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Committee Secretary
Senate Education, Employment and Workplace Relations Committees
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Submission, Hickory Group

This submission is made on behalf of Hickory Group in relation to the Senate's Education, Employment and Workplace Relations References Committee inquiry in relation to "The shortage of engineering and related employment skills"¹, and in particular with reference to:

"d) options for infrastructure delivery using alternative procurement models which aim to foster collaboration and achieve effective community outcomes, including skills development and retention"²

Summary

Current conventional procurement practices in Australia do not drive investment or innovation in the industry and cause adversarial behaviours and market failure. Best practice procurement models involve the early involvement of contractors in the scoping and design of projects, allowing for full capabilities demonstration and shared responsibilities for the outcomes of the project. The preferred model for the vast majority of large or complex projects is relationship or alliance contracting.

About Hickory

Hickory is one of Australia's largest apartment builders and is well aware of the problems derived from current procurement practices in Australia. Hickory is based in Melbourne where it has operated for over 20 years and has recently expanded to South Australia and WA. Hickory leads innovation in the construction industry and is firmly focused on change and innovation

¹ http://www.aph.gov.au/senate/committee/eet_ctte/engineering/info.htm. Last accessed 1 February, 2012.

² Ibid. Last accessed 1 February, 2012.

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culture. Whilst we perform a large number of projects in various sectors of the construction industry we clearly achieve most of our innovation when we operate outside of the normal procurement process.

Unitised Building (UB)

UB, of which Hickory is the owner, focuses on the construction of medium and high-rise residential, hotel, aged care facilities and hospital projects in Australia.

UB Australia utilises an innovative structural building technology, the UB™ System, which allows accelerated on-site and off-site construction programs. It has demonstrated the ability to deliver buildings faster, to a higher quality standard, while produced in a safer and more controlled work environment. UB Australia is Australian owned and fabricates all of its technology in Australia.

Independent analysis by consultants from The University of Melbourne's Department of Civil & Environmental Engineering shows that, compared to traditional slab and column construction, the UB System has the capacity to demonstrate;

- Time reduction of up to 50%
- Up to 90% less disruption to neighbours and traffic
- Reduced material requirements
- Reduced wastage
- Reduced water usage
- Less embodied energy over the lifecycle of the building
- Less transport energy
- Increased material recyclability
- Reduced carbon footprint

Procurement in Australia

Hickory is active in a number of markets in Australia. We are currently looking to expand our operations in Western Australia, Queensland and South Australia, while we have a long history as the premier apartment builder in Victoria. Our experience in many years of involvement in the construction industry is:

- Private developers, in demonstrating best-practice procurement in construction, seek early involvement of contractors in the design and scope of projects. This may involve early identification of project difficulties, sensitivities, outcomes, opportunities all through a collaborative approach which allows for on-time completion of projects and a relationship of trust. As such variations are not expected and delivery the norm. We have a suite of loyal clients for which we continue to perform and deliver in this collaborative manner. The principles guiding this process include goodwill, team competence and it allows for continuing innovation. It ensures the best possible chance of being able to deliver projects on-time, on-budget and at premium quality;

- Government and large listed firms traditionally use a myriad of procurement methods from design and construct, construct only, PPP to EPCM models but generally without Early Contractor Involvement (ECI). They scope a project, and set a ceiling price for delivery in isolation of the marketplace. Such models encourage disputation, as they do not involve the contractor in the scope of the project and encourage a level of distrust between client and contractor during the completion of the project. A diminished capacity in the engineering workforce in large companies and in government leads to a vexatious and often litigious environment, as this capacity is largely outsourced to contractors who are asked to deliver to what has become an increasingly ill-informed consumer. While it is understood that both Government and listed companies have a responsibility for prudent financial management, this model is not delivering value for money, and nor is it encouraging innovation in the industry. It is instead rewarding standard construction practices and fermenting a growth in adversarial behaviours. This is borne out by research conducted by Blake Dawson, which found the alliancing model as optimal for the delivery of projects on time and on budget, well ahead of other methods of procurement.³
- The increase prevalence of Engineering, Procurement & Construction Manager (EPCM) contracts with little or no contractor accountability. There is an increasing perception that although this model scores high on the partnering and relationship scale, it does not produce value for money in that most are contracted on a cost plus type arrangement.

The use of traditional procurement models without the ECI process or contractor accountability is contributing to market failure and failing to deliver innovation. UB is a product which has great utility for both the government and the private sector. It offers a solution for social housing, housing for resource projects while remaining a premium product for the delivery of any project be it commercial or residential. It has the benefit of bringing modern architectural design to projects while providing the utility for recyclability and the benefits of off-site construction which are key in the delivery of projects in remote parts of Australia which can be so difficult to access. Importantly, it is an Australian innovation which has the capacity to revolutionise construction.

