## **Director-General's Requirements**

Section 75F of the	Environmental Planning and Assessment Act 1979
Application number	MP10_0240
Project	Princes Highway Upgrade – Foxground to Berry Bypass
Location	Approximately 11.6 kilometre length of dual carriageway from the junction of Toolijooa Road and the Princes Highway to the junction of Schofields Lane and the Princes Highway, south of Berry in the Kiama and Shoalhaven local government areas.
Proponent	NSW Roads and Traffic Authority
Date issued	27 May 2011
Expiry date	27 May 2013
General requirements	<ul> <li>The Environmental Assessment (EA) must include the following: <ol> <li>an executive summary.</li> </ol> </li> <li>a detailed description of the Project including: <ol> <li>route alignment and corridor width;</li> <li>design elements (requirements for bridges, culverts, Level of Service, pedestrian and cyclists, rest areas and service centres, etc);</li> <li>clear identification of and/or options for the proposed location of ancillary facilities (e.g. compound site, batching plants, etc);</li> <li>resourcing (e.g. construction material needs, spoil disposal, natural resource consumption including water supply sources); and</li> <li>potential staging.</li> </ol> </li> <li>an assessment of the key issues, including an assessment of the worst case and representative impact for each issue for all aspects of the project (including the proposed locations of and/or options for the ancillary facilities) with the following aspects addressed for each key issue (where relevant): <ol> <li>describe the existing environment;</li> <li>assess the potential impacts of the proposal at both construction and operation stages, in accordance with relevant policies and guidelines. Both direct and indirect impacts must be considered including potential interactions with the existing Princes Highway (as relevant);</li> <li>identify how relevant planning, land use and development matters, (including relevant strategic and statutory matters), have been considered in the impact assessment and/ or in developing management/ mitigation measures; and</li> <li>describe measures to be implemented to avoid, minimise, manage, mitigate, offset and/or monitor the impact assessment sections of the esidual impacts.</li> </ol> </li> <li>a draft Statement of Commitments (SoC). The SoC must incorporate or otherwise capture all measures to avoid, minimise, manage, mitigate, offset and/or monitor impacts identified in the impact assessment sections of the effect and/or monitor impacts identified in the specific, where relevant.</li> </ul>
Key issues	<ul> <li>Strategic Justification – describe the strategic need, justification and objectives for the project taking into account the aims and objectives of relevant strategic planning and transport policies including the State Plan (2006), the Illawarra Regional Strategy and South Coast Regional Strategy.</li> </ul>

<ul> <li>Project Justification – assess the alternatives considered (including an assessment of the environmental costs and benefits of the project relative to alternatives), and provide justification for the preferred project taking into consideration the objects of the <i>Environmental Planning and Assessment Act 1979</i> and the following:         <ul> <li>the environmental, social and economic impacts of the project;</li> <li>the suitability of the site; and</li> <li>whether or not the project is in the public interest.</li> </ul> </li> </ul>
<ul> <li>Traffic and Transport - including but not limited to:         <ul> <li>construction traffic impacts, including identification of construction routes and the nature of existing traffic on these routes, quantification of traffic volumes (including for spoil haulage), potential impacts to regional and local road network (including safety and level of service), and potential disruption to existing public transport services, access/ service lanes to local properties;</li> <li>operational traffic and transport impacts to the local and regional road network, including:                 <ul></ul></li></ul></li></ul>
<ul> <li>Noise and Vibration - including but not limited to:         <ul> <li>a construction noise and vibration assessment including construction traffic noise, batch plants and blasting impacts. The EA must clearly identify nearest sensitive receptors and assess construction noise/ vibration generated by representative construction scenarios focussing on high noise generating works. Where work hours outside of standard construction hours are proposed, clear justification and detailed assessment of these work hours must be provided including alternatives considered and mitigation measures proposed. The assessment must further consider any cumulative impacts during construction, having regard to any other developments (both existing and approved) in the locality;</li> <li>an operational road traffic noise assessment including consideration of local meteorological conditions (as relevant) and any additional reflective noise impacts from proposed noise mitigation barriers;</li> <li>the assessment(s) must take into account the following guidelines as relevant: <i>Interim Construction Noise Guideline</i> (DECC 2009), <i>Road Noise Policy (DECCW 2011), Environmental Noise Management Manual</i> (RTA, 2001), Assessing Vibration: A Technical Guideline (DEC, 2006); and Technical Basis for Guidelines to Minimise Annoyance Due to Blasting Overpressure and Ground Vibration (ANZECC, 1990).</li> </ul> </li> </ul>

