

Appendix 2.2

Strategic Environmental Assessment (SEA) Monitoring Framework

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Appendix 2.2 – Strategic Environmental Assessment (SEA) Monitoring Framework

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A9 Dualling Programme – SEA Monitoring Framework – Design Section Constraints	
A9 Design Section – Central	Project 8, Dalwhinnie to Crubenmore
<p>SEA References: SEA Environmental Report (ER) – Section 5, ER Addendum – Section 3, Section 4 and: Appendix B (Detailed Assessment Matrices, Sections C1 and D1) – Appendix C (Revised Geographical Information System (GIS) Mapping – Ancient Woodland Inventory) – Appendix D (Indicative Junction Locations Constraints Review Tables) – Appendix E (Habitats Regulations Appraisal (HRA) and Programme-level Appropriate Assessment (AA) Report) – Appendix F (Strategic Landscape Review) – Appendix G (Strategic Flood Risk Assessment (SFRA))</p>	

SEA Identified Constraints	Description of Constraint	SEA Comment	Recommendations for later DMRB Stages		Record how addressed at:	
			DMRB Stage 2	DMRB Stage 3	DMRB Stage 2	DMRB Stage 3
Special Area of Conservation (SAC)	Drumochter Hills SAC	Refer to Environmental Report (ER) Addendum Appendix E – Habitats Regulations Appraisal (HRA) and Programme-level Appropriate Assessment (AA) Report	Embed range of strategic principles on biodiversity, and avoidance of SAC/ SPA/ Site of Special Scientific Interest (SSSI) site boundaries and impacts wherever possible	Should SAC/ SPA boundaries prove unavoidable, project level HRA/ AA must be completed and agreed with SNH in advance of Stage 3 ES finalisation to inform final preferred alignment design	Drumochter Hills SAC and SPA: At DMRB Stage 2, Project 8 mainline alignment and junction options were developed to avoid encroachment into the Drumochter Hills SAC and SPA boundaries	Drumochter Hills SAC and SPA: No direct encroachment into the SAC/ SPA from the mainline carriageway therefore no mitigation required
Special Protection Area (SPA)	Drumochter Hills SPA	Key issues for consideration in this Design Project include:	Secure early consultation with SNH to agree project level HRA Screening requirements for alignment, junctions and drainage options through the Drumochter Hills site	Project level HRA/ AA will need to demonstrate no adverse effects on site integrity for SAC and SPA qualifying features and species	There are no hydrological connectivity issues related to DMRB Stage 2 options as these are all down-gradient from the SAC/ SPA site boundaries	Minor encroachment into SAC/ SPA from use of the (existing) BDL access track. As this track already exists, impacts are considered not significant
Site of Special Scientific Interest (SSSI)	Drumochter Hills SSSI	<ul style="list-style-type: none"> possible encroachment into Special Area of Conservation (SAC)/ Special Protection Area (SPA) site boundaries, associated with Dalwhinnie junction options at the northern extent of the site inclusion of suitable drainage and Sustainable Drainage Systems (SuDS) features, including consideration of impacts on drainage into SAC habitats, to the satisfaction of Scottish Environment Protection Agency (SEPA) and Scottish Natural Heritage (SNH) consideration of habitat impacts, including peat, Groundwater Dependent Terrestrial Ecosystems (GWDTE) opportunities to incorporate 	Consultation with SNH to inform selection of the preferred dualling alignment and junction options SNH consultation to advise requirements for surveys and mitigation for qualifying interest species and to inform the approach to more detailed AA, as required to support DMRB Stage 3 detailed design and Environmental Statement (ES) SNH consultation to include consideration of drainage and SuDS requirements to address risks to SAC and SSSI habitats and species SEPA should be included in discussion on levels of SuDS treatment, Controlled Activity Regulation (CAR) requirements and flood risk implications SSSI boundary is larger than the SAC/ SPA boundary and runs directly alongside the current A9 between approx. refs.: NN628791 and NN639838	To include means to address potential run-off, pollution and hydrological risks/ effects on SAC habitats with mitigation, management plans and exclusion zones/ timescales for qualifying species Will have to demonstrate effective consideration of ecological and hydrological connectivity between priority wetland/ peat habitats as well as peat habitat management and restoration plans Consultation with SNH, Cairngorms National Park Authority (CNPA) and other	DMRB Stage 2 HRA for the SAC therefore identifies 'No Likely Significant Effect (LSE)' on qualifying features associated with Project 8 options DMRB Stage 2 HRA for the SPA identifies 'No LSE' with respect to any supporting habitat issues for qualifying species (merlin, breeding), but cannot rule out LSE for breeding merlin at this stage, due to potential for disturbance effects during the construction stage At DMRB Stage 2 stage of assessment, no breeding merlin have been identified in proximity to the A9 (ref. Project 8 ornithology)	Habitats affected during temporary works will be protected via ground protection measures such as floating roads and reinstated to enable recovery where trafficked DMRB Stage 3 included a fully updated and revised HRA which further considered potential disturbance effects on breeding merlin Drumochter Hills SSSI: DMRB Stage 3 included a full appraisal of SSSI habitat and breeding bird assemblage impacts to identify potential mitigation and/ or compensation options Detailed habitat surveys were undertaken on areas due to be affected by the Proposed Scheme

