



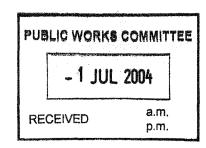


### THE ROYAL AUSTRALIAN INSTITUTE OF ARCHITECTS

1 July 2004

The Secretary
Public Works Committee
Parliament House
CANBERRA ACT 2800

By Facsimile: (02) 6277 4426



PARTNER YBE 2004



# PROPOSED DEVELOPMENT OF LAND AT LEE POINT, IN DARWIN, FOR DEFENCE AND PRIVATE HOUSING

The submission to the PSCPW by DHA to develop land at Lee Point for Defence and Private Housing is at the preliminary stage only and lacks the required detail to enable comment on the design merit or otherwise of the proposed development. No detail is provided on the subdivision layout or the style of housing proposed.

Nevertheless, the RAIA welcomes the opportunity to address the PSCPW and to make comment on the broad principles and design objectives outlined in the DHA submission.

It is quite possible to circumvent even the best design objectives and we recommend that the PSCPW reviews this development at further stages to ensure that the intention of the mandated development objectives/principles are being adhered to.

It would be appropriate that further PSCPW reviews occurred at the completion of subdivision design and at the completion of design stage for the first DHA houses.

Our specific comments on the DHA submission are as follows;

#### Item 4.3 Development objectives/principles

We recommend under (b), (c), (d), (e), (f), (g), (i) and (j) to replace the word 'should' with 'will' as they are mandated objectives.

(b), (c). The RAIA supports these objectives but recommends DHA be required to specify a minimum lot size as such terms as 'sufficient' are too subjective.

(g). The term 'high amenity environment' is undefined and does not provide an adequate measure for the assessment of the completed product.

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- (j). ESD design is generally regarded as more costly and yet the objective suggests that lot servicing costs will be less. We are interested to understand how this can be achieved.
- (n) The mandatory objective should require (not identify) community involvement in the design and management of community space.
- (o). The term 'high amenity family environment' is undefined and does not provide adequate measure for the assessment of the completed product.

#### Item 13.8.1 Electricity

With attention to the design of the neighbourhood and in particular in setting strict ESD design criteria for the houses at the development DHA can substantially reduce the electrical supply requirements created by the new suburb.

#### Item 13.11.1 Telecommunications

There should be provision made for cable TV throughout the suburb.

# Item 15 Energy Conservation

The proposal is that 'all DHA houses will be required to provide optimal passive solar performance and achieve a minimum 4 star energy rating".

The RAIA has concerns that there may be a misunderstanding that achievement of the 4 star rating results in reduced energy consumption. The star rating system is not an appropriate tool for measuring the energy performance of houses in the tropical regions. Achievement of the 4 star rating will identify a house that consumes energy more efficiently if air conditioned but the rating does not consider the design using passive cooling techniques. Unless designed appropriately for the climatic conditions, houses will require air conditioning and will in fact use substantially more energy than those houses designed to incorporate passive cooling techniques. The PSCPW should appreciate that a ceiling fan uses up to 36 times less energy than an air conditioner and that both can achieve similar levels of comfort for occupants in appropriately designed housing for much of the year.

In the early 1990's DHA identified the need to procure passively designed houses but since the mid to later part of the 20<sup>th</sup> century they changed their procurement priorities to generally be a masonry building model that requires air conditioning to achieve comfort levels all year round. The RAIA believes that in order for DHA to meet their stated intention to achieve energy conservation then the DHA should re evaluate their specification requirement.

We recommend that the PSCPW seek a qualified independent report on this issue.

#### Item 17. Project Feasibility

Initial feasibility indicates DHA expects a land yield of 725 residential lots and it would be assumed that the financial model is based on this assumption.

We assume that DHA have an expectation on lot sizes and density mix to have made the announcement on yield.

Knowledge of the expected lot size is necessary to enable an early evaluation on whether the proposal can achieve the mandatory design objectives 4.3(b) & (c). Our experience with lots under 750 sq m is that it is difficult to achieve good design outcomes using standard project home designs.

A recent subdivision in Palmerston incorporating appropriate lot sizes achieved 384 mixed use lots over an area of 50 hectares. Using similar calculations this would equate to approximate 600 lots at Lee Point. Whilst the variables obviously differ there are a number of constraints at the Lee Point site that will inhibit its yield including the issues of flora & fauna protection, maintenance of the Sandy Creek catchment and provision of a retarding basin, incorporation of existing defence communications cabling, retention of vehicle access to the hospital, buffer zones to Tracey Village and the incorporation of the mandated design objectives/principles for the site.

We recommend that the PSCPW requires the DHA advise their intentions for lot sizing, residential density and zone mix.

## Request for Expression of Interest to form a Joint Venture

Submissions were invited on the expectation that the joint venture partners will be involved in a subdivision based on approximate yield of 725 lots. The appropriateness of this yield needs to be proved.

Despite the submission to the PSCPW that the development will incorporate appropriate design input into the development the evaluation criteria is biased to management skills and successful financial outcomes with no reference to the ability to design appropriately. The success of the development will rely on the skills base of the design professionals used, the experience of the joint venture developer in developing appropriate successful subdivisions in the tropical regions and the commitment of the joint venture developer to achieve a high standard of design within the development.

Any further negotiations to form a joint venture partner should clearly define that design is an important consideration in the development of the site and will be an important evaluation criteria in the formation of the joint venture partnership.

In summary, the RAIA supports the early development of the Lee Point site by DHA but recommends that the development be done in a way that ensures that the neighbourhood and the housing are designed to a high standard incorporating appropriate and environmentally sustainable solutions that truly reflect the unique Darwin lifestyle and the tropical climate we live in.

Yours sincerely

Mr Ross Jonkin FRAIA

President RAIA NT Chapter