

# Nenthead Mine Water Treatment Scheme



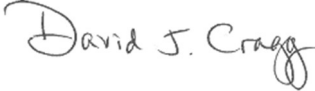

Peat Survey Report

Coal Authority

Project number: 60596575  
MWTS-AEC-NC-XX-RP-Y-3132 P1

26 April 2023

## Quality information

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## Revision History

Revision	Revision date	Details	Authorised	Name	Position
P01	26/04/23	First Issue	Yes	Lewis Wardle	Project Manager

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# 1. Introduction

## 1.1 Background

The Department for Environment, Food and Rural Affairs (DEFRA) set up the “Water and Abandoned Metal Mines” (WAMM) Programme in 2011 to begin to tackle pollution from the hundreds of metal mines across the country. The programme is delivered as a partnership between DEFRA, the Environment Agency and the Coal Authority.

The River Nent fails to achieve good status for cadmium, lead, zinc, fish and invertebrates. The Northumbria River Basin Management Plan (RBMP), published in 2015, includes steps for addressing pollution from abandoned mines and managing the impacts to 2027. The WAMM programme has ranked the River Nent as the lowest quality in the Northumbria RBMP, and one of the lowest quality rivers in England, with respect to mine water related pollution. The pollution from the River Nent contributes to pollution in the River South Tyne up to 60km downstream. Due to these impacts, the Nent Catchment has been a priority for investigation, assessment and targeted improvement measures.

AECOM has been appointed by the Coal Authority to undertake the feasibility and outline design for a mine water treatment scheme (MWTS) at the Caplecleugh Adit and Rampgill Adit which are two of the point source contributors to the failure of the River Nent under the RBMP. The aim is to reduce the metal loading (principally lead, zinc, cadmium) within the mine water discharge from the Caplecleugh Adit and Rampgill Adit by between 70% and 90%, providing betterment to the River Nent, whilst adhering to the conditions required for consents, licences and permits. The scheme will also incorporate surface water management across the site to limit the volume of water coming into contact with contaminants.

The MWTS is located to the east of an existing surface water reservoir known as Handsome Mea. The proposals are shown on Figure 1 in Appendix A.

In 2022, Cumbria County Council (CCC) indicated that a peat survey would be required at Nenthead and provided the following comments:

*“Our ecological consultant has advised that the mapping the UKSO provide is indicative – but given the upland nature of the site and the fact that we rely on field survey to provide the evidence base, he still thinks the site will need a Peat survey. He considers it needn't be surveyed on anything smaller than a 50x50 grid, but that we ought to know to avoid any issues.*

*We would seek peat to be avoided leaving it undisturbed and retained in-situ in the first instance, but where this is not possible we would be looking at translocation of turves/peat soils to a suitable nearby receptor site and/or a nearby upland restoration project.”*

At the request of CCC, the approach for the site works and reporting has been based on guidance for peat surveying provided in the following:

- Forestry Commission, December 2021. Natural environment survey and assessment instructions <sup>1</sup>

However, AECOM note that this document relates to woodland creation and not all of the requirements indicated within this guidance will be relevant to the proposed works, in particular assessing and providing recommendations about the suitability of the site for woodland creation due to the presence of peatland.

## 1.2 Site Designations

Most of the site is situated within the local wildlife site (non-statutory) designation and, therefore, it was considered unlikely that Natural England would need be involved for these non-statutory designations. Although there is a SSSI immediately to the south (Smallcleugh Mine SSSI), this is outside of the site area and has been designated for geological interest which does not include any designated habitat features.

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<sup>1</sup> <https://www.gov.uk/government/publications/natural-environment-survey-and-assessment-instructions>

However, as indicated on the Historic England website <sup>2</sup>, the survey works area includes the area of a Scheduled Monument associated with former lead mines, ore works and smelt mill at Nenthead. The mine workings are known to underlie the footprint of the proposed treatment scheme.

Prior to the survey works, a method statement was prepared which summarised the proposals for the survey works and was sent to Historic England along with the Scheduled Monument Consent application.

A copy of the Scheduled Monument Consent received from Historic England (23 December 2022) has been included in Appendix B.

### 1.3 Previous Investigation

The UK Soil Observatory online map viewer <sup>3</sup> does not indicate the site is located within an area where peat is present.

Information relating to ground conditions within the site area from a previous ground investigation has been provided within the following:

- Soil Engineering, November 2019. Report on a ground investigation at Nenthead mines proposed Minewater Treatment Scheme. Prepared for the Coal Authority
- AECOM, February 2020. Nenthead Mine Water Treatment Scheme Phase 2 Geo-Environmental and Geotechnical Ground Investigation Report. Prepared for the Coal Authority

Peat was not encountered during the ground investigation by Soil Engineering (2019).

Alluvial organic clay was encountered from 0.55m to 2.25m (base not proved, terminated on a probable boulder) beneath made ground in one trial pit (TP128) which is located to the south of the MWTS area, adjacent to an access track. An organic slightly sandy gravelly clay was also encountered in TP113 from 0.1m to 1.10m (base not proved, terminated on a probable boulder). TP113 was located to the north west of the existing Handsome Mea reservoir and also outside of the MWTS area.

The exploratory hole locations from the Soil Engineering (2019) investigation are indicated below.



<sup>2</sup> <https://historicengland.org.uk/listing/the-list/list-entry/1015858>

<sup>3</sup> <https://mapapps2.bgs.ac.uk/ukso/home.html>

## 2. Site Works

### 2.1 Summary

The peat surveying site works were undertaken by AECOM between 7<sup>th</sup> and 9<sup>th</sup> March 2023.

