

# S9 – Verges and unmade ground



Researched, compiled and produced by



and



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## Introduction- SROH S9

This advisory document is designed to assist incoming and existing Inspectors as support and refresher material. It will be provided in simple language to aid in understanding and avoiding technical or descriptive explanation.

The current edition (Ed 4) of the Specification for Reinstatement of Openings in the Highway (SROH) has been updated to assist readers in understanding, and introduce new methods and developments within street-works.

Remember, the SROH applies to works undertaken on carriageway's, footway's and verge's maintained at public expense (not private roads or land).

You will now be taken through the key items within S9 which will enable you to have a better understanding of what to look for when monitoring Verges and Unmade Ground, relating to reinstatement.



**Please note:**

This document is simply to aid in understanding of the Specification for the Reinstatement of Openings in the Highway (SROH) and should not be used for any other purpose. The simplicity of language is to assist in explanation, but may detract from certain technical or descriptive specification requirements and, therefore, the SROH should be consulted for clarity.



# S9 – Verges and unmade ground

## What it says in the SROH – S9.1 General

**S9.1.1** Backfill materials must comply with the requirements of S5.  
1) Topsoil within 200 mm of the surface of the verge must be stored and re-used. Where insufficient topsoil is available from the excavation, imported topsoil may be used to a depth of 100 mm or to match the existing depth, whichever is the lesser.

## What it means



For environmental reasons it is better to re-use topsoil excavated as a result of works, and it should be stored carefully away from active work area and protected from bad weather. If there is insufficient topsoil available to cover completed works, you can import new topsoil which should be laid to a depth of 100 mm. If the original topsoil layer is proven to be less than 100 mm, you can match the existing depth.



Untidy works in verge.  
Topsoil not set aside.

Care must be taken to ensure that imported topsoil is not contaminated with non-organic material or noxious weeds.

The re-use of excavated materials as backfill in verges and unmade ground is to be encouraged as part of a policy of environmentally sustainable construction.

Where invasive plant species are identified within the excavated materials, these materials must not be re-used in the reinstatement. Appropriate advice may be sought from the authority or DEFRA as to the means of permissible disposal.



Japanese Knotweed



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## SROH - what it says – S9.2 Adjacent road structures

**S9.2.1** Where road construction layers (including any structural courses, foundations, kerbs or backing that provide edge support to road structures) extend below adjacent verges or unmade ground, any reinstatement must take account of such provisions. The reinstatement of such areas must match the existing layer thicknesses, with similar or equivalent materials.

## What it means



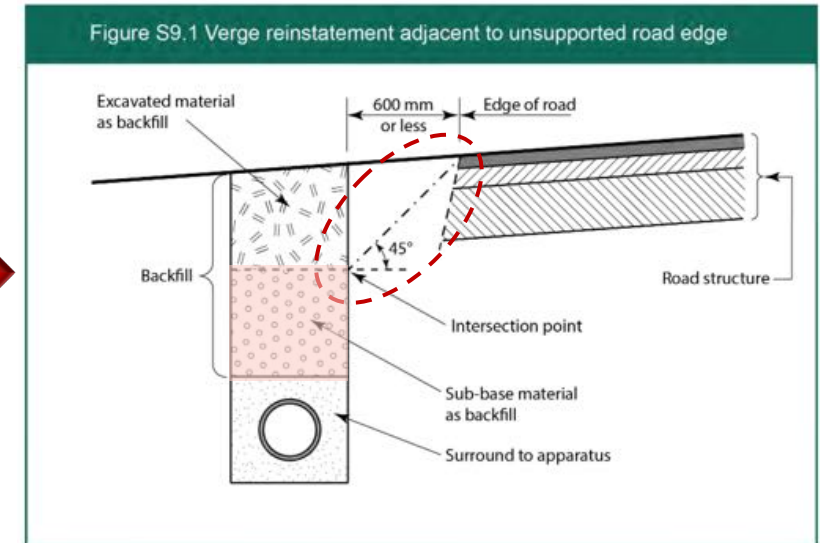
It is important to ensure when excavating in the verge near a road that there is no part of the road construction that may be damaged as a result of working in the verge. Some roads will have supporting structures below the verge area such as foundations or beams for underpinning kerbs or channel blocks. If these are interfered with during excavation, they must be replaced with similar materials to match the existing structure. If this is not done, it is likely to cause failure at a later stage.



