

Management of the Hadrian's Wall Path National Trail: The management of the grass sward in archaeologically sensitive locations

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Introduction

Frontiers of the Roman Empire: Hadrian's Wall World Heritage Site is an archaeological monument of both national and international importance. Its uniqueness and fragility, two of the qualities that led to its inscription onto the UNESCO list of World Heritage Sites, must continue to be respected by all concerned with its use as a recreational resource. This document sets out to explain both why this is so important and how the National Trail project, under the auspices of Natural England, aims to do this.

The modern history of Hadrian's Wall has witnessed increased access and mobility by the general public and, in common with many countryside destinations, this has led to a concentration of visitors in particular 'hot spot' sites. In the case of the Wall these localized and concentrated pinch-points have resulted in the development of problems of overcrowding and erosion to the fabric of the monument that we seek today to protect. The problems were documented in the Dartington report (1976) which set in motion a process that led, eventually, to the proposal to establish the National Trail. In 1993 a Submission Document was presented to the government and in November 1994 the Secretary of State for the Environment granted conditional approval for the Trail's creation.

The Trail's aims then, as now, are clear: to manage the path in a way that, wherever possible, does not compromise the integrity of the World Heritage Site, either in terms of the direct impact of the Trail on archaeological remains, and also in terms of its impact on the setting of the monument. This aim will apply both to the need to address the impact of the Trail, and also with reference to measures to alleviate this impact.

In the planning of the Trail, its route has been aligned to keep the path, wherever possible, away from the most sensitive areas of archaeological interest. However, the route of the Trail still crosses highly fragile archaeological sites and remains and, as a consequence, a key component of the focus of the maintenance of the Trail has been to ensure that these remains are not adversely affected by the Trail.

This is done through a programme of maintenance of the existing grass sward. From the planning stages of the Trail it has been considered that the maintenance of a healthy grass sward was the best way of protecting any buried archaeological deposits and is also the most appropriate and sympathetic setting for the Wall. For much of its length, the Trail runs within the area around Hadrian's Wall that is legally protected as a series of Scheduled Ancient Monuments. This scheduling allows control over activities affecting the monument. For this reason, the maintenance of the Trail must comply with the Ancient Monument and Archaeological Areas Act 1979.

It must be noted that this document covers only the archaeological and monument issues associated with Trail maintenance. By concentrating only on these issues it does not seek to represent guidance on the complex balancing of sometimes competing interests and sets of legislation that relate to works on Hadrian's Wall. Such issues are invariably complex and require discussion so that they can be worked through on a case-specific basis.

It does not explain the procedures for other permissions and statutory consents which may be required, for example: management and interventions within SSSIs that might also be necessary prior to works being undertaken within the Scheduled Monument area. *Working on farmland also brings with it specific responsibilities; staff should pay particular regard to bio-security and always obtain landowner and tenant farmer consents.* Trail staff should refer to the section management plans (refer section 1.2) for details of other designations or points of note that require special attention.

Fundamental to this process it is vital that the following is understood:

- there is a range of maintenance tasks, listed below, that require Scheduled Monument Consent (SMC); the underlying cause of damage is immaterial – whether from recreational or farming pressures or indeed natural causes, for example burrowing animals, the same principle will apply;
- to undertake such a task without SMC is illegal. Likewise varying a specification without consent is also illegal. Either of these could result in the prosecution of both the individual concerned and the commissioning body;
- in addition to the actual planned works, preparatory works, transport to and from a site and the storage of materials are nearly always part of an SMC and have conditions attached which must be adhered to.

Applying for SMC every time that a routine (and sometimes proactive) task is undertaken is a time-consuming process. For this reason the Secretary of State has agreed that a range of maintenance operations can be given consent and, therefore, undertaken on a routine basis within the scope of a generic SMC that would still provide the necessary safeguards to ensure this work does not compromise the monument. This should allow routine maintenance work to be undertaken without the need for an SMC application for every piece of work. Equally, in providing this document in a written form, this generic prescription will give all parties certainty about what activities are allowed under this prescription and what are not.

Emergency works and class consent

In certain circumstances, works on the Trail may benefit from a process called Class Consent. This covers those activities which are deemed not to require an application for SMC as they are considered to have consent already.

