Development of a new product

AUS–SPEC

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AUS–SPEC

- AUS–SPEC is a specification system for the life-cycle of assets.
Our journey....

• In July 2007 Institute of Public Works Engineering Australia and Standards Australia engaged NATSPEC to update, develop and distribute the AUS–SPEC range of specifications.
Oct 2007 – Launch of AUS–SPEC Specifications

NATSPEC, founded in 1975, is a not-for-profit organisation that is owned by the design, build, construct and property industry through the following professional associations and government property groups. NATSPEC’s major service is the comprehensive national specification system endorsed by government and professional bodies. The specification is for all building structures with specialist packages for architects, interior designers, landscape architects, structural, mechanical, hydraulic and electrical engineers and domestic owners.

// Update service

// Quick and easy with SPECbuilder Pro

// National classification system
Infrastructure cycle
‘The grouping of this material into logical subdivisions is the obvious starting point in the preparation of a specification... We also must recognize the best of local contracting and construction techniques and attempt to anticipate the future.’

Douglas A. Norman
AUS–SPEC Packages

- Contracts
- Urban and open spaces (includes NATSPEC Site)
- Buildings (includes NATSPEC Basic)
- Roadworks and bridges
- Public utilities
- Maintenance (Non Parks)
AUS–SPEC Update 2008

• AUS–SPEC TECHguides introduced.
• Building construction worksections revised.
• New worksection released– Integrated management.
• First edition of NATSPEC Maintenance reference released.
TECHguides

TECHguides provide roadmaps and examples for compiling the documentation required for local government projects. They include information on contracts, technical specifications and tender submission requirements.
NATSPEC Maintenance Reference

NATSPEC MAINTENANCE REFERENCE
APRIL 2010

Government of Western Australia
Department of Treasury and Finance
Building Management and Works
www.bmw.wa.gov.au

Your NATSPEC
AUS SPEC
Our Approach

Why?
Develop and update

What?
Requirements

When?
Implementation

Where?
Research

How?
Design

Develop and update
Requirements
Implementation
Research
Design
Project outline

Why?
Infrastructure development
New methods

What?
Roadworks

When?
October 2009

Where?
State Road Authorities and Austroads

How?
Design Template
AUS–SPEC Update 2009

• New master templates for Design and construction worksections developed.

• 35 AUS–SPEC Roadways worksections reissued.
  – 00 PLANNING AND DESIGN workgroup – 4
  – 11 CONSTRUCTION workgroup – 31

• New worksection – Street lighting.

• SPECbuilder Live available for AUS–SPEC users.
Finding a consistent design template

- General
- Open space
- Roadways
- Bridges
- Public utilities
Design Worksections
Template structure

• General
• Design
  – Consultation
  – Planning
  – Design criteria
  – Materials
• Documentation
Finding a consistent construction template

- General
- Urban and open spaces
- Buildings
- Roadworks and bridges
- Public utilities
Construction Worksections

Template structure

• General
• Pre-construction planning
• Materials
• Execution
• Measurement and payment
• Annexures
Key Improvements

• Design worksections—Include design variables like:
  – Location.
  – Environment.
  – Materials.
  – Construction and maintenance methods.
  – Alignment with the new Austroads guides.

• Construction worksections
  – Inspections: Summary of Hold points and Witness points.
  – Submissions.
  – Pre-construction planning.
  – Measurement and payment.
1111 Cleaning and grubbing

1111 CLEARING AND GRUBBING

1 SCOPe AND GENERAL

1.1 SCOPE

The work to be executed under this work section consists of the clearing of all vegetation, both living and dead, all minor structures (such as fences and livestock yards), all rubbish and other materials which, in the opinion of the Superintendent, are unsuitable for use in the works. The clearing of the crown of trees and the branches of shrubs and the grubbing of trees and stumps. The work also includes the disposal of all materials that have been cleared and grubbed. All natural landscape features, including natural rock outcrops, natural vegetation, soil and watercourses are to remain undisturbed except where affected by the Works as approved by the Superintendent.

1.2 QUALITY

Requirements for quality control and testing, including maximum lot sizes and minimum test frequencies, are given in 0161 Quality (Construction).

