

PRIORITY FLORA IMPACT ASSESSMENT

1. Introduction

The Mt Stirling Project is a proposed greenfields open cut gold mining operation located approximately 40 km north-northwest of Leonora, Western Australia, within the Shire of Leonora (Figure 1).

The following tenements are associated with the project: M37/1305, M37/1306, M37/1311, M37/1312, M37/1313, M37/1354 (pending), L37/294 and L37/295. The tenements are held by GoldArc Resources Limited. BML Ventures Pty Ltd (BMLV) has been appointed mine operator, overseeing and managing all aspects of the operations.

The proposed mining activities will involve construction of a haul road (west of Darlot Road), two open pits with abandonment bunds, two waste rock landforms, a ROM pad, topsoil storage areas, internal access roads and a camp.

The proposed clearing comprises 113 ha within a broader 221.31 ha Permit Area.

2. Field Surveys

A reconnaissance flora and vegetation survey and basic terrestrial vertebrate fauna survey of a subset of the project area was undertaken on the 8th of November 2025 (Figure 2).

Two Priority flora taxa, *Acacia* sp. Marshall Pool (P3) and *Grevillea inconspicua* (P4), were found at various locations within the project area.

A supplementary reconnaissance flora and vegetation survey and basic terrestrial vertebrate fauna survey of the remaining project area was undertaken on the 12th and 13th of May 2026 (Figure 2). This included a targeted flora survey for *Acacia* sp. Marshall Pool (P3) and *Grevillea inconspicua* (P4) across the entire project area.

The targeted survey identified 40 plants of *Acacia* sp. Marshall Pool (P3) and 1,441 plants of *Grevillea inconspicua* (P4) within the survey area (Figure 3).