With reference to the Trail, the most likely Class Consent (refer also section 8.2) is that covering works urgently necessary for health and safety reasons. Importantly, such works have to be immediately necessary, and they must be limited to the absolute minimum in order that the structure or area may be rendered safe.

With reference to the Trail, works involving dangerous structures may qualify for such Class Consent. If this is the case, staff working on the Trail are empowered to undertake the minimum works necessary to secure public safety without further reference to English Heritage. However, those making use of such procedures will have to demonstrate both why the works they undertake were immediately necessary and also how they were the minimum works. If at all possible such works should always be discussed with English Heritage and the National Trail consultant archaeologist.

This menu of generic prescriptions replaces: *Management of the Hadrian's Wall Path National Trail: The Management of the grass sward in archaeologically sensitive locations. Version 3: 6th March 2006*. The prescriptions have been agreed with the English Heritage archaeologists for Hadrian's Wall. (Refer Appendix 2 for current contact details). It also represents current best practice in environmentally sustainable recreation and monument management. The National Trail Manager (NTM) will monitor and consider new ideas for materials and techniques and consider them for revised versions of this document.

Sources of archaeological advice available to National Trail staff

The first point of reference for National Trail staff in seeking archaeological advice is always the Trail's consultant archaeologist. The consultant is retained by Hadrian's Wall Heritage Ltd to provide a number of services that include: a call-off contract to enable Trail staff to seek advice at any time during working hours; on-site advice; written consultancy documents (refer section 1.2: management plans); archaeological evaluations; watching briefs; any other archaeological advice as recommended. **The onus is on Trail staff to avail themselves of this comprehensive service.**

Note that the term archaeology does not refer simply to matters of Roman interest, and that not all archaeology is afforded statutory protection as a Scheduled Ancient Monument. If staff are ever in any doubt about maintenance works on or off the Trail, either at the planning stage or when actually on site, they must contact the consultant archaeologist for advice, whose **advice must at all times be adhered to.**

English Heritage provides its own archaeological cover for the World Heritage Site (WHS). The role is divided between the Hadrian's Wall archaeologist and the Inspectors of Ancient Monuments; Guardianship Sites (refer Appendix 2). English Heritage manages the latter monuments on behalf of the Secretary of State.

While English Heritage is prepared to offer informal advice to the National Trail project, the first point of reference is the Trail's consultant archaeologist who will decide when it is appropriate to approach English Heritage. For example, if *type 3* or *type 4* works are proposed (refer section 2) the first contact must be the Trail's consultant archaeologist.

Role of the National Trail Manager

The National Trail Manager (NTM) has strategic responsibility for all 84 miles of the Trail's route, agrees and oversees its day-to-day operations and ensures that

everything is managed according to its rules and protocols. **The NTM must be made aware of everything that is proposed for the National Trail.**

1 Background to Generic Prescriptions

1.1 Scheduled Ancient Monuments

The Secretary of State compiles and maintains a list of monuments that are considered to be of national importance; when a monument is added to the list it is thereafter referred to as a Scheduled Ancient Monument. The principal effect of scheduling is that the approval of the Secretary of State (Scheduled Monument Consent) is required for any works to the monument.

Most of Hadrian's Wall and its associated earthworks are scheduled and for considerable lengths the Hadrian's Wall Path National Trail is within the scheduled monument area. This means that the National Trail project must obtain Scheduled Monument Consent before any works are undertaken. Works undertaken without consent are carried out illegally and could render both the individuals concerned and the Trail project itself liable for prosecution (see also Introduction above).

1.2 National Trail Management Plans

The management plans lie at the heart of the National Trail project. They not only record the Trail's aspirations, aims and objectives, but also archive everything that happens to the Trail and ancient monument. **In turn, within each management plan is embedded a detailed consultancy document. Written by the Trail's consultant archaeologist it is the essentially important archaeological opinion that informs and guides the way that the Trail has been, and continues to be, developed and managed.**

Altogether some thirty-four sectional management plans document the Trail from the city/county boundary in the east near Newburn to Bowness-on-Solway on the Solway Firth. (A thirty-fifth plan for the section on urban Tyneside is forthcoming). In decades to come it should be possible to track every event and management activity that has occurred over time to the Trail, also within each Scheduled Ancient Monument.

