VOLUME 5: CHAPTER 9: TRAFFIC AND TRANSPORT – ALTERNATIVE ALIGNMENT

Figures (Volume 2 of this EIA Report)

The relevant figures for this Chapter are contained within the Appendices listed below.

Appendices (Volume 4 of this EIA Report)

Appendix V1-11.1: Transport Assessment

Appendix V1-11.2: Draft Outdoor Access Management Plan

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9. TRAFFIC AND TRANSPORT – ALTERNATIVE ALIGNMENT

9.1 Executive Summary

9.1.1 A review of the transport and access issues associated with the Proposed Development with the Alternative Alignment (hereafter referred to as the 'Alternative Alignment') has been undertaken.

9.1.2 As set out in **Volume 5: Chapter 1: Introduction - Alternative Alignment**, the Alternative Alignment takes a slightly more northerly and longer route than that of the Proposed Alignment to avoid the proposed Melvich Wind Energy Hub. The assumed delivery route of all construction materials and components and new and upgrade of existing bellmouths, as described in **Section 3.9** of **Volume 1: Chapter 3: The Proposed Development**, and would be relevant to the Alternative Alignment. The length of new temporary and permanent access tracks, to access individual tower locations, however, would be longer and less existing track would require upgrade.

9.1.3 The assessment considers the direct effects during construction of the Alternative Alignment on increased traffic flows in the surrounding study area, including upon local road users and local residents. Where certain criteria are met in accordance with best practice guidance, a review of the effects on severance, driver delay, pedestrian delay, pedestrian amenity, fear and intimidation and accidents / road safety have been evaluated. The operational phase of the Alternative Alignment would not have any significant effects on the public road network as a result of the low levels of traffic that are forecast and was scoped out of the assessment.

9.1.4 An assessment of average daily development trips is considered an appropriate method of assessing the impact of the Alternative Alignment, as this will account for peaks and troughs during the construction programme. As was the case for the Proposed Alignment, the Alternative Alignment would lead to a temporary increase in traffic volumes on the road network within the study area during the construction phase. However, no link capacity issues are expected on any of the roads assessed due to the additional movements associated with the Alternative Alignment. The effects of construction traffic are temporary in nature and are transitory.

9.1.5 The assessment identified a significant effect could be expected on Scottish Hill Track 344 and Core Path SU19.03 by track users, and Kirkton Road users, during the construction phase. To reduce effects to not significant levels, a series of mitigation measures and management plans have been proposed to help mitigate and offset impacts during the construction phase. These include the implementation of a Construction Traffic Management Plan, Outdoor Access Management Plan and Staff Travel Plan.

9.1.6 As was the case for the Proposed Alignment, the assessment confirms the predicted residual effects (i.e. after the implementation of mitigation) would be minor in nature and they would not be significant. There would be no long-term detrimental transport or access issues associated with the construction phase of the Alternative Alignment.

9.2 Introduction

9.2.1 This Chapter considers the likely significant effects, including cumulative effects, of the Proposed Development with the Alternative Alignment on transport and access matters during construction.

9.2.2 The specific objectives of the Chapter are to:

- describe the existing access network and transport baseline;
- describe the assessment methodology and significance criteria used in completing the impact assessment;
- describe the potential effects, including direct, indirect and any potential cumulative effects;
- describe the mitigation measures proposed to address likely significant effects; and
- assess the residual effects remaining following the implementation of mitigation.

9.2.3 An overview of the effects of the traffic movements has been considered in accordance with the Institute of Environmental Management and Assessment (IEMA) Environmental Assessment of Traffic and Movement (2023)[1]. The document is referred to as the IEMA Guidelines in this Chapter.

9.2.4 The Proposed Development with the Proposed Alignment is assessed in **Volume 1: Chapter 11: Traffic and Transport**. Where relevant, this Chapter refers to **Volume 1: Chapter 11** and associated appendices where the text applies to both the Proposed Alignment and Alternative Alignment. This includes details provided in **Volume 4: Appendix V1-11.1** that contains the Transport Assessment (TA) of the Proposed Development with the Proposed Alignment. The traffic generation numbers set out in Section 9.8 of this Chapter, for the Alternative Alignment, have been estimated as per the methodology set out in the TA. **Volume 4: Appendix V1-11.2** contains the Outdoor Access Management Plan (OAMP), applicable to both the Proposed Alignment and Alternative Alignment. This is referenced in the body of the text, where relevant.