1.3 CROSS REFERENCES

Associated worksections: Conform to the following:
- 0161 Quality (Construction)
- 0257 Landscape - roadsides and street trees
- 1102 Blasting for erosion and sedimentation
- 1105 Boundary fences for road reserves

1.4 EROSION CONTROL

In advance of or in conjunction with clearing and grubbing operations, effective erosion and sedimentation control measures shall be implemented in accordance with 1102 Control of erosion and sedimentation.

1.5 BOUNDARY FENCE LINE

The clearing and grubbing required for boundary fences is included in 1195 Boundary fences for road reserves and does not form part of the work under this worksection.

1.6 BLASTING

Explosives shall not be permitted to be used in clearing, grubbing or other demolition activities without the prior written approval of the Superintendent.

2 CONSTRUCTION

2.1 LIMITS OF CLEARING

Unless otherwise shown on the Drawings or directed by the Superintendent, the area to be cleared is that which will be occupied by the completed Works, erosion and sedimentation measures, all crops and stumps that are visible within a distance of 4 m beyond the tops of trees and logs of trees remaining to where the natural fall of the ground is towards the roadway and 2 m beyond the tops of trees and logs of any structures where the natural fall of the ground exceeds 100 mm. The Contractor shall ensure that only the absolute minimum area for construction is cleared.

The Contractor shall ensure that all the limits of clearing and present this for approval 7 days prior to any commencement of work. This action constitutes a HOLD POINT.

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Reference documents

- Australian Standards
- Australian Asphalt Pavement Association
- Austroads
- Civil Contractors Federation
- Concrete Masonry Association of Australia
- Concrete Pipe Association of Australia
- Engineers Australia
- Government publications
- International publications (ASTM, BS etc)
- Institute of Public Works Engineering Australia
- Water Services Association of Australia
State Road Authorities

- Department of Infrastructure, Energy and Resources. (TAS)
- Department of Territory and Municipal Services. (ACT)
- Department of Transport, Energy and infrastructure. (SA)
- Department of Transport and Main Roads. (Qld)
- Main Roads. (WA)
- Northern Territory Transport Group. (NT)
- Roads and Traffic Authority. (NSW)
- VicRoads. (VIC)
Local Government Councils

- Blacktown City Council
- Blue Mountains City Council
- City of Marion
- City of Geraldton–Greenough
- City of Onkaparinga
- Coffs Harbour City Council
- Great Lakes Council
- Ku–ring–gai Council
- Lockyer Valley Regional Council
- Mackay City Council
- Moreton Bay Regional Council
- Newcastle City Council
- Penrith City Council
- Port Macquarie Hastings Council
- Rockdale City Council
- South Gippsland Shire Council
- Sunshine Coast Regional Council
- Wagga Wagga City Council
Industry bodies including Consultants

- Australian Asphalt Pavement Association
- Australian Society for Concrete Pavements
- Complete urban
- Cement Concrete and Aggregates Australia
- Dura-post
- Energy Australia
- GHD
- Geofabrics Australia
- IPWEA
- Trees Impact
- Snowy Works and Services
- Wellstructured
AUS–SPEC Complete package

- TECHguides – 10
- Design Worksections – 13
- Construction Worksections – 66
- Maintenance Worksections – 94
- NATSPEC Maintenance Reference
Additional documents

- QUICKstart
- National worksection matrix
- TECHreports
- TECHnotes
- NATSPEC papers
- NATSource
- SPECnotes
- Branded worksections
AUS–SPEC Update 2010

• Revision of AUS–SPEC Public utilities worksections.
  – 00 PLANNING AND DESIGN workgroup – 4
  – 1 GENERAL – 4
  – 13 PUBLIC UTILITIES workgroup – 9
Promotion

- Direct Marketing

- AUS–SPEC weblink – IPWEA National and State websites.

Promotion – Benchmarking

AUS-SPEC Update 2009
AUS-SPEC Asset Benchmark Survey 2009

Thank you to all the Councils for supporting the AUS-SPEC Asset Benchmark Survey 2009. The final report along with a copy of the paper presented at the International Public Works Conference organised by IPWEA in Melbourne recently, is now available on the AUS-SPEC page of www.natspec.com.au.

