Ground protection

SGN 3



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. You may download and republish (in its full format) and print copies of the guidance – but you must not adapt any guidance.

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Summary guidance for site operatives

Ground protection

Administration

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

Other relevant SGNs

- Monitor works in RPAs by the supervising arboriculturist (See *SGN 1 Monitoring tree protection*).

Important reminders

- Ground protection will be fit for purpose, i.e. prevent damage to the underlying soil and roots in RPAs.
- Ground protection will be installed at the locations shown on the tree protection plan.
- Ground protection locations will not be altered without prior approval of the supervising arboriculturist.
- Where feasible, retain existing hard standing to act as ground protection.
- Ground protection will not be removed at the end of construction without prior approval of the supervising arboriculturist.

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Explanatory notes and examples

Ground protection

Purpose

SGN 3 describes where ground protection will be installed, what form it can take, and how long it should remain in place to effectively protect trees to be retained, based on the recommendations in *BS 5837 (6.2 and 7.3)*.



General principles and clarifications

Ground protection is an effective means of preventing damage to the RPAs of retained trees during development activity. In practice, a range of approaches can be used, including retaining existing hard surfacing or structures that already protect the soil, installing new materials, or a combination of both. Whatever the chosen option, the result will be that the underlying soil (rooting environment) remains undisturbed and retains the capacity to support existing and new roots.

Ground protection will be installed at the locations shown on the tree protection plan and agreed by the local planning authority before any construction activity starts on site. It will remain in place until there is no risk of harm from the development activity. No ground protection will have its location changed or be removed without consulting the supervising arboriculturist. Furthermore, the condition of the ground protection will be regularly monitored to ensure it remains fit for purpose, i.e. sufficient to prevent damage to the RPAs of retained trees.

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Explanatory notes and examples

Ground protection



SGN 3-01
Metal plates and heavy plywood cover this entire area while the piles are being installed and the building is constructed above the RPA.



SGN 3-02
Heavy-duty plywood set onto a compressible woodchip layer and pinned into position is suitable to spread the loading from pedestrian access.



SGN 3-03
ArborRaft is very effective on flat areas to spread load and reduce compaction. Its main benefits over other cellular products are that there is no need to fill it with stone, which saves costs, and it is reusable. The UK supplier is Wrekin Products: wrekinproducts.com

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Explanatory notes and examples

Ground protection



SGN 3-04
Plywood fixed to a wood frame is another effective method of protecting soil from pedestrian compaction.



SGN 3-05
A scaffold framework attached to the main scaffold fencing can be used to support either scaffold planks or plywood to create an elevated platform with a gap beneath.



SGN 3-06
Cellular products are a very effective means of providing ground protection where heavy vehicle use is expected. Here, it is being used to temporarily widen an existing road, to be removed once the construction is finished.

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Explanatory notes and examples

Ground protection



SGN 3-07
Custom designed sectional metal tracks can be joined to support very heavy traffic use through sensitive areas.



SGN 3-08
Ground protection must be used where repeated pedestrian traffic could cause compaction in sensitive RPAs. It can be as simple as plywood, pinned to the ground, or custom designed plates that interlock to spread the load.



SGN 3-09
A combination of retaining existing surfacing and using temporary construction cabin accommodation can be a very effective means of preventing damage to sensitive areas.

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Explanatory notes and examples

Ground protection



SGN 3-10
Steel plates can be an effective way of temporarily reinforcing weak surfacing over a construction access during the development activity.



SGN 3-11
A temporary concrete slab cast directly over existing low load bearing surfacing is an effective way of ensuring that the soil beneath is protected from compaction during development. This is removed once the heavy use is finished.



SGN 3-12
Temporary concrete slabs on slopes are an effective way of preventing soil damage during the transport of materials on and off site.

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