

Office of the Independent Planning Commission NSW
Suite 15.02 Level 15
135 King Street
Sydney NSW 2000

29 October 2025

Dear Sir/Madam,

Liverpool Range Quarry Project (SSD-68063715) – Proponent Submission to IPC

We refer to the above project and provide the following submission for the IPC's consideration.

1. Benefits of the Project

The Liverpool Range Wind Farm (LRWF) (SSD 6696 Mod-1) is an approved State Significant Development (SSD) that was approved on 23 October 2024. The LRWF consent contemplated sourcing quarry materials from both the proposed Liverpool Range Quarry, as well as existing commercial quarries in the region. This is important from a haul traffic impact perspective, as the LRWF has assessed the traffic impacts of sourcing quarry materials from multiple locations. While it is understood that many members of the community are opposed to the LRWF, it is an approved SSD project, and the proposed Liverpool Range Quarry (if approved) has the potential to significantly reduce the impacts of truck traffic on the surrounding local and regional road network. In summary, the quarry:

- would be a pick-up point for materials by the LRWF haul fleet within the LRWF Project Area – no additional haul truck fleet is required;
- requires no change to the approved haul route of LRWF in order to access the quarry;
- avoids the need to haul quarry materials from commercial quarries located a significant distance from the LRWF project; and
- addresses the challenge of sourcing quarry materials in a region with limited supply opportunities – particularly given forecast demand from other renewables projects in the Central West Orana (CWO) REZ.

The quarry would also result in a significant reduction:

- of approximately 17 million km travelled by the LRWF haul fleet on local and regional road network (assuming 2 Mt demand of quarry materials);
- in potential for interactions between the LRWF haul fleet and other road users – resulting in a major improvement in road safety;
- in public road maintenance requirements by the LRWF; and
- in greenhouse gas emissions of the LRWF project.

2. Response to Public Submissions

This part of the submission provides a response to several issues raised and comments made in public submissions and by members of the community during the IPC's Individual Community Meeting of 22 October 2025. A response to these issues is provided below.

Efficacy of 5 km Radius for Direct Community Consultation

As indicated in Table 2.4 of the Social Impact Assessment (SIA) (Umwelt 2024a) face-to-face consultation was undertaken with properties with a shared boundary with land on which the Project is located, as well as any non-involved residences within 5 km of the quarry. This distance was chosen based on experience with assessment and operation of similar scale quarries, where residences beyond 3 km are highly unlikely to be affected by emissions (*e.g.* noise/dust/blasting) from operations. The choice of 5 km was conservative and was confirmed as reasonable, given the results of the noise/dust/blasting assessments. In summary, these assessments concluded that at the nearest non-involved residence (Lot 90 DP750749 – 3.1 km from the site):

- Modelled blast vibration was very significantly below ANZECC (1990) criteria limits (4 % of the criteria limit) while overpressure was also below criteria limits at this residence (refer Section 7.1, Blast Impact Assessment (BIA), Envirostrata, 2024).
- Model results for each of the key particulate matter classifications were very significantly below the EPA criteria limits (mostly 1 – 4 % of the criteria limit) at up to half the distance from the quarry site to this residence (refer Section 6, Air Quality Impact Assessment, Airen, 2024)
- Modelled worst-case noise levels at commencement of quarrying operations (assuming no mitigation) show that the EPA criteria limit extends just beyond this residence, which is approximately 1.5 km short of the next nearest non-involved residences to the southwest (refer Figure 3, Noise Impact Assessment, Sonus 2024).

As indicated in Table 2.4 of the SIA (Umwelt, 2024a), consultation with the broader community was undertaken via a number of methods, including direct letterbox drop of the Community Information Sheet to all residences along the proposed haul route of Vinegaroy Road (between Golden Highway and Rotherwood Road, Rotherwood Road and Yarrawonga Road).