Fundamentally, the plans use colour coding to refer to all areas of archaeological, and sometimes nature conservation, sensitivity, together with measures taken to mitigate for the effects of visitor and other pressures. The management plans, therefore, provide the background information necessary to ensure that all works undertaken on behalf of the Trail have all the necessary legal permissions, and must be referred to and updated on a routine basis and read in conjunction with any Scheduled Monument Consents, including works permitted within this document.

1.3 Training of Staff

Trail managers must ensure that only suitably trained staff and contractors undertake works within Scheduled Ancient Monuments.

2 Maintenance works

This document sets out a hierarchy of works, which are categorized throughout into four main types, as follows:

type 1 works: works not requiring SMC, for example: repairs to an above ground structure such as a bridge and where no works involve ground disturbance, unless the structure is itself a Scheduled Ancient Monument;

type 2 works: works of generic type that can be undertaken because of SMC having been granted for the generic prescriptions, for example: grass cutting, top dressing, spiking the ground surface;

type 3 works: works where the principle of their use is covered by generic prescriptions, but where specific agreement in writing from the Secretary of State advised by English Heritage must be obtained first for the location of usage, for example: the use of polyacrylamide granules or the maintenance of sacrificial surfaces;

type 4 works: works that require a specific SMC application, in other words any new works not covered by the above.

2.1 The maintenance of an existing grass sward using top dressings

2.1.1 Application of seed and fertilizer for large areas of intact grassland (*type 2 operation*)

Subject to any SSSI consents, spread either by hand or by means of an automatic spreader from a moving quad bike. **The vehicle should not be used in areas of sensitive archaeology (refer to colour coded sections in management plans) and, in any case, should be driven only when ground conditions are dry enough to take the load without causing any damage to the surface and, therefore, to underlying deposits.** Fertilizers are normally granular and are either organic or inorganic. Where practicable, for larger areas, seed may be sown using a seed drill up to a maximum depth of 25mm. A spiked drum (**type 2 operation**, refer section 2.4.1) is driven behind a moving quad bike (**noting the restrictions for vehicular use, see above**) with seed sown into the spaces created.

2.1.2 Application of other top dressings for small areas of intact grassland (*type 2 operation*)

Applying top dressings of soil/sand/grit, of preferably local provenance, to established grass surfaces helps to promote a free draining layer of topsoil. Where available and practicable to do so, gathered up-cast soil from mole hills could be used for this purpose, especially when working within biologically sensitive SSSIs when it is important to source materials as locally as possible. The dressings may be brushed into the aeration holes created by the spiking action (**type 2 operation**, refer section 2.4.1).

Other top dressings may be applied, for example: live mulch; horticultural top dressing (prepared sand/compost mix).

2.1.3 Application of other novel horticultural top dressings (*type 3 operation*)

New horticultural top dressings are becoming available, for example: various mixtures of sand and coir; pulverized blast furnace fuel ash, which may be considered. Discuss first with the National Trail consultant archaeologist and other land managers/owners.

2.1.4 Application of ground rubber granules (*type 3 operation*)

Subject to landowner approval ground rubber granules, or other granulated materials, may be brushed into aeration holes in order to promote improved soil drainage.

2.1.5 Application of polyacrylamide granules (*type 3 operation*)

Polyacrylamide (water retaining granules) may be applied once per year only and brushed into aeration holes. If it is necessary to apply more frequently (refer section 2.5.2 - repair of large pinch-points) it is to be treated as a **type 4 operation**.

2.1.6 Application of farm yard manure (*type 2 operation*)

Farm yard manure should be spread in such a manner (and in accordance with measures to ensure bio-security) that in areas of erosion it does not exceed the turf line; it can be used both as a filler and as a general fertiliser.

2.2 Burrowing animals

2.2.1 Manual spreading of mole hills and other animal up-casts (*type 2 operation*)

If left unchecked, the up-cast soil from mole hills and other animal up-casts will kill off the small area of grass affected; this can lead to a pinch-point if exacerbated by the effects of trampling. It is desirable, therefore, to spread the soil away from the line of the path.

