A9 Dualling Programme: Tay Crossing to Ballinliug

DMRB Stage 3 Environmental Statement

Appendix A13.4: Strategic Environmental Design



Principles: Landscape

Appendix A13.4: Strategic Environmental Design Principles: Landscape

1 Strategic Environmental Design Principles: Landscape (SEDPL)

- Developed in collaboration with the Scottish Environmental Protection Agency (SEPA), Scottish Natural Heritage (SNH), Historic Environment Scotland (HES) and the Cairngorms National Park Authority (CNPA), the Strategic Environmental Design Principles: Landscape (SEDPL) as set out in the SEA Post Adoption Statement (Transport Scotland, 2014).
- These principles were reviewed as part of the landscape and visual assessment of the proposed scheme and taken into account in the progression of the Stage 3 design and mitigation, as presented in the Environmental Statement (ES). Details of how the principles are addressed by the proposed scheme design are set out in Table 1 below.



Table 1: Application of Strategic Environmental Design Principles: Landscape

Application of Strategic Environmental Design Principles (Landscape)					
Landscape Principle	A9 Dualling should:	Adopting the Principle	How Principle has been adopted		
L1	Respect for the distinctive local landscape character and qualities of the A9 corridor shall inform all aspects of the dualling process.	Design Teams shall include early consideration of the relevant landscape character of each project extent, and ensure that local landform and likely visibility informs the development of route alignment options. Design Teams shall consult effectively with SNH the CNPA, and HES (formerly Historic Scotland) and each other to ensure route-wide consistency between projects where particular aspects are identified as being appropriate to the identity of the A9 overall.	The landscape assessment of the proposed scheme has included identification and recording of the key features and elements of the local landscape character as part of the initial baseline studies. These studies have informed the design of the proposed scheme and the mitigation proposals.		
L2	Ensure road alignment and design responds to the qualities and key characteristics of each landscape character area through which the route passes.		The alignment of the proposed scheme and the development of the mitigation proposals have been informed through the baseline studies and review of the predicted visibility of the proposed scheme in addition to detailed assessment of the likely impacts of the proposed scheme. The mitigation plans in particular have been developed in order to reflect and tie in with the distinctive local character of the landscape through which the proposed scheme passes.		
L3	Whilst respecting the distinctive character and qualities of the landscape and places along the route, ensure a consistency of approach to design to reinforce the overall identity of the A9 between Perth and Inverness.		The development of the SEDPL has been developed in consultation with the Environmental Steering Group. These consultations have promoted consistency in the approach to the design of the individual A9 dualling projects including the Tay Crossing to Ballinluig section.		
L4	Enhance the views from the road to maximise the positive traveller experience. Key views shall inform the siting of laybys, around appropriate opportunities to showcase natural and built heritage along the route	Design Teams shall seek opportunities to accommodate key views and enhanced laybys in alignment options and design development, recognising potential conflicts with junction requirements.	Views from the A9 have been considered and enhanced through careful consideration of layby siting and making provision for potential enhanced laybys. In addition, the design of the mitigation proposals has been developed in order to provide travellers with improved opportunities to experience the built and natural heritage as they pass through the landscape.		
L5	Ensure potential construction and long term (25 years plus) landscape effects both inform the landscape design of the road.	Design Teams shall ensure that the resultant visual footprint of dualling within highly scenic landscapes informs alignment and junction location options, and design development decisions, from the earliest stages.	The landscape assessment and mitigation proposals have taken account of the construction and residual/long term impacts including impacts on the landscape features within the River Tay (Dunkeld) National Scenic Area (NSA). The design of the proposed scheme and the extent and nature of the mitigation proposals (including screening) within the River Tay (Dunkeld) NSA have involved an iterative approach from DMRB Stage 2 through to DMRB Stage 3 in order to minimise the visual footprint of the proposed scheme. Although the landscape and visual assessments address impacts in summer after 15 years in line with DMRB guidance, the landscape mitigation has been designed for the longer term (> 25 years), with species selected to continue to mature and provide mitigation. The planting mixes are designed to include a range of understorey and edge species to ensure a balanced woodland structure, providing lower level screening once canopy species have matured. They include long lived and native species which are expected to naturally regenerate, hence ensuring longevity of woodland and scrub planting areas.		

