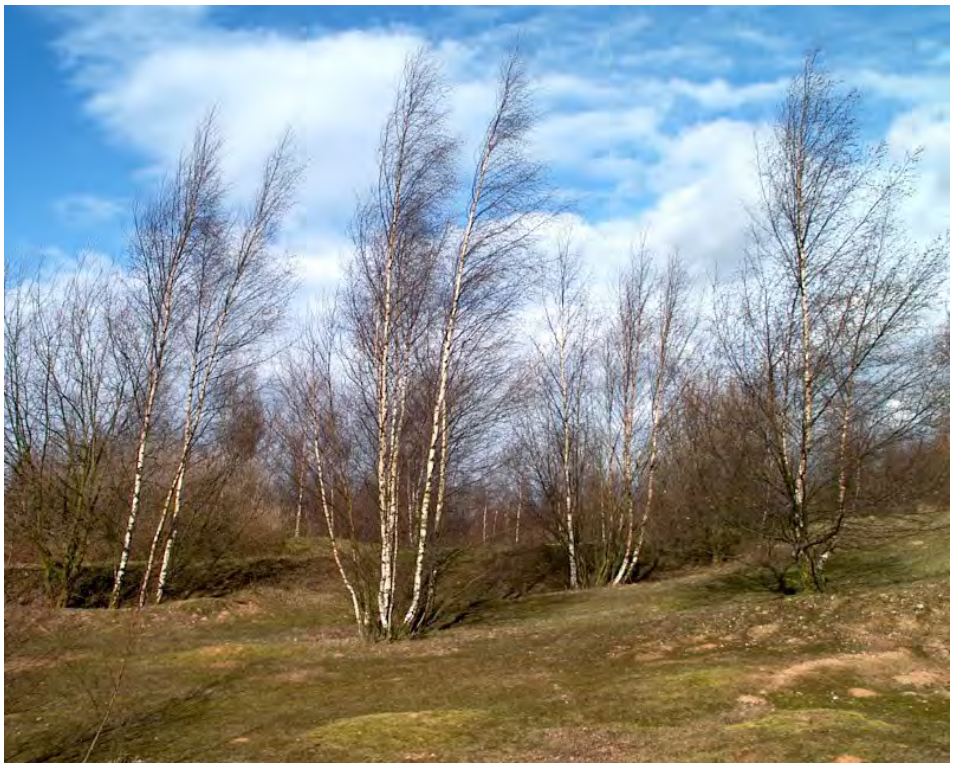
Austerfield Quarry

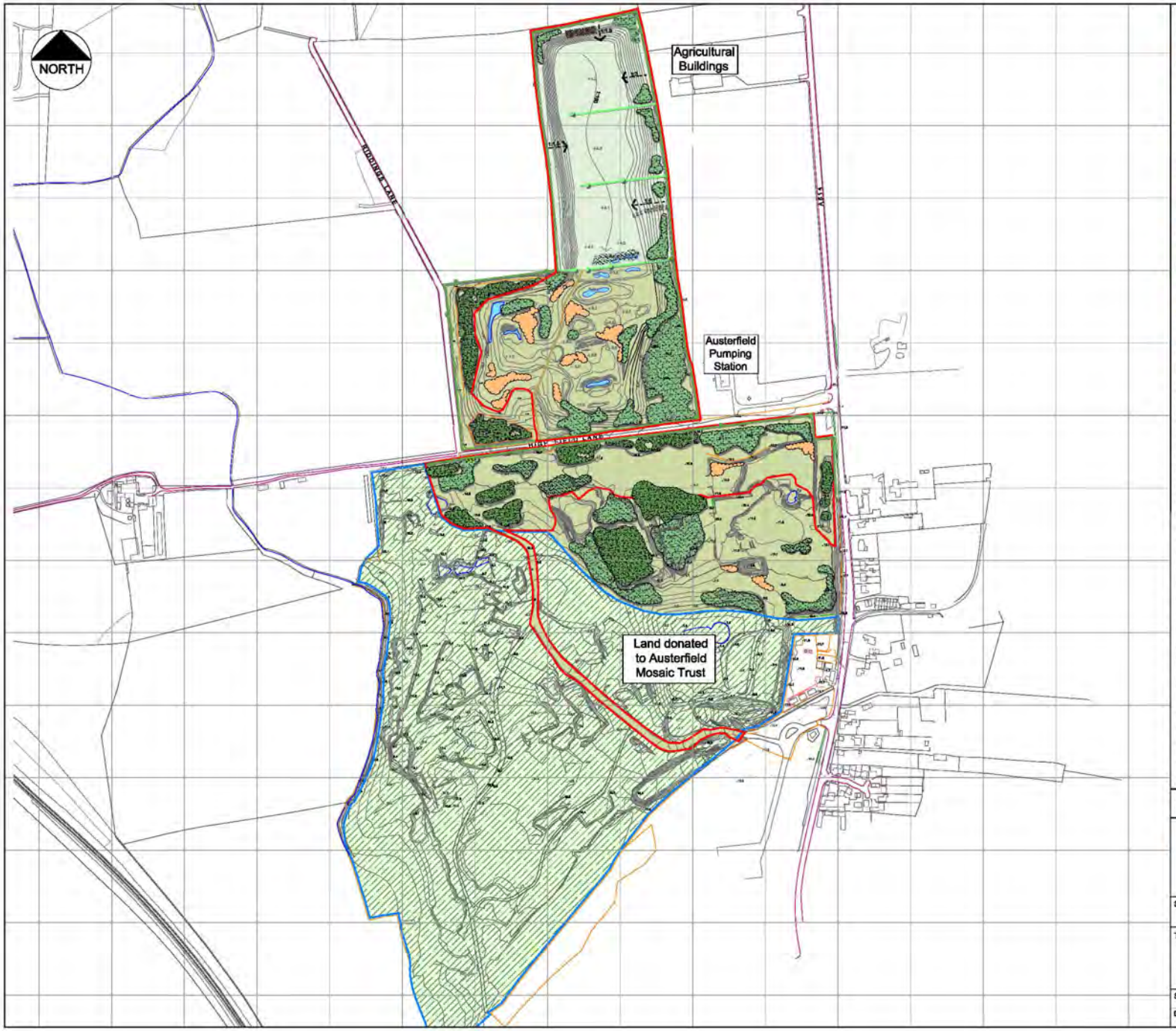
Site Biodiversity Action Plan



Prepared: May 2010	**Updated: November 2022**

Site Information-Austerfield

Site Name and Location	Austerfield Quarry is situated approximately 1km to the north of Bawtry in South Yorkshire. Grid ref SK 657 947
Hanson Company	Hanson Aggregates - North
BAP(s) that will be targeted	Doncaster BAP
BAP Habitat(s) to be developed	Hedgerows, lowland mixed deciduous woodland, lowland heath and acid grassland
BAP species to be encouraged	*Mammals*: Water vole, brown hare, harvest mouse, bats (all species) *Birds*: Barn owl, woodland edge species (turtle dove, green woodpecker, bullfinch, spotted flycatcher, lesser spotted woodpecker, farmland species (marsh tit, tree sparrow, grey partridge, corn bunting, yellow wagtail, skylark) and sand martin *Reptiles and amphibians*: All species *Invertebrates*: Solitary wasps and bees *Plants*: number of heath/acid grassland species listed in the Preliminary Atlas for Doncaster (January 2007) Mosses, lichens and ferns
Designated Natural Area	Humberhead Levels
Background and site description	To the south of the quarry lies the River Idle Washlands SSSI, to the west of the site is King's Wood, an area of Ancient and Semi-natural woodland. The older part of the quarry is managed by the Mosaic Trust, a charitable body, which has been involved with the quarry restoration since the year 2000, with which Hanson has a strong partnership. The quarry is operational and is being restored progressively. In November 2015 an extension of the quarry to the north was approved and this will be worked and restored progressively.