With the exception of badger setts, where it is illegal, spread up-cast soil into the grass surface with a rake or other suitable implement. Refer also to section 2.1.2; up-cast soil, when gathered, can be useful as a component of a top dressing.

2.2.2 Spreading of animal up-casts using chain harrows (*type 2 operation*)

This should be used in relatively flat areas only and avoiding sensitive archaeology (refer individual management plans) **and, in any case, should be driven only when ground conditions are dry enough to take the load of a quad bike without causing any damage.** (Note that this operation is illegal if the up-cast soil is from badger setts). The harrows measure approximately 8 feet square and draw one inch long steel tines across the surface. They scatter any small lumps and level the ground.

2.3 Grass mowing, verge and hedge maintenance (type 1 operation)

This is necessary where the ground is not regularly grazed, also where the mowing of a new desire line is necessary to spread the visitor load of the Trail. **Grass mowers should be used only when ground conditions are dry enough to permit the load of a machine without causing damage.** The path must be mowed to the full available width and adjoining hedges managed throughout the season so as not to reduce the available width. Clippings must be removed from the grass surface so as to prevent the build up of thatch. Cutting blades should also be set in order to avoid scalping any visible earthfast stones (which may be of archaeological interest).

2.4 Removal of compaction within, and aeration of, topsoil

The aim here is to ameliorate the effects of soil compaction and promote a healthy sward. The techniques are as follows.

2.4.1 Use of spiked drum (type 2 operation)

Use a spiked drum driven behind a moving quad bike. **The vehicle should not be used in areas of sensitive archaeology (refer to colour coded sections in management plans) and, in any case, should be driven only when ground conditions are dry enough to take the load without causing any damage.** The drum is approximately 1m wide containing 4 rows of 4 solid tines that are themselves approximately 30mm long. With each revolution of the drum, therefore, there are 4 rows of holes in the topsoil each approximately 25mm apart. It will normally be necessary to make 2 or 3 runs of the drum over each section of path depending on the degree of compaction. **The action should have no effect on archaeological deposits but in any case it will not be used on areas of sensitive archaeology.**

2.4.2 Hand forking (type 2/3 operation)

Where necessary, the ground may be either hand-forked using a 4-tined fork pressed 30mm into the ground or spiked using a hand pushed aerator with a 300mm drum which has 6 rows of 30mm solid tines. Situations where this might be necessary will include the following: very close to or on sensitive archaeology; on steep or very uneven slopes; close-up to gates and stiles; where the path is too narrow to allow access for the quad bike; in woodland.

Generally speaking, when away from sensitive archaeology it is a type 2 operation; when close to or on sensitive archaeology it is a type 3 operation, in which case **there is a need to agree in writing with the Secretary of State, as advised by English Heritage, the location and extent of the use of this technique.** In such circumstances or for clarification as to whether a site has sensitive archaeology or not discuss first with the Trail consultant archaeologist.

2.5 Repair of pinch-points, including erosion around individual posts, with top-dressing mix and/or turves (type 2/3/4 operation)

Repair pinch-points that occur within the topsoil horizon with turves, preferably cut locally but definitely outwith the Scheduled Area, but including “grassfelt” or similar turf-derived material. Aerate the soil (as per section 2.4.1 – **type 2 operation**) and consider first adding both a top dressing mix (as specified in section 2.1.2 – **type 2 operation**) and polyacrylamide granules (**type 3 operation**) before laying the turves. If considered necessary, secure the turves with pins, the maximum dimensions of which should be 100mm length by 10mm diameter. The type of operation should be established beforehand with the NTM; if a type 3 operation is required it is necessary **to secure an agreement in writing with the Secretary of State and English Heritage for the location and extent of the use of the particular technique close to or within sensitive archaeology before any on-site works commence.** In such circumstances discuss with the Trail consultant archaeologist.

Do not allow the turves to dry out. Water in the turves and consider re-watering depending on the time of year and especially if drought conditions are forecast. *(This is a **type 1 operation**, but seek advice from the National Trail consultant archaeologist if a water bowser needs to remain on site for a period of time. If necessary, apply for SMC).*

2.5.1 Small pinch-points (Type 2/3 operation)

A small area is defined as being up to 2m in diameter, or for up to 20m of narrow linear erosion of up to 300mm in width, with no loss of depth beyond the topsoil horizon. Normally a type 2 operation, it becomes a type 3 operation if the topsoil has been completely eroded exposing sub-soil below.

