9 People and Communities, Effects on all Travellers

9.1 Introduction

9.1.1 This chapter presents the Environmental Impact Assessment (EIA) of the Effects on All Travellers for A9 Dualling Project 8 – Dalwhinnie to Crubenmore (Central Section). The Proposed Scheme under assessment is described in **Chapter 5**.

9.1.2 For ease of reference the term Non-Motorised Users (NMUs) has been used to describe pedestrians, cyclists and equestrians. This chapter also considers vehicle travellers including users of public transport.

9.1.3 Potential for impacts on the following has been considered:

- Journey length
- Amenity value
- Ease of access to the outdoors
- Views from the road
- Driver stress

9.1.4 In order to provide context to this EIA the following factors within the study area, generally relating to NMUs, have also been considered:

- Local access
- Parking provision
- Public transport services

9.1.5 In accordance with DMRB Interim Advice Note (IAN) 125/09, this chapter covers the 'vehicle travellers' and 'pedestrians, cyclists and equestrians' topics within DMRB Volume 11, Section 3, Part 8 (Effects on All Travellers). The updated IAN 125/15 recommends that Part 6 (Land Use), Part 8 (Pedestrians, Cyclists, Equestrians and Community Effects) and Part 9 (Vehicles) are combined into an assessment on 'People and Communities'.

9.1.6 In the absence of revised DMRB guidance setting out a combined methodology for People and Communities, the approach adopted retains the assessments in two separate chapters under the heading of 'People and Communities', Community and Private Assets (**Chapter 8**) and Effects on All Travellers (this chapter).

9.1.7 **Chapter 8** considers issues related to community severance and the potential impacts of the Proposed Scheme on access to residential and commercial land, community facilities, development, agricultural, forestry and sporting land.

9.1.8 The following drawings should be considered in relation to this chapter:

- **Baseline Plan Drawing 9.1, All Travellers – Overview**

- **Baseline Plan Drawing 9.2, All Travellers – Views from the Road**
- **Assessment Plan Drawing 9.3, All Travellers – Views from the Road, Proposed Scheme**
- **Assessment Plan Drawings 9.4-9.8, All Travellers - NMUs**

Non-Motorised Users (NMUs)

Land Reform (Scotland) Act 2003

9.1.9 Part 1 of The Land Reform (Scotland) Act 2003 came into effect in February 2005 and established statutory public rights of access to most land and inland water bodies for recreational and other purposes. This is based on responsible access and puts obligations on both the users and land owners.

9.1.10 The legislation also outlines duties for local authorities and national park authorities such as preparing Core Path plans and maintaining routes, keeping them free of obstructions and encroachment. Section 10 of the Act states it is the duty of Scottish Natural Heritage (SNH) to issue '*The Scottish Outdoor Access Code'* (SNH, 2005) which provides guidance on these access rights and responsibilities. It is also the duty of SNH to promote the Access Code and understanding of it.

A9 Dualling NMU Access Strategy

9.1.11 The Proposed Scheme has developed taking into consideration the '*A9 Dualling Programme Non-Motorised User (NMU) Access* Strategy' (Transport Scotland, 2016) which sets out various opportunities and constraints in relation to NMUs and A9 dualling.

9.1.12 As well as setting route-wide objectives, the NMU Access Strategy developed section specific opportunities to be considered throughout the design process. Central section opportunities relevant to the Proposed Scheme included the following:

- To provide improved bus stop infrastructure and NMU connections associated with the grade-separated junction proposed at Dalwhinnie

9.1.13 A separate project-specific access study considered a variety of access options, which informed the developing design of the Proposed Scheme and embedded mitigation, key to retaining continuity of NMU access across the A9 corridor. Subsequent consultation and engagement with stakeholders allowed the project team to fully consider the suitability of access proposals.

Vehicle Travellers

9.1.14 In terms of vehicle travellers, this chapter assesses the potential impacts of the Proposed Scheme on views from the road. This is defined as the extent to which travellers are exposed to the different types of scenery through which a route passes. The extent to which travellers can perceive the landscape through which they are passing through will vary with the relative level of the road in question and the surrounding landscape.

9.1.15 In addition to the ability of the traveller to see the view, the assessment takes into consideration the route type, landscape character and the special quality of the views experienced within the Cairngorms National Park (CNP).

Driver Stress

9.1.16 DMRB defines driver stress as "*…the adverse mental and physiological effects experienced by a driver traversing a road network*". There are many factors which can influence driver stress such as speed and flow, road layout, opportunities to overtake and frequency of junctions. Stress however is subjective, and the levels of stress for drivers will vary depending on factors including driving experience, knowledge of the route, temperament and health.

9.1.17 The main components therefore considered in the assessment of driver stress are: traffic flows, speed, and frustration.

9.2 Approach and Methods

9.2.1 This section firstly sets out the baseline data used in this chapter, then the methodology used to assess the potential impacts of the Proposed Scheme on NMUs; it then goes on to set out the methodology for vehicle travellers, assessing potential impacts on views from the road and driver stress.

9.2.2 This assessment considers both temporary (construction phase) and permanent (operational phase) impacts on NMUs and vehicle travellers. The impacts are based on the worst case scenario and therefore determine impacts at year 1 once the Proposed Scheme is operational. **Section 9.6** (Residual Impacts) outlines any potential impacts once mitigation has been taken into consideration at years 15-25, once vegetation has become established.

Baseline Conditions

9.2.3 Baseline data for NMUs and vehicle travellers has been collected through a combination of desk based studies, consultations and site visits:

Desk Based Assessment

- Review of the '*A9 Dualling Programme Strategic Environmental Assessment (SEA) Strategic Landscape Review'* (Transport Scotland, 2014)
- Review of online maps to identify NMU resources within the study area, including cycle paths, Core Paths, tourist walks and crossing points (CPs)
- Review of web-based tools including panoramic photographs and road traffic cameras to understand levels of screening provided by existing vegetation, earthworks and landform
- Web based search to identify key views and areas of scenic quality from the existing NMU network
- Review of three-dimensional visualisation model of the Proposed Scheme, produced by CH2M HILL Fairhurst Joint Venture (CFJV)
- Review of Regional and Local Landscape Character Areas

Consultation

9.2.4 The following consultations have been undertaken:

- Walking Group Consultation, 28 November 2014 (A9 Dualling programme wide) held at the Dewars Centre Perth. Attendees included; Scottish National Heritage (SNH), Visit Scotland,

The Highland Council (THC), Perth and Kinross Council (PKC), Cairngorms National Park Authority (CNPA), The Mountaineering Council of Scotland, Scottish Orienteering Association, Ramblers Scotland, Paths for All, Scottish Outdoor Access Network, National Access Forum, Perth and Kinross Access Forum, Cairngorms Access Forum and John Muir Trust

- Local Authority Access Officers meeting (THC and CNPA), 5 February 2015 (Central Section only)
- NMU Forum 26 May 2015 (A9 Dualling programme wide) held at the Dewars Centre, Perth. Attendees included; Visit Scotland, PKC, THC, CNPA, Cairngorms Access Forum, The Mountaineering Council of Scotland, Scottish Orienteering Association, Ramblers Scotland, Paths for All, Scottish Outdoor Access Network, John Muir Trust, Scotways, SNH, National Access Forum, Perth and Kinross Access Forum, Sustrans, Highland and Islands Transport Partnership (HITRANS), Tayside and Central Scotland Transport Partnership (TACTRAN), Highland Perthshire Cycling, ByCycle, Cycle Touring Club Scotland, Highland Cycle Campaign, Velocity Inverness, Inverness City Cycle Forum, Cycling Scotland, British Horse Society (BHS) and Sustainable & Active Travel Team
- NMU Forum 27 May 2016 (A9 Dualling programme wide) held at the Dewars Centre, Perth. Attended by Living Streets, PKC, Perth and Kinross Countryside Trust, THC, CNPA, Cairngorms Local Outdoor Access Forum, The Mountaineering Council of Scotland, Ramblers Scotland, Paths for All, Scottish Outdoor Access Network, John Muir Trust, Scotways, SNH, National Access Forum, Sustrans, HITRANS, TACTRAN, ByCycle, Cycle UK, Highland Cycle Campaign, Cycling Scotland, BHS, and Association of British Riding Schools
- NMU Drop in session 23 November 2016 (Central Section only)
- Accessibility Workshop 30 March 2017 (programme wide) held at Buchanan House, Glasgow. Attended by People Friendly Design (PFD) and Mobility and Access Community for Scotland (MACS)
- Accessibility Workshop 10 October 2017 (programme wide) held at Buchanan House, Glasgow. Attended by MACS

9.2.5 Further details on consultation can be found in **Chapter 7.**

Site Visits

9.2.6 The following site visits were undertaken by CFJV staff:

- To identify summer views from the road, September 2015
- To identify winter views from the road, February 2015
- To verify NMU facilities and amenity value, August 2016, November 2016 and May 2017
- Other ad hoc visits by CFJV staff

Non-Motorised Users (NMU)

9.2.7 Considering the requirements placed on landowners under the regulations of the Land Reform (Scotland) Act 2003 regarding maintenance and upkeep of public access areas, it has been considered that any existing NMU routes affected by the scheme should be maintained and improved, where possible, regardless of the level of use and the type of user. Where the type of user is identified within this assessment, this has been through information provided via the consultation events and site based observations noted above.

Study Area

9.2.8 The study area covers a 1km wide corridor, 500m either side of the existing A9 carriageway, as shown on **Drawing 9.1 (Volume 3)**. However, for the purpose of the baseline, a wider area for NMU routes between 1 and 3km was considered in order to fully understand NMU use and access around the Proposed Scheme extents. This study area has been defined using professional judgement.

Assessment Methodology

9.2.9 The assessment of the potential impacts of the Proposed Scheme on pedestrians, cyclists, and equestrians was undertaken with reference to DMRB Volume 11, Section 3, Part 8 (Highways Agency et. al. 1993).

9.2.10 The key impacts that have been assessed include:

- Journey length and accessibility – changes in journey length may be a result of realigning routes, diversions or even closures
- Amenity value – amenity is here defined as 'the relative pleasantness of the journey' in accordance with DMRB
- Ease of access to the outdoors

Sensitivity

9.2.11 Sensitivity is primarily determined based on the importance of the route rather than the level of use. Where an NMU route or community land is attributed to more than one category the highest sensitivity is applied. The criteria are defined in **Table 9-1** below.

Table 9-1: NMU Sensitivity Criteria

Sensitivity	Characteristics/ Types of Community Land
High	Vindicated rights of way Asserted rights of way Core Paths/ proposed Core Paths Access to and the amenity of nationally important community land (e.g. National Parks, Munros, National Nature Reserves)
Medium	Claimed rights of way National Cycle Routes Access to and the amenity of regionally important community land (e.g. Country Parks, forests, Corbetts and Grahams)
Low	Local routes/ other paths outwith above categories Access to and the amenity of locally important community land (e.g. local parks and playing fields)

9.2.12 **Chapter 8** defines community land as areas that provide an established public recreational resource, such as playing fields, country parks, waterways or areas identified as Open Space within Local Plans. As noted in **section 9.1,** the Land Reform (Scotland) Act 2003 establishes statutory rights of responsible access on and over most land, including inland water. It is therefore acknowledged that additional areas of privately owned land may be used informally by the community. Access to these features is assessed in this chapter under the heading of 'Access to Outdoor Areas'.

