

CHAPMAN FLOOD PREVENTION WORKS

Response by Cooleman Ridge Park Care Group Inc to “Chapman Flood Prevention Works. Works Planning Report. October 2009”

1. The Group’s interest in the proposed drainage works.

1.1 Entity Notice (Attachment D to the Works Planning Report)

As stated by Helen McKeown at Land Management and Planning, Cooleman Ridge Park Care Group is actively involved in environmental work on the Reserve.

We therefore expect to be closely consulted both during the planning and execution of the proposed works. The author of this document may be contacted 7 days a week on 6231 7392 or via email to ryan@pcug.org.au.

1.2 About the ParkCare Group (“the Group”)

The Group has been looking after the Cooleman Ridge Reserve for nearly 20 years. Volunteers have chopped, slashed, planted, watered and weeded to restore it to grassy woodland. The Group has documented the flora of the Reserve, in particular, in some detail. The Group provides information to the public about the Reserve, via their website at <http://www.coolemanridge.org/>.

Some members have walked the Ridge regularly since Weston Creek was developed. The Group has nurtured all parts of the Reserve to a varying extent. Even when their own homes had burnt down in 2003, volunteers continued caring for Cooleman Ridge, encouraging regeneration of the many kinds of resilient plants that clothed it before white settlement.

In partnership with PCL (Parks, Conservation and Lands), community groups and schools, the Group has devised two Self-Guided Walking Trails. **Both of these Trails lie adjacent to the proposed works and will be affected by the proposed works.** (See Items 3.2 and 3.5 below). Each Trail has an official brochure (copies provided separately). PCL assists in producing these brochures, using information and illustrations mainly provided by volunteers. Group volunteers replenish supplies as needed. These Walking Trails have been very popular with the community.

This year, the Group was officially recognised as “Quiet Achievers” in the ACT National Land Care Awards.

Members have first-hand knowledge of the effects of previous interventions, as well as of the results of fire and flood. We have seen how human action and inaction have affected the local flora, fauna, usage and amenity of the Ridge.

We understand the need to prevent flood damage to properties downhill from the drain. We note that, of necessity, the proposed work generally follows the

existing track and drain. **However, our hands-on conservation role gives us an obligation to point out some negative effects of the proposed works on the natural values of the Reserve, on the approaches to the Reserve, and on safe access to the Reserve.**

2. General

The Group endorses the approach adopted by the designers. Removing man-made blockage points in the drain, ensuring it falls more evenly to collection points and making the batters less steep, makes sense. These improvements may well enhance safe access to the upper slopes in many instances. It appears that the proposed adaptation of the Management Road to be an initial overflow drain (correcting its camber, levelling its rises and falls, and stabilising its surface so that water is redirected away from downhill properties) should prevent repetition of flooding on the scale experienced in 2007.

(We understand that the long-term efficacy of the works will depend partly on adequate maintenance to remove silt and debris, but that this aspect of flood prevention is outside the scope of the present proposal.)

However, we have the following general concerns –

2.1 Access and Infrastructure

The Group has received verbal assurances from GHD representatives and from Peter Tait (ACT Procurement Solutions, TAMS), that any existing bridges, signage, and other pedestrian accesses etc which have to be removed or replaced, will be reinstated and/or returned to an acceptable standard. These assurances were made to the writer of this submission at the Information Sessions at Chapman Primary School. **The Group would like this confirmed in writing. We expect to be kept informed about what is proposed to be done, and when.**

2.2 Root damage to existing trees

The plan indicates that there will be stonework in places where there is no scope to adjust the uphill slope of the batter and also at some other points. **Existing larger trees should not have their roots cut or damaged.**

Apart from cutting, root damage can also occur due to traffic compaction, parking, fuel and oil spills, so trees in other locations should also be protected. **The Group urges fencing off vulnerable older trees and regenerating saplings.**

2.3 Trimming of trees

There are a number of trees listed for trimming. Some are along the track; others stand in the few suitable parking points along the Management Road where machinery would presumably be left during the works.

We oppose unnecessary removal of dead wood from trees. Even the smaller dead branches are important roosting and resting places for some birds, especially predators. The larger old branches are important habitat for hollow-nesting birds, some mammals and the insects on which they feed. Where the plan proposes removing dead wood from particular individual trees, we urge that only small branches be trimmed – not larger limbs.

If there are safety issues for workers in particular cases, we argue that fencing off a tree is preferable to damaging it. We also contend that the Eucalyptus trees native to this Reserve are not particularly prone to branch-drop.

2.4 Weed introduction

We note that the plan mandates standard hygiene measures for preventing works vehicles accidentally carrying weed seeds into the construction sites during the progress of the project. No doubt these protocols will be strictly observed. However, we expect to have additional weeds to deal with on the Ridge as a result of these works. Weed infestations follow roads and works as night follows day.

