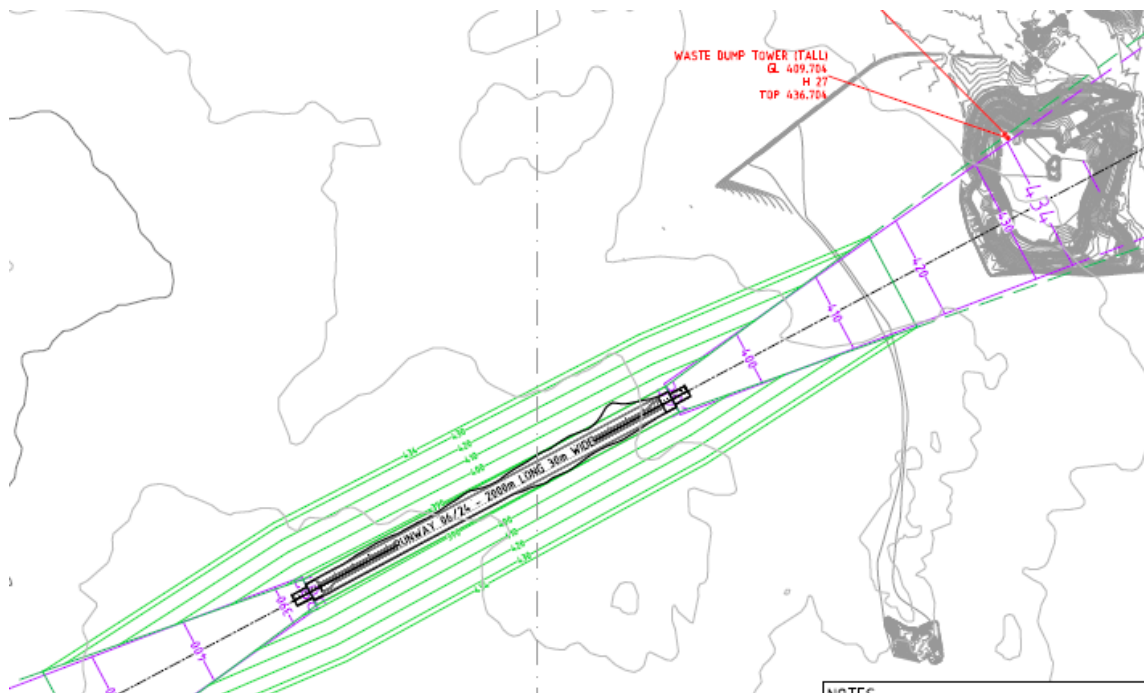


## MEMORANDUM

**To:** Briony Sinclair / Paul Brennan  
**From:** Rob Mills  
**cc:** Nicholas Jones /Stephen King  
**Date:** Wednesday, 12 April 2017  
**Subject:** Proposed CDO Aerodrome Mallee Fowl Survey

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Saracen is currently in the process of conducting final investigations for the construction of an Aerodrome facility at Carosue Dam, approximately 2-3.5km north west of the Carosue Dam village.



Mallee Fowl (listed as Vulnerable under state and federal legislation) are known to exist in the general region, therefore Saracen must ensure that impacts to protected flora and fauna are minimised as far as reasonably practically. Saracen contracted Paul Armstrong and Associates in September 2016 to conduct a Vegetation and Flora survey of the proposed airstrip clearing area, which included a non-targeted search for Mallee Fowl in the same areas inspected for flora values. The September survey did not recover any evidence of Mallee Fowl, or their mounds.

On the 15<sup>th</sup> March 2017, Saracen performed a targeted MalleeFowl survey of the L28/54 Lease, along with a small portion of M28/241. The survey consisted of 16 survey team members walking in

straight lines from the south western boundary of the survey area, to the north east. Survey team members included the following personnel:

| ID | Name            | Company | Department       |
|----|-----------------|---------|------------------|
| 1  | Mark Blum       | SGM     | Dewatering       |
| 2  | Cullen McGrail  | SGM     | Dewatering       |
| 3  | Nathan Colli    | SGM     | Engineering      |
| 4  | Alex Pit        | SGM     | Geologist        |
| 5  | Dave Lyon       | SGM     | Geologist        |
| 6  | Des Koh         | SGM     | Engineering      |
| 7  | Alston D'Lima   | SGM     | Engineering      |
| 8  | Stijn Kupperts  | SGM     | OHS              |
| 9  | Chad Prince     | SGM     | OHS              |
| 10 | Luke Dhu        | SGM     | Exploration      |
| 11 | Jena Bloomfield | SGM     | Processing       |
| 12 | Zoe Cowan       | ESS     | Active Lifestyle |
| 13 | Cleo Leunig     | SGM     | Metallurgist     |
| 14 | Morgan Calver   | SGM     | Purchasing       |
| 15 | Mani Clark      | SGM     | Exploration      |
| 16 | Rob Mills       | SGM     | Environmental    |