Statement of Qualifications

9.2.5 The assessment was undertaken by Pell Frischmann Consultants Limited. A table presenting relevant qualifications and experience of key staff involved in the preparation of this Chapter is included in **Volume 4: Appendix V1-5.1: EIA Team Details**.

9.3 Scope of Assessment

9.3.1 The assessment has fully considered the transport and access issues arising from the construction phase of the Alternative Alignment. This Chapter considers effects on the following:

- direct effects during construction on traffic flows in the surrounding study area;
- direct effects upon local road users; and
- effects upon local residents due to an increase in construction traffic.

9.3.2 Where the effects meet the criteria set out in the IEMA Guidelines, a review of the effects on severance, driver delay, pedestrian delay, non-motorised user amenity, fear and intimidation and accidents / road safety has been undertaken.

9.3.3 The assessment is based on the Alternative Alignment as described in **Volume 5: Chapter 3: The Proposed Development - Alternative Alignment** and the Transport Assessment provided in **Volume 4: Appendix V1-11.1: Transport Assessment**.

Study Area

9.3.4 The study area encompasses the area over which all desk-based and field data were gathered to inform the assessment presented in this Chapter. The study area comprises the road links assessed as part of this assessment. These are listed below:

- The A9 between Georgemas and Scrabster;
- The A836 between Thurso and Strathy; and
- The A897 between the A836 and Connagill 275/132 kV substation.

9.4 Consultation and Scoping

9.4.1 Full details of the consultation process and responses are included in **Volume 1: Chapter 4: Scope and Consultation** and associated appendices.

[1] IEMA (2023), Environmental Assessment of Traffic and Movement, Institute of Environmental Management and Assessment. Available at: https://www.iema.net/resources/blogs/2023/07/12/iema-guidance-ea-of-traffic-and-movement/

9.4.2 Further details on consultation and scoping responses relevant to traffic and transport, which are common to both the Proposed and Alternative Alignments of the Proposed Development are summarised in **Table V1-11.1** of **Volume 1: Chapter 11: Traffic and Transport**.

Issues Scoped Out of Assessment

9.4.1 The issues scoped out of the assessment are the same as detailed within **Paragraph 11.4.2** of **Volume 1: Chapter 11: Traffic and Transport**.

9.5 Legislation, Policy and Guidance

9.5.1 This assessment has been undertaken with reference to relevant policy and guidance, which are set out in **Section 11.5** of **Volume 1: Chapter 11: Traffic and Transport**.

9.6 Methodology

Desk Study

9.6.1 The desk study included reviews and identification of the following:

- relevant transport policy;
- accident data;
- sensitive locations;
- any other traffic sensitive receptors in the area (core paths, routes, communities, etc);
- Ordnance Survey (OS) plans; and
- potential origin locations of construction staff and supply locations for construction material to inform extent of local area roads network to be included in the assessment.

Field Survey

9.6.2 Field surveys were also undertaken and comprised of a site visit in May 2024 to review the general study area.

Assessment of Effects

9.6.3 This assessment has been undertaken in accordance with IEMA Guidelines[1] and professional judgement. Further details are provided in **Section 11.6** of **Volume 1: Chapter 11: Traffic and Transport** and **Volume 4: Appendix V1-11.1: Transport Assessment**.

Limitations to the Assessment

9.6.4 A summary of the assessment limitations is set out in **Paragraphs 11.6.13 to 11.6.16** of **Volume 1: Chapter 11: Traffic and Transport,** which are applicable to the Alternative Alignment.

