

SECTION 1:

Project Brief for Morridge Hill Country Habitat Restoration – Vegetation Survey and Restoration recommendations (the Services)

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a) Brief

MorrIDGE Hill Country (MHC) is one of DEFRA's Landscape Recovery Projects and is located within the South West Peak of the Peak District National Park. It is an ambitious landscape scale project with nature recovery at its heart (Map1).

Whilst the area is already relatively biodiverse compared to other parts of the country, there are significant opportunities here to restore ecosystems and increase resilience to change, and in doing so providing many additional benefits.

This area is within low agricultural land classification due to its altitude and wet climate; much of the land supports shallow and deeper peats. (See Map 5). It straddles the headwaters of the rivers Manifold, Dove, Dane and Churnet.

As a result of land drainage operations going back many years - mostly aimed at increasing agricultural production – a lot of the area is much drier than it would be in an unmodified state. Over time this has led to widespread loss of wetland areas and associated plant and animal species, drying of peat soils and associated carbon losses, and flashier conditions in downstream watercourses. In addition to drainage, other activities have led to losses of diversity across wet and drier habitats throughout.

As part of the 20-30 year vision for MHC we are exploring opportunities to:

- **diversify currently species-poor and depleted vegetation, including grasslands, mires, heaths etc.**
- **restore a more natural hydrologically functioning landscape**

This unique opportunity enables us to consider recovery across adjacent areas without the constraint of current boundaries whilst providing wider environmental benefits such as reduced downstream flood risk, protecting and enhancing soil carbon and improving water quality.

To inform where we might do this we are seeking costings for completion of a suite of surveys across the area, as shown on Map 2. An important element of this work will be to undertake an ecohydrological study across the area to determine where areas can be made wetter and more diverse and identify where drier areas could support more species rich neutral and acid grasslands and heaths together with the measures required to achieve this.

The information from these surveys will be used by the successful contractor to develop recommendations and scenarios of where these habitats may be enhanced and restored and provide a basis for future monitoring.

We are therefore seeking:

- 1. Updated vegetation survey of the extent and condition of the in-bye land.**

2. **Hydrological study and field survey to identify opportunities to restore naturally functioning hydrological regimes**
3. **Recommendations for habitat restoration across the landscape (Opportunity mapping report).**

Please see more detail on page 5.

The total survey area covers 865.16 hectares (shown on Map 2 - dark orange areas). This is made up of 29 individual sites which are grouped into five areas.

Spreadsheet 1 (Appendix A) shows the full list of sites. This also shows the hectareage of each site. The locations of the individual sites is shown further on Map 3. The Authority is seeking costings for survey and reporting of these areas as set out further below,

Please note that the costing schedule at Appendix A allows for pricing of (1) Group areas and (2) individual sites within those areas as separate packages.

b) Background to the Brief

Much of MHC sits within the Leek Moors SSSI, Peak District Moors (South Pennine Moors Phase II) Special Protection Area (SPA) and within the South Pennine Moors Special Area of Conservation (SAC). The area supports important birdlife including short eared owl, merlin and upland breeding waders such as snipe and curlew and nationally and internationally important upland habitats including grasslands, blanket bog, wet and dry heath, mires, flushes, fringing clough woodlands and willow scrub.

The landscape is crossed with primary and secondary watercourses and in places groundwater emerges on slopes and wetlands and flushes have developed.

Despite past drainage significant parts of the survey area are on the wetter side of the grassland spectrum. This wetness is a large part of why the area is ecologically special supporting upland waders and locally and nationally significant habitats and species - partly due to a combination of the hydrology and geology and past management (low intensity). Much of the soil resource has been derived from peaty substrates. Map 5 indicates the extent of this influence across the landscape.

Map 1 shows the boundary of the MHC area.

All of these areas are subject to various existing grazing regimes associated with sheep and cattle and many are currently within agri- environment schemes.

As part of the vision for the area we are exploring the potential to maximise the diversity of the habitats within the in-by lands and where these could be managed and enhanced to enable a wide landscape mosaic of species rich habitats to develop with varied structural complexity.

Currently the grasslands tend to be a mix of acid and neutral grasslands of varying diversity. They include a significant resource of rush pasture, and semi improved grasslands as well as some hay meadows. Some of the rush pastures are species rich but the majority are botanically poor. Field ditches and sub surface underdrainage is present across the area.

There is also a significant resource of grasslands which are important for fungi including nationally and internationally important areas. These tend to be located within relatively botanically poor grasslands.

- Map 3 - shows Indicative habitat maps (note these do not cover all the area and are derived from data sets which are up to 20 years old and of varying quality).
- Map 4 - The known resource of fungal grasslands

Additional habitat information can be viewed on MAGIC.