School Bus Route

Section 5.4 of the Traffic Impact Assessment (Constructive Solutions, 2024) addresses consideration of the school bus that terminates at the Rotherwood Road /Yarrawonga Road intersection, stating that:

“Under the LRWF Traffic Management Plan (TMP), special consideration will be provided to public transport and school bus routes impacted by the wind farm construction traffic.”

Given that haulage of quarry materials from the site to the LRWF will be managed by the LRWF proponent/contractor, this aspect of traffic management has been considered and will be managed accordingly.

Blasting

A blast exclusion zone on neighbouring Lot 90 DP750749 is not proposed nor is it required for the project, as flyrock from blasting can be managed to ensure that it remains within the proposed quarry site on Lot 89 DP750749. Notwithstanding, prior to finalisation of the EIS, in good faith ARDG attempted to enter into a neighbour agreement with the landowner (John Richard) that included establishment of a small blast exclusion zone which while not required, would add an additional factor of safety to the blasting method that was originally envisaged. During consultation and at the direction of the landowner, discussions and site visits were held between ARDG and Geoff Richard (the occupier of Lot 90 DP750749) and a draft agreement was provided to John and Geoff Richard in May 2024 that reflected the outcomes of discussions. This included:

- delineation of a blast exclusion zone that would be applicable for a short period of time (30 mins.) during each blast (every 4 – 8 weeks) to a very small portion of Lot 90 DP750749 (< 3 %) in the northeastern corner below the crest of the hill; and
- in return, ARDG would drill up to two bores on Lot 90 DP750749 to assist the landowner with extending their irrigation infrastructure.

However, following circulation of the draft agreement, the landowner advised that he was unable to execute any agreement due to ongoing legal matters directly related to ownership of the property.

In order to maintain the additional factor of safety, ARDG worked with its blast contractor / consultant to revise the blasting strategy, prior to submission of the EIS. The revised blasting strategy involves the use, as required, of higher cost, lower charge-mass blasting methods to ensure that flyrock risk is further mitigated and managed entirely within Lot 89 DP750749. It includes:

- Flexibility to adopt a blast design that incorporates more conservative values (compared to those detailed in Table 1 of the BIA) for decrease in blast hole spacing and diameter; increased stemming depth and reduced powder factor, as informed by the risk assessment for each blast.
- Commencement of blasting to occur a minimum of 150 m from the property boundary with Lot 90 DP750749 along the eastern edge of the extraction pit, to establish an initial void (drop cut). Pit development / blasting will then proceed in a northerly and southerly direction along the eastern boundary of the extraction pit, with shot rock from each blast directed into the expanding north-south oriented void from north, south and east-facing quarry faces (*i.e.* away from the direction of Lot 90 DP750749). No blasting will be undertaken that would direct shot rock towards Lot 90 DP750749.
- Construction of a 2-3 m high earth mound adjacent to the property boundary with Lot 90 DP750749, near the southwest corner of the extraction pit to prevent direct line of sight to the extraction pit from the property boundary.

As pit development progresses to the north (and deeper into the second bench), the risk associated with flyrock is further reduced. In accordance with standard operating procedures, a site-specific Blast Management Plan will be prepared by the proponent and drill and blast contractor that will address all occupational health and safety requirements, including procedures for neighbour notification of blasting. Based on the location of the pit and proposed mitigation strategies outlined above, the flyrock impact can be adequately managed and potential risks are considered to be negligible.

Request for Warrumbungle Shire Council Oversight of Project

The Project is wholly located in Upper Hunter Shire Council LGA, not Warrumbungle Shire LGA. With respect to haulage from the quarry to the LRWF, a portion of the haul route on Rotherwood Road between the Talbragar River and Vinegaroy Road is located in Warrumbungle Shire Council LGA, as is a portion of Vinegaroy Road between Rotherwood Road and the Golden Highway and the remainder of Vinegaroy Road west of Rotherwood Road.

