

# Statement of Reasons

## DEFENCE HOUSING AUSTRALIA – LEE POINT MASTER-PLANNED URBAN DEVELOPMENT

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### PROJECT

The Defence Housing Authority's (the Proponent) Lee Point Master-planned Urban Development (the Proposal) was assessed under the *Environmental Assessment Act* at the level of Environmental Impact Statement (EIS). Assessment Report 88 was provided to the Minister on 30 October 2018.

The Proponent wrote to the NT EPA on 20 December 2018 to provide notice of an alteration to the Project in accordance with clause 14A of the Environmental Assessment Administrative Procedures (EAAP).

The Proposal is located approximately 14 km north-east of the Darwin central business district. The surrounding land uses include undeveloped land and Lee Point to the north, Commonwealth land and Buffalo Creek to the east, residential suburbs and Royal Darwin Hospital to the south, and Casuarina Coastal Reserve (including Casuarina Beach) to the west.

The Proposal area includes two properties (2 Control and Reporting Unit (2CRU) and Muirhead North). 2CRU (Lot 4873) is approximately 81 ha and is currently vacant Commonwealth land to the west of Lee Point Road. Muirhead North (Lot 9370) is approximately 51 ha and comprises vacant Crown Land to the east of Lee Point Road.

The major components of the Proposal that were considered by the NT EPA in Assessment Report 88 include:

- residential housing options for an estimated 3000 residents comprising a mix of ground-level dwellings, rural residential lots and apartments
- tourist, recreation and commercial components including approximately 200 to 300 room tourist accommodation and commercial and retail businesses
- services, community purpose and open space:
  - primary school and community centre
  - internal road network, connecting to Lee Point Road
  - pedestrian and bicycle paths
  - essential infrastructure, expanding existing electrical, reticulated water, reticulated sewerage (no septic proposed)
  - stormwater management and detention storage basins
  - esplanade parkland developed along the western boundary of the site adjoining the Casuarina Coastal Reserve, including pedestrian/cycle trails
  - active recreation reserve (2.46 ha) developed adjacent to the school site/community centre on the eastern side of Lee Point Road. The reserve would incorporate the

Konfrontasi military heritage site and include sports facilities (such as an AFL/cricket oval)

- conservation area (11.24 ha) incorporating a 0.88 ha monsoon rainforest patch in Muirhead North
- park and open space area (2.57 ha) incorporating the 'Bunkers' in 2CRU

The Proposal would be constructed in seven stages with the aim of releasing one stage each year over a total of seven years. The staging and timing of each part of the Proposal would be subject to planning approvals and commercial assessment of the property demand.

### **Altered Proposal**

The alteration includes the following changes to the Proposal within Muirhead North (Figure 2):

- altered boundary of the detention storage (to maintain its size while avoiding the larger conservation buffer – see below)
- addition of open-unlined drains and drainage infrastructure (to connect to existing drainage infrastructure at Muirhead for discharge into Buffalo Creek)
- change in proposed zoning to reflect the change in proposed land use in the previously identified 'Drainage Reserve/Conservation Area'
- an increase to the width of the conservation buffer around the 'Monsoon Rainforest' (from 15 m to 25 m in accordance with Recommendation 15 of Assessment Report 88).

### **CONSULTATION**

The notification was reviewed in consultation with the following Northern Territory Government (NTG) advisory agencies:

- Department of Environment and Natural Resources
- Department of Health
- Department of Infrastructure, Planning and Logistics
- Power and Water Corporation

The Proponent has notified the responsible Minister with details of the alteration as required under clause 14A(1)(a) of the EAAP.

### **JUSTIFICATION**

The NT EPA acknowledges that the Proposal has been altered from that previously assessed at the level of EIS as outlined in the Proponent's notice. It is acknowledged that the altered Proposal accommodates Recommendation 15 of Assessment Report to impose a 25 m buffer around a patch of monsoon rainforest in Muirhead North. In addition, the notice of alteration includes additional drainage infrastructure not specified in the plan previously considered by the NT EPA.