Poor verge reinstatement



Where there is no edge support, if an excavation comes within 600 mm of the edge of a road and the backfill extends below the intersection point shown in Figure S9.1, sub-base material must be used for backfill below that point. The intersection point is where a 45° line extending downwards from the edge of the road surface intersects the side of the trench nearest the road. Above this point, excavated material can be used as backfill.



I'm not sure what this means?

Simply, if there's no kerb, and the trench is within 600mm of the road edge, you should provide sub-base support to the load bearing surface. This is where a line intersects trench wall at 45° from the road edge (see pink area above)





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## SROH - what it says – S9.3 Cultivated areas

**S9.3.1** Unless otherwise agreed, cultivated areas containing shrubs, plants or bulbs must be reinstated using the same or similar species. Thereafter, a reasonable growth must be established within the following 12 months. Where the authority knows of special features in verges (e.g. orchid sites etc.) it should inform the undertaker to agree the best means of conserving those features.

## What it means



If you have to excavate on areas containing hedges, shrubs, plants and bulbs you must ensure that all disturbed plants are replaced like for like, or at least with similar species. If you have something like a box hedge, hebe, laurel or similar, it should be replaced and allowed 12 months to prove reasonable growth. The local authority should advise of any specialist or rare plants if they exist in or near the area of proposed works, and agreement made on how to protect them.





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## What it says in the SROH – S9.4 Grassed areas

**S9.4.1** Grassed areas must be reinstated using the original turf, replacement turf or an equivalent seed, depending on weather and growing season. In all cases, a reasonable growth must be established within the following 12 months.

Where grassed areas have been mown, the reinstated surface must be demonstrably free from stones greater than 20 mm nominal size. All other debris arising from the works must be removed from the site. It should be recognised that stones in grassed areas tend to migrate to the surface over a period of time and this should not lead to repeated intervention.



## What it means



When excavating in grassed areas you must save the original turf to relay when reinstating. Otherwise, you must use replacement turf, or topsoil and seed which should establish itself in twelve months. There are other requirements relating to topsoil and seeding which will be outlined below.



You can see on the left that this is a very poorly reinstated grass verge. The clay and stones need to be removed with topsoil added and levelled. Then turf or seeding can be laid to ensure verge can return to acceptable state.





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## What it says in the SROH – S9.5

**S9.5.1** Verges, ditches and drainage courses must be restored to their original profile unless otherwise agreed.



Drainage courses, ditches and verges must be reinstated to original shape. This is important as generally they are part of a natural drainage system to take water from surrounding areas.

If the local authority requires that changes are made to the profile or shape of a drainage course, ditch or verge, it must be completed under agreement of the parties and recorded as such.





# S9 - Summary



How much topsoil should I use?

You must use 100 mm of topsoil or match existing thickness, whichever is the lesser.

What if there is not enough topsoil available?

You can import new topsoil, but you must ensure it is not contaminated with weeds or invasive plant species.

What do you mean by an invasive species or noxious weed?

These are usually non-domestic types of plants and shrubs that are detrimental to the environment, with species such as Japanese Knotweed or Giant Hogweed (on right)

If closer than 600mm to road edge, why do I need to reinstate with sub-base materials?

It is essentially to provide strength in responding to the bearing forces on the road surface. This is where a 45° angle intersects the trench on the closest side to the road.

What are cultivated areas?

These are areas where there may be hedges, shrubs, flowers and other types of growing plants which may be in place to enhance an area. If these are interfered with during works, they must be replanted, replaced or renewed.

