

<b>To:</b>	<b>Nikki Huddy</b>	ABN 21 100 960 236 Biotropica Australia Pty Ltd PO Box 866, Malanda 4885 Queensland - Australia  T (07) 4095 1116 E <a href="mailto:info@biotropica.com.au">info@biotropica.com.au</a> W <a href="http://www.biotropica.com.au">www.biotropica.com.au</a>	 Quality ISO 9001 
<b>From:</b>	<b>Nigel Tucker</b>		
<b>Date:</b>	<b>23<sup>rd</sup> December, 2021</b>		
<b>Reference:</b>	<b>PLA21.12.01</b>		
<b>Subject:</b>	<b>Marine Plant Survey Lot 11 SP273000</b>		

## 1.0 INTRODUCTION

Biotropica Australia Pty Ltd (Biotropica) has been commissioned by Planz Town Planning to survey Lot 11 SP273000 Port Street, Port Douglas for the presence of marine plants, as defined by the *Fisheries Act 1994* (Qld). Rotary wing take-off and landing is proposed for the site, and survey is required to ensure no marine plants will be cleared or disturbed as part of this change of use.

The site (see Map 1) was surveyed in early December 2021. All vascular plants occurring across the site were identified to species level. The extent of marine plants was delineated by walking the mangrove margin using a Garmin GPS to generate a tracklog, transformed using the ArcGIS platform. A 3-5m error should be assumed. Nomenclature follows Brown and Bostock (2020).

## 2.0 SURVEY OUTCOMES

### 2.1 Vegetation

Site vegetation is dominated by exotic species comprised of plants that are commonly seen in disturbed sites across north Queensland. Few woody species are present; grasses, vines and herbs account for the majority. This vegetation occurs on levelled imported fill, which slopes steeply on the eastern and northern sides where it abuts the original level at the corner point; intact mangrove vegetation remains at the original level. Table 1 below contains a list of all species present on the development footprint and its immediate surrounds.

**Table 1: Species present.**

Species	Common Name
<i>Calopogonium mucunoides</i> *	Calopo
<i>Chloris gayana</i> *	Rhode's grass
<i>Cynodon dactylon</i> *	Couch grass
<i>Distimake quinquefolia</i> *	Mile-a-minute
<i>Macroptilium atropurpurea</i> *	Siratro



Species	Common Name
<i>Macroptilium lathyroides</i> *	Phasey bean
<i>Megathyrsus maximus var. maximus</i> *	Guinea grass
<i>Mimosa pudica</i> *	Sensitive weed
<i>Richardia brasiliensis</i> *	White-eye
<i>Sesbania cannabina</i>	Sesbania
<i>Sida rhombifolia</i> *	Belly-ache bush
<i>Sphagneticola trilobata</i> *	Singapore daisy
<i>Stachytarpheta jamaicensis</i> *	Blue snake weed
<i>Triumfetta rhomboidea</i> *	Triumfetta

## 2.2 Marine Plants

No marine plants were found on the property, as shown by the tracklog on Map 1. This is consistent with aerial imagery (background) which also shows mangroves outside the boundary of the Lot, and confirms that there are no marine plants present on Lot 11 SP273000. Marine plants outside the property boundary conform to Regional Ecosystem 7.1.1 (Mangrove closed scrub to open forest of areas subject to regular tidal inundation), forming an abrupt boundary with the exotic vegetation detailed in Table 1. The margin is dominated by white-flowered black mangrove (*Lumnitzera racemosa*) and mangrove fern (*Acrostichum speciosum*) flanked by stilt-root mangrove (*Rhizophora* spp.). Grey mangrove (*Avicennia marina*) is present in the north-west corner.

## 3.0 SUMMARY

Exotic vegetation dominates Lot SP273000 which is comprised of imported fill material, forming a level surface above the high tide mark.

No marine plants are present on the Lot. Ground traverse places marine plants outside the boundary of the Lot, with a belt of exotic vegetation intervening between Lot 11 SP273000 and marine plants to the east and north.



**APPENDIX 1: MAPS**



## DOCUMENT CONTROL SUMMARY

### REPORT AND CLIENT DETAILS

Technical Note:	Marine Plant Survey Lot 11 SP273000
Client:	Planz Town Planning
Client Contact:	Nikki Huddy
Status	Advice Note
Project Manager:	Nigel Tucker
Author/s:	Nigel Tucker

REVISION/QUALITY ASSURANCE								
REVISION NUMBER	DATE	CHECKED BY		ISSUED BY		DISTRIBUTION – NO. OF COPIES		
						Client	Other	Biotropica Library
0	2/12/2021	SH	✓	NT	✓	1	0	1
Final	23/12/2021	GH	✓	NT	✓	1	0	1

