

WOY WOY ROAD KARIONG

CONSOLIDATED CONSTRAINTS MAPPING AND INDICATIVE CONCEPT PLAN

PREPARED FOR

DARKINJUNG LOCAL ABORIGINAL LAND COUNCIL

17 JAN 2020

FINAL REPORT

INTRODUCTION

This document provides a summary of the technical investigations undertaken to inform and support the progression of the Planning Proposal for Lots 512 and 513 DP 727686 located at Woy Woy Road, Kariong. It consist of three sections as follow:

- Project Background;
- Development Footprint Identification and Consolidated Constraints Mapping;and
- Indicative Concept Plan

PROJECT BACKGROUND

In February 2019, Darkinjung Local Aboriginal Land Council (DLALC) identified the proposed rezoning of their land on Lots 512 and 513 DP 727686, Kariong in the Interim Darkinjung Development Delivery Plan with a total area of 13.2 ha for urban expansion purpose.

While the Central Coast Regional Plan 2036 does not propose the expansion of the Kariong urban area, it does identify the potential for development at the urban fringe provided sites can be efficiently serviced and areas with high environmental values and hazards are avoided. The regional plan also supports housing delivery in and near growth corridors.

A letter from DPIE in response to the proposed rezoning confirmed the following guiding principles for the rezoning proposal:

- A high-level assessment of land on the urban fringe at Kariong has been undertaken. The findings confirm that the northern part of Lots 512 and 513 DP 727686 has sufficient strategic merit to be further considered for rezoning subject to further planning investigation.
- Any rezoning proposal will need to identify that servicing and infrastructure needs can be met and, where necessary, include commitments to provide infrastructure upgrades.
- The eastern and southern edges of the land will need to provide suitable buffers to the adjoining national park and proposed regional biodiversity corridor. Potential conflicts with the large lot residential development to the north should be assessed and mitigated.
- The development footprint should demonstrate the avoidance of impacts on vegetation, assess the impacts of any unavoidable clearing and propose an offset strategy.
- The developable area should be in the north of the site, with the transmission line easement forming a logical southern extent of urban development
- Appropriate assessment of Aboriginal cultural heritage is to be undertaken and impacts avoided.

DEVELOPMENT FOOTPRINT IDENTIFICATION AND CONSOLIDATED CONSTRAINTS MAPPING

A technical investigations have been consolidated through a sieve mapping process to identify the development footprint and inform the consolidated developable area for the subject site.

The sieve mapping process considers the following environmental constraints to determine the development footprint:

- Slope and Topography;
- Aboriginal Heritage Items;
- Zoning; and
- Easement

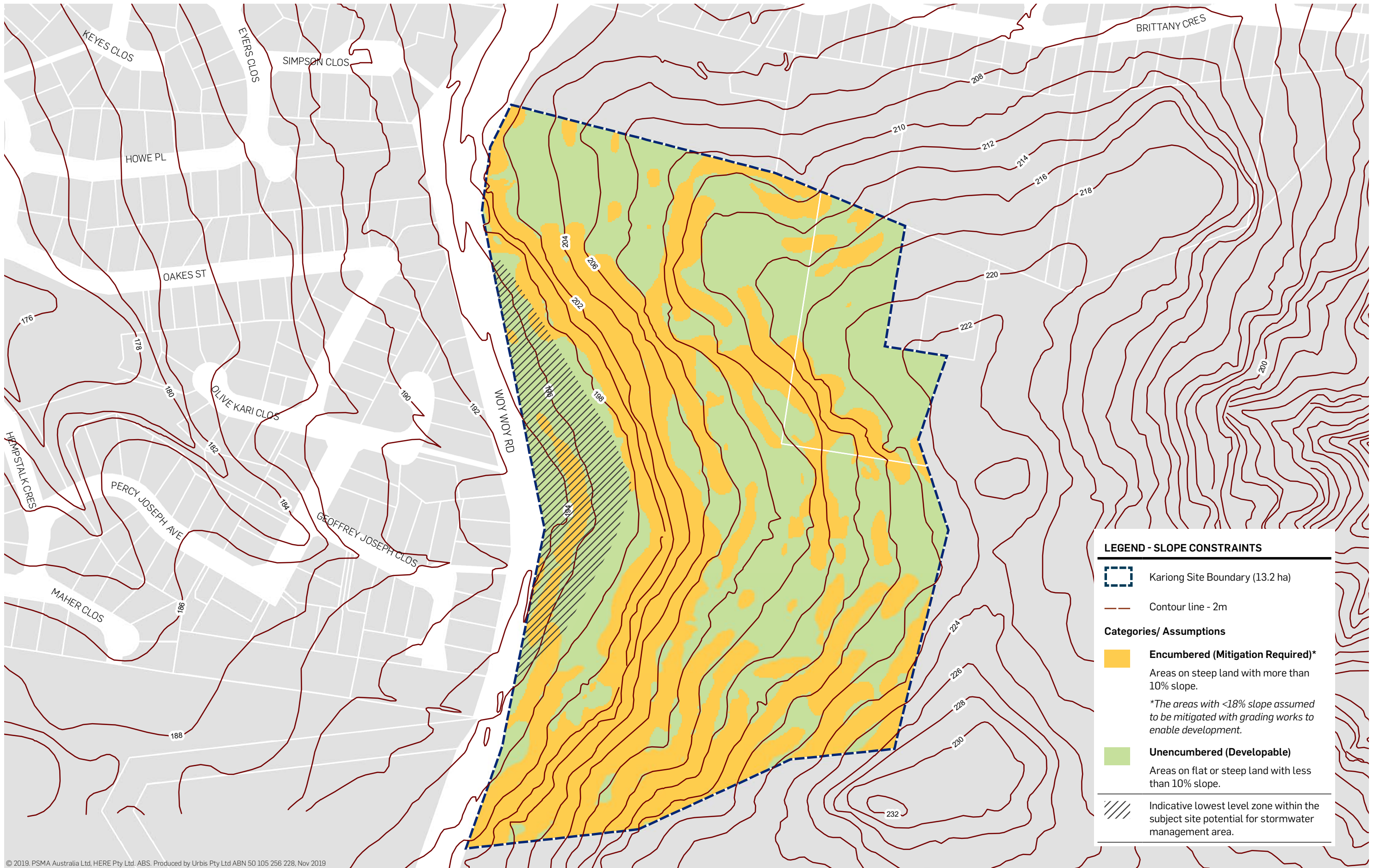
In addition to the above analysis, the following development constraints analysis has been undertaken to identify the developable area:

- Bushfire Assessment;
- Access and Movement;
- Consolidated Constraints Mapping.

Each constraint has been classified under 3 categories as follow:

- **Encumbered (No Development):** Areas affected by constraints that are unsuitable for any future development.
- **Encumbered (Mitigation Required):** Areas affected by constraints that can be mitigated, where future development is possible prior to further investigation and implementation of mitigation strategies.
- **Unencumbered (Developable):** Areas not affected by any constraints, where future development can more likely be placed.

Assumption informing the constraints categorisation are noted on each page.



LEGEND - SLOPE CONSTRAINTS

Kariong Site Boundary (13.2 ha)

Contour line - 2m

Categories/ Assumptions

Encumbered (Mitigation Required)*
Areas on steep land with more than 10% slope.
**The areas with <18% slope assumed to be mitigated with grading works to enable development.*

Unencumbered (Developable)
Areas on flat or steep land with less than 10% slope.

Indicative lowest level zone within the subject site potential for stormwater management area.