Changes in Journey Length and Accessibility - Methodology

9.2.13 Changes in journey length will most likely occur due to direct impacts such as closures, diversions and alterations introduced during the construction stages of the Proposed Scheme. It could also be the result of indirect impacts, such as increased traffic flows, leading NMUs to use an alternative route.

9.2.14 Where there is an anticipated change in journey length this is shown on **Drawings 9.4 to 9.8 (Volume 3)** as a Journey Length Assessment (JLA). The criteria used to determine the magnitude of impact to changes in journey length is described below in **Table 9-2**.

Table 9-2: Magnitude of Impact Criteria for Changes to NMU Journey Length

Magnitude	Characteristics
High	Greater than 500m closure or loss of NMU route. Alteration of a route to nationally important community land. Alteration to a route regularly used by vulnerable users.
Medium	Between 250 and 500m closure or loss of NMU route. Alteration of a route to regionally important community land
Low	Between 100 and 250m closure or loss of NMU route. Alteration of a route to locally important community land
Negligible/ No change	Less than 100m closure or loss of NMU route.

9.2.15 The matrix to determine the significance of impact on journey length is shown below in **Table 9-3**. The impact can be either beneficial or adverse.

Table 9-3: Significance of Impact on NMU Journey Length

Sensitivity / Magnitude	Low	Medium	High
High	Moderate	Moderate/ Substantial	Substantial
Medium	Slight/ Moderate	Moderate	Moderate/ Substantial
Low	Negligible/ Slight	Slight	Moderate
Negligible	Negligible	Negligible/ Slight	Slight

9.2.16 Significance is not absolute and should be defined for individual assets in relation to their context and location. A higher level of significance is generally attached to large-scale impacts and impacts on highly sensitive or sensitive receptors; therefore, moderate impacts on highly sensitive receptors can be more significant than substantial impacts on less sensitive receptors.

9.2.17 In the event of a Moderate/ Slight impact, whereby Moderate is considered significant and Slight is considered not significant, supporting text explains whether a particular impact is considered significant or not, based upon the local context of the individual receptor.

Changes in Amenity - Methodology

9.2.18 It is acknowledged that changes to the amenity of a journey are subjective; however, for the purpose of this assessment it is considered that, where NMUs would experience a change in traffic (increased flows) or road-related noise, visual impact and/ or air quality impact, there would be an impact on amenity, either beneficial or adverse.

9.2.19 Where existing NMU routes are accessed from existing at-grade crossing points, it is considered that there would be an improvement in NMU safety where replacement access is provided via dualled carriageway underpasses.

9.2.20 Therefore, potential changes in amenity were considered where:

- existing CPs for paths are affected by the Proposed Scheme
- noise and air quality would potentially increase or decrease
- the Proposed Scheme would be visible from existing paths/ community land

9.2.21 In line with DMRB guidance, the assessment of changes in amenity of NMU routes does not use sensitivity criteria and assessment matrices to determine significance. The significance of impact on amenity is determined using professional judgement, taking into consideration the magnitude of change in other factors such as views, air quality and noise levels. The assessment also includes consideration of amenity impacts on community land and outdoor community facilities.

9.2.22 The significance of impact criteria for change in amenity are described in **Table 9-4.** Significance can be either beneficial or adverse.

Table 9-4: Significance of Impact on NMU Amenity

Significance	Characteristics
Substantial	Where there is a substantial change in the existing view and/ or air quality and/ or a major change in noise levels and/ or substantial change in traffic flows resulting in change in safety.
Moderate	Where there is moderate or noticeable change in the existing view and/ or air quality and/ or a moderate change in noise levels and/ or moderate change in traffic flows resulting in change in safety.
Slight	Where there is slight or barely perceptible change in the existing view and/ or air quality and/ or a slight change in noise levels and/ or slight change in traffic flows resulting in change in safety.
Negligible/ No change	Very little or no discernible change from baseline conditions equating to a no-change situation.

9.2.23 The assessment of amenity impacts has been undertaken based on data provided in relation to:

- Predicted traffic flows
- Predicted noise levels at receptors representative of NMU routes
- Predicted air quality at receptors representative of NMU routes
- Predicted impacts on views from receptors representative of NMU routes

9.2.24 The raw data is provided in **Appendix 9.1,** found within **Volume 2** of this report.

Overall Impacts on NMU Routes (journey length and amenity)

9.2.25 To determine overall significance of impacts on NMU routes, the significance for changes in journey length and amenity were considered together, using professional judgement. Overall significance is determined based on these two factors having an equal weighting of importance. Where an impact is only identified for one factor, the degree of overall significance was reduced accordingly.

Potential Impacts on Access to the Outdoors

9.2.26 The objective of the outdoor access assessment was to determine any likely significant effects on access to the outdoors (Scottish Natural Heritage, 2013). This includes the ability to make use of an outdoor area or path and the ease with which access can be gained.

9.2.27 The assessment has been undertaken for outdoor areas and community land that can be accessed from NMU routes within the study area; these are identified in **section 9.3.** Potential

impacts on access to these areas are based on the potential impacts to the surrounding NMU network.

Vehicle Travellers - Views from the Road

9.2.28 DMRB defines 'view from the road' as the "*extent to which travellers, including drivers, are exposed to different types of scenery through which a route passes*". This assessment considers:

- Type of scenery or landscape through which the route passes, and which travellers may have wider views of
- The extent to which travellers may be able to view the scene and the duration of the view
- Quality of the landscape including the Special Qualities attributed to the CNP
- Presence of features of particular interest or prominence in the view and duration of visibility

Study Area

9.2.29 The study area for views from the road focuses on the views experienced from the existing A9 road corridor. The views considered extend across all visible features including the skyline, landform, landmark features, vegetation, residential buildings at Dalwhinnie and road, rail, and power infrastructure.

9.2.30 The extent to which travellers perceive the landscape varies with the relative level of the road, surrounding topography and vegetation. The categories used in assessing this include:

- No view – road in very deep cutting or contained by earth bunds, vegetation or adjacent structures
- Restricted view – road in frequent cuttings, or with deep cuttings across slopes, vegetation or adjacent structures blocking the view
- Intermittent view – road generally at-grade but with shallow cuttings, vegetation or structures at intervals
- Open view – road generally at-grade or on embankment with views extending over the wider landscape or only restricted by existing landscape features

9.2.31 DMRB Volume 11, Section 3, Part 9 requires consideration of *"any especially good or bad potential views along the route"*. The scenic quality of the views has been determined using the Special Landscape Quality Assessment within **Chapter 14** and professional judgement.

9.2.32 To assist with the assessment of the views from the road a review of the broad Landscape Character Areas has been undertaken. Details of Regional and Local Landscape Character Areas are provided in **Chapter 13.**

Views from the Road Impact Assessment

9.2.33 The impact assessment for views from the road is similar to the methodology used in **Chapter 14**, which is set out in accordance with '*Guidelines for Landscape and Visual Impact Assessment Third Edition' (*Landscape Institute and the Institute of Environmental Management and Assessment, 2013). The methodology provides guidance to assess the susceptibility and sensitivity to change, magnitude of visual change and significance of visual effect.

9.2.34 The potential impact on views from the road is assessed through comparison of the existing baseline scenario and views likely to be experienced by vehicle travellers using the Proposed Scheme. A three-dimensional visualisation model, produced by the CFJV, has been used to aid in the assessment of perceived changes in view. The extent of change has informed the assessment and professional judgement has been used to determine if the views will be adversely or beneficially affected.

9.2.35 It is important to note that vegetation establishment in areas with high altitude (and latitude), high rainfall and frequent low temperatures, such as is found in the Proposed Scheme, will be slow. For future assessment years, and as any additional mitigation, i.e. landscape planting, will likely not be effective at the year of opening, views from the road have been assessed during winter of year one and summer of years 15-25.

9.2.36 In the absence of specific assessment criteria from DMRB, **Table 9-5** below sets out general criteria in order to determine the impact significance in relation to views from the road.

Table 9-5: Impact Significance Criteria for Views from the Road

Impact	Typical Criteria
Substantial	A major deterioration or improvement in views from the road. Adverse: The project would cause major deterioration to views, or loss of views from the road where travellers currently experience extensive views of a high quality landscape, area of unique landscape character, or a varied sequence of prominent features of particular interest. Beneficial: The project would lead to a major improvement in a view where travellers would experience new extensive views of a high quality landscape, area of unique landscape character, or a varied sequence of prominent features of particular interest.
Moderate	A notable deterioration or improvement in views from the road. Adverse: The project would cause a notable deterioration to, or loss of views from the road where travellers currently experience partial/ intermittent views of a high quality landscape (or extensive views of a medium quality landscape), area of unique/ distinctive landscape character, or features of interest. Beneficial: The proposals would cause a notable improvement to views from the road where travellers would experience new partial/ intermittent views of a high quality landscape (or extensive views of a medium quality landscape), area of unique/ distinctive landscape character, or features of interest.
Slight	Minor deterioration or improvement in views from the road. Adverse: The project would cause limited deterioration to, or loss of views from the road where travellers currently experience views of low quality landscape/ unremarkable or degraded landscape character, or has heavily restricted views/ no view of surrounding landscape regardless of quality. Beneficial: The project would cause limited improvement to views from the road where the traveller would experience new views of unremarkable landscape, or has heavily restricted views/ no view of surrounding landscape regardless of quality.
Negligible/ No Change	No deterioration or improvement in views from the road.

Vehicle Travellers - Driver Stress

9.2.37 DMRB Volume 11, Section 3, Part 9 *Vehicle Travellers* outlines the various factors that contribute to driver stress. The three main components are frustration, presence of other vehicles and route uncertainty. **Table 9-6** and **Table 9-7** below set out the DMRB guidance for assigning the level of driver stress using the three point descriptive scale of Low, Moderate or High.

Table 9-6: Assessment guidance for driver stress for dual carriageway roads

Average peak hourly flow lane, in flow Units/1 hour	Average Journey Speed Km/hr		
	Under 60	60-80	Over 80
Under 1200	High	Moderate	Low
1200-1600	High	Moderate	Moderate
Over 1600	High	High	High

Table 9-7: Assessment guidance for driver stress for single carriageway roads

Average peak hourly flow lane, in flow Units/1 hour	Average Journey Speed Km/hr		
	Under 50	50-70	Over 70
Under 600	High	Moderate	Low
600-800	High	Moderate	Moderate
Over 800	High	High	High

9.2.38 To support the A9 Dualling Programme Case for Investment, Transport Scotland commissioned research which considered the impact of a lack of guaranteed overtaking opportunities on the A9 between Perth and Inverness on levels of driver frustration. This work concluded that there were a number of factors that contribute to driver frustration on this route, in particular:

- Not being able to drive at the desired speed
- Whether there is on-coming traffic
- Lack of overtaking opportunities
- The number of heavy goods vehicles (HGVs) in the platoon ahead

9.2.39 The research concluded that the presence of these conditions along the single carriageway sections of the A9 between Perth and Inverness is contributing to driver frustration. Based upon the scale and prevalence of these factors along the route, the recommendation was that all projects forming part of the A9 Dualling Programme should be assessed as having at least a moderate level of driver frustration in the baseline, with a moderate to high level in areas where there are longer stretches of single carriageway without opportunities to overtake.

