

Devon hedges and development 1: moving hedges

Devon hedges can be moved, that is translocated, and this is an option which should be considered rather than removing them. Experience shows that moving hedges is often a practical proposition within developments such as road widening or around new buildings. This is particularly true for those Devon hedges where the earth bank is faced with turf rather than stone.

This guidance note is intended to help developers, planners, landowners, consultants and contractors reach decisions about when it may be appropriate to move a Devon hedge and how to achieve this.

The guidance does not include details on the planning and regulatory processes that may apply or need to be considered - relevant local authorities can advise on these.

Why move hedges?

The only way truly to conserve a Devon hedge is to retain it in its original position and setting: translocation should be seen as a last resort. However, where retention is not possible, moving a Devon hedge can offer the following advantages over outright removal:

- The hedge is likely to be more in keeping with the surrounding landscape than a new boundary feature such as a fence or unbanked hedge.
- Where works are carried out well, the integrity and visual character of the original hedge can be maintained, together with much of its cultural, environmental and landscape value.
- A translocated hedge will establish and grow in its new position more quickly than a new hedge.



Figure 1: Hedge moved successfully using the incremental dragging technique. ©Peter Chamberlain

- Translocation retains the genetic stock and seed bank of the original woody and herbaceous plants.
- The retention of the original and nutrient poor soils can help to reduce weed infestation problems.
- It can be cheaper than establishing a new hedge.

Selecting hedges for moving

When faced with the possible loss of a hedge, consider first whether there is any way in which the hedge can be retained by incorporating it into the design of the proposed development. If not, consider whether moving the hedge may be feasible.

Moving a hedge is most likely to be the favoured option where:

- The hedge is of particular landscape or wildlife importance. It may, for example, be recognised as an 'Important Hedgerow' under the Hedgerows Regulations.
- The hedge is a true Devon hedge, that is one consisting primarily of an earth bank, usually with shrubs and trees growing on top.

- The original bank is turf faced rather than stone faced.
- It is in good condition, having a well-defined and maintained bank rather than one which is slumped and gappy.
- The hedge is to be moved only a short distance, usually no more than 5 m or so, as moving it further increases risk and expense.
- The surrounding ground is level, although hedges can be moved across moderate slopes.
- The work can be carried out during autumn or winter months when hedge growth is dormant and the ground is sufficiently moist, but not frozen or waterlogged.

Translocation is unlikely to be suitable where:

- The hedge's value is primarily historic: this is unlikely to be conserved through re-positioning.
- It contains more than the occasional mature tree.
- The soils are light or sandy: the heavier the soil, the more stable the bank will be.



Figure 2: Remove slumped soil and turf from the base of the hedge, on the side facing the direction of movement. ©Peter Chamberlain

Techniques for moving Devon hedges

Although there are probably as many variations in technique as there are contractors, there are three main options. The first two listed below are preferred methods but are only suitable where the hedge is to be moved a short distance (less than 5 m) over fairly level ground. The third is more suitable for moving hedges further or over uneven or sloping ground. Generally, the larger the machinery used, the less damage will ensue.

1. Dragging sections

The hedge is split into sections which are re-joined after moving, limiting major disturbance to the joins.

2. Incremental dragging

The entire hedge is dragged (or pushed) in very small, incremental, stages without breaking it. If done well, this is the best technique and can give superb results, but it is a slightly slower and more skilled operation than dragging sections.

3. Lifting and rebuilding

Lifting whole chunks and using them to rebuild the hedge.

Preparatory works

Hedges identified for translocation, and receptor sites, should be prepared as follows, regardless of which technique is applied.

- Cut back much of the existing woody growth, outside the bird breeding season (March to mid-September). Flailing is appropriate where the hedge contains small stems whilst coppicing should be used with more mature growth.
- Cut away slumped soil and turves from the base of the bank, on the side facing the direction of movement (Figure 2). The turves should be set aside for use in finishing the translocated hedge.
- Prepare the ground on the receiver site by removing turf and creating a shallow, level receiving trench.

Technique 1: dragging sections

Machinery

Tracked mechanical excavator with a 360° swing shovel (usually 13 tonne or larger) and a selection of buckets.

Method

1. Mound soil against the face of the bank facing the direction of movement (Figure 3). This will help to prevent any disintegration or toppling of the bank when being moved. The mounded soil should reach at least half the height of the bank.
2. Cut into the base of the face of the bank on the side facing away from the direction of movement. Do this with a wide bucket, up to a third of the bank width (Figure 4). This will dislodge the bank and ease initial movement.
3. Once each section of the bank starts to move freely, reverse the bucket so that the bank is pulled by the back, flat aspect of the bucket.
4. Drag back the full height of the bank in bucket-sized widths.
5. Continue this process sequentially along the hedge, pulling each section back by the required distance to match the adjoining section.
6. Repair any minor collapses and re-face bare sections of bank with cut turves as necessary.



Figure 3: Mound soil against and at least halfway up the bank, on the side facing the direction of movement. ©Peter Chamberlain



Figure 4: Use the excavator bucket to cut into the side of the hedge facing away from the direction of movement. ©Peter Chamberlain



Figure 5: The hedge can be pushed or pulled. ©Peter Chamberlain

Technique 2: incremental dragging

Machinery

As for the dragging sections.

Method

1. Follow the first three steps given for dragging sections above.
2. The bank can be pushed (Figure 5) or pulled. If being pulled, two people are required, one to operate the excavator and one on the other side to guide the precise movement of the bucket.



Figure 6: Move the hedge in very small steps.
©Peter Chamberlain

3. Move the bank in tiny increments, continuously tracking up and down the selected length, to retain its original structure at all times (Figure 6).

Technique 3: Lifting and rebuilding

Lifting and rebuilding is not a preferred approach as it requires taking the bank apart before rebuilding it. Nevertheless it can be successful where either a hedge needs to be moved by more than 5 m, or where the ground is sloping or the bank irregularly shaped. In such circumstances it may, however, be preferable to create a completely new hedge due to the expense and complication of moving the original one.

Machinery

Four-wheel drive mechanical excavator with front four-in-one loading bucket and 180° backhoe with a selection of buckets.

Method

1. Use the four-in-one bucket to remove the top layer of bank to the depth of the main fibrous root-ball. Place this material to one side.
2. Remove the remainder of the bank down to ground level, preferably as two bucket loads, transferring these across and placing them within the receiving trench, ensuring that their positioning replicates the original structure of the bank.
3. Place the top section of the bank onto the newly created base.
4. Continue this operation in sequence, shaping the newly constructed bank as necessary.
5. On completion, use the cut turves to face up the bank where needed. For guidance see section 13, *Devon hedge management 1: maintaining and repairing turf and stone facing*.

Case study: widening of the B3264, Kingsbridge

In 2004, an important highway link into Kingsbridge (on the hill leading directly into the town) was widened as part of a Devon County Council highways improvement scheme. The DCC environmental audit process recognised that it would be preferable to translocate the bordering hedge rather than remove and replace it with a fence or an unbanked hedge. Subsequently DCC commissioned BK Widger & Sons and K & J Plant Hire to move the hedge using Technique 2, incremental dragging, an average 1.5 m but in places up to 3 m. An impressive 1 km was moved in total. Today, it is virtually impossible to detect that the hedge has been repositioned.