



## **Ilkley Moor Resilience Works Package**

Prepared by  
Richard Brewster

Moors for the Future Partnership  
The Moorland Centre, Edale, Hope Valley, Derbyshire, S33 7ZA, UK

T: 01629 816 563

M: 07580 509582

E: [Richard.Brewster@peakdistrict.gov.uk](mailto:Richard.Brewster@peakdistrict.gov.uk)

W: [www.moorsforthefuture.org.uk](http://www.moorsforthefuture.org.uk)

## Table of Contents

1.	WORKS QUANTITIES .....	4
2.	WORKS DATES & PROGRAMME .....	4
2.1.	Late July/Early August .....	4
2.2.	Start Date: .....	4
2.3.	End Date .....	4
2.4.	Restricted Dates .....	4
2.5.	Works Phasing.....	4
3.	WORKS REQUIREMENTS .....	5
3.1.	Materials Supply – Heather bales.....	5
3.2.	Materials supply – Gully Blocking .....	5
3.3.	Supply of materials for footpath repair and cross drains.....	6
3.4.	Supply of trees, stakes and tree guards.....	6
3.5.	Preparation of materials for aerial load lifting.....	6
3.6.	Marshalling of Aerial Load Lifting & material deliveries.....	6
3.7.	Installation of Stone Dams.....	6
3.8.	Installation of Coir Dams.....	6
3.9.	Installation of Heather Bale Dams.....	6
3.10.	Installation of 5 Timber dams and 4 debris timber dams.....	7
3.11.	Bracken cutting and tree planting .....	7
3.12.	Sitka Spruce Removal.....	7
3.13.	Access Facilities: Construction of footpath, steps and cross-drains .....	7
3.14.	Sphagnum Planting .....	7
3.15.	Removal of waste materials from the works site .....	7
3.16.	Temporary Trackway .....	7
3.17.	Traffic management.....	7
4.	WORKS SITE DETAILS .....	8
4.1.	Work Site Name: Ilkley Moor .....	8
4.2.	Description of Works Site location: .....	8
4.3.	Specified Access Points/Routes: .....	8
4.4.	Public Rights of Way / Footpaths:.....	8
4.5.	Vehicles allowed on Works Site: .....	8
4.6.	Livestock:.....	8
4.7.	Hazards associated with the Works Site:.....	8
4.8.	SSSI .....	8
4.9.	Scheduled Ancient Monuments and other Archaeology.....	8
5.	LIFT SITE DETAILS.....	8

---

5.1.	Lift Site Name .....	8
5.2.	Description of Lift Site location: .....	8
5.3.	Specified Access points/routes: .....	9
5.4.	Lift Site Surface/ Temporary Trackway Requirements: .....	9
5.5.	Public Rights of Way / Footpaths: .....	9
5.6.	Vehicles allowed on Lift Sites: .....	9
5.7.	Hazards associated with the Lift Sites: .....	9
5.8.	SSSI: .....	9
5.9.	Storage of Materials allowed at lift site: .....	9
5.10.	Helicopter refuelling permitted: .....	9
5.11.	Traffic management required: .....	9
6.	WORKS MAPS and PHOTOS .....	10
Figure 1	Location of the Ilkley Works Site .....	10
Figure 2	Ilkley Package All Works .....	11
Figure 3	Ilkley Package Gully blocks .....	12
Figure 4	Ilkley Package Bracken Control and Heather cutting .....	13
Figure 5	Ilkley Package Sphagnum Planting, Sitka Spruce removal and Tree Planting .....	14
Figure 6	Ilkley Moor Lift Access and Site: Whetstone Gate .....	15

## I. WORKS QUANTITIES

The works on the Ilkley Moor Site consists of 1 package of work. Tenders will only be accepted that offer to deliver the whole works detailed in this works package.

Table 1 below identifies the quantity of work to be delivered for package 1. Detailed requirements of the works package can be found in section 3. Works site and lift site information can be found in sections 4 and 5. Works maps can be found in section 6. Additional information and photos can be found in section 7.

Table 1 Works Quantities Package 1

Activity	Activity Type	Unit type	Units	
Heather	Cutting Phase	Hectares	10	
Sitka Spruce	Hand extraction	Hectares	36.2	
Sphagnum	Standard chunky Year 2	Hectares	4.7	1250/ha
Sphagnum	Pool Mix	Hectares	0.15	2500/ha
Sphagnum	Dense chunky Year 2 provision for heather cuts	Hectares	10	2500/ha
Gully Blocking	Coir	Dam units	25	16 dams
Gully Blocking	Heather Bale	Dam units	62	55 dams
Gully Blocking	Timber	Dam units	5	
Gully Blocking	Stone	Dam units	418	355 dams
Leaky Dam	Timber / woody debris	Dam units	4	
Access	Cross Drains	Item	24	
Access	Pitched steps	Metres	9	
Access	Substrate	Metres	72	
Bracken	Cutting/removal	Hectares	2.1*	TBC
Tree planting	Clough planting	Hectares	1.43*	Approx 150 trees

\*This may change depending upon the SSSI Assent.

