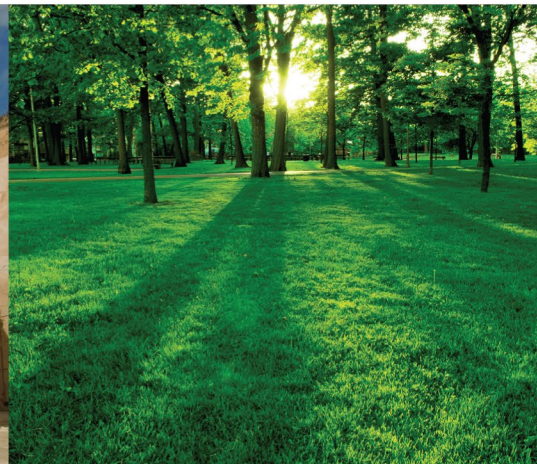


RISK ASSESSMENT,  
SSSI, STAIRFOOT  
AT  
PROPOSED CULLET RECYCLING FACILITY  
WOMBWELL LANE, BARNSELY, S70 3NS  
FOR  
POTTERS-BALLOTINI LTD  
REPORT REF: PB 3505/SSSI

Engineering Geologists and Environmental Scientists



# Ashton Bennett



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ASHTON BENNETT CONSULTANCY

Engineering Geologists & Environmental Scientists

November 2022

Ashton Bennett Limited Co Reg No: 3318828 is a member of the Ashton Bennett Consultancy  
group of companies

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## QUALITY MANAGEMENT FOR REPORT

|             |                                                                                    |                                                                       |                             |
|-------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------|
| Project     | Proposed End of Waste Glass Recycling and Repurposing Facility, Stairfoot, S70 3NS | Risk Assessment for SSSI, Stairfoot, S70 3NS                          |                             |
| Client      | Potters-Ballotini Ltd                                                              |                                                                       |                             |
| Date        | November 2022                                                                      |                                                                       |                             |
| Version     | Issue 2                                                                            |                                                                       |                             |
| Reference   | PB 3465 SSSI                                                                       |                                                                       |                             |
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|             | Tristan Bennett                                                                    | BSc (Hons)                                                            | Engineer                    |



## 1. INTRODUCTION

### 1.1 The Report

This report is a Risk Assessment based on the potential risks the development of a glass recycling plant at the former Stairfoot Brickworks site in Wombwell Lane, Barnsley, S70 3NS

may pose to the adjacent SSSI. The work was commissioned by Potters-Ballotini Ltd and was carried out by the Ashton Bennett Consultancy.

The SSSI is formed by the Aegiranum Marine Band which marks the base of the Duckmantian-Bolsovian or Westphalian C Coal Measures of Carboniferous Age and is a rare example of exposure of the marine band. The Aegiranum Marine Band at Stairfoot is an internationally important horizon for the stratigraphical correlation of the Westphalian Series across much of north-west Europe.

Nationally important geological and geomorphological sites are protected as Sites of Special Scientific Importance (SSSIs). They were selected through the Geological Conservation Review between 1977 and 1990 to provide a scientific record of important sites which would represent our national geology and landforms. Land is notified as an SSSI under the Wildlife and Countryside Act (1981). SSSIs are managed by Natural England, as befits sites of national importance. These sites are sufficiently important to need protection from development and other threats.

This report assesses the risk of any threats to the SSSI from the adjacent proposed development on the former brickworks.



**Figure 1 Site Location Plan**

A Site Location Plan is presented as Figure 1 and a SSSI Location Plan is presented as Figure 2. Figures 3A and 3B present photographs of the former educational display adjacent to the Marine Band. Figure 4 presents a Plan of the Proposed Development Site and Figure 5 presents a Plan of the Development Site Proposals. A Bedrock Geology Plan is presented as Figure 6. Figures 7 and 8 present photographs of the Marine Band in 2021 and in 1993 respectively. Figure 8 details the Fossil Horizon Description of the Marine Band. Figure 9 presents contours of the groundwater levels in 2021 and Figure 10 presents the fencing

proposals for the development site. Figures 11 to 16 illustrate various drains in the vicinity of the SSSI and Figure 17 shows the brick enclosure on the west side of the Trans Pennine Trail that could be used for an information area for the SSSI.

