Appendix A2.2: Strategic Environmental Assessment (SEA) Monitoring Framework

A9 Dualling Programme – SEA Monitoring Framework – Design Section Constraints								
	A9 Design Section – South		Design Project –	Pitlochry to Killiecrankie (approx. 6km)			
SEA References: SEA Environmental Report – Section 5 Environmental Report Addendum – Section 3, Section 4 and: Appendix B (Detailed Assessment Matrices, Sections B1) – Appendix C (Revised GIS Mapping – Ancient Woodland Inventory) – Appendix D (Indicative Junction Locations Constraints Review Tables) – Appendix E (HRA and Programme-level Appropriate Assessment (AA) Report) – Appendix F (Strategic Landscape Review) – Appendix G (Strategic Flood Risk Assessment)								
SEA Identified Description of	SEA Commont	Recommendations for	later DMRB Stages	Record hov	/ addressed at:			
Constraints Constraint	SEA Comment	DMRB Stage 2	DMRB Stage 3	DMRB Stage 2	DMRB Stage 3			
Special Area of Conservation (SAC) River Tay SAC Approx. crossing refs.: NN951566 NN928585	Refer to ER Addendum Appendix E, HRA and Programme-level Appropriate Assessment (AA) Report. Embed range of strategic principles on biodiversity, and avoidance of SAC site boundaries and impacts wherever possible. Any crossings of the River Tay SAC, or encroachment upon the SAC boundaries, will require consideration via project level Habitats Regulations Appraisal (HRA). Drainage/ SuDS outfalls to the River Tay SAC, and its tributaries are also likely to require consideration via project level HRA. Should include consultation with SEPA and Tay Fisheries Board on drainage, SuDS and CAR aspects. Refer to SNH's River Tay SAC advice to developers at: http://www.snh.org.uk/pdfs/publicatio ns/desi gnatedareas/River%20Tay%20SAC. pdf	Secure early consultation with SNH and other relevant stakeholders (as agreed with Transport Scotland and the A9 Dualling Environmental Steering Group) to agree project level HRA Screening requirements for crossings of, and drainage to, the River Tay SAC. Consultation with SNH to determine alternative alignment option impacts on River Tay designations, to inform selection of the preferred dualling alignment. 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 Appropriate Assessment, as required to support DMRB3 detailed design and Environmental Statement. SEPA should be included in discussion on levels of SuDS treatment, CAR requirements and opportunities to improve crossings for fish passage (e.g. flood risk implications). Tay Fisheries Board should be included in terms of protected species/ spawning beds, etc	Project level HRA/ AA must be completed and agreed with SNH in advance of Stage 3 Environmental Statement finalisation to inform final preferred alignment design. To include means to address potential spillage, run-off, pollution and sedimentation/ hydrological risks/ effects on river geomorphology, with mitigation, management plans and exclusion zones/ timescales for qualifying species. Preferred alignment design and Environmental Statement to include appropriate record of consultation, all further studies undertaken and any mitigation or compensatory works required.	Regular meetings with the Environmental Steering Group (ESG), which includes SNH, have been held and SNH has been consulted for specific topic items such as the HRA approach. Baseline data gathering required for Stage 2 was agreed through the forum of the ESG and compiled in an Outline Approach to Consistency in A9 Ecology Survey Extents document. TDSFB have been consulted and their data included in our Stage 2 Assessment. A minimum of two levels of SuDS for all mainline road drainage prior to discharge to receiving watercourses, as agreed with SEPA and SNH. Three levels will be considered for designated sites where practicable, in agreement with SNH. Geomorphological input will inform the design of watercourse	Regular meetings with the Environmental Steering Group (ESG), which includes SNH, have been held. SNH has been consulted in relation to specific items such as the HRA approach. DMRB Stage 3 assessments detailed in the ES were informed by: DMRB Stage 2 assessments; further surveys; liaison with the appropriate consultees (including TDSFB, SNH and SEPA); and cross- discipline liaison as appropriate (including geomorphology and hydrogeology). Mitigation workshops have included consideration of outfall design to avoid adverse effects on site integrity. Two levels of SuDS treatment have been identified as a minimum requirement for the proposed scheme. On a number of drainage catchments, a second level of treatment has been achieved through the adoption of a proprietary system (e.g.			



