

Statement of Reasons

DEPARTMENT OF INFRASTRUCTURE, PLANNING AND LOGISTICS – RAPID CREEK CATCHMENT FLOOD MITIGATION WORKS

PROJECT

The Notice of Intent (NOI) for the Rapid Creek Catchment Flood Mitigation Works (the Project) was referred from the Department of Infrastructure Planning and Logistics (DIPL) to the Northern Territory Environment Protection Authority (NT EPA) on 14 December 2016 for consideration under the *Environmental Assessment Act* (EA Act).

Further information was requested on 23 February 2017 to inform the NT EPA's decision. The Proponent responded to the further information request on 24 February 2017.

The Proponent, DIPL, proposes earthworks and infrastructure to provide flood mitigation measures to residents and property adjacent to Rapid Creek. The works would:

- slow overland stormwater flows within Rapid Creek catchment
- distribute a portion of the stormwater that overtops infrastructure and runs into Rapid Creek to accommodate peak flows commensurate with flood events (1 in 100 year events).

The proposed works include:

- construction of a detention basin to a maximum depth of 4m through excavation and construction of an earth embankment wall from treated excavation materials from which detained water will be directed circuitously back to Rapid Creek via three routes requiring works
- modification of an existing drain on the east side of Netball facilities within the Marrara Sporting Complex to redirect captured water into the detention basin
- extension of an existing culvert running parallel to Henry Wrigley Drive to redirect captured water into the detention basin
- construction of a new culvert 90m north of Abala Road to direct captured waters to the detention basin via the above mentioned drain.

The majority of the proposed works associated with the construction of the detention basin are to occur on Section 4294 located to the south west of the McMillans Road and Henry Wrigely Drive intersection. Construction of the proposed new and modification to existing drainage channels is to occur on Section 5936 Hundred of Bagot situated adjacent to Henry Wrigely Drive south of Abala Road. Access will be either from Henry Wrigely Drive or Abala Road via a drainage easement in Section 3091 Hundred of Bagot abutting the eastern boundary of the Netball facilities.

DIPL anticipate commencing works in April 2017 for completion by December 2017.

DIPL has undertaken an internal risk assessment of the Project and determined environmental risks can be managed at a low level through work practices and contractor requirements. However the Project has been referred to the NT EPA due to public interest. The Project has not been referred under the *Environmental Protection and Biodiversity Conservation Act 1999*.

CONSULTATION

The Notice of Intent (NOI) and further information have been reviewed as a notification under the EA Act in consultation with Northern Territory Government (NTG) advisory bodies and the responsible Minister, in accordance with clause 8(1) of the Environmental Assessment Administrative Procedures.

JUSTIFICATION

Review of the Notice of Intent and further information identified the following potential environmental impacts and risks associated with the proposed action:

- potential impacts relating to the generation of dust
- potential impacts from inappropriate erosion and sediment control
- potential to impact cultural heritage
- potential for exposing contamination at the site if the site was used as a dump for debris from Cyclone Tracy
- potential for distributing earth that may be contaminated by per and poly fluorinated alkyl substances (PFAS)
- potential to impact threatened species.

Air quality

Dust will be generated by the proposed works conducted during the Dry season. Impacts are likely to be negligible due to few sensitive receptors being directly adjacent to the proposed works. The Proponent has committed to implementing dust suppression measures when soil moisture is low through the use of water carts.

Water quality

Sedimentation of waterways adjacent to the proposed works is acknowledged by the Proponent as having potential to negatively impact aquatic communities downstream of the site. To minimise impacts on ecosystems, human health and amenity the works are scheduled to maximise the use of drier periods between April and December 2017. Timing of works coincident with the implementation of best practice erosion and sediment control (as detailed in an Erosion and Sediment Control Plan to be developed by the contractor prior to commencement of works and monitored by DIPL) will avoid or minimise potential environmental impacts.

