

18 December 2014

Mr Steven Bailey
Inquiry Director
New Zealand Productivity Commission
PO Box 8036
The Terrace
Wellington 6143

Dear Steven

Inquiry into land for housing

INTRODUCTION

This submission has been prepared by the Institution of Professional Engineers New Zealand and the Land Development Engineering Group who are a special interest group of the Institute of Public Works Engineering Australasia New Zealand Division (IPWEA NZ).

We were concerned that the Issues Paper understated the role of engineers in the approval processes of subdivision consents, and hence this first section explains the subdivision process and the critical part that engineers play. We then respond to the Questions in the Issues paper that are relevant to the engineering profession.

THE SUBDIVISION PROCESS

Section 4 understates the role of engineers in approving subdivisions. At the outset of land development, engineering consultants acting for the developer will frequently approach the council land development engineers to understand the earthworks requirements and key infrastructure requirements that may need to be met. Normally these discussions include the relevant planning / subdivisions officer.

The issues discussed at the initial meeting may include the engineering standards of the infrastructure that will be required within the subdivision and many councils apply the New Zealand Standard NZS 4404:2010 Land Development and Subdivision Infrastructure, often with some local variations. These discussions also include road and access layouts and the ability of the council infrastructure outside the subdivision to accommodate additional demands that may be imposed by the development. Issues could include a need for road widening, water supply restrictions, and the capacity of existing downstream sewage pump stations and treatment. These types of issues may result in the need for financial or development contributions and allow the consulting engineer to advise their client on the financial viability of the development.

Council will also explain that conditions will be set for other infrastructure – such as electricity, gas, telecommunications street lighting and land use restrictions due to geotechnical concerns and natural hazard risks. Some of these may require mitigation works such as stop-banks, overland flow paths, land remediation, and slope stabilisation.

These initial discussions may highlight the need for additional consents for water extraction and disposal.

As part of the viability assessment the engineering consultant may prepare preliminary designs for costing purposes for their client and discuss and test these with the council's land development engineer.

If viable the subdivider may apply for a subdivision consent (Section 87 and 88), and the land development engineer would work with the council planners/subdivisions staff in setting consent conditions (Section 220) relating to earthworks (earthworks standards for cuts, fills and compaction), the required standard of infrastructure, and financial contributions for any consequential infrastructure upgrading outside the subdivision.

The Council specifies the engineering design and construction standards of the infrastructure within the subdivision as the council takes over the infrastructure when it is vested in the council and will maintain it in perpetuity.

The developer's consulting engineer will then submit detailed engineering plans for the earthworks and infrastructure and these may be commented on by the land development engineer and subsequently approved. At this stage there may be discussions with the consulting engineer to ensure the requirements are reasonable.

Throughout the construction period the land development engineer monitors earthworks and infrastructure construction. On completion the land development engineer approves the infrastructure as meeting the required standards. This may involve the developer's contractors undertaking road pavement testing and pressure testing water, wastewater and stormwater pipelines to demonstrate compliance with the council's standards.

If satisfactory, the council's land development engineer authorises a Section 224 completion certificate to the council planners so a title plan can be approved and titles issued for the lots.

RESPONSES TO SPECIFIC QUESTIONS

Chapter 4 Conditions

Question 37: What processes do local authorities use for ensuring that consent conditions are fair and reasonable? How successful are local authorities in meeting the "fair and reasonable" test?

Engineering related conditions are based on engineering design and construction standards that are widely recognised, tested, and accepted in the infrastructure industry. These standards include roading width and geometry, construction materials, and water, wastewater, and stormwater materials and sizes to meet the likely design criteria. Therefore, the conditions will likely be fair and reasonable. Also, dialogue with the developer's consultants usually results in general agreement and an understanding of engineering related conditions.

Council asset groups, such as roading, stormwater and wastewater may sometimes require works that are outside the scope of the development (this is becoming more apparent with CCO's).

Where a council involves a "Development Engineer" to co-ordinate the input of engineering requirements to a subdivision or development, the Development Engineer ensures the conditions are fair and reasonable. "Development Engineers" are engineers familiar with the requirements of the RMA, understand the processes and the need to be "fair and reasonable". This is a key element of the role.

Question 38: In your experience, what impact do conditions on resource consents have on the viability of development projects?

Subdivision consent conditions may well impact on the financial viability of the development, but if the developer and their consultants have worked closely with the council land development engineers and planners in determining the infrastructure requirement, financial viability should be determined well before a formal subdivision consent application has been made.

In some cases urban land development may not be financially viable because, for example, it may be too remote from supporting infrastructure such as a waste-water treatment plant.

Chapter 4 Coordination within council

Question 39: Which local authorities have been most successful in providing coordinated decisions over applications to use land for housing? What explains their success?

We are not able to comment on which councils are most successful. However as explained above, if the developer, the engineering consultant, the council planner / subdivisions staff and the land development engineer work together from an early stage, then a good understanding of the requirements of both parties develops and surprises are avoided.