## 1.2 Authors

This report was prepared by Frances A Bennett an engineering geologist who has a degree in Geology, a postgraduate qualification in Soil Mechanics and is a Chartered Geologist CGeol, Chartered Environmentalist CEnv and Chartered Water and Environmental Manager C.WEM and FIMMM with 45 years of experience in the fields of geology, geotechnical engineering, hydrogeology, contamination, mining and waste disposal.

## 1.3 Sources of Information

The following data have been referenced in relation to compiling this Report:

- Historical and Current mapping from Ordnance Survey 1850 to date.
- Geological mapping from British Geological Survey 1:50,000 Sheet 87 Barnsley
- Geological mapping from British Geological Survey 1:10,000 Sheets SE30NE and SE30SE
- The Pennine Lower and Middle Coal Measures formations of the Barnsley District, BGS Internal Report IR/06/135.
- Natural England: Standard SSSI Monitoring Assessment and Reporting, May 2019.
- Natural England Open Data Publication
- Natural England SSSI: Managing your land
- Natural England Designated Sites View
- Hydrogeological data from Environment Agency
- Hydrological data from Environment Agency
- Land Contamination Risk Management (LCRM) 2020
- Yorkshire and Lincolnshire Pollution Advisory Service (YALPAGs), 'Development of Land Affected by Contamination-Technical Guidance for Developers, Landowners and Consultants,' June 2020.
- BS 5930:2015, Code of Practice for Ground Investigations, British Standards Institute
- The Water Framework Directive (Standards and Classification) Directions (England and Wales) 2015.
- The Water Supply (Water Quality) Regulations, 2016.
- A Sequence-stratigraphy scheme of the Late Carboniferous southern North Sea, Anglo Dutch sector, JM Cole, M Whittaker, M Kirk and S Crittenden, Volume 7 Yorkshire Geological Society 2005.
- Letter and photographs from Sheffield Area Geology Trust (SAGT), March 2<sup>nd</sup> 2021.

The information for this report is also from sources recommended by the Institute of Civil Engineers (ICE), the Association of Geotechnical and Geoenvironmental Specialists (AGS), Construction Industry Research and Information Association (CIRIA) and the Department of the Environment Transport and the Regions (DETR). The report has been compiled in accordance with the latest ICE, DETR, Department of Environment, Food and Rural Affairs (DEFRA), British Standard Draft Documents and British Standards, CIRIA, CLR 11 & other CLEA Reports and Eurocode 7.

In addition, the scope of the investigation has used the extensive knowledge and experience of the staff of Ashton Bennett Consultancy to assess the data and to interpret the findings.

## **2. REPORT OBJECTIVE AND REPORT SCOPE**

### **2.1 Report Objective**

The objective of this report is to determine whether the development and fencing proposed for a new glass recycling facility at the former Stairfoot Brickworks site is likely to detrimentally affect the adjacent SSSI.

Potential risks as determined by Natural England may include deterioration of the exposure by:

- Dumping, spreading or discharge of any materials.
- The introduction of tree and/or woodland management (including planting).
- Extraction of minerals.
- Destruction, construction, removal, rerouting or regrading of roads, tracks, walls, fences, hardstands, banks, ditches or other earthworks, including soil and soft rock exposures or the laying, maintenance or removal of pipelines and cables, above or below ground.
- Storage of materials on or against rock outcrops.
- Erection of permanent or temporary structures, or the undertaking of engineering works, including drilling.
- Modification of natural or man-made features and clearance of boulders, large stones, loose rock or scree and battering, buttressing or grading of geological exposures.
- Building too close to SSSI and undermining its stability
- Creating pipework or drainage that may leak and undermine the stability of the SSSI
- Access for maintenance adjacent to the SSSI
- Walkers and Cyclists using the Trans Pennine Trail.