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			DMRB Stage 2	DMRB Stage 3	DMRB Stage 2	DMRB Stage 3
		<p>wildlife crossings</p> <ul style="list-style-type: none"> noise disturbance during bird breeding and nesting seasons effective consideration of cumulative impacts within the site boundaries landscape and visual impacts <p>Should dualling alignment/ junction design options encroach within SAC/ SPA site boundaries, project level HRA and AA will be required</p> <p>Separate consideration of SSSI features and consents will be required</p>	<p>DMRB Stage 2 options design should aim to minimise dualling and junction footprints/ encroachment within the SSSI boundary</p> <p>Consultation with SNH and SEPA required to agree more detailed local survey requirements/ further studies and assessment to determine habitat/ species impacts and agree effective mitigation and compensation measures for any unavoidable impacts on SAC/ SPA/ SSSI features and habitats</p> <p>Peat and GWDTE surveys (ecology and hydrology) will be required to inform DMRB3 HRA/ AA, drainage strategy, ES and any habitat management and restoration plans</p>	<p>relevant stakeholders required on landscape and visual impacts assessment for preferred alignment and junction options in the vicinity of the Drumochter site</p> <p>Preferred alignment design and ES to include appropriate record of consultation, all further studies undertaken and any mitigation or compensatory works required to the satisfaction of SNH, SEPA and CNPA</p>	<p>surveys, 2015) and construction stage disturbance risks are expected to be manageable to a level that avoids 'Adverse Effects on Site Integrity' (AESI) via application of suitable exclusion periods or zones</p> <p>Drumochter Hills SSSI:</p> <p>At DMRB Stage 2, Project 8 mainline alignment and junction options were developed to minimise the footprint within the SSSI, whilst also avoiding encroachment into the River Spey SAC boundary</p> <p>Given that the SSSI envelops the A9, some minor habitat impacts will be unavoidable</p>	<p>Consultation meetings were held with SNH to discuss issues where SSSI was affected by the Proposed Scheme</p> <p>The assessment recognises that the A9 sits within the SSSI and some land will be lost to A9 Dualling infrastructure</p>
Special Area of Conservation (SAC)	River Spey SAC	<p>Refer to ER Addendum Appendix E – HRA and Programme-level AA Report</p> <p>Any crossings of the River Spey SAC, or encroachment upon the SAC boundaries, will require consideration via project level HRA</p> <p>Drainage/ SuDS outfalls to the River Spey SAC, and its tributaries, are also likely to require consideration via project level HRA</p> <p>Likely to require protected species and habitat survey for salmon/ lamprey spawning and fresh water pearl mussel beds, as well as otter</p> <p>Project level HRA/ AA will need to demonstrate that it is possible to avoid adverse effects on site integrity in this constrained section</p> <p>Should include consultation with SEPA and Spey Fisheries Board on drainage, SuDS and Controlled Activity Regulation (CAR) aspects – the River Truim is a designated part of the River Spey SAC so gravel/ shingle beds may be spawning sites</p>	<p>Embed range of strategic principles on biodiversity and avoidance of SAC site boundaries and impacts wherever possible, recognising potential issues in this section at approx. refs.:</p> <p>NN647858 to NN650862 (route constrained between river and aqueduct),</p> <p>NN656871 (crossing of SAC tributary),</p> <p>NN660877 to NN665882 (river in close proximity to HML and A9)</p> <p>NN677910 (crossing of SAC tributary)</p> <p>Secure early consultation with SNH to agree project level HRA Screening requirements for drainage to/ possible encroachment on the River Spey SAC</p> <p>Consultation with SNH to determine alternative alignment/ junction option impacts on River Spey designations, to inform selection of the preferred dualling alignment and junction location(s)</p> <p>SNH consultation to advise requirements for surveys and mitigation for qualifying interest species and means to address pollution/ sedimentation risks and effects on river geomorphology, to inform the approach to more detailed AA, as required to support DMRB3 detailed design and ES</p> <p>SEPA should be included