An important element of this work will be to undertake a hydrological study across the area.

The overall aim of this will be to identify and describe the hydrological context of the survey area, to understand its development, changes and modifications over time. Then, identify opportunities to restore natural hydrological function across the landscape by removing or mitigating the impacts of any artificial drainage features, such as surface or sub surface drains and harness any natural water flow pathways where possible to:

- Maximise the diversity and extent of the wet grassland and mire resource
- Benefit waders, invertebrates and wetland plants in particular.

Prior to SSSI designation in the late 1980's wetland areas were more extensive and diverse. Widespread drainage undertaken over the first half of the 20th century has changed the landscape. Review of old data sets in the years prior to designation indicate where fragments of some of these wetland plants and communities once occurred supporting species such as sundew, globe flower and marsh cinquefoil which are now long gone.

Fast forward to the present and the local perception is that the catchment is getting wetter – and part of the reason for this is that drains installed during the first half of the 20th century are starting to collapse and fill-in, together with changing weather patterns. Land managers are finding areas more difficult to manage in ways that they have been used to.

Landscape recovery offers the ability to think about the composition of habitats across areas and how they could be managed differently and sustainably for multiple benefits and to restore natural processes. You should be inventive with your ideas. For example, areas could be managed by being part of wider parcels with low intensity grazing that may be sustained through most of the grazing year. Similarly, some areas traditionally managed as hay meadows are becoming wetter and the opportunity arises to think about managing some of these areas differently too. They offer the potential to be used as a donor seed source, and in the longer term perhaps being managed as part of wider low intensity grazing parcels, allowing the botanical interest to develop to wetter communities where species can flower and the swards have structural complexity throughout the year.

Consequently, this study would need to consider how increased wetness across the sites may affect current management activities and what measures or changes in current practice and grazing patterns may be needed to be considered to allow these wetlands and species rich grasslands to be created and restored. For example, reduced grazing of some areas, purchase of low ground pressure machinery, creation of crossing points etc.

An example of restoration activities might include:

- areas for restored and enhanced hydrological function by addressing past drainage infrastructure; areas where natural hydrological surface flow pathways could be harnessed to provide enhanced hydrological function and slowing the flow of water across the land. Drain blocking/infilling and location of further water control structures
- areas for sphagnum plug planting in wet grasslands and mire habitats;
- areas identified for inoculation or more intensive seeding or plug planting with higher plant species that are otherwise under represented for the vegetation type or that are now rare or absent in the landscape, but would once have been more common place e.g marsh marigold,

ragged robin, marsh violet, lesser and greater spearwort, meadow sweet, iris, wild angelica, together with species such as globe flower, bog bean, marsh cinquefoil, sedges (bottlesedge) bog pondweed, butterwort, sundews, valerians, creeping willow, devils bit scabious, petty whin, dyer's greenweed, betony etc.

c) Scope and requirements for each site

1) Updated survey of the extent and condition of vegetation types currently present across the area

- Across the sites, map the current extent and type of the vegetation together with supporting habitats such as open water.
- Boundaries of the main vegetation types in each field should be recorded and registered with the appropriate NVC code. Provide a DAFOR 'record card' (excel format) of the species encountered during a structured walkover in each vegetation type within the field (where vegetation types are contiguous across field boundaries these can be recorded on one record card where appropriate). **Record overall condition.** It is expected that the range of sward heights and structure is recorded, together with cover of bare ground and undesirable species. **There is no requirement to record individual quadrats.**

Representative photographs of the vegetation should be provided (georeferenced). This should be downward pointing at the vegetation as well as representative view of the general vegetation.

2) Hydrological study and field survey :

Since there are various landownerships this must be presented with a series of options that could be taken forward independently or collectively over several years.

Study:

- **Review of existing surveys.** Habitat survey data is shown on Map 3. The digital data sets would be supplied to the contractor. Map 4 shows extent of 'waxcap' grasslands in this area (Full report will be made available for the successful contractor(s)). In addition habitat and drainage survey reports have been undertaken for sites Big Fernyford Farm, Brown spit Farm SWT and Shawfield Farm. These include information particularly on surface drainage with some conductivity readings.
Botanical recording of haymeadows for some sites has been undertaken in the last 3 years. These will be supplied to assist with recommendations. There are a small number of old historical plant records that will also be supplied e.g locations formerly known for globe flower, sundew etc. These are in jpeg format and not held on GIS. Digitally mapped archaeological data will be supplied.
- **Review of the hydrogeology/soils.** A high level review of the survey area, that describes the likely influence of the geology on the presence, location and pH of water seepage and spring lines. it is expected that base influence may be present at some sites.
- **Review existing data pertaining to drainage** to identify both natural and modified surface and sub surface drainage - It is anticipated that existing data sets will be used (where available) e.g. Lidar data, aerial photography
- **Sub surface drains:** The desk study should identify where there are sub surface field drains. Aerial imagery and Lidar imagery will assist in identifying where subsurface drains are present.

