

Construction Management Plan

TREE PROTECTION MEASURES

Compaction issues can be dealt with by ensuring that a Tree Protection Zone (TPZ) is erected around the retained trees within the site.

The above ground space will not be impacted.

Scaffolding - TPZ should erected 2 metres off the proposed building to allow for scaffold erection and access. See attached 4.5.6 for details

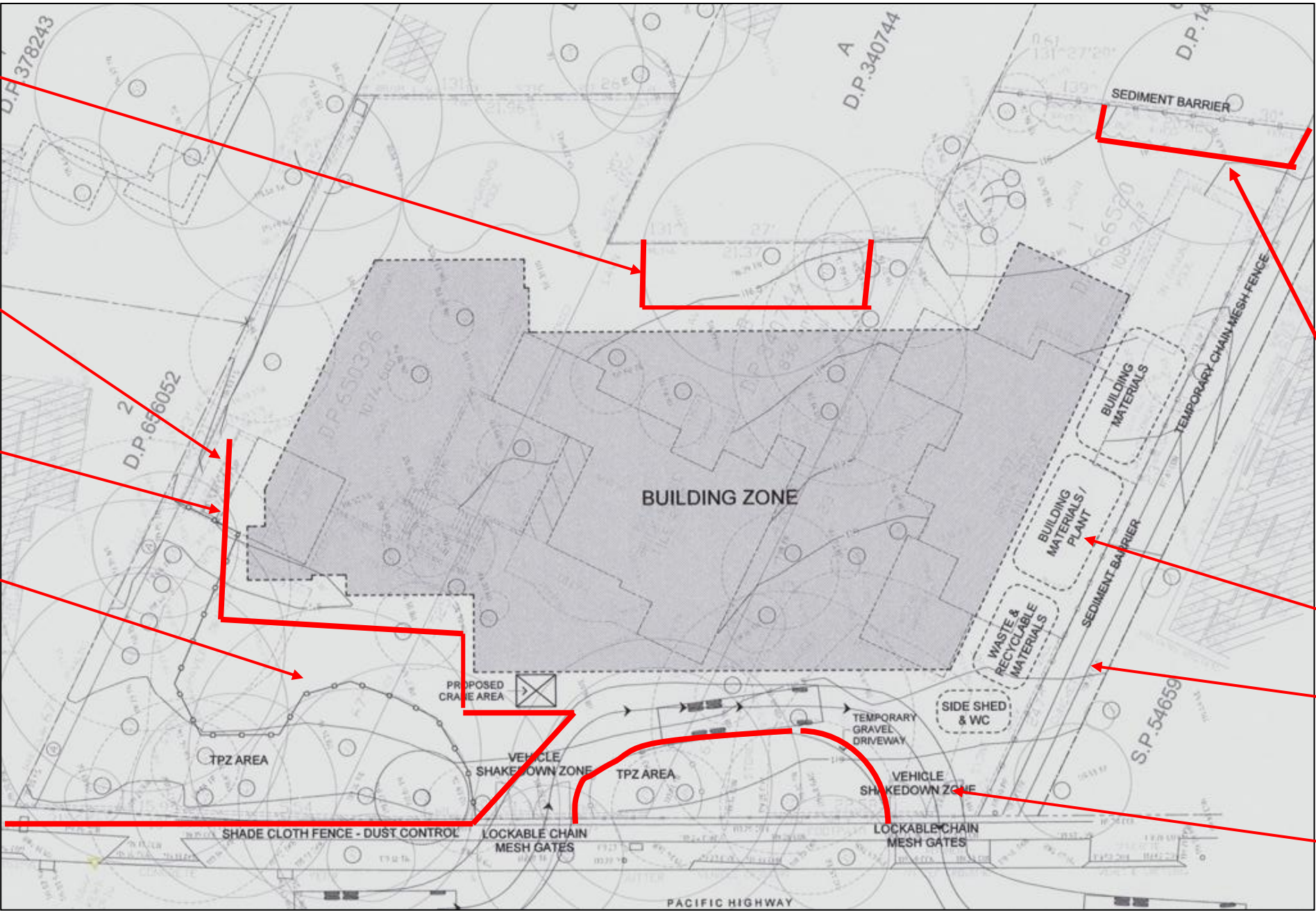
There will be no fill soils around any retained trees.

Should any services be located through existing trees TPZs they should be hand dug and supervised by an AQF5 Arborist.

Existing sandstone paving in existing driveway to be retained insitu until Landscaping phase of the development.

TPZ SIGNAGE

A 600mm x 450mm prohibition sign complying with AS4970:2009 stating “NO ENTRY – TREE PROTECTION ZONE” and including contact details of the site foreman is to be attached to the fence to be visible from all sectors of the site, and remain in place until all construction has been completed.