### **2.2 Report Scope**

The scope of the Report is to establish the nature, extent and condition of the SSSI and to understand the details of the proposed development and working practices to establish if there is any potential for the glass recycling facility to detrimentally affect the SSSI.

The information for this report is from sources recommended by the Institute of Civil Engineers (ICE), the Association of Geotechnical and Geoenvironmental Specialists (AGS), Construction Industry Research and Information Association (CIRIA) and the Department of the Environment Transport and the Regions (DETR). The report has been compiled in accordance with the latest ICE, DETR, Department of Environment, Food and Rural Affairs (DEFRA), British Standard Draft Documents and British Standards, CIRIA, CLR 11 & other CLEA Reports and Eurocode 7.

In addition, the scope of the investigation has used the extensive knowledge and experience of the staff of Ashton Bennett Consultancy to assess the data and to interpret the findings.

## **3. THE SITES**

### **3.1 Description of SSSI Marine Band Site**

The geological SSSI is present immediately adjacent to the south east corner of the development site and forming the eastern boundary of the Trans Pennine Trail, at SE 381048

to 376054 and is 0.184 hectares in size. The location of the SSSI is shown on Figure 2 where it is marked in bright green and annotated as 1.

The SSSI is listed because of its significance as an exposure of the Mansfield Marine Band in the Coal Measures. Natural England holds the citation and maps which are in the public domain. Natural England is responsible for the maintenance of SSSIs.

Under the management of the Manager of Yorkshire Brick, the SSSI was made available for school visits and for sample collecting, with any resulting spoil being used in the brickmaking process. The brickworks liaised with the British Geological Survey for a display panel, which was housed in a specially built brick housing. A plaque was installed alongside the Trans Pennine Trail, as shown in Figures 3A and 3B, which has since been vandalised.

After the closure of the brickworks, the display was demolished and the ground in front of the SSSI is now partially flooded. The shale bank is overgrown with birch and brambles and there is very little exposure of the marine band.

The SSSI at Stairfoot is outside the boundary of the proposed development, so is unlikely to be damaged by the proposed redevelopment of the brickworks.