9.7 Baseline Conditions

9.7.1 Access to the Alternative Alignment would be taken from six locations on the public road network, as displayed on **Figure 2** within **Volume 4: Appendix V1-11.1: Transport Assessment**. These are:

- Junction A: Access would be taken from the A836 from the existing Strathy North Wind Farm access junction off the A836, leading south along an existing access track. The junction off the A836 and the existing access track were upgraded ahead of the construction of the Strathy North Wind Farm, as far as the Strathy North substation. The upgrade of the track is currently being extended for use during the construction of the consented Strathy South and Strathy Wood wind farms. No further works would be required to the junction or the existing access track to enable access for the Alternative Alignment;

- Junction B: Access would be taken from an existing access junction on the A836, located to the east of Strathy. The existing junction would be upgraded to suit construction traffic and a layout plan of the proposed junction upgrade is provided in **Annex A** of **Volume 4: Appendix V1-11.1**;
- Junction C: Access would be taken from an existing access junction on the A836, located to the west of Melvich. The existing junction would be upgraded to suit construction traffic and a layout plan of the proposed junction upgrade is provided in **Annex A** of **Volume 4: Appendix V1-11.1**;
- Junction D1 and D2: Access would be taken from A836 via the Kirkton Road. Two access junctions are proposed, using existing access points off Kirkton Road that are located in close proximity; and
- Junction E: Access to the terminal tower and cable sealing end (CSE) compound would be taken from the A897, via a new access junction located to the south of the existing Connagill 275/132 kV substation, see **Annex A** of **Volume 4: Appendix V1-11.1**.

9.7.2 To enable construction of the Alternative Alignment, existing private access tracks would be widened, and new permanent and temporary offroad access tracks would be constructed to enable access to the various tower locations, temporary diversions and CSE compound along the length of the Alternative Alignment.

9.7.3 To minimise the impact of construction traffic on the local road network, it is proposed that local quarry sources would be used. It is assumed that the aggregate quarries located off the A897 at Ackron are used.

9.7.4 Previous experience of projects located along the A836 suggests that The Highland Council (THC) would resist the use of the north – south access links of the A897 (Melvich – Helmsdale) and A836 between Lairg and Tongue (located to the west of the Alternative Alignment). As such, it is assumed that delivery of all materials and components for use at the Alternative Alignment, would be delivered from the east, via the A9 and A836 from Thurso.

Network Conditions: Active Travel Network

9.7.5 A review of Core Paths directly affected by the Alternative Alignment has been undertaken. Core Path SU19.03 (Kirkton – Upper Bighouse), as displayed on **Figure 11.1.1** in **Volume 4: Appendix V1-11.2: Draft Outdoor Access Management Plan,** is proposed to be used by traffic accessing the Alternative Alignment site from Kirkton Road.

9.7.6 The main existing access track to be utilised by the Alternative Alignment to the west of the Proposed Development (with the Alternative Alignment) site, passing to the east of the River Strathy and Strathy Forest, is featured within the guidebook 'Scottish Hill Tracks'. This is a joint publication between the Scottish Rights of Way and Access Society and The Scottish Mountaineering Trust. The track forms part of Scottish Hill Track 344: Strath Halladale, which travels between Trantlebeg and Strathy.

9.7.7 A review of the Sustrans cycle network plan of the United Kingdom indicates that the A836 is part of National Cycle Network 1 (NCN1) between Lairg and Thurso. There is however no dedicated cycle infrastructure on the road, other than directional signage.

Network Conditions: Vehicle Access

A9

9.7.8 The A9 is the main trunk road in the area and connects Polmont to Scrabster. The road is operated on behalf of Transport Scotland by BEAR Scotland. Within the study area, the road is subject to a 60 miles per hour (mph) speed limit in the main and typically varies between 7 metres (m) and 8 m in width.

A836

9.7.9 The A836 is a two-way single carriageway road which is a district distributor road that provides connections between Tain and Thurso by way of Lairg and Tongue. The road is maintained by THC and is generally of a good standard and typically varies between 6 m and 7 m in width, with a speed limit of 60 mph, with 30 mph restrictions within settlements.

9.7.10 The section of the A836 between Scrabster and the various Site access junctions is in good relative condition, as observed during the time of a site visit. There are sections to the west of the study area where sections of the road surfacing would benefit from re-dressing and areas of minor edge cracking. There are no posted weight limits on the road.

9.7.11 The A9 and A836 within the study area form part of the North Coast 500 (NC500) tourist route. This 830 km (516 mile) route is now a popular tourist sightseeing route around the northwest Highlands and Sutherland and has been responsible for an increase in traffic visiting the study area.

