

AMENDED

Arborist's Comments: Cycle Path Southleigh Road to New Lane (Hayling Billy Trail) via Warblington School. (Amendment)

These comments are with reference to drawing HI52/188 "*Proposed Cycleway Route Warblington School Southleigh Road to Hayling Billy Trail Option B Cycle Route*" which indicates the positions of various trees and tree groups.

23 FEB 2011
RECEIVED

SUMMARY:

1.0 I would describe this proposal as having a LOW impact on tree cover at the site. By this I mean that although numerous trees will have to be removed, *no trees having any long-term value or growth & development prospects will be removed*. On the other hand, important screening will be lost (most notably by removal of **G5A & G5B**). Approximately 25 trees would be lost but there is probably only scope in the areas immediately around the proposed development to establish half a dozen or so replacements, resulting in an overall permanent reduction in tree numbers.

1.1 From an arboricultural perspective I am able to SUPPORT this proposal in that it allows for retention of, arguably, the only trees of real importance on the proposed cycleway route, which are T3, a large mature ash and G6 a mature hornbeam screen.

2.0 The proposal requires the removal of the trees listed in Table 1

Table 1 - Trees required to be removed

Tree categories (Cat): A = highest importance; C = lowest importance R = ideally remove

Age: M = mature Y = young

Overall Condition: (OC): A = healthy & vigorous; B = satisfactory; C = declining; D = poor

Remaining useful life expectancy, estimated (RULE): L = 40 years+; M = 20-40 years; S = 10-20 years; VS = less than 10 years

Tree Identity	Tree Species	Cat	Age	OC	RULE	Reason/Justification for removal
Leyland Cypress at W end G6		R	M	D	S	species inclined to be unstable//this specimen multistemmed from ground level, possibility of failure of stems onto railway//will lose significant quantity of roots when cycleway excavated
Group 5B	Predominantly Lawson Cypress	C	M	D	S	in direct route of cycleway//poor quality//no development or improvement potential//will become hazardous to railway within 5-10 years
Group 5A	Norway Maple x 5 Field Maple x 4	R	Y/M	D	S	in direct route of cycleway//structural condition of most is poor as result of no maintenance of stakes & ties, rapidly developing risk of breakages onto railway
T4	Beech	C	Y	B	L	in direct route of cycleway//small insignificant tree - only survivor of row planted by school students c2002
T3.1	Sycamore	B	M	B	L	partially in route of cycleway//shares crown space with T3 so visual effect removal will be limited//will allow T3 to develop better

3.0 In addition I am recommending the removal of trees listed in Table 2

Table 2 - trees recommended to be removed

Tree categories (Cat): A = highest importance; C = lowest importance R = ideally remove

Age: M = mature Y = young

Overall Condition: (OC): A = healthy & vigorous; B = satisfactory; C = declining; D = poor

Remaining useful life expectancy, estimated (RULE): L = 40 years+; M = 20-40 years; S = 10-20 years; VS = less than 10 years

Tree Identity	Tree Species	Cat	Age	OC	RULE	Reason/Justification for removal
T9	rowan	R	M	D	S	very poor condition, can secure replacement/s
T10	copper beech	R	M	D	S	very poor condition, can secure replacement/s

4.0 Important Note: G5A & G5B collectively provide important screening of the visually unattractive sports hall and other buildings, as viewed from residential areas to the north of the railway line.

5.0 This leaves the trees listed in Table 3. Some of these trees require special measures to ensure their survival in good condition.

Table 3 - trees to be retained

Tree categories (Cat): A = highest importance; C = lowest importance R = ideally remove

Age: M = mature Y = young

Overall Condition: (OC): A = healthy & vigorous; B = satisfactory; C = declining; D = poor

Remaining useful life expectancy, estimated (RULE): L = 40 years+; M = 20-40 years; S = 10-20 years; VS = less than 10 years

Tree Identity	Tree Species	Cat	Age	OC	RULE	special protective measures required
T3	ash	A	M	A	L	chestnut paling wrap + no-dig path construction
T7	cherry	C	M	C	VS	heras fencing
T8	copper beech	B	M	D	M	heras fencing
T4.1	ash	B	M	B	M	chestnut paling wrap
G6	hornbeam - row of	A	M	A	M	heras fencing + partial hand excavation
G2	hawthorn x 3 elderberry x 1	C	M	B	S	chestnut paling wrap
G1	mixed species copse	A	M	B	L	existing chain link fencing left intact

DETAIL:

6.0 As the cycle path enters the school grounds from Southleigh Road it passes between **T10** and **T9** - Table 2. This is an ideal opportunity to replace these two end-of-life trees.

7.0 Continuing West, the path passes south of cherry and Copper Beech **T8 & T7** - Table 3. These will not be directly affected but will require protective fencing to guard against accidental damage by construction machinery.

8.0 The path then passes very close to the south of **G6** - Table 3 - a row of hornbeams with a solitary Leyland Cypress at the west end. The existing car park surfacing is being utilised "as is", hence excavation is only required at the West end of the row, affecting just the most westerly hornbeam and the Leyland Cypress. The Leyland Cypress should be considered separately as a category R tree and removed. I support its removal on the basis that it is multi-stemmed from ground level, with weak unions, added to which Leyland generally is not renowned for being a wind-firm species. It is within falling distance of the railway. Again it is an ideal opportunity to gain a better tree elsewhere on the site.

