Scheduled Monument Consent: Report on Handling

Case Information

Reference/Case ID	300018793

Scheduled Monument	Forth and Clyde Canal: Glasgow Branch		
Index no	SM6771	**Grid ref**	NS 57100 68900

Date application validated	01 December 2016
Summary of proposed works	North Glasgow Water Management System - Geotechnical Investigation to inform future design stages

1. Summary recommendation

This report recommends that approval for geotechnical investigatiosn to inform future design stages of the North Glasgow Integrated Water Management System (NGIWMS) be granted.

2. Background

This application covers several distinct scheduled sections of the Forth & Clyde Canal, including works at Ruchill, Shirva, Craigmarloch, and Wyndford. The monuments affected are:

- Forth and Clyde Canal: Glasgow Branch (Index no. 6771) [for the Ruchill works]
- Forth and Clyde Canal: Kirkintilloch - Auchinstarry Farm (Index no. 6769) [for the Shirva works]
- Forth and Clyde Canal: Auchinstarry Farm – Castlecary (Index no. 6766) [for the Craigmarloch and Wyndford works]

The monument comprises that length of waterway forming part of the Forth and Clyde Canal falling within the boundaries of the civil parishes of Glasgow, Kirkintilloch and Cumbernauld, and the boundaries of Glasgow District and Cumbernauld and Kilsyth District.

The scheduled area includes the entire length of canal in water together with the banks on either side and the towing path running one side.

The monument is of national importance because, as an integral part of the Forth and Clyde Canal, it is a superlative example of Georgian civil engineering. It was the first of Scotland's great inland waterways to be constructed (between 1768 and 1790) and even at the time of its opening in the 1770s it was christened 'The Great Canal', a recognition of its undoubted national importance even then. The works at Shirva, Craigmarloch and Wyndford are on sections that were part of the original scheme, while the Ruchill works are on the later Glasgow Branch.

The proposed works involve geotechnical investigations at four locations adjacent to spill weirs as part of a proposed North Glasgow Integrated Water Management System. This is intended to inform the final design choices on the precise location and nature of the weirs to be used in managing the revised water levels that would occur in advance of and after severe precipitation events. The geotechnical investigations include trial pitting and borehole work at these four locations on the canal. It follows a previous application for section 42 consent for ground-penetrating radar work at the four locations proposed for this work, which has now been granted. It has been submitted by Scottish Canals as landowner.

The application is accompanied by location plans for the proposed works, along with method statements for the work and a photo survey of the proposed locations.

HES Heritage Management Directorate has undertaken general pre-application discussions with the applicant regarding the scope and timing of works, but the locations and method were agreed on a site visit conducted after the application was made.

3. Proposals

- Trial excavation work at 4 locations
- Inspection pit excavation and borehole work at the same 4 locations

Consented works – geotechnical investigation to inform future design stages of the North Glasgow Integrated Water Management System. The 4 trial pits (1m wide by 3-4m by 2 – 4.5m deep) will be excavated in the soft verge by a mechanical excavator, adjacent to existing weirs. For the 4 boreholes an inspection pit (0.5m by 0.5m by 1.2m deep) will be excavated in the soft verge adjacent to the towpath by a mechanical mini-excavator, again adjacent to the weirs. The borehole will then be sunk within this pit to a depth of 5-6m, using small tracked drilling rigs. The ground will be re-instated after the excavations. In order to protect the weir structures during excavations a 5m exclusion zone will be set in place around each structure.

Aims – the works are being proposed as part of the North Glasgow Integrated Water Management System. This is a scheme to manage water levels in the Forth & Clyde Canal summit pound (between Kirkintilloch and Wyndford) to enable SUDS water to be

transported away from new development sites in Glasgow. This would require weir outfalls that are larger than the existing weirs that allow excess water to run off the canal. Scottish Canals are a partner in this proposal, along with Glasgow City Council and Scottish Water.

Timetable – the work will be done as soon as the recently consented ground penetrating radar works have been completed.

Personnel – the work will be undertaken by geotechnical consultants reporting to Scottish Canals.

4. Representations received

The following third party representations have been received:

Scottish Natural Heritage have confirmed on 20 December 2016 that the works at Wyndford (within the Dullatur Marsh SSSI) raises no natural environmental issues.