CONSTRUCTION MANAGEMENT PLAN (CMS)

A copy of the CMS must be issued to the site manager prior to commencement of works.

A copy of the CMS is to be given to tradespeople during induction onto the site.

TPZ FENCING

The TPZ is to be constructed of a minimum of 1800mm high chain link fabric on 2400mm star picket or 50mm GWI pipe anchor posts driven 600mm into the ground so that the fencing cannot be breached or moved.

Install diagonal cable bracing if required for stability. On construction sites with wind blown dust and debris, attach shade cloth or similar geotextile fabric to cover the fence panels and screen the TPZ from contamination.

TPZ fencing is to be erected prior to commencement of works and to remain in place until the landscaping phase of the development.

The Site Office, Toilets, Materials Storage should not be within or near TPZs.

No vehicular access to the site via Cathiness Street

Tradespeople working on-site should not wash down equipment within or near TPZs.

Vehicle Shakedown Zone is to be constructed as per 4.5.3 for details

TPZ CERTIFICATION

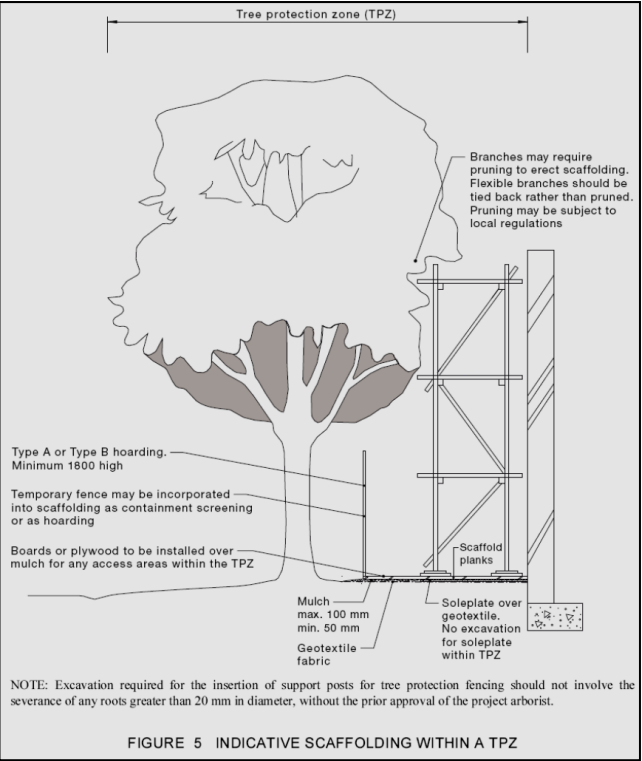
Consultant Arboriculturist is to be onsite for erection of TPZ fencing & Temporary Access Way installation.

A Letter of Certification to be issued for the correct erection of TPZs, Signage & Temporary Access Way.

4.5.6 Scaffolding

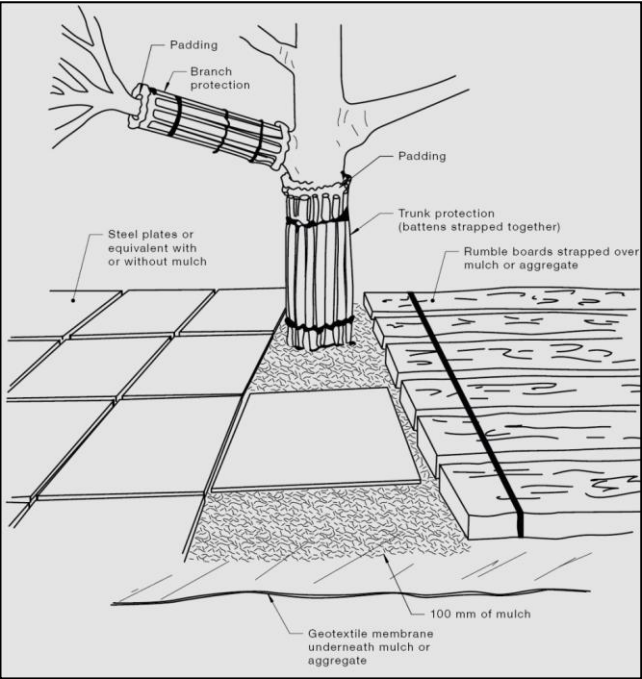
Where scaffolding is required it should be erected outside the TPZ. Where it is essential for scaffolding to be erected within the TPZ, branch removal should be minimized. This can be achieved by designing scaffolding to avoid branches or tying back branches. Ground below the scaffolding should be protected by boarding (e.g. scaffolding board or plywood sheeting) as shown in Figure 5. Where access is required, a board walk or other surface material should be installed to minimise soil compaction. Boarding should be placed over a layer of mulch and impervious sheeting to prevent soil contamination. The boarding should be left in place until the scaffolding is removed.”

