

OUTLINE PROPOSAL FOR A TREE PLANTING SCHEME ASSOCIATED WITH THE INSTALLATION OF THE M40 NOISE REDUCTION BARRIERS AT LANE END

Summary

This is an outline proposal for a community led tree planting project to restore and deepen an existing belt of woodland alongside the M40 at Lane End. The aim is to complement the anticipated benefits of the Noise Reduction Barriers (due for installation in autumn/winter 2017), by enhancing noise reduction for local residents and walkers, whilst providing biodiversity enhancement. There is potential also for the project to be used for monitoring purposes (to assess the impact on noise reduction) and as a War Remembrance Woodland. Go ahead is subject to agreement of all necessary parties, all necessary permissions and securing of resources.

Location

'Four fields' along the southern side of the M40. This is adjacent to the end of the planned noise reduction barriers to be installed along the M40 through the built up area of Lane End.

Description

The site is approximately 300metres in length and runs approximately east-west, immediately alongside the M40. Currently there is a belt of woodland approximately 15m depth, of which roughly half is within the M40 boundary fence and half is in a strip between the M40 fence and the field fence. This outer strip includes a footpath, approximately 2m width.

The inner strip (adjacent to the M40) is of mixed species with Oak, Ash and Pine as the main canopy species. There are significant gaps in the tree cover. Disease risk to the existing tree cover, particularly *Chalara fraxinea* (known to be in the local area), threaten to increase the gappiness of the tree cover.

The footpath is very noisy, due to the proximity to the M40 and the gaps in the inner strip tree cover. For example, on a site visit, normal conversation was impossible and it was necessary to shout to be heard. The path will often be in significant shade due to the wooded cover on both sides.

The outer strip (between footpath and field) is a more recent planting (reportedly approx. 20 years ago), comprising shrub species such as field maple, holly, hazel, dogwood and hawthorn, with no canopy species. There are no obvious areas of failed planting, with the only noticeable gap being found at the mid-point (where the field hedge meets the planting area), where no trees appear to have been planted.

A post and rail fence divides the planted area from the fields.

Purpose of proposed scheme

We propose a programme of tree planting on a stretch of land part publicly owned (Highways England) and part privately owned land that would:

- Enhance the noise reduction benefits of the hard barriers by providing some level of noise interception beyond the Western end of the hard barrier at Lane End proposed by Highways England.
- Enhance the wildlife value of the woodland belt by increasing the tree cover within the existing strip and by increasing the depth of the planted area, with mixed, native species.
- Enhance the partial visual screening provided by the existing tree belt.
- Increase resilience to disease risk by achieving a diverse species mix.

There is potential also to:

- Enhance visitor experience, if the existing line of the footpath can be included within the planting area, with the footpath re-routed to outside a widened woodland belt (further away from the M40).
- Provide an opportunity for monitoring the impacts on noise of different species mixes, planting densities and depths, by planting in blocks along the 250-300m stretch.
- Use the expanded wooded area as a Remembrance Woodland, marking 100 years since World War 1.

The proposal is consistent with the goals of M40 Chilterns Conservation Group (M40CEG) and has its full support.

Proposal

Establishment

We propose (subject to all necessary agreements, permissions and resources) to:

1. Plant mixed native species to fill gaps within the existing inner strip.
2. Plant mixed native species to extend the wooded strip into the field by an additional 10m.
3. Relocate the footpath to outside the widened wooded strip (an additional 2m).
4. Install a new post & rail fence between the re-located footpath and the field (12m into the existing field).

Tree planting: Species selection, density and numbers

Species selection should achieve:

- Biodiversity gain – native species, complementing but extending the existing range of species found in the existing wooded strip).
- Resilience – a variety of species to mitigate disease risk, vulnerability to extreme conditions etc.
- Year round leaf cover, to provide year round visual screening and noise reduction.
- Avoid any risk of poisoning to livestock.
- Potential to link individual species to the Remembrance theme: e.g. by planting 1 Oak standard tree (or other canopy species) for each name on the Lane End War Memorial.

Planting density should be set at a high density rate of 1 tree per 2m, as it is assumed that higher density planting will increase the noise and visual impact.

Length (300m) x Depth (10m) x 2m spacing = 150 x 5 trees
 Additional trees for gapping up on M40 embankment = Est. 100
Total = 850 trees.