in discussion on</p>	<p>Project level HRA/ AA must be completed and agreed with SNH in advance of Stage 3 ES finalisation to inform final preferred alignment design</p> <p>To include means to address potential run-off, pollution and sedimentation/ hydrological risks/ effects on river geomorphology, with mitigation, management plans and exclusion zones/ timescales for qualifying species</p> <p>In the event that encroachment is absolutely unavoidable at detailed design stage, consultation with SNH is required as early as possible to determine effective mitigation and/ or compensation measures to avoid adverse effects on site integrity</p> <p>Preferred alignment/ junction design and ES to include appropriate record of consultation, all further studies undertaken and any mitigation or compensatory works required</p>	<p>At DMRB Stage 2, Project 8 mainline alignment and junction options were developed to avoid encroachment into the River Spey SAC boundaries</p> <p>All junction options require a link road crossing of the SAC to link into Dalwhinnie; however, there are no other crossings of the SAC identified</p> <p>There are numerous minor tributaries/ hillside runoff/ drainage channels that are crossed by the A9 mainline options; however, water quality and morphological impacts are not expected to result in AESI due to the required implementation of SuDS</p> <p>Potential for species disturbance during construction was identified as a possible issue but DMRB Stage 2 HRA identified measures to minimise risks to a level that would not result in AESI, e.g. avoidance of construction in proximity to the watercourse during salmon season</p>	<p>DMRB Stage 3 included a fully updated and revised HRA which considered crossings, SuDS and outfalls associated with the Proposed Scheme</p> <p>There is one crossing of the River Truim (part of the River Spey SAC).</p> <p>This is on the new link road from the A9 to the A889, just south of Dalwhinnie.</p> <p>The River Truim bridge has been designed to minimise impacts on the SAC with no piers within the SAC boundary</p> <p>The Proposed Scheme has been designed to have enhanced SuDS treatment where water quality assessments produced a fail result with two levels, in order to maintain water quality</p> <p>Mitigation for construction in proximity to the SAC includes programme recommendations to minimise ecological impacts, such as avoiding the salmon season</p>

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			DMRB Stage 2	DMRB Stage 3	DMRB Stage 2	DMRB Stage 3
			levels of SuDS treatment, CAR requirements, flood risk implications and opportunities to improve provisions for fish passage Spey Fisheries Board should be included in terms of protected species/ spawning beds, etc.			
Site of Special Scientific Interest (SSSI)	Loch Etteridge Geological SSSI	These feature sites are unlikely to be affected by dualling works to current single carriageways, but should be considered further if any works are to be considered on the existing Crubenmore dual carriageway – for example, improvements to junctions or provision of underpasses	Unlikely to require consideration at DMRB Stage 2 for single carriageway dualling designs Should be considered if design options extend to junction improvements/ underpass provision on existing Crubenmore dual carriageway	Unlikely to require consideration at DMRB Stage 3 for single carriageway dualling designs Should be considered if design options extend to junction improvements/ underpass provision on existing Crubenmore dual carriageway	No DMRB Stage 2 options developed for Project 8 will directly affect the Loch Etteridge SSSI or GCR designated areas Project 8 does not include any works options for junction improvements/ underpass provision on the existing Crubenmore dual carriageway	Did not apply at DMRB Stage 3 as not affected by the Proposed Scheme
Geological Conservation Review Site (GCR)	Loch Etteridge GCR		Embed range of strategic principles on geodiversity and avoidance of designated site boundaries and impacts where possible			
Ancient Woodland (AW) (of semi-natural origin)	AW (SNO) Wood ID 17185 Class 1a	This Ancient Woodland Inventory (AWI) site is unlikely to be affected by dualling works to current single carriageways, but should be considered further if any works are to be considered on the existing Crubenmore dual carriageway – for example, improvements to junctions or provision of underpasses	Unlikely to require consideration at DMRB Stage 2 for single carriageway dualling designs Should be considered if design options extend to junction improvements/ underpass provision on existing Crubenmore dual carriageway	Unlikely to require consideration at DMRB Stage 3 for single carriageway dualling designs Should be considered if design options extend to junction improvements/ underpass provision on existing Crubenmore dual carriageway	No DMRB Stage 2 options developed for Project 8 will directly affect this AWI area Project 8 does not include any works options for junction improvements/ underpass provision on the existing Crubenmore dual carriageway	Did not apply at DMRB Stage 3 as not affected by the Proposed Scheme