<ul> <li>Flora and Fauna - including but not limited to:</li> <li>an assessment of all project components on flora and fauna and their habitat (both terrestrial and aquatic, as relevant) consistent with the <i>Draft Guidelines for Threatened Species Assessment</i> (DEC, 2005). The EA must provide details of the survey methodology employed including survey effort and representativeness for species targeted;</li> <li>specific consideration of impacts to threatened species, populations, ecological communities and/or critical habitat listed under both State and Commonwealth legislation that have been recorded on the site and surrounding land;</li> <li>details on the existing site conditions (both terrestrial and aquatic) and quantity and likelihood of disturbance (including quantifying the worst case extent of impact on the basis of vegetation type and total native vegetation disturbed);</li> <li>as relevant, consideration of weed infestation and edge effects; habitat fragmentation; impacts to wildlife and riparian corridors; impacts to groundwater-dependent communities, riparian and aquatic habitat (including impacts on SEPP 14 wetlands and fish passage);</li> <li>provide details of how flora and fauna impacts would be managed during construction and operation for all project components, including adaptive management and maintenance protocols and monitoring programs; and</li> <li>demonstrate actions to be undertaken to avoid, mitigate or offset impacts of the project, where offset measures are proposed to address residual impacts.</li> </ul>
<ul> <li>Surface and Ground Water - including but not limited to:         <ul> <li>water quality taking into account impacts from both accidents and runoff and considering relevant environmental water quality criteria specified in the <i>Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000.</i> The assessment must describe measures to control erosion and sedimentation during construction activities and measures to capture and treat runoff from the site during the operational phase;</li> <li>identify potential risks of the project on groundwater resources including: characterising existing local and regional hydrology; potential risks of drawdown; impacts to groundwater quality; discharge requirements; and implications for groundwater-dependent surface flows (including springs and drinking water catchments), groundwater-dependent ecological communities, and groundwater users;</li> <li>identifying potential impacts of the project on existing flood regimes, consistent with the <i>Floodplain Development Manual</i> (Department of Natural Resources, 2005), including impacts to existing receivers and infrastructure and the future development potential of affected land, demonstrating consideration of the changes to rainfall frequency and/or intensity as a result of climate change on the project. The assessment shall demonstrate due consideration of flood risks in the project design; and;</li> <li>waterways to be modified as a result of the project, including ecological, hydrological and geomorphic impacts (as relevant) and measures to rehabilitate the waterways to pre-construction conditions or better.</li> </ul> </li> </ul>
<ul> <li>Landscape and Visual Amenity - including but not limited to:</li> <li>assessment of the visual significance of the area, including the escarpment and ridges and the township of Berry, and impact of the proposed alignment; and</li> <li>design of the project (including noise barriers, retaining walls and</li> </ul>

	<ul> <li>landscaping) consistent with the existing (and desired) character of affected localities, including consideration of the <i>Noise Wall Design Guideline</i> (RTA, 2006). The assessment should also consider highway/street lighting and the potential lightspill impacts on nearby residents.</li> <li>Aboriginal and Historic Heritage – including but not limited to:         <ul> <li>an assessment of the project on Aboriginal cultural heritage consistent with the draft <i>Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation</i> (DEC, July 2005), specifically considering artefacts, potential archaeological deposits and landscape cultural values. The EA must demonstrate effective consultation with indigenous stakeholders during the assessment and in developing mitigation options (including the final recommended measures). The EA must describe the actions that will be taken to avoid, mitigate or offset impacts; and</li> <li>an assessment of the impact of the project on historic heritage values, in particular impacts on the historic township of Berry.</li> </ul> </li> <li>Land Use/Property, Social/Economic - including but not limited to:         <ul> <li>directly-affected properties and land uses adjacent to the project, including: impacts to land use viability and future development potential; and property allotment, land sterilisation and severance impacts.</li> <li>the agricultural sector taking into account the fragmentation and</li> </ul> </li> </ul>
	<ul> <li>potential loss of agricultural and farm viability including internal and external farm access arrangements both during construction and operation of the project;</li> <li>local community socio-economic impacts associated with access, land use, property and amenity related changes;</li> <li>business impacts including the overall viability, profitability, productivity and sustainability of businesses in the township of Berry associated with the changes to route alignment in Berry; and</li> <li>impacts on recreational fishing access and opportunities in Broughton Creek, Broughton Mill Creek and Bundewallah Creek.</li> </ul>
	<b>Environmental Risk Analysis</b> – notwithstanding the above key assessment requirements, the EA must include an environmental risk analysis to identify potential environmental impacts associated with the project (construction and operation), proposed mitigation measures and potentially significant residual environmental impacts after the application of proposed mitigation measures. Where additional key environmental impacts are identified through this environmental risk analysis, an appropriately detailed impact assessment of this additional key environmental impact must be included in the EA.
Consultation	<ul> <li>You should undertake an appropriate and justified level of consultation with relevant parties during the preparation of the EA, including:</li> <li>local, State or Commonwealth government authorities and service providers, including the NSW Office of Environment and Heritage; the NSW Office of Water; the Department of Trade and Investment, Regional Infrastructure and Services; Shoalhaven City Council; Shoalhaven Water and the Council of the Municipality of Kiama;</li> <li>specialist interest groups including Local Aboriginal Councils; and</li> <li>the public, including affected landowners.</li> </ul>
	consultation undertaken to date and identify the issues raised (including where these have been addressed in the EA).