Repair small pinch-points by filling in with the top dressings specified in section 2.1.2 (and in woodland by applying woodchip to wet and muddy areas). Consider scattering seed over the affected area, also its protection using tree brushings (section 3.1), electric fence stakes (section 3.2) or people deflector barriers (section 3.3). **Note that there will be a need to agree in writing with the Secretary of State and English Heritage the location and extent of the use of this technique close to or within sensitive archaeology before any on-site works commence.** In such circumstances discuss with the Trail consultant archaeologist.

Staff should consult the National Trail consultant archaeologist for advice on whether or not a site lies within sensitive archaeology.

2.5.2 Large pinch-points (type 4 operation)

A large area is defined as being more than 2m in diameter and where there is likely to be a visible loss of the topsoil horizon. Typical examples will be large areas around gates that have been badly poached by cattle. **Such repairs will in the first instance require Scheduled Monument Consent (type 4 works).** Repeated top dressing of such repairs will normally be allowed, as per section 2.1.2 (also with

woodchip, section 2.5.1), without the need to re-apply for SMC. If in any doubt consult the National Trail consultant archaeologist for advice.

Scatter seed over the affected area, also consider its protection using tree brashings (section 3.1), electric fence stakes (section 3.2) or people deflector barriers (section 3.3).

2.6 Repairs to areas of specially laid turf (type 2 operation)

Where Scheduled Monument Consent has already been granted to prepare the ground for and lay turf, its repair, including re-laying new sections of turf, is permitted under this generic consent. Before the turf is laid it might be necessary to remove soil compaction but this would be done according to section 2.4.1 (spiked drum, **type 2 operation**) or 2.4.2 (hand forking, **type 2 operation**) and a fine tilth established by carefully raking over the surface of the soil.

3 Protecting repaired pinch points and the prevention of wear and tear

3.1 Protect repaired pinch points and wear lines using tree brashings (type 2 operation)

With the prior agreement of the land holder fix tree brashings to the ground with pins (refer section 2.5 for permitted maximum dimensions). Do so only for as long as is necessary in order to promote recovery of the sward. Move the brashings around from time-to-time so as to spread the visitor/livestock load. **Those using pins should be aware that they are working within the Scheduled Monument area; use only the minimum number and press them in only as far as is necessary.**

As well as Trail staff and trained contractors, volunteers may undertake this task but only under the supervision of Trail staff. The latter are responsible for both defining the area within which brashings can be spread, and initially positioning them.

3.2 Using electric fence stakes (type 2 operation)

Influence the walked desire line with electric fence stakes linked with tape or rope. The stakes penetrate 100mm into the ground. Move them around from time-to-time so as to rest emerging wear lines. **Their use and location is to be notified to the NTM who will maintain a record and inform the Hadrian's Wall archaeologist and Trail consultant archaeologist as appropriate.**

3.3 Using people deflector barriers (type 2 operation)

Influence the walked desire line with approved design temporary deflector barriers. Move them around from time-to-time so as to rest emerging wear lines. This operation can be undertaken by volunteers but Trail staff must first explain to them the area within which they can be moved around.

3.4 Temporary surfaces (type 2 operation)

Short-term temporary surfaces may be constructed using materials as suggested by the NTM, as agreed by the Trail consultant archaeologist and Hadrian's Wall archaeologist; **they should normally not involve ground disturbance**. It is anticipated that they will be used, for example, in situations where unexpected drainage problems have occurred and there is an urgent need to prevent damage to the path and monument. The cause of the problem should be investigated with a view to finding a long-term solution. Consult the National Trail consultant archaeologist before installation. They should normally not remain on site for longer than six months without the specific consent of the Hadrian's Wall Archaeologist. **Maintain a log of the date that they are installed and the reasons why they are necessary, informing the NTM who will maintain a record and inform the Trail consultant archaeologist and Hadrian's Wall archaeologist as appropriate.**

Temporary surfaces may be constructed using both natural materials, for example flagstones (for stepping stones), and manufactured materials, for example small and large sheets of Golpla and Ritter (rigid plastic honeycomb cells), and Playsmart, (sheets of rubber honeycomb cells). The aim with these materials is to provide a protective medium for the ground in order to promote the recovery of an existing grass surface. It is necessary to move the sheets at regular intervals so as to ensure an even rate of recovery.