5. Report

a) Policy considerations

The application should be considered with the following legislative and policy considerations in mind:

Ancient Monuments and Archaeological Areas Act 1979

Part 1 Section 2: Control of works affecting scheduled monuments.

Historic Environment Scotland Policy Statement June 2016

3.14. A monument is included in the schedule to secure the long-term legal protection of the monument in the national interest, in situ and as far as possible in the state it has come down to us. Scheduled monuments have an intrinsic value as monuments, not related to any concept of active use. It is the value of the monument to the nation's heritage, in terms set out in the section on Scheduling in Chapter 2 of this policy statement that is the primary consideration in determining applications for scheduled monument consent.

3.16. Works on scheduled monuments should therefore normally be the minimum level of intervention that is consistent with conserving what is culturally significant in a monument.

3.18. Scheduled monument consent applications must be considered in terms of the cultural significance of the monument and the impact that the proposals would have upon this cultural significance. The more important particular features of the monument are to its cultural significance, the greater will be the case against interventions which modify these features.

b) Assessment

The trial pit works would involve the loss of embankment material in 4 locations, each 1.0m wide by 4m by 2m, and 5m deep, all excavated by mini-digger. This would involve the excavation of a total of approximately 160 cubic metres of material. Much of this material will represent original canal construction makeup. The 4 locations chosen are adjacent to original weirs on the canal, all of which are constructed in fine ashlar with rounded arches on internal and external faces. These weirs would not be affected by the works.

The borehole works would involve the loss of embankment material in the same 4 locations, with inspection pits being mechanically excavated to 0.5m by 0.5m by 1.2m deep. The small tracked drilling rig would then drill a borehole in each pit, to a maximum depth of 6m. This would involve the removal of a total of approximately 7.2 cubic metres of material. Much of this material would represent original canal construction makeup. Again, the weirs would not be affected by the works.

The embankments of the canal contain very little of archaeological interest other than their overall form. The removal of a total of approximately 167.2 cubic metres of material would involve significant excavation works. However, this material was generally randomly dumped and contains no archaeological features/strata within it. Therefore, while the works would have a substantial physical impact, there would be no impact on the cultural significance of the scheduled monument.

Once the works are complete, the material would be backfilled into the pits and the sites regressed. In effect, the appearance of the canal embankment would be returned to its original form. On balance, it must be considered that the impact on the cultural significance of the canal would therefore be negligible.

c) Other material considerations, including impact of the works on Protected Species and Places

No impact on Protected Species and Places considered likely – see Protected Places and Species assessment. The works would be within Dullatur Marsh SSSI and we have consulted SNH regarding the works. SNH have confirmed that the works should not impact the SSSI.

d) Conclusion

The application should be viewed as works as set out in both Part 1 Section 2 of the AMAA Act 1979 and paragraph 3.4 of the policy statement.

The works, comprising geotechnical investigation to inform future design stages for the North Glasgow Integrated Water Management System , are being done to elements of the monument in such a way that they will have little impact on the cultural significance of the monument. They do not, therefore, conflict with paragraphs 3.16 and 3.18 of the policy statement.

The work will be carried out early in 2017 and certainly before the end of the financial year 2016-17. We would not need to carry out a site inspection, so no notification condition is required. The reported conclusions will form part of the pre-application discussion on the overall scheme, and this will be submitted to HES as part of that process. Consequently, no reporting condition is considered necessary.

6. Recommended decision

The works proposed are considered acceptable in meeting the terms of national policy for scheduled monuments, and also accounting for other material considerations

It is recommended that consent is **granted without conditions.**

7. Conditions

No conditions have been attached to this decision.

8. Approval

Case officer	John Malcolm	**Date**	21 December 2016
Approved by	John Raven	**Date**	21 December 2016

Annex A – list of supporting documents

- Borehole Drilling Methodology Borehole Drilling Rev 1
- Trial Pit Methodology Trial Pit Rev 1
- Location Plans (4 No.) Craigmarloch.pdf, Shirva.pdf, Ruchill.pdf, Wynford.pdf
- Photographs of the Weirs