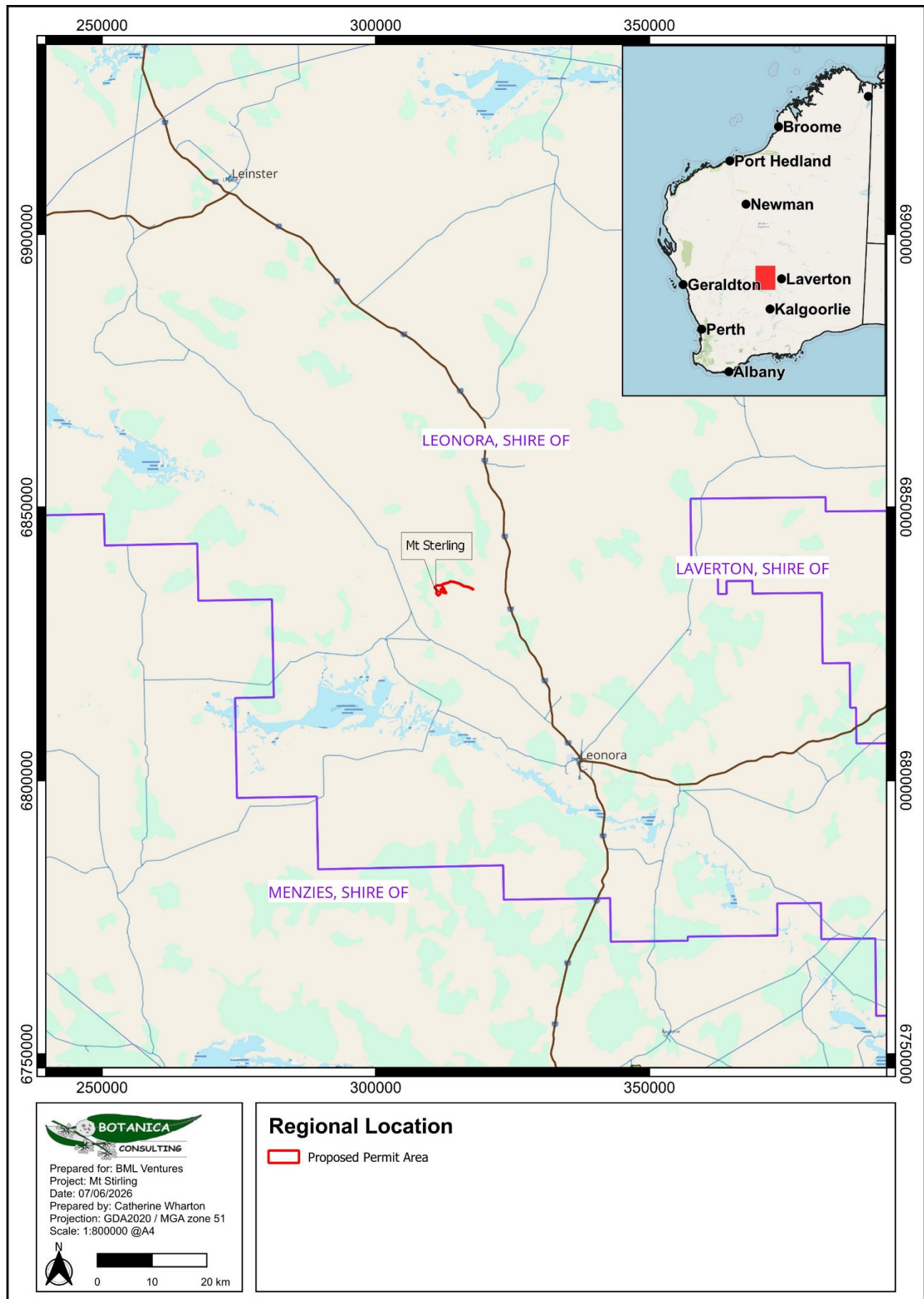


Figure 1: Regional location

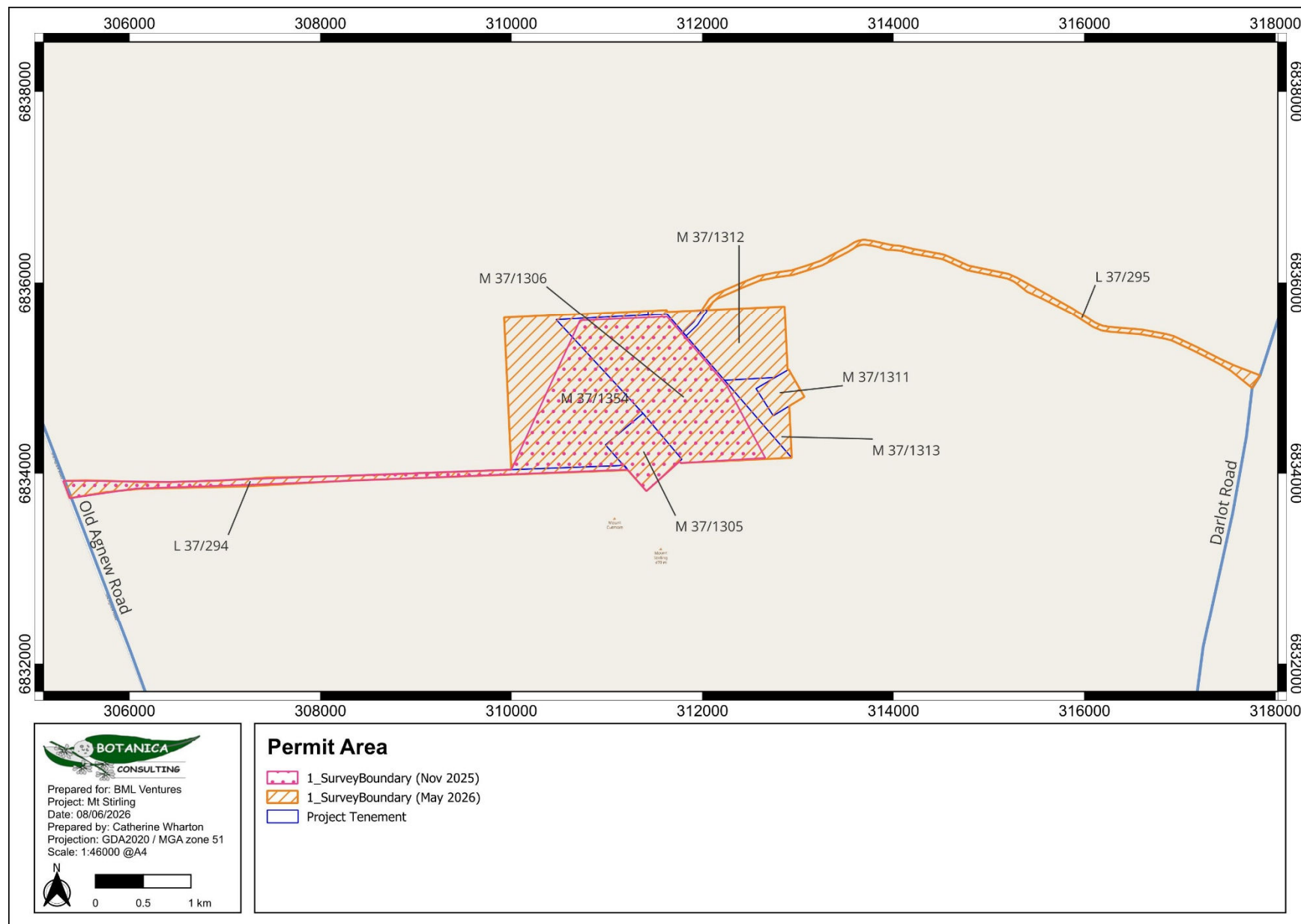


Figure 2: Survey areas

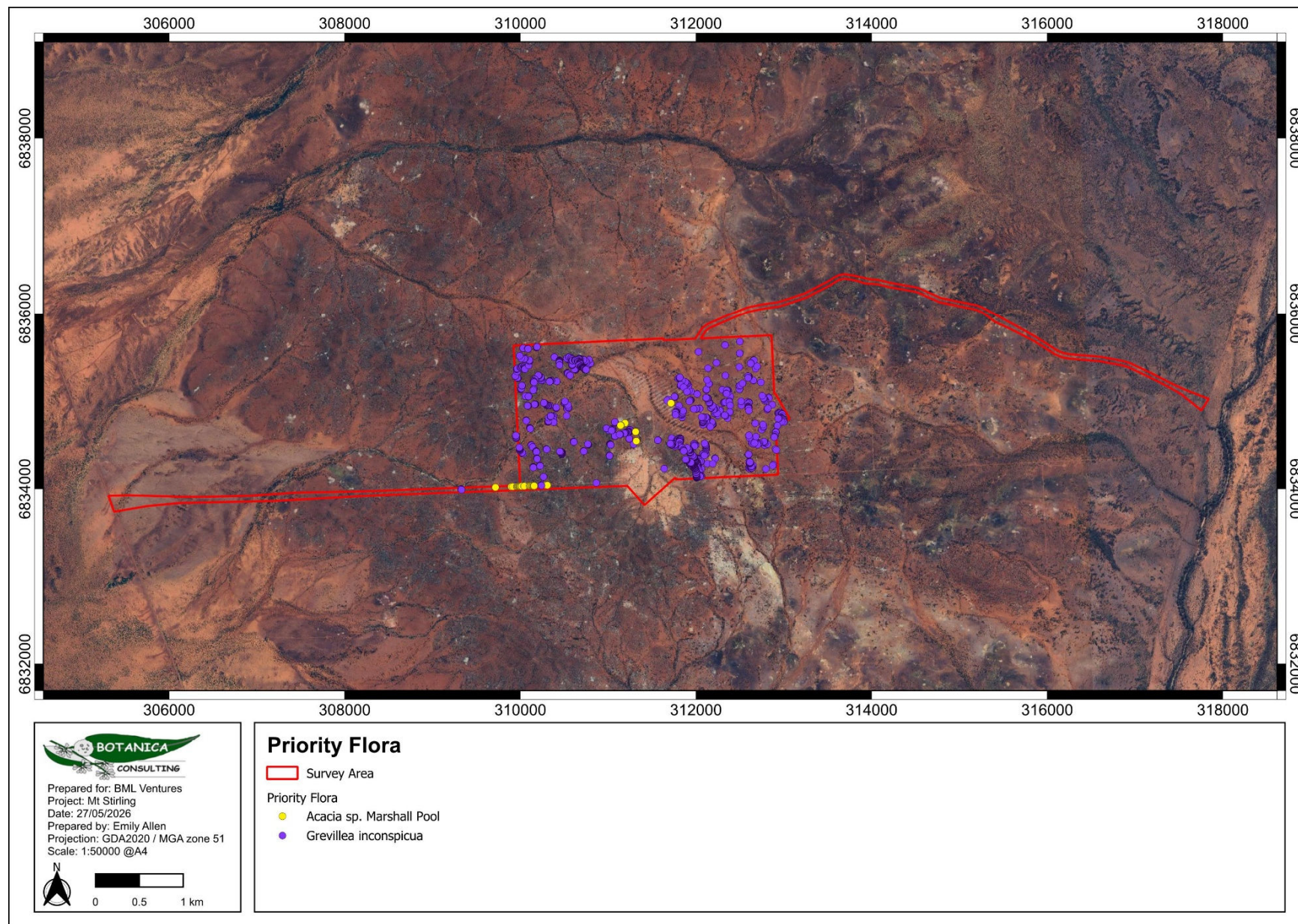


Figure 3: Locations of Priority flora within the survey area

3. Proposed Permit Area

Based on the results of the targeted survey, the proposed site layout for Mt Stirling was modified and the proposed Permit Area was refined to preserve as many plants as possible. The original access road to the west on L37/294 was replaced with an alternative access road to the east on L37/295.

The proposed Permit Area intersects tenements M37/1305, M37/1306, M37/1311, M37/1312, M37/1313, and L37/295.

