



Hi Shona (and Rod),

Targeted Flora surveys were conducted within 2 Level Crossings within ESA sites 52 and 90 along Line 4 (Central) on the 21/02/2021. Surveys were conducted by myself with Rod Gibbs (Arc Infrastructure) present.

Survey Results and Proposed Level Crossing works information presented below:

ESA 90 – Level Crossing 47.665km (Wyening East Road)

- Photo 1 ESA 90 presents NE quadrant of the level crossing area that requires line of sight clearing activities to be conducted (photo taken at north end of survey area looking south towards level crossing). Rod is proposing that a mulcher be used to lower vegetation on site at this location. The proposed mulching area occurs in an area that was previously cleared and is approximately 2-2.5 metres from the edge of the railway formation. This previously cleared area formed the basis of the survey area.
- The Threatened flora recorded in this ESA site is *Acacia chapmanii* subsp. *australis* (W.A. Listed – Threatened – Endangered) (EPBC Listed – Endangered). Photos 2 ESA 90 and 6 ESA 90 present examples of *Acacia chapmanii* subsp. *australis* (T) plants found on site.
- A survey of the proposed mulching impact area was conducted, with 7 plants of *Acacia chapmanii* subsp. *australis* (T) recorded occurring in this area. Due to the potential for impacts to occur during mulching activities, Threatened plants recorded immediately adjacent to the proposed mulching area were also recorded with 15 plants of *Acacia chapmanii* subsp. *australis* (T) recorded. All plants were flagged and will be avoided where possible. Photos 7 ESA 90, 8 ESA 90, 9 ESA 90 & 10 ESA 90 present example of demarcation of Threatened Flora within and adjacent to the proposed mulching area.
- There are some taller shrubs growing out from the edge of the previous cleared area adjacent to the railway formation that may require hand pruning to remove. Rod has propped that he will remove this material and place in cleared areas outside of the ESA site (if this is necessary as part of the works).
- Shona - please find attached conservation significant flora location data spreadsheet for *Acacia chapmanii* subsp. *australis* (T) plants that will or are likely to be impacted by the line of site clearing activities proposed for this site. I would recommend that the Authority to Take Application to be submitted to DBCA include all 22 plants as potential to be impacted. Rod has said that they will attempt to minimise the impacts to the Threatened Flora during the works where feasible.
- Following the completion of the works, demarcation (pink flagging) is to be removed from site and the Threatened Flora not impacted by the activities (this is a standard request that we get from DBCA).

ESA 52 – Level Crossing 109.188km (Kayners Crossing – Summers East Road)

- Photo 1 ESA 52 presents NE quadrant of the level crossing area and Photo 2 ESA 52 presents NW quadrant of the level crossing area that requires line of sight activities to be conducted (photos taken from level crossing looking north). Rod is proposing that a mulcher be used to lower vegetation on site. The proposed mulching area is approximately 2-2.5 metres from the edge of the railway formation. This proposed mulching area formed the basis of the survey area.
- The Threatened flora recorded in this ESA site are *Acacia vassalii* (W.A. Listed – Threatened – Critically Endangered) (EPBC Listed - Endangered), *Gastrolobium hamulosum* (W.A. Listed – Threatened – Critically Endangered) (EPBC Listed – Endangered) and *Grevillea bracteosa* subsp. *bracteosa* (W.A. Listed – Threatened – Endangered).
- No Threatened Flora were recorded within the proposed mulching impact area in the NE quadrant.
- The Threatened flora recorded within the proposed mulching area of the NW quadrant was *Acacia vassalii* (W.A. Listed – Threatened – Critically Endangered) (EPBC Listed - Endangered). Photo 4 presents example of *Acacia vassalii* (T) plants found on site.
- A survey of the proposed impact mulching area was conducted, with 14 plants of *Acacia vassalii* (T) recorded occurring in this area. All plants were flagged and will be avoided where possible. Photos 5, 6, 7 & 8 present example of demarcation of Threatened Flora within the proposed mulching area.
- Shona - please find attached conservation significant flora location data spreadsheet for *Acacia vassalii* (T) plants that will or are likely to be impacted by the line of site clearing activities proposed for this site. I would recommend that the Authority to Take Application to be submitted to DBCA include all 14 plants as potential to be impacted. Rod has said that they will attempt to minimise the impacts to the Threatened Flora during the works where feasible.
- Following the completion of the works, demarcation (pink flagging) is to be removed from site and the Threatened Flora not impacted by the activities (this is a standard request that we get from DBCA).
- Also please note that the Threatened Flora markers at the south end of this ESA site are laying on the ground and should be erected to identify the ESA site as soon as possible (refer Photo 2 ESA 52).

Any further questions, please let me know.

Regards

Kim



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