(The use of such materials must be agreed with landowners/tenants in keeping with the safety requirements of the site. As detailed above, the presence of such a possible management solution in this document is only intended to provide Scheduled Monument Consent, and not to recommend a particular solution).

3.5 Temporary protection of earthworks damaged by livestock (type 2 operation)

Where livestock have created erosion scrapes in sensitive archaeological earthworks the scrapes may be temporarily filled with aggregate- or soil-filled sacks. This is to deter the livestock from making the problem any worse until a long-term solution is agreed.

4 Protecting large areas of woodland surface with hardwood chips (type 4 operation initially, thereafter type 2).

Subject to any necessary SSSI consents, **in the first instance it is necessary to apply for Scheduled Monument Consent (SMC)**. Thereafter, repeated top dressing with additional wood chips will normally be allowed without the need to re-apply for SMC. However, where formal edgings are required they are subject to SMC every time for repairs.

5 Maintenance of sacrificial and other surfaces (*type 4 operation initially, thereafter type 2 for maintenance*)

These are engineered surfaces. They can be: pitched, flagged or made of aggregate; their maintenance will also involve repairs to adjacent grassland using the techniques described above.

5.1 Aggregate paths

These may be re-dusted with aggregate but only to the extent of filling in a rut that has not exceeded the depth of the existing aggregate (**type 2 operation**). Contact the National Trail consultant archaeologist if this type of work is proposed.

5.2 Drains

5.2.1 Clearing blocked cross-drains

These may be cleared of accumulated débris, provided no excavation is necessary, as long as the limits of recently accumulated débris can be easily distinguished (**type 1 operation**). Note that the construction of additional cross-drains would be a **type 4 operation** and require SMC. Contact the National Trail consultant archaeologist if the latter type of works is proposed.

5.2.2 Clearing underground drains and cundies (*type 3 operation*)

These may be cleared of débris using drain rods inserted at rodding points, provided no excavation is necessary. If this does not clear the blockage then consult the Trail consultant archaeologist who will advise if the following procedure, **carried out under strict archaeological supervision**, may apply:

- a) from visual inspection and any existing records establish exactly where the drain lines run;
- b) on each drain identified a hole, no larger than 0.5m x 0.5m, may be manually excavated as far as possible within the ground disturbed by the installation of the drain, to the depth of the drain cap;
- c) attempt to clear the blockages by the insertion of drain rods, for a maximum distance of 10m – 15m;
- d) if this fails then a water jet may be used to dislodge and remove the blockage;
- e) if this cures the problem then broken tiles within the excavated hole may be replaced and the hole backfilled and reinstated carefully by hand;
- f) if this operation fails to remove the problem but the blockage can be identified, the disturbed ground above the blockage may be carefully excavated by hand to reveal the likely broken tiles then proceed as in c and d above;
- g) these additional excavations will only take place following agreement by the English Heritage Hadrian's Wall Archaeologist on the number, size and precise location of such excavations. Any more extensive works which may prove necessary will be subject to discussion with the English Heritage Hadrian's Wall Archaeologist and be subject to an application for Scheduled Monument Consent.**

5.3 Repairs to metalled surfaces used both by vehicles and the National Trail

A new top surface may be applied to repair wear lines but only to the extent that it does not exceed the depth of the existing aggregate (**type 2 operation**).

5.3.1 Repairs to metalled surfaces that were not subject to an initial Scheduled Monument Consent (*normally type 4 operation*)

Such surfaces will include existing farm tracks that are also used by the Trail. This technique includes both the top dressing of surfaces and the repair of pot holes. In all cases consult the Trail consultant archaeologist who will consider obtaining advice from the English Heritage archaeologist.