The peat survey was completed using a 1.2 m peat probe with 0.94 m extension rods. The survey locations were based on an approximate 50 m x 50 m spaced grid although this was subject to amendment during the site works due to local features and hazards such as services, surface waters, undulating ground/ditches and statutory designations.

In total, 58 no. locations were surveyed, 17 no. of which were located in or close to the proposed MWTS. One location, P55, had to be moved due to surface water covering the planned location.

The surveying locations are shown on Figure 1 in Appendix A.

The peat survey locations, depths and condition categories were recorded using the Peatland Action recording form <sup>4</sup>.

The depths recorded are from the ground surface. In a number of locations shown as 'NA' on Figure 3 in Appendix A, it was possible to progress the probe to depth although no peat was visible at the surface. These relate to survey locations within reworked areas of land which were often covered at the surface with spoil associated with previous mining activity. No additional investigations were undertaken to confirm the presence, thickness or condition of the peat below the spoil at these locations.

### 2.2 Peat Condition Assessment Approach

The peatland condition category at each survey location was assessed using the Peatland Condition Assessment <sup>5</sup> guidance which is referred to in the Forestry Commission's guidance. This guidance provides the following categories for peat condition along with a summary of the descriptions:

- 1) Near natural - evidence of grazing and trampling is rare or absent, little or no bare peat surface, no known fires, Sphagnum mosses dominates rather than heather.
- 2) Modified - bare peat present in small patches, evidence of fires or recorded fire history, frequent impacts of grazing and trampling, extensive cover of heather or purple moor grass, Sphagnum mosses are rare or absent, undesirable level of scrub drying out the bog.
- 3) Drained - within 30m of either an artificial drain or a re-vegetated hagg / gully system.
- 4) Actively eroding - the hagg / gully system actively eroding with no vegetation in gully bottoms and steep bare peat cliffs, extensive continuous bare peat surfaces, restoration may require period of de-stocking and exclusion of wild herbivores.

The peatland conditions recorded at each survey location where peat was present are provided on Figure 3 in Appendix A. No locations were recorded as being 'actively eroding'.

### 2.3 Peat Distribution, Condition and Depth

A record of the survey locations, peat depth and condition category has been provided in Appendix C. The peat condition is also shown on Figure 3 in Appendix A.

Of the 58 no. peat survey locations, 17 no. were located within or close to the proposed MWTS location. Within this area, peat at 8 no. of the survey locations was assessed as 'modified', 6 no. were 'near natural' and at 3 no. survey locations no peat was encountered near surface.

Within the wider area, to the south of the proposed MWTS the surveyed locations were all deemed to be near natural, and to the west there were 15 no. locations where no peat was found or noted at near surface, 12 no.

<sup>4</sup> <https://www.nature.scot/doc/peatland-action-peat-depth-and-peat-condition-survey-guidance-and-recording-form-guidance>

<sup>5</sup> <https://www.nature.scot/sites/default/files/2023-02/Guidance-Peatland-Action-Peatland-Condition-Assessment-Guide-A1916874.pdf>

locations were considered modified, and 7 no. locations were considered near natural and one location was assessed as drained (artificial) located immediately north of Handsome Mea Reservoir.

The Forestry Commission<sup>6</sup> indicate soil with a peat layer of 30cm or deeper is considered to fall into the category of 'deep peat' and that the Soil Survey of England and Wales classifies these as the major soil type 'Peat soils' or group 10 which is considered to either support, or have the capability to support, priority habitats.

The depth of peat encountered is shown on Figure 2 in Appendix A.

Depths of 8cm to 158cm were obtained from survey locations located in or closest to the MWTS. The survey location with the greatest depth in this area (158cm) is located outside the footprint of the MWTS, to the south of the existing quarry access track / west of Handsome Mea northern leat channel. No peat was recorded near surface at this location as mining spoil was present at the ground surface.

At one location within the footprint of the proposed MWTS the probe was extended to a depth of 122cm, again this was recorded as 'NA' as peat was not visible at the ground surface due to the presence of mining spoil. The other location where spoil was present at the surface, where a depth of 59cm was obtained from probing, was located immediately the south of the quarry access track / east of Handsome Mea northern leat channel.

In the 14 of 17 no. survey locations in or close to the footprint of the MWTS where peat was recorded near surface, the depth of peat was greater than 30cm in only 8 no. locations, ranging from 34cm to 66cm.

However, other organisations provide different depths defining deep peat as, for example, Natural England<sup>7</sup> considered deep peaty soils to be areas covered with a majority of peat >40cm deep with shallow peaty soils comprising areas with a majority of soils with peat 10–40cm deep, with 5 no. of the locations within the MWTS area where peat was noted exceeding 40cm.

NatureScot<sup>8</sup> indicates that peat in the Scottish soil classification exceeds 50cm in thickness. Only 3 no. locations in the footprint of the MWTS where peat was noted would exceed this.

### 3. Review of Potential Impacts and Mitigation

Surveying has identified the presence of peat within the area of the proposed MWTS treatment site in a number of locations. In these locations, the peat is near surface at thicknesses greater than 30cm indicated for deep peat as defined within Forestry Commission guidance. Measured peat depths ranging from 34cm to 66cm have been recorded from the surface.

For the purpose of providing a stable formation for the treatment ponds, it is anticipated that the peat will need to be removed down to underlying competent strata across the footprint of the proposed MWTS treatment site. There would thus be a requirement to devise a peat translocation plan whereby the peat arisings are placed back onto the ground in areas of the site which may have suffered from erosion.