In addition, the location of any field drains from landowner maps will be provided as hard copies to the contractor at the start of the contract. There is no requirement to interview individual landowners.

- The contractor should be able to supply their own digital data sets such as lidar, OS based data etc and manipulate these to produce mapped information and relief models to identify drainage across the area.
- **Wetness index** modelling should be undertaken to identify additional water flow pathways and identify potential areas for enhanced wetness as indicated by intensity mapping. An example of a wetness intensity map is shown on example Map: 6. It is expected that the contractor will provide maps showing similar detail for the study area.
- Reference to WETMECS where appropriate to help understand where existing and potential wetland water supply comes from and how potential interventions across the areas could enable existing wetland areas to thrive, expand and new ones to develop.

Field Survey:

- **Undertake field survey of all hydrological features identified through the desk review process.** It is expected that this will relate to features that are visible on the ground. Much sub surface drainage identified through desk study is unlikely to be visible.
- **Each feature should be given a unique mapped identifying code.** (Including sub surface drainage).
- **Individual parameters for each feature should be recorded as shown in the example spreadsheet provided at Appendix B or as otherwise agreed.** Please also see example map7 showing features with unique identifying codes It is expected that the contractor will provide maps showing similar detail for the features surveyed and as a minimum include depth, width, height, as well as gradient, any water depth, flow rate and direction of flow. Conductivity/pH should be recorded as the contractors finds appropriate. Length should also be recorded but can be pre- populated during the desk study.
- **Undertake soil profile augers/probes where considered** necessary to understand the soil type and depth profile to inform potential interventions. Locations should be geo referenced
- **Undertake soil moisture and compaction measurements (e.g soil penetrometer) where considered necessary** to indicate current moisture and infiltration levels and inform potential interventions. Locations should be geo referenced
- **Undertake any pH and conductivity measurements where considered** necessary to indicate current levels and inform potential interventions.* Locations should be geo referenced
- **N.B It is not expected that soil nutrient tests would be undertaken at this stage.** Surveyors should use their skill and judgement from current vegetation types to indicate where interventions are likely to be most successful in the short term and areas where interventions and associated botanical change may be a longer term goal. **Contractors should identify areas for soils testing. Areas identified for enhancement would be subject to soil tests at project implementation stage.**

* Collectively approximately 12 conductivity/pH readings were undertaken across Big Fernyford, Shawfield and Crow trees Farms. It is expected that repeat readings will be undertaken at these points.

3) Opportunity mapping document:

Brief opportunity mapping report for each site. This should pull together all the above information to identify opportunities for habitat restoration to include:

- **Likely outcomes on Proposed Hydrological regime and how this will differ from the current situation (including completed spreadsheet Appendix B*).** – e.g how has a natural

regime been restored, what is the character of the current supply into, through and out of the site and how will these change. This should include details of where and how to block, in-fill or redirect drainage ditches or other features to rewet and restore areas to a more natural hydrological system. Cross referenced to maps as necessary. This should consider any decompaction measures as a one off operation – this may be particularly applicable to grasslands that have been grazed with high numbers of livestock in the past and the ground has historical compaction. Restoration should also consider the most appropriate grazing regime in light of any proposed changes.

- **Specifications for suggested works and methodology**
- **Likely changes to vegetation, species composition and condition** with reference to NVC types where appropriate
- **Details and specification for all methods proposed for introduction of plant species** For example species suites for wetland areas, mires, acid grassland and neutral grassland.
- **Identify any additional benefits to the works.**
- **Steps in the process** to such a recovery.
- **Likely impacts on the site and surrounding land**, including impacts on soil hydrology, water quality, current land management activities, any ecological constraints such as waxcap grasslands, archaeology, rights of way.etc. Constraints should be cross referenced to a map. Identify any permissions required from relevant statutory bodies to undertake the works.
- Consider partial restoration scenarios and likely outcomes.
- **Schedule of works and Costings** to achieve the above.

****Appendix B provides a format where drainage interventions can be costed and populated. It is expected that the successful contractor will provide costings in this or as otherwise agreed.***

Maps:

- Map to show **wetland conceptualisation plan** showing likely influence of works **and locations and type of hydrological interventions** - (this could be shown in a tier-based series of maps with partial restoration scenarios). It should show the extent of land likely to be affected by re-naturalised/modified water levels.
- **Before and after maps to show water supplies and drainage networks**-includes routes of water into and out of areas.
- **Map to show current habitat types** (with NVC notation)
- **Map to show potential habitat change as result of proposals.** This should be indicative and broad brush.
- Map to show **where areas could be planted or seeded** with 'missing' plant components relative to the target vegetation type including higher plants and sphagnums.
- **Constraints map**
- Map showing any **infrastructure required** to enable landscape management.

d) The outputs

The surveys and opportunity mapping report should be supplied in a digital format with supporting GIS files (Reports provided in Microsoft word format and pdf. To include PDF Maps). GIS files compatible with Arc GIS (Shape files).