A897

9.7.12 The A897 provides local connections between the A836 to the east of Melvich and Helmsdale in Caithness. The road is predominantly single carriageway with passing places along its length. The section of A897 from Connagill 275/132 kV substation to the A836 has been subject to road widening works, although the use of passing places is still required. The A897 to the north of Ackron Quarry is two lanes, however the widened section does not reach the quarry access junction.

Kirkton Road

9.7.13 Kirkton Road is a minor single carriageway providing access to agricultural and residential properties. The road is single carriageway with passing places.

Network Conditions: Accident Review

9.7.14 Road traffic accident data for the five-year period commencing 01 January 2018 through to the 31 December 2022 was obtained from the online resource Crashmap[2] which uses data collected by the police about road traffic crashes occurring on British roads.

9.7.15 Nine accidents were recorded on the A836 between the Proposed Development (with the Alternative Alignment) site and Thurso. A further eight were noted on the A9. One slight accident was noted on the A897 and no accidents were recorded on Kirkton Road. Further details of the accidents are provided in **Volume 4: Appendix V1-11.1: Transport Assessment**. Based on the information available, it has been established that there are no specific road safety issues within the immediate vicinity of the Alternative Alignment that currently require addressing or would be exacerbated by the construction of the Alternative Alignment.

Existing Traffic Conditions

9.7.16 Traffic data used in the assessment has been sourced from the following sources:

- Transport Scotland (TS) database[3];
- Department for Transport (DfT) Traffic Statistics database[4]; and
- Ackron Wind Farm planning submission documents[5].

[2] CrashMap: www.crashmap.co.uk
[3] https://ts.drakewell.com/
[4] https://roadtraffic.dft.gov.uk/
[5] https://projects.statkraft.co.uk/Ackron-windfarm/project-documents/

9.7.17 The locations of the count points on the A836, A897 and the A9 are shown on **Figure 5** within **Volume 4: Appendix V1-11.1: Transport Assessment**.

9.7.18 The traffic count data allowed the traffic flows to be split into vehicle classes and the data has been summarised into cars / light goods vehicles (LGV) and heavy goods vehicles (HGVs) (i.e. all goods vehicles >3.5 tonnes gross maximum weight). The baseline data for 2024 is illustrated in **Table V5-9.1**.

Table V5-9.1: 2024 Existing Traffic Conditions (Average Daily Two-Way Flows)

Site Ref. No.	Survey Location	Car / LGV	HGV	Total
1	A9 north of Georgemas Junction	3,077	436	3,512
2	A9 Thurso	2,908	136	3,044
3	A836 near Forss	2,286	31	2318
4	A836 near Strathy	623	20	643
5	A897	847	251	1,098

Future Baseline

9.7.19 Construction of the Alternative Alignment is expected to commence in 2026, if consent is granted. Construction is anticipated to take approximately 21 months.

9.7.20 To assess the likely effects during the construction and typical operational phases, base year flows were forecast by applying a National Road Traffic Forecasts (NRTF) low growth factor to the 2026 flows in **Table V5-9.2**. The NRTF low growth factor for 2024 to 2026 is 1.011.

Table V5-9.2: Future Baseline Flows (2026 Flows)

Site Ref. No.	Survey Location	Car / LGV	HGV	Total
1	A9 north of Georgemas Junction	3,111	440	3,551
2	A9 Thurso	2,940	137	3,078
3	A836 near Forss	2,312	31	2,343
4	A836 near Strathy	630	20	650
5	A897	857	254	1,110

Please note minor variances due to rounding may occur.

9.7.21 It has been assumed for the purposes of this assessment that both Strathy South and Strathy Wood wind farms, as consented developments for which the grid connection that would be provided by the Proposed Development (with the Alternative Alignment) is required, would be constructed at the same time as the Alternative Alignment.

9.7.22 The traffic associated with Strathy Wood Wind Farm Grid Connection has also been included in the committed traffic flows. Whilst this scheme is not yet determined, it is essential to the Proposed Development and would be concurrent in traffic terms.

9.7.23 Their peak construction traffic has therefore been included in the baseline 2026 traffic flows. The Base + Committed Development traffic flows are summarised in **Table V5-9.3**.