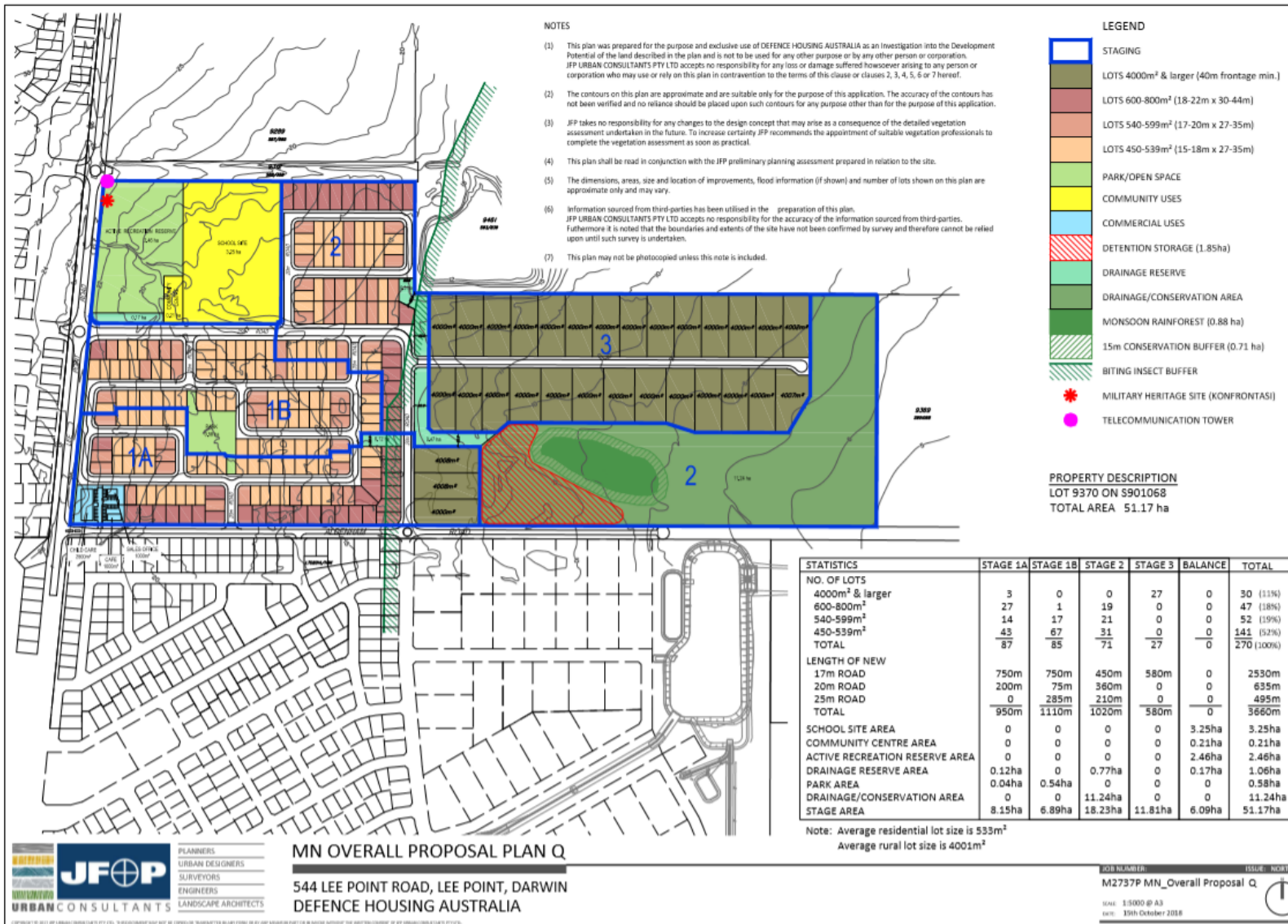


Figure 1. Site layout for Muirhead North considered in Assessment Report 88

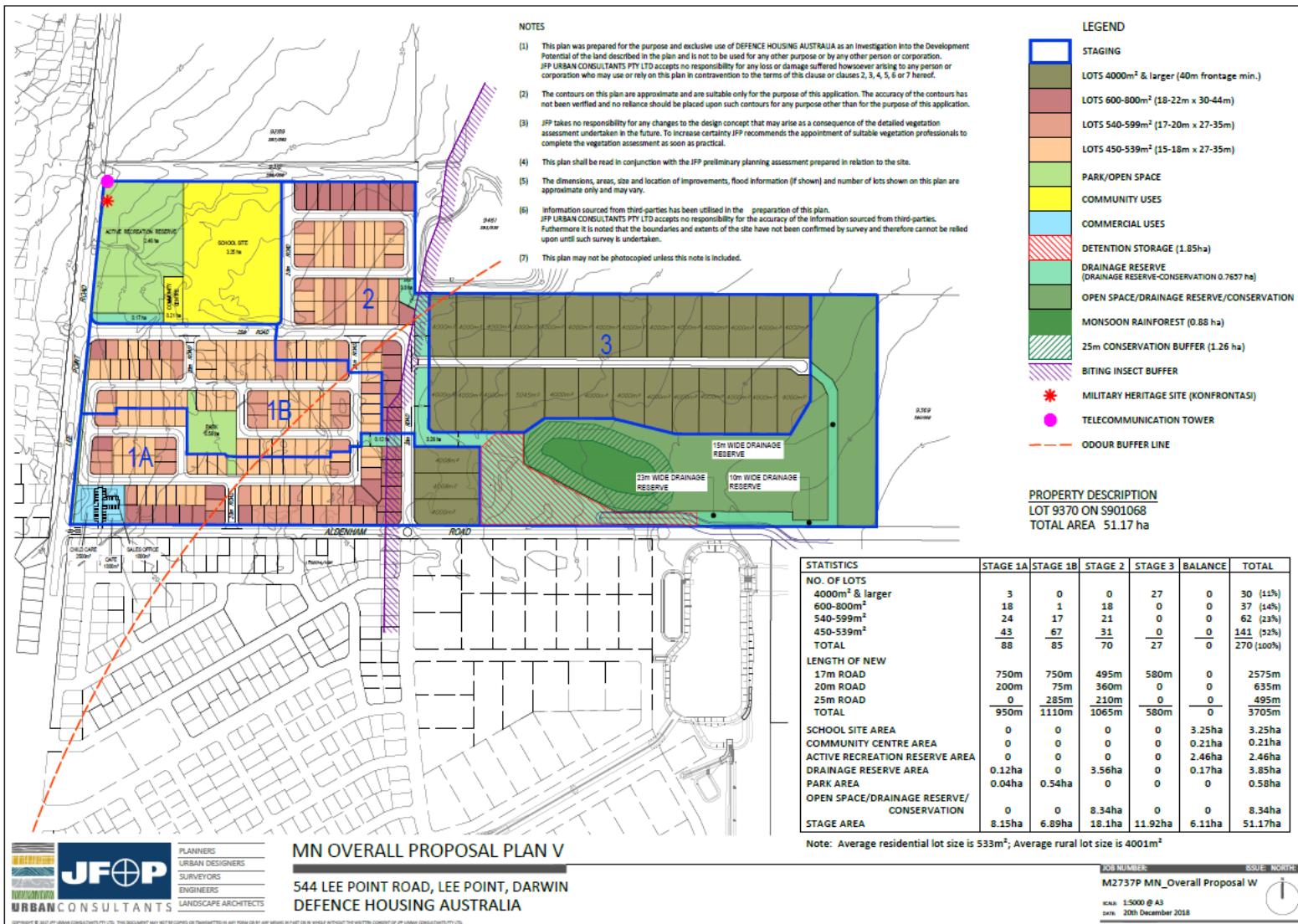


Figure 2. Altered site layout for Muirhead North

## 1. Terrestrial Flora and Fauna

Objective: Protect the NT's flora and fauna so that biological diversity and ecological integrity are maintained.

### Black-footed tree-rat (*Mesembriomys gouldii gouldii*)

The black-footed tree-rat (*Mesembriomys gouldii gouldii*) is listed as endangered under the *Environment Protection and Biodiversity Conservation Act 1999* and vulnerable under the *Territory Parks and Wildlife Conservation Act*. Targeted surveys for the species were undertaken as part of the EIS, with the species identified at three locations within Muirhead North. Subsequent habitat surveys of the site identified areas of habitat of varying quality across Muirhead North.

In its assessment of the Proposal, the NT EPA considered the impacts of the Proposal on *M. g. gouldii*. The NT EPA found that the Proposal would remove a significant proportion of the remaining woodland habitat for the species in the Lee Point area and noted that there is a risk that the loss of habitat may affect the longer-term viability of the Lee Point sub-population. The NT EPA concluded that the clearing of 23 ha of suitable habitat and the modification of a further 7.5 ha would likely have a significant residual impact to the species but not to the extent that the impact would be unacceptable.

The notice of alteration proposes new 'Drainage Reserves' in the eastern portion of Muirhead North within an area that contains suitable habitat for *M. g. gouldii*. Based on habitat mapping provided in the Supplement, the NT EPA estimates that the proposed 'Drainage Reserves' would require the clearing of approximately 0.42 ha of suitable habitat for *M. g. gouldii*. The altered 'Detention Storage' is predicted to impact on approximately 1.30 ha of suitable habitat for *M. g. gouldii*.

In addition to the impacts from clearing, the location of the proposed 'Drainage Reserves' may also restrict the species' movement through the site and access to the 'Conservation Area'. Other potential impacts include an increased risk of predation for individuals moving across open areas and degradation of the 'Conservation Area' from edge effects.