Because current models of procurement do not allow for early involvement of the contractor, the full benefits which this technology can bring to a myriad of projects across Australia have been difficult to demonstrate during tender processes. A collaborative approach would have allowed a full investigation of the suitability of this technology and a demonstration of what can be achieved through its use, and a responsive scoping process. This would involve collaboration during the scoping of a project with a number of selected preferred contractors, an exploration of capabilities, and a finalising of the scoping of the project during this process. A preferred contractor is then identified with the full knowledge of their capabilities and capacity to deliver. The scoping of the project can be an iterative process throughout; making sure that the end consumer receives the optimal product.

³ Blake Dawson. *Scope for improvement. Project risk – Getting the right balance and outcomes.*

Perhaps a better model would be a 2 stage ECI process where:

- Stage 1 would be very similar to an interim Project Alliance Agreement - where the contractor is engaged under a services agreement to develop the design in collaboration with the client to a point where it can be accurately priced.
- In Stage 2 the contractor and client would be a lot better informed as to where projects risks can be allocated and based upon this the contractor can forward a lump sum or schedule of rates design and construct offer – thereby placing the cost and programme accountability for the project on the party best placed to manage it.

Contractual arrangements which seek to shift risk to those delivering projects cannot serve to encourage innovation. They instead encourage adversarial relationships and do not deliver best value for the client, the contractor and nor do they deliver a project of optimal utility.⁴

Our limited involvement in the Public-Private-Partnership (PPP) model saw a potential client seek our ongoing involvement in a project which would have seen risk shifted to us as the contractor to unacceptable degree. Their demand modelling for the project was deeply flawed, would have seen Hickory bear the costs of operations for a project which was unlikely to be ever able to see cost recovery, let alone profit. This only became apparent after contract stage, a problem which has also been seen in the delivery in a number of State Government PPPs, which have seen outcomes varied in nature from disastrous to excellence.

Under current models for procurement, a cycle of disinvestment in research, innovation and skills development is implicitly encouraged, namely:

- The client lets a project under traditional models for procurement;
 - Project is scoped without contractor involvement;
 - Client requires a level of engineering capability at senior levels.
- The contractor bids on that project on a cost basis;
- The successful contractor bids on the project with the tightest possible profit margin;
 - Attempts to deliver on time and on-budget; and
 - Within such a tight budget, operates within a framework of limited research, training and workforce development opportunities.
- And any contract variations or difficulties in delivery give further disincentive to new entrants into the industry.

For those regularly involved in bidding for tendered projects, the 'patchy' nature of tenders coming to market means that business and workforce planning is made more difficult.

⁴ Relationship Contracting, 1999. *Maximising Project Outcomes*. Australian Constructors Association.

The Cooperative Research Centre for Construction Innovation cites the following as key considerations in procurement for the minimisation of disputes:

- I. "There is thus the need to create a culture within the group which is project oriented, but which recognises the financial and social requirements of each participant, and facilitates the building of trust between them.
- II. In selecting project participants, significant weight should be given to the attitude of a participant, as well as its capacity and pricing.
- III. The early involvement of head contractors, specialist subcontractors and designers with the client and other project sponsors."⁵

We agree that these are the hallmarks of a good benchmark in best practice procurement processes. However, for many years now there has been a trend towards adversarial relationships which discourage innovation and the sharing of knowledge. Relationship or alliance contracting is becoming the optimal model for procurement in Australia⁶, and encourages collaboration, innovation and workforce development. By involving the client with the contractor early in a process, the contractor is well placed to share their knowledge of current construction processes with the client, and external stakeholders can be involved at every stage. Thus, the client also benefits from an expansion of their knowledge of current technologies and industry best practice, thus fostering workforce development whilst ensuring that projects can be delivered on-time, and on-budget, as the project is correctly scoped at the outset. This method has allowed us to deliver innovative projects in sensitive communities in inner-city Melbourne within contractual obligations with minimum disruption to the community, many of the involving UB.

Conclusion

The growth of outsourcing of the design and construction of projects in recent years, with inadequate internal scoping undertaken in isolation of preferred contractors has helped drive a dearth of innovation in the industry, and a growth in adversarial relationships and thereby failed to deliver the best possible results for the community.

I would be happy to elaborate on any of the matters contained within this submission, and thanks the committee for their interest in these important matters.

⁵ Cooperative Research Centre for Construction Innovation (2009), *Guide to Leading Practice for Dispute Resolution*. Cooperative Research Centre for Construction, Qld,

⁶ Building the Education Revolution Implementation Taskforce, 2011. *Final Report*. Commonwealth of Australia.

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Yours sincerely,

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