## 2. WORKS DATES & PROGRAMME

### 2.1. Late July/Early August

Site Walkover with a Nominated Officer from the Authority.

### 2.2. Start Date:

15<sup>th</sup> August 2024

### 2.3. End Date

31<sup>st</sup> March 2025

### 2.4. Restricted Dates

There may be some dates where access to the works site is not possible due to shooting activities.

### 2.5. Works Phasing

Table 2 below provides suggested outline phasing/timing of the different works elements. These are based on completing the works within the dates stipulated in section 2.1, 2.2 and 2.3. The

Contractor is required to provide their proposed detailed programme for the works as part of the tender.

Table 2 Suggested Outline Works Phasing

Year	Period	Works element
2024	15 <sup>th</sup> August to 4 <sup>th</sup> September 2024	Cutting of Bracken
		Cutting and baling of Heather
		Supply of Gully Blocking Stone, Coir logs, Timber
	4 <sup>th</sup> September- 31 <sup>st</sup> Dec 2024	Flying and Installation of Gully Blocks
		Flying and Installation of Access facilities (cross drains, steps and aggregate path)
		Installation of Leaky timber dams
Sitka spruce removal		
2025	1 <sup>st</sup> Jan to 31 <sup>st</sup> March 2025	Tree Planting and Sphagnum Planting

### 3. WORKS REQUIREMENTS

Information on the works required to be delivered by the contractor is provided below. Standard works specifications can be found in **Appendix 2**.

#### 3.1. Materials Supply – Heather bales

The contractor will be required to supply a total of **62** Heather Bales. Ideally, the contractor will be required to cut the bags of Heather Brash from within the available specified cutting areas on Ilkley Moor. The cutting areas are identified in the works maps in section 6. These cutting areas will need to be checked via the walk over by the Contractor with a Nominated Officer from the Authority, prior to cutting, to check the suitability for baling and access to the areas by machinery.

If the heather is unsuitable for baling, then an alternative source of heather will need to be found for the bales. This heather would need to have a biosecurity passport which will need to be sent to the Authority.

#### 3.2. Materials supply – Gully Blocking

The contractor will be required to supply a total of **418 stone dam units (314 tonnes of gully blocking stone)** for the works. The stone must be from a source to meet the Specifications for the works and agreed with the Nominated Officer from the Authority.

The contractor must deliver the gully blocking stone to Whetstone Gate Lift Site. The location of Whetstone Gate Lift Site is identified on the works maps in Section 6. Access for vehicles is from the South along Ilkley Road (from Keighley). Under no circumstances should vehicles be directed from Ilkley in the North along Keighley Road as this is a 4X4 track despite its designation as a road. Maps of the access route to the Lift Site and the available materials storage location are provided in Section 6.

The lift site must be visited by the Contractor with a Nominated Officer of the Authority as part of the site walkover.

Supply of 25 Coir logs and Timber for 5 dams for the gully blocks which can be flown on to site in dumpy bags.

---

### **3.3. Supply of materials for footpath repair and cross drains**

The Contractor is responsible for supplying the materials for the footpath repair (substrate), pitched steps and cross drains. These can all be flown onto site with the gully blocking materials.

### **3.4. Supply of trees, stakes and tree guards**

The Contractor is responsible for the supply of tree whips, guards and stakes. **Please refer to Table I for calculating Tender cost.** The exact final details of the tree species mix and density of planting may vary according to NE recommendations, which will be communicated to the winning bidder once we have feedback.

### **3.5. Preparation of materials for aerial load lifting**

The Contractor is required to sort the Materials into loads for transportation to the Works Sites by aerial load lift. It is the Contractor's responsibility to ensure that the means of sorting the Materials into loads and the transportation of loads are suitable and safe. The Contractor is responsible for supplying all Equipment (except airlifting strops) and Machinery required for preparing the loads for transport. For the aerial load lifting of stone, the Authority anticipates that this will require the Contractor to provide a telehandler or excavator to load gully blocking stone (750kg per load) into skips provided by the Authority's aerial works contractor.