The transport of all quarry products from the Quarry Project to the LRWF would be undertaken and managed by the LRWF (proponent/contractor), solely using heavy vehicles already approved under the LRWF Development Consent. The LRWF Development Consent is based on data presented in the *LRWF Supplementary TIA* (which assumes an on-site quarry in the location proposed), and the Quarry Project TIA has used exactly the same traffic generation data, given that the only HV hauling quarry products from the Quarry Project will be those of the LRWF.

Tilt Renewables (the proponent of the LRWF Project) via the LRWF Development Consent SSD 6696 Mod -1 (LRWF Consent), is responsible for the upgrade and maintenance of the haulage route in consultation with relevant road authorities, including both Councils, as necessary to accommodate its construction vehicles.

In accordance with Condition 28 of the LRWF Consent, the proponent of the LRWF must upgrade roads to the 'Austroads Guidelines, Australian Standards (as amended by TfNSW supplements) and to the satisfaction of the relevant roads authority/manager. As Warrumbungle Shire Council is the roads authority for the roads within its LGA that comprise part of the approved haulage route for the LRWF, it will determine the standard of road upgrades to be implemented by Tilt Renewables on these roads, as required under the LRWF Consent.

There is no nexus for any oversight of the Project nor need to report on any aspects of the Project to Warrumbungle Shire Council given:

- the project is not located in the Warrumbungle Shire Council LGA;
- all road upgrades and ongoing maintenance for the LRWF are the responsibility of the LRWF project proponent and require the approval of Warrumbungle Shire Council prior to construction (for roads in its LGA);
- sourcing of materials from the Liverpool Range Quarry would not result in any increase on Warrumbungle Shire Council management and services; and
- statutory reporting requirements of the project will be to the relevant State government agencies.

We confirm that a VPA has been agreed with Upper Hunter Shire Council.

Assumption of Additional 2Mt of Material on Rotherwood Road

References to an "additional 2 Mt tonnes of material on Rotherwood Road" are incorrect. The Liverpool Range Quarry would provide an alternate source of quarry materials for the LRWF Project that would otherwise be sourced from existing commercial quarries in the region. Importantly, it will not increase the demand for quarry materials required to construct the LRWF.

It should be noted that Rotherwood Road is an approved haul route of the LRWF, irrespective of the Liverpool Range Quarry. As indicated previously, the LRWF has assessed the traffic impacts of sourcing quarry materials from multiple locations, including the Liverpool Range Quarry site, based on the material demands of the LRWF Project.

John and Carol Richard – Oral and written submissions

A number of specific issues raised by this submitter (Richard) are addressed below.

- ***Quarry disturbance footprint 20 m from common property boundary***

Part 11(i)(6)(d) of the Upper Hunter Development Control Plan 2023 stipulates a 10 m buffer to adjoining properties for extractive industries. The Project has adopted a 20 m setback distance (double the requirement) in consultation with the landowner of Lot 89 DP750749 (on which the quarry is located) to enable stock to graze between the boundary fence and quarry disturbance boundary (the latter of which will be fenced to exclude stock) as well as for vehicle access to enable the maintenance of the boundary fence as required. It is noted that only 115 m of the perimeter of Lot 90 DP 750749 (total perimeter approximately 12.8 km) is adjacent to the 20 m buffer around the quarry disturbance footprint.

- ***Water Management***

Contrary to information provided by Richard, as indicated in Figure 3.1 of the Surface Water Impact Assessment (SWIA) (Engeny, 2024), all surface water from the Project will be directed via a site perimeter bund towards the sediment basin located below the Borrow Pit. No water will shed off the Project disturbance footprint onto the adjacent Lot 90 DP750749 property.

With respect to water supply for the Project, arrangements with the landholder for supply of groundwater from a licenced bore on the property under the landholders' Water Access Licence (WAL) are detailed in Section 5.1.3 of the SWIA. Public disclosure of water use for the project is not required, as its usage is consistent with the landholder's existing WAL and any record keeping requirements under that WAL.