Maps should be in colour with suitable keys and detail.

- Survey information and recorded features provided in GIS format with relevant completed spreadsheets as appropriate or otherwise agreed.
- All photographs provided in jpeg format or as otherwise agreed

e) Access

All access permission for the consultant will be pre-arranged.

The consultant will comply with the Authority's reasonable requirements regarding access to the survey area. Part of the survey area (Swainsmoor) may not be accessible (Ministry of Defence land). The consultant (including staff, subcontractors, agents or invitees) must not access such areas without prior notice and consent. The extent and type of access to such areas will be confirmed on award of contract with, if required, a proportional reduction in the cost of the provision of the Services to reflect this. The Authority reserves the right to remove such areas from the Service provision in its entirety.

Consultants must liaise directly with MHC staff before accessing sites. Details of landowners will be provided at the pre-contract meeting.

The consultant will comply with the Authority's reasonable requirements regarding access to the consultant's pre-existing Intellectual Property Rights

The intellectual property rights (including copyright and design) of all work, documentation, data, and materials produced for the Authority pursuant to the contract by or on behalf of the consultant will vest solely in the Authority.

f) Restricted Dates

Works may be restricted (or prohibited) on the instructions of the Authority on certain dates, which the consultant will be informed of at the pre-contract meeting.

g) Timescales

This is a time sensitive project, we are looking for this work to be completed as soon as possible. All surveys must be completed by the 30th September 2025.

Draft reports must be provided by 15th October 2025

Final report must be provided by 30th October 2025

All other outputs (data) associated with the Brief must be provided by 30th October 2025 (the Target Completion Date).

h) Costings and Tender Evaluation

The PDNPA is VAT registered, costings should exclude VAT and be fixed for three months.

- In your tender return please use the spreadsheet at Appendix A. This should be used to price all inclusive costs for the Area Groups (West, South West, Mid, East, and South) and individual sites within a Group Area. Please include these costings in the Form of Tender (Appendix 1) and Appendix 2.
- Please price for everything in spreadsheet that you could do and identify what your preferences are

The MHC partnership is seeking to let the contract as a whole but will also accept tender returns individual sites (as set out in Appendix A) and reserves the right to split the Services as required. The Authority is not obliged to award for individual sites.

The successful consultant shall be required to enter into a contract with the Authority in the form contained at Appendix 7. At the Authority's option, the consultant may be required to enter into a contract in substantially the same form as that contained at Appendix 7 with the landowner of the land upon which the Services are to be performed. The consultant shall be notified of this requirement at the pre-start meeting. In such an event the contract shall include provisions that (1) Intellectual Property Rights in the Services shall be owned jointly by the landowner and the Authority and (2) the consultant shall comply with the requirements of the Authority relating to the management of the contract.

Please provide day rates in the Form of Tender.

Tender evaluation

The successful tenderer will be selected based on an evaluation using the criteria set out below.

1. Price (40% of the total score value);
2. Quality criteria (60% of the total score value):
 - Experience and Capability to undertake the works
 - Proposed methodology

Criteria	Weighting	Evaluation Criteria
Price	40%	40 x (Lowest Tender Price)/(Tenderer X's Price)
Experience and Capability to undertake the works	30%	6 x score (see methodology at Appendix 6)
Proposed methodology	30%	6 x score (see methodology at Appendix 6)

Supporting information

Please provide brief supporting documentation/text regarding:

Responses to the Quality criteria above should be provided with the Form of Tender.

Responses should address the following:

- Explain in detail how you will undertake this work and any equipment you will use. Please provide information to demonstrate knowledge, experience and understanding of the Brief. You should set out how you will record the necessary information and any recording templates that you will use. You should set out the most effective and efficient approach of collecting and providing this data.
- Supporting information to demonstrate successful experience of similar work, including examples of previous work.

The tender should allow for a start up meeting.

Costings must be inclusive of all costs and expenses and include provision of all elements considered necessary by the consultant to deliver the Services.

Additional information to be provided:

- Risk assessments including any lone working practices;

g) TENDER DEADLINE

Tender return deadline: **17.00 Friday 6th June 2025.**

Please see **Section 2** (Instructions on Submitting a Tender) for instructions on submission.
