



New trees in surfacing

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TREE CONSULTANCY

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# New trees in surfacing



New trees planted into large expanses of hard standing often die or look unhealthy because of poor below-ground preparation. These failed trees create a subconscious impression of decay and deprivation that ultimately provides the definition between affluent neighbourhoods, where people want to live, and slums that the less fortunate cannot escape from!



This dying rowan could have been a valuable asset to this commercial frontage if it had been planted into properly prepared soil with the correct surfacing above.



Failure to provide root deflectors when this tree was planted means that its roots are now damaging the paving. Severe root pruning that will shorten the life of the tree is a common consequence when there is not sufficient room to keep the roots.



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## Amsterdam case study



During a visit in 2005, Amsterdam City Council kindly agreed to excavate around this elm to show us why it had not caused any adjacent surfacing damage despite having been planted for seven years. It was planted into structural tree soil with permeable surfacing above.



Heavy duty root deflectors installed around the root ball (black plastic) when the tree was planted have been effective at preventing large surface roots near the trunk.



All the roots are forced to grow downwards and emerge into the surrounding soil below the black root deflectors.



Further excavation and removal of the root deflectors shows the main structural roots emerging into the surrounding soil at about 60cm below the surface where they do not damage adjacent surfacing.



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## Reading case study

Reading Borough Council conditioned the planting of four new semi-mature trees on this development, with a specific requirement for structural tree soil to be used beneath the surfacing. This carefully formulated soil mix has a high proportion of angular sand, which offers sufficient structural support for cars to use the surfacing above but also allows roots to grow through it. It provides a very effective solution to the problems of having trees and parking close together.



Existing services were covered with a geo-textile membrane and the special structural tree soil filled the planting pit.



Once the main construction was completed, the linear planting pit was excavated to a depth of 1m in the parking area.



The four new root-balled trees were planted into the planting pits that lined up with landscaping strips between the parking bays.



The new surfacing was installed on top of the tree soil and the trees begin to fulfil their planned landscape-softening role with very little loss of parking space. They will also provide much welcomed shade to the parked cars in the heat of summer.

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## Poundbury case study



Without special below-ground preparation using structured tree soil, these trees would not be thriving as they are.



Structured tree soil allows trees and parking to occupy the same space, which is a very efficient way of providing visual amenity and functionality.



Similarly these trees are making a significant contribution to amenity without compromising pedestrian access to these narrow shop frontages.



A combination of specially designed planting pits and structured tree soil means that these trees form green parking bay divisions within the highway without causing any surfacing damage.