- “Notes:
- 1 For trunk and branch protection use boards and padding that will prevent damage to bark. Boards are to be strapped to trees, not nailed or screwed.
 - 2 Rumble boards should be a suitable thickness to prevent soil compaction and root damage.”



4.5.3 Ground protection

If temporary access for machinery is required within the TPZ ground protection measures will be required. The purpose of ground protection is to prevent root damage and soil compaction within the TPZ. Measures may include a permeable membrane such as geotextile fabric beneath a layer of mulch or crushed rock below rumble boards as per Figure 4. These measures may be applied to root zones beyond the TPZ.”



Tree Protection Zones using AS4970:2009

Tree No.	DBH (mm)	DGL (mm)	Radius of full TPZ (x 12)	SRZ
1	780	680	9.4 metres	2.8 metres
2	160	250	2.0 metres*	1.8 metres
3	250	380	3.0 metres	2.3 metres
5	900	1400	10.8 metres	3.8 metres
13	250	350	3.0 metres	2.1 metres
14	700	1000	8.4 metres	3.3 metres
25	250	350	3.0 metres	2.1 metres
27	850	1400	10.2 metres	3.8 metres
28	300	400	3.6 metres	2.3 metres
29	130	200	2.0 metres*	1.7 metres
30	750	900	9.0 metres	3.2 metres
31	230	370	2.8 metres	2.2 metres
32	420	600	5.1 metres	2.7 metres
33	1380	1700	15.0 metres	4.1 metres
43	780	1200	9.4 metres	3.6 metres
46	200	350	2.4 metres	2.1 metres
47	1210	1400	14.5 metres	3.8 metres
48	680	1000	8.2 metres	3.3 metres
50	1400	1600	15.0 metres*	4.0 metres
51	700	900	8.4 metres	3.2 metres
54	610	1000	7.3 metres	3.3 metres
58	500	800	6.0 metres	3.0 metres
59	200	400	2.4 metres	2.3 metres
60	300	400	3.6 metres	2.3 metres
61	280	400	3.4 metres	2.3 metres

* Minimum TPZ is 2 metres – Maximum TPZ is 15 metres

Minimum SRZ is 1.5 metres

Source: AS4970:2009

Advanced Treescape Consulting

Arboriculturist & Horticulturist

A.B.N 30 138 200 388

Mobile: 0408 439 186

Office: 43 402 964

Fax: 43 405 089

**P.O. Box 7192,
KARIONG NSW 2250**

Email: advancedtreescape@bigpond.com



21st December, 2011.

Ms. Kimberley Munn & Ms. Tempe Bevan
Ku-ring-gai Council
Locked Bag 1056
PYMBLE NSW 2073

Dear Kimberley & Tempe,

Re: 573-585 Pacific Highway, Killara

As requested by Ku-ring-gai Council additional root mapping of Tree 27 was conducted on Friday, 16th December, 2011.

The additional trenches were dug on the edge of the proposed driveway closest to the subject tree. The 2 x trenches were 1.2 metres long and 400mm deep.

Trench 1, which is located between points A and B, (of attached plan) had 1 x root on the outer edge of point B of the trench. This root was 100mm in diameter at 300mm deep. It was located between 2.4-2.5 metres from the inside edge of the existing fence.

Trench 2, which is located between points C and D, (of attached plan) had 1 x root located 800mm from the inside of the existing fence. This root was 70mm in diameter at 100mm deep.

There were no other roots located within the trenches.

The results of the further trenching confirm the original results of the trenching conducted by Flamenco Landscapes.

The proposed piers for the proposed driveway will not impact any structural support roots (1st order) of Tree 27.

In view of the root at Point B the pier has been moved 300mm away. There will be adequate room for future growth of this root.

Principal: Russell Kingdom MIACA MAIH MAAL

Fully Insured: Public Liability 5M, Prof. Indemnity 5M & Personal Accident

Advanced Treescape Consulting is committed to providing a safe working environment for its employees in accordance with The Occupational Health & Safety Act NSW 2000.

The proposed works will have an acceptable impact on this tree and the tree's SULE will not be reduced.

The amenity provided by this tree will be maintained for the future.

I trust the above meets with your approval. If you have any queries please do not hesitate to contact me directly on 4340 2964.

Yours sincerely,

R. Kingdom

R. J. Kingdom MIACA MAIH MAAL
Grad. Dip. Hort.
Dip. Hort
Dip. Hort/Arboriculture
Arboriculturist & Horticulturist
Advanced Treescape Consulting

Digital Images



Figure 1 The site showing original root mapping trench and additional trenches



Figure 2 Showing Trench A-B and root in trench



Figure 3 Showing Trench C-D and root



Figure 4 Showing excavated trenches



Figure 5 Showing lower soil level where pier is to be constructed compared to the footpath

Root Mapping