The NT EPA acknowledges that the altered Proposal will incrementally increase the significant residual impact on *M. g. gouldii* but notes that there are no new threats or sources of potential impacts beyond those previously considered in Assessment Report 88. The NT EPA considers that the loss of suitable habitat can be compensated through the implementation of Recommendation 14, taking into account the alterations to the Proposal. The residual impact calculations should also take into account the potential impacts from reduced access for *M. g. gouldii*, increased predation potential and degradation of habitat from edge effects.

### Monsoon Rainforest

The vegetation within the Muirhead North portion of the site includes seven relatively common vegetation types and one significant and sensitive vegetation type (monsoon rainforest which includes monsoon vine thicket, or coastal vine thicket). The monsoon rainforest patch in Muirhead North is approximately 0.88 ha in size and is considered to be of 'moderate' conservation significance, as one of a network of monsoon rainforest patches in the Darwin area.

In the EIS, the Proponent acknowledged the significance of the monsoon rainforest patch and proposed to retain the vegetation within the Proposal. The proposed area plan initially included a buffer of 15 m between the rainforest patch and adjoining rural lots. The NT EPA found that a buffer of 15 m was unlikely to provide sufficient protection from adjacent land uses and subsequently recommended that the Proponent increase the buffer around the patch to a minimum of 25 m (Recommendation 15).

The NT EPA supports the Proponent's approach to adopting Recommendation 15 with respect to widening the buffer around the monsoon rainforest patch. The NT EPA is satisfied that the environmental significance with respect to the impacts to native vegetation has not changed.

Recommendation 15 of the NT EPA's Assessment Report would still apply to the altered Proposal, requiring that the 'Open Space/Drainage Reserve/Conservation' at Figure 2 be rezoned as 'Conservation'.

The NT EPA considers that, with the application of recommendations 14 and 15 of Assessment Report 88 to the altered Proposal, the NT EPA's objective for terrestrial flora and fauna can be met.

## **2. Hydrological Processes**

Objective: Maintain the hydrological regimes of groundwater and surface water so that environmental values are protected.

The Proposal is located to the west and upstream of Buffalo Creek. The hydrology of this creek is considered to be relatively modified due to existing suburbs and infrastructure within the catchment. It is predicted that the increased area of impervious surfaces associated with the Proposal would reduce local infiltration and further increase runoff into the creek.

Assessment Report 88 acknowledged that increased surface runoff from the development would be managed using stormwater infrastructure (detention basins, pollutant traps, swales) in accordance with a Stormwater Management Plan. The objective of this Plan is to maintain the pre-development hydrology (peak flows) while managing the increased volume of runoff from the site.

The Proponent proposes to mitigate the predicted increase in flows due to impervious surfaces by using a 1.85 ha detention basin in the southern part of Muirhead North. In altering the boundary of the detention basin to address Recommendation 15 of Assessment Report 88, the Proponent reconsidered the alternatives to attenuate peak flows and ensure the depth of water does not exceed 1.2 m during a 20 year annual recurrence interval event. The Proponent updated the Stormwater Management Plan and included it with the notice of alteration.

This updated Plan predicts that the altered stormwater infrastructure would likely increase peak flows entering the Muirhead North detention basin by 8-12% when compared to the previous stormwater basin design included in the EIS. To accommodate this increase in peak flows, the Proponent has incorporated grass-lined channels to attenuate flows prior to discharging into Buffalo Creek near an existing stormwater outlet for Muirhead. It is also proposed that three of the sporting grounds within the 'Active Recreational Reserve' (in the north west of Muirhead North) are designed to delay flows discharging from 2CRU into Muirhead North.

The NT EPA is satisfied that the reconfiguration of the detention basin and management of stormwaters in the 'Active Recreational Reserve' and grass-lined channels has not changed the environmental significance of the Proposal in relation to hydrological processes.

## **CONCLUSION**

In considering the above, the NT EPA concludes that the alterations will not reduce the significance of the potential environmental impacts and risks arising from the Project. The environmental significance of the altered Proposal has not changed. The recommendations outlined in the Assessment Report 88 still apply to the Proposal as altered.

## DECISION

The Lee Point Master-planned Urban Development has been altered in such a manner that its environmental significance has not changed and, subject to clause 14A of the EAAP, the administrative procedures are at end with respect to the proposed action.



DR PAUL VOGEL  
CHAIRMAN

NORTHERN TERRITORY ENVIRONMENT PROTECTION AUTHORITY

29 JANUARY 2019

**Attachment A: Northern Territory Government Agencies consulted on the Notice of Alteration**

Department	Division
Department of Environment and Natural Resources	Flora and Fauna Water Resources Weeds Environment Bushfires NT Rangelands
Department of Infrastructure, Planning and Logistics	Lands Planning Infrastructure Transport
Department of Health	Environmental Health Medical Entomology
Power and Water Corporation	