Limitations to Assessment

9.2.40 The baseline data used for this assessment has been prepared by a review of publicly available information, site visits and consultations, as noted under **paragraphs 9.2.3** to **9.2.6.**

9.2.41 Limitations to this assessment are with regards to the numbers of NMUs utilising the identified access routes, as survey counts have not been undertaken; nonetheless it is considered that there is sufficient information to undertake a full DMRB Stage 3 assessment.

9.3 Baseline Conditions

9.3.1 The baseline conditions relating to NMUs and views from the road within the study area are described below. **Drawings 9.1 and 9.2 (Volume 3)** illustrate the baseline conditions for existing NMU provision and views from the road within the Proposed Scheme extents.

Non-Motorised Users (NMU)

9.3.2 **Paragraphs 9.3.5 to 9.3.15** outline the NMU resources that exist within the study area. Where existing NMU routes are mentioned, these comprise Core Paths, National Cycle Network (NCN) routes, or informal routes including tourist walks and hill walks (including Munro walks). The study area is located within an area of high landscape and ecological importance that attracts a wide variety of NMUs. **Table 9-8** below provides an overview of these routes. Chainage (ch.) is used in this chapter to indicate locations of relevant receptors.

9.3.3 The NMU routes listed below, as well as lay-bys, crossing points and other existing features, are detailed on **Drawing 9.1 (Volume 3)**.

Table 9-8: NMU routes (including reference numbers)

NMU Ref. No.	NMU Receptor	Location (ch.)
NMU1	Section of NCN7, long distance cycle route between Sunderland and Inverness	20,000 to 31,050
NMU2	Cairngorms National Park Authority (CNPA) Core Path along NCN7	20,000 to 21,250
NMU3	Hill walking track to two Munros, Carn na Caim and A'Bhuidheanach Bheag	20,550
NMU4	CNPA Core Path between the A889/ General Wade's Military Road (GWMR) and the Highland Mainline (HML) railway line	22,550
NMU5	CNPA Core Path between the A889/ GWMR and the HML railway	22,850 to 23,150
NMU6	Highland Council Core Path to the west of the HML railway that travels around Loch Ericht and forms the Dalwhinnie to Culra Bothy tourist walk	22,350
NMU7	Highland Council Core Path to the north of Dalwhinnie and to the west of the A889 that follows a track that crosses the Allt an t-Sluic (forms part of the Fara tourist walk)	22,700
NMU8	Informal NMU route from Dalwhinnie to NMU10 along the Scottish and Southern Energy (SSE) Aqueduct track	22,550 to 25,500
NMU9	CNPA Core Path along GWMR to the north of Dalwhinnie	24,050 to 25,500
NMU10	Hill walking track to Munro Meall Chuaich	25,550
NMU11	Informal track between GWMR and the A9 accessing settlement of Cuaich	25,550 to 25,950

Crossing Points

9.3.4 There are 11 NMU routes in proximity to the Proposed Scheme extents which run adjacent to the A9, through Dalwhinnie and in the surrounding area, accessing Munros and local hill walking routes. These NMU routes intersect the A9 at various points; these are defined as Crossing Points (CPs) and are shown in **Table 9-9.**

Table 9-9: Crossing Points (CP)

CP Ref. No.	NMU CPs	Location (ch.)
CP1	At-grade crossing of the A9 to access NMU3 hill walking track to two Munros, Carn na Caim and A'Bhuidheanach Bheag	20,550
CP2	At-grade crossing of the A9 within the vicinity of the existing A9/ A889 junction, used by people accessing the bus stop on the southbound carriageway of the A9 from Dalwhinnie	21,250
CP3	Underpass crossing of the A9, where NMU8 - the SSE track and SSE Aqueduct pass under the A9	23,400
CP4	At-grade crossing used by NMUs parking in the northbound lay-by 97 and crossing to access NMU10 Meall Chuaich Munro	25,650
CP5	Underpass connecting Meall Chuaich Munro track with Cuaich and the GWMR	25,800
CP6	At-grade crossing of the A9 to access shooting beats (as detailed in Chapter 8). Likely to only be associated with Phoines Estate private operations.	29,150

Detailed Description of NMU Routes and Crossing Points

9.3.5 Refer to **Drawing 9.1** (**Volume 3**) for details of the existing NMU routes and Crossing Points (CPs). NMU1 (NCN7) runs adjacent to the A9, off-road between ch. 20,000 and ch. 21,300 before following the A889 into Dalwhinnie (see **Photograph 9-1** below). To the north of Dalwhinnie, NMU1 follows the route of GWMR which runs almost parallel and to the west of the A9.

Photograph 9-1: Looking north along the A889 and (on road) NCN7 in Dalwhinnie

9.3.6 NMU2, a CNPA Core Path, follows the same route as NMU1 adjacent to the A9 between ch. 20,000 and 21,300 where it stops at the existing A889 junction.

9.3.7 NMU3 is a well-established hill walking track to Carn na Caim and A'Bhuidheanach Bheag that originates at the A9 at ch. 20,550. Within the study area this is a single track but later, as the route continues east, it divides into the two separate hill walking tracks. The location of an

existing Type A lay-by (segregated from the carriageway) on the northbound side has created an at-grade crossing demand to access this NMU route. The Walk Highlands website suggests parking in this lay-by to access these Munros.

9.3.8 CP2 is an at-grade crossing of the A9 within the vicinity of the existing Dalwhinnie Junction, mainly used by people accessing the bus stop on the southbound side of the A9.

9.3.9 There are two CNPA Core Paths (NMU4 and 5) within Dalwhinnie between the A889/ GWMR and the HML railway. There are two Highland Council Core Paths to the west and north of Dalwhinnie. One is located to the west of the railway line and travels around Loch Ericht (NMU6); this also forms part of the Dalwhinnie to Culra Bothy tourist walk. The other is further to the north of Dalwhinnie, and to the west of the A889 and follows a track that crosses the Allt an t-Sluic (NMU7). These both form tourist walks as detailed below.

9.3.10 The Fara tourist walk (NMU7), starts along the footpath next to the train station and continues alongside Loch Ericht. This walk utilises The Highland Council Core Paths. The Fara is amongst the highest of the Corbetts. There is an informal parking area at the level crossing, used to access these NMU routes. There is limited space for parking here.

9.3.11 There is an informal NMU route (NMU8) through the Phoines Estate (owned by SSE and running alongside the SSE Aqueduct) to the east of the A889/ GWMR. It starts to the south of Dalwhinnie, passes under the A9 and eventually connects to the path that leads to Meall Chuaich, a Munro located to the east of the A9. CP3 is where NMU8 passes under the A9 (at ch. 23,400), see **Photograph 9-2** below. NMU consultations have highlighted equestrian use of this route.

Photograph 9-2: NMU8 looking north towards CP3 where the SSE Aqueduct track crosses under the A9

9.3.12 A CNPA Core Path also follows the line of NCN7, to the north of Dalwhinnie following the GWMR public road (NMU9) between ch. 24,050 and 25,500, see **Photograph 9-3**. There are several informal parking locations along this stretch of road, as shown on **Drawing 9.1 (Volume 3).**

Photograph 9-3: General Wade's Military Road NMU9 and NMU1 (NCN7) looking south-east towards the A9

9.3.13 NMU10 is a hill walking route to Meall Chuaich, to the east of the A9. Two lay-bys are currently utilised to access this track, southbound lay-by 94 and northbound lay-by 93. This generates at-grade crossing activity, CP4 (at ch. 25,650) in peak season when availability of parking is limited and walkers must walk a short distance along the A9 to get to the start of this walk. This hill walking route can also be accessed directly from NMU8, the SSE Aqueduct track.

9.3.14 NMU11 is an informal track connecting GWMR to a small cluster of five Phoines Estate homes in Cuaich to the west of the A9, see **Photograph 9-4**. NMU11 meets the A9 at two locations; at-grade at CP4 and an underpass at CP5. These CPs connect to NMU10 to the east of the A9.

Photograph 9-4: Looking east from NMU11 at Cuaich toward the A9 and the underpass at CP5

9.3.15 Consultation with stakeholders has highlighted that the A9 is crossed at-grade at ch. 29,150 where Phoines Estate personnel park and cross the road for grouse shooting. As there are no NMU routes around this area it is unlikely that hill walkers cross here.

Disabled/ Vulnerable User Access

9.3.16 A group of users can be defined as 'vulnerable' in a number of ways, such as by the level of protection from traffic (e.g. pedestrians and cyclists) or by the level of task capability (e.g. young and the elderly).

9.3.17 Current understanding is that there are no local facilities that would create a high demand from vulnerable users as Dalwhinnie Primary School is closed and there are no care homes; however, Dalwhinnie Railway Station and local facilities, including Loch Ericht Hotel and Café, could potentially create some NMU demand by vulnerable users.

9.3.18 Existing facilities for vulnerable users within the study area are varied. Although NCN7 is on-road through much of the Proposed Scheme extent, it is set back from the A9 north of the existing A9/ A889 junction, with fewer vehicles and smoother surfacing, this section of the route could be more suited to vulnerable users. Hill walking routes such as NMU3 and NMU10 could potentially be unsuitable for users with limited task capability due to uneven tracks and steep inclines.

Access to the Outdoors

9.3.19 Key outdoor areas accessible from NMU routes within the Proposed Scheme extents include the surrounding Munros and Corbetts, Loch Ericht, NCN7 and the CNPA and The Highland Council Core Path networks. These features are identified on **Drawing 9.1 (Volume 3)**.

Vehicle Travellers

9.3.20 The A9 from Dalwhinnie to Crubenmore is characterised by a single carriageway stretch of road passing east of the River Truim. Dalwhinnie lies to the west, with clear views of Dalwhinnie Distillery from the A9. The A9 continues north to Crubenmore where the route becomes more enclosed with planting and areas of rock cut to the east.

Local Access

9.3.21 Dalwhinnie is accessed via the existing A889 junction at ch. 21,250. There is a filter lane for those travelling southbound wanting to turn right across the northbound carriageway. Dalwhinnie can also be accessed from GWMR which connects to the A9 north of the Proposed Scheme extent at Crubenmore.

9.3.22 There are a number of access tracks from the A9 that connect to NMU routes, the settlement of Cuaich and other private assets. Access to these is described in more detail in **Chapter 8.**

Parking Provision

9.3.23 There are presently 14 lay-bys within the Proposed Scheme extents, seven on the northbound side and seven on the southbound side of the carriageway; these are indicated on **Drawing 9.1 (Volume 3).** These include a combination of Type A and B lay-bys. Type A lay-bys are segregated from the carriageway whereas Type B provides no separation between the stopping area and the A9 carriageway.

9.3.24 Lay-bys are important for drivers needing to stop for a short time. They may be provided for more specialised functions such as emergency lay-bys for broken down vehicles, bus lay-bys or hardstandings where maintenance vehicles may pull off the road. It is apparent that NMUs

utilise lay-bys for access to hill walking routes and Munro tracks, with many NMU organisations recommending the use of lay-bys for parking.

9.3.25 There is limited provision available within Dalwhinnie to park and/ or use rest facilities. There is a petrol station and café with parking within the centre of the village and some limited parking at the rail station. There is also on-street parking and private parking for residents. Informal parking areas along the Ben Alder Road (NMU4) within Dalwhinnie are used by walkers, likely accessing routes around Loch Ericht.