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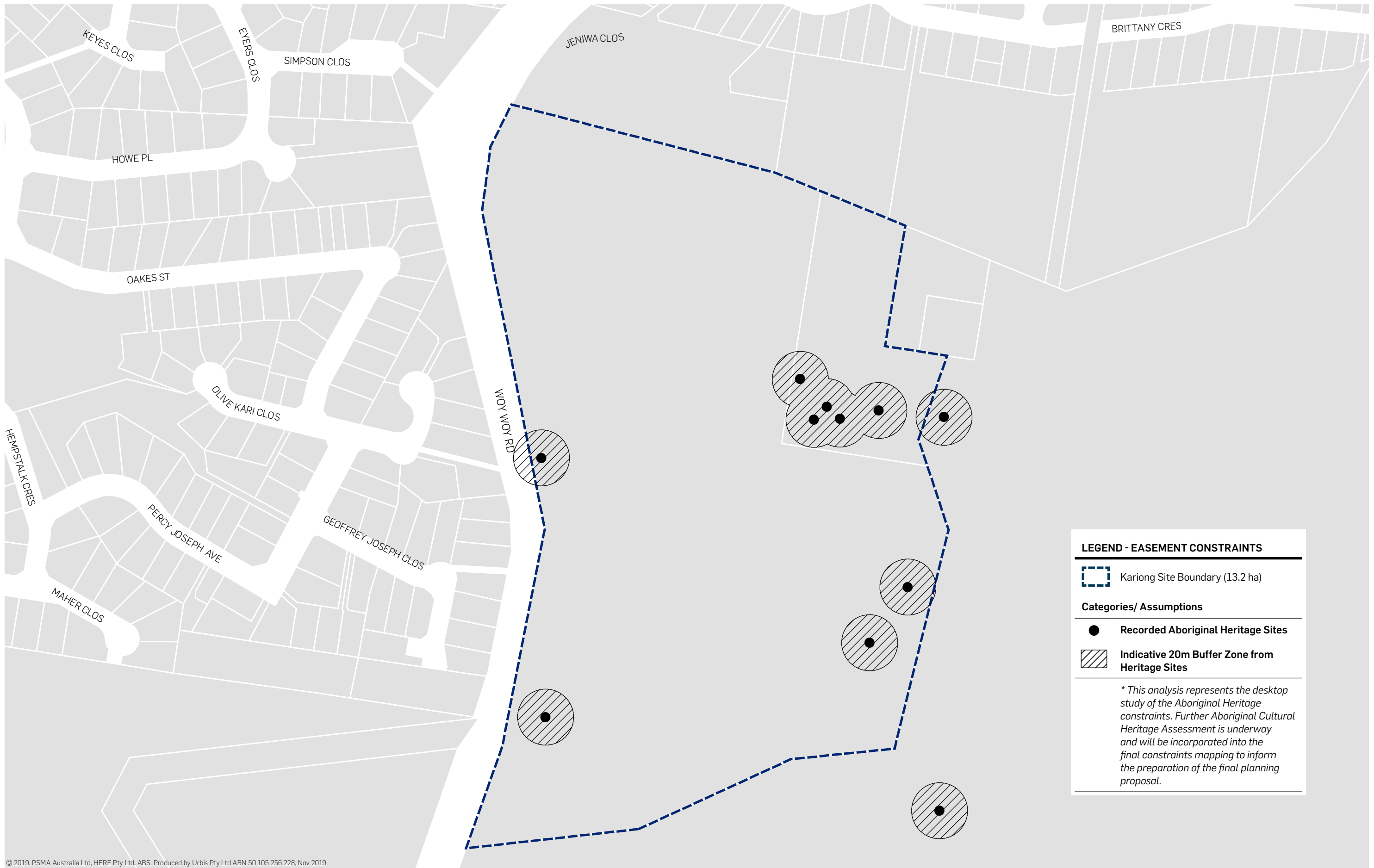
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ENVIRONMENTAL CONSTRAINTS MAPPING - SLOPE



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LEGEND - EASEMENT CONSTRAINTS

Kariong Site Boundary (13.2 ha)

Categories/ Assumptions

Recorded Aboriginal Heritage Sites

Indicative 20m Buffer Zone from Heritage Sites

** This analysis represents the desktop study of the Aboriginal Heritage constraints. Further Aboriginal Cultural Heritage Assessment is underway and will be incorporated into the final constraints mapping to inform the preparation of the final planning proposal.*