A further possible mitigation is that peat arising from the pond excavations could be re-used as a cover to the pond bund slopes as a means to establish native moorland vegetation on the slopes. From a landscaping perspective there is a desire to blend in the appearance of the bunds with the surrounding land surface. Use of peat on the bund slopes may help to achieve this. The depth of peat re-used in this way may be limited to 200-300mm due to slope stability constraints although thicker depth may be possible if the peat surface is pinned to the bulk fill and the pins are linked by netting across the peat surface.

Temporary and permanent ecological effects could arise due to the loss of peat habitat and as a result of the disruption of surface and groundwater pathways. The loss of peat could lead to localised dewatering of peat habitat surrounding the MWTS and result in the drying of heathland habitats. There could also be similar effects within the footprint of the pipe line route, where excavation will affect heathland habitat. Similarly, the disruption and interception of surface water flows through the habitats could result in impacts on groundwater dependent ecosystems towards the base of the slope.

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<sup>6</sup> Decision support framework for peatland protection and the establishment of new woodland (Interim) June 2021  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/992439/Decision\\_support\\_framework\\_for\\_peatland\\_protection\\_and\\_the\\_establishment\\_of\\_new\\_woodland\\_\\_Interim\\_\\_June\\_2021\\_FINAL.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/992439/Decision_support_framework_for_peatland_protection_and_the_establishment_of_new_woodland__Interim__June_2021_FINAL.pdf)

<sup>7</sup> England's peatlands: Carbon storage and greenhouse gases  
<http://publications.naturalengland.org.uk/publication/30021>

<sup>8</sup> <https://www.nature.scot/doc/advising-carbon-rich-soils-deep-peat-and-priority-peatland-habitat-development-management>



Therefore, where direct or indirect impacts on peat deposits cannot be avoided as part of the proposed construction works, guidance provided by NatureScot<sup>8</sup> indicates that mitigation should be considered which could involve adopting alternative construction techniques, carefully planning drainage on the site and ensuring good maintenance of mitigation measures on site.

Tracking of heavy plant across peat should be avoided where possible which could be mitigated by placing prefabricated tracking sheets raised above the ground surface. Where this cannot be avoided the length of track across peat should be minimised, using the existing tracks wherever possible

Measures should be taken to minimise adverse impact on the condition of peat where present close to other excavations and construction activity. In particular groundwater and surface water control in or close to any excavations should be designed and implemented to prevent dewatering of the peat.

Where potential impacts cannot be avoided or mitigated (for example, through alterations to the site layout or construction techniques), it is good practice to identify opportunities for habitat enhancement. As noted above this would seek to improve the condition of existing peatland habitat and to restore damaged habitat which could include translocation of peat from the footprint of the development area to a suitable nearby receptor site and / or a nearby upland restoration project. It may also be possible to re-use some of the peat arisings within the scheme or other areas of the site.

The findings from the peat surveying and proposals for mitigation should be discussed and agreed with CCC and should consider the objectives of any local and national policies relating to peat habitats and their conservation/ restoration e.g. the England Peat Action Plan<sup>9</sup> and the UK Peatland Strategy<sup>10</sup>. Depending on the mitigation approach proposed, further delineation could also be required to confirm the extent of the peat within the footprint of the proposed MWTS treatment site.

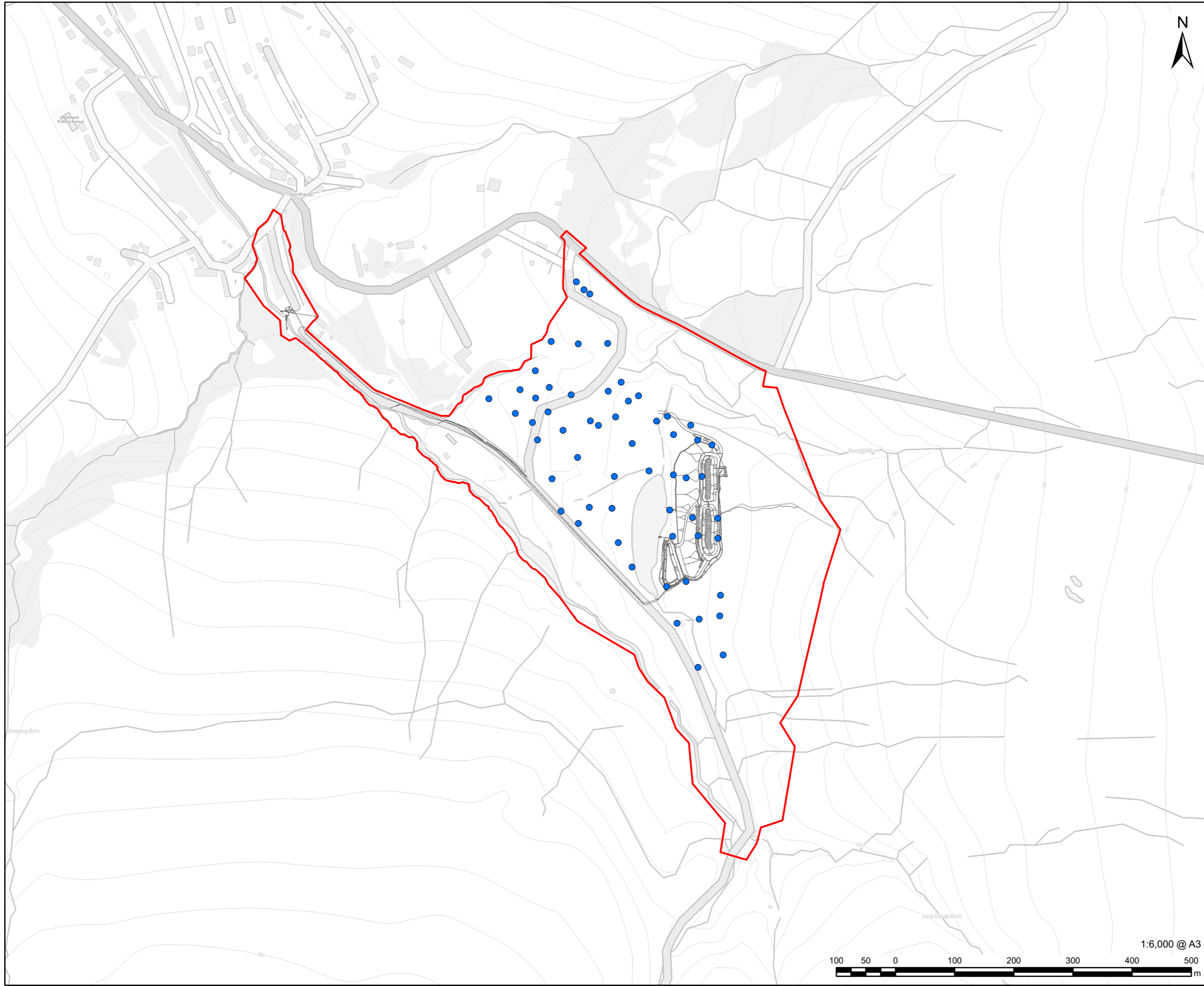
Peat has also been identified within the areas to the west of the proposed MWTS at depths at of >30cm. Therefore, as noted above if temporary or permanent works are proposed within these areas it will be necessary to consider mitigation if areas with peat cannot be avoided.