9.3.26 Where the off-road NCN7 follows the A889 there is also a small area sometimes used by visitors and NMUs, as well as two lay-bys along the A889 between the existing junction and Dalwhinnie, which could be used to gain access to the NCN7, the SSE Aqueduct track (NMU8) and connecting hill walking routes. Consultation has highlighted that northbound lay-by 87 (as-well as lay-bys 85 and 86 to the south of the Proposed Scheme) are often used by hill walkers to access the hill track to Munros Carn na Caim and A'Bhuidheanach Bheag (NMU3). These lay-bys each have capacity for approximately 7-9 cars at any one time.

9.3.27 It is also acknowledged that lay-bys 93 and 94 around Cuaich are used by hill walkers to access Meall Chuaich (NMU10) to the east of the A9. These lay-bys do not have the capacity during peak parking demand and frequently results in areas of the roadside verge also being used by NMUs for informal parking.

9.3.28 **Drawing 9.1 (Volume 3) illustrates the** locations of lay-bys and informal parking areas.

Public Transport

9.3.29 The HML railway runs generally parallel to the A9 for much of the Proposed Scheme. The rail services stopping at Dalwhinnie include:

- Edinburgh/ Glasgow to Inverness – Monday to Saturday, six trips daily going north, four trips daily going south; Sunday (two trips daily in both directions) – operated by ScotRail
- London to Inverness Caledonian Sleeper Highland Route – sleeper operating six nights per week Sunday to Friday (one trip daily in both directions stopping at Dalwhinnie) – operated by Serco Caledonian Sleepers Ltd.

9.3.30 Other rail services do operate on this line but do not stop at Dalwhinnie.

9.3.31 The A9 corridor is popular with tourists and many coach trips use the road to access the Whisky Trail and the CNP. A limited number of services stop at Dalwhinnie, and the majority of these pick up and drop off at the existing A9/ A889 Dalwhinnie Junction with a 1.5km walk to/ from the centre of Dalwhinnie. There is currently no footpath along the A889 between the bus stops and the village and those travelling southbound currently need to cross the A9 to/ from the bus stop. **Table 9-10** outlines the bus and coach services which can be accessed from near Dalwhinnie.

Table 9-10: Bus and coach services accessing Dalwhinnie

Service Number	Operator	Comments
Number M91 Edinburgh - Inverness	SCMG Scottish Citylink + Megabus + Parks of Hamilton	Bus stops at A889/ A9 Junction once a day on the northbound carriageway and twice a day on the southbound carriageway. Operates seven days a week.
Number 39 Dalwhinnie to Kingussie	Stagecoach Highlands	School service bus, 1 outbound, 1 inbound on school days
Number 226 Arbroath to Fort William	Fisher Tours of Dundee running 'Scottish Express' tours primarily aimed at tourists.	Runs Tuesday fortnightly return service March to October with no winter service.

Service Number	Operator	Comments
Number 228 Arbroath to Inverness	Fisher Tours of Dundee running 'Scottish Express' tours primarily aimed at tourists.	Bus stops at A889/ A9 Junction. Thursday fortnightly return service March to October with no winter service.
Number 242 Forfar to Fort William	Fisher Tours of Dundee running 'Scottish Express' tours primarily aimed at tourists.	Tuesday fortnightly return service March to October with no winter service.
Number 244 Forfar to Inverness	Fisher Tours of Dundee running 'Scottish Express' tours primarily aimed at tourists.	Bus stops at A889/ A9 Junction. Thursday fortnightly return service March to October with no winter service.
Number 267 Cupar to Inverness	Fisher Tours of Dundee running 'Scottish Express' tours primarily aimed at tourists.	Bus stops at A889/ A9 Junction. Friday fortnightly return service March to October with no winter service.
Number 267 Inverness to Cupar	Fisher Tours of Dundee running 'Scottish Express' tours primarily aimed at tourists.	Bus stops at A889/ A9 Junction. Monday to Sunday and Friday fortnightly return service March to October with no winter service.

Views from the Road

9.3.32 **Chapter 14** includes ay-by Viewpoints A-G **(Drawings 14.20-14.26**, within **Volume 3**). These drawings should be read in conjunction with the views from the road section.

9.3.33 Key features visible from the road include the following:

- Mountain ranges to the east of the A9 including A'Bhuidheanach Bheag, Carn na Caim, Leacainn, Creag Ruadh, Meal Odharaich and Torr na Cùile Riabhaich.
- Mountain ranges to the west of the A9 including Creagan Mor, Meall a' Bhurich and Càrn Dhomhnuill Bhàin.
- The River Truim and its tributaries
- SSE Aqueduct
- Beauly to Denny Power Line (BDL)
- HML railway
- Loch Ericht
- Woodland features, including coniferous plantations, snow belts and Lechden Woods
- Dalwhinnie Distillery

9.3.34 Views from the road are transient in nature, but can add to the experience for vehicle travellers. As the Proposed Scheme sits within the CNP and travellers can enjoy high value views, views from the road are assigned a **Medium** sensitivity.

9.3.35 At the southern end of the Proposed Scheme extent there are open, views west for northbound and southbound travellers encompass the slopes of Creagan Mor, the River Truim can be seen meandering along the strath floor between the HML railway and the A9. To the east, existing snow belt vegetation forms the forefront of the view, with the BDL and the slopes of A'Bhuidheanach Bheag and Carn na Caim visible beyond. Southbound travellers also have high value long distance views of the surrounding mountains.

9.3.36 On the northbound approach to Dalwhinnie, coniferous plantation can be seen on the hillslopes, with glimpse views of the River Truim in the foreground. The strath floor is scattered with vegetation and partially screens longer distance views to Dalwhinnie.

9.3.37 Adjacent to Dalwhinnie there are mid-long distance views both east and west. Dalwhinnie Distillery can be seen, the white building standing out in the landscape. The BDL remains visible to the east and then crosses the A9. Dalwhinnie Distillery is also a key feature within the landscape for vehicle travellers approaching Dalwhinnie Junction from the north.

9.3.38 On the northerly approach to Cuaich the A9 lies in cutting and views are restricted to the east and west. As the topography flattens out, Lechden Woods is a prominent feature to the west of the road, also screening views of Cuaich from the south. Past this vegetation there are mid-distance views of the small settlement of Cuaich and the strath floor is relatively featureless. There are long distance views east of the Allt Cuaich between Leacainn and Creag Rhuadh. Views are restricted on the southbound approach to Cuaich as the A9 lies in an area of cutting as well as the curve of the road, limiting wider views to the south.

9.3.39 To the north of Cuaich, where the immediate landscape flattens out, views are open and there is inter-visibility between the A9 and GWMR to the west. Further north, toward Crubenmore, views become more enclosed with embankments to the east and west, including areas of rock cut. Coniferous and broadleaf vegetation line the road, adding to the feeling of enclosure. Views north and south are restricted. Occasional cascades cut through the rock on the eastern side of the A9, enhancing the views for vehicle travellers.

Driver Stress

9.3.40 One of the scheme objectives of the A9 Dualling Programme is reducing driver stress. The assessment of driver stress is based on the traffic and road conditions likely to be encountered and the certainty of the route in question for travellers. The following factors are considered in relation to driver stress:

- Traffic flows
- Journey speed
- Frustration

9.3.41 The A9 is utilised by a combination of vehicle types, including passenger vehicles, coaches and HGVs, serving strategic, local, agricultural, and commercial and tourist traffic. In addition, the tourism industry contributes to a significant traffic volume along the length of the route during summer months and holidays.

9.3.42 Journey time reliability can be unpredictable along the A9. Driver frustration, due to a lack of safe overtaking opportunities, is considered to contribute to a higher than average rate of serious and fatal accidents. **Table 9-11** and **Table 9-12** below set out traffic data and flow information collected in 2015. Note that the average speed shown below will be influenced by the introduction of average speed cameras along the single carriageway sections the A9.

Table 9-11: 2015 traffic data relating to south of Dalwhinnie Junction

	Hourly flow per lane	Average speed km/hr
Northbound	180	81
Southbound	194	78

Table 9-12: 2015 traffic data relating to north of Dalwhinnie Junction

	Hourly flow per lane	Average speed km/hr
Northbound	169	79
Southbound	183	79

9.3.43 **Table 9-13** shows the proportion of different types of vehicles using the A9 passing the Crubenmore junction (which is just to the north of the Proposed Scheme extent).

Table 9-13: Average vehicle type proportions on a weekday at the A9/ Crubenmore junction (2012)

	1000 – 1600 hrs	1600 – 1900 hrs
Car	54%	71%
LGV	22%	13%
HGV	24%	16%

9.3.44 Based on DMRB methodology outlined within **section 9.2** and the information in **Table 9-11** and **Table 9-12,** driver stress for northbound and southbound vehicle users to the north and south of Dalwhinnie are assessed as being Low. Although that may be the case based on these figures, we know that other factors come into play that adds to driver frustration.

9.3.45 Therefore, taking into consideration the commissioned research by Transport Scotland, described previously**,** Driver Stress for the whole of the Proposed Scheme is defined as **Moderate** due to the potential number of slower moving vehicles, with few available overtaking opportunities.

NMU Baseline Summary

9.3.46 There are 11 NMU routes within the wider (3km) study area for the Proposed Scheme, comprising Core Paths, cycle paths, hill walking routes and informal routes. These routes intersect the A9 at six CPs (currently two underpasses and four at-grade crossings). NMU routes and CPs are illustrated on **Drawing 9.1 (Volume 3).**

9.3.47 NMU routes outside of the 1km study area (500m either side of the A9) have been considered in the baseline to provide a detailed picture of NMU facilities around the Proposed Scheme; however, NMU4, 5, 6 and 7 are not considered further in this assessment. NMU routes that are within the 1km study area, or intersect the A9, are detailed in **Table 9-14** below. CPs have been assessed in relation to the relevant NMU routes and have been considered as part of the amenity impact and journey length impact assessments.

9.3.48 Where there is an anticipated change in journey length, either adverse or beneficial, a Journey Length Assessment (JLA) has been calculated. The JLA locations are shown on **Drawings 9.4 to 9.8 (Volume 3)** and assessed in **section 9.4**. **Table 9-14** lists the key NMU routes that have been assessed and their assigned sensitivity.

Table 9-14: Key NMU routes assessed

NMU ref. no.	Type of NMU	CP ref.	Baseline amenity	Link to outdoor access areas	Sensitivity
NMU1	NCN7	CP1 and CP2	Cycle way which follows an off-road gravel track separated from the A9 then continues to an on-road route through Dalwhinnie. Set at distance from the A9 traffic and noise	Access to Loch Ericht from Dalwhinnie	High
NMU2	CNPA Core Path	CP1 and CP2	Off-road gravel track separated from the A9, then continues to an on-road route through Dalwhinnie. Set at distance from the A9 traffic and noise	Access to Loch Ericht from Dalwhinnie	High
NMU3	Hill walking track	CP1	Gravel track with occasional vehicle use for estate and shooting parties	Access to Munros Carn na Caim and A'Bhuidheanach Bheag	High
NMU8	Informal NMU route	CP3	Gravel track with occasional vehicle use by Phoines Estate and SSE	Access from Dalwhinnie to Munro Meall Chuaich	Medium
NMU10	Hill walking track	CP4	Gravel track, with occasional vehicle use by estate and SSE	Access to Munro Meall Chuaich	High
NMU11	Informal NMU route	CP4 and CP5	Gravel track through Cuaich with occasional estate vehicle use	Link to NCN7 and Munros Leacainn and Creag Ruadh	Low

9.4 Potential Impacts

9.4.1 This section considers the potential temporary (construction) and permanent (operational year 1) impacts of the Proposed Scheme on NMUs and Vehicle Travellers.