Historic Environment including Unscheduled Archaeology	Listed Buildings identified by SEA are discussed below	Unscheduled archaeology was outwith the scope of route-wide SEA studies and should be considered at an early stage in consultation with Historic Scotland and the relevant Local Authority archaeology teams CNPAs also have an interest in non-designated historic features and gardens within the Park boundaries	Secure early consultation with Historic Scotland, CNPA and Local Authority archaeology or heritage team and obtain historic environment records to determine the location of any locally important sites and features Route alignment studies to be informed by consultations to avoid such sites in the first instance, and to determine scope of further studies where avoidance is not possible	Preferred alignment design and ES to include appropriate record of consultation, all further studies undertaken and any mitigation required for unscheduled archaeology	Project 8 mainline alignment and junction options may impact on unknown buried archaeological remains At DMRB Stage 2, consultations with Local Authority Historic Environment team and Historic Scotland were undertaken DMRB Stage 2 assessment identified that there are areas of archaeological potential around the A9, particularly between Dalwhinnie to Dalnacardoch at Lechden and Dallenach; and in areas of the conjectured line of General Wade's Military Road	Non-designated cultural heritage assets were assessed as part of DMRB Stage 3. Walkover surveys were undertaken to assess the current condition of assets and to identify previously unrecorded assets. Specific mitigation required for impacted assets was outlined and determined in consultation with Historic Environment Scotland and the Local Authority

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Scheduled Monuments (SM)	Dalwhinnie, Wade Bridge Approx. ref.: NN638827	Scheduled Monument (SM) and Listed Building (LB) designations on the same feature Unlikely to be directly affected by A9 dualling; however, it is located within the 200m wide corridor	SM and LB designations on the same feature Unlikely to be directly affected by A9 dualling; however, it is located within the 200m wide corridor	Preferred alignment design and ES to include appropriate record of consultation, all further studies undertaken and any mitigation required	No DMRB Stage 2 options developed for Project 8 will directly affect this heritage asset Potential impacts on the setting of the asset were identified, and outline recommendations for mitigation were presented	Since SEA stage, this Asset was de-scheduled and is a Grade II Listed Building. Setting assessment was carried out on Wade Bridge Mitigation included sensitive design of A9 embankment Historic recording also proposed to be carried out to record the assets current setting
Listed Building (LM) (Cat B)	Dalwhinnie, Wade Bridge LB 339627	Embed range of strategic principles on historic environment and avoidance where possible May have to be included as a sensitive visual receptor and assessed for impact on setting – requires discussion with Historic Scotland	Embed range of strategic principles on historic environment and avoidance where possible May have to be included as a sensitive visual receptor and assessed for impact on setting – requires discussion with Historic Scotland			
Listed Building (LB) (Cat B)	Dalwhinnie Distillery LB 338623 and Bonded Warehouse LB 338624	No direct impact anticipated on these LBs; however, may have to be considered as sensitive visual receptors for assessment of visual impacts/ effects on setting	Embed range of strategic principles on historic environment and avoidance where possible Secure early consultation with Historic Scotland and other relevant stakeholders (as agreed with Transport Scotland and the A9 Dualling Environmental Steering Group (ESG)) to determine whether additional studies are required for DMRB Stage 3 assessment of visual impact/ impact on setting	Preferred alignment design and ES to include appropriate record of consultation, all further studies undertaken and any mitigation required	No DMRB Stage 2 options developed for Project 8 will directly affect these listed buildings There could be potential impacts on the setting of the listed building Outline recommendations for mitigation were presented	Dalwhinnie Distillery was assessed for impacts on its setting. The asset was scoped out due to no impact predicted on the asset's setting from the Proposed Scheme due to distance and lack of visibility