Within councils there are varying arrangements for coordination between planners / subdivision staff and land development engineers. In some cases the land development engineer or engineers may be in the engineering manager's team to ensure there is a good link to the infrastructure engineers (roading, three waters) as they inherit responsibility for maintaining the newly vested assets. In other cases the land development engineers are in the regulatory planning team to ensure good liaison with the planners, and to ensure regulatory time-frames are met. In some cases council have in-house service agreements between the engineering team and the planning team.

Whatever the internal arrangement is we believe it is critical to have land development engineers within the process to ensure a coordination of engineering requirements across the departments, and to ensure quick and appropriate decisions are made to enable development.

Chapter 4 Infrastructure for Housing

Question 44: What is your experience working with the infrastructure component of the land supply system?

Generally our experience with the infrastructure component of the land supply system works well. It is our general experience that developers use well known consultants, and these consultants have good working relationships with council and a good knowledge of the council infrastructure standards and infrastructure related financial/development contributions. It is widely recognised that sound liaison starts at the initial concept stage.

In some areas of the country there is concern about the different engineering requirements set by the councils and the growth of individual engineering standards across the country. A key reason for the creation of IPWEA New Zealand's "Land Development Engineering Group" is to work on this matter.

Question 45: Are there particular aspects of the system, or particular types of infrastructure, that are problematic?

On occasions there are problems with small developments where the developer is a first time developer and is unfamiliar with requirements and submit an inadequate plan expecting approval. Many councils provide helpful brochures explaining the process for subdivisions and the importance of early discussions with the council.

Some of the bigger issues arise where a development has a significant impact on external infrastructure and the resulting development contributions are high. We note the Productivity Commission supports the concept and economic efficiency of development contributions as the Commission's comments in 2012 were:

*"In principle, the case for development contributions is strong. Linking the payment made for some types of additional infrastructure to the benefits received helps to ensure that investment reflects its opportunity cost and that locational decisions are efficient. Linking benefits and payments also likely to be equitable."*¹

Where there is a significant impact from the larger development there could be a possibility that council's upgrading of its assets may have to be advanced requiring a financial contribution from ratepayers that was not forecast, in addition to funding from financial and development contributions.

Also it is becoming more and more common that planners and architects are promoting developments on behalf of developers and progressing plans with council planners without first considering the engineering and infrastructure elements. This can result in the need for significant redesigns, delays and failure of developments.

This suggests that better co-ordination is required within some of the larger councils, and the need for guidance materials for developers and their advisors on the process and requirements for urban and rural land development.

Question 46: What are the opportunities to improve this part of the land supply system?

The engineering elements of development must be considered at the earliest possible stage.

Question 47: Is there sufficient alignment of incentives for the various organisations involved in the provision of infrastructure to support housing? If not, what could be done to improve alignment.

The preamble to this question says that "developers construct at least some of the local infrastructure to support new housing". This is not always the case especially in greenfield situations where developers construct virtually all the infrastructure – excluding electricity and telecommunications services. Council land development engineers approve literally hundreds of millions of dollars of new assets each year and are typically involved in the creation of more public assets than councils asset groups.

It is imperative that the infrastructure, in particular water, wastewater, stormwater and roading, is thoroughly investigated prior to encouraging land development in any area. It should also be recognised by developers that zoning of land does not presently

¹ New Zealand Productivity Commission, *Housing Affordability Inquiry*, March 2012.

guarantee it is suitable for development. Nor does it guarantee there is suitable supporting infrastructure.

Small councils typically work well across the areas of planning and engineering infrastructure groups to ensure capital works are carried out to enable development of land zoned for such purpose. Larger councils, particularly with CCO's do not have such alignment. This is where Land Development Engineers can play an important part in assisting the groups.

Question 50: Is there evidence that territorial authority debt levels are acting as a barrier to the provision of infrastructure for housing in rapidly growing areas?

The provision of new infrastructure beyond the development can be funded by development/financial contributions – and some of these contribution policies may be long standing e.g. may have been collected over a 10-20 year period and be held in a dedicated reserve fund. If additional funds are required these can be funded from debt, and the loan may be serviced from a targeted rate over the area of benefit.

Infrastructure Charges: Variability in Charges

Question 51: How variable are the practices and processes around infrastructure charges across different jurisdictions? Does variability complicate, delay, or add unnecessary cost to the process of developing land for housing?

While we have no comment on the practices of using financial contributions versus development contributions, it can be expected that the quantum of the contribution will vary depending on the costs of the infrastructure improvements to meet the increased demand resulting from the development.

Development Contributions and Urban Form

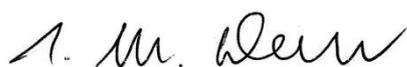
Question 53: Are there particular types of development (e.g., green-fields, infill etc.) that are less costly to service with infrastructure? What evidence can you provide about any variation in infrastructure costs?

Infrastructure costs are typically driven by the availability of existing infrastructure and the scale of the development.

CONCLUSION

We appreciate the opportunity to make this submission and are able to provide further clarification if required.

Yours sincerely



T M Davin
Director External Relations
IPENZ



M Connolly
Chief Executive
IPWEA (NZ Division)