With respect to harvestable rights, the simplistic presentation by Richard of volume calculations erroneously assumes that final extraction pit void space equals water storage capacity. It ignores critical factors such as the fractured nature of the existing rock mass, its associated high hydraulic conductivity, absence of groundwater (all confirmed by drilling), as well as evaporation and topography. Therefore, it is highly unlikely that the pit void would retain any significant volume of water given these factors.

Notwithstanding, in the event that some water is retained in the rehabilitated main extraction pit, the responsibility for any licencing of water storage after cessation of quarry operations would be with the landholder (as it is for all water storages on any property), to ensure that the harvestable rights applicable to all dams on the property are compliant.

- ***Biophysical Strategic Agricultural Land / draft State Significant Agricultural Land***

Richard has provided significant commentary regarding the agricultural significance of the land on which the quarry is located. However, the maps provided with respect to Biophysical Strategic Agricultural Land and draft State Significant Agricultural Land do not support the claims that the quarry would significantly impact land with high agricultural significance.

Figure 1 shows the quarry disturbance footprint with respect to the Biophysical Strategic Agricultural Land map provided by Richard. However, as illustrated, the quarry disturbance footprint is not located on land mapped as Biophysical Strategic Agricultural Land (green shading on Figure 1).

Figure 2 shows the quarry disturbance footprint with respect to the draft State Significant Agricultural Land map provided by Richard. Note, this map incorrectly identifies the location of the Liverpool Range Quarry site. The site marked by Richard, is in fact on Lot 90 (*i.e.* Richard's land). It also shows that apart from the quarry access road, the main Liverpool Range Quarry site is not located on land mapped as draft State Significant Agricultural Land (blue shading on Figure 2).

As indicated in Section 6.9.1 of the Environmental Impact Assessment (Umwelt, 2024b), regional scale mapping categorises the land within the quarry disturbance footprint as Class 3 (high capability land) and Class 4 (moderate capability) agricultural land, based on broad-scale assessment. Site specific investigations, however, indicate that at best, in the more highly weathered areas of the site (Borrow Pit), the site is more consistent with Class 6 (very severe limitations) agricultural land. The permanent removal of areas for potential production as a result of the extraction areas and access road was therefore considered unlikely to have a significant impact on the productive capacity of the land.

- **Site selection**

As indicated during the site meeting of 21 October 2025 with the IPC, the hill located to the east of the proposed quarry site was investigated (amongst many other sites), however was discounted due to the greater level of vegetation/habitat clearing that would be required to establish a quarry footprint at this location. Page 18 of Richard's submission identifies this site as an 'alternate quarry site'. However, contrary to Richard's concerns, as illustrated in Figure 2, this land is mapped as draft State Significant Agricultural Land.

We also point out that the photo provided on page 19 of Richard's submission is not of the suggested 'alternate quarry site', but rather a hill on the property 'Dalkeith' known as 'Bald Hill', which is located 6.5 km southeast of the Liverpool Range Quarry (refer Figure 3).

Should you have any questions regarding this information, please do not hesitate to contact the undersigned.

Yours sincerely,



Dr Justin Meleo
Director – Planning and Development

References

Airen (2024). *Liverpool Range Quarry – Air Quality Impact Assessment*

ANZECC (1990). *Technical Basis for Guidelines to Minimise Annoyance due to Blasting Overpressure and Ground Vibration*

Constructive Solutions (2024). *Liverpool Range Quarry – Traffic Impact Assessment*

