

ANNEX A SMC APPLICATION SUPPORTING STATEMENT PROPOSED WORKS TO ROAD EDGE OF GARDEN TO WEST OF MILL

v.13/01/2016

1.1 New Abbey Corn Mill is Category A listed. The building is dual designated, forming part of the New Abbey Corn Mill: Mill, Mill Pond, Lade, Fish Pond and Curling Pond Scheduled Ancient Monument site, and also sits within the New Abbey Conservation Area and an Archaeologically Sensitive Area designated by Dumfries and Galloway Council. The complex retains its operational water powered milling machinery, with the former miller's house in the north part of the mill building now accommodating a small visitor centre.

The site is in the ownership of Scottish Ministers, but is run and managed as a visitor attraction for Ministers by Historic Environment Scotland (HES).

Public highways forming parts of New Abbey village's road network bisect the site splitting it into a number of areas; including the Mill Building with its adjacent curtilage garden ground, the Mill Pond area to the SW and an area containing the Fish Pond and the site's car park to the NW. These proposals are for the area of garden ground to the west of the Mill Building and the adjoining road edge.

1.2 The road running along the garden's west boundary provides access to a number of properties within the village including a commercial sawmill at Townhead on the village's edge. This generates frequent heavy goods vehicle (HGV) traffic bringing in logs and taking out finished material and chippings and sawdust waste products. Operations can involve passage of several lorries daily past the mill. The narrowness of the roads and the size of present day HGV's creates particular difficulties for lorries climbing the slight gradient and negotiating the sharp turn at the end of the road running between Church House and the mill's garden ground.

This has led to lorries encroaching onto the verge whilst carrying out their turning manoeuvre, damaging the mill garden's beech hedge to the extent it has now been breached through, and hitting branches of the cherry tree in the mill's garden causing damage. The grass verge has been churned up and the asphalt road surface is breaking up locally under the weight of HGV wheels turning on and going beyond its edge. Masonry at the corner of Church House opposite also shows evidence of collision damage. With increased lorry size and frequency damage is becoming a regular occurrence.

1.3 HES are concerned about damage to the tree and hedge at our property and the breach in our perimeter boundary hedge to the garden area, with ease of access bringing security and health and safety implications as the garden has open water channels and contains the mill wheel. The mill's garden is at a slightly lower level than the road with height difference increasing to the south. HES staff and contractors work intermittently in the mill garden carrying out maintenance, whilst our visitors congregate there to view the mill wheel. We are therefore concerned about the risk posed by passing HGV's given the history of hedge and cherry tree collisions, which could throw debris material into the garden, and also the potential for lorries to leave the road and enter the garden area given the history of encroachment onto the verge and differences in level.



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1.4 We have explored options to address this problem with Dumfries and Galloway Council Roads, Planning and Strategic Timber Transport Grant officers.

We noted the impossibility of upgrading the existing road to full modern standards within the Conservation Area context of the existing built environment. We also noted that rerouting lorries to the south of the Mill past the square and nearer the village centre is undesirable because the roadway there is equally narrow, passing close to buildings and in any case its junction layout with the A710 is unsuitable for HGVs on the main direction of travel, from the north. We also considered the prospect of new direct access for the sawmill premises from the main C road to Beeswing on the edge of the village. However this option was discounted given the likely high costs of developing a new road which would require a bridge over the New Abbey Pow watercourse, together with land acquisition. There are also a number of houses close to the Beeswing road whose proprietors might view this as adversely impacting on their properties.

We did examine prospects for improving the road layout beside the Mill to better accommodate HGVs. However this was quickly discounted as quite apart from issues around loss of ground and aesthetic impact, significant civil engineering in the garden area with consequent detrimental impact would also be entailed due to the difference in levels between the raised roadway and our garden, and the configuration of the mill water channels.

The conclusion of discussions was that the existing village street network will continue to be used by HGVs and is passable providing care is exercised by drivers. As HGVs will continue to pass by our site, doing nothing or repairing the existing boundary features is not considered an option. We have concluded that reinforcement of our mill garden road edge boundary to discourage HGV encroachment and re-establish the secure perimeter is necessary. The village Conservation Area location, the immediate setting of the Mill and adjacent buildings, and the site's Scheduled Ancient Monument status requires this to be done with particular sensitivity.

- 1.5.1 Our proposed measures which form the subject of this SMC Application comprise in brief:
 - Removing damaged cherry tree and a length of hedge;
 - Adding material to the mill garden ground beside the road, to reprofile contours eliminating the sudden change in level between garden and highway;
 - Reinstating grass and garden planting over this recontoured area;
 - Reinstating hedge to a new alignment set back slightly from existing line, with temporary fencing put in place until the hedge matures;
 - Adding a line of grey granite boulders along the roadside on a concrete foundation / embedment detail;
 - Extending the road a small distance to abut the re-established verge line with a reinforced edge construction.

The rational for our proposals and greater detail about the above items is set out below.



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- 1.5.2 <u>Highway Notional Boundary Impact</u> Discussions with Dumfries & Galloway Council roads officers clarified that for highways purposes Scottish Ministers' property at the highway verge is regarded as extending only to the centre line of the existing hedge. The council are not supportive of allowing obstacles to be placed on the roadside section of the verge viewed as being part of the highway, hence we have agreed to keep the line of new boulders on 'our' side of this boundary line. This means we have to concede a slight widening of the road and verge realignment to accommodate, replanting the hedge to a slightly set back line.
- 1.5.3 <u>Ground Reprofiling</u> At present ground falls away at the road edge down to garden level, with the change in level becoming increasingly pronounced as one moves south. Our proposal is entirely additive; to build up ground within the garden to form a banking with a strip along the road boundary sitting level with the road surface.