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<sup>9</sup> UK Government (2021) England Peat Action Plan May 2021: <https://www.iucn-uk-peatlandprogramme.org/resources/restoration-practice/restoration-techniques>

<sup>10</sup> IUCN National Committee United Kingdom – UK Peatland Strategy 2018 – 2040: <https://www.iucn-uk-peatlandprogramme.org/uk-strategy>

## Appendix A – Drawings



**AECOM**

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Nenthead MWTS

**CLIENT**  
Coal Authority

**CONSULTANT**  
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Leeds, LS11 9AR  
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**LEGEND**

- ▭ Scheme Boundary
- Proposed Construction Works
- Peat Probe Location

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**ISSUE PURPOSE**

FINAL

**PROJECT NUMBER**

60596575

**FIGURE TITLE**

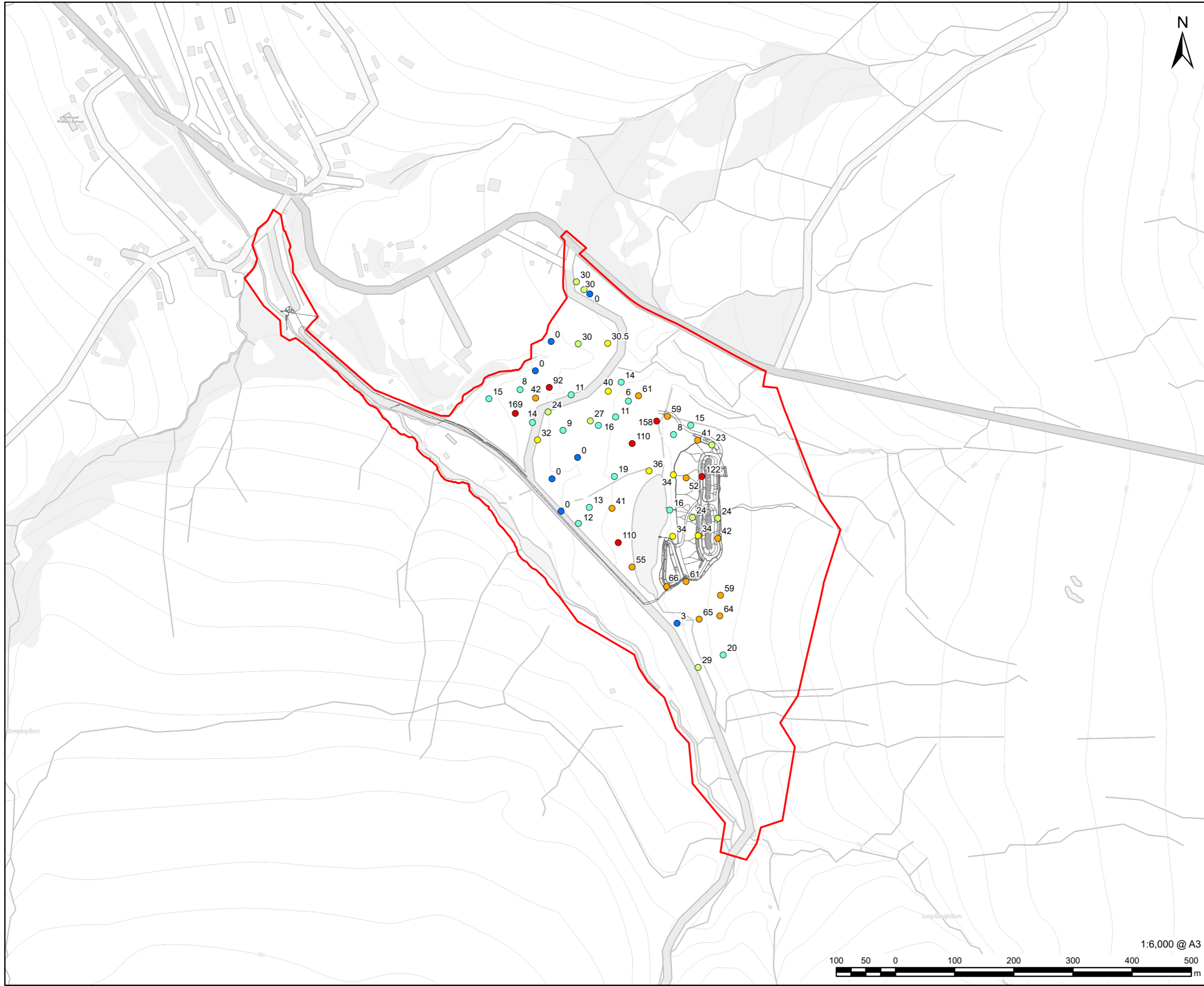
Survey Locations

**FIGURE NUMBER**

Figure 1



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- LEGEND**
- Scheme Boundary
  - Proposed Construction Works
  - Peat Probe Location - Depth (cm)**
  - 0 - 5
  - 5 - 20
  - 20 - 30
  - 30 - 40
  - 40 - 90
  - 90 - 170

**NOTES**  
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**ISSUE PURPOSE**  
FINAL

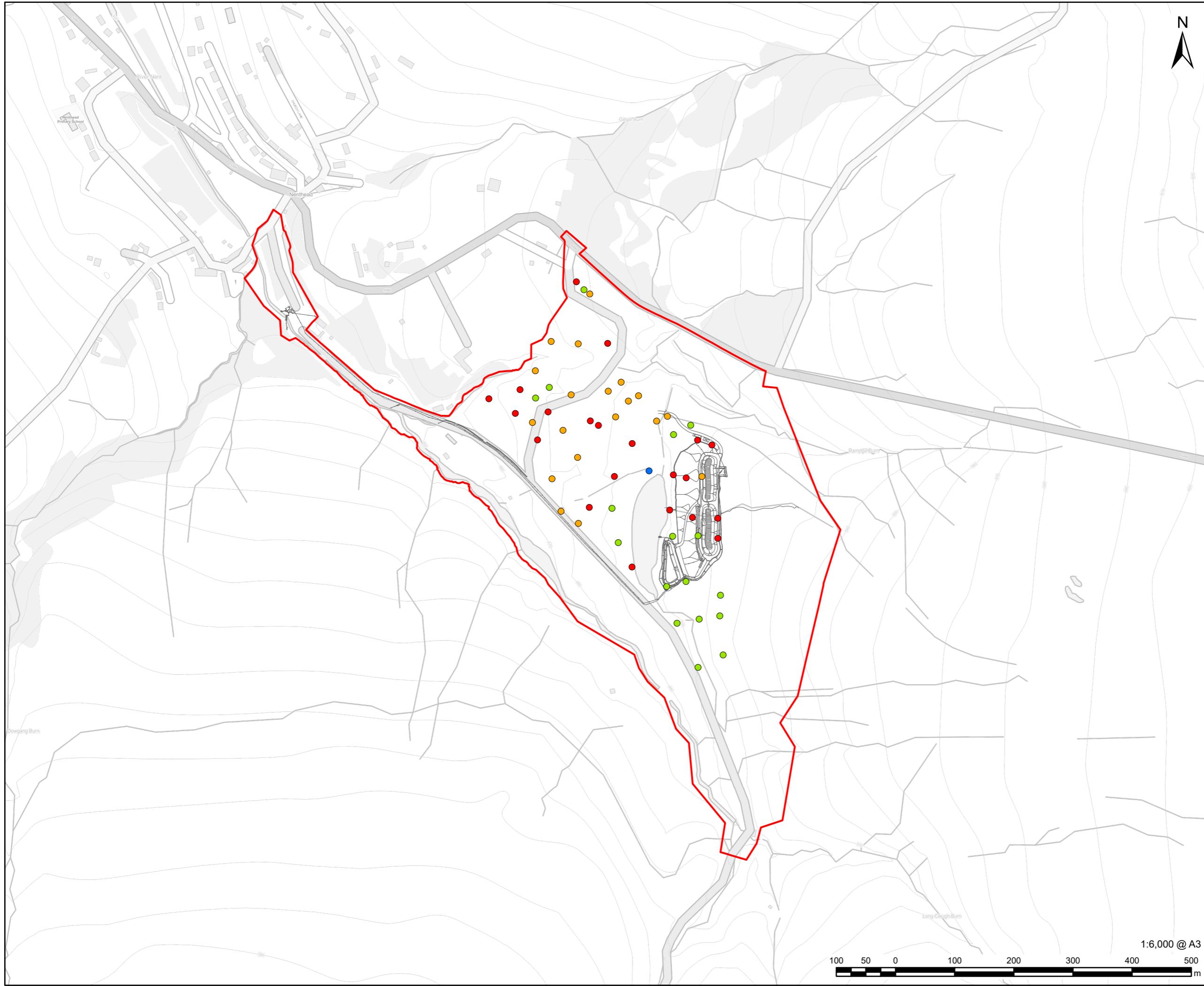
**PROJECT NUMBER**  
60596575

**FIGURE TITLE**  
Depth of Peat

**FIGURE NUMBER**  
Figure 2



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- LEGEND**
- Scheme Boundary
  - Proposed Construction Works
  - Peat Probe Location - Condition**
  - Drained: Artificial
  - Modified
  - Near natural
  - NA