Table V5-9.3: Future Baseline Flows (2026 Base + Committed Flows)

Site Ref. No.	Survey Location	Car / LGV	HGV	Total
1	A9 north of Georgemas Junction	3,221	471	3,692
2	A9 Thurso	3,050	168	3,219
3	A836 near Forss	2,422	62	2,484
4	A836 near Strathy	740	51	791
5	A897	857	254	1,110

Please note minor variances due to rounding may occur.

Summary of Sensitive Receptors

9.7.24 A summary of the sensitive receptors within the study area is presented in **Table V5-9.4**.

Table V5-9.4: Summary of Sensitive Receptors

Receptor	Sensitivity	Justification
A836 Users	**Medium**	Where the road is a local A or B class road capable of regular use by HGV traffic.
A897 Users	**Medium**	Where the road is a local A or B class road capable of regular use by HGV traffic.
Kirkton Road Users	**High**	Where the road is a minor rural road, not constructed to accommodate frequent use by HGV traffic.
A9 Road Users	**Low**	Where the road is a Trunk or A-class, constructed to accommodate significant HGV composition.
Thurso Residents	**High**	Where a location is a large rural settlement containing a high number of community and public services and facilities.
Reay Residents	**Medium**	Intermediate rural settlement with some community facilities.
Melvich Residents	**Medium**	Intermediate rural settlement with some community facilities.
Hill Track / Access Track / Core Path Users	**High**	Where the road is a minor rural road.
Residents living along the A9	**Low**	Where a location is a small rural settlement, few community or public facilities or services.
Residents living along the A836, Kirkton Road and A897	**Low**	Where a location is a small rural settlement, few community or public facilities or services.

9.7.25 Where a road passes through a location, users are considered subject to the highest level of sensitivity defined by either the road or location characteristics.

9.7.26 Based on the examples of sensitive areas (e.g., hospitals, churches, schools, historical buildings, tourist attractions etc.), as outlined in **Paragraph 11.6.7** of **Volume 1: Chapter 11: Traffic and Transport**, the

following areas are considered sensitive and will be subject to 'Rule 2' of the IEMA Guidelines[1] which requires a full assessment of effects if the locations are subject to an increase in 10% of traffic:

- Users of Kirkton Road;
- Thurso;
- Reay; and
- Melvich.

9.7.27 All other locations within the study area are subject to 'Rule 1' and are assessed if traffic flows (or HGV flows) on road links increase by more than 30%.

9.8 Assessment of Likely Significant Effects

9.8.1 This section considers the potential impacts and associated effect significance of the construction of the Alternative Alignment, based on the typical activities described in **Volume 5: Chapter 3: The Proposed Development – Alternative Alignment**.

Construction (and dismantling of the existing 132 kV OHL) Effects

9.8.2 Traffic generation for the Alternative Alignment, including ancillary works, has been estimated as per the methodology presented in **Volume 4: Appendix V1-11.1: Transport Assessment**. As the route is longer than the Proposed Development with the Proposed Alignment, the subsequent traffic generation is higher.

9.8.3 The construction profile for the Alternative Alignment is illustrated in **Table V5-9.5**.

Table V5-9.5: Construction Traffic Programme – Alternative Alignment

	Month																				
Element	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Site Set Up	50																				50
Site Compound	146																				146
General Deliveries	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44
Timber Extraction		8																			
Access Track Works	1143	1143	1143	1143	1143	1143	1143	1143													
Foundation Works			1283	1283	1283	1283	1283	1283													
Structures					8	8	8	8	8	8	8										
Line Installation							32	32	32	32	32	32	32								
Commissioning													88	88	88						
Removal of Old OHL																	50	50	50		
Removal of temporary access tracks																			1378	1379	1379
Completion															88						
Staff Movements	1200	1410	1680	2070	2400	2850	3030	3030	3030	3030	3030	3030	3030	2820	2400	1200	1200	1200	1200	1200	1200
Total Daily Car & LGV	*40*	*47*	*56*	*69*	*80*	*95*	*100*	*100*	*100*	*100*	*100*	*100*	*104*	*97*	*86*	*40*	*40*	*40*	*40*	*40*	*40*
Total Daily HGV	*46*	*40*	*82*	*82*	*83*	*83*	*84*	*84*	*3*	*3*	*3*	*48*	*3*	*1*	*1*	*1*	*3*	*3*	*49*	*47*	*54*
Total Daily Movements	*86*	*87*	*138*	*151*	*163*	*178*	*184*	*184*	*104*	*104*	*104*	*104*	*106*	*98*	*87*	*41*	*43*	*43*	*89*	*87*	*94*

9.8.4 The peak traffic flows indicate 100 car / LGV and 84 HGV two-way movements are predicted per day, at the peak of construction activity (Month 7).