National Designations (SSSI, SAC, SPAs, RAMSARs and NPs) within 500m	Between the quarry and Bawtry to the south lies the River Idle Washlands SSSI, designated due to its good examples of wet grassland plant communities and large number of passing and wintering waterfowl. The older part of the quarry is designated as an SSI (County wildlife site)
Resource Requirements	Works funded by restoration budget.
Contribution to biodiversity & benefits	Compliance with legislation and planning. Identification of areas of nature conservation value that are being retained for positive management for wildlife. When fully worked restored the site has the potential to hold BAP priority habitats and their associated species most notably lowland heathland and acid grassland. Restoration of the site (including the northern extension) will fit with the existing designated local wildlife site and increase the biodiversity value of the area as a whole.
Partners and Local initiatives	The Mosaic Trust
Other documents supporting the site BAP	Site Restoration Plan Management and Aftercare Plan



LEGEND

- Planning Application Boundary
- Land donated to the Mosaic Trust
- Land restored for conservation grazing
- Land restored for nature conservation
- Existing woodland planting/ regeneration
- Proposed woodland planting/regeneration
- Heath
- Existing hedgerows
- Proposed hedgerows
- Acess route to grazing
- Ephemeral pools/wet area

Restoration Philosophy

The proposed extension area will be restored to conservation grazing. Faces for sand martin will be left on the steeper northern bank and pockets of woodland will be created on the slopes. Hedgerows will be planted to recreate historic field patterns.