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**ISSUE PURPOSE**  
FINAL

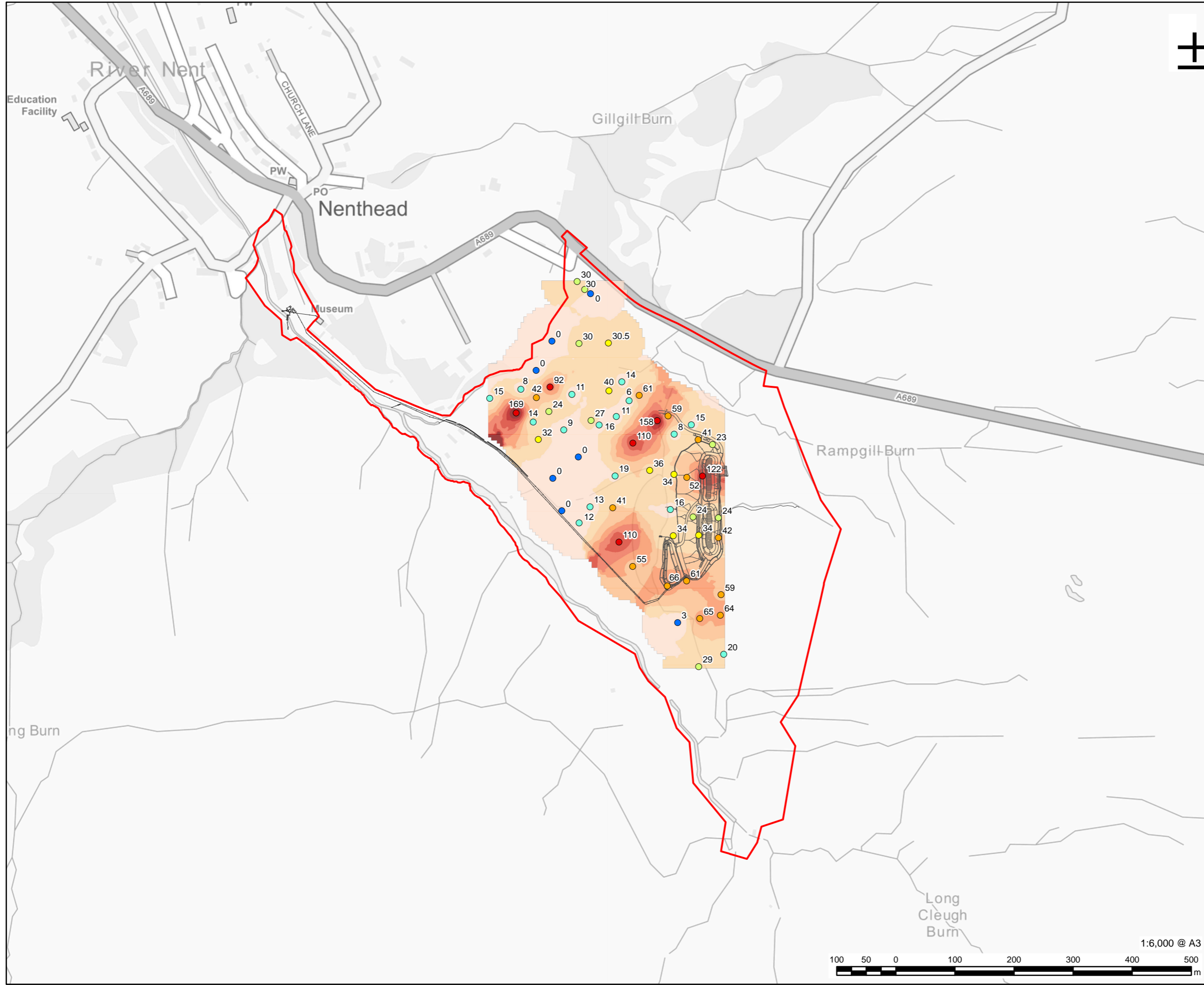
**PROJECT NUMBER**  
60596575

**FIGURE TITLE**  
Condition of Peat

**FIGURE NUMBER**  
Figure 3



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**LEGEND**

- Scheme Boundary
- Proposed Construction Works
- Peat Probe Location - Depth (cm)
- 0 - 5
- 5 - 20
- 20 - 30
- 30 - 40
- 40 - 90
- 90 - 170
- Peat Depth Interpolation Estimate (cm)
- >0 to 20
- >20 to 40
- >40 to 60
- >60 to 80
- >80 to 100
- >100 to 120
- >120 to 140
- >140 to 170

**NOTES**

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**ISSUE PURPOSE**

DRAFT

**PROJECT NUMBER**

60596575

**FIGURE TITLE**

Interpolation of Peat Depth

**FIGURE NUMBER**

Figure 4



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## **Appendix B – Scheduled Monument Consent**



Dr Jonathan Shipley  
AECOM  
One Trinity Gardens  
Quayside  
Newcastle upon Tyne  
NE1 2HF

Direct Dial: 0161 242 1439

Our ref: S00243578

23 December 2022

Dear Dr Shipley

**Ancient Monuments and Archaeological Areas Act 1979 (as amended); Section 2  
control of works  
Application for Scheduled Monument Consent**