	A9 Dualling Programme – SEA Monitoring Framework – Design Section Constraints							
		A9 Design Section – South		Design Project -	- Pitlochry to Killiecrankie (approx. 6km)		
SEA References: SEA Environmenta Environmental Rep Appendix B (Detail Appendix D (Indica Appendix F (Strate	SEA References: SEA Environmental Report – Section 5 Environmental Report Addendum – Section 3, Section 4 and: Appendix B (Detailed Assessment Matrices, Sections B1) – Appendix C (Revised GIS Mapping – Ancient Woodland Inventory) – Appendix D (Indicative Junction Locations Constraints Review Tables) – Appendix E (HRA and Programme-level Appropriate Assessment (AA) Report) – Appendix F (Strategic Landscape Review) – Appendix G (Strategic Flood Risk Assessment)							
SEA Identified Constraints	Description of Constraint	SEA Comment	Recommendations for	later DMRB Stages	Record how	addressed at:		
					structures, any necessary channel realignment and outfall location, at DMRB Stage 3. Opportunities to improve/ maintain fish passage through culverts will be undertaken at DMRB Stage 3. CAR authorisation requirements will be discussed and agreed with SEPA at DMRB Stage 3.	separator) as opposed to conventional SuDS (e.g. a basin). This is due to these drainage runs being considered 'constrained sites' where the adoption of a second level of conventional SuDS would have resulted in the loss of ancient woodland, significant landscape impacts and/or increased flood risk. Designs of the Tummel and Loch Faskally crossings have been informed by multidisciplinary discussions to minimise implications for the SAC. Culvert designs to improve / maintain fish passage were informed by DMRB Stage 3 surveys, and designs are being developed at DMRB Stage 3 in consultation with geomorphology, hydrology and structures. The construction of the proposed scheme will be required to comply with all relevant environmental legislation and protection such as the Water Environment (Controlled Activities) (Scotland) Regulations 2011, relevant Pollution Prevention		



	A9 Dualling Programme – SEA Monitoring Framework – Design Section Constraints							
		A9 Design Section – South		Design Project -	Design Project – Pitlochry to Killiecrankie (approx. 6km)			
SEA References: SEA Environmental Report – Section 5 Environmental Report Addendum – Section 3, Section 4 and: Appendix B (Detailed Assessment Matrices, Sections B1) – Appendix C (Revised GIS Mapping – Ancient Woodland Inventory) – Appendix D (Indicative Junction Locations Constraints Review Tables) – Appendix E (HRA and Programme-level Appropriate Assessment (AA) Report) – Appendix F (Strategic Landscape Review) – Appendix G (Strategic Flood Risk Assessment)								
SEA Identified Constraints	Description of Constraint	SEA Comment	Recommendations for	later DMRB Stages	Record how	v addressed at:		
				DMIKE Stage S		Guidance for Pollution Prevention (GPPs) aimed at managing run-off, accidental spillage and sediment release and other good practice guidance. Input to the HRA included a geomorphological assessment of the River Tummel and Loch Faskally which involved considering the geomorphological processes and characteristics that influence the physical habitat conditions supporting SAC gualifying species		
Other natural heritage designations	No other Natura, SSSI, NNR, GCR sites identified within this stretch	No other designated sites noted; however early consultation with SNH and SEPA required in terms of wetlands, priority habitats and protected species issues.			Regular meetings with the Environmental Steering Group (ESG), which includes SNH, have been held and SNH has been consulted for specific topic items.	Part of the Pass of Killiecrankie SSSI falls within the study area for ecology and nature conservation, lying approximately 200m from the existing A9 at its nearest point. It does not fall under the footprint of the proposed scheme, lying predominantly to the north and uphill of this section of the proposed scheme. It is also on the far side of the B8079 and railway. Although nationally important, no effects pathway could be identified from the proposed scheme, and thus no specific issues in relation to this designated site are considered material.		