Listed Building (LB) (Cat B)	Crubenmore, Old Bridge LB 339626 NN676913	LB bridges are unlikely to be directly affected by dualling as the Highland Mainline presents a barrier between the A9 and these LB features			No DMRB Stage 2 options developed for Project 8 will directly affect these listed buildings Both bridges are screened from the existing A9 by woodland, and no impacts on their setting were considered likely	Setting assessment was carried out on Crubenmore Old Bridge and Crubenmore New Bridge Mitigation included replacement of any tree screening lost and Historic recording also proposed to be carried out to record the asset's current setting
Listed Building LB (Cat C(S))	Crubenmore Bridge LB 399555 NN676914	Both are also in the vicinity of the transition between A9 single/ dual carriageways, so any impact on setting is likely to be minimal				
Cairngorms National Park (CNP)	This entire section is within the CNP boundaries	CNPA have a duty to promote and enhance the natural and/ or cultural heritage via any developments within the Park boundaries (ref. National Park Aim 1) Key issues noted above for avoidance of designated site boundaries and impacts are likely to take precedence; however, CNPA will require effective consideration of non-designated natural heritage sites, protected species, geodiversity, NMU,	Ensure early and ongoing consultation with CNPA on the full range of design and environmental issues and options to secure their advice and agreement on the preferred dualling alignment Will require detailed consultation to work with CNPA to determine their requirements for additional studies on landscape/ visual effects assessments and mitigation to inform DMRB3	Preferred alignment design and ES to include appropriate record of consultation, all further studies undertaken and any mitigation required	CNPA were consulted regularly through the DMRB Stage 2 options development and assessment process, including via the A9 ESG and Landscape Forum Approach to Landscape Assessment tailored to include consideration of the Special Landscape Qualities (SLQ) of the CNP, as well as providing cross-sections for each developed option Landscape and Visual receptors considered in Stage 2 assessment were all acceptable to CNPA, as	Consultation continued with CNPA through the DMRB Stage 3 EIA Representative visual receptors were agreed for assessment, the Special Landscape Qualities of the CNP were considered, earthworks slope, SuDS and structures design aesthetic and planting mitigation have all been taken into account at DMRB Stage 3 to avoid and minimise adverse landscape and visual effects where possible One Project 8 lay-by includes connections to an NMU route (one

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		access, lay-by and landscape/ visual issues within this sensitive corridor section			was the ecological survey rationale agreed via the A9 ESG	southbound lay-by will enable hill walkers access to NMU3, a track to Munros Car na Caim and A'Bhuidheanach Bheag).
Peat Soils	Peaty soils identified throughout this section	<p>Large sections through Glen Truim identified with peat soils and other wetland habitats</p> <p>Embed strategic principles approach to avoid losses of peat soils where possible</p> <p>Action to avoid River Spey SAC and SSSI boundaries may mean dualling to the opposite (east) side of the current carriageway, which may increase risk to peat habitats/ soils</p> <p>SNH and SEPA will also require demonstration that GWDTE have been identified/ surveyed and assessed with effective mitigation/ compensation/ restoration plans, with reference to current guidance</p>	<p>Secure early consultation with SEPA and SNH to determine alternative alignment and junction option impacts on peat soils, to inform selection of the preferred options and to determine requirements for additional surveys and studies to inform peat habitat management and restoration plans</p> <p>Should also include consultation on presence of, and further requirements on, GWDTE</p>	<p>Preferred alignment design and ES to include appropriate record of consultation, further peat or GWDTE studies undertaken, any mitigation or compensatory works required, and an agreed peat habitat management and restoration plan in accordance with applicable guidance</p>	<p>Information presented in Stage 2 options assessment was primarily based on JHI information or limited ecological survey sample probing</p> <p>Feedback received from SNH/ SEPA/ CNPA on peat information requirements is noted for inclusion with DMRB Stage 3 EIA</p> <p>Commissioned DMRB Stage 2 Ground Investigations included a suite of peat probing to improve information available for Stage 3</p> <p>Potential GWDTE areas were also considered via habitat mapping analyses to identify areas for further consideration</p>	<p>Peat and GWDTE issues continued to be considered and assessed via Stage 3 design development and EIA</p> <p>Peat surveys were carried out for the project and adjacent areas</p> <p>Peat depth maps were created and used in the environmental assessment, as well as design development process</p> <p>In doing so, areas of deep peat and GWDTE were avoided where possible</p> <p>In some places embankments were steepened to avoid areas of deep peat.</p> <p>Other elements, such as SuDS and compensatory storage areas, were also re-located out of areas of deep peat</p> <p>Outline Peat Management Plan produced</p>