The currently planned site is restored for nature conservation (as the existing approved plan) and aims to create Local Biodiversity Action Plan habitats:

- **Lowland Heathy Oak Woodland**
- **Lowland Heathland/Acid Grassland Mosaic**

Areas of bare ground will be left for the benefit of insects and reptiles. Rocks and stones will be used to create habitat piles. The finished topography will be varied, undulating and uneven with the aim of creating micro-habitats for a variety of flora and fauna. Woodland planting will be of local provenance and sparsely planted to allow for natural regeneration to infill. There may be the possibility of collecting seed for heathland/acid grassland creation from a nearby donor site. Emphemeral pools will be created at the base of south facing soil mounds for habitat and to aid drainage.

Land donated to the Mosaic Trust, that was previously worked, has developed a diverse flora and fauna and has been designated as a Site of Scientific Interest by Doncaster Metropolitan Borough Council. The site is note-worthy for its range of mosses, lichens and liverworts. It is envisaged that the currently planned site and proposed extension will consolidate and expand the range of habitats

Hanson
HEIDELBERGCEMENT Group

Site: AUSTERFIELD QUARRY

Title: Northern Extension
Whole Area Concept Restoration Plan

Scale	Date	Drawing No.
1:5000@A3	March 15	A1h/100
Drawn by JW	Checked by BJA	

Action Plan

Item No.	Objective	Biodiversity Feature	Targets	Tasks	Assessing Indicator	Responsible Person	Timescale (Completion)
1	Creation of lowland acid grassland.	Lowland acid grassland, moss and lichen rich.	Establish areas of lowland acidic grassland using natural regeneration or seeds of local provenance.	1.Create and seed acid grassland 2. Manage acid grassland once established	Ha restored and managed	Landscape Architect	2029
2	Restoration and creation of hedgerows and woodland areas.	Hedgerows encouraging birds, invertebrates. Broad-leaved and mixed woodland.	Increase in amount of hedgerow on site. Increase connectivity of habitats on site Increase in woodland on site.	1. Plant and manage hedgerows in accordance with detail in establishment and aftercare report. 2. Plant and manage/create woodland areas in accordance with detail in establishment and aftercare report including glades and coppice.	Lin. m planted and maintained Ha. planted and managed.	Landscape Architect	2029
3	Creation of shallow pools and ephemeral wetland habitat	Open water/shallow pools and ephemeral ponds	Create shallows and marginal habitat suitable for target amphibian species and dragonflies etc	1.Create pools 2.Restrict access/install signage to particularly sensitive areas (i.e. bird nesting sites such as sand martins)	Successful breeding by number of species Viable breeding populations of amphibians and dragonflies	Landscape Architect Site Manager	Ongoing until 2029 Annually
4	Species conservation and management.	Bats (all species). Birds: Barn owl, woodland edge species, farmland species and sand martins Reptiles and amphibians: all common species Invertebrates: Solitary wasps and bees Plants: species of heath/acid grass mosaic . Mosses, lichens and ferns	Bat box program in suitable trees on site. Creation of suitable woodland and hedgerow habitat for range of species. Maintenance of breeding population of sand martins. Viable populations of a number of the common species. Maintain and increase populations through habitat creation.	1. Erect bat boxes 2. Maintain vigilance of existing nest sites and limit disturbance by making site staff aware of habitat areas. Leave a suitable sand cliff for sand martins and/or build an artificial nesting wall. 3. Maintain woodland edge habitat near areas of open grassland to provide suitable habitat for reptiles. 4.Manage to maintain bare sand areas	Bat box checks Regular breeding by a range of species including sand martins. Records of species Presence of nesting holes in sandy areas Continued	Ecological Consultant Site Manager Mosaic Trust/ Landscape Architect	Ongoing until 2029

			To maintain presence of species already recorded (13 species)	5. Manage current habitats where the species are found to maintain in favourable condition and provide new habitat for colonisation.	presence in previous areas and presence within new areas		
5	Habitat and species monitoring.	All of the above.	Maintain agreed monitoring programme to ensure target species are monitored and appropriate response agreed.	1. Monitoring data on bird and rare plant species collected and summarised in a report during extraction and continuing for 5 years following restoration.	Monitoring reports	Mosaic Trust/local nature groups	Every five years up to 2034