	A9 Dualling Programme – SEA Monitoring Framework – Design Section Constraints						
		A9 Design Section – South		Design Project – Pitlochry to Killiecrankie (approx. 6km)			
SEA References: SEA Environmental Report – Section 5 Environmental Report Addendum – Section 3, Section 4 and: Appendix B (Detailed Assessment Matrices, Sections B1) – Appendix C (Revised GIS Mapping – Ancient Woodland Inventory) – Appendix D (Indicative Junction Locations Constraints Review Tables) – Appendix E (HRA and Programme-level Appropriate Assessment (AA) Report) – Appendix F (Strategic Landscape Review) – Appendix G (Strategic Flood Risk Assessment)							
SEA Identified	Description of	SEA Comment	Recommendations for	later DMRB Stages	Record how	addressed at:	
constraints	Constraint		DMRB Stage 2	DMRB Stage 3	DMRB Stage 2	DMRB Stage 3	
Ancient Woodland (of semi-natural origin)	3 x AWI (SNO) (Category 1a & 2a)	A mixture of AWI woodlands lie to both sides of the existing A9 in this section. Embed range of strategic principles on biodiversity, woodland and avoidance where possible. However, as much of this section is bordered by AWI woodlands on both sides, secondary aim must be to minimise losses and fragmentation	Secure early consultation with SNH and other relevant stakeholders (as agreed with Transport Scotland and the A9 Dualling Environmental Steering Group) to determine alternative alignment option impacts on all AWI woodlands, to inform	Preferred alignment design and Environmental Statement to include appropriate record of consultation, all further studies undertaken and any mitigation or compensatory works required	Regular meetings with the ESG have been held. Consultation with SNH has been undertaken during ESG meetings.	Regular meetings with the ESG have been held. Consultation with SNH has been undertaken during ESG meetings and further communications or	
Ancient Woodland (Long established of plantation origin)	4 x AWI (LEPO) (Category 2b)		selection of the preferred dualling alignment. Determine potential requirements for additional surveys and studies where AWI woodlands are unavoidable and where	Where AWI woods are unavoidable, aim to minimise fragmentation and maintain woodland integrity. Cumulative woodland impact to include woodland edge effects.	Requirements for additional surveys of ancient woodland sites have been determined. Compensatory habitat solutions will be considered in detail at DMRB3.	meetings as required. Further assessment of ancient woodland sites was undertaken and woodland edge effects were considered within	
Ancient Woodland (Roy)	2 x AWI (Roy) (Category 3)	SNH advise that categories 1a, 2a and 3 of Ancient Woodland (AW) are irreplaceable; however, category 2b may be of lower conservation value.	compensation may be required. Consider mechanisms to provide compensatory habitat solutions that will deliver an equal or greater amount of habitat to the standard of that which is lost. Ancient Woodland Inventory mapping should be supplemented with Native Woodland Survey of Scotland (NWSS) data.	Where habitat compensation is not achievable in situ, Environmental Statement should identify where compensation will be delivered.	AWI mapping has been supplemented with NWSS data at DMRB2.	cumulative woodland impacts. Compensatory habitat solutions have been considered in detail at DMRB Stage 3 and have been informed by discussions with landscape architects and use of the woodland connectivity tool. To identify suitable areas for planting, this tool has been used along with consideration of other factors such as: • landscape requirements; • objectives for maintaining and enhancing permeability for species using woodland; and • the conservation objectives of adjacent designated for features other than	



		A9 Dualling F	Programme – SEA Monitoring Framew	vork – Design Section Constraints			
		A9 Design Section – South		Design Project –	Pitlochry to Killiecrankie (approx. 6km)	
SEA References: SEA Environmental Report – Section 5 Environmental Report Addendum – Section 3, Section 4 and: Appendix B (Detailed Assessment Matrices, Sections B1) – Appendix C (Revised GIS Mapping – Ancient Woodland Inventory) – Appendix D (Indicative Junction Locations Constraints Review Tables) – Appendix E (HRA and Programme-level Appropriate Assessment (AA) Report) – Appendix F (Strategic Landscape Review) – Appendix G (Strategic Flood Risk Assessment)							
SEA Identified	Description of	SEA Comment	Recommendations for	later DMRB Stages	Record hov	v addressed at:	
Constraints	Constraint		DMRB Stage 2	DMRB Stage 3	DMRB Stage 2	DMRB Stage 3	
						woodland.	
Historic Environment including Unscheduled Archaeology	No Scheduled Monuments or Inventory Gardens and Designed Landscapes identified by SEA	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. Should also include consideration of non- designated historic parks and gardens.	Secure early consultation with Historic Scotland, Local Authority archaeology or heritage teams 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 Environmental Statement to include appropriate record of consultation, all further studies undertaken and any mitigation required for unscheduled archaeology.	DMRB Stage 2 Option 1 developed for Project 4 would have a direct physical impact on Greengates Cottage Stone Circle, a Scheduled Monument due to reconfiguration of Pitlochry North Junction. Alternative alignments (Options 2A and 2B) avoid physical impacts on Scheduled Monument. Physical impacts of Option 1 identified as removal of part the asset and any present archaeological remains. Broad recommendations for mitigation of impacts were presented.	Consultation with HES and PKC has been undertaken and is summarised in Chapter 15 Cultural Heritage (paragraphs 15.2.5 and 15.2.6). The assessment has been prepared based on the results of desk- based research and walkover survey, supplemented with the result of a targeted geophysical survey (please refer to Appendix A15.2: Geophysical Survey Results). Mitigation for both scheduled and un- scheduled archaeology is described in Section 15.5 (Mitigation) of Chapter 15 and also in Appendix A15.3 (Cultural Heritage Impact, Mitigation and Residual Impact Tables).	
Listed Building (Cat B) Listed Building (Cat C(S))	A number of listed buildings present in the vicinity of Dunfallandy,, Fonab and Pitlochry	All are outwith the likely extent of dualling works. Embed range of strategic principles on historic environment and avoidance where possible.	Secure early consultation with Historic Scotland, Local Authority archaeology or heritage teams and other relevant stakeholders (as agreed with Transport Scotland and the A9 Dualling Environmental Steering Group), to present local options and determine their requirements/ recommendations for	Preferred alignment design and Environmental Statement to include appropriate record of consultation, all further studies undertaken, assessment of impacts on features and their setting, appropriate mitigation or compensation measures	No DMRB Stage 2 options developed for Project 04 will result in a significant impact on these assets.	Consultation with HES and PKC has been undertaken and is summarised in Chapter 15 Cultural Heritage (paragraphs 15.2.5 and 15.2.6). The assessment has been prepared based on the results of desk- based research and walkover	