SEPA 1:200 year Flood Zone	<p>Existing route crosses Flood Zone in two areas</p> <p>Approx. refs.: NN656871 NN677910</p> <p>HML railway provides a barrier in other locations</p>	<p>Refer to ER Addendum Appendix G Strategic Flood Risk Assessment (SFRA)</p> <p>Embed strategic principles approach to avoid encroachment in the flood zone</p> <p>Any loss of functional flood plain will require compensatory storage</p> <p>Flood zone areas principally around watercourse crossings</p> <p>Preference would be to avoid encroachment in the flood zone; however, avoidance is unlikely at crossing locations</p>	<p>Alignment studies should aim to strike a balance between avoidance of other constraints and the 1:200 year flood zone</p> <p>Secure early consultation with SEPA to determine alternative alignment option impacts and to determine requirements for flood risk assessment, SuDS drainage and CAR requirements</p> <p>Consider where drainage designs can include improved wildlife crossing and fish passage opportunities to secure multi-species benefit</p>	<p>Preferred alignment design and ES to include appropriate record of consultation, all further studies undertaken and any mitigation or compensatory works required</p> <p>Incorporate appropriate drainage, compensatory storage and management measures to ensure no net change to flood risk</p> <p>Make recommendations to avoid works compounds within the functional floodplain where possible</p>	<p>At DMRB Stage 2, Project 8 mainline alignment and junction options and associated earthworks were developed to avoid and minimise encroachment upon the 200 year functional floodplain; however, it was not completely avoidable</p> <p>Flood plain issues did inform junction option sifting, but were not a significant factor in mainline option comparisons</p> <p>Flood model has been developed for the River Truim to enable informed assessment of varying/ cumulative changes to culvert sizes, etc.</p>	<p>Hydrology and flooding issues fully considered and assessed via Stage 3 design development and flood modelling, as reported in the FRA and Environmental Statement</p> <p>Stage 3 flood modelling was used to minimise loss of functional floodplain (construction and operational phases), and to inform culvert and watercourse crossing designs, as well as access track and SuDS locations</p> <p>Where earthworks encroachment into floodplain was unavoidable, modelling appropriately located compensatory storage areas using a volume-slices approach to ensure no net change to flood risk</p> <p>Consultation continued with SEPA and other ESG members</p>

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Highland Main Line (HML) railway	No HML railway crossings in this section	Highland Mainline (HML) provides a physical barrier between the A9, the River Spey SAC and the 200 year Flood Zone across much of the length of this section Mainly an engineering constraint; however, will affect scale and location of dualling earthworks required	Secure early consultation with relevant stakeholders (as agreed with Transport Scotland and the A9 Dualling ESG) to determine alternative alignment options, which clearly demonstrate HML constraints, and inform selection of the preferred dualling alignment CNPA may require identification of HML railway as a sensitive visual receptor in this area for inclusion in visual impact assessments	Preferred alignment design and ES to include appropriate record of consultation, all further studies undertaken and any mitigation required	At DMRB Stage 2, Project 8 mainline alignment and junction options and associated earthworks were developed to avoid encroachment upon the HML HML railway included as a receptor in DMRB Stage 2 Visual assessment chapter as recommended	Stage 3 design continued to avoid encroachment upon the HML railway Land made available for temporary construction works extends to the HML boundary in some locations HML users included as key visual receptors in assessment, design development and mitigation – representative HML viewpoints agreed with CNPA Access to HML crossings retained in dualling design
Beauly Denny Power Line (BDL)	Beauly Denny line runs to the east of the A9 until it crosses the route just north of Dalwhinnie at approx. ref.: NN647859	The Beauly Denny Power Line (BDL) follows the A9 route and adds a further fixed infrastructure constraint; however, removal of old pylons may provide opportunities in terms of space for dualling in this section	Secure early consultation with relevant stakeholders (as agreed with Transport Scotland and the A9 Dualling ESG) to determine alternative alignment options, which clearly demonstrate BDL constraints, and inform selection of the preferred dualling alignment	Preferred alignment design and ES to include appropriate record of consultation, all further studies undertaken and any mitigation required	At DMRB Stage 2, Project 8 mainline alignment and junction options and associated earthworks were developed to avoid encroachment upon the BDL No significant issues identified at DMRB Stage 2	BDL exclusion zone (approximately 15m) informed Stage 3 design constraints Former BDL access track to be made permanent to provide alternative estate access due to closure of direct access from A9