**LEAD MINES, ORE WORKS AND SMELTMILL AT NENTHEAD  
Scheduled Monument No: SM 28906, HA 1015858  
Our ref: S00243578  
Application on behalf of The Coal Authority**

1. I am directed by the Secretary of State for Digital, Culture, Media & Sport to advise you of the decision regarding your application for Scheduled Monument Consent received 2 December 2022 in respect of proposed works at the above scheduled monument concerning geotechnical ground investigation by probing to provide information on the depth of peat. The works were detailed in the following documentation submitted by you:

Plan of Ground Investigation works in relation to Scheduled Monument  
Nenthead Mine Water Treatment Scheme - Peat Probing Method Statement (October 2022)

2. In accordance with paragraph 3(2) of Schedule 1 to the 1979 Act, the Secretary of State is obliged to afford you, and any other person to whom it appears to the Secretary of State expedient to afford it, an opportunity of appearing before and being heard by a person appointed for that purpose. This opportunity was offered to you by Historic England and you have declined it.

3. The Secretary of State is also required by the Act to consult with the Historic Buildings and Monuments Commission for England (Historic England) before deciding whether or not to grant Scheduled Monument Consent. Historic England considers the effect of the proposed works upon the monument to be works with a limited effect which will not be seriously adverse to the known surviving archaeology of the monument.



SUITES 3.3 AND 3.4 CANADA HOUSE 3 CHEPSTOW STREET MANCHESTER M1 5FW

Telephone 0161 242 1416  
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I can confirm that the Secretary of State is agreeable for the works to proceed providing the conditions set out below are adhered to, and that accordingly Scheduled Monument Consent is hereby granted under section 2 of the 1979 Act for the works described in paragraph 1 above, subject to the following conditions:

- (i) The works to which this consent relates shall be carried out to the satisfaction of the Secretary of State, who will be advised by Historic England. At least 2 weeks' notice (or such shorter period as may be mutually agreed) in writing of the commencement of work shall be given to Mr A P Davison, Historic England North West, Canada House, 3 Chepstow Street, Manchester, M1 5FW (telephone 0161 242 1412, email [andrew.davison@HistoricEngland.org.uk](mailto:andrew.davison@HistoricEngland.org.uk)) in order that an Historic England representative can inspect and advise on the works and their effect in compliance with this consent.
- (ii) A report on the geotechnical investigation shall be sent to Mr A P Davison at Historic England within 3 months of the completion of the works (or such other period as may be mutually agreed).

4. By virtue of section 4 of the 1979 Act, if no works to which this consent relates are executed or started within the period of five years beginning with the date on which this consent was granted (being the date of this letter), this consent shall cease to have effect at the end of that period (unless a shorter time period is set by a specific condition above).

5. This letter does not convey any approval or consent required under any enactment, bye law, order or regulation other than section 2 of the Ancient Monuments and Archaeological Areas Act 1979.

6. Your attention is drawn to the provisions of section 55 of the 1979 Act under which any person who is aggrieved by the decision given in this letter may challenge its validity by an application made to the High Court within six weeks from the date when the decision is given. The grounds upon which an application may be made to the Court are (1) that the decision is not within the powers of the Act (that is, the Secretary of State has exceeded the relevant powers) or (2) that any of the relevant requirements have not been complied with and the applicant's interests have been substantially prejudiced by the failure to comply. The "relevant requirements" are defined in section 55 of the 1979 Act: they are the requirements of that Act and the Tribunals and Inquiries Act 1971 and the requirements of any regulations or rules made under those Acts.



SUITES 3.3 AND 3.4 CANADA HOUSE 3 CHEPSTOW STREET MANCHESTER M1 5FW

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Historic England

Yours sincerely

**Emma Feddon**

Business Officer

E-mail: [emma.feddon@historicengland.org.uk](mailto:emma.feddon@historicengland.org.uk)

For and on behalf of the Secretary of State for Digital, Culture, Media and Sport



SUITES 3.3 AND 3.4 CANADA HOUSE 3 CHEPSTOW STREET MANCHESTER M1 5FW

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## Appendix C – Peat Condition Record