	A9 Dualling Programme – SEA Monitoring Framework – Design Section Constraints							
		A9 Design Section – South		Design Project – Pitlochry to Killiecrankie (approx. 6km)				
SEA References: SEA Environmental Report – Section 5 Environmental Report Addendum – Section 3, Section 4 and: Appendix B (Detailed Assessment Matrices, Sections B1) – Appendix C (Revised GIS Mapping – Ancient Woodland Inventory) – Appendix D (Indicative Junction Locations Constraints Review Tables) – Appendix E (HRA and Programme-level Appropriate Assessment (AA) Report) – Appendix F (Strategic Landscape Review) – Appendix G (Strategic Flood Risk Assessment)								
SEA Identified	Description of	SEA Comment	Recommendations for	later DMRB Stages	Record how	/ addressed at:		
Listed Building (Cat C(S))	Moulin, Atholl Road, Craigeach LB 394949	Within 100m of the current transition between single/ dual carriageways Unlikely to be directly affected by dualling as sits to the opposite side of the Highland Mainline	additional studies/ surveys to inform selection of a preferred alignment. Seek agreement on additional studies required for DMRB Stage 3 assessment of visual impact/ impact on setting.	and any construction stage. monitoring required, to the satisfaction of Historic Scotland and other relevant stakeholders.	DMRB Stage 2	Survey, supplemented with the result of a targeted geophysical survey (please refer to Appendix A15.2: Geophysical Survey Results). Mitigation for both scheduled and un- scheduled archaeology is described in Section 15.5 (Mitigation) of Chapter 15 and also in Appendix A15.3 (Cultural Heritage Impact, Mitigation and Residual Impact Tables) and includes construction stage monitoring.		
National Scenic Areas (NSA)	Loch Tummel NSA	Section enters Loch Tummel NSA, north of Faskally, on the approach to Killiecrankie. Potential for direct impact on the NSA throughout this area. Refer to A9 Strategic Landscape Review (ER Addendum Appendix F) and secure early consultation with SNH to discuss landscape issues related to NSA special qualities. Aim to minimise impacts on woodland within the NSA. Consider opportunities for enhanced laybys and viewpoints in consultation with SNH and CNPA.	Embed strategic landscape principles and secure early consultation with SNH and CNPA to discuss DMRB2 alignment options and determine their recommendations and requirements to inform the selection of a preferred alignment. Seek opportunities to incorporate key views to enhance visitors' experience of this NSA, including potential for enhanced laybys and interpretation features. Agree range of visual receptors with SNH for detailed Landscape and Visual Impact Assessment (LVIA) at next stage.	Stage 3 LVIA to inform design to integrate the road with its surroundings and minimise the impacts of road furniture. Preferred alignment design and Environmental Statement to include appropriate record of consultation, all further studies undertaken, assessment of landscape and visual impacts, appropriate mitigation measures and any construction stage monitoring required, to the satisfaction of SNH and CNPA.	SNH have been consulted as part of the Environmental Steering Group for their opinions on the proposed route options and the assessment methodology. Opportunities to provide enhanced laybys along the route, including the locations suggested in the Enhanced Layby Strategy developed as part of the A9 Dualling Programme Environmental Design Guide, have been considered as part of the route options. Technical constraints have ruled out many opportunities, but further consideration will be made as part of the Stage 3	DMRB Stage 3 LVIA has informed design to integrate the road with its surroundings and minimise the impacts of road furniture. The ES includes a record of consultation and further studies undertaken as well as an assessment of the landscape and visual impacts along with mitigation measures as discussed in Chapter 13 (Landscape). Consultation with SNH, CNPA and HES has been undertaken throughout the DMRB Stage 3 process as described in Chapter 7 (Consultation and Scoping) and within the ES technical chapters 8-19.		



