



## Site Guidance Note 12: Landscaping in root protection areas

This document is only a summary of its subject matter. You should not rely on this general guidance in isolation, and you should always seek detailed advice from an appropriate expert in relation to specific circumstances before any action is taken or refrained from. The content of these pages is protected by copyright © Barrell Treecare Ltd 2018. You may download and republish (in its full format) and print copies of the guidance – but you must not adapt any guidance.

## SGN 12: Summary guidance for site operatives

### Administration

1. **Unauthorised damage to protected trees is a criminal offence and could lead to enforcement action.**
2. **Work under the normal site risk assessment procedures and comply with the wider site safety rules.**
3. **Brief operatives entering root protection areas (RPAs) by the supervising arboriculturist before work starts.**

### Other relevant SGNs

4. **Monitor works in RPAs by the supervising arboriculturist (See SGN 1 Monitoring tree protection).**
5. **Design access to avoid soil compaction (See SGN 3 Ground protection).**
6. **Minimise excavation into original undisturbed soil (See SGN 7 Excavation in root protection areas).**
7. **Install hard landscaping according to SGN 9 Installing / upgrading surfacing in root protection areas, and SGN 10 Installing structures in root protection areas.**

### Important reminders

8. **No heavy mechanical cultivation such as ploughing or rotavation.**
9. **Do not fill above the original ground levels within the RPAs of retained trees until the precise depth of fill has been agreed and authorised by the supervising arboriculturist.**
10. **Never raise soil levels to leave soil touching a trunk that was previously exposed to the air.**

## SGN 12: Explanatory notes and examples

### Purpose

SGN 12 describes the practical requirements for soft and hard landscaping to avoid damage to retained trees, based on the recommendations in BS 5837 (8) and BS 3998 (6.3). It assumes that the design and technical specifications prepared for the site contractors comply with the relevant British Standards, and in particular, *BS 8545 (2014) Trees: from nursery to independence in the landscape – Recommendations*.

Note: Soft landscaping includes the re-profiling of existing soil levels and covering the soil surface with new plants (grass or shrubs) and/or an organic mulch. Any new hard surfacing and structures will be installed as described in SGN 9 (Installing surfacing in root protection areas) and SGN 10 (Installing structures in root protection areas).

The RPA of this tree **was not** effectively protected during construction and excessive compaction of the soil meant it died soon after this turf covered up the damage.



SGN 12-01

Soil **should not** be heaped against trunks and no level changes should occur within 1m of the trunk unless authorised by the supervising arboriculturist. The raised soil levels against this trunk and across the RPA caused the decline of this tree.



SGN 12-02

## SGN 12: Explanatory notes and examples



Healthy mature trees had adjacent soil levels raised by over a metre in their RPAs because provision was made for load spreading and aeration.



This tree had tarmac parking within its RPA that was removed and replaced with an organic mulch near the trunk and limited no-dig surfacing on the outer edges of its RPA.

## SGN 12: Explanatory notes and examples

### Technical reference

*Due to copyright restrictions, the relevant British Standard clauses are summarised, not quoted, as follows:*

1. **BS 5837 (2012) Trees in relation to design, demolition and construction – Recommendations:** Clause 8 (Site works, landscape operations and management) recommends:
  - 8.4 Avoid soil compaction around existing trees and in areas where new planting is proposed. Where soil compaction has occurred within RPAs, arboricultural advice should be taken on how to mitigate risk of further damage to roots before carrying out any remedial or other works. Any cultivation within RPAs should be undertaken carefully by hand, but no heavy mechanical cultivation such as ploughing or rotavation should occur. Decompaction measures include forking, spiking, soil augering and tilled radial trenching should be carried out with care to minimise the risk of further damage to roots.
  
2. **BS 3998 (2010) Tree work – Recommendations:** Clause 6.3 (Aeration/decompaction) recommends:
  - 6.3 Decompaction works should be controlled so that major roots greater than 2.5cm in diameter are not damaged. Avoid extensive cultivation such as ploughing or rotavation in RPAs.