Root Barriers:

A personal view

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I don’t pretend to be an expert in the use of root barriers or root deflectors.

Root barriers/root deflectors are offered by numerous manufacturers.

The theory is a simple one which suggests that tree roots can either be stopped from, or diverted away from, areas where tree roots cause damage to hard surfaces or building structures.

These can be either simple or complex or somewhere in between.

The problem manifests itself in many ways

And it is not for me to claim that any of the solutions on offer work or not

There is certainly evidence, some would say overwhelming evidence, that such solutions work, and if they mean trees can be planted successfully then who am I to contradict.

However, it is perhaps worth approaching the solutions with caution and introduce a few thoughts for consideration.

- All of the solutions involve a product and therefore ‘product mythology’.
- All of the solutions have only been around for 20-30 years which is no time at all in tree time.
- Root development and growth is opportunistic with roots growing into spaces where conditions are favourable.
- Any barrier will inevitably influence radial development of the root system.

It is widely accepted that tree roots are opportunistic and develop where soil conditions are favourable. This is usually to a depth of around 900mm where gaseous exchange is optimised. Below this depth generally anaerobic conditions begin to develop and it is generally accepted that root development is reduced or non-existent.

It is arguable that root barriers that are deeper than 900mm and completely surround a tree in fact containerize that tree in the landscape.

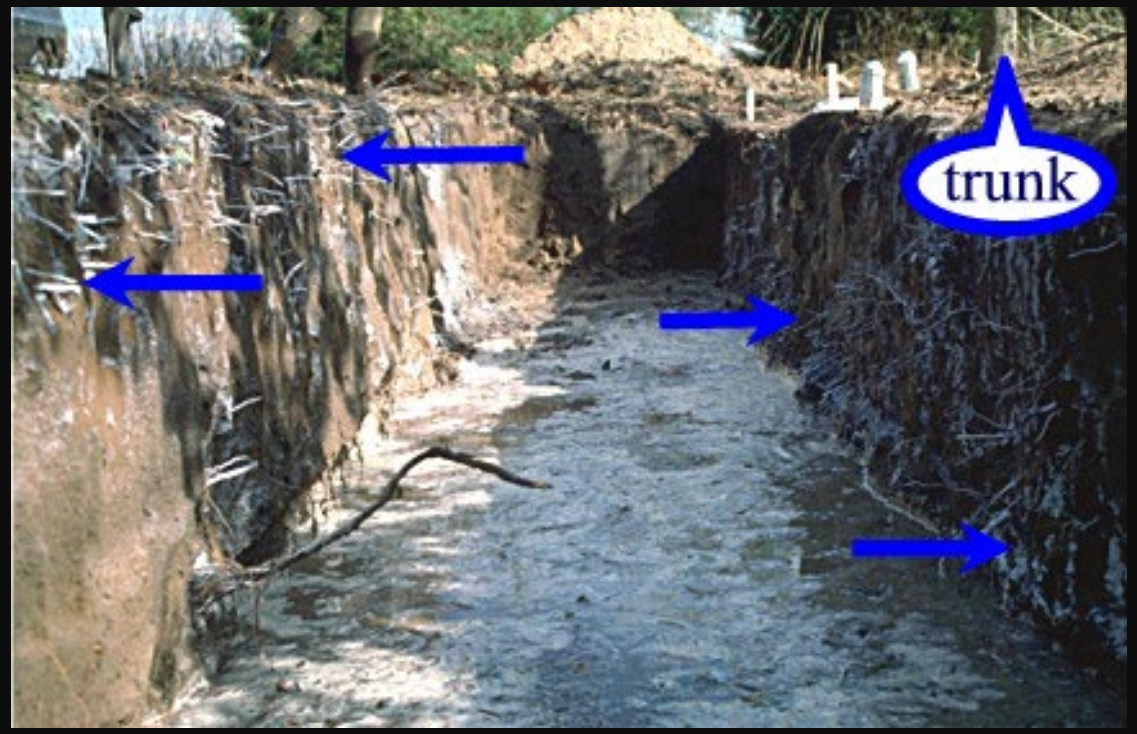
And we are all aware of the problems associated with containerisation and root circling

And this can happen on scale: San Sebastian, Spain.

Root barriers to a depth of more than 900mm along just one or two planes will effectively stop root development in that direction. This is of course their purpose but there are potential implications in disturbing the radial development of the tree particularly as it grows and develops.

And the consequences can be dramatic

If the root barrier is shallower than 900mm there is the possibility that tree roots will grow under the barrier and then grow up towards the surface again.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However, it has to be accepted that if we want trees to grow in difficult urban spaces, in harmony with hard surfaces, then interventions may be necessary. The use of root barriers/root deflectors is a perfectly reasonable intervention to make, and there is real evidence that they work.
As always, time will tell and the consequences at this moment are unknown.

In conclusion:

During the production of BS 8545 it was often stated that planting trees in the urban landscape and achieving a balance between trees and hard surfaces is, and remains, an ‘intellectual exercise’.

There is no recipe or formula and each site will have its own constraints, demands and potential solutions.

There is no ‘cut and paste’ solution.

Thanks for listening