	A9 Dualling Programme – SEA Monitoring Framework – Design Section Constraints							
		A9 Design Section – South		Design Project –	Design Project – Pitlochry to Killiecrankie (approx. 6km)			
SEA References: SEA Environmental Report – Section 5 Environmental Report Addendum – Section 3, Section 4 and: Appendix B (Detailed Assessment Matrices, Sections B1) – Appendix C (Revised GIS Mapping – Ancient Woodland Inventory) – Appendix D (Indicative Junction Locations Constraints Review Tables) – Appendix E (HRA and Programme-level Appropriate Assessment (AA) Report) – Appendix F (Strategic Landscape Review) – Appendix G (Strategic Flood Risk Assessment)								
SEA Identified Constraints	Description of Constraint	SEA Comment	Recommendations for	later DMRB Stages	Record how	v addressed at:		
			DMRB Stage 2		assessment following the identification of a preferred route option. The locations of the representative viewpoints that have been selected have been chosen to include or represent the views from key features and visitor attractions around the study area. SNH have been consulted on the viewpoint locations, and their input has been taken into consideration. Some of the locations they have recommended have been omitted from the Stage 2 assessment as the viewpoints would not aid in the selection of a preferred route, but they may be incorporated into the Stage 3 assessment as receptors.			
Cairngorms National Park (CNP)	National Park is outwith the extents of this scheme	Cairngorms National Park Authority should be consulted on landscape and visual issues as the CNP could be considered as a sensitive visual receptor.	Secure early consultation with SNH and CNPA to determine whether the National Park should be considered as a sensitive visual receptor for this scheme.	Preferred alignment design and Environmental Statement to include appropriate record of consultation, all further studies undertaken and any mitigation works required.	CNPA have been consulted as part of the Environmental Steering Group for their opinions on the proposed route options and the assessment methodology. Opportunities to provide enhanced laybys along the route, including the locations suggested in the Enhanced Layby Strategy developed as part of the A9	DMRB Stage 3 LVIA includes visual assessment of a full range of viewpoints, including locations suggested by consultees, but not assessed at DMRB Stage 2. Regular meetings with the ESG have been held during the DMRB Stage 3 process as described in Chapter 7 (Consultation and Scoping).		



A9 Dualling Programme – SEA Monitoring Framework – Design Section Constraints							
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SEA Identified Description Constraints Constrain	of SEA Comment	Recommendations for	later DMRB Stages	Record how	addressed at:		
				Dualling Programme Environmental Design Guide, have been considered as part of the design development of the route options. Technical constraints have ruled out many opportunities, but further consideration will be made as part of the Stage 3 assessment following the identification of a preferred route option. The locations of the representative viewpoints that have been selected have been chosen to include or represent the views from key features and visitor attractions around the study area. SNH have been consulted on the viewpoint locations, and their input has been taken into consideration. Some of the locations they have recommended have been omitted from the Stage 2 assessment as the viewpoints would not aid in the selection of a preferred route, but they may be incorporated into the Stage 3 assessment as receptors.	The ES includes a record of consultation and further studies undertaken as well as an assessment of the landscape and visual impacts along with mitigation measures as discussed in Chapter 13 (Landscape). DMRB Stage 3 assessments detailed in the ES were informed by DMRB Stage 2 assessments, further surveys and liaison with the appropriate consultees (including SNH and SEPA) and disciplines (including geomorphology and hydrogeology). Compensatory habitat solutions have been considered in detail at DMRB Stage 3 and have been informed by the woodland connectivity tool which has been used (along with consideration of other factors such as landscape requirements, and objectives for maintaining and enhancing permeability for species using woodland), to identify suitable areas for planting. In addition, design of mitigation planting of all habitat types affected by the proposed scheme has included		