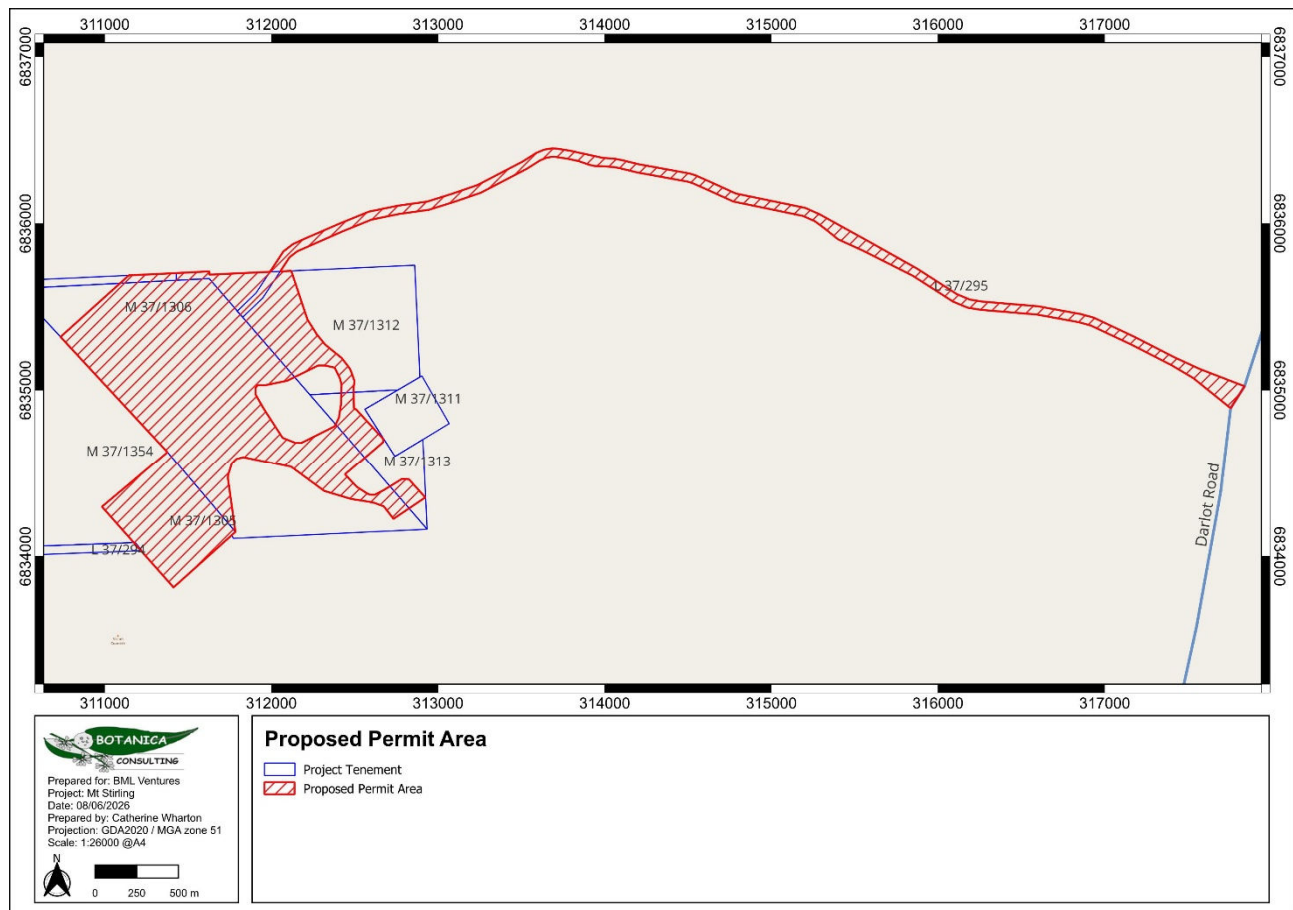


Figure 4: Proposed permit area

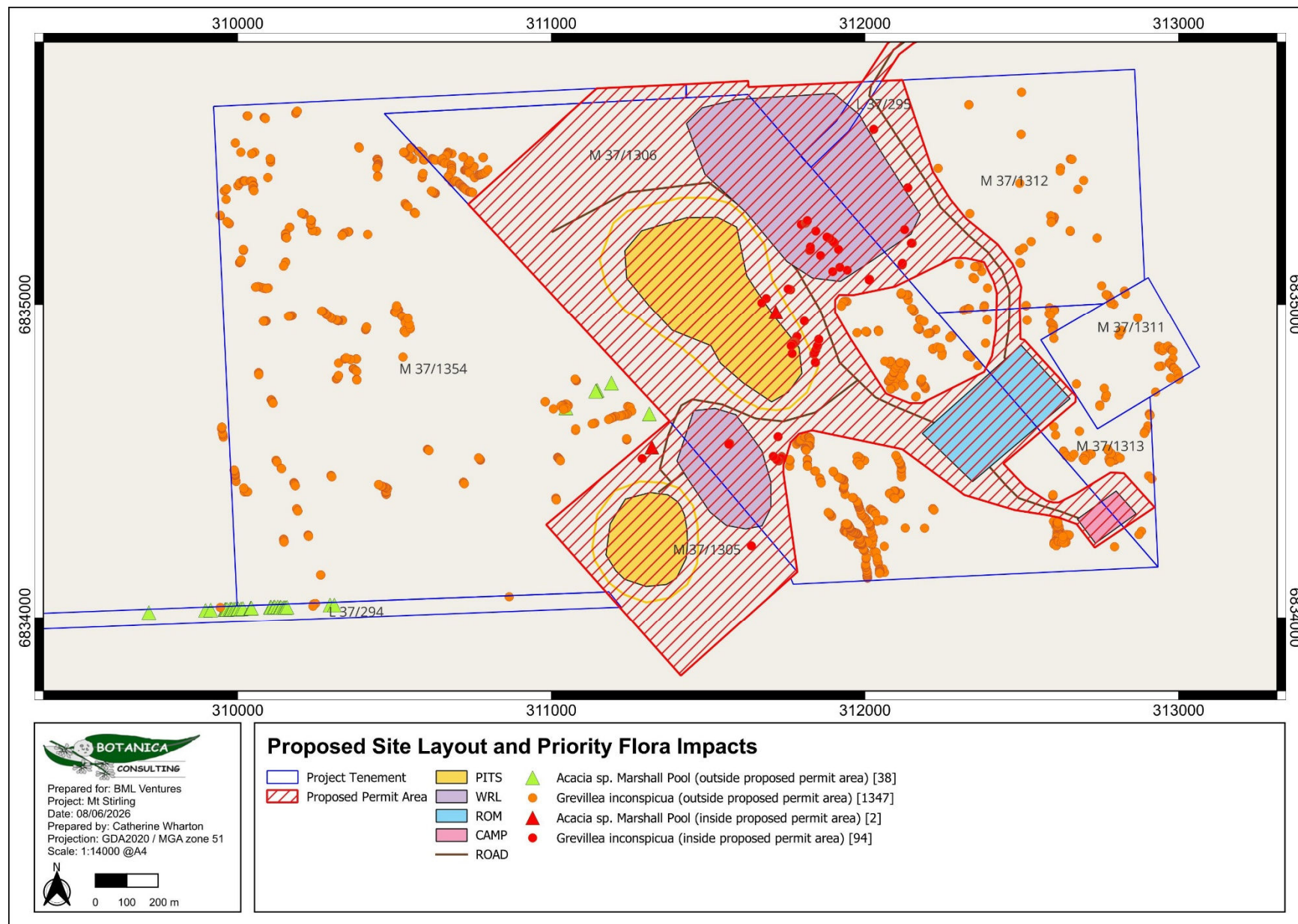


Figure 5: Priority Flora within the proposed permit area

4. Impact Assessment Methodology

Available records of *Acacia* sp. Marshall Pool (P3) and *Grevillea inconspicua* (P4) were collated and the number of plants located within the proposed Permit Area were compared against the estimated regional population for each taxon.

Records from DBCA's Threatened and Priority Flora (TPFL), Western Australian Herbarium (WAHerb) databases in conjunction with records from submitted Threatened and Priority Flora Report Forms (TPRF) provided by DBCA and records from other surveys in the region were collated.