Engeny, (2024). *Liverpool Range Quarry – Surface Water Impact Assessment*

Envirostrata (2024). *Liverpool Range Quarry – Blast Impact Assessment*

Sonus (2024). *Liverpool Range Quarry – Noise Impact Assessment*

Umwelt (2024a). *Liverpool Range Quarry – Social Impact Assessment*

Umwelt (2024b). *Liverpool Range Quarry – Environmental Impact Assessment*

Figures

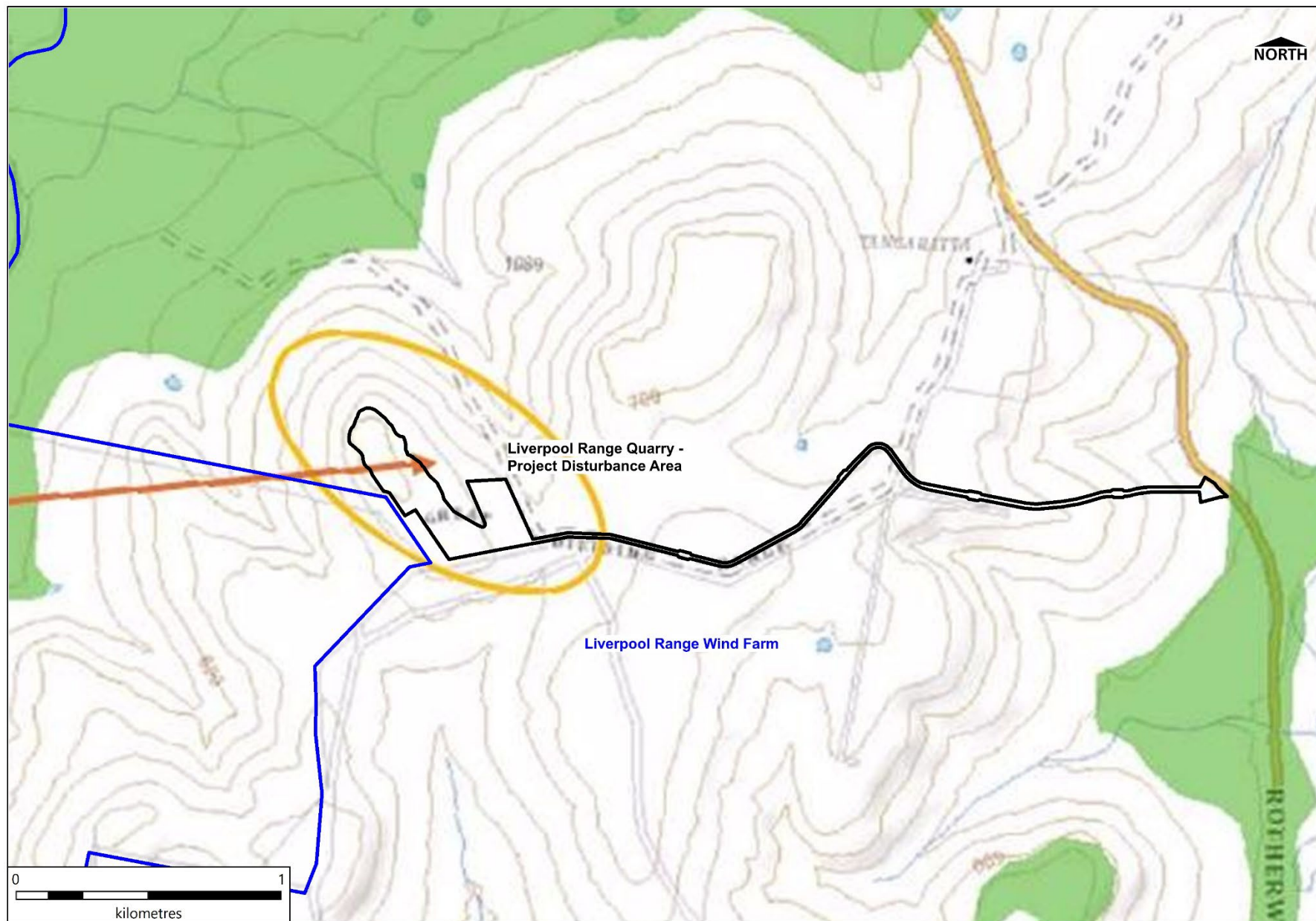


Figure 1 – Quarry disturbance footprint with respect to the Biophysical Strategic Agricultural Land (shaded green)