### **3.6. Marshalling of Aerial Load Lifting & material deliveries**

The contractor will be responsible for all marshalling of Aerial Load Lifting and material deliveries at the lift sites and works sites. It is the Contractor's responsibility to plan and mark out the Drop Locations for the loads of Materials at the Works Sites. The Contractor must supply all materials for marking out the Drop Locations.

The Contractor must ensure that any means of transporting the Materials is an efficient operation. It is the responsibility of the Contractor to ensure that it has all the required Equipment and Machinery and personnel to satisfactorily complete the Works.

The Contractor is responsible for Marshalling and **will provide sufficient personnel** to Marshal each load at the Drop Site and at the Lift Site. The Contractor **will also provide sufficient personnel** to Marshal members of the public at the Drop Site and at the Lift Site.

The public road at Whetstone Edge will require marshalling during the aerial load lifting as well as the numerous footpaths which congregate at this point.

Please refer to the main Tender "MFF 14 2024-2025" for detailed information on marshalling requirements.

### **3.7. Installation of Stone Dams**

The contractor will be required to install & construct **355 stone dams** at the works site using 314 tonnes of stone. It will be critical to check the number of stone drops per dam unit during construction.

### **3.8. Installation of Coir Dams**

There are **16 dams** required using **25 coir logs**. These will be built using the Specifications provided in **Appendix 2**.

### **3.9. Installation of Heather Bale Dams**

Construction of **55 dams** using 65 bales following the guidance in the Specifications (**Appendix 2**)

---

**3.10. Installation of 5 Timber dams and 4 debris timber dams.**

The **5 timber dams** and 4 debris timber dams required across the site. The timber dams will need constructing as to our existing specifications by supplying the required materials to each point (see **Appendix 2**) and the Debris dams should be built using existing materials in the clough using the outline which has been added to the Timber Dam Specification.

**3.11. Bracken cutting and tree planting**

There is approx 2.1 ha of bracken cutting required on an area of the steeper North slope and a clough head in August/September. This is preparation for subsequent tree planting which will need to take place into the New Year phase of the works.

The bracken can be cut by hand or by using a flailbot or similar.

Trees will be planted according to the guidance in the Works Spec (**Appendix 2**), but for additional information:

Due to the expected losses, we will plant at approx. 8.0 m intervals in the cut areas. Trees will need staking and protectors. Tree numbers: 150 whips: mixed deciduous species (tbc but expected to be birch (downy and silver acceptable), rowan, hawthorn, sessile oak so please price accordingly.

**3.12. Sitka Spruce Removal**

Removal will need to be by hand, including removing the root stock where possible. Larger trees will need to be cut to ground level and below the lowest branches.

**3.13. Access Facilities: Construction of footpath, steps and cross-drains**

These will all require a bespoke approach whilst following the Specifications provided in **Appendix 2**.

**3.14. Sphagnum Planting**

MFFP will supply the sphagnum, however the contractor will liaise with MFFP's supplier to coordinate deliveries. Planting will need to follow the guidelines in the Specification and (**Appendix 2**). There is 14.85ha of planting across the site and density of planting is generally at 2500/ha (refer to Table 1). This is split up into a number of blocks around the site. Access is easy and there is little ascent required. **Please note** that not all of the areas are mapped yet, as some will be in the heather cutting areas planned for this Tender.

**3.15. Removal of waste materials from the works site**

The contractor will be responsible for preparing empty Bags and Waste Materials for removal from the Works Site. All Bags and Waste Materials shall be secured as per the methodology set out in Preparing Bags for removal in **Appendix 2** Works Specification. If Waste Materials are not secured and become wind blown, the Contractor shall retrieve and secure all wind blown Materials at their expense. The Contractor will need to remove empty bags off the moor by hand and back to the Lift Site. The Contractor must then arrange collection and recycling (where possible) of all empty Bags from the Lift Site.

**3.16. Temporary Trackway**

No Temporary Trackway will be required

**3.17. Traffic management**

The public road at Whetstone Edge will require marshalling during the aerial load lifting as well as the numerous footpaths which congregate at this point. Two people stood N and S of the lift site on the "road" will be sufficient. No traffic lights required, it is a 4X4 track (although it is used by adventurous commuters!).

---

## 4. WORKS SITE DETAILS

### 4.1. Work Site Name: **Ilkley Moor**

### 4.2. Description of Works Site location:

Ilkley Moor is located on the Southern edge of Ilkley in the South Pennines and West of Bradford.