	A9 Dualling Programme – SEA Monitoring Framework – Design Section Constraints						
		A9 Design Section – South		Design Project –	Pitlochry to Killiecrankie (a	approx. 6km)	
SEA References: SEA Environmental Report – Section 5 Environmental Report Addendum – Section 3, Section 4 and: Appendix B (Detailed Assessment Matrices, Sections B1) – Appendix C (Revised GIS Mapping – Ancient Woodland Inventory) – Appendix D (Indicative Junction Locations Constraints Review Tables) – Appendix E (HRA and Programme-level Appropriate Assessment (AA) Report) – Appendix F (Strategic Landscape Review) – Appendix G (Strategic Flood Risk Assessment)							
SEA Identified Constraints	Description of Constraint	SEA Comment	Recommendations for	later DMRB Stages	Record how	addressed at:	
			DWIKD Stage 2		DINING Staye 2	consideration of the maintenance of habitats of relevance to CNPA's priority non-protected species.	
Agricultural Soils	Productive agricultural soils present around the A9 between Pitlochry and Killiecrankie	Embed strategic principles approach to avoid disturbance of productive agricultural land where possible.	Secure early consultation with relevant stakeholders (as agreed with Transport Scotland and the A9 Dualling Environmental Steering Group) to determine alternative alignment option impacts on productive agricultural soils, to inform selection of the preferred dualling alignment. Likely to require consideration of accesses to productive land.	Preferred alignment design and Environmental Statement to include appropriate record of consultation, all further studies undertaken and any accommodation, mitigation or compensatory works required.	LCA considered in significance. Land-take of prime/non- prime. Accesses considered.	The DMRB Stage 3 design process has reduced overall land-take and limited, where practicable, the loss of more productive (in terms of LCA class) agricultural land. Proposed scheme requires no land-take from prime land and overall land-take and land-take by LCA class is quantified in Chapter 8 (People and Communities – Community and Private Assets). Structured interviews were held with the landowners and tenants of the potentially affected farms and holdings, and with forestry and sporting landowners and managers within the study area to identify potential construction and operational impacts. Interview proforma Appendix A8.3 and survey findings have informed the assessment refer to Appendices A8.3 and A8.5. Mitigation measures to avoid or reduce effects on agricultural, forestry and sporting interests are set out in Section 8.5	



A9 Dualling Programme – SEA Monitoring Framework – Design Section Constraints									
	A9 Design Section – South				Design Project – Pitlochry to Killiecrankie (approx. 6km)				
SEA References: SEA Environmenta Environmental Rep Appendix B (Detail Appendix D (Indica Appendix F (Strate	SEA References: SEA Environmental Report – Section 5 Environmental Report Addendum – Section 3, Section 4 and: Appendix B (Detailed Assessment Matrices, Sections B1) – Appendix C (Revised GIS Mapping – Ancient Woodland Inventory) – Appendix D (Indicative Junction Locations Constraints Review Tables) – Appendix E (HRA and Programme-level Appropriate Assessment (AA) Report) – Appendix F (Strategic Landscape Review) – Appendix G (Strategic Flood Risk Assessment) SEA Identified Description of								
SEA Identified Constraints	Description of Constraint	SEA Comment	DMRB Stage 2	DMRB Stage 3	DMRB Stage 2	DMRB Stage 3			
						(Mitigation) of Chapter 8. Mitigation includes management of soils in accordance with 'Construction Code of Practice for the Sustainable Use of Soils on Construction Sites' and provision of new/replacement accesses.			
SEPA 1:200 year Flood Zone	Existing route crosses Flood Zone at various points in this section, given the proximity to the River Tay and its tributaries	Refer to ER Addendum Appendix G (Strategic Flood Risk Assessment). Any loss of functional flood plain will require compensatory storage. Embed strategic principles approach to avoid encroachment in the flood zone; however, this stretch is bordered by the River Tay flood zone to the west side of the road and is unlikely to be avoided at all locations.	Alignment studies should aim to strike a balance between avoidance of other constraints and the 1:200-year flood zone. Secure early consultation with SEPA to determine alternative alignment option impacts and to determine requirements for flood risk assessment, SUDS drainage and CAR requirements. Consider where drainage designs can include improved wildlife crossing and fish passage opportunities.	Preferred alignment design and Environmental Statement to include appropriate record of consultation, all further studies undertaken and any mitigation or compensatory works required. Incorporate appropriate drainage, compensatory storage and management measures to ensure no net change to flood risk. Make recommendations to avoid works compounds within the functional floodplain where possible.	Alignments have been developed to minimise encroachment in floodplain given other environmental constraints and the selection of an online route. Detailed hydrology and Flood Risk Assessment underway and engagement with SEPA commenced to agree baseline and detail for Stage 3 assessment. Multi objective design workshops held to ensure all watercourse crossing design constraints understood and to inform design at Stage 3	The proposed scheme has been assessed for flood risk and avoids encroachment into the functional floodplain where practicable. Flood risk assessment has included the assessment of the route against the SEPA 1:200- year flood zone and the hydraulic modelling flood zone (for high flood risk locations). Compensatory storage has been investigated for a number of locations along the route in order to offset any impacts to flood risk due to floodplain encroachment / the proposed scheme. Ongoing consultation with SEPA has occurred throughout the DMRB Stage 3 assessment to discuss flood risk issues/complexities. Culverts and crossings have been designed with input from			