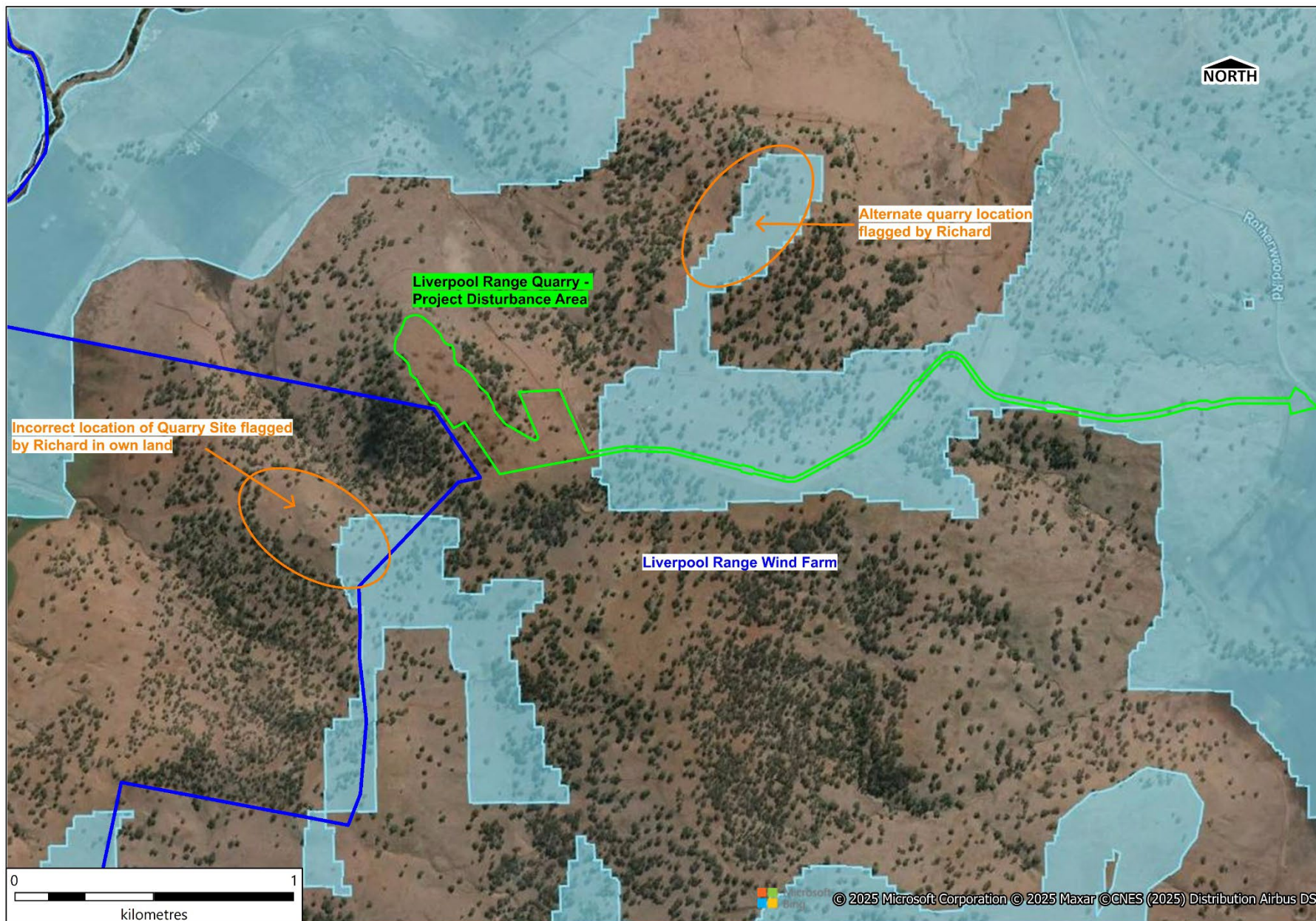


Figure 2 – Quarry disturbance footprint with respect to the draft State Significant Agricultural Land (shaded blue)