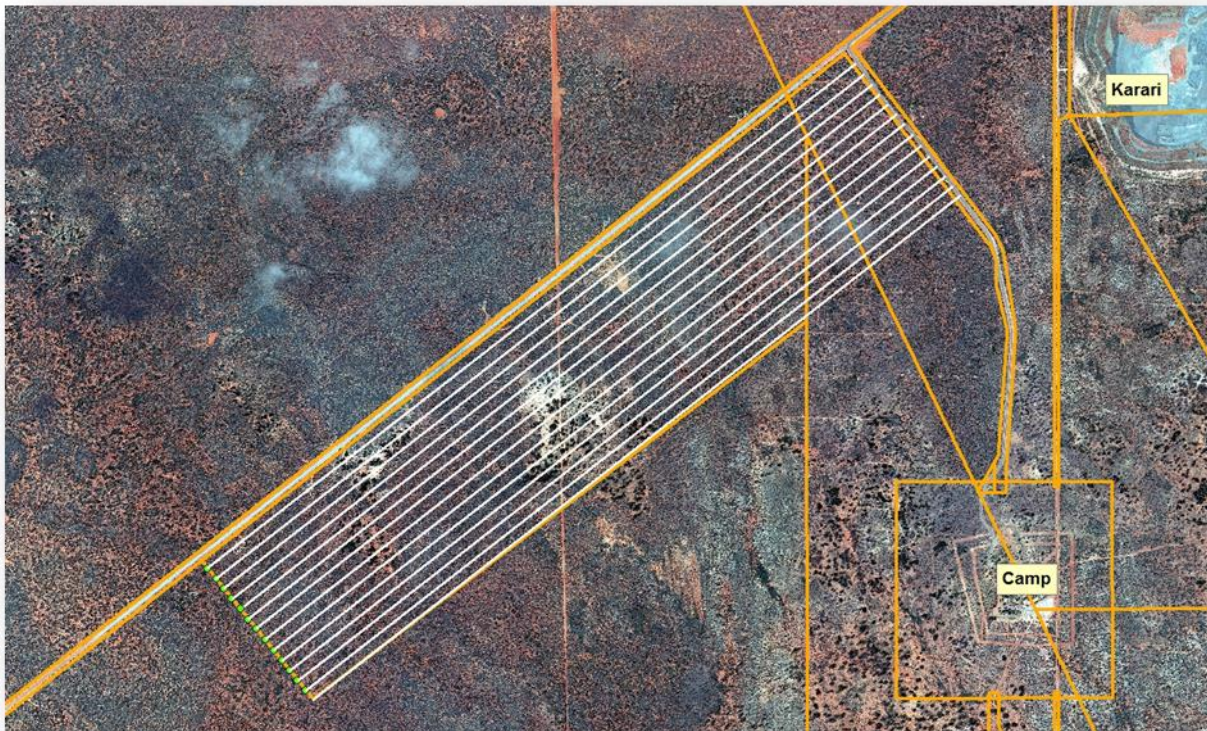
The survey project commenced at 5:00am at the Carosue Dam administration building with a safety and awareness brief. The presentation covered the objectives of the survey, identification tools for both Mallee Fowl and their mounds, survey logistics and safety requirements. Survey personnel then travelled out to the south eastern boundary and formed a line, with spacings of 50m between each person. Each person was given a map, GPS/compass, radio and an individual line to follow.



***Figures 1-4- Survey team members.***

15 lines were walked from south west to north east, the survey ended on the Carosue Dam camp access road by 8.30am.