9.8.5 The construction traffic was compared against the future baseline traffic to estimate the increase in traffic associated with the Alternative Alignment. **Table V5-9.6** illustrates the potential traffic impact of the peak month of construction activity.

Table V5-9.5: Traffic Impact Summary – Alternative Alignment

Site Ref. No.	Survey Location	Car / LGV	HGV	Total	Car / LGV % Increase	HGV % Increase	Total % Increase
1	A9 north of Georgemas	3,141	488	3,629	1.0%	10.9%	2.2%
2	A9 Thurso	3,031	185	3,216	3.1%	34.9%	4.5%
3	A836 near Forss	2,402	79	2,482	3.9%	151.8%	5.9%
4	A836 near Strathy	730	104	834	15.9%	413.0%	28.3%
5	A897	859	292	1,150	0.2%	15.0%	3.6%

Please note minor variances due to rounding may occur.

9.8.6 The total traffic movements are not predicted to increase by more than 28.3% across the whole study area network, with the highest increase occurring on the A836 near Strathy. The traffic impact on Kirkton Road would be higher, given the nature of the road and its likely traffic uses.

9.8.7 It should be noted that the construction phase is transitory in nature and the peak of construction activities is short lived, occurring over a relatively short timeframe when taking account of the whole construction programme.

9.8.8 In accordance with the IEMA Guidelines Rules 1 and 2 and based on the construction traffic data shown in **Table V5-9.6**, detailed assessments have been undertaken on the following receptors:

- Kirkton Road Users (High Sensitivity)
- A836 Users (Medium Sensitivity);
- A897 Users (Medium Sensitivity);
- Reay Residents (Medium Sensitivity);
- Melvich Residents (Medium Sensitivity); and
- Scottish Hill Track 344 / Core Path SU19.03 / Access Track Users (High Sensitivity).

9.8.9 The significance of the potential effects has been determined using the rules and thresholds detailed previously. **Table V5-9.7** summarises the significance on the receptors for the construction (and dismantling of the existing 132 kV OHL) phase.

Table V5-9.6: Overall Construction Effects – Alternative Alignment

Receptors	Severance	Driver Delay	Pedestrian Delay	Non-motorised User Amenity	Fear & Intimidation	Accidents & Safety
A836 Users	Slight	Slight	Slight	Slight	Slight	Slight
A897 Users	Slight	Slight	Slight	Slight	Slight	Slight
Kirkton Road Users	**Large**	Slight	Slight	**Large**	**Large**	Slight
Reay Residents	Slight	Slight	Slight	Slight	Slight	Slight
Melvich Residents	Slight	Slight	Slight	Slight	Slight	Slight
Scottish Hill Track 344 / Core Path SU19.03 Track Users	Slight	Slight	**Large**	**Large**	**Large**	Slight

9.8.10 The assessment of significance suggests that **Large** and **significant effects** could be expected on Scottish Hill Track 344 / Core Path SU19.03 track users and Kirkton Road users during the construction phase. As such, mitigation measures would be required.

9.9 Mitigation

Mitigation During Construction

9.9.1 Details of mitigation proposed during construction are provided in **Section 11.9** of **Volume 1: Chapter 11: Traffic and Transport** and **Volume 4: Appendix V1-11.2: Draft Outdoor Access Management Plan** and would be applicable to the Alternative Alignment.

Operational Phase

9.9.2 Whilst operational phase impacts have been scoped out of the assessment given the low levels of traffic that are forecast, best practice measures would be put in place. This would include ensuring site entrance roads are well maintained and monitored during the operational life of the Proposed Development. Regular maintenance would also be undertaken to keep the site access track drainage systems fully operational and to ensure there are no run-off issues onto the public road network.