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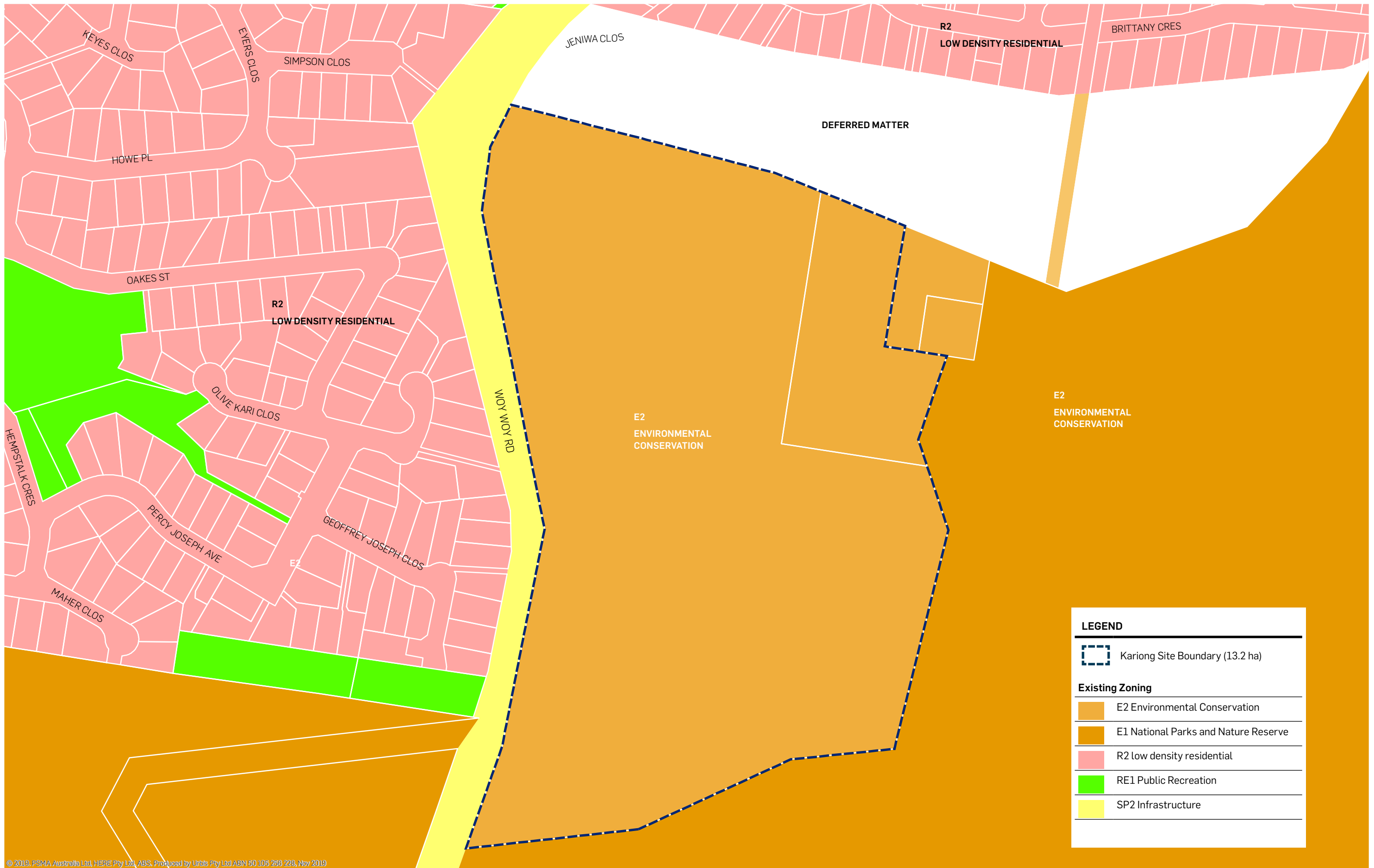
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DEVELOPMENT CONSTRAINTS MAPPING - ABORIGINAL HERITAGE