Botanica Consulting has data pertaining to two survey areas, a targeted survey undertaken in 2025 at Bannockburn for Northern Star Resources Limited and the targeted survey undertaken in 2026 at Mt Stirling for BML Ventures Pty Ltd.

A map of the priority flora locations for available records of *Acacia* sp. Marshall Pool (P3) and *Grevillea inconspicua* (P4) is provided in Figure 6 and Figure 7 respectively.

Additional survey data was found online, a report by Western Botanical (2019) that states “Western Botanical, 2018 estimated 37,266 plants of *Acacia* sp. Marshall Pool at three population centres:...” A copy of the map produced by Western Botanical (2019), showing the locations of *Acacia* sp. Marshall Pool is provided as Figure 8.

A summary of the abundance values from each source is provided in Table 1.

Table 1: Data sources for available records

Source	Source Reference	Abundance by source	
		<i>Acacia</i> sp. Marshall Pool (P3)	<i>Grevillea inconspicua</i> (P4)
DBCA (TPFL)	43-0426FL_TPFL	-	16,793
DBCA (WAHerb)	43-0426FL_WAHerb	215	585
DBCA (TPRF)	Umwelt 2023	5	-
	Natural Area Consulting Management Services 2024	-	72
	Maia Environmental Consultancy 2019	-	8
	Trace Ecology 2022	-	21
	Ecoscape 2023	-	372
Survey Results	Botanica Consulting (Mt Stirling) 2026	40	1441
	Botanica Consulting (Bannockburn) 2025	155	-
	Western Botanical (Leonora) 2019	37,266	-
Total Abundance from available records		37,681	19,292

If two or more spatial records shared a location (identical coordinates) they were flagged as duplicate records, and the abundance data from only one record was used for the impact assessment. Furthermore, 80 spatial records from DBCA that occurred within the proposed Permit Area were excluded from the impact assessment as they were considered to be potential duplicates of the spatial records used from the targeted survey.

A summary of the abundance values from each source, the number of records omitted (duplicates or DBCA records within the proposed Permit Area) and the calculated abundance to be used for the impact assessment is provided in Table 2.

Table 2: Summary of collated Priority flora abundance by source

Taxon	Source	Abundance by source	No. records omitted	Abundance to be used for impact assessment
<i>Acacia</i> sp. Marshall Pool	DBCA (WAHerb)	215	31	184
	DBCA (TPRF)	5	0	5
	Botanica Consulting (Mt Stirling) 2026	40	0	40
	Botanica Consulting (Bannockburn) 2025	155	1	154
	Western Botanical (Leonora) 2019	37,266	-	37,266
	Total	37,681	32	37,649
<i>Grevillea inconspicua</i>	DBCA (TPFL)	16,793	120	16,683
	DBCA (WAHerb)	585	5	580
	DBCA (TPRF)	473	0	473
	Botanica Consulting (Mt Stirling) 2026	1,441	0	1,441
	Total	19,292	125	19,177

A total of 37,681 plants/individuals of *Acacia* sp. Marshall Pool (P3) were collated from available records. This taxon is largely concentrated within the Leonora–Leinster area, with occurrences primarily located within 70 km of Leonora (Figure 6). Thirty-two duplicate records were identified.

A total of 19,177 plants/individuals of *Grevillea inconspicua* (P4) were collated from available records. This taxon is distributed across a broad area of the northern Goldfields, with scattered occurrences between Mount Magnet, Meekatharra, Sandstone, Leinster and Leonora (Figure 7). Forty-five duplicate records were identified, and 80 DBCA records occurred within the proposed Permit Area.

The calculated abundance to be used for impact assessment were summed to estimate the collated regional abundance for each taxon.