	A9 Dualling Programme – SEA Monitoring Framework – Design Section Constraints						
		A9 Design Section – South		Design Project – Pitlochry to Killiecrankie (approx. 6km)			
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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	realignments have also been designed to allow for existing flows and mimic (if not improve) existing channel cross-sections.	
Highland Mainline (HML)	Two HML crossings identified at approx. refs.: NN921595 NN955565	Mainly an engineering constraint; however, likely to affect scale and location of dualling earthworks required for new crossings, and therefore, scale of impact on local features, including Ancient Woodland.	Secure early consultation with relevant stakeholders (as agreed with Transport Scotland and the A9 Dualling Environmental Steering Group) to determine alternative alignment option impacts on HML crossing and inform selection of the preferred dualling alignment. Consider opportunities to provide wildlife crossing opportunities to secure multi- species benefit.	Preferred alignment design and Environmental Statement to include appropriate record of consultation, all further studies undertaken and any mitigation or compensatory works required.	The DMRB Stage 2 sifting exercise considered parallel widening northbound, parallel widening southbound and symmetrical widening options across the HML at the southern and northern extents and a new crossing of the HML at the northern extents of the project. It was considered that the symmetrical widening option introduced additional construction complexities at the sites and was therefore sifted out. At the southern crossing of the HML, parallel widening southbound introduced impacts on other constraints in the area therefore parallel widening northbound was taken forward for full assessment at DMRB Stage 2. At the northern extent of the project it was considered that given the	A consultation meeting was held with Network Rail (NR) during the DMRB Stage 3 design development phase. The purpose of the meeting was to provide NR with an update in relation to interfaces with NR infrastructure.	



A9 Dualling Programme – SEA Monitoring Framework – Design Section Constraints									
		A9 Design Section – South		Design Project -	- Pitlochry to Killiecrankie (a	ipprox. 6km)			
SEA References: SEA Environmenta Environmental Rep Appendix B (Detail Appendix D (Indica Appendix F (Strate	SEA References: SEA Environmental Report – Section 5 Environmental Report Addendum – Section 3, Section 4 and: Appendix B (Detailed Assessment Matrices, Sections B1) – Appendix C (Revised GIS Mapping – Ancient Woodland Inventory) – Appendix D (Indicative Junction Locations Constraints Review Tables) – Appendix E (HRA and Programme-level Appropriate Assessment (AA) Report) – Appendix F (Strategic Landscape Review) – Appendix G (Strategic Flood Risk Assessment)								
SEA Identified	Description of	SEA Comment	Recommendations for	later DMRB Stages	Record how	addressed at:			
Constraints	Constraint		DMRB Stage 2	DMRB Stage 3	DMRB Stage 2 substandard horizontal	DMRB Stage 3			
					alignment of the existing carriageway, an online widening option would not be appropriate on safety grounds. The rout options developed at the northern extent of the project include the				
					symmetrical widening of the existing HML underbridge or the construction of a new crossing over the HML.				
					Network Rail has been consulted at DMRB Stage 2 to obtain general guidance about design standards and to outline potential conflicts between the dualling proposals and the HML. Further consultation is proposed to take place at DMRB Stage 3 as the design of the structure is developed.				
					The provision of wildlife crossing opportunities as a principle is included within the project. Detailed provision will be considered at DMRB Stage 3.				



