Safer rural roads with AUS-SPEC

By Emma Green, NATSPEC Communications

Roads are a local government's most significant asset. Over half of all road accidents in Australia occur on rural and regional roads, therefore, safety is paramount.

AUS-SPEC's new Rural Roads specification package brings technical support and expertise to rural and regional councils. AUS-SPEC, the national local government specification, is a joint venture between NATSPEC and IPWEA.

Using the documents in this package and implementing the recommended techniques will significantly improve the structural integrity, safety and performance of sealed and unsealed roads. This will assist councils to better serve their communities.

Road management is an important responsibility – and a serious challenge. AUS-SPEC Rural Roads is a reliable resource to help rural and regional councils manage their roads to a high standard, in a sustainable manner.

The Rural Roads specification package is for engineering services, environmental services, asset management and maintenance management. It works across all areas of road design, providing the insight needed to improve roads' safety and structural integrity.

The Rural Roads specification package includes editable worksection templates, documentation and guidelines for planning, design, tendering, contract preliminaries, construction, operation and maintenance of sealed and unsealed road resources.

Unsealed roads are more easily affected by materials and environmental factors, which is addressed by four new specifications for geometric road design and pavement design for sealed and unsealed roads.

TECHreport *TR08 Management of council gravel pits in country areas – A case study* explains how blending gravels from marginal gravel pits can produce defect-free unsealed roads, using Lachlan Shire Council as a case study. In the Shire of Albany in Western Australia, improved gravel blending for unsealed roads reduced potholes and water penetration to zero, reduced maintenance grading from every week to twice a year and extended resheeting intervention times from every three to five years to every ten to 15 years. This creates a significant whole-of-life cost saving.

AUS-SPEC construction worksections provide better quality control, environmental management and integrated management for construction of local roads. New worksections include rural concrete bases and the wearing courses, bases and subbases of unsealed roads. Existing

worksections, like *Stabilisations* and *Flexible pavement base and subbase*, have been updated significantly for rural councils. The new TECHnote *GEN026 Otta seal – A different approach to road sealing* explains the use of Otta seal for low traffic volume unsealed gravel roads.

The new design and construction reference documents provide procedures to rural councils to develop their own specifications in house and are a major advantage. *Design reference and checklists* provide a record of design processes and requirements. *Construction reference and schedules* include material selection schedules, summaries of hold points and witness points, maximum lot sizes and test frequencies. These documents can be customised to include specific requirements.

AUS-SPEC Rural Roads incorporates scientific technology to extend intervention times and enable road operation at optimal maintenance investment. The new TECHnote *GEN027 Maintenance of unsealed roads* assists local road authorities in maintaining low volume unsealed gravel roads. The revised maintenance worksections, such as *1602 Maintenance schedules – road reserve*, help councils improve asset inventory and maintenance history.

To simplify the documentation process, subscribers can access SPECbuilder, NATSPEC's online specification compiler. AUS-SPEC provides an annual update service in response to changes to regulations, standards, industry practices and the evolving needs of subscribers. It creates a national framework for managing local government infrastructure and assets.

Providing a safe road network in rural areas means protecting livelihoods and lives. With the AUS-SPEC Rural Roads specification package, councils can proactively manage their roads and provide safe infrastructure to their communities. AUS-SPEC is an essential technical resource for delivering sustainable local government projects of exceptional quality.

AUS-SPEC is developed by the industry, for the industry. It is managed by NATSPEC, a not-for-profit, Government- and industry-owned organisation. NATSPEC maintains the National Building Specification for Australia and has been a valued part of the construction industry for over 40 years.

For more AUS-SPEC information, case studies and resources, visit <u>www.natspec.com.au</u>.