### 4.3. Specified Access Points/Routes:

The works site is criss-crossed by public rights of way and tracks. The old Ilkley/Keighley Road is a 4X4 track which still has Public Road status and which bisects the whole works area.

**Ilkley Moor is very busy, particularly in school holidays. No flying will take place in these periods and extra vigilance should be applied to any works activities during this period.**

### 4.4. Public Rights of Way / Footpaths:

As mentioned above, the public road (Ilkley/Keighley road) will require marshalling during the aerial load lifting.

### 4.5. Vehicles allowed on Works Site:

All Equipment and Machinery accessing the Work Site must be low ground pressure (<3 psi) or must remain on the Ilkley/Keighley Road 4X4 track.

### 4.6. Livestock:

Sheep graze the Work Site seasonally. The contractor must ensure their works do not allow sheep to escape.

### 4.7. Hazards associated with the Works Site:

School holidays/Bank Holidays pose an increased risk to the public due to the increased number of visitors.

### 4.8. SSSI

The site is located within the South Pennines SSSI. SSSI Consent/Assent will be arranged by MFFP in co-ordination with Bradford MDC. No works shall commence prior to confirmation from MFFP that SSSI consent/assent has been granted.

### 4.9. Scheduled Ancient Monuments and other Archaeology

Based on previous engagement with the West Yorkshire cultural heritage team, a considerable number of features of archaeological/historical interest are present at the site. These locations should be avoided during machine tracking and excavation works. A Tool Box Talk will be carried out by MFFP/WYAAS prior to any works starting.

More detailed information will be provided to the contractor in the period leading up to works starting.

## 5. LIFT SITE DETAILS

### 5.1. Lift Site Name

Whetstone Gate SE 10152 45372

### 5.2. Description of Lift Site location:

The lift site is an area of hardstanding ground with space to store materials. It is approx. 100m N of Whetstone Gate to the West of the track. There is already some stone left over from previous works in the lift area.



---

**5.3. Specified Access points/routes:**

The lift site can be accessed via the minor road from the South, (metalled) leading out from Bingley/Keighley (See Fig 1). Approach from the N from Ilkley must be avoided due to the unsuitable 4x4 track and steep and narrow preceding metalled road.

**5.4. Lift Site Surface/ Temporary Trackway Requirements:**

The surface of the lift site is an area of hard standing ground. As such it is not expected that temporary trackway will be required.

**5.5. Public Rights of Way / Footpaths:**

There are a multitude of Rights of Way across the land, plus the area is Open Access Land.

**5.6. Vehicles allowed on Lift Sites:**

Temporary storage of vehicles at the Lift Site is permitted. Fuels must not be stored at the lift site. However, this is an area which is popular with young people meeting up in cars at night and consideration of this is crucial to avoid damage and the risk of fire. We have had Coir logs set on fire at other sites in the past.

**5.7. Hazards associated with the Lift Sites:**

School holidays. Fire risk.

**5.8. SSSI:**

The Lift Site is on SSSI although it is a hard-cored area within this.

**5.9. Storage of Materials allowed at lift site:**

Storage of materials is permitted at the lift site, but see risks highlighted above.

