

19 May 2016

Tasmania Planning Commission
GPO Box 1691
HOBART TAS 7001



**ENGINEERS
AUSTRALIA**
Tasmania Division

Dear Sir/Madam

Re: Engineers Australia Submission to Tasmanian Draft State Planning Provisions

Thank you for the opportunity to submit a response to the draft state planning provisions.

Engineers Australia is the peak body for the engineering profession in Australia. With over 100,000 members across Australia, we represent all disciplines and branches of engineering. Engineers Australia is constituted by Royal Charter to advance the science and practice of engineering for the benefit of the community.

Engineers provide critical advice for decision-makers who are transforming the economy. Tasmania needs to build a strong engineering profession to support Tasmania's economic growth plans. Engineering innovation is essential to transform our economy for a high-value, high-tech future.

There are three key points that we would like to include in our submission. These are:

- Efficiencies in the process through whole of issues consideration
- Implementation of the provisions
- National Engineering Register

Efficiency gains through whole of issues considerations

Engineers Australia has been advocating for the recognition of interdependencies between government policies and whole of government, both within a single level and between levels of government. A similar statement can be made with planning.

Efficiencies are to be gained through considering the impact of future development opportunities. For this reason, we encourage that, where possible, collaboration between agencies and planning authorities occurs to understand longer term visions are taken into account during the planning process. Not only does this include councils where developments cross council boundaries, but also in the areas of electricity (understanding electrical capacity), traffic and transport management (understanding impacts on main thoroughfares through traffic modelling) and sewer and stormwater.

As an example, our members have given feedback on the lack of consideration for assessing electrical capacity for new developments in the planning scheme. Our understanding is that current arrangement can lead to delays in projects. We have given specific feedback on the case for the requirement to include electrical capacity considerations in the planning provisions (Appendix 1).

Feedback from members have also indicated that there are still potential improvements in the provisions for landslip, traffic and transport, sewer and stormwater that will actually improve the planning process and reduce planning approval and development time, as well as maintaining consumer safety. Should you require further information our members are available to discuss particular aspects.

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Implementation of the provisions

Educational program

As with the introduction of any new approvals, it is important to have a robust educational programme to ensure that both users and approvers understand the nuances of definitions within the provisions, and the implementation of the provisions to ensure consistency across the state. Engineers Australia will be very happy to offer assistance, where appropriate, to deliver briefings and information to engineering practitioners.

Engineering capability in planning agencies

Well utilised engineering expertise drives innovation, reduces project risk and improves financial and project outcomes for the good of the economy, and the nation.

With respect to the implementation of State Planning Provisions, planning authorities have a key role to play in engineering workforce development through its own workplace structures. Engineers Australia has long advocated on the need for government, at all levels, to be an informed buyer of engineering products and services. Central to this is the ability to properly assess the engineering merits, or otherwise, of projects.

Over recent years, the government, including local government, has severely reduced its in-house engineering workforce, and with this, reduced its ability to properly judge the value it receives as a customer. This also results in increased delays for project proponents applying for approvals, such as development and building approvals.

Engineers Australia advocates that where possible, professionally competent engineering staff are employed in relevant areas, including management, planning and approvals, traffic and infrastructure, etc. This is necessary to enable planning authorities meet the needs of its community. Where this is not possible, we recommend that agencies develop effective and efficient arrangements to ensure these provisions.

Innovation

The planning provisions, in particular its implementation, needs to take into account changes in innovation, best practices and land-use changed. It is important that decision makers in the planning authorities are aware of such changes or that systems are in place that allow for such changes. Such a system, for instance, could take advantage of the recently established National Engineering Register.

National Engineering Register

The successful implementation and proper application of the State Planning Provisions as is intended relies current and competent practitioners. In Tasmania, the only registration requirement for engineers in this area is the Scheme for the Accreditation of Building Practitioners as approved in accordance with the *Building Act 2000*. The absence of quality assurance mechanisms for engineering service providers highlights the potential for different outcomes with regard to the implementation of the coastal hazard package, with regard to ensuring that engineering designs will function correctly and that appropriate materials, where appropriate, are specified.

Where there is no consistent form of registration, consumers are usually unable to verify the competence of service providers. To overcome this information imbalance, Engineers Australia launched the National Engineering Register (NER). All members of the profession who meet the national benchmark standard of professionalism for the NER are eligible to apply to be registered on the NER. All registrants on the NER have:

- A recognized qualification benchmarked to the international education standards to which Engineers Australia is the Australian signatory
- A minimum period of professional practice post-graduation
- Currency of continuing professional development (CPD)
- The benefit of Professional Indemnity (PI) insurance
- A commitment to ethical practice
- And annual certificate of registration
- An entitlement to use the 'NER' post nominal.