9.4.2 Throughout the DMRB Stage 3 iterative design process, a number of environmentally led workshops considered each aspect of the developing design and made recommendations for certain features to be included in the design. These aspects have been defined as 'embedded mitigation' and, where they are included in the Proposed Scheme design, they are considered within the context of the impact assessment as providing mitigation to avoid or reduce environmental impacts, and in some cases, provide environmental benefits.

9.4.3 All lay-bys included within the Proposed Scheme are defined as follows; basic DMRB Type A, with enlarged carriageway segregation strip and potential links to NMU routes.

Embedded Mitigation

9.4.4 The embedded mitigation that has been incorporated into the Proposed Scheme, providing continued and potentially improved NMU access, includes the following:

- NMU crossing points rationalised and at-grade crossings replaced with a number of safer underpass crossings
- removal of all right turn manoeuvres across carriageways, improving road safety
- Type A lay-bys with wide segregation strip to replace existing lay-bys
- re-alignment of NMU1 (NCN7) and NMU2, where affected by SuDS feature 207
- proposed southbound lay-by between ch. 20,550 and ch. 20,650 will enable hill walkers access to NMU3, a track to Munros Carn na Caim and A'Bhuidheanach Bheag
- bus turning circle and footways in the new Dalwhinnie Junction and link road layout
- River Truim crossing and new access track around SuDS basin 225 allowing for realignment of NMU8
- diverted SSE Aqueduct track and realignment of NMU8
- NMU link from Type A lay-by to SSE Aqueduct track (NMU8) at ch. 24,400

9.4.5 The baseline conditions outline six CPs within the Proposed Scheme extents, with the majority being at-grade crossings. The Proposed Scheme also includes six underpass crossings catering for NMUs and estate access. These crossings are part of the embedded mitigation of the Proposed Scheme. The underpass crossings and their intended use are set out below:

- Allt Coire Bhathaich watercourse crossing with ledge for pedestrian use, approx. ch. 22,250
- vehicle and NMU underpass in the Dalwhinnie Junction, ch. 22,550
- continued use of CP3 as the SSE Aqueduct track (NMU8) passes under the A9; gravel track with approx. 5m clearance for equestrian use Cuaich vehicular and NMU underpass at ch. 25,850
- track underpass at ch. 27,825 primarily for estate use
- Allt Garbh watercourse crossing with ledge for pedestrian use, ch. 29,175 primarily for use by Phoines Estate

9.4.6 Embedded mitigation specific to views from the road has also been developed through the environmentally-led design process, with input from Landscape Architects; including:

- landform refinement, mainly of the embankments of mainline and junction proposals, adjoining the proposed road to the surrounding landscape
- design of access tracks/ realigned NMU routes
- design of drainage (SuDS) features
- design of rock cuts
- design of retaining walls and other structures

Non-Motorised Users (NMU)

Construction Phase Impact Assessment - Temporary

9.4.7 NMU routes will be affected during construction; these effects will be temporary and will primarily affect NMU routes with direct access to, from, or crossing the existing A9. Phasing of the works will reduce the temporary effects on NMU routes as much as possible.

9.4.8 Where necessary, temporary diversions and alternative access will be provided to allow use of the NMU network during the construction phase. Details, including the timing and exact routes of diversions, will be dependent upon the arrangements of the Contractor; therefore, this information is not available at this time.

9.4.9 Typically, in the absence of mitigation, there will be adverse impacts on the amenity value and journey length of NMUs during the construction phase. Likely impacts include the following:

- temporary diversions of NMU routes
- alternative access points for NMU routes and potential severance of access to NMU routes from the A9
- construction traffic on local roads and off-road NMU routes
- effects on the visual amenity of NMU routes close to construction work
- increase in noise levels – where the NMU receptor is within approximately 75m of construction activities there could potentially be temporary impacts associated with localised works (distance defined via professional judgement), further details on construction noise impacts can be found in **Chapter 17**)

9.4.10 There are seven NMU routes likely to be affected during construction. Given the limited details on construction phasing and diversions, consideration of impacts cannot take into account specific details of potential increases/ decreases in journey length.

9.4.11 During the construction of watercourse diversions, SuDS basin 207 and the associated access track diversion, there will be **Moderate adverse** effects on NMU1. It is anticipated a short stretch of NMU1 would need to be diverted during this time between ch. 20,000 and 21,000. NMU1 will also experience temporary disruption during the process of de-trunking and lane narrowing along the A889 from the existing junction to the proposed Dalwhinnie Junction. As details of the diversion will be considered by the Contractor impacts on journey length cannot be assessed at this time; however, it is anticipated that, given the close proximity to the A9, there would be **Substantial/ Moderate** change in views and noise levels during construction.

9.4.12 As NMU1 stretches the whole length of the Proposed Scheme, once in Dalwhinnie there may be some noise and visual impacts during construction; however, this stretch of NMU1 is outside of the study area and impacts are not anticipated to be significant, see **Drawing 9.1 (Volume 3)**.

9.4.13 NMU2 will experience the same disruption as NMU1 between ch. 20,000 and 21,000. Diversion of this NMU route is anticipated, although this is likely to only be for a limited period of time. The impact will be **Moderate adverse**.

9.4.14 Hill walking track NMU3 will experience **Substantial/ Moderate adverse** impacts during construction as this track is anticipated to be used to access the proposed Drumochter Estate track. However, the Contractor will be required to retain access for hill walkers and construction traffic will be separated from walkers.

9.4.15 Safe crossing of the A9 for hill walkers will be at the discretion of the contractor therefore details of diversions and access is not available at this time. However, there is anticipated to be a **Substantial/ Moderate** change in views and noise impacts given the tree loss within this area and views toward the Dalwhinnie Junction. Construction noise will also be evident

9.4.16 NMU8 will be affected in two locations; during the construction of Dalwhinnie Junction and at the proposed SSE Aqueduct diversion. There are likely to be periods of closure surrounding the aqueduct diversion; it is therefore anticipated to be a **Substantial adverse** impact during construction; however, access to Munros would still be possible from NMU10 at Cuaich.

9.4.17 NMU10 and 11 will be affected during the construction of new accesses and SuDS basin 258 at Cuaich. During construction, the Contractor would be required to maintain access to Cuaich given the properties here; therefore, it is likely these routes will still be accessible during construction. Therefore, the impact on these NMUs will be **Moderate adverse** given the change in amenity and likely minor diversions and change in access.

Permanent – Operational Phase

9.4.18 NMU routes have been considered during the design process, including the wider connectivity of routes, in order to retain NMU connectivity through the Proposed Scheme extents. For NMU provisions within the Proposed Scheme, journey length, accessibility and amenity have been assessed separately and then, using the methodology set out in **Section 9.2,** an overall significance of potential impact has been assigned. Refer to **Drawings 9.4-9.8 (Volume 3).** The impacts set out below are based on worst case scenarios and therefore determine impacts at year 1. Unless stated otherwise, all impacts are adverse.

Journey Length and Accessibility

9.4.19 This assessment has identified eight journey length assessments (JLAs) where there is either an increase or decrease in journey length along the identified NMU route. Where there are multiple changes in journey length along the same NMU route these JLAs have been amalgamated in order to assess the total potential new journey length. JLAs and the potential new journey lengths are shown on **Drawings 9.4-9.8 (Volume 3).** There is no anticipated change in journey length identified for NMU3; however, potential impact on accessibility is discussed below.

9.4.20 Two JLAs have been identified for NMU1 and the results for JLA1a and JLA1b have been totalled, resulting in a **negligible** magnitude. Given this NMU route is assigned a **high** sensitivity, using the methodology set out in **Section 9.2**, the overall impact is **Slight**.

9.4.21 There is a minor decrease in journey length to NMU2, shown as JLA2. The magnitude of change is **negligible** and, given this NMU route is assigned a **high** sensitivity, the overall impact is **Slight beneficial**.

9.4.22 There is no change in journey length for NMU3 and it is considered that there will be improved access to this route as the Proposed Scheme introduces a southbound lay-by where this track meets the A9 at ch. 20,550. There is also an underpass crossing with a ledge for NMUs, creating a safe crossing point between NMU1 and NMU3. Therefore, there is considered to be a **Moderate beneficial** impact on accessibility.

9.4.23 Two JLAs have been identified for NMU8; these have been amalgamated with the total magnitude of change being **low**. Given the sensitivity of this NMU route, the potential impact is **Slight.**

9.4.24 There is a potential increase in journey length identified for NMU10 as this will follow the new access track toward the underpass crossing. Although the magnitude of change is **low**, given the **high** sensitivity the overall impact, it is considered to be **Moderate**.

9.4.25 JLA5 identified a potential decrease in journey length for NMU11 due to the new underpass crossing. Given the change is less than 100m, resulting in a **negligible** magnitude of change, and the **low** value of this NMU route, the potential impact on journey length is considered to be **Negligible**.

9.4.26 **Table 9-15** summarises the potential impacts, without additional specific mitigation, for changes to journey length. These JLAs are shown on **Drawings 9.4 to 9.8 (Volume 3)**. Unless stated otherwise, all effects are adverse.

Table 9-15: Potential impacts on NMU journey length during operation

JLA Point	NMU Ref.	CP Ref.	NMU type	Key Impact on NMU	Baseline Journey Length (m)	Potential New Journey Length (m)	Potential Change (m)	Sensitivity	Potential Impact	
									Magnitude	Significance
JLA1a-b	NMU1	CP1 and CP2	NCN7	Local realignment	245	257	+12 (257-245=12)	High	Negligible	**Slight**
JLA2	NMU2	Not applicable	Core Path	Local realignment	90	87	-3 (90-87=3)	High	Negligible	**Slight beneficial**
JLA3a-b	NMU8	CP3	Informal route	New compact junction and aqueduct diversion	535	775	+240 (775-535=240)	Medium	Low	**Slight**
JLA4	NMU10	CP4	Hill walking track	New access track, local realignment	76	226	+150 (226-76=150)	High	Low	**Moderate**
JLA5	NMU11	CP5	Informal route	New access track, local realignment and junction	396	301	-95 (396-301=95)	Low	Negligible	**Negligible**

Amenity

9.4.27 As stated within **paragraphs 9.2.18 - 9.2.23** the amenity value has taken into consideration any potential changes in safety, noise levels, air quality and visual amenity in order to assess the overall potential impact on amenity without mitigation.

9.4.28 Topic specialists for Noise, Air Quality and the Visual Chapters have informed the assessment to consider any changes in amenity, with the associated data provided in **Appendix 9-1 (Volume 2)**. Visual impacts were based on extent of the Proposed Scheme visible and any loss or increase in tree cover, and impacts relating to safety and increased traffic flows were based on predicted traffic data and changes to CPs (i.e. change from at-grade crossings).