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LEGEND

Kariong Site Boundary (13.2 ha)

Existing Zoning

E2 Environmental Conservation

E1 National Parks and Nature Reserve

R2 low density residential

RE1 Public Recreation

SP2 Infrastructure

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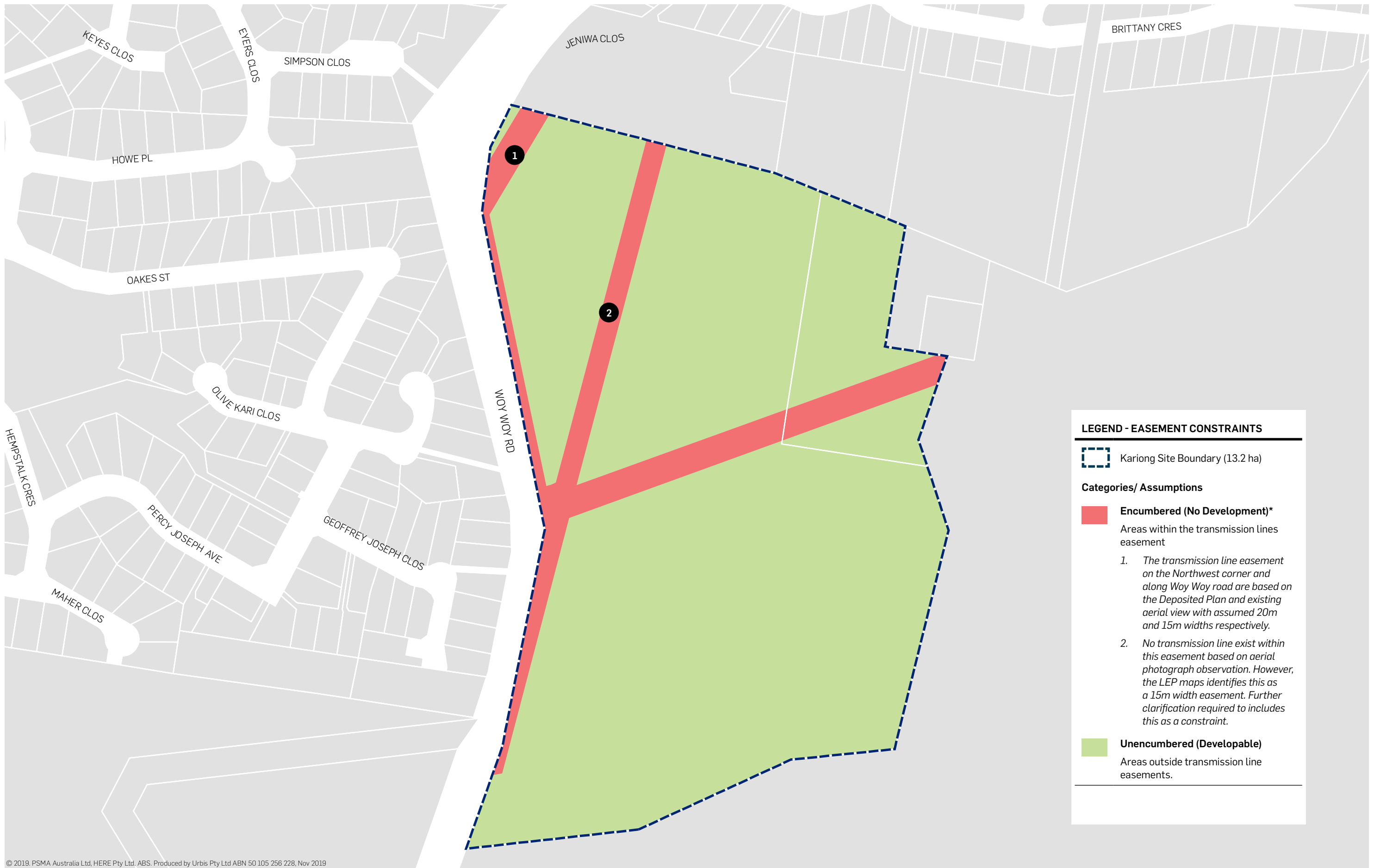
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DEVELOPMENT CONSTRAINTS MAPPING - EXISTING ZONING