There should be a follow-up inspection by a weeds expert a year or so after each section is completed. If deemed necessary, infestations of weeds along the Management Road and around the work sites would then be mopped up.

3. Specific Concerns

The following comments are presented as if travelling along the Management Road from the Mt Arawang end of the Reserve to the Kathner Street entrance. Where possible, detailed locations are provided. In some instances, however, due to constraints of time, knowledge and ability, there may be some lack of precision. Please contact the writer for more details if needed.

We can also provide photographs on request.

3.1 Granite boulder outcrop and Tree 34 (drawing No 23-12917-C205)

This magnificent boulder and its guardian eucalypt are listed for removal. They form an outstanding feature of this part of the Reserve. **We oppose their destruction.**

(We note with surprise that tree 34 is listed as *Eucalyptus tereticornis* in the Tree Assessment Report. *Eucalyptus tereticornis* has not previously been found in the ACT, according to the ACT Plant Census.)

We can see that the flood control measures here face real difficulties, because there is such a steep and narrow stretch of land down to the power lines and property boundaries. **However, there are solutions other than removing the**

tree and its boulder fortress. For example, would it be possible to use stone work to form a wall on the downhill side of the road, to achieve the same effect of channelling run-off to a safe discharge point, without removing the boulder and the tree? Surely a low stone retaining wall, stretching along the road as far upstream as necessary, would serve both as a pleasant seat for walkers and an extra bank to increase the carrying capacity of the drain at this point?

We request further discussion on-site.

3.2 Self Guided Walking Trail – Chapman Primary School Segment (Drawing 23-12917-C206, especially chainage 1240 - 1290)

3.2.1 Trail Markers

Part of this Trail coincides with the Management Road and Drain. We are currently arranging with PCL for new numbered Trail markers, corresponding with features of the Reserve as published in the Trail Brochure. The markers will be installed along the length of the Trail. A new pamphlet box has been already been made, ready for installation. (There was considerable damage to the Trail during the 2003 fires.)

It appears that at Points 1 and 2 and at Points 9 through to 14, these markers will need to be removed while works are undertaken. **They will have to be replaced or reinstated after completion of works here.**

3.2.2 Potential damage to features of the Trail.

There is considerable potential for the features of the Trail at Points 1 and 2 and at Points 9 through to 14, to be obliterated or damaged by the works. This would then mean that we would have to repeat the whole exercise of selecting features, describing them, negotiating text for the brochure etc etc- very time-consuming indeed.

We request an on-site meeting to discuss potential impacts and how to minimise them.

3.2.3 Potential damage to Rocky outcrops and *Eucalyptus polyanthemos* trees Nos 74, 75 etc at chainage 1240 – 1290 (*I can't read this on the plan and the Tree Report doesn't help me*).

Just downhill from the Management Road at this point is an access track to the Trail. A handsome *E. polyanthemos*, surrounded by its attendant colony of Cherry Ballarts *Exocarpos cupressiformis* and regenerating Kurrajongs *Brachychiton populneus*, grows on the rocky knoll here. It provides a beautiful foreground to the view and a lovely entry point from the suburb below.

We seek reassurance that this area will not be disturbed, and request erection of an exclusion fence to protect it during the works.

3.3 Tree 404 (drawing No 23-12917-C212)

We do not understand why this tree has been listed for removal. It stands alone and does not appear to form more of an impediment to the works than other similarly situated trees. It is a Mealy Bundy *Eucalyptus nortonii*, a very long-lived species. (Although there are several of these in the Reserve, they are no longer common trees.) The dead and hollow branches provide nesting sites for birds. **We request that tree 404 be left alone, and if necessary fenced off to prevent damage.**

3.4 The Rocky knoll containing trees 519, 523, 524 and 525 (drawing No 23-12917-C212)

This rocky outcrop needs to be fenced off prior to commencement of works. We wish to be present when the fencing is being marked out and installed.

For 14 years, the area on and around the knoll between trees 519 and 525 has been tended regularly. In addition to the Eucalypts, the outcrop contains at least 23 different species of remnant native plants. These include flowers that are not common on the Reserve. The older trees in the rockery are presumably an essential component of the species diversity at this point.

Two kinds of orchids have been observed here: Donkey Orchids *Diuris sulphurea* and a pink orchid *Diuris dendrobioides*.

The Donkey Orchids number between 40 and 60 plants. The numbers have varied with fire and drought. To our knowledge, only one isolated orchid of this kind has been seen anywhere else on the Ridge in 20 years. This site holds an important remnant population, from which local re-colonisation can take place.