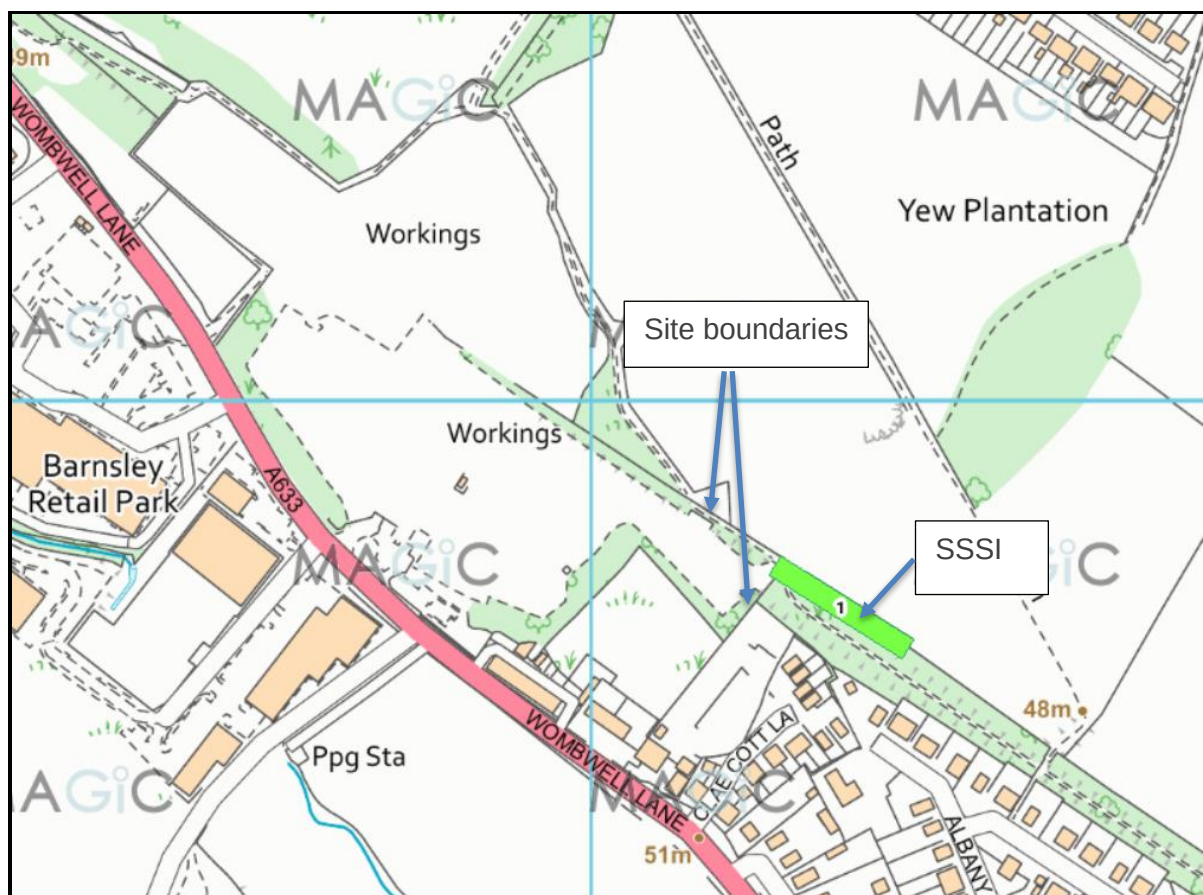


**Figure 2 SSSI Location Plan**



**Figure 3A      Former Display Adjacent SSSI  
(supplied by SAGT)**

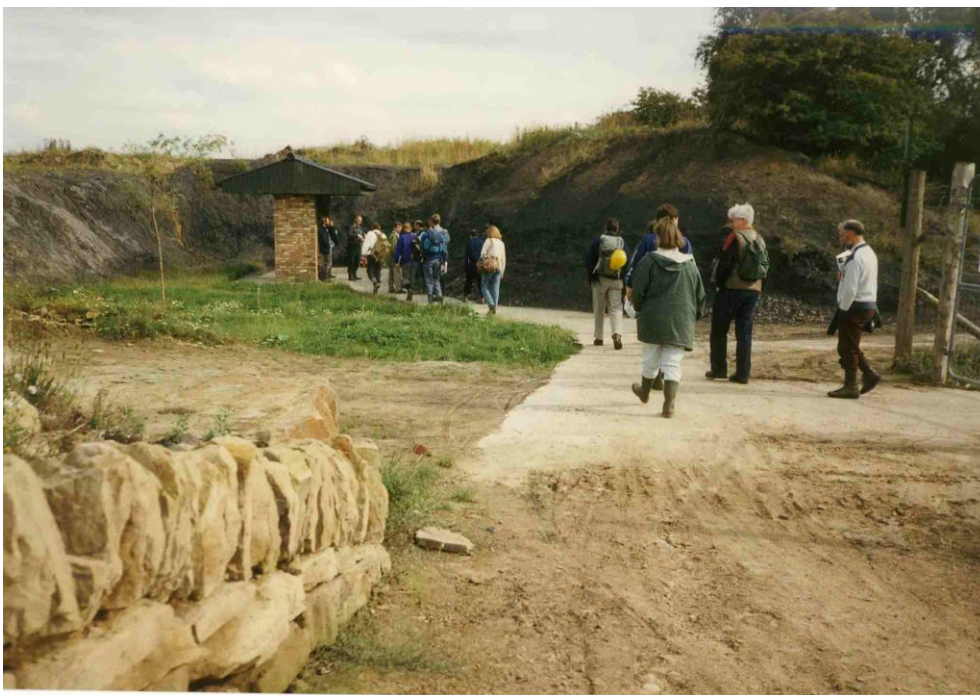


**Figure 3B  
The Mansfield Marine Band SSSI at Stairfoot, The Trans-Pennine Trail is out of view to  
the right. 1993  
(supplied by SAGT)**

The last survey of the SSSI by Natural England was undertaken in 2010 and reported as follows:

Exposure visible. . Herbage developing, which needs control, but not yet critical. Site sign vandalised. Footpath work has been carried out since the site visit, but methodology previously agreed. Unlikely to have impacted on interest features. Water levels clearly rise in the base of the site and could cause problems with access. Drainage may need looking at. Favourable ? Interest feature visible and accessible.

To classify as favourable, means the designated feature(s) within a unit are being adequately conserved and the results from monitoring demonstrate that the feature(s) in the unit are meeting all the mandatory site specific monitoring targets set out in the Favourable Conditions Table (FCT) in Annex 1 of the Natural England:Standard Monitoring, Assessment and Reporting, 2019. The FCT sets the minimum standard for favourable condition for the designated features and there may be scope for the further (voluntary) enhancement of the features / unit. A unit can only be considered favourable when all the component designated features are favourable.

### 3.2 Description of Proposed Development Site

The development site comprises 6.49 hectares and is located at the former Stairfoot Brickworks site in Wombwell Lane, Barnsley, S70 3NS. The site, previously occupied by a brickworks, is currently unoccupied comprising open land with concrete hard cover, woodland and grassed areas. Access is to the south of the site from Wombwell Lane which lies between Barnsley and Wombwell.

The site lies around National Grid Reference 437784<sup>E</sup> 405117<sup>N</sup> at a height of around 45m a OD in the west rising to 55m a OD in the east and in the south east corner of the site.