A9 Dualling Programme: Tay Crossing to Ballinluig DMRB Stage 3 Environmental Statement Appendix A13.4: Strategic Environmental Design Principles: Landscape



Application of	Application of Strategic Environmental Design Principles (Landscape)					
Landscape Principle	A9 Dualling should:	Adopting the Principle	How Principle has been adopted			
L6	Secure adequate land for integrated landscape solutions.		The extent of the Compulsory Purchase Order (CPO) boundary has been informed by inputs from the Jacobs Environment Team and also from consultation (where this has been raised by consultees) in order to identify sufficient land to accommodate the landscape and ecological mitigation proposals.			
L7	Design for low maintenance and to accommodate future change.		The mitigation proposals have been developed in order to require minimal maintenance and to provide 'flexibility' to accommodate future changes in circumstances, for example climate and to take opportunities for wildlife habitat enhancement or management of views from the road.			
L8	Use natural characteristics in design and encourage the use of sensitive and innovative methods to mitigate adverse environmental and visual effects, including rock cuttings, to deliver appropriately balanced solutions.	Design Teams shall consult effectively with SNH, CNPA, HES and local stakeholders to ensure that dualling designs are sympathetic to local landform and designated sites (including ecological, geological, and historic and landscape designations). Sensitive receptors need not be in close	The development of the mitigation proposals has been informed by discussion with the Environmental Steering Group (ESG) which included SNH, the CNPA and HES. Careful consideration has been given to the nature of earthworks in order to mitigate adverse impacts on the landscape and integrate the proposed scheme. The mitigation proposals have also been developed in order to reflect locally occurring native plant species in the vicinity of the proposed scheme. This has also included consideration of the native tree species found within the historical policy woodlands.			
L9	Minimise the effect of the road on the experience of the wider landscape, including lighting and noise.	proximity to the route, as it is likely to be visible from, for example, surrounding hillsides and elevated recreational routes. Dark skies, wildness and historic settings will be key issues to address in various areas.	The on-line widening of the proposed scheme and adjoining woodland tend to limit the impacts on the wider landscape; however additional screen planting is included as part of the mitigation proposals in order to mitigate visual impacts. Road lighting is proposed for the A9 Southern Tie-in Roundabout and as such the proposed scheme will have an impact on the dark sky qualities travellers and residents experience over and above the levels which are currently experienced. Special attention would be given to minimising the landscape and visual impacts of the lighting columns and fixings and to prevent unnecessary glare or light spill. LEDs or similar are proposed to provide a directional light source with minimal light spillage. The levels of lighting would be controlled to achieve the optimum balance between road safety and the impact of road lighting.			
L10	Minimise the landscape impacts of verge and boundary treatments, within the context of safety standard requirements.		Verge widths kept to minimum to avoid excessive land-take.			
L11	Avoid, or reduce effects on, landscape features, retain and make best use of existing vegetation and re-use site won materials wherever possible.		Existing vegetation has been retained where possible. It is anticipated that the contract documents will require detailed design to comply and opportunities for recycling/reuse of felled material etc. to be taken during construction of the proposed scheme.			

A9 Dualling Programme: Tay Crossing to Ballinluig DMRB Stage 3 Environmental Statement Appendix A13.4: Strategic Environmental Design Principles: Landscape



Landscape Principle	A9 Dualling should:	Adopting the Principle	How Principle has been adopted
			AWI soil to be translocated to new woodland areas to aid colonisation by existing native species impacted by the proposed scheme.
L12	Maintain and where possible enhance ecological and landscape connectivity and minimise fragmentation.	Design Teams shall seek to avoid and minimise potentially adverse ecological effects, and realise opportunities to improve connectivity between local and landscape scale habitat networks through dualling design.	Development of mitigation proposals has been informed by ecological assessment and input to the proposals.
			The mitigation proposals include enhancement of the ecological and landscape connectivity through planting of woodland and scrub and species rich grassland to link existing habitats.
L13	Protect species and habitats to support biodiversity, natural processes and Local Biodiversity Action Plan (LBAP) targets.		The landscape and ecological mitigation proposals are targeted towards LBAP local priority species and habitats (e.g. bats, birds, amphibians, reptiles).
L14	Use locally native and characteristic plant species and species mixes.		The landscape and ecological mitigation proposals include locally native and characteristic species and mixes, informed by Phase 1 habitat survey.
L15	Aim to ensure the enhanced reputation of the A9 as one of the world's great tourist routes, through landscapes of national and international importance.	Design Teams shall seek to realise the long-term potential for A9 Dualling to deliver an outstanding visitor experience through iconic Scottish scenery.	The alignment of the proposed scheme and mitigation proposals have been developed (in consultation with the ESG in order to ensure that travellers continue to experience interesting and varied views of the iconic Highland landscapes associated with the River Tay (Dunkeld) NSA between the Tay Crossing and Ballinluig.

A9 Dualling Programme: Tay Crossing to Ballinliug DMRB Stage 3 Environmental Statement Appendix A13.4: Strategic Environmental **Design**



2 References

Principles: Landscape

Transport Scotland (2014). A9 Dualling Programme: Strategic Environmental Assessment (SEA) -Post Adoption Statement (September 2014).