Non-Motorised Users (NMU)	National Cycle Network (NCN) 7 and Core Paths in the area run to the opposite side of the river and HML railway in this section	No impact on National Cycle Network (NCN) 7 or Core Paths expected in this section CNPA is the access authority within the Park boundaries Refer to, and embed, strategic principles approach to NMU and cycling provisions NMMUs to include pedestrians, cyclists and equestrians NMU access may be impacted during construction and existing crossing points may be rationalised to provide safer crossing opportunities	Secure early consultation with relevant stakeholders (as agreed with Transport Scotland and the A9 Dualling ESG) to determine alternative alignment option impacts on any other identified NMU routes and crossings to inform selection of the preferred dualling alignment Consider opportunities to provide wildlife crossing opportunities to secure multi-species benefit and to link to enhanced lay-by facilities Selection of preferred alignment to be informed by an 'access audit', as required by Chapter 6 of Transport Scotland's 'Roads for All: Good Practice Guidance for Roads' and a 'cycle audit', as required by Chapter 11 (see Fig. 11.1) of Transport Scotland's 'Cycling by Design' good practice guidance	Preferred alignment design and ES to include appropriate record of consultation, all further studies undertaken and any mitigation or compensatory works required to ensure an equal or better standard of provision than existing DMRB Stage 3 to include construction mitigation requirements on provision of appropriate diversionary routes and signage to maintain overall access provisions during construction	Consultation ongoing via A9 ESG and Access forums Potential impacts considered via DMRB Stage 2 assessments on Community & Private Assets and Effects on All Travellers Route-wide access strategy and project specific access studies also ongoing to consider implications in advance of Stage 3, in cognisance of the 'audit' requirements noted	Where affected by the Proposed Scheme, the surrounding NMMUs have been locally realigned Six underpass crossings have been incorporated into the design allowing NMMUs to safely cross the A9 and access the surrounding NMU routes. A bus turning circle is proposed at the Dalwhinnie Junction to retain public transport provision into Dalwhinnie. There is potential for temporary disruption during construction, although mitigation has been identified to potentially include a local shuttle service during NMU closures

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Wildlife Crossings	<p>The existing A9 is considered to act as a barrier to species movement</p> <p>However, the location of any wildlife crossing opportunities was outwith the scope of the SEA</p>	<p>Embed the principle of 'multi-species benefits through route permeability' across all design sections</p>	<p>Identification and implementation of wildlife crossing provisions should be embedded within the consideration of drainage, watercourse crossings, NMU routes, junctions and other road and rail crossing opportunities</p> <p>Secure early consultation with SNH and CNPA on appropriate species and habitat survey requirements</p>	<p>Preferred alignment design and ES to include appropriate record of consultation, all further studies and surveys undertaken and any mitigation, compensatory or improvement works required to deliver a suitable range of wildlife (e.g. mammals and fish) crossings and passes</p>	<p>Not specifically included in DMRB Stage 2 options development or assessment as culverts, crossings, etc. are designed at Stage 3</p> <p>However, species surveys have been undertaken (in line with rationale agreed via A9 ESG), as well as reviews of Deer Vehicle Collision data, and morphological baseline surveys on watercourses to inform ecological inputs to Stage 3 design</p>	<p>Wildlife crossings have been included in the Stage 3 design.</p> <p>These include mammal ledges in watercourse culverts, dry culverts, deer ledges and multi-use underpasses</p> <p>Mammal fencing has also been included in the design to guide animals to the appropriate crossing points</p> <p>22 watercourse culverts have been designed to be suitable for fish passage through use of natural bed material within</p> <p>In total, there are 12 mammal crossings for species such as otter and 2 crossings for larger mammals such as deer in key locations where species have been recorded or where watercourse crossings can provide 'green' routes under the scheme</p>