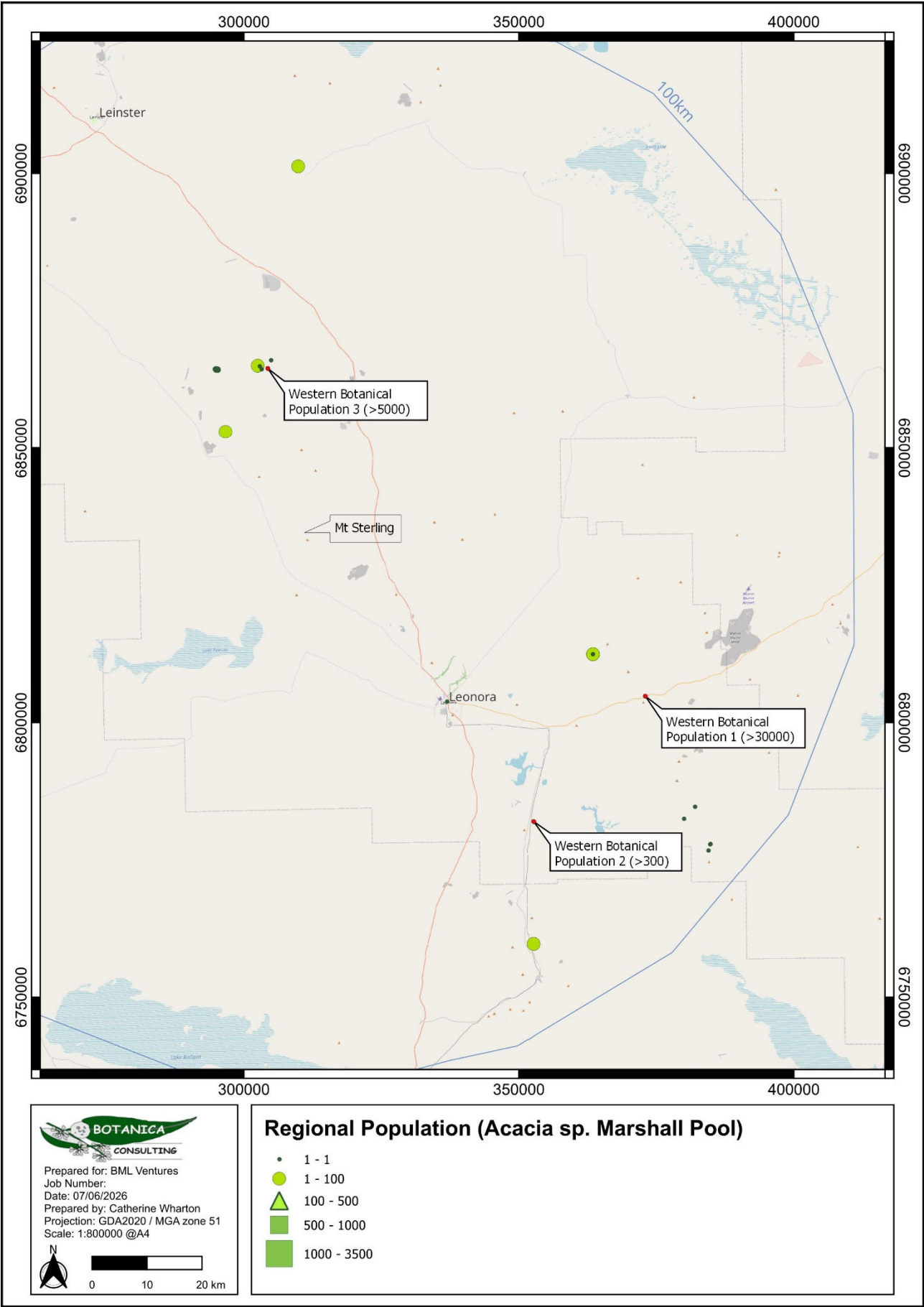


Figure 6: Priority Flora Locations – Regional (*Acacia* sp. Marshall Pool)

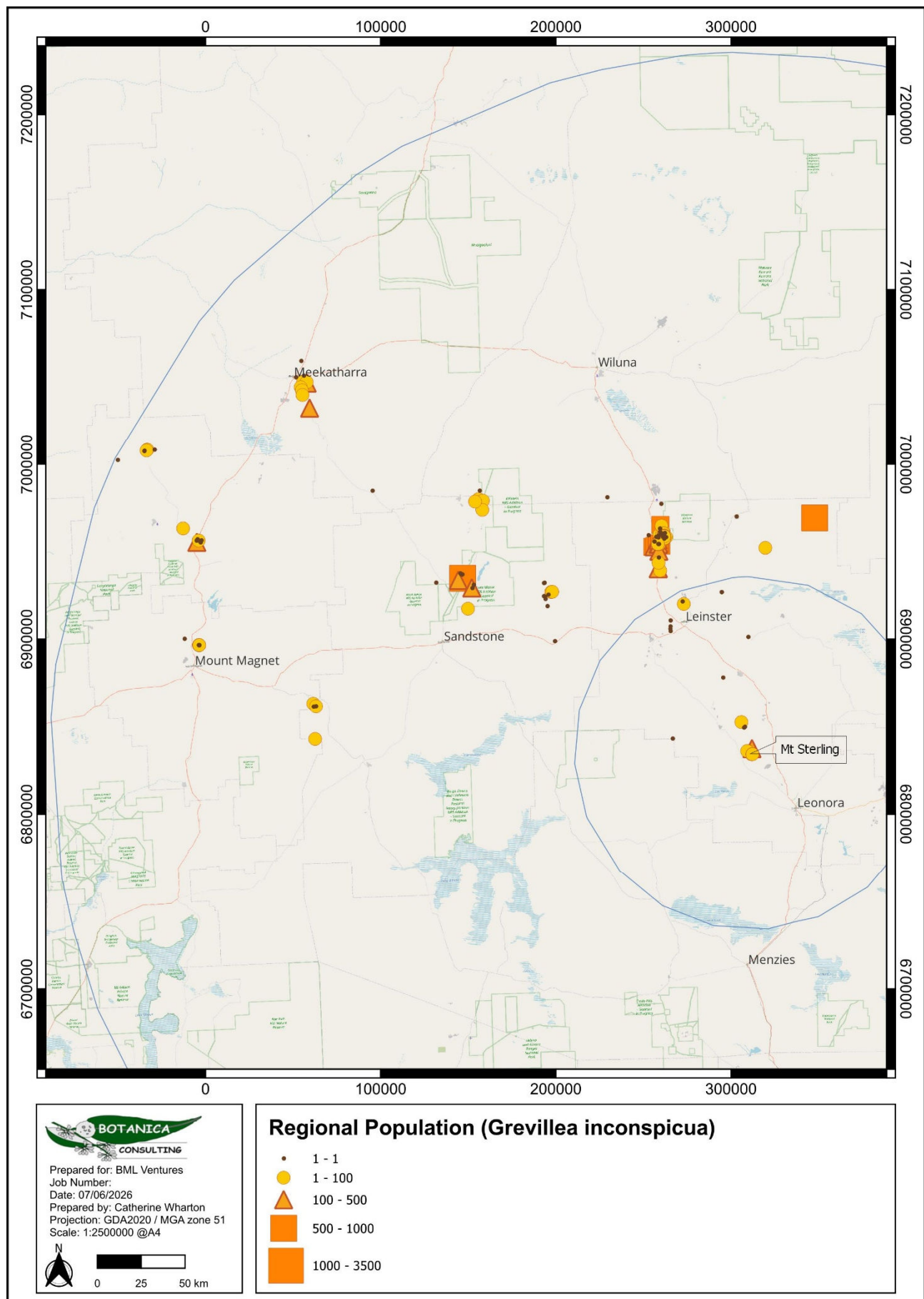


Figure 7: Priority Flora Locations – Regional (*Grevillea inconspicua*)