By choosing to engage an engineer who is on the NER, the consumer - be they individuals, planning authorities or government – can be confident that the engineer will meet the above criteria and be competent to practice.

Options for Government

The NER is a voluntary register and governments may choose to utilize it in a number of ways:

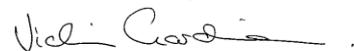
- **A pathway:** Where systems are already in place to assure the competence of engineers, the NER can be nominated as an acceptable pathway to registration or licensing. This approach has already been taken by the Queensland government for engineers seeking status as a Registered Professional Engineer Queensland (RPEQ) and could be replicated by all jurisdictions.
- **A new tool for expanded quality assurance:** A risk-based approach to regulation may deem it appropriate to expand requirements for the regulation of engineers to other fields building, planning and emergency management (or even to other engineering activities across the board). Creating a register would be a significant undertaking, and the NER offers an existing framework to make sure an action much simpler.
- **Community awareness:** It is agreed that industry and consumers require better information to make informed choices. The NER is a voluntary register and it would be appropriate for the government to promote the NER as a means to verify the quality of engineers. Just as quality assurance schemes and voluntary standards exist for many professions and products, the NER is a quality assurance mechanism for engineering service providers.

Conclusion

Engineers Australia is constituted by Royal Charter to advance the science and practice of engineering for the benefit of the community. Engineering is integral to all components included in the planning provisions. Ensuring that there is a means for the community and consumers to assess and select competent engineers service providers is an important function of the association.

Should you have any questions about the content of this submission, Engineers Australia's position more broadly, or opportunities to protect the community via the NER, please do not hesitate to contact me directly, either by telephone on 03 6218 1902 (mob: 0409 955 720), or by email on VGardiner@engineersaustralia.org.au.

Yours faithfully



Dr Vicki Gardiner FRACI CChem ComplEAust
General Manager – Tasmania Division
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Appendix 1: Comments for inclusion of electrical supply in the State Planning Provisions

The proposed planning scheme includes a criteria regarding services that notes (for developed areas but similar for all zones):

8.6.3 Services:

Objective:	To ensure that the subdivision of land provides adequate services to meet the projected needs of future development.
Acceptable Solutions	Performance Criteria
A1 Each lot, excluding for public open space, a riparian or littoral reserve or Utilities, must have a connection to a reticulated potable water supply where available.	P1 No Performance Criteria.
A2 Each lot, excluding for public open space, a riparian or littoral reserve or Utilities, must have a connection to a reticulated sewerage system.	P2 No Performance Criteria.
A3 Each lot, excluding for public open space, a riparian or littoral reserve or Utilities, must have a connection to a stormwater system able to service the building area by gravity.	P3 Each lot, excluding for public open space, a riparian or littoral reserve or Utilities, must be capable of accommodating an on-site stormwater management system adequate for the future

Similarly the objective for road design is as follows:

Objective:	To ensure that the arrangement of new roads within a subdivision provides for: (a) safe, convenient and efficient connections to assist accessibility and mobility of the community; (b) the adequate accommodation of vehicular, pedestrian, cycling and public transport traffic; and (c) the efficient ultimate subdivision of the entirety of the land and of surrounding land.
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In both cases, subdivision proponents must demonstrate the provision of services for each lot in the current development, and such a capacity as to not preclude future subdivision of the land.

The service requirements are less stringent for rural areas but still require provision of solutions for water, stormwater and sewerage at planning stage.

The planning scheme does not require the provision of electrical supply to each lot as this is currently resulting in reduced amenity of developments, significant delays and a lack of ability of authorities to require that lots are adequately serviced. It is advised that provision of

electrical supply for each proposed lot should be designed and demonstrated at planning stage in parallel with the other essential services listed above. The design of electrical supply does not incur any additional cost on the developer, since the provision of electrical supply is an essential service required for each lot albeit not currently included at planning stage. However, the current situation which provides council no visibility into the electrical design, results in conflicts between services, inefficient provision of services and significant delays during subdivision construction and development due to the requirement to provide electrical infrastructure well after other utilities have been designed and often partially or wholly constructed.

In the interests of an efficient, planning system which provides for the expected services to new building lots without unexpected delays and cost it is recommended that an acceptable solution be included related to the provision of connection to electrical supply for each lot. The performance criteria could allow the provision of an alternative supply (for example microgrid with renewable energy and storage), however the alternative source of electricity supply should have sufficient capacity to service the future use and development of the land in line with the requirements for roads, water, sewerage and stormwater infrastructure.

There are numerous examples of recent subdivisions where lack of electrical supply provision at planning stage has resulted in need for rework, a need to upgrade services as later blocks are developed, electrical infrastructure being constructed in contradiction of council planning schemes all of which add to the inefficiency and cost of development in Tasmania. It is important that the electrical services be integrated with other utilities in the planning scheme, and we understand TasNetworks to be fully supportive of this model.