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DARKINJUNG LOCAL ABORIGINAL LAND COUNCIL - KARIONG PLANNING PROPOSAL

DEVELOPMENT CONSTRAINTS MAPPING - EASEMENT



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0 20 40 60 80 100

DEVELOPMENT FOOTPRINT IDENTIFICATION SUMMARY

The following figure illustrates the proposed Development Footprint of Lot 512 and 513 DP 727686 with total area of 6.1 ha.

The identification of the development footprint has taken into consideration the guiding principles identified in the letter from DPIE through the following approach:

- The northern part of the site as the development footprint;
- Excludes a 20m buffer zone of the Aboriginal Heritage Items as a non development footprint;
- Include low level land area on to the western boundary as part of stormwater management area.
- The east west electrical easement forms the southern extent of the development footprint.

LEGEND - STUDY AREA IDENTIFICATION




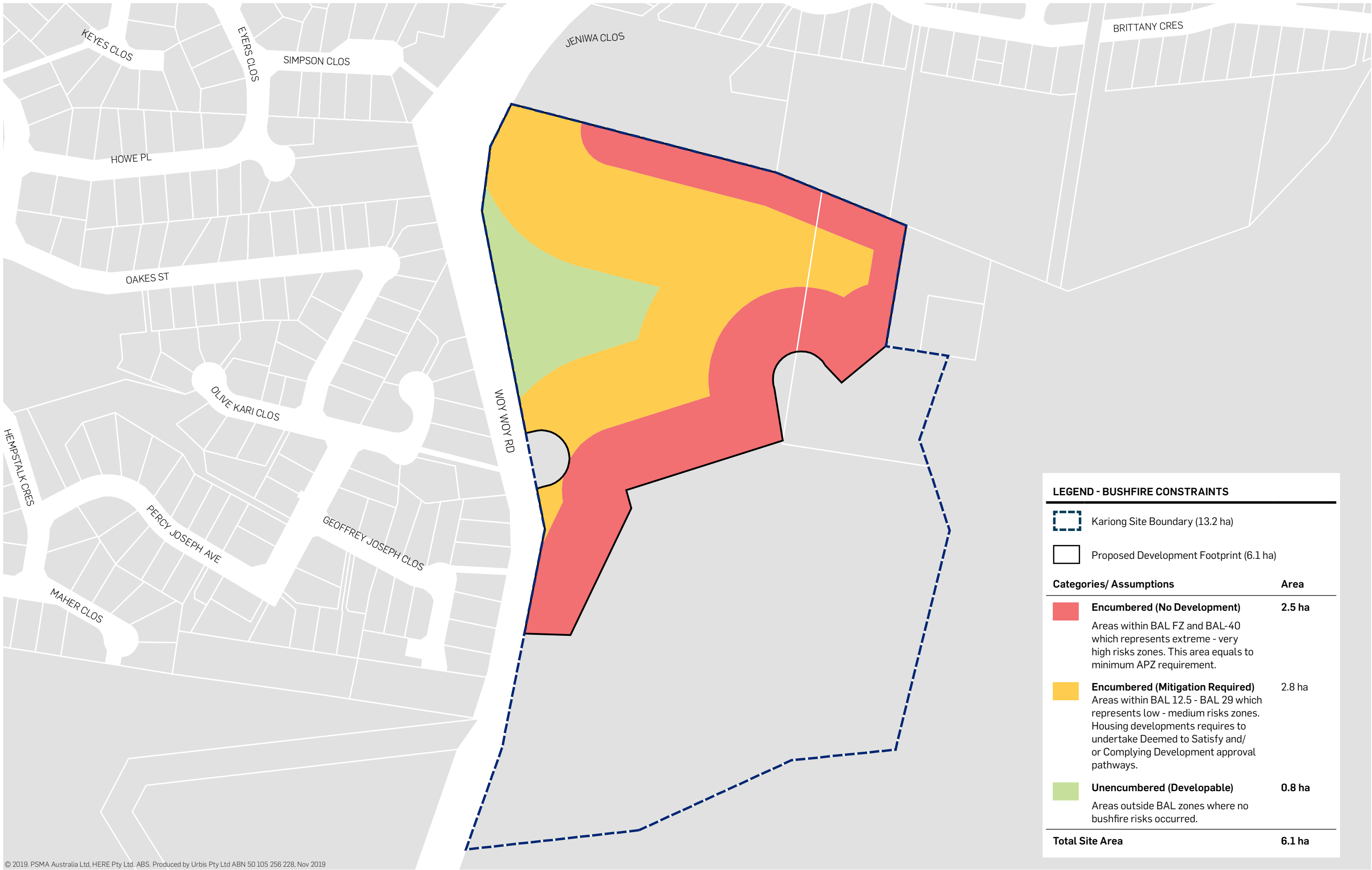
-  Kariong Site Boundary (13.2 ha)
-  Proposed Development Footprint (6.1 ha)
-  Aboriginal Heritage Items sites
-  Transmission line easements