The less common pink orchid, *Diuris dendrobioides*, was observed in flower for 3 years running here prior to 2003 fire. We understand that this is one of the few locations these orchids occur.

We would be very concerned about damage to this area by road work, tree cutting, trampling and rock disturbance. Also, applying an impervious surface to the batters and drain may alter the long-term viability of trees 519 and 525 in particular. If they die, so may the many plants they shelter. If stonework is absolutely necessary on the batter, it should be executed with care and sensitivity, retaining the existing plants where possible.

3.5 Self Guided Walking Trail – Kathner St segment (drawing No 23-12917-C212).

3.5.1 Regenerating Kurrajongs

The regenerating Kurrajongs (*Brachychiton populneus*) at the track intersection are featured in the Self-Guided Walk brochure, Point 16. **We do not want them to be damaged or removed. We would like them**

protected. Although they may currently appear small and insignificant, they have sprouted from the roots of much older trees damaged in the 2003 firestorm. As often happens in our ancient and resilient plants, these plants are much older than their aboveground appearance would suggest.

Not only are Kurrajongs important bush tucker plants, their foliage was important to early settlers on this land as drought fodder for cattle. They are heritage plants both for European and indigenous Australians. And they are not fire prone, so they are very suitable trees for areas close to suburbia. We are encouraging their regeneration.

3.5.2 Potential for erosion below the Kathner St end of the proposed new drain

We note that the proposed works are likely to increase the flow out of the drain and into the Reserve and the Kathner St Dam. In principle, we welcome this – members have noted a gradual drying out of the fenced regeneration area over the years.

More water may contribute to both the health and the variety of native plants in this part of Cooleman Ridge. This is important to community use of the Reserve, because Kathner Street is the most easily accessible of all entry points. It attracts many visitors and people with an interest in the bush.

However, the soils of Cooleman Ridge erode easily, particularly when exposed to heavy rain when drought or fire removes vegetation. Additional flow may unravel some of the progress we have made in bush regeneration.

Over the last two winters, volunteers took advantage of the drought conditions to remove the introduced tall perennial pasture grass *Phalaris aquatica* from the main drainage line in the fenced regeneration area. This was done by hand, using mattocks, with clumps piled in windrows across the slope to minimise the chance of erosion while native plants re-established there. (The lovely Weeping Rice Grass *Microlaena stipoides*, Slender Mint *Mentha diemenica* and Native Geranium *Geranium solanderi* responded particularly quickly. At the same time, we successfully planted River Tussock *Poa labillardieri* to slow run-off, catch debris and enhance habitat for invertebrates, amphibians and small mammals.) In addition, work was undertaken to halt a gully which threatens our only colony of Nodding Chocolate Lilies *Dichopogon fimbriatus* (currently flowering) and to stabilise the eroding walls of the dam. Our investment of time, effort and love has been considerable.

We believe that the additional water to be discharged into the area after so many years of lower flows is likely to cause renewed erosion at these vulnerable points and might even carve new gullies.

We are very concerned that the current proposal for discharge would be inappropriate both in hydrological and aesthetic terms. **We do not want hard channels and concrete lined pools.** We therefore urge reconsideration of this matter. Is there a solution that harmonises with the Reserve but does not

threaten it? For example, as discussed with Peter Tait, there may be potential for creating a series of leaky ponds commencing at the drain outlet, and cascading down to the dam, to spread the flow into the gully over a longer time and avoid erosion.

We wish to be closely consulted about this issue, both at this planning stage and through the construction phase.

3.5.3 Access, Amenity and Erosion – grade, surface and alignment of the Management Road, Kathner Street Entrance

The first part of the Management Road apparently falls outside the scope of the proposed works. However, works-vehicles will access the construction sites at the Kathner St end of the Reserve via this Road.

This section of finely-gravelled road is misaligned, which gives it inappropriately steep grades and makes it prone to erosion. We are concerned that this section will get additional usage without rectification of its alignment, grade and surface. Unrectified, the damage inflicted will impact adversely on public amenity well into the future.

The newest segment at the Kathner St end of the Self Guided Walking Trail takes the form of a rough foot-track skirting a well-vegetated rocky knoll. It allows walkers to avoid the very dangerous steep section of the road and look out over regenerating grassland, rather than watching their feet at every step!

In 2009, contractors at this point smashed the graceful old tree at the upper turn-off, obliterated the bypass walk entry points, and made the formed surface of the road even more treacherous to walkers and cyclists. Further, it has made it harder for walkers to find the way in and out of the bypass. This has distressed us: needless destruction disheartens volunteers.

We would welcome discussion about ways in which the alignment, grade and surface of this section may be improved.

END