**5.10. Helicopter refuelling permitted:**

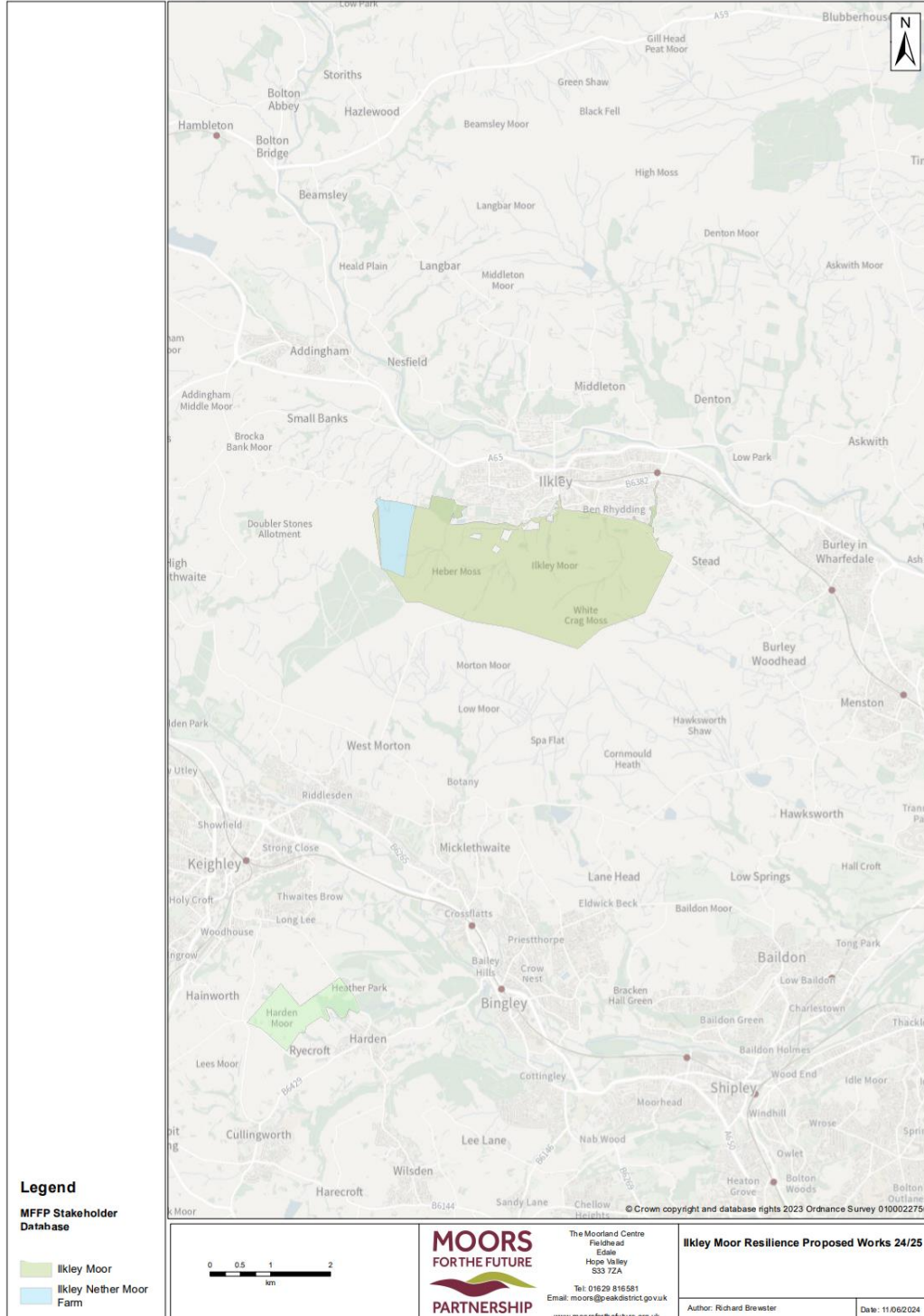
Helicopter refuelling is permitted at the lift site, with the usual caveats.

**5.11. Traffic management required:**

Traffic Management not required, but marshalling of the adjacent track during airlifting is required, as per section 3.17.