Potential for contamination

Concerns were raised that the site may have been used to dump waste from Cyclone Tracy based on aerial photos of the proposed area of works showing that it had been cleared in the early-mid 1970's. In its response to concerns, the Proponent advised that the site was most probably cleared for use as a borrow pit for the construction of McMillans Road based on the findings detailed in the Project Development Report (NOI Appendix A) that:

- there is currently approximately 2 mm of topsoil across the site with rocky/sandy material below
- there is a dip in the area, indicating material has been removed
- the Project Development Report investigated the "presence of any soil contamination (possibly due to the dumping of materials following Cyclone Tracy)" and found no building rubble or anthropogenic material was encountered (apart from one abandoned asbestos pipe). Asbestos was not detected at the reporting limits in any of the soil samples tested

- the observed lack of vegetation (regrowth) over the area is likely to be attributed to the nature of the soil (i.e. very limited topsoil) and the fact that the area is frequently slashed.

Appropriate mitigation measures to be implemented in the event that contaminated material is identified during works are detailed in the Project Development Report.

Potential for soil contamination of the project area by per and poly fluorinated alkyl substances (PFAS) was raised due to the presence of a fire station within the catchment or flood waters from Rapid Creek entering the project area. In response to concerns, the Proponent stated that the likelihood of PFAS being present is extremely low because the fire station in question was constructed in 2007, several years after the use of firefighting foams containing PFAS by the NT Fire and Rescue Service ceased, and the project area being outside the flood zone and therefore highly unlikely to receive floodwaters from Rapid Creek. In addition, the works are in a catchment that is separate and isolated from the known contamination sources.

Furthermore, the Proponent intends to reuse excavated material in the construction of the earth embankment, and will not be moving any materials off site, removing any risk of mobilisation of PFAS (should it be present) by the project works. The proposed earth embankment is to be covered in grass further reducing the likelihood of any environmental impact resulting from mobilisation of PFAS.

Cultural heritage

Sites of cultural significance have not been identified within the works area by either the Aboriginal Areas Protection Authority or Heritage Branch of the Department of Tourism and Culture. Two Recorded Sacred Sites are known to exist close to the project area but are not expected to be impacted by the proposed works. Contractors will be required to cease works and contact Heritage Branch if items of potential cultural significance are unearthed.

Threatened species

Advice from the Department of Environment and Natural Resources Flora and Fauna Division confirmed the Proponent's assessment of risks to threatened species in the project area and endorses the proposed mitigation methods to address the high concentration of Cycads (*Cycas armstrongii*) along the western edge of the proposed work and any impact on the Black-footed Tree-rat (*Mesembriomys gouldii*). Translocation of cycads consistent with the *Management Program for Cycads in the Northern Territory of Australia 2009-2014* in combination with an undertaking to retain and improve the condition of the remaining woodland area to the west of the detention basin (including through weed management) adequately address the potential impact on threatened species.

The NT EPA is satisfied that potential impacts and risks associated with the proposed Rapid Creek Flood Mitigation Works are not significant and can be adequately managed through the implementation of measures proposed in the NOI.

In addition to consultation with the Rapid Creek Land Care Group, NT EPA has recommended that the Proponent consult with the Rapid Creek Water Advisory Committee.

ENVIRONMENTAL MANAGEMENT

The Proponent will require the Contractor to prepare and adhere to a Construction Environmental Management Plan (CEMP) that addresses the environmental protection practices, resources and sequence of activities required to comply with relevant environmental legislation, conditions of any applicable licence, approval and permit and all the requirements of the NOI. The CEMP

requirements as outlined in the DIPL *Standard Specifications for Environmental Management* (Dol 2014) are available for viewing on the DIPL website.

The CEMP will include all supplementary plans for environmental protection and operational control (including plans for erosion and sedimentation control, weed management, waste management and site establishment) specific to the Project.

The CEMP will be reviewed and audited by DIPL. The NT EPA considers that the CEMP will provide a satisfactory level of environmental management for this project.

DECISION

The proposed action, which was referred to the NT EPA by DIPL, has been examined by the NT EPA and preliminary investigations and inquiries conducted. The NT EPA has decided that the potential environmental impacts and risks of the proposed action are not so significant as to warrant environmental impact assessment by the NT EPA under provisions of the *Environmental Assessment Act* and can be managed by the CEMP for this project.

This decision is made in accordance with clause 8(2) of Environmental Assessment Administrative Procedures, and subject to clause 14A the administrative procedures are at an end with respect to the proposed action.



DR PAUL VOGEL

CHAIRMAN

NORTHERN TERRITORY ENVIRONMENT PROTECTION AUTHORITY

20 MARCH 2017