8.1 To minimise root damage to the most westerly hornbeam, excavation within 3m of the west end of the car park surfacing must be carried out using hand tools only. All roots of 25mm diameter or greater must be severed cleanly with a sharp saw. This excavation and root pruning must be supervised by a suitably qualified arboriculturalist. Supervised hand-digging is of the utmost importance because the hornbeam is within falling distance of the railway and will almost certainly require some root pruning. **G6** will require protective fencing.

9.0 The path then passes to the north of the "old swimming pool area" and the sports hall, where it requires the complete removal of **G5A** and **G5B** -Table 1. These are low quality trees but they have high screening value. Space will not be available to establish replacement screening material.

10.0 **T4.1** - Table 3 - is not directly affected by the proposals but will require protection against accidental damage by construction machinery.

11.0 **T4** - Table 1 will have to be removed.

12.0 Further West, the path negotiates the retained **T3** -Table 3. Extensive consideration has been given to the exact route of the path here resulting in the apparently non-negotiable route indicated. The factor which pushes the path into the 12m radius Root Protection Zone (RPZ) is the proposed placement of sports pitches and associated fencing. The solution here is for the cycle path to be of a standard 100% no-dig construction, i.e. built up onto existing unaltered ground surface and retained at the edges with pegged boards. The levels within the RPZ are, if anything, favourable to this solution - the area around the tree corresponding approximately to the RPZ is slightly dishd, or concave. It has not been possible to retain **T3.1** though as it is partially within the route of the cycleway.

12.1 As there will be no excavation or construction within the RPZ and as the cycleway will be constructed to within approximately 1m of the base of **T3**, it is not appropriate to require full specification protective fencing. However the tree must be protected against accidental knocks and impacts, by the use of 3 thicknesses of 2.4m height chestnut paling fencing wrapped directly around the main stem and wired securely in place. Construction vehicles must be kept strictly outside the RPZ, which is a 12m radius around the base of the tree.

13.0 From the point where the cycleway exits the RPZ of **T3**, it will be a temporary construction. This is because the remainder of the site from here on is designated for housing development for which there are as yet no detailed plans. There are three possible routes for the temporary section:

13.1 (i) The South route - the cycleway, having passed **T3**, turns South at the base of the short slope, turns West to run at a minimum of 4 metres North of the garden boundaries, then turns North and then West again to exit onto New Lane by running outside of the chain link fencing on the South edge of **G1**. This has no implications for trees provided the chain link fencing remains intact.

13.2 (ii) The Middle route (this is at present the favourite option) - the cycleway, having passed **T3**, heads in a straight line diagonally across the remainder of the site, to exit onto New Lane by running outside of the chain link fencing on the South edge of **G1**. This has no implications for trees provided the chain link fencing remains intact.

13.3 Almost at the Western end of the route, as observed in the Summary above, the cycleway appears to chop off the corner of **G1**, which would involve the removal of **T1** (category B sycamore) and a number of associated mature hawthorns and other shrubby trees and undergrowth. This represents the loss of valuable trees and habitat, as well as an incursion into a Nature Reserve managed by the nearby Fairfield Primary School, and also incurs additional costs, not just for tree removals but also for removal and replacement of chain link boundary fencing which secures the Nature Reserve

13.4 (iii) The North route - the cycleway, having passed **T3**, follows the North boundary, then turns South to run along the East boundary of **G1** and then exits onto New Lane by running outside of the chain link fencing on the South edge of **G1**. This temporary route will pass **G2** and I recommend it should be designed to curve gently around the Group to be a minimum distance of 3m South of it. The trees themselves are of very low importance but have high habitat value for nesting birds. Only one of these trees is on the site-side of the railway fencing and I recommend this is protected with chestnut fencing in a similar fashion to **T3**. This route has no other implications for trees provided the chain link fencing protecting **G1** remains intact.

14.0 Summary of Protective Fencing requirements:

14.1 For **T7 T8** and **G6** this must be in the form of "Heras" type panels, on concrete feet, but made immovable by the addition of scaffold pole bracing, as illustrated on drawing HI52/188 and in the exact positions illustrated.

14.2 **T3 T4.1** and the tree in **G2** which is south of the railway fencing require 3 thicknesses of 2.4m height chestnut paling fencing wrapped directly around the main stem and wired securely in place to prevent against accidental impacts.

14.3 Protection of **G1** will depend upon existing chain-link fencing being kept intact.

15.0 Replacement trees will be required for **T10 T9 T4** and the **Leyland Cypress** in **G6** - eight replacements in all. I recommend:

Acer campestre "Elsrijk" x 3
Fraxinus pennsylvanica "Summit" x 3
Thuja plicata x 1
Thuja plicata "Zebrina" x 1

to be planted at positions to be agreed. I recommend the use of 14-16cm girth Standards, container grown.

16.0 "No-Dig" surfacing within RPZ of **T3**. The general specification for this is as follows:

- manually remove all loose surface material and vegetation including roots to a maximum depth of 100mm
- lay construction textile
- build up path to required thickness with various aggregates
- finish with asphalt/macadam, cambered to direct surface water towards base of tree
- retain edges with timber, the timber to be pegged in place

16.1 Planning Permission to be conditional upon submission of a detailed specification for "No Dig"

17.0 Fencing within RPZ of **T3**

17.1 Construction of fencing around the part of the site retained by Warblington School requires a section of fencing to be erected within the RPZ of **T3**. The section of fencing within the RPZ will be 17-18m long. The fence pillars will be at 3.1m spacing. This has been designed to place one pillar right on the W edge of the RPZ, 5 pillars inside the RPZ and one pillar just outside the E edge of the RPZ. My advice is that this will have no measurable effect upon **T3**.

SIGNED:

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