5.4 Re-setting pitched stones or flagstones (*type 2 operation*)

This operation covers normally only single stones or very small areas of stones. Such works would normally require a watching brief, seek advice from the National Trail consultant archaeologist. **If English Heritage is agreeable to the operation they may impose conditions to cover the level of archaeological mitigation required to keep the work within the scope given consent by the Secretary of State.**

It is emphasized that this only covers isolated and small areas of re-setting, and does not apply to wholesale repairs, which require specific SMC.

Work will normally be undertaken manually except where, for health and safety reasons, it is necessary to use a machine to move a stone or transport materials to site. **A machine should not be used in areas of sensitive archaeology and, in any case, should be driven only when the ground conditions are dry enough to take the loads without causing any damage.**

5.5 Re-setting masonry that forms part of the archaeology (*type 4 operation*)

Loose masonry found lying on the Trail that it is clear has fallen from the archaeology should **not** be put back in place. A note must be taken of the location (if possible with GPS grid reference), together with a photograph, and sent immediately to the Hadrian's Wall archaeologist. If it is known that the archaeologist is unavailable, for example on leave, then inform the National Trail consultant archaeologist who will advise on the best course of action to take.

5.6 Setting deflector stones (*type 3 operation*)

A deflector stone is a large temporary boulder used to deflect walkers from particular areas. **The position of any such stones must be discussed beforehand with the Trail consultant archaeologist and specific agreement obtained in writing from the Secretary of State advised by English Heritage.** Set such stones in places where it would be helpful to influence the walked line. If the situation does not improve within a defined period (agree this with the NTM) discuss a more permanent solution with the Trail consultant archaeologist.

5.7 Protecting buried masonry that has become exposed (type 3 operation)

Before masonry becomes worked loose, re-profile the ground feature using either Suretrac (sand/coir), sand, soil and/or turf and consider temporarily reinforcing the repaired area with plastic reinforcing mesh or a sheet of coir matting. Always attempt to influence the walked line so as to allow the area concerned to rest and recover and always photograph the feature both before and after the works. Lodge copies of the images with the NTM and the Trail consultant archaeologist for reference in the Trail management plans and consultancy document respectively.

5.8 Short-term protection of damaged earthworks using ground reinforcement mesh (type 3 operation)

As a short-term measure only, and for a maximum period of three months, damaged earthworks may be protected by pinning a layer of plastic ground reinforcement mesh so as to provide a temporary wearing layer. The mesh is fixed to the ground with 150mm steel pins that should be removed when the mesh is removed. The pins must NOT be located directly into the most sensitive archaeology, for example, upstanding stone and earthworks; such areas must be agreed with English Heritage before works take place. English Heritage will expect that plans for dealing with such a damaged area, and a timetable for their implementation, will be outlined at the same time as the application for use of such materials.

6 Rolling small stones into the ground surface (type 4 operation)

This will be agreed on a site-by-site basis with the Hadrian's Wall archaeologist, stones should not exceed 30mm diameter. The procedure, which requires Scheduled Monument Consent, will normally be undertaken only once. **The creation of a metallised surface is to be avoided.** In the first instance discuss with the Trail's consultant archaeologist.

7 Earthfast stones (type 4 operation)

Earthfast stones are stones that protrude from the ground surface and present a trip hazard to walkers. Note that they may be a part of the archaeology.

A note must be taken of the location (if possible with GPS grid reference), together with a photograph, and brought to the attention of both the National Trail consultant archaeologist and the Hadrian's Wall archaeologist on a case-by-case basis and should not be moved until SMC or the agreement of the Hadrian's Wall archaeologist has been given.

If in any doubt seek advice from the Trail consultant archaeologist and instruct grass-cutting contractors to avoid clipping visible stones with their machines.

8 Temporary protection of archaeological earthworks undercut by watercourse (type 3 operation)

Where an archaeological earthwork is being undercut by a watercourse and erosion is occurring, the eroded area may be temporarily braced using sacks filled with aggregate. Typically, this action may be necessary where the watercourse is affecting a Trail structure, for example a footbridge abutment. A long-term solution should then be sought. **Where this action is proposed discuss first with the Trail's archaeological consultant. Note that any works in a watercourse may require Environment Agency consent, in writing.**

9 Maintenance of path furniture

9.1 Repairs above ground (type 1 operation)

These may be undertaken without SMC unless the upstanding structure is Scheduled. (Examples of above ground structures that form part of the monument would include dry-stone walls along the line of Hadrian's Wall and its associated earthworks).