9.4.29 NMU1 will likely experience a Moderate adverse change in views, concentrated between ch. 20,000–23,000, given the proposed Dalwhinnie Junction and SuDS features. Where NMU1 routes through Dalwhinnie any changes in views will be very limited given the distance to the A9. There is anticipated to be a Moderate beneficial impact on safety as there are two underpasses catering to NMUs allowing users of NMU1 to cross safely, as well as a stretch of road (the existing A889 to the proposed junction tie-in) that will cater to users of the NMU1 and where vehicle traffic is expected to decrease (with occasional maintenance/ estate vehicle access). There is anticipated to be a minor adverse change in noise levels and a negligible change in air quality. Overall, given safety benefits are localised, it is anticipated that the amenity impact is **Moderate/ Slight adverse.**

9.4.30 Similarly, NMU2 will experience a Moderate change in views. There is considered to be a Slight beneficial change in safety and a negligible change in noise and air quality. Overall it is anticipated that the overall amenity impact is **Moderate/ Slight adverse.**

9.4.31 Due to the removal of the existing at-grade crossing there is a beneficial effect on safety for NMU3 as access can now be gained from a southbound lay-by. Potential adverse changes in views are considered to be Slight; there will be some tree loss to the east between the A9 and the track. As the track climbs, the A9 is visible and changes around Dalwhinnie junction may be noticeable; however, the road does not dominate the view. There is anticipated to be a minor change in noise and a negligible change in air quality. Overall the impact on NMU3 is **Slight adverse**.

9.4.32 NMU8 will likely experience Moderate adverse changes in views around SuDS feature 225 and the proposed Dalwhinnie Junction. Visual changes may also be noticeable where this route approaches Cuaich. Changes in safety and air quality are considered negligible and there is anticipated to be a minor change to noise levels. Overall the amenity impact on NMU8 is considered **Moderate/ Slight adverse.**

9.4.33 NMU10 will experience a slight beneficial change in safety given the removal of existing CP4 and retaining the Cuaich underpass. There is considered to be a slight change in views with the new Cuaich access and SuDS feature 259. There is anticipated to be a minor change in noise and a negligible change in air quality. Overall the impact on NMU10 is **Slight adverse/ Negligible.**

9.4.34 Similarly there will be a **slight** beneficial impact on safety for NMU11, a minor change in noise levels and a negligible change in air quality. There is potential for Moderate/ Substantial changes in visual amenity given the loss of vegetation along the roadside including Lechden Wood, proposed SuDS features 254 and 259 and associated access tracks. Overall the amenity impact on NMU11 is **Moderate adverse.**

9.4.35 **Table 9-16** summarises the potential impacts, without mitigation, for considered changes to amenity. Unless stated otherwise, all effects are adverse.

Table 9-16: Potential Changes in NMU Amenity Value during Operation at year 1

NMU Ref.	Type of NMU	Potential Change				Significance
		Safety	Visual (Year 1)	Air Quality	Noise	
NMU1	NCN7	Moderate beneficial	Moderate	Negligible	Minor	**Moderate/ Slight**
NMU2	CNPA Core Path	Slight beneficial	Moderate	Negligible	Negligible	**Moderate/ Slight**
NMU3	Hill walking track	Slight beneficial	Slight	Negligible	Minor	**Slight**
NMU8	Informal NMU route	Negligible	Moderate	Negligible	Minor	**Moderate/ Slight**
NMU10	Hill walking track	Slight beneficial	Slight	Negligible	Minor	**Slight/ Negligible**
NMU11	Informal NMU route	Slight beneficial	Moderate/ Substantial	Negligible	Minor	**Moderate**

9.4.36 **Table 9-17** below identifies the overall impact on NMUs once the Proposed Scheme is operational. As defined in **paragraph 9.2.25,** an equal weighting is given to amenity impacts and journey length impacts. Unless stated otherwise, all impacts are adverse.

Table 9-17: Summary of potential impacts on NMU

NMU Ref.	Significance of Potential Impacts		
	Amenity Value	Journey Length	Overall
NMU1	Moderate/ Slight	Slight	**Moderate/Slight**
NMU2	Moderate/ Slight	Slight beneficial	**Slight**
NMU3	Slight	Moderate beneficial	**Slight beneficial**
NMU8	Moderate/ Slight	Slight	**Moderate/ Slight**
NMU10	Slight/ Negligible	Moderate	**Slight**
NMU11	Moderate	Negligible	**Slight**

9.4.37 In the absence of additional mitigation there is likely to be a Moderate/ Slight impact on NMU1 and NMU8. These impacts are considered to be **significant** given change to journey length and impacts to visual amenity. As there is not anticipated to be a Moderate adverse impact on any other NMU route, there are no other significant impacts identified upon operation (year 1).

9.4.38 There will be localised areas of significant beneficial impacts arising from the removal of at-grade crossings which have been rationalised to underpasses. This provides a S**ignificant Beneficial** impact on the connectivity of the NMU network within the Proposed Scheme extents.

Public Transport

Temporary - Construction Phase

9.4.39 During the first phase of construction the existing carriageway will be utilised with narrowed lanes, as the proposed southbound carriageway is built to the east. Therefore, the existing bus stop lay-bys will remain in use during this phase of construction. It is assumed that during the second phase it is likely that the proposed northbound carriageway will be constructed and temporary bus stop provisions will be incorporated to maintain this provision throughout the construction period and provide safe access for pedestrians using the services. It is not presently known where these temporary provisions will be located; however, it is anticipated there will be a **Negligible** impact on public transport given that temporary replacement stops will be required in proximity to the existing locations.

Permanent – Operational Phase

9.4.40 The proposed Dalwhinnie Junction layout incorporates a bus turning circle on the new A9/ A889 link road. This removes the need to cross the A9 and will reduce the journey time for users of public transport walking from here into Dalwhinnie as it is located approximately 1.5km closer to Dalwhinnie than the existing bus stops. Therefore, it is considered that there will be **Moderate/ Slight beneficial** impact.

Access to the Outdoors

Temporary - Construction Phase

9.4.41 Access to Munros Carn na Caim and A'Bhuidheanach Bheag from NMU3 will be affected during construction around ch. 20,550. NMU3 will remain in use; however, safe crossing of the A9 will

be determined by the Contractor therefore details of access are not available at this time. In the absence of mitigation, it is anticipated there will be a **Moderate adverse** impact on access to these Munros.

9.4.42 Access to Munro Meall Chuiach can be achieved within the study area from NMU10; there are likely to be minor changes in access during construction; however, due to the need to provide access for residents at Cuaich, access will still be possible to this NMU route. It is considered that temporary diversions will be provided during the construction phase when required. Therefore, the impact on access to this Munro is likely to be **Slight adverse**.

9.4.43 Throughout the construction phase there will be continued NMU access into Dalwhinnie from the north and south via NMU1, therefore there will be a **Negligible** impact on access to Loch Ericht.

Permanent – Operational Phase

9.4.44 Potential impacts on access to the outdoors relate closely to the potential impacts on the NMU routes detailed. Specific impacts on access to community facilities and Phoines and Drumochter Estate land have been assessed within **Chapter 8**.

9.4.45 In the Proposed Scheme, Munros Carn na Caim and A'Bhuidheanach Bheag would be accessed from NMU3 at ch. 20,550. A southbound lay-by at this point will provide safe access to NMU3 without crossing the A9, this replaces existing northbound lay-by 87 (as well as 85 and 86 just south of the Proposed Scheme). The proposed lay-by will have capacity for approximately 15-16 cars at any one time.

9.4.46 In addition, there will be safe underpass crossing at the Dalwhinnie Junction for NMUs accessing these Munros on foot from the north. This can also be accessed safely on foot from the south of the Proposed Scheme. Therefore, it is considered there will be **Moderate beneficial** impact on access to Munros Carn na Caim and A'Bhuidheanach Bheag.

9.4.47 Currently Meall Chuaich is accessed from lay-bys 93 and 94. The proposed southbound lay-by at ch. 24,400 with NMU link will provide continuous access for NMUs to this Munro via SSE Aqueduct track NMU8. This also removes the need to cross the A9 at-grade, therefore it is considered there will be a **Slight beneficial** impact on access to Meall Chuaich Munro.

9.4.48 NMU routes providing access to Dalwhinnie will be retained and there will be no impact on informal parking within Dalwhinnie. Therefore, there will be negligible impact on access to Loch Ericht.

9.4.49 Given that approximately 1km of the A889 will be de-trunked as part of the Proposed Scheme, only to be lightly trafficked and used by NMUs, it is considered likely that, during peak times, this road could provide opportunities for informal parking by NMUs accessing the surrounding outdoor areas if nearby lay-bys are at capacity.

Compliance with A9 Dualling NMU Access Strategy Aims

9.4.50 The Proposed Scheme complies with route-wide objectives set out within the NMU Access Strategy, including the removal of at-grade crossings, avoiding permanent severance of recognised routes such as Core Paths and rationalisation of crossing points. This has informed consideration of the identified Central section opportunities discussed in **paragraph 9.1.11,** proposed underpass locations and alternative access provisions which have been embedded into the Proposed Scheme design.

Vehicle Travellers – Views from the road

Temporary - Construction Phase

9.4.51 There will be adverse impacts on views from the road during the construction phase resulting from plant, earthworks, temporary signage and temporary areas for material storage which could detract from the open views of high value scenery. Notably, there will be significant temporary effects around the proposed Dalwhinnie Junction, the A889 tie-in road and River Truim crossing due to temporary roads and structures, as well as temporary haul routes to the eastern side of the A9 between ch. 23,700 and 25,500. On approach to these areas it is anticipated there would be **Substantial/ Moderate adverse** impacts on views from the road during construction.

Permanent – Operational Phase

9.4.52 Views from the road are transient in nature but can add to the experience for vehicle travellers. Vehicle travellers typically have a Medium sensitivity and a Medium susceptibility to change (see **Chapter 14**).

9.4.53 Generally, open long-distance views looking west will not be changed as a result of the Proposed Scheme. However, there will be some notable changes in localised areas; these are detailed below for operation year 1.

9.4.54 Screen shots from the 3D rendered models are provided below to demonstrate views from the road under the Proposed Scheme. Limitations to the model, such as not showing the full extent of existing vegetation or landscape mitigation context, mean that these images are indicative visualisations; however, they do help identify where views from the road may change.

9.4.55 Changes in views from the road will be notable on the approach to Dalwhinnie Junction; **Figure 9.1** shows the barriers to the edge of the carriageway and the northbound slip road on the approach to the junction. Increase in signage will be visible on the approach to and around the junction and slip roads which will have an adverse impact on views from the road. As well as signage, there will be localised views of the slip roads and associated cuttings and embankments. The access track to the eastern side of the road will also be visible in places. Although views from the road will encompass additional signage and slip roads, it is also considered that generally, as the road corridor is elevated, this will also enable wider views across Dalwhinnie. Therefore, around the Dalwhinnie Junction, in the absence of mitigation, it is considered there will be **Moderate adverse** impact on views from the road.

Figure 9.1: View from the road – Northbound on approach to the proposed Dalwhinnie Junction

Figure 9.2: View from the road – Southbound on approach to the proposed Dalwhinnie Junction

9.4.56 There will also be altered views around the proposed Cuaich left in/ left out accesses on the north and southbound carriageways. Due to carriageway widening there will be some loss to existing roadside vegetation, including at Lechden Wood, creating more open views of the proposed SuDS features and associated access tracks. **Figure 9.3** and **Figure 9.4** below show the proposed access tracks which can be seen from the road to the east and west. In the absence of additional mitigation there would be a **Moderate adverse** impact on views from the road at Cuaich.

