that experienced during the construction phase.

11.6. Cumulative Effects

Cumulative Effects

11.6.1. As set out at paragraphs 11.2.11 – 11.2.15, there are not considered to be any cumulative effects arising as a result of the proposed development and other cumulative sites. Therefore, no significant cumulative residual effects are identified between the Proposed Development and any other relevant cumulative scheme.

In-Combination Effects

11.6.2. In-combination effects related to Transport and Access effects and the effects of other environmental disciplines for the Proposed Development are not expected to be greater than that provided for each individual environmental discipline considered in isolation. Where the highest and most direct effects from other topics are predicted, the overall magnitude of in-combination effects would not be expected to increase as a result of concurrent Transport and Access effects.

11.7. Summary

Introduction

11.7.1. This Chapter assesses the potential likely significant effects of the Proposed Development on vehicular traffic flows, severance, driver delay, non-motorised user delay, non-motorised amenity, road safety, fear and intimidation, and hazardous/large loads.

11.7.2. This chapter has been prepared alongside a supporting **draft oCTMP**.

Baseline Conditions

11.7.3. The Proposed Development is centred approximately 1.5 kilometres north of Ponthir, three kilometres east of Cwmbran and six kilometres northeast of Newport. Access to the Site during the construction and operational phases is anticipated to be provided from the B4236 Caerleon Road, Candwr Road and various Unnamed Road surrounding the Site.

11.7.4. Data from the most recent three-year period shows that there are not any existing highway safety issues on the local highway network that would be exacerbated by the Proposed Development .

Likely Significant Effects

11.7.5. Impact Magnitudes have been defined for the construction phase with regard to the IEMA 'Environmental Assessment of Traffic and Movement', which states that a significant environmental impact may occur when traffic flows (or its HGV component) increase by 30% (or 10% where a link is of high sensitivity significance).

Construction

11.7.6. The impact of the construction phase traffic is generally considered to be of **Negligible** to **Major** significance. On links 5 and 7 there are significant effects relating to Traffic Flows and Driver Delay. There will therefore be a direct, temporary, short-term moderate adverse residual effect during the construction phase. However, there is a low baseline number of total traffic and HGVs using the link which affects the percentage increase in vehicle flow and magnitude of change.

Operation

11.7.7. Once operational, all assessed links will be subject to a negligible magnitude of change based on the increase in traffic flows of less than 5% and a negligible magnitude of change based on there being no HGV traffic. The sensitivity of the links are negligible to medium. During the operational phase there will therefore be no direct, long-term, negative effects.

Decommissioning

11.7.8. The impact of the decommissioning phase traffic is generally considered to be of Negligible to Moderate significance. On links 5 and 7 there are significant effects relating to Traffic flows and Driver Delay. There will therefore be a direct, temporary, short-term moderate adverse residual effect during the construction phase. However, there is a low baseline number of total traffic and HGVs using the link which affects the percentage increase in vehicle flow and magnitude of change.

Mitigation, Enhancement, Residual Effects

11.7.9. A Construction Traffic Management Plan (CTMP) will be implemented during the construction phase. The aim of the CTMP is to minimise the effect of the construction phase on local residents and the highway network. It will contain a package of agreed mitigation measures such as traffic management, environmental control measures, environmental obligations and the responsibility of various parties. It is anticipated that the CTMP will be secured via condition.

11.7.10. A Decommissioning Traffic Management Plan (DTMP) dealing with management and mitigation of traffic during the decommissioning of the Proposed Development can be secured by condition.

11.7.11. The mitigation measures are forecast to reduce the residual impact of the construction phase on each of the links by one level of significance.

11.7.12. Enhancements are provided through new permissive paths being installed, through the Site that will be in place for the 40 year lifetime of the Proposed Development as indicated on the **Indicative Site Layout** (**Figure 4.1**).

Cumulative Effects

11.7.13. There are not considered to be any cumulative effects.

Conclusion

11.7.14. It is concluded that the proposed package of mitigation measures will ensure that the Proposed Development is acceptable and that there will be **no (adverse) significant effects**.

11.7.15. There are therefore no Transport or Access reasons which should prevent the Proposed Development .

11.7.16. **Table 11-14** provides a summary of effects, mitigation and residual effects.

Table 11-18: Summary of Effects, Mitigation and Residual Effects

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Construction								
Link 5 - Unnamed Road North of Site Access 2	Traffic Flows	Temporary / Direct	Low	High	Local	Moderate Adverse **(Significant)**	Provision of a CTMP	Minor Adverse **(Not Significant)**
	Severance			Low		Minor Adverse **(Not Significant)**		Negligible Adverse **(Not Significant)**
	Driver Dealy			High		Minor Adverse **(Not Significant)**		Negligible Adverse **(Not Significant)**
	Non-Motorised User Delay			Low		Minor Adverse **(Not Significant)**		Negligible Adverse **(Not Significant)**
	Non-Motorised			Negligible		Negligible Adverse		Negligible Adverse

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
	User Amenity					**(Not Significant)**		**(Not Significant)**
	Fear and Intimidation			Negligible		Negligible Adverse **(Not Significant)**		Negligible Adverse **(Not Significant)**
	Road Safety			Negligible		Negligible Adverse **(Not Significant)**		Negligible Adverse **(Not Significant)**
	Hazardous and Large Loads			Negligible		Negligible Adverse **(Not Significant)**		Negligible Adverse **(Not Significant)**
Link 6 - Unnamed Road South of Site Access 3	Vehicular Traffic Flows	Temporary / Direct	Negligible	High	Local	Negligible **(Not Significant)**	Provision of a CTMP	Negligible **(Not Significant)**
	Severance			Low		Negligible **(Not Significant)**		Negligible **(Not Significant)**

