Building Over Infrastructure Services

March 2016

Contents
1. Summary........................................................................................................................... 2
2. Background......................................................................................................................... 2
3. Issues as at 2016.................................................................................................................. 3
4. Proposed position and rationale....................................................................................... 4
5. TRG resolution:.................................................................................................................. 4
1. **Summary**

Queensland’s water and sewerage service providers (WSPs) are responsible for ~$35 Billion in assets. A high proportion of those assets are underground, constructed with expected design lives of up to 100 years.

The challenges of managing underground networks are significant. Damage to mains through excavation is a common occurrence and underground assets must be periodically inspected, repaired and ultimately replaced. One issue is locating underground assets. The advent of GIS technologies and better as-constructed data has significantly reduced risks for newer developments, but there is a legacy of older infrastructure which is not mapped to a high level of confidence. Most WSPs have programs in place to improve their knowledge of the location of these assets. Every attempt is made to avoid inconveniencing customers, however the opportunity to significantly relocate or reconfigure mains on brownfield sites is often limited by original lot design.

Accidental damage can be reduced but is at times unavoidable. Knowingly creating design and planning policies which increase the risk of future accidental damage is inexcusable. The state’s current position on allowable infrastructure built over or near infrastructure (particularly sewerage infrastructure) creates a perceived short term benefit for property owners, but with extremely expensive long term consequences.

Building Codes Queensland conducted a consultation process in the development of and changes to Mandatory Part 1.4 of the Queensland Development Code from 2012 to 2014, with final amendments being made in 2014. qldwater participated in the process which was fundamentally flawed. The current Part 1.4 has been designed to encourage development, particularly on small lots, but the risk to WSP assets has not been adequately addressed despite repeated concerns raised by the water and sewerage sector. This position paper outlines remaining risks and proposes an urgent review to address them.

2. **Background**

qldwater released a standard guidance/ policy template for Building Near Local Government Infrastructure in February 2009. The first proposal to create MP1.4 came in 2012, ultimately replacing a Non-Mandatory Part which had been released in 2008. South-East Queensland WSPs were well-advanced in developing the SEQ Design and Construction Code, a state legislative requirement, but the state government at the time had adopted a “red-tape reduction” agenda designed to promote commercial development and attempts to make the two approaches complementary failed, and development of the state-wide MP1.4 commenced.

The first opportunity to comment on a draft MP1.4 came in August 2012. The review and development process was long and contrived. At one point (September 2013), the Local Government Association of Queensland sought intervention from the Director General of Housing and Public Works to stop inclusion of a provision which would have seen structures (e.g. carports) built over access chambers, creating a major accident risk for property
owners who then enclosed those structures. The Department throughout has refused to acknowledge that illegal building additions accompany legal building work once a structure is in place, and that ignorant modifications (in this case simply enclosing a carport) can not only risk infrastructure but the safety of residents as well.

On 1 November 2013, the first major amended Part came into force. Fact sheets were released containing errors, resulting in significant confusion for asset owners, developers and building certifiers.

As a consequence of “unintended growth in the number of concurrence referrals” resulting from the introduction of this Part, further amendments were drafted during 2014. While qldwater was invited to participate in reviews, there were limited opportunities to consult with our broader membership (and thus provide a considered and consolidated industry position) on the impacts of the proposed significant changes.

The current version of MP1.4 commenced on 15 December 2014.

qldwater wrote to Minister Enoch in March 2015 following her appointment to the portfolio, outlining residual issues. The response received in April stated:

“I am advised that QWD’s suggested amendments were discussed at length during focus group meetings and consultation in the second half of 2014. Officers from the Department of Housing and Public Works have reviewed the proposed amendments and advise that on balance they would be counter to the red tape reduction intent of the reforms. Since introduction, the department has not received any contrary feedback on these areas. The department will continue to monitor the ongoing effectiveness of the reforms to ensure they are achieving their core red tape reduction goal.”

In fact, the suggested amendments were not discussed – conversation was actively stifled by the department.

3. Issues as at 2016

Residual issues with MP1.4, presented in the abovementioned letter are:

- The requirement to refer applications for combined sanitary drains to concurrence agencies has been removed. Combined sanitary drains are a constant source of frustration for service providers and regulators alike. They have historically proven to be a regular source of failure with ownership complexity making remedial action difficult. Service providers should be involved in any decision to evaluate alternative solutions. Ignoring this amendment will create significant future issues when these drains fail.
- Class 1 or 10 structures can be located as little as 3 metres from the centreline of large diameter (>300mm) mains without the service provider having any knowledge of it happening, let alone an opportunity to approve/not approve it. Large mains create access issues with large repair costs and potential for significant damage to
buildings as ground may be eroded well into the footings zone of influence by the liquid being carried by the pipe, particularly if it is a pressure main.

- One acceptable solution creates a scenario where footings of light-weight structures can be relying on the trench fill and the pipe for support rather than bridging over the trench. This may result in cracking of footing slabs due to settlement of the trench fill.
- The definition of “DN” needs to be amended to “nominal internal diameter” to avoid creating confusion for applicants.
- A situation exists where proximity exemptions can be misinterpreted which create a real risk that MP1.4 won’t be applied, placing infrastructure at risk. Rewording has been suggested, but ignored.

4. Proposed position and rationale

MP1.4 creates a real likelihood that legal building work will create loads which causes sewerage infrastructure failure. Trenchless technologies can in some cases rehabilitate smaller mains with leaks. A collapsed sewer main on a property with a structure above normally requires the structure to be demolished as a minimum. If there are access problems for machinery, other structures also need to be demolished and rebuilt. It is not uncommon for repairs to run into hundreds of thousands of dollars, and service providers have no option but to seek to recover these costs from the property owner.

qldwater, on behalf of its members, accepts the policy desire to improve opportunities for property owners to build over infrastructure, particularly on smaller lots. It is prepared to work with the State to resolve outstanding concerns to make MP1.4 workable. qldwater will convene a reference group of industry experts to support this process. It seeks urgent amendment to the Queensland Development Code.

5. TRG resolution:

The qldwater Technical Reference Group (TRG) endorsed this position paper on 26 February 2016.