Figure 1 Land ownership and development footprint identification map



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DEVELOPMENT CONSTRAINTS MAPPING - BUSHFIRE

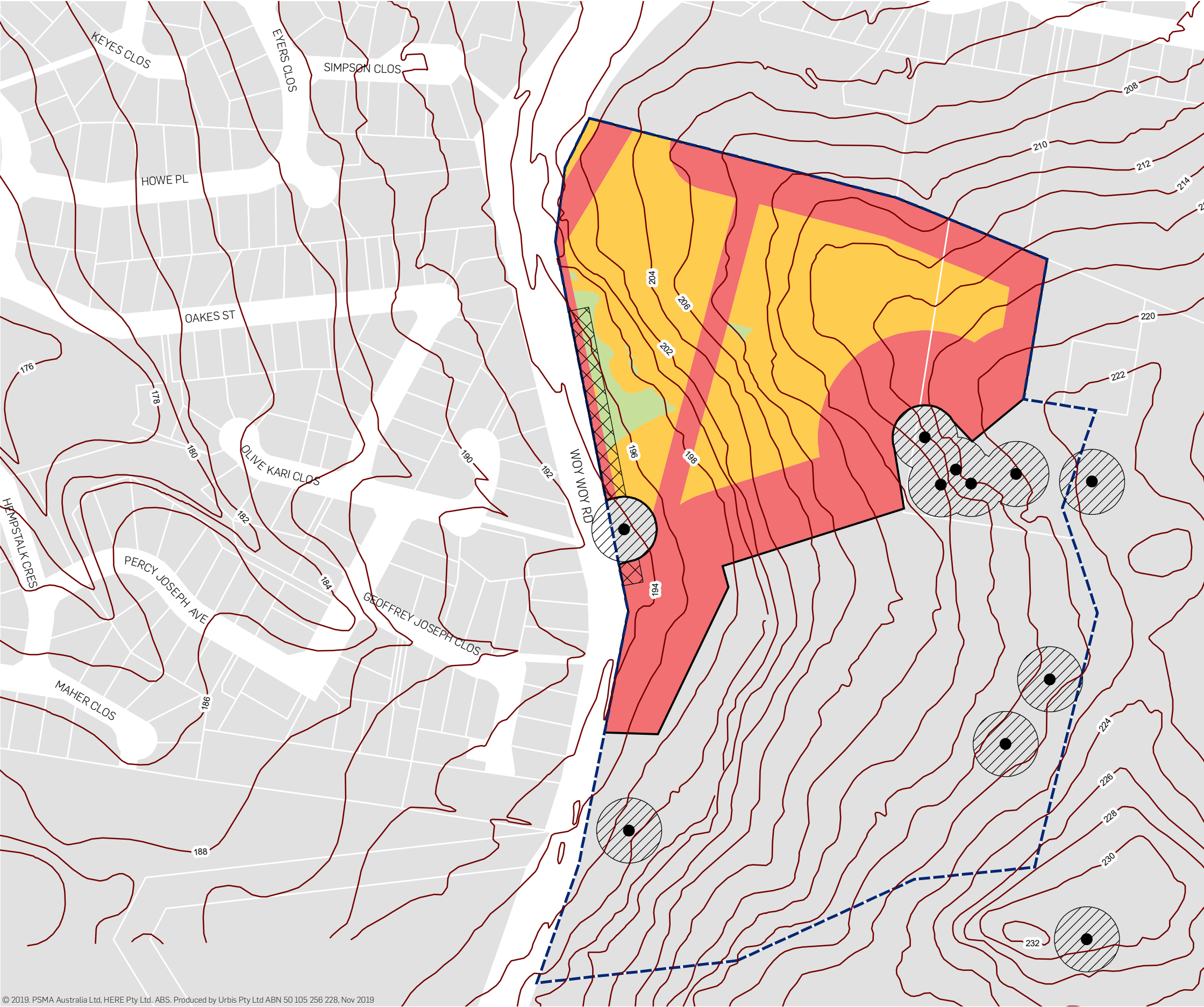


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DARKINJUNG LOCAL ABORIGINAL LAND COUNCIL - KARIONG PLANNING PROPOSAL
DEVELOPMENT CONSTRAINTS MAPPING - ACCESSING MOVEMENT



LEGEND - COMBINED CONSTRAINTS

Kariong Site Boundary (13.2 ha)

Proposed Development Footprint (6.1 ha)

Contour line - 2m

Categories/ Assumptions	Area
<div></div> Encumbered (No Development) Areas that are encumbered by various Environmental and Development Constraints, where No Development can be undertaken. This includes: <ul style="list-style-type: none">Bushfire Risk: Areas within BAL FZ and BAL-40 which represents extreme - very high risks zones; andEasement: Areas within the transmission lines easement The area within this zone only suitable for non-residential uses including roads, public and private open space; and utilities.	2.9 ha
<div></div> Encumbered (Mitigation Required) The net area that are encumbered by various Environmental and Development Constraints, where Mitigation would be required prior to any future development. This includes: <ul style="list-style-type: none">Topography and slope: Areas on steep land with more than 10% slope. Grading works required to enabling residential development subject to further technical study.Bushfire Risk: Areas within BAL 12.5 - BAL 29 which represents low - medium risks zones. Residential development allowed within this zone subject to building standard compliance identified in Planning for Bushfire Protection document	3.0 ha