9.2 Repairs that involve below ground disturbance (type 3 / 4 operation)

All structures installed since 1995 by the National Trail project have required Scheduled Monument Consent. For most instances involving below ground disturbance (when a structure needs to be either replaced or repaired) the works will be **type 3 operations** as long as the structures go back into the original holes and there is no extra ground disturbance. The works must be accompanied by an archaeological watching brief. Consult the NTM and consultant archaeologist beforehand for advice and to discuss archaeological considerations to determine whether the task is a **type 4 operation**. If the latter applies an SMC will be required.

For specific health and safety issues covered by class consent discuss the procedure beforehand, or at the earliest possible opportunity, with both the National Trail consultant archaeologist and NTM.

10. Access to sites for maintenance works

The above sections explain situations when machines or vehicles should not be driven, for example, in areas of sensitive archaeology and when ground conditions are not dry enough to take the loads without causing any damage. **These rules also apply when gaining access to a site for maintenance purposes.** While you do not need Scheduled Monument Consent to drive vehicles across a monument it is an offence to damage it. If there is ever any doubt consult the National Trail's consultant archaeologist and consider using temporary plating and tracking (**type 3 operation**). The WHS is a complex pattern of archaeology, both masonry and earthworks that can either be above ground or buried, and it is vital that all of this archaeology is respected and not damaged. The management plans will help Trail staff to plan their access to maintenance sites but if they are ever in any doubt they should contact the consultant archaeologist for advice.

Appendix 1: Type 3 operations

As detailed above, these are works for which the principle of their use along the Trail has been agreed, and has received Scheduled Monument Consent. However, as made clear in the main document, to ensure that such activities are not damaging to the archaeology of the Wall and its associated features, or indeed any other archaeology, these techniques are only suitable for use in particular circumstances. As such, although the principle of their use on the Trail is accepted, and a new SMC application is not necessary for every time such works are proposed, their use needs to be formally agreed before any works take place. Type 3 works therefore require agreement prior to their usage.

Although English Heritage is consulted on applications for SMC, the decision as to whether consent is granted is taken by the Secretary of State for Culture, Media and Sport (DCMS). This means that the agreement to undertake type 3 operations must also be gained from the DCMS.

In the situation of Trail works of type 3 being proposed, this issue should be raised first with the National Trail consultant archaeologist prior to approaching English Heritage, who will advise on whether it is likely to be acceptable. Provided English Heritage endorses the proposal, they will then write to the DCMS to ask for the approval of the Secretary of State. Once confirmation of this has been given, works on site can take place.

Appendix 2: Contact details for archaeological advice

(a) For English Heritage

Michael Collins
Hadrian's Wall Archaeologist
Bessie Surtees House
41/44 Sandhill
Newcastle upon Tyne
NE1 3JF

Telephone 0191 269 1212

Kate Wilson (Guardianship Sites North East)
Inspector of Ancient Monuments
English Heritage
41/44 Sandhill
Newcastle upon Tyne
NE1 3JF

Telephone 0191 269 1221

Andrew Davison (Guardianship Sites North West)
Inspector of Ancient Monuments
English Heritage
Suites 3.3/3.4
Canada House
3 Chepstow Street
Manchester
M1 5ER

Telephone 0161 242 1400

(b) For the National Trail Consultant Archaeologist

Rachel Newman
Director, Oxford Archaeology North
Mill 3, Moor Lane Mills
Moor lane
Lancaster
LA1 1GF

Telephone 01524 541000

Appendix 3: Other contact details

National Trail Manager

David McGlade
National Trail Manager
Hadrian's Wall Heritage Limited
East Peterel Field
Dipton Mill Road
Hexham
NE46 2JT

Telephone 01434 609700

Appendix 4: Generic "Operations Likely to Cause Damage" Consent

This consent (forthcoming), for works within SSSIs in Northumberland National Park, to be inserted with the agreement of Natural England.

David McGlade
National Trail Manager

Version 5: 29th November 2007

Replaces: Version 4: 2nd May 2007
 Version 3: 6th June 2006;
 Version 2: 13th June 2005;
 Version 1: 20th December 1998

