Peel Health Campus EPBC Referral - MNES Banksia Woodland TEC Assessment

The impact on the Banksia woodland TEC (endangered) has been assessed against the MNES Significant Impact Guidelines 1.1 for endangered ecological communities (Department of the Environment 2013).

1) Reduce the extent of an ecological community
Unlikely to occur.
The Proposed Action will have a direct impact through the clearing of 1.93 ha of the Banksia woodland TEC. This impact within the Project Area is part of a larger patch of Banksia woodland TEC, which currently covers approximately 8.01 ha within the Project Area with the remainder in the Avoidance Area (see Att. A, Figure 17). According to the 2018 South West Vegetation Complex Statistics Report (Government of Western Australia 2019), vegetation complexes that contain Banksia woodlands occupied approximately 184,463 ha, as of 2018, within the Perth Swan Coastal Plain. The Proposed Action within the Project Area would have a direct impact upon approximately 0.001% of the Banksia woodland community across the Swan Coastal Plain. There are extensive areas of Banksia woodland TEC surrounding the site and immediately to the east, and the mitigation actions associated with the Proposed Action would seek to consolidate and better manage the retained Banksia woodland TEC patch. Banksia Woodland TEC is common within a 10km radius (refer to Att. A, Figure 18), and will also remain within the Project Areas as an outcome of impact avoidance. Therefore the 1.93 ha reduction in extent is not material in terms of the broader known extent of Banksia woodland TEC and will not materially reduce the extent of the Banksia woodland TEC.
2) Fragment or increase fragmentation of an ecological community, for example by clearing vegetation for roads or transmission lines
Unlikely to occur.
The direct impact to 1.93 ha of Banksia woodland TEC within the Project Area is part of a larger patch of Banksia woodland TEC that extends across the east of the Project Area, which currently covers approximately 8.01 ha (see Att. A, Figure 17). The Proposed Action will not fragment this larger patch of Banksia woodland TEC to the east into multiple patches or cause additional fragmentation losses. Based on the Banksia woodland TEC conservation advice (DoEE 2016), a maximum 30m non-vegetated separation is applied when determining the extent of a single patch of the Banksia woodland TEC. The clearing impact to the Banksia woodlands TEC would involve the construction of a road and a building in the northern portion of the Project Area, however the resultant area of Banksia woodland TEC would remain part of a single Banksia woodland TEC patch, given the separation of these areas is less than 30 m. Given this and the inclusion of these areas into the Proposed Action monitoring and maintenance regime that ensure fencing and weed management is in place to prevent any further degradation of the patch to ensure ongoing ecological integrity, there will not be any fragmentation losses.
3) Adversely affect habitat critical to the survival of an ecological community
Unlikely to occur.
The impact to Banksia Woodland TEC would not adversely affect habitat critical to the survival of the Banksia woodland TEC, given impacts are minor in the context of the broader Project Area. The Proposed Action will result in the direct loss of 1.93 ha of Banksia woodland TEC, however this involves the edges of the patch in closest proximity to the existing Peel Health Campus facilities.

The remaining single patch of Banksia woodland TEC being retained is separated from the existing historic development and activities and is the critical habitat for the survival of the ecological community within the Project area. The Banksia woodland TEC conservation advice (DoEE 2016) recommends a buffer zone of typically 20m-50m when siting development adjacent to Banksia woodland TEC. This has been accommodated in the Proposed Action through the provision of a managed interface between the development and the Banksia woodland TEC involving a perimeter ring road (which provides boundary access control), and the provision of a managed area for weeds and bushfire fuel reduction, which will retain existing native overstory/canopy while providing an actively managed understory (incl. weed management). Overall, the avoidance outcome, the interface and ongoing management will ensure that habitat critical for the survival of the Banksia woodland TEC will not be adversely affected.
4) Modify or destroy abiotic (non-living) factors (such as water, nutrients, or soil) necessary for an ecological community's survival, including reduction of groundwater levels, or substantial alteration of surface water drainage patterns
Unlikely to occur.
The proposed clearing impact to Banksia woodland TEC is minor in the context of the broader Project Area and larger Banksia woodland patch. While the Proposed Action will result in the direct and total loss of 1.93 ha of Banksia TEC, there will not be any adverse modification to the abiotic support factors underpinning the broader 6.08 ha patch within the Retention Area. The Proposed Action and the interface road will manage stormwater from the Disturbance Footprint and avoid stormwater impacts to the retained Banksia Woodland TEC. Construction activities will be managed in accordance with a Construction Environmental Management Plan (CEMP) prepared and implemented by the proponent to avoid any impact to abiotic support factors within the Retention Area. Construction will not require any dewatering or ongoing use of groundwater to the extent that groundwater levels would be influenced.
5) Cause a substantial change in the species composition of an occurrence of an ecological community, including causing a decline or loss of functionally important species, for example through regular burning or flora or fauna harvesting
Unlikely to occur.
The Proposed Action will result in clearing impact to Banksia Woodland TEC within the Project Area, with the total loss of 1.93 ha of the total 8.01 ha Banksia woodland TEC patch within the site. While the cleared area will be subject to a change in species composition, the Retention Area will ensure the long-term retention of Banksia woodland TEC within the Project area and the associated species diversity. The proposal development layout interface will avoid any additional impact to the retained Banksia woodland TEC which will avoid any change of species composition. Additionally, the Proposed Action monitoring and maintenance regime will ensure that fencing and ongoing weed management is in place to prevent any further degradation of the overall Banksia woodland TEC ecological community within the Project Area to ensure ongoing ecological integrity.
6) Cause a substantial reduction in the quality or integrity of an occurrence of an ecological community
Unlikely to occur.
The Proposed Action will result in clearing impact to Banksia Woodland TEC within the Project Area, with the total loss of 1.93 ha of the total 8.01 ha Banksia woodland TEC patch within the site. While there will be reduction on the extent of the occurrence, there would not be any further reduction in the quality or integrity of the occurrence.

The planned retention and the interface between the proposed development and the adjacent Banksia woodland TEC and the implementation of an ongoing monitoring and maintenance program will ensure the quality and integrity of the Banksia woodland TEC.
7) Interfere with the recovery of an ecological community
Unlikely to occur.
The Proposed Action will result in clearing impact to Banksia Woodland TEC within the Project Area, with the total loss of 1.93 ha of the total 8.01 ha Banksia woodland TEC patch within the site. The proposed retention outcome and the development interface will ensure the long-term retention and management of a sustainable patch of Banksia woodland TEC, which will contribute to the recovery of the Banksia woodland TEC and not interfere with the recovery of the ecological community.