Roadways Worksections Reissued

It is just over 2 years since the Institute of Public Works Engineering Australia (IPWEA), Standards Australia and NATSPEC announced the engagement of NATSPEC to update, develop and distribute the AUS-SPEC range of specifications. The national specifications system used by Local Councils for the lifecycle management of assets, is now updated annually by NATSPEC to reflect changes to standards and regulations and to meet the evolving needs of subscribers. The various worksections are suitable for customising by the relevant authorities for compiling their project specific contract documents.

The main focus of AUS-SPEC 2009 Update has been on 35 AUS-SPEC Roadways worksections.

AUS-SPEC Roadways and bridges package is aimed at the Local Government Councils for the design, construction and maintenance of minor roads. The Roadways worksections that are being revised are:

- A00 PLANNING AND DESIGN – Roadways workgroup - 4 worksections.
- 11 CONSTRUCTION – ROADWAYS workgroup - 33 worksections.

The revised structure of each worksection is based on a standard Template which has been developed to reflect the construction sequence and improve clarity while maintaining the existing information. The worksections are aligned with the new AUSTROADS guides and are informed by the various State Road Authority publications. Any technical changes are listed in the update summary which is provided to all the AUS-SPEC subscribers.

Reissued worksections have the following improvements:

- Global
  - Responsibilities clause to define worksection objectives and performance.

- Guidelines text (in green) to assist the specifier in developing the specification. Guidance can be turned on/off as desired as required.
- Expanded Abbreviations and Definitions clauses.
- Prompts (complete/deleted) with associated Guidance text to assist the specifier input project specific requirements.
- Recalling of AUS-SPEC language in the imperative mood for clarity and brevity, e.g. “lay tiles...” instead of “Tiles shall be laid...”.
- Keywords at the start of each paragraph to assist in identification of unique clauses and simplification of the text structure.

- 00 PLANNING AND DESIGN – Roadways
  - Revised format, based on a standard Template under 3 clause headings: General, Design and Documentation.
- External review by the various State Road Authorities prior to being reissued.
- 11 CONSTRUCTION – Roadways
  - Revised format, based on a standard Template, under 5 clause headings: General, Pre-construction planning, Materials, Execution, Measurement and payment.
- Definition of HOLD POINTS and WITNESS POINTS in the Template text.
- Summary tables of HOLD POINTS and WITNESS POINTS to assist the Contractor to plan activities requiring prior approval.
- Time periods for approval are now grouped in the summary table where previously they have been located throughout the text and are added as required.
- Submissions list, to assist the Contractor in determining submission requirements for approval to progress the works.
- Cross-reference to 0102 Schedule of rates – supply projects: 016 Quality (Construction) or 0167 Integrated management: 0179 General requirements (Construction) and 1001 Control of traffic.
- Revised Measurement and payment clause and presentation of Pay items in tabular form including item, unit and description of works.
- External review by subscribers and industry bodies prior to being released.
- Other improvements to AUS-SPEC in this Update include:
  - Update of the Template in worksections in the 02 SITE, URBAN AND OPEN SPACES and 03 STRUCTURE workgroups.
  - Referenced documents list in all worksections of the 14 – 18 MAINTENANCE workgroups.
  - SPECBuilder Line: Online availability of worksections via SPECBuilder Line, an online version of the SPECbuilder specification compilation software. Subscribers will still receive a CD-Rom of their package with this Update.

Available in a range of packages.

In addition to the AUS-SPEC Roadways and bridges package the other AUS-SPEC packages which are available include: Complete, Buildings, Centrals, Maintenance Non Parks, Public Utilities, and Urban and open spaces.

For further information, visit www.natspec.com.au.
Promotion

- Participation in Conferences and seminars
  - AUS–SPEC Presentations – Institute of Public Works Engineering Australia (IPWEA) NSW, QLD, SA and VIC Conferences.
  - AUS–SPEC Banners – Displayed at the IPWEA State Conference and Australian Consulting Engineers Australia Conference.
AUS–SPEC Subscribers

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The road to success is always under construction.