9.10 Residual Effects

9.10.1 An evaluation of the potential effects of the increase in traffic on the study area roads used for construction traffic has been undertaken. The summary of this assessment is provided in **Table V5-9.8**.

9.10.2 The assessment confirms the predicted residual effects (i.e. after the implementation of mitigation) would be minor in nature and they would not be significant. The construction traffic effects are transitory in nature. There are no long-term detrimental transport or access issues associated with the construction phase of the Alternative Alignment.

Table V5-9.7: Summary of Residual Effects

Description of Effect	Significance of Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial / Adverse		Significance	Beneficial / Adverse
Construction & Dismantling					
Kirkton Road Users: Severance	Large	Adverse	CTMP and OAMP Measures and Staff Travel Plan	Slight	Adverse
Kirkton Road Users: Amenity	Large	Adverse	CTMP and OAMP Measures and Staff Travel Plan	Slight	Adverse
Kirkton Road Users: Fear & Intimidation	Large	Adverse	CTMP and OAMP Measures and Staff Travel Plan	Slight	Adverse
Scottish Hill Track 344 / Core Path SU19.03 / Track Users: Pedestrian Delay	Large	Adverse	CTMP and OAMP Measures and Staff Travel Plan	Slight	Adverse
Scottish Hill Track 344 / Core Path SU19.03 / Track Users: Amenity	Large	Adverse	CTMP and OAMP Measures and Staff Travel Plan.	Slight	Adverse
Scottish Hill Track 344 / Core Path SU19.03 / Track Users: Fear & Intimidation	Large	Adverse	CTMP and OAMP Measures and Staff Travel Plan.	Slight	Adverse

9.11 Cumulative Effects

9.11.1 The baseline traffic flows already include the committed developments of Strathy Wood and Strathy South wind farms, in line with accepted transport planning guidelines.

9.11.2 Only consented schemes are considered as committed developments and are included in the assessment of cumulative effects. A review of consented developments within the study area includes Spaceport Sutherland.

9.11.3 The operational phase traffic associated with Spaceport Sutherland has been obtained from the Transport Assessment within the Spaceport Sutherland EIA Report[6] produced in support of the planning application for that project. A typical launch event would result in 400 car and LGV movements and 4 HGV movements per day.

9.11.4 As these events are expected to occur on one day per month, it is not considered appropriate to include them as fully committed traffic as the high levels of traffic on launch days would mask the true impact of the construction phase associated with the Alternative Alignment.

9.11.5 There are no other significant, consented planning applications noted within the study area. The imposition of further committed development traffic into the baseline to undertake a cumulative assessment dilutes the potential traffic impact that the Proposed Development (with the Alternative Alignment) would have. The level of traffic generation associated with the Alternative Alignment is such that it, combined with the committed development and future proposed development traffic, would not impact on the road link capacity.

9.11.6 As part of the construction stage mitigation for the Alternative Alignment (as set out in **Section 9.9** of **Volume 1: Chapter 11: Traffic and Transport**), it is proposed that a Construction Traffic Management Plan (CTMP) is developed to include the wider impacts of any further projects in the area that are eventually consented and would have similar construction timescales to the Proposed Development. This would be agreed with THC and TS.

9.12 Summary and Conclusions

9.12.1 The Alternative Alignment would lead to a temporary increase in traffic volumes on the road network within the study area during the construction phase. Traffic volumes would fall outside the peak period of construction.

9.12.2 An assessment of average daily development trips is considered an appropriate method of assessing the impact of the Alternative Alignment as this will account for peaks and troughs during the construction (and dismantling of the existing 132 kV OHL) programme. The construction traffic would result in a temporary increase in traffic flows on the road network surrounding the Alternative Alignment.

9.12.3 No link capacity issues are expected on any of the roads assessed due to the additional movements associated with the Alternative Alignment. The effects of construction traffic are temporary in nature and are transitory.

9.12.4 The increase in traffic has been assessed as not significant in EIA terms following the application of a series of mitigation measures and management plans proposed to reduce the impacts of the traffic flows from the construction (and dismantling of the existing 132 kV OHL) phase of the Alternative Alignment.

[6] Spaceport Sutherland EIA Report (2020). Available at: https://wam.highland.gov.uk/wam/applicationDetails.do?keyVal=Q5CD2AIHKTF00&activeTab=summary