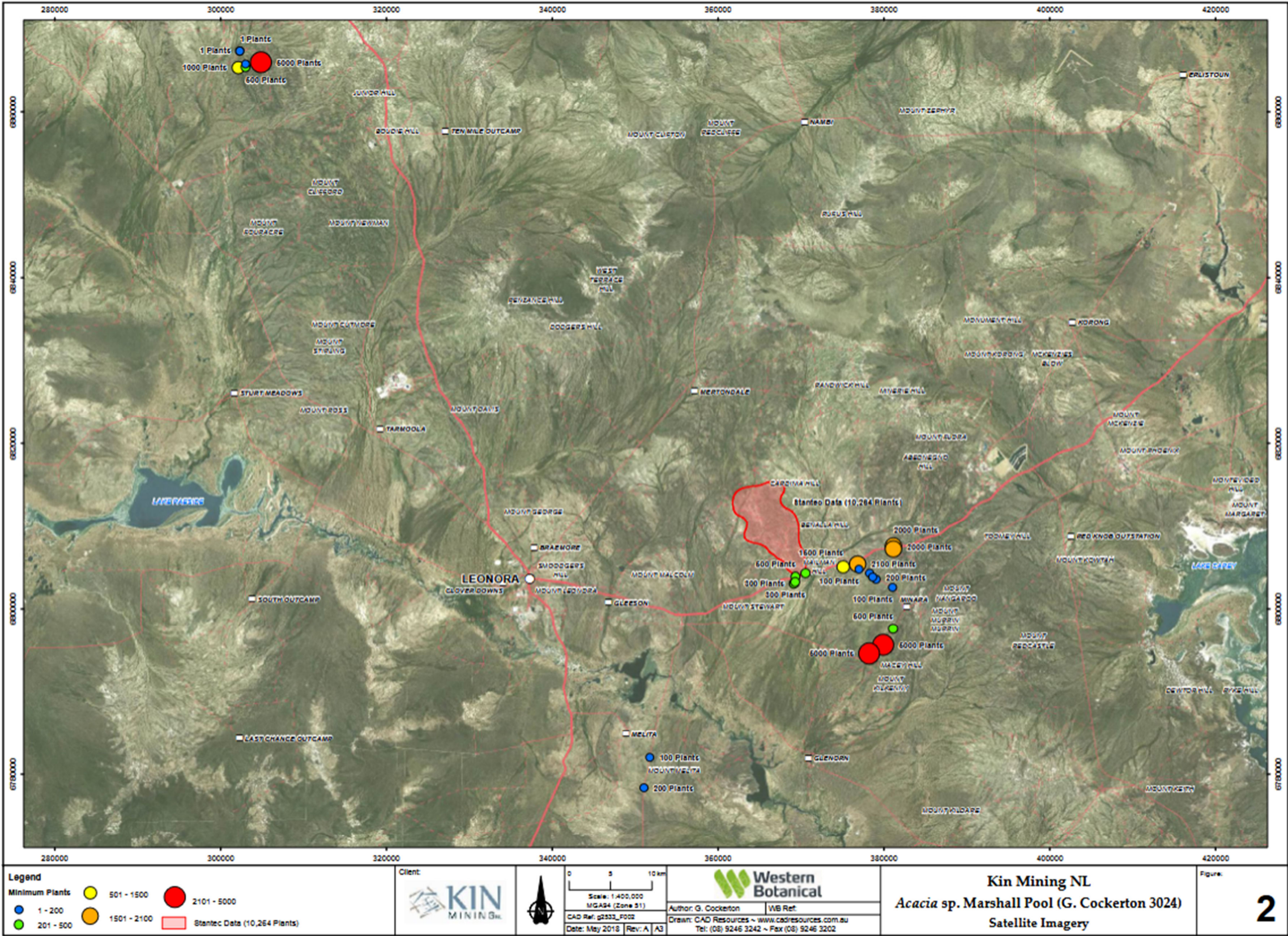


Figure 8: Locations of *Acacia* sp. Marshall Pool recorded by Western Botanical (2019)

5. Impact Assessment Results

The number of recorded plants within the proposed Permit Area were compared against the regional abundance to determine the proportion of each taxon potentially impacted by the proposed clearing.

The results of the impact assessment are provided in Table 3.

Table 3: Priority flora impact assessment

Taxon	Code	Regional Abundance	Potential Impact	
			No. plants within the proposed permit area	% plants within proposed permit area
<i>Acacia</i> sp. Marshall Pool	P3	37,649	2	0.01%
<i>Grevillea inconspicua</i>	P4	19,177	94	0.49%

Based on records from the targeted survey (Botanica Consulting, 2026), the proposed Permit Area contains 94 individuals of *Grevillea inconspicua* (P4), representing approximately 0.49% of the collated regional abundance, and 2 individuals of *Acacia* sp. Marshall Pool (P3), representing approximately 0.01% of the collated regional abundance.

On this basis, the proposed clearing is unlikely to result in a significant impact to the currently recorded abundance of either taxon.