Peat depth survey points

OS easting (e.g. 191771)	OS northing (e.g. 735836)	OS alphanumeric Grid reference (e.g. NM9177135836)	Sample point ID	Survey date (YYYY-MM-DD)	Surveyor name	GPS accuracy (metres)	Peat depth (cm)	Peatland condition category	Notes
378600.429	543573.202	NY7860043573	P01	2023-03-07	JP/AP	0.008	30	Modified	
378613.231	543559.747	NY7861343559	P02	2023-03-07	JP/AP	0.007	30	Near natural	
378623.071	543552.640	NY7862343552	P03	2023-03-07	JP/AP	0.006	0	NA	
378557.757	543472.332	NY7855743472	P04	2023-03-07	JP/AP	0.009	0	NA	
378603.545	543468.355	NY7860343468	P05	2023-03-07	JP/AP	0.007	30	NA	
378653.289	543469.112	NY7865343469	P06	2023-03-07	JP/AP	0.009	30.5	Modified	
378531.020	543422.808	NY7853143422	P07	2023-03-07	JP/AP	0.008	0	NA	
378554.580	543394.671	NY7855443394	P08	2023-03-07	JP/AP	0.007	92	Near natural	
378591.556	543382.158	NY7859143382	P09	2023-03-07	JP/AP	0.009	11	NA	
378505.179	543390.854	NY7850543390	P10	2023-03-07	JP/AP	0.006	8	Modified	
378531.457	543376.678	NY7853143376	P11	2023-03-07	JP/AP	0.007	42	Near natural	
378452.495	543375.500	NY7845243375	P12	2023-03-07	JP/AP	0.006	15	Modified	
378497.205	543350.755	NY7849743350	P13	2023-03-07	JP/AP	0.007	169	Modified	
378526.123	543335.352	NY7852643335	P14	2023-03-07	JP/AP	0.006	14	NA	
378676.063	543403.446	NY7867643403	P15	2023-03-07	JP/AP	0.008	14	NA	
378705.445	543380.557	NY7870543380	P16	2023-03-07	JP/AP	0.007	61	NA	
378654.252	543388.251	NY7865443388	P17	2023-03-07	JP/AP	0.007	40	NA	
378688.354	543371.574	NY7868843371	P18	2023-03-07	JP/AP	0.008	6	NA	
378552.582	543353.235	NY7855243353	P19	2023-03-07	JP/AP	0.007	24	Modified	
378577.795	543322.118	NY7857743322	P20	2023-03-07	JP/AP	0.007	9	NA	
378666.731	543344.764	NY7866643344	P21	2023-03-07	JP/AP	0.008	11	NA	
378735.973	543337.765	NY7873543337	P22	2023-03-07	JP/AP	0.009	158	NA	
378754.327	543345.815	NY7875443345	P23	2023-03-08	JP/AP	0.008	59	NA	
378793.650	543330.706	NY7879343330	P24	2023-03-08	JP/AP	0.009	15	Near natural	
378534.736	543305.882	NY7853443305	P25	2023-03-08	JP/AP	0.01	32	Modified	
378602.449	543276.288	NY7860243276	P33	2023-03-08	JP/AP	0.009	0	NA	
378624.005	543338.059	NY7862443338	P26	2023-03-08	JP/AP	0.009	27	Modified	
378637.670	543330.447	NY7863743330	P27	2023-03-08	JP/AP	0.011	16	Modified	
378694.738	543299.779	NY7869443299	P28	2023-03-08	JP/AP	0.011	110	Modified	
378764.654	543314.855	NY7876443314	P29	2023-03-08	JP/AP	0.009	8	Near natural	
378805.250	543305.580	NY7880543305	P30	2023-03-08	JP/AP	0.008	41	Modified	
378829.525	543297.333	NY7882943297	P31	2023-03-08	JP/AP	0.01	23	Modified	
378559.232	543240.166	NY7855943240	P32	2023-03-08	JP/AP	0.008	0	NA	
378664.692	543244.128	NY7866443244	P34	2023-03-08	JP/AP	0.007	19	Modified	
378764.315	543246.844	NY7876443246	P36	2023-03-08	JP/AP	0.007	34	Modified	
378786.010	543241.729	NY7878643241	P37	2023-03-08	JP/AP	0.008	52	Modified	
378812.544	543244.032	NY7881243244	P38	2023-03-08	JP/AP	0.007	122	NA	
378723.235	543253.537	NY7872343253	P35	2023-03-08	JP/AP	0.007	36	Drained: Artificial	
378574.457	543185.259	NY7857443185	P39	2023-03-08	JP/AP	0.008	0	NA	
378622.238	543191.853	NY7862243191	P40	2023-03-08	JP/AP	0.008	13	Modified	
378660.628	543190.253	NY7866043190	P41	2023-03-08	JP/AP	0.009	41	Near natural	
378758.175	543187.335	NY7875843187	P42	2023-03-08	JP/AP	0.008	16	Modified	
378796.530	543174.760	NY7879643174	P43	2023-03-08	JP/AP	0.008	24	Modified	
378839.453	543173.340	NY7883943173	P44	2023-03-08	JP/AP	0.007	24	Modified	
378839.490	543139.558	NY7883943139	P49	2023-03-08	JP/AP	0.009	42	Modified	
378806.129	543143.868	NY7880643143	P48	2023-03-08	JP/AP	0.009	34	Near natural	
378763.125	543142.980	NY7876343142	P47	2023-03-08	JP/AP	0.01	34	Near natural	
378603.794	543164.723	NY7860343164	P45	2023-03-08	JP/AP	0.008	12	NA	
378671.197	543132.245	NY7867143132	P46	2023-03-08	JP/AP	0.009	110	Near natural	
378694.444	543091.041	NY7869443091	P50	2023-03-09	JP/AP	0.009	55	Modified	Light snow underfoot
378752.996	543058.014	NY7875243058	P51	2023-03-09	JP/AP	0.007	66	Near natural	Light snow underfoot
378785.659	543066.498	NY7878543066	P52	2023-03-09	JP/AP	0.008	61	Near natural	Light snow underfoot
378843.982	543043.282	NY7884343043	P53	2023-03-09	JP/AP	0.009	59	Near natural	Light snow underfoot
378842.804	543008.399	NY7884243008	P56	2023-03-09	JP/AP	0.007	64	Near natural	Light snow underfoot
378807.935	543002.873	NY7880743002	P55	2023-03-09	JP/AP	0.009	65	Near natural	Moved location due to water covering location
378770.545	542995.946	NY7877042995	P54	2023-03-09	JP/AP	0.01	3	Near natural	Light snow underfoot
378806.101	542921.350	NY7880642921	P57	2023-03-09	JP/AP	0.011	29	Near natural	Light snow underfoot
378848.490	542942.373	NY7884842942	P58	2023-03-09	JP/AP	0.008	20	Near natural	Light snow underfoot

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