Figure 9.3: View from the road – Northbound on approach to Cuaich

Figure 9.4: View from the road – Southbound at Cuaich

9.4.57 There will be **Slight adverse** impacts on views from the road between approximate ch. 27,400–29,400 as access tracks run adjacent the northbound carriageway of the A9 providing access to a number of SuDS basins.

9.4.58 Toward the northern end of the Proposed Scheme there is a retaining wall between ch. 30,600 - 30,800. Although this stretches for approximately 200m it is unlikely to significantly affect views for vehicle travellers, which are generally transient. It is therefore anticipated that there will be a **Slight adverse/ Negligible** impact on views from the road at this location.

Vehicle Travellers - Driver Stress

9.4.59 The Proposed Scheme projected flows and speeds for years 2026 and 2041 (short and long term) are detailed below in **Table 9-18** and **Table 9-19**. **Table 9-20** provides a comparison between the baseline and projected data.

Table 9-18: Projected traffic data for 2026 and 2041 south of Dalwhinnie Junction

	2026		2041		Difference between 2026 and 2041 data	
	Hourly flow	Average speed km/hr	Hourly flow	Average speed km/hr	Hourly flow	Average speed km/hr
Northbound	260	97	274	95	+14	-2
Southbound	284	99	292	97	+8	-2

Table 9-19: Projected traffic data for 2026 and 2041 north of Dalwhinnie Junction

	2026		2041		Difference between 2026 and 2041 data	
	Hourly flow	Average speed km/hr	Hourly flow	Average speed km/hr	Hourly flow	Average speed km/hr
Northbound	247	94	260	93	+13	-1
Southbound	267	95	271	94	+4	-1

Table 9-20: Baseline and projected data comparison

	Difference between 2015 and 2026 data		Difference between 2015 and 2041 data	
	Hourly flow	Average speed km/hr	Hourly flow	Average speed km/hr
South of Dalwhinnie Junction				
Northbound	+80	+16	+94	+14
Southbound	+90	+21	+98	+19
North of Dalwhinnie Junction				
Northbound	+78	+15	+91	+14
Southbound	+83	+14	+88	+15

9.4.60 **Table 9-20** shows the comparison between hourly flows and average speeds for the 2015 baseline scenario and projected 2026 and 2041 data with the Proposed Scheme. Note that the baseline average speed includes for Average Speed Cameras (ASC) along A9 single carriageway sections and the projected data anticipates the removal of ASCs once the Proposed Scheme is operational.

9.4.61 Based on the methodology set out in **section 9.2** the projected figures result in a **Low** stress rating for vehicle travellers. As well as increased average speeds, the dualled road will improve the opportunities for overtaking, which will reduce journey times and frustration. Removal of right turn manoeuvres across the carriageway and inclusion of Type A lay-bys with segregation strips is anticipated to be an improvement to safety, further reducing fear and frustration which both contribute to driver stress. Therefore, it is anticipated that there will be a **Slight beneficial** impact on driver stress.

9.5 Mitigation

9.5.1 This section discusses mitigation requirements in relation to the assessment of Effects on All Travellers for the Proposed Scheme.

9.5.2 During construction, several NMU routes will be affected with the potential for significant adverse impacts, as outlined in **section 9.4.** These effects will be temporary and it will be up to the Contractor to provide suitable alternative temporary crossings, diversions or closures to the network of NMU routes as appropriate, in line with a phased programme of works.

9.5.3 Any adverse impacts relating to views from the road have been considered during the design stage and embedded mitigation has been incorporated into the Proposed Scheme, as detailed in **paragraphs 9.4.4 - 9.4.6.** During construction, the works will be suitably phased to reduce disruption and delays, as far as is practicable, which will also help minimise the temporary impacts on views from the road.

9.5.4 Two significant potential impacts have been identified on NMU routes (NMU1 and NMU8), and two areas with significant impacts with respect to views from the road have been identified, around Dalwhinnie Junction and Cuaich. **Table 9-21** below details the Standard and Specific Mitigation Commitments in relation to All Travellers to reduce these impacts.

9.5.5 'Standard Mitigation' is considered applicable across all A9 Dualling projects, 'Embedded Mitigation' refers to elements, included in the DMRB Stage 3 design for the Proposed Scheme, that must be carried through to the detailed design and construction stage to ensure their delivery, and 'Specific Mitigation' measures are further measures that must be implemented to avoid, reduce or offset identified effects.

9.5.6 Project specific mitigation commitments P08-AT11 to P08-AT20 should be read in conjunction with **Chapter 13** and **14** and the **Environmental Mitigation Drawings** (**Drawings 6.1 - 6.14, Volume 3**).

Monitoring Requirements

9.5.7 Reinstated NMU routes, access tracks and underpass crossings will be inspected for construction defects before handover to Transport Scotland, after which their condition will be monitored under routine maintenance inspections schedules during the operational phase of the scheme.

Table 9-21: Standard and specific mitigation commitments for the Effects on All Travellers

Item Ref.	Approximate Chainage/ Location	Timing of Measure	Description	Mitigation Purpose/ Objective	Specific Consultation or Approval Required
Standard A9 Mitigation					
SMC-AT1	Throughout Proposed Scheme	Construction	As far as reasonably practicable, the construction programme will take into account the need to minimise the length of closures or restrictions of access for NMUs.	To minimise length of closures or restrictions of access for NMUs.	None required
SMC-AT2	Throughout Proposed Scheme	Construction	Where practicable, temporary diversion routes and/or assisted crossings will be provided to maintain safe access for NMUs throughout the construction works. Any closure or re-routing of routes used by NMUs will take cognisance of the 'Roads for All: Good Practice Guides for Roads' (Transport Scotland, 2013). These will be agreed in advance with the relevant local authorities and will be clearly indicated with signage as appropriate.	To maintain safe access for NMUs throughout the construction works.	Any closures will be agreed with Transport Scotland (Rights of Way), CNPA and/or PKC (local and core paths).
SMC-AT3	Throughout Proposed Scheme	Pre-Construction	In consultation with the relevant Roads Authority and public transport provider, bus stops affected by the works will be relocated safely with a safe access route provided for NMUs.	To maintain access to Public Transport facilities.	Consultation with the relevant Roads Authority and public transport provider
SMC-AT4	Throughout Proposed Scheme	Construction	The Contractor will produce a traffic management plan that will include measures to avoid or reduce disruption to the road traffic, and in accordance with the Traffic Signs Manual (Department of Transport, 2009). The plan will include consideration of the timing of works, the location of haul roads to reduce site traffic on the public roads and a well maintained traffic management system with sweeping of roads to reduce construction debris on the carriageway.	To avoid or reduce disruption to the road traffic.	None required
SMC-AT5	Throughout Proposed Scheme	Construction	Reasonable precautions will be taken by the Contractor to avoid or reduce road closures. One lane in each direction will be provided for A9 traffic during peak hours (Mon to Fri) except in exceptional circumstances and for closures which are pre-approved by Transport Scotland e.g. those required during blasting.	To avoid or reduce road closures and resulting disruptions to traffic.	Approval required from transport Scotland in the event of required A9 lane closures.
SMC-AT6	Throughout Proposed Scheme	Construction	Road diversions will be clearly indicated with road markings and signage as appropriate. Any road closures will be notified in advance through road signage and appropriate signage will be provided for the duration of the closure. The Contractor will also be responsible for identifying any notable changes in patterns of road network use during construction, where such changes may cause significant disruption elsewhere (such as drivers re-routing away from the A9), and will review and update traffic management provisions as appropriate in discussion with Transport Scotland.	To reduce disruption to the road users.	None required
SMC-AT7	Throughout Proposed Scheme	Construction	Appropriate lighting will be provided during any necessary night-time working, taking into account the requirements of **Mitigation Items E10 and LV4.**	To mitigate potential impacts on driver stress such as fear of potential accidents due to inadequate lighting provision.	None required

Item Ref.	Approximate Chainage/ Location	Timing of Measure	Description	Mitigation Purpose/ Objective	Specific Consultation or Approval Required
SMC-AT8	NMU facilities	Construction	Access for NMUs will be maintained and improved in accordance with the following principles: The requirements of the Equality Act 2010 and 'Roads for All: Good Practice Guides for Roads' (Transport Scotland, 2013) shall be incorporated into the proposed scheme wherever practicable; e.g. any bridges, ramps or footpaths will not present potential barriers to disabled people such as the gradient or surfacing. NMU access shall be provided in accordance with the objectives set out in the A9 Dualling NMU Access Strategy (Transport Scotland, 2016a). Surfacing of any new paths including alongside roads will be considered on a case by case basis, taking into account factors such as safety, the type of user and should comply with current standards. Safety of paths will be considered in accordance with the outcome of the Road Restraints Risk Assessment Process and may require provision of barriers. New cycleways/footpaths will use non-frost susceptible materials to reduce risk of degradation.	To maintain access for NMUs and provide appropriate facilities based on use and improve access for NMUs.	None required
n/a (note)	*n/a*	*n/a*	*Further to the above, the mitigation items detailed in Table 13-17 (Landscape), Table 14-12 (Visual), Table 16-13 (Air Quality) and Table 17-19 (Noise and Vibration) will reduce the adverse amenity impacts on NMU and vehicle travellers during construction.*	*To reduce the adverse amenity impacts on NMU and vehicle travellers during construction.*	*n/a*
Embedded Mitigation					
P08-AT1	ch.20,650-20,800 northbound	Design and Construction	NMU1 (NCN7) and NMU2 have been realigned in the Proposed Scheme around SuDS feature 207	To maintain access to NMU1 and 2 upon operation of the Proposed Scheme.	None required
P08-AT2	ch.22,050	Design and Construction	Allt Coire Bhathaich watercourse crossing with hardstanding ledge for pedestrian access providing access from NCN7 to the east of the A9	To improve NMU safety and maintain NMU access.	None required
P08-AT3	ch.22,550	Design and Construction	Dalwhinnie Junction underpass includes provision for vehicles and NMUs	To improve NMU safety and maintain NMU access.	None required
P08-AT4	ch.22,550 northbound	Design and Construction	A bus turning circle is included along the A889/ Dalwhinnie Junction link road as part of the Proposed Scheme	To maintain and improve public transport stopping points.	None required
P08-AT5	ch.22,550 northbound	Design and Construction	NMU8 is realigned within the Proposed Scheme along the A889/ Dalwhinnie Junction link road and access track to SuDS feature 225	To maintain access along NMU8 upon operation of the Proposed Scheme.	None required
P08-AT6	ch.23,400-23,700 southbound	Design and Construction	NMU8 is to be realigned along aqueduct diversion as part of the Proposed Scheme	To maintain access along NMU8 upon operation of the Proposed Scheme.	None required