This would be formed by uplifting a strip of turf along the lower edge of the area, laying a separating membrane to differentiate the addition if deemed necessary by HES HMD and placing graded bottoming material with soil cover over within the garden area, graded gradually down to meet existing garden level. This then enables the new line of boulders and new set back hedge to be accommodated and better safeguards against the risk of HGVs coming off the road and plunging down into the garden.

Adding material will be relatively simple to achieve and avoids the cost and ground invasion which a concrete or masonry retaining structure would require, and its adverse archaeological impact within a Scheduled site.

1.5.4 <u>Granite Boulders & Foundation</u> Proposed addition of a line of grey granite boulders along the roadside on a concrete foundation / embedment detail, set so their road facing side is within our boundary line, is intended to act as a deterrent to vehicle encroachment and to offer physical protection reinforcement at the road edge. Grey granite boulders have been selected for their durability and sympathy with the context where this natural stone material is widely used in buildings, dykes and as roadside stones to discourage vehicles – for example beside our adjacent Mill Pond.

A continuous reinforced concrete strip foundation beneath the boulders is proposed to ensure support and resistance to boulders being moved by vehicle contact. This would be partly in new additive material within the garden ground and partly involve excavation into existing ground at the raised roadside.

Concrete would be kept below finished ground level and the verge area around the boulders would be of soil reseeded with grass or turfed.

Alternative conventional modern highway designs such as raised concrete kerbs and proprietary steel barriers were rejected as aesthetically unsuited to this location.

1.5.5 Road Surface Extension & Reinforcement

cont'd

The asphalt road surface would be extended a small distance towards the new verge line. To enable HGV wheel loadings to be resisted the road edge will need to be reinforced and this may entail excavating up to a maximum 500mm depth along the road edge to enable formation of a concrete founded edge and incorporation of



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- 1.5.5 adequate road-base bottoming layers. Specification is provisional at present but cont'd would be agreed with HES HMD in advance of works.
- 1.5.6 <u>Cherry Tree</u> The cherry tree is proposed for removal due to its proximity to the road edge and resulting vulnerability to being hit, but also because garden ground reprofiling raising earth around its base will likely adversely affect roots. Stump grinding of base of trunk and roots to just below existing ground surface would be carried out. No replacement tree planting is planned.
- 1.5.7 <u>Hedge</u> The section of damaged beech hedge and an additional length of hedge to the south and north is proposed for removal. Other works proposed here will enable much of the main root structures to be removed. For the remaining length of removed hedge stump grinding of base of trunks and roots to just below existing ground surface would be carried out.

The replacement hedge would have its trunks planted just behind the line of the boulders and foliage would be encouraged to spread out above the boulders. A section of hedge to the south and north would also be replanted to an amended line to join retained original and new alignments in a continuous planted perimeter to our mill garden, reinstating a visual appearance similar to that which existed before HGV damage.

After careful deliberation we have concluded that provisionally beech hedging should be used to maintain existing appearance and character rather than selecting an alien shallow rooted species. Archaeological impact of beech's relatively deep roots would be mitigated by being largely within ground formed by the new banking material and elsewhere close to the existing road formation and former hedge ground disturbance.

- 1.5.7 Temporary fencing would be erected whilst the hedge matures, and removed once hedge height and thickness allows. This fencing would be freestanding Herras type fencing where garden boundary shape and slope allows, or wire mesh and / or timber rails on timber posts and braces set into built up banking material over the recontoured area. No penetration into existing ground would be made for fencing.
- 1.5.9 <u>Garden Planting</u> The reprofiled garden ground would be turfed or seeded for grass and potentially planted with flowers and small plants having limited non-invasive roots adjacent to the hedge where the ground would be formed of new banking material. This is intended to re-establish the character of the existing garden.
- 2.1 The advice of the HES in-house Cultural Heritage Advisor forms part of this submission. In line with this, ground breaking activities to realise the proposals would be archaeologically monitored, recorded and reviewed as appropriate.
 - Detail of appropriate procedures and measures, such as for instance producing a Written Scheme of Investigation, will be discussed and agreed with HES HMD and put in place prior to any works commencing on site.



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We shall also ensure that agreed protection and mitigation control measures are incorporated into developed method statements for the works and adhered to.

2.2 The HES in-house Natural Environment Advisor commenting on the scheme has noted no issues with these proposals other than reporting that otters, a European Protected Species, have been recorded in the past at the nearby New Abbey Pow burn and its associated watercourses. However no active holt currently appears evident in the banks within 50m of the site. Also though close to the burn, the site is in a village beside a main A road making otter visits less likely.

His suggested precautionary mitigation measures - instructing site operations personnel to avoid disturbing any otters in the area by avoiding entering water courses and basic site fencing to discourage any otters from entering the work area when any open excavations exist and the site is unattended will be adopted. We shall liaise with our advisor and Scottish Natural Heritage to ensure that any protection and mitigation control measures required are incorporated into developed method statements for the works and adhered to.

Our Natural Environment Advisor has also confirmed that bats are not an issue in respect of the cherry tree felling element of proposals.

3.1 We are of the view that these proposals reconcile minimising adverse monument impact, respecting the character and appearance of the conservation area and listed buildings' and monument settings, maintaining vehicle access along existing roads, whilst addressing immediate HES concerns about health and safety and re-securing our garden perimeter boundary. In our opinion, archaeological impact would be limited to the minimum necessary commensurate with safe operation of the site and aesthetic considerations, and mitigated by considered design and archaeological watching brief monitoring of any excavations deemed necessary.

Paul Beaton
District Architect
SW District, South Region
Historic Environment Scotland - Estates