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
	Driver Dealy			High		Negligible **(Not Significant)**		Negligible **(Not Significant)**
	Non-Motorised User Delay			Low		Negligible **(Not Significant)**		Negligible **(Not Significant)**
	Non-Motorised User Amenity			Negligible		Negligible **(Not Significant)**		Negligible **(Not Significant)**
	Fear and Intimidation			Negligible		Negligible **(Not Significant)**		Negligible **(Not Significant)**
	Road Safety			Negligible		Negligible **(Not Significant)**		Negligible **(Not Significant)**
	Hazardous and Large Loads			Negligible		Negligible **(Not Significant)**		Negligible **(Not Significant)**

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Link 7 - Unnamed Road North of Site Access 6	Vehicular Traffic Flows	Temporary / Direct	Medium	High	Local	Major **(Significant)**	Provision of a CTMP	Moderate **(Significant)**
	Severance			Medium		Minor **(Not significant)**		Negligible **(Not significant)**
	Driver Dealy			High		Major **(Significant)**		Moderate **(Significant)**
	Non-Motorised User Delay			Low		Minor **(Not significant)**		Negligible **(Not significant)**
	Non-Motorised User Amenity			Negligible		Negligible **(Not Significant)**		Negligible **(Not Significant)**
	Fear and Intimidation			Negligible		Negligible **(Not Significant)**		Negligible **(Not Significant)**
	Road Safety			Negligible		Negligible		Negligible

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
						(Not Significant)		**(Not Significant)**
	Hazardous and Large Loads			Negligible		Negligible **(Not Significant)**		Negligible **(Not Significant)**
Operation								
All	Vehicular Traffic Flows	Permanent / Direct	Various	Negligible	Local, Borough/ District	Negligible	**n/a**	**Negligible Adverse (not significant)**
	Road Safety			Negligible		Negligible		
	Severance			Negligible		Negligible		
	Driver Delay			Negligible		Negligible		
	Non-Motorised User Delay			Negligible		Negligible		
	Non-Motorised			Negligible		Negligible		

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
	User Amenity							
	Fear and Intimidation			Negligible		Negligible		
	Hazardous and Large Loads			Negligible		Negligible		
Decommissioning								
Link 5 – Unnamed Road North of Site Access 2	Traffic Flows	Temporary / Direct	Low	High	Local	Moderate Adverse **(Significant)**	Provision of a DTMP	Minor Adverse **(Not Significant)**
	Severance			Low		Minor Adverse **(Not Significant)**		Negligible Adverse **(Not Significant)**
	Driver Dealy			High		Minor Adverse **(Not Significant)**		Negligible Adverse **(Not Significant)**

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
	Non-Motorised User Delay			Low		Minor Adverse **(Not Significant)**		Negligible Adverse **(Not Significant)**
	Non-Motorised User Amenity			Negligible		Negligible Adverse **(Not Significant)**		Negligible Adverse **(Not Significant)**
	Fear and Intimidation			Negligible		Negligible Adverse **(Not Significant)**		Negligible Adverse **(Not Significant)**
	Road Safety			Negligible		Negligible Adverse **(Not Significant)**		Negligible Adverse **(Not Significant)**
	Hazardous and Large Loads			Negligible		Negligible Adverse **(Not Significant)**		Negligible Adverse **(Not Significant)**

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Link 6 – Unnamed Road South of Site Access 3	Vehicular Traffic Flows	Temporary / Direct	Negligible	High	Local	Negligible **(Not Significant)**	Provision of a DTMP	Negligible **(Not Significant)**
	Severance			Low		Negligible **(Not Significant)**		Negligible **(Not Significant)**
	Driver Dealy			High		Negligible **(Not Significant)**		Negligible **(Not Significant)**
	Non-Motorised User Delay			Low		Negligible **(Not Significant)**		Negligible **(Not Significant)**
	Non-Motorised User Amenity			Negligible		Negligible **(Not Significant)**		Negligible **(Not Significant)**
	Fear and Intimidation			Negligible		Negligible **(Not Significant)**		Negligible **(Not Significant)**
	Road Safety			Negligible		Negligible		Negligible

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
						(Not Significant)		**(Not Significant)**
	Hazardous and Large Loads			Negligible		Negligible **(Not Significant)**		Negligible **(Not Significant)**
Link 7 – Unnamed Road North of Site Access 6	Vehicular Traffic Flows	Temporary / Direct	Medium	High	Local	Major **(Significant)**	Provision of a CTMP	Moderate **(Significant)**
	Severance			Medium		Minor **(Not significant)**		Negligible **(Not significant)**
	Driver Dealy			High		Major **(Significant)**		Moderate **(Significant)**
	Non-Motorised User Delay			Low		Minor **(Not significant)**		Negligible **(Not significant)**
	Non-Motorised User Amenity			Negligible		Negligible **(Not Significant)**		Negligible **(Not Significant)**

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
	Fear and Intimidation			Negligible		Negligible **(Not Significant)**		Negligible **(Not Significant)**
	Road Safety			Negligible		Negligible **(Not Significant)**		Negligible **(Not Significant)**
	Hazardous and Large Loads			Negligible		Negligible **(Not Significant)**		Negligible **(Not Significant)**
Cumulative Effects								
Cumulative Effects								
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
In-Combination Effects								
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a