Vegetation

The Mt Stirling Project lies within the Eastern Murchison (MUR01) subregion of the Murchison Bioregion, as defined by the Interim Biogeographic Regionalisation of Australia (IBRA).

Vegetation of the Murchison Bioregion in the Austin Botanical District is predominantly Mulga low woodlands on plains, often rich in ephemerals, which reduce to scrub on hills. It is also characterised by hummock grasslands, Saltbush shrublands and Samphire shrublands (Beard, 1990; Cowan, 2001).

The Department of Primary Industries and Regional Development GIS file (DPIRD, 2021) indicates that the proposed Permit Area is located within three (3) pre-European Beard vegetation associations (Figure 9). The system association descriptions and their remaining extent within the IBRA subregion, as specified in Report 3b of the *2018 Statewide Vegetation Statistics* (Government of Western Australia, 2019) is provided in Table 4.

Areas retaining less than 30% of their pre-European vegetation extent generally experience exponentially accelerated species loss, while areas with less than 10% are considered “endangered” (EPA, 2000).

Given that each vegetation association retains more than 97% of its pre-European extent within the Eastern Murchison subregion, the proposed clearing is unlikely to significantly impact the regional extent of these vegetation associations.

Table 4: Pre-European Vegetation Associations within the proposed Permit Area

IBRA Subregion	Vegetation Association	Floristic Description	Pre-European Extent Remaining	% Protected for Conservation
Eastern Murchison (MUR01)	LAVERTON_28	Low woodland, open low woodland or sparse woodland	131,531 ha (98.35%)	0%
	LAVERTON_39	Scrub, open scrub or sparse scrub	151,580 ha (97.53%)	0%

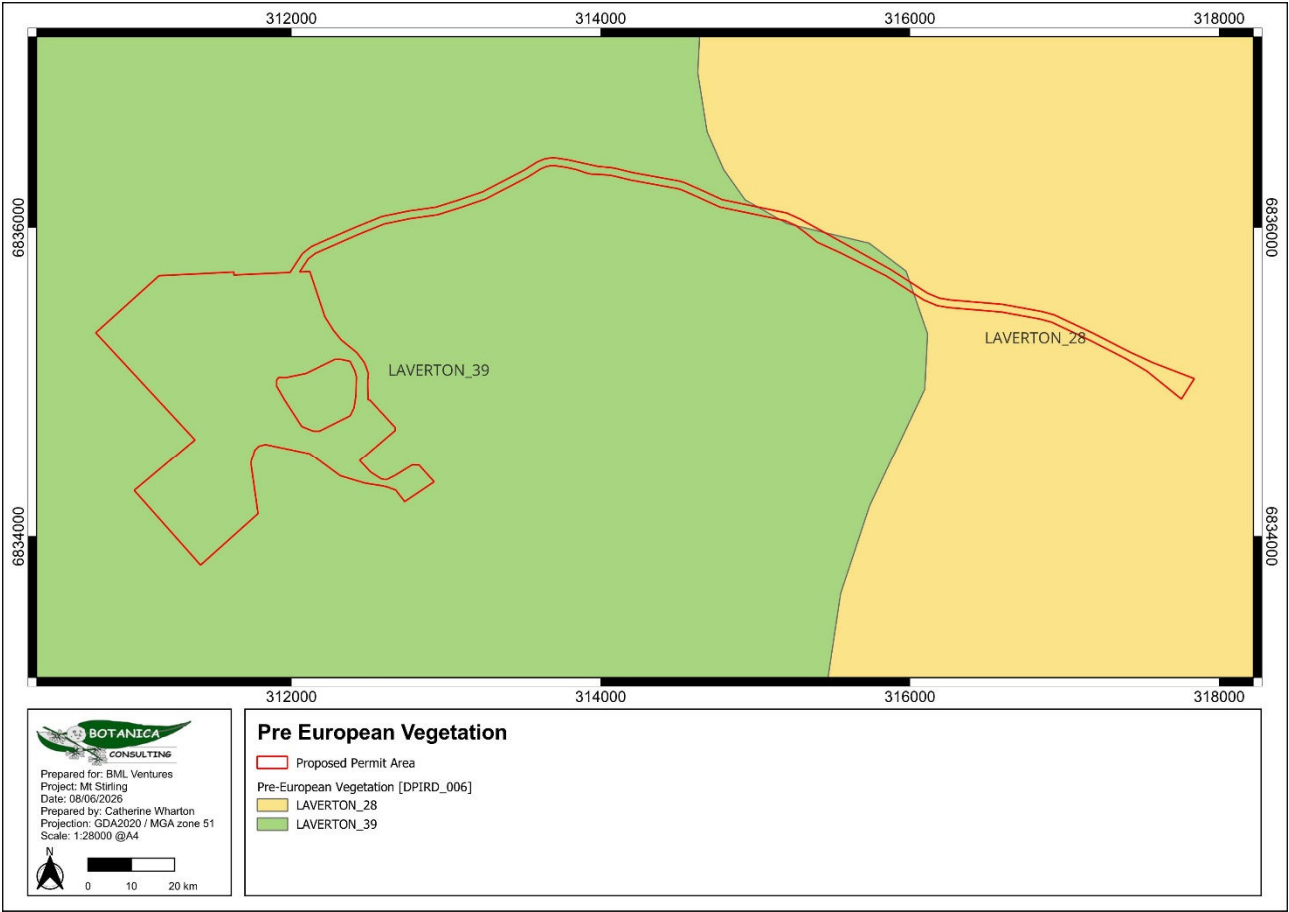


Figure 9: Pre-European vegetation within the proposed Permit Area

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