***Figure 5- Survey area and individual search lines for personnel.***

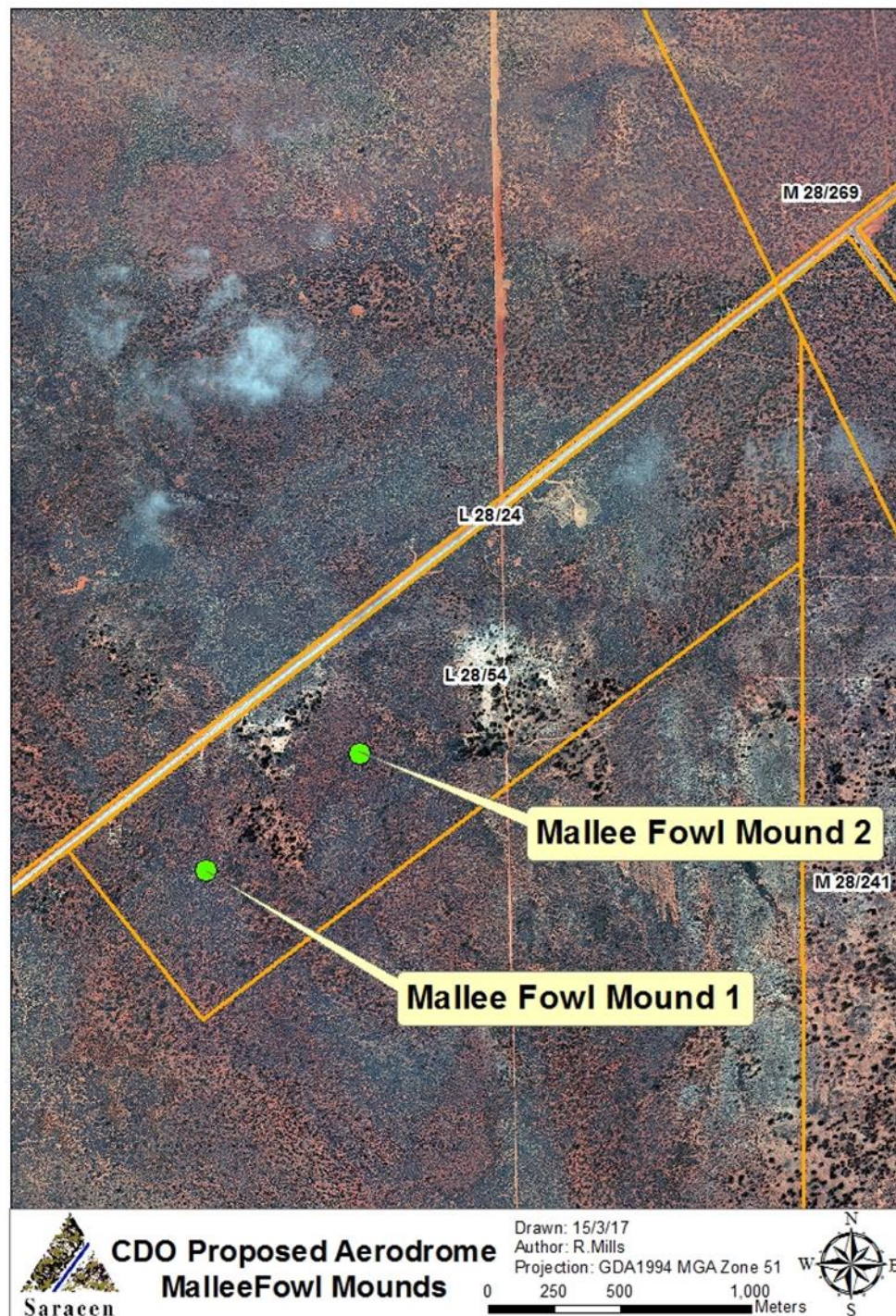
A total of two Mallee Fowl mounds were located during the survey. No Mallee Fowl were located at any time. The mounds were open topped and appeared to not be bearing any eggs, with evidence of the chicks having already left the nests. The locations of the two mounds were as follows (GDA1994 MGA Zone 51):

**Mound 1- 433691 E 6661031 N**

**Mound 2- 434276 E 6661477N**

The location of the mounds in relation to site tenements is shown below.





**Figure 6- Location of mounds located during survey.**

Photographs of the mounds are provided below:





***Figures 7 & 8- Mound 1 located during survey.***



***Figures 9 & 10- Mound 2 located during survey.***