## 6. WORKS MAPS and PHOTOS

Figure 1 Location of the Ilkley Works Site



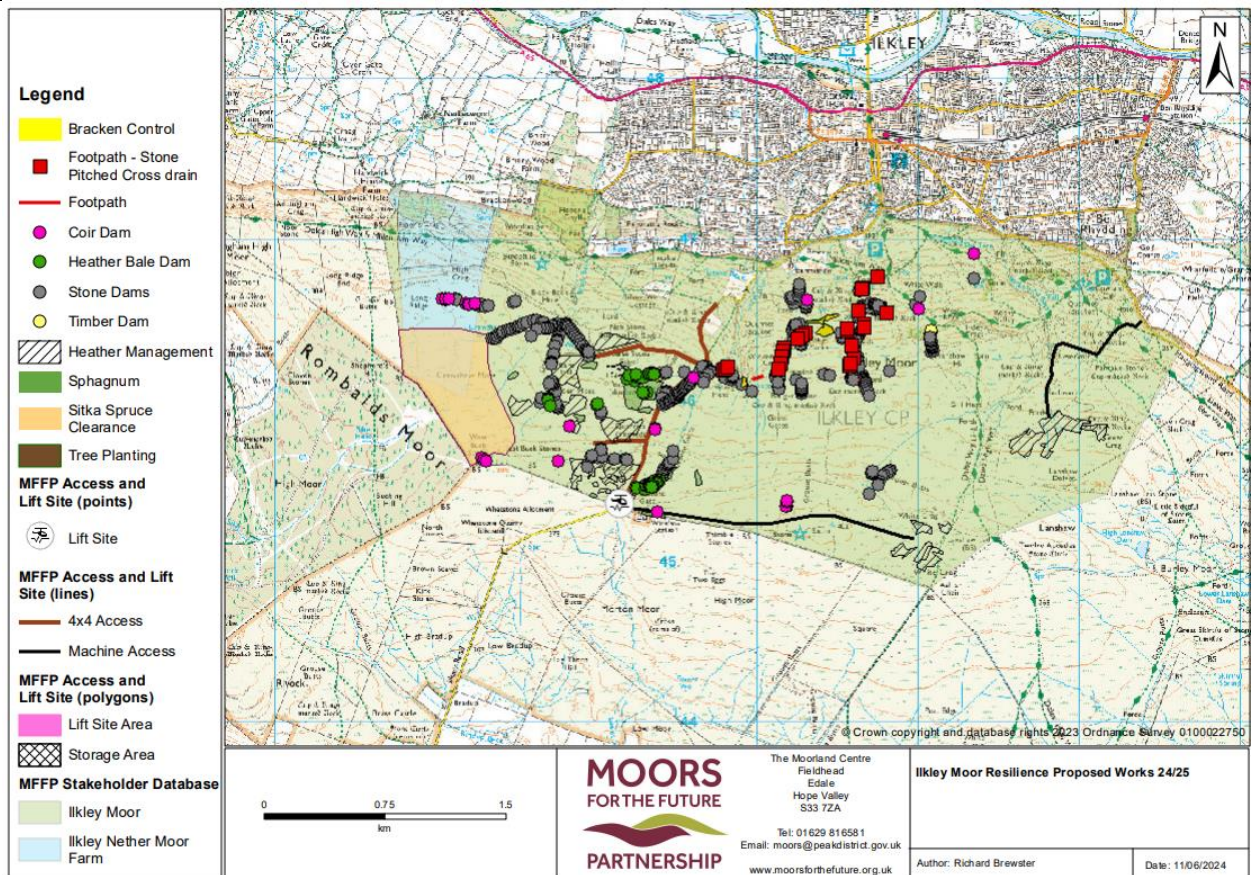


Figure 2 Ilkley Package All Works

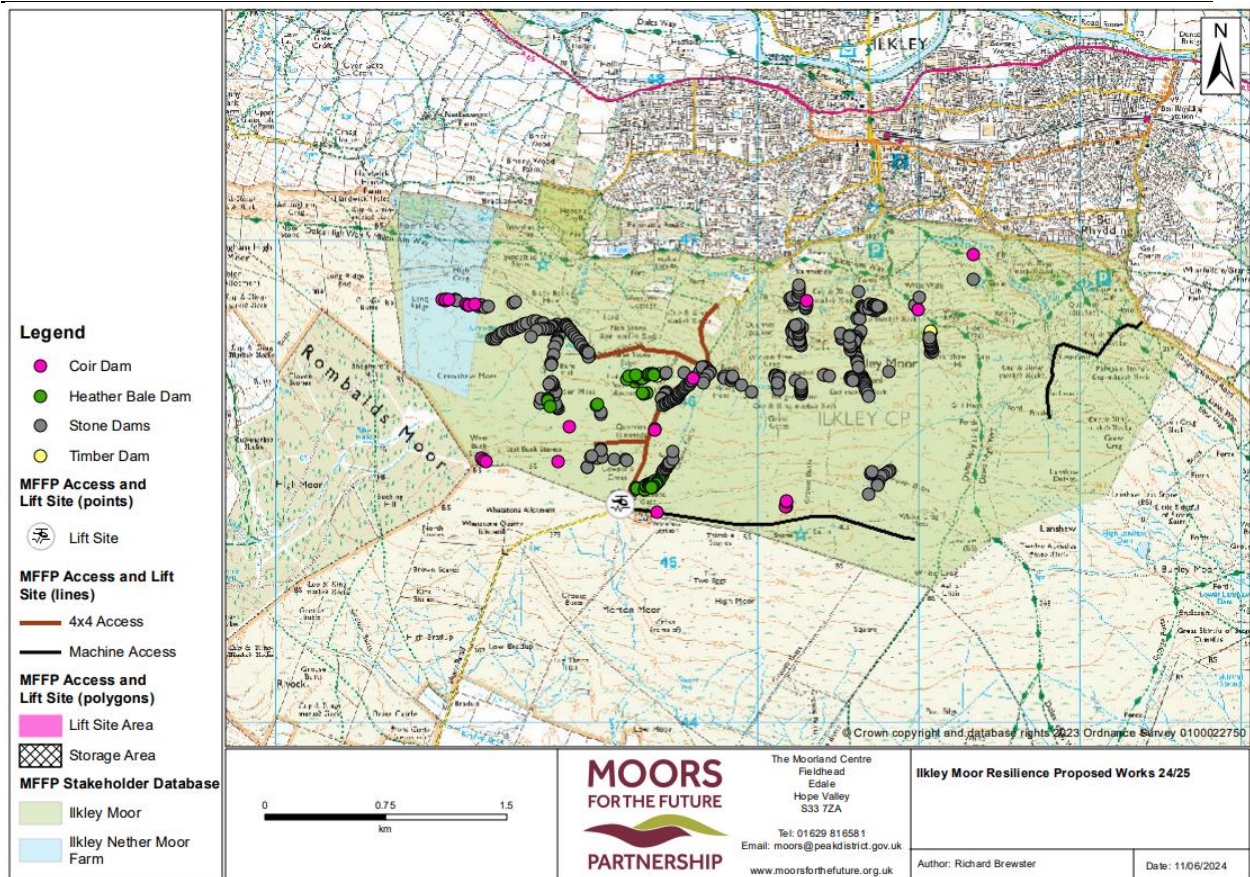


Figure 3 Ilkley Package Gully blocks

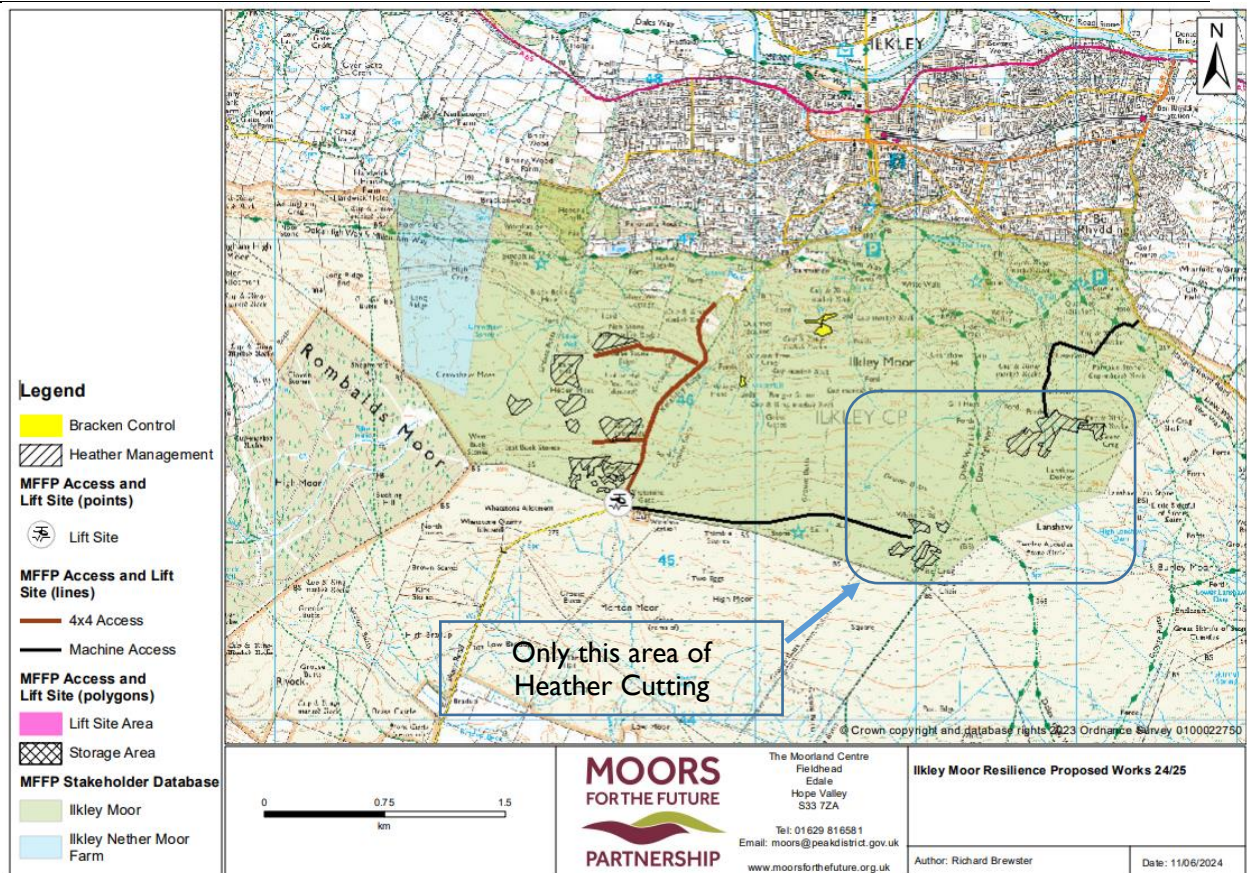


Figure 4 Ilkley Package Bracken Control and Heather cutting