A9 Dualling Programme – SEA Monitoring Framework – Design Section Constraints						
A9 Design Section – South				Design Project – Pitlochry to Killiecrankie (approx. 6km)		
SEA References: SEA Environmental Report – Section 5 Environmental Report Addendum – Section 3, Section 4 and: Appendix B (Detailed Assessment Matrices, Sections B1) – Appendix C (Revised GIS Mapping – Ancient Woodland Inventory) – Appendix D (Indicative Junction Locations Constraints Review Tables) – Appendix E (HRA and Programme-level Appropriate Assessment (AA) Report) – Appendix F (Strategic Landscape Review) – Appendix G (Strategic Flood Risk Assessment)						
SEA Identified Constraints	Description of Constraint	SEA Comment	DMRB Stage 2	DMRB Stage 3	DMRB Stage 2	DMRB Stage 3
Non-Motorised Users (NMU)	NCN7 and Perth and Kinross Council Core Paths within this section Approx. crossing refs.: NN945568 NN939574 NN929579 NN928585 NN927586 NN927588	Refer to ER Addendum Section 4.3. Various Core Paths and the NCN7 run in proximity and/ or parallel to the A9 in this section. Refer to and embed strategic principles approach to NMU and cycling provisions. CNPA is the access authority within the Park boundaries. NMUs to include pedestrians, cyclists and equestrians. Non-motorised user (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 Environmental Steering Group) to determine alternative alignment option impacts on NCN7, Core Paths and 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 NCN7 to enhanced layby 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 Environmental Statement 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. DMRB3 EIA to include construction mitigation requirements on provision of appropriate diversionary routes and signage to maintain overall access provisions during construction.	Consultation was undertaken with various access, cycling, equestrian and walking groups to inform the baseline assessment and ensure the path network described and assessed is accurate. The consultees provided information regarding the locations and usage of paths and key crossing points. Rights of way data received from ScotWays. Consultation with various stakeholders also took place at two NMU forums (in November 2014 and May 2015). Information gained from stakeholders during these discussions was used to inform the baseline in this assessment. The consultation process informed the identification of potential conflict areas between NMUs and the proposed route options assessed in the Stage 2 Report. This information will also be taken into account during the Stage 3 assessment, where mitigation measures will be further developed and incorporated into the design	The proposed scheme assessed at DMRB Stage 3 is the result of an iterative design process in which provision for maintaining and enhancing NMU journeys was taken into account, as set out in Chapter 5 (The Proposed Scheme). As such, the proposed scheme already includes embedded mitigation such as underpasses, provision of footpaths/cycleways and planting which reduces impacts on NMUs. Chapter 9 (People and Communities: All Travellers) and accompanying Appendix A9.1 (People and Communities: All Travellers Full Assessment Results for NMU Routes and Access to Outdoor Areas) provides the full assessment of impacts on NMUs including journey length changes and impacts on amenity value. Construction mitigation for NMUS is set out in the Standard Mitigation Commitments and specific mitigation measures during operation for NMUs are set out in Chapter 9 (People and Communities: All Travellers)



A9 Dualling Programme – SEA Monitoring Framework – Design Section Constraints							
A9 Design Section – South				Design Project – Pitlochry to Killiecrankie (approx. 6km)			
SEA References: SEA Environmental Report – Section 5 Environmental Report Addendum – Section 3, Section 4 and: Appendix B (Detailed Assessment Matrices, Sections B1) – Appendix C (Revised GIS Mapping – Ancient Woodland Inventory) – Appendix D (Indicative Junction Locations Constraints Review Tables) – Appendix E (HRA and Programme-level Appropriate Assessment (AA) Report) – Appendix F (Strategic Landscape Review) – Appendix G (Strategic Flood Risk Assessment)							
SEA Identified Constraints	Description of Constraint	SEA Comment	DMRB Stage 2	DMRB Stage 3	DMRB Stage 2	DMRB Stage 3	
					of the preferred route option. Additional consultation will also be undertaken at Stage 3 to inform the assessment process and the development of mitigation. The provision of wildlife crossing opportunities as a principle is included within the project. Detailed provision will be considered at DMRB Stage 3.		
Wildlife Crossings	The existing A9 is considered to, at some level, impede species' movement. Widening the carriageway is therefore expected to increase the barrier, thereby decreasing the permeability of the road to wildlife The location of any wildlife crossing opportunities was, however, outwith the scope of the SEA.	Embed the principle of 'multi-species benefits through route permeability' across all design sections	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 Secure early consultation with SNH on appropriate species and habitat survey requirements	Preferred alignment design and Environmental Statement 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 (eg. mammals and fish) crossings and passes	The provision of wildlife crossing opportunities as a principle is included within the project. Detailed provision will be considered at DMRB3. Regular meetings with the ESG have been held. Consultation with SNH has been undertaken during ESG meetings.	Regular meetings with the ESG have been held as described in Chapter 7 (Consultation and Scoping). Consultation with SNH has been undertaken during ESG meetings, and guidance from the ESG has been taken into account in the design and location of wildlife crossings, with associated mammal-resistant fencing to guide animals to safe crossing locations, and landscape planting. The provision of wildlife crossing opportunities (including providing mammal ledges on culverts, dry mammal underpasses and mammal-resistant fencing to direct animals towards these	



A9 Dualling Programme – SEA Monitoring Framework – Design Section Constraints								
A9 Design Section – South				Design Project – Pitlochry to Killiecrankie (approx. 6km)				
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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		
						features) was informed by DMRB Stage 3 survey data and data received through the consultation process. Locations were refined through discussion with other disciplines, including highways, drainage and landscape.		