Species	Remembrance	Year round leaf cover	Proposed number
Oak	64 (standards)		64
Beech		y	75
Holly		Y	137
Hazel			150
Box		Y	62
Field maple			150
Wild cherry			56
Crab apple			56
Hawthorn			50
Buckthorn			50

Footpath

A footpath currently runs alongside the M40 on the Motorway side of the existing planted strip. This is not an historic footpath route but one that was created when the M40 was built. If the footpath were moved to the field-side of the new planting area (but within a new fence line), this would improve the walker experience by placing them on the protected side of the overall wooded area (and taking the path out of the shade, providing an open, south-facing aspect with good views across to Lane End village).

Fencing

The existing boundary fenceline between the trees and field will be removed, to promote a 'single block' feel to the expanded wooded area.

A new fenceline must be established between the new planting and the remaining field area. This is to be to the same specification as the fencing being installed (by the landowners) elsewhere on the holding, expected to be post and sheep netting.

See map for proposed layout.

On-going Management

These would be typical for newly planted woodland.

- Annual weeding/mulching to reduce competition.
- Mowing grass between trees in early years as necessary to aid tree establishment.
- Checking for successful establishment ('beating-up'), re-stocking as necessary.

Details of work items and cost estimates are given in Annex 1.

Responsibilities

It is assumed that the land would remain under current ownership, with owners assuming all on-going management responsibilities. Some form of long-term agreement or covenant would be required to ensure retention of the woodland into the long term.

Funding sources

Potential sources of funding / support might include:

- Wycombe District Council – funds available for environmental works in Lane End associated with the M40 Noise Reduction Project.
- Woodland Trust – free supply of trees and guards
- Chiltern Rangers, Chilterns AONB, Natural England – can all be approached by LECG.
- Highways England - study of natural barriers for reducing traffic noise

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On behalf of Lane End Conservation Group

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ANNEX 1 – DRAFT SCHEDULE OF WORKS

Establishment

Location • Work item	Detail	Who	Cost estimate ¹
M40 embankment			
• Site Preparation	Clear brash in areas for replanting	HE	£100
• Gap up	Plant up gaps (estimate 100 trees)	HE	Supply £45 Planting £145
Footpath			
• Fencing to block access to existing footpath line at both ends.	Post and rail + sheep netting. 5m x2 (both ends of path)	Contractor	£49
• Planting for long term blockage	10 x Hawthorn x 2 (both ends of path)	LECG	Supply £9 Planting £28
• Access points to new path	2 x Kissing Gate 1 x Stile (across hedge at mid point)	Contractor	£600 £125
• Signage	Explanatory notice (weatherproof) x2 Footpath signage x4	Contractor	£700 £240
• Bench	Wooden (at approx mid point)	LECG	£410
Existing planting			
• Remove existing fence	300m length post and wire. Remove and dispose.	Contractor	£900
New planting			
• Supply 850 trees and	64 Oak standards	Contractor	Supply £383

¹ Based on National Forest, Changing Landscapes Scheme: Standard Costs 2017

spirals/guards	786 whips (mixed species)		
<ul style="list-style-type: none"> Mark out new fence line (12m into field) and planting area (10m into field). 		LECG / Landowner	£200
<ul style="list-style-type: none"> Instal new fence line 	300m Post and rail + sheep netting.	Contractor	£1470
<ul style="list-style-type: none"> Plant 750 trees. 	Dig holes, plant and spiral guards	Contractor – Holes LECG - plant	Oak standards £192 All other trees £2264
<ul style="list-style-type: none"> Mulch around 750 trees 	Bark chip (850 trees)	LECG	£553
<ul style="list-style-type: none"> Strim new path (2m width between new planting and new fence. 		Contractor	£69
TOTAL			£8,482

Management

Site check (Beat up survey)	1 per annum	Landowner	£200
Mowing between trees	2 per annum	Landowner	£450
Replenish mulch.	1 per annum	Landowner	(10%) £20
Replace any failed plantings	Years 1,3 and 5	LECG	(15% Yr 1) £29 (5% Yrs 2,3) £10
Check and maintain new access route and furniture	1-2 times per annum. (assumed 2x annual strimming)	Landowner	£138
TOTAL			£837

Potential additional areas of cost:

- Promotion and publicity
- Securing of approvals.
- Management agreement/Covenant to secure long term management arrangements.
- Any additional works associated with any monitoring scheme.
- Higher specification requirements (eg to fencing, guards etc)
- Any footpath surfacing.