**NB Cutting area to the West of the 4X4 access track is not part of this work package.**

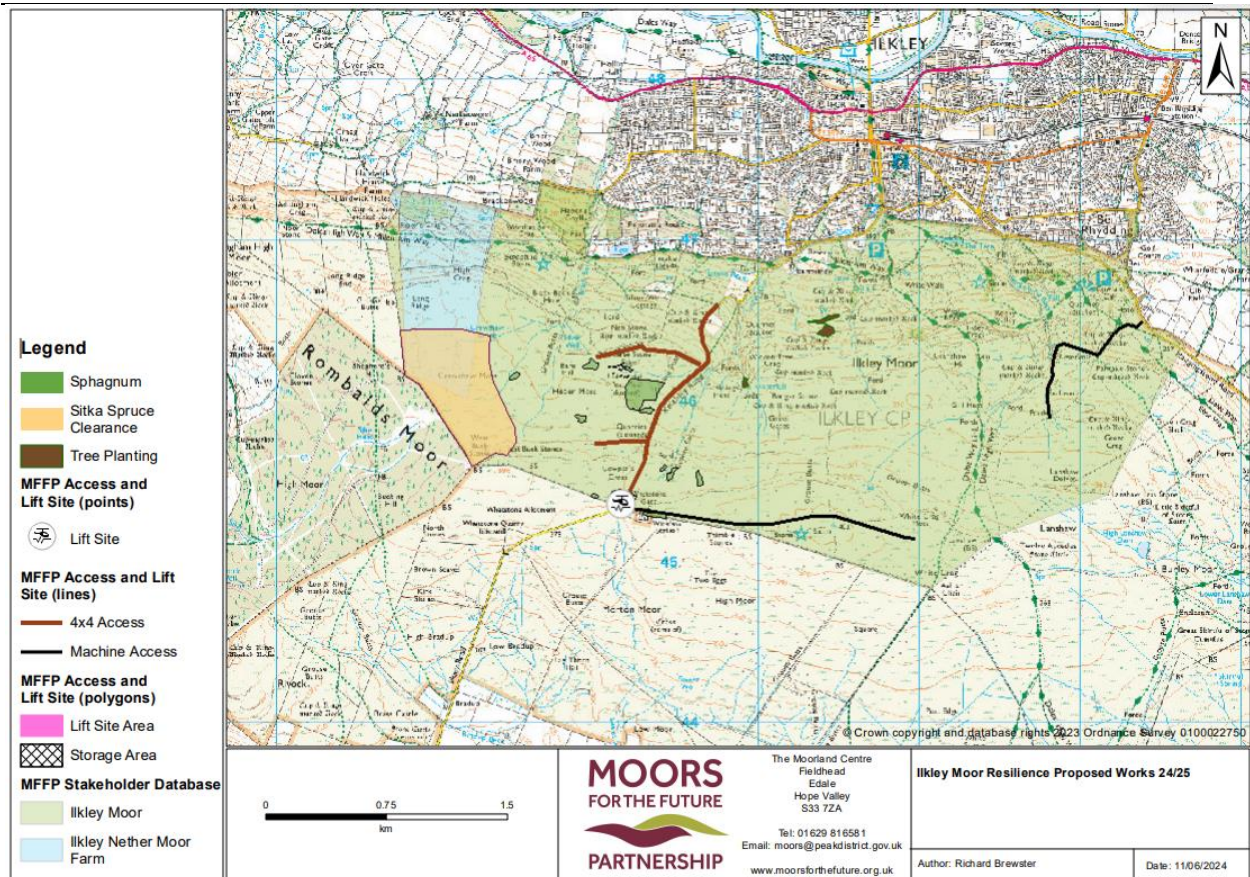


Figure 5 Ilkley Package Sphagnum Planting, Sitka Spruce removal and Tree Planting

Please Note: Shape files for each package of work are attached to the Tender email.



Figure 6 Ilkley Moor Lift Access and Site: Whetstone Gate



Figure 7 Ilkley Moor Lift Site (with previous stone delivery)



Figure 8 Ilkley Moor: Whetstone Gate from metalled approach road and parking area outside Works Site





Figure 9 Ilkley Moor: Substrate/aggregate path upgrade



Figure 10 Ilkley Moor: Pitched path section



Figure 11 Ilkley Moor: One of the Cross-drain sections of path



Figure 12 Ilkley Moor: Bracken cutting/Tree planting area.