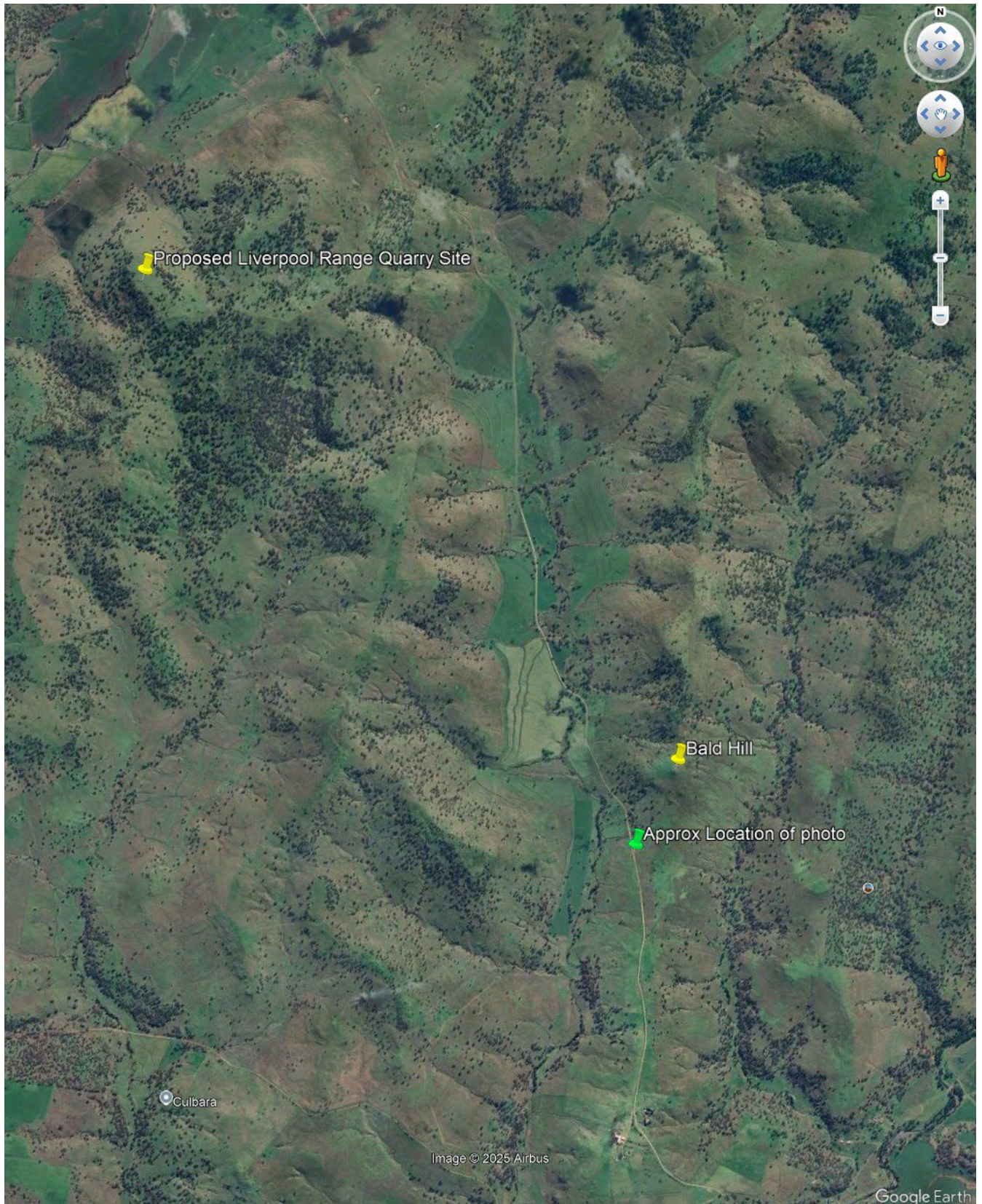


Figure 3 – Quarry disturbance footprint with respect to 'Bald Hill'