<div></div> Unencumbered (Developable) The remaining area of land that is Unencumbered by any environmental and development constraints, where development can more likely occur.	0.2 ha

Recorded Aboriginal Heritage Sites

Indicative 20m Buffer Zone from Heritage Sites

Indicative Zone for Potential Access Road - Based on Transport advice.

Total Site Area

6.1 ha

**Biodiversity constraints has been excluded from the analysis due to no existing plant communities be retained within the proposed Development Footprint as identified in the Biodiversity Certification Assessment Report prepared by Umwelt .*



DARKINJUNG LOCAL ABORIGINAL LAND COUNCIL - KARIONG PLANNING PROPOSAL

ENVIRONMENTAL AND DEVELOPMENT CONSTRAINTS MAPPING - COMBINED



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INDICATIVE CONCEPT PLAN

The following section illustrates the indicative concept plan based on the consolidated constraints mapping undertaken with the following maps:

- Indicative Concept Plan;
- Proposed Zoning Plan; and
- Indicative Subdivision Plan.

The indicative concept plan undertaken the following assumptions:

- Consideration of interface with northern large lots and the water tanks by locating 45m depth large lots that provides adequate buffer zone.
- Average 40m depth lots along western boundaries to provide buffer to Woy Woy Road
- A portion of north-south and western boundary transmission lines easements are located within private lots; and
- Allocate south west portion of the site as stormwater basin.