Item Ref.	Approximate Chainage/ Location	Timing of Measure	Description	Mitigation Purpose/ Objective	Specific Consultation or Approval Required
P08-AT7	ch. 24,400	Design and Construction	An NMU link from a Type A Lay-by to SSE Aqueduct track (NMU8)	To improve NMU access to NMU8 and the connected hill walking routes	None required
P08-AT8	ch.25,850	Design and Construction	An NMU and vehicle underpass is provided at Cuaich	To improve NMU safety and maintain NMU access for NMU10 and 11.	None required
P08-AT9	ch.27,825	Design and Construction	An underpass is incorporated into the Proposed Scheme, primarily for estate use	To improve NMU safety and maintain NMU access.	None required
P08-AT10	ch.29,175	Design and Construction	Allt Garbh watercourse crossing with hardstanding ledge for pedestrians, primarily for use by Phoines Estate	To improve NMU safety and maintain NMU access.	None required
P08-AT11	Throughout Proposed Scheme	Design and Construction	Sensitive slope design with input from Landscape Architects to set slope gradients from the A9 verge to the surrounding land; refer mitigation commitment P08-LV1 in **Chapter 13 and 14**.	To lessen the visual impact of the scheme and blend earthworks into the surrounding landscape.	None required
P08-AT12	Throughout Proposed Scheme	Design and Construction	SuDS design to integrate with roadside slopes at all locations where SuDS are adjacent to these slopes. SuDS basins to look as natural as possible to blend into surrounding open landscape. Refer to specific embedded mitigation commitment P08-LV2 in **Chapter 13 and 14**.	To lessen the visual impact and changes in views from the road/ amenity value of NMU routes.	None required
Project Specific Mitigation					
P08-AT13	ch.20,000 - 21, 300 (at A889, Dalwhinnie) northbound	Construction	Suitable NMU diversion must be provided where NMU1 and NMU2 are affected by construction works	To maintain safe access for NMUs throughout the construction works.	Any closures or diversions will be agreed with Transport Scotland (Rights of Way) and the CNPA.
P08-AT14	ch.20,550	Construction	A temporary parking provision from the A9 southbound lane should be provided with access to NMU3 to retain hill walking access to Munros Carn na Caim and A'Bhuidheanach Bheag during construction of the northbound carriageway. Temporary access should be clearly signposted.	To maintain safe access to NMU3 throughout the construction works.	None required
P08-AT15	Ch.20,400 to 22,200 southbound	Design and Construction	Any woodland/ vegetation lost to the existing coniferous tree belt shall be replaced with native mixed woodland species to increase biodiversity and visual amenity. Refer to Specific Mitigation commitment P08-V5 in **Chapter 14,** P08-LV6 in **Chapter 13** and the **Environmental Mitigation Drawings 6.1-6.14 (Volume 3)**.	Reduce impact on views from the road and NMU visual amenity.	None required
P08-AT16	ch.22,000 -23,400 northbound and southbound	Design and Construction	Tree, scrub planting and seeding is required around Dalwhinnie Junction and A889 link road to soften embankments and screen views. Refer to Specific Mitigation commitment P08-V4 in **Chapter 14,** P08-LV7 in **Chapter 13** and the **Environmental Mitigation Drawings 6.1-6.14 (Volume 3)**.	Reduce impact on views from the road and visual amenity of NMU1, NMU2 and NMU8.	None required

Item Ref.	Approximate Chainage/ Location	Timing of Measure	Description	Mitigation Purpose/ Objective	Specific Consultation or Approval Required
P08-AT17	ch.23,400 – 23,700 southbound	Design and Construction	Woodland planting as well as heath and wet and species rich grassland surrounding the proposed aqueduct diversion is required; this will soften and screen views of the embankment from the A9. Refer to Specific Mitigation commitment P08-V6 in **Chapter 14,** P08-LV9 in **Chapter 13** and the **Environmental Mitigation Drawings 6.1-6.14 (Volume 3)**.	Reduce impact on views from the road and visual amenity of NMU8.	None required
P08-AT18	ch.25,300 – 25,600 northbound and southbound	Design and Construction	Replacement planting at Lechden Wood which will also increase the diversity of species, and riparian planting around SuDS features 258 and 259. Refer to Specific Mitigation commitment P08-V7 in **Chapter 14,** P08-LV10 in **Chapter 13** and the **Environmental Mitigation Drawings 6.1-6.14 (Volume 3)**.	Reduce impact on views from the road and visual amenity of NMU10 and 11.	None required
P08-AT19	ch.25,400 – 26,200 northbound and southbound	Design and Construction	Woodland and scrub planting is required around Cuaich to soften the embankments and screen views. Refer to Specific Mitigation commitment P08-V7 in **Chapter 14,** P08-LV10 in **Chapter 13** and the **Environmental Mitigation Drawings 6.1-6.14 (Volume 3)**.	Reduce impact on views from the road and NMU visual amenity.	None required
P08-AT20	ch.30,400 – 30,850 northbound	Design and Construction	Native woodland and scrub mix is required around SuDS feature 306 west of the HML railway. Refer to Specific Mitigation commitment P08-V9 in **Chapter 14**, P08-LV12 in **Chapter 13** and the **Environmental Mitigation Drawings 6.1-6.14 (Volume 3)**.	Reduce impact on views from the road.	None required
P08-AT21	Throughout Proposed Scheme	Design/ Construction	Slope treatment to create a natural appearance where slopes are integrated into the sensitive landscape context. This will be detailed with desired contours and cross sections to indicate how slopes should be finished. For further details refer to P08-LV3 in **Chapter 13** and **14**. Planting of slopes as specified on the **Environmental Mitigation Drawings 6.1-6.14 (Volume 3)**.	Reduce impact on visual amenity from NMU routes with views toward the A9.	Transport Scotland
P08-AT22	Throughout Proposed Scheme	Design/ Construction	Refinement of SuDS basin design to integrate SuDS with roadside slopes and access tracks, at SuDS basins 233, 258, 259, 277, 282, 286 and 293. For further details refer to P08-LV13 in **Chapter 13** and **14**. Planting to be as specified on the **Environmental Mitigation Drawings 6.1-6.14 (Volume 3)**.	Reduce impact on visual amenity from NMU routes and views from the road.	Transport Scotland

9.6 Residual Impacts

9.6.1 This section presents the residual impacts of the Proposed Scheme, taking into account the additional mitigation set out in **section 9.5** and the likely effects at operation years 15-25. Impacts are adverse unless otherwise stated.

Non-Motorised Users (NMU)

Temporary - Construction Phase

9.6.2 Implementation of mitigation measures set out in **section 9.5** will reduce impacts on NMU routes during construction; however, it is likely that there will still be some temporary adverse effects throughout the construction process as a result of diverted routes, construction traffic and reduced amenity value. This is temporary and these will not be significant in the long term.

9.6.3 Mitigation as detailed in **Table 9-21** will help reduce some of these construction impacts. The Contractor will be required to provide a suitable diversion for cyclists and pedestrians using NMU1 (NCN7) where this is affected by construction of the Proposed Scheme. As details of this are yet to be determined journey length cannot be assessed. It is anticipated that during construction there would be adverse amenity impacts and there would remain a **Moderate adverse** impact for users of NMU1 which could be locally significant. The remainder of NMU1 would not be significantly affected given the distance from the A9.

9.6.4 It is anticipated there would remain a **Moderate adverse** impact on NMU3 given the close proximity of this route to the works, noticeable tree loss and presence of construction traffic.

Permanent

9.6.5 **Section 9.4** identifies two significant potential impacts on NMU1 and NMU8. Through specific mitigation detailed in **Table 9-21** and given that winter resilience or mitigation vegetation will have established by years 15-25, it is anticipated there will be a **Slight adverse** residual impact on NMU1 and NMU8. Therefore, there will be **no significant residual impacts** on these NMUs given planting around the Dalwhinnie Junction, the aqueduct diversion and at Cuaich.

Access to Outdoor Areas

9.6.6 It is considered there will be a **Moderate beneficial residual impact** on access to Munros Carn na Caim and A'Bhuidheanach Bheag given the proposed southbound lay-by access and proposed underpass crossings improving access to NMU3. This is a significant impact.

Vehicle Travellers - Views from the road

Temporary - Construction Phase

9.6.7 There will be significant temporary effects on views from the road during construction. The Standard Mitigation Commitments listed within **Table 9-21** will help to limit the areas impacted by these temporary effects. There is likely to still be significant effects, however these will be temporary and are therefore not residual.

Permanent

9.6.8 **Section 9.4** identifies two significant potential impacts on views from the road, localised around Dalwhinnie Junction and Cuaich. Taking into consideration the mitigation commitments detailed in **Table 9-21,** and the established winter resilience vegetation at years 15-25 around Dalwhinnie Junction and Cuaich, it is anticipated that, although there will remain some change in views there will be **no significant residual impacts** on views from the road arising from the Proposed Scheme.

Vehicle Travellers – Driver Stress

9.6.9 It is considered that there will be a **Slight beneficial** residual impact on driver stress given the increased opportunities for overtaking, new junctions and removal of right turns across the carriageway, all of which contribute to reducing fear and frustration for drivers.

9.6.10 **Table 9-22** below sets out the summary of residual impacts.

Table 9-22: Summary of residual impacts table – Effects on All Travellers

Receptor	Description	Sensitivity	Significance of Impact – Construction Phase	Significance of Impact – Operation Year 1	Mitigation Ref. (see Table 9-21)	Residual Significance – Construction Phase	Residual Significance – Operation Years 15-25
NMUs							
NMU1	NCN7	High	Moderate	Moderate/ Slight	P08-AT13, P08-AT14, P08-AT21	Moderate/ Slight	**Slight**
NMU2	CNPA Core Path	High	Moderate	Slight	P08-AT13, P08-AT15	Moderate/ Slight	**Slight/ Negligible**
NMU3	Hill walking track	High	Substantial	Slight	P08-AT14, P08-AT15	Moderate	**Negligible/ Slight beneficial**
NMU8	Informal NMU route	Medium	Moderate	Moderate/ Slight	P08-AT16, P08-AT17, P08-AT21	Moderate	**Slight**
NMU10	Hill walking track	High	Moderate/ Slight	Slight/ Negligible	P08-AT18, P08-AT19, P08-AT21, P08-AT22	Moderate/ Slight	**Slight**
NMU11	Informal NMU route	Low	Moderate/ Slight	Moderate/ Slight	P08-AT18, P08-AT19, P08-AT21, P08-AT22	Moderate/ Slight	**Slight**
Vehicle Travellers – Views from the Road							
Dalwhinnie Junction ch. 22,000 - 23,400	Increased signage and localised views of the slip roads, with views of the access track to the east of the A9	Medium	Substantial/ Moderate	Moderate	P08-AT11, P08-AT12, P08-AT16, P08-AT17	Substantial/ Moderate	**Slight**
Cuaich ch. 25300 - 25900	Tree loss to Lechden wood and along the edge of the road	Medium	Substantial/ Moderate	Moderate	P08-AT11, P08-AT12, P08-AT18, P08-AT19, P08-AT22	Substantial/ Moderate	**Slight**
Estate tracks ch. 27,400 – 29,400	Partial views of the tracks and SuDS basins	Medium	Substantial/ Moderate	Slight	P08-AT18, P08-AT19, P08-AT22	Substantial/ Moderate	**Slight/ Negligible**
Retaining wall ch. 30,600 - 30,800	Some loss of vegetation to the roadside and view of the retaining wall	Medium	Substantial/ Moderate	Slight/ Negligible	P08-AT18, P08-AT19, P08-AT20	Substantial/ Moderate	**Slight/ Negligible**

9.7 References

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