The site area nearest to Wombwell Lane is hard covered with reinforced concrete. A weighbridge building was demolished in late 2021 by the previous owner just prior to transfer of land. The north of the site is raised land, overgrown and edged by a high bund of ground to separate the view of the brickworks from the Trans Pennine Trail which runs around the northern boundary of the site.

The site is bounded to the west by the A633 Wombwell Lane, with Barnsley Retail Park and Tesco beyond. The site is bounded to the east by open land with houses of Ardsley village beyond. The site is bounded to the north by open ground and residential and commercial property and is bounded to the south by residential housing and commercial premises.

### 3.3 Development Proposals

Potters-Ballotini propose to install a glass recycling plant on the site whereby clean glass will be crushed and sold on to customers in the UK, and mixed glass will undergo separation to split the glass from rubber, metal, aluminium etc with the glass going to UK customers to manufacture glass wool and the other materials sold to corresponding recycling industries.

Equipment and buildings proposed for the site include:

- Office block
- Welfare block
- Perimeter fencing
- 2 weighbridges
- Electricity substation
- Storage bays constructed from interlocking moveable blocks
- Site entrance with two way traffic flow
- 2 off 70m by 20m by 16m high steel portal frame buildings with cladding to house processing equipment
- Storage bays for vehicles

- Workshop building comprising steel portal frame with cladding, 15m by 15m by 7m high
- Process equipment

The main entrance to the site will be from the A633 Wombwell Lane. There will be no vehicular or pedestrian access required along the Trans Pennine Trail adjacent to the SSSI. The development will be designed for a lifetime of in excess of 20 years. The existing drainage on the site is being investigated for location and for leaks and will, where necessary, be upgraded for a 20 year life. The site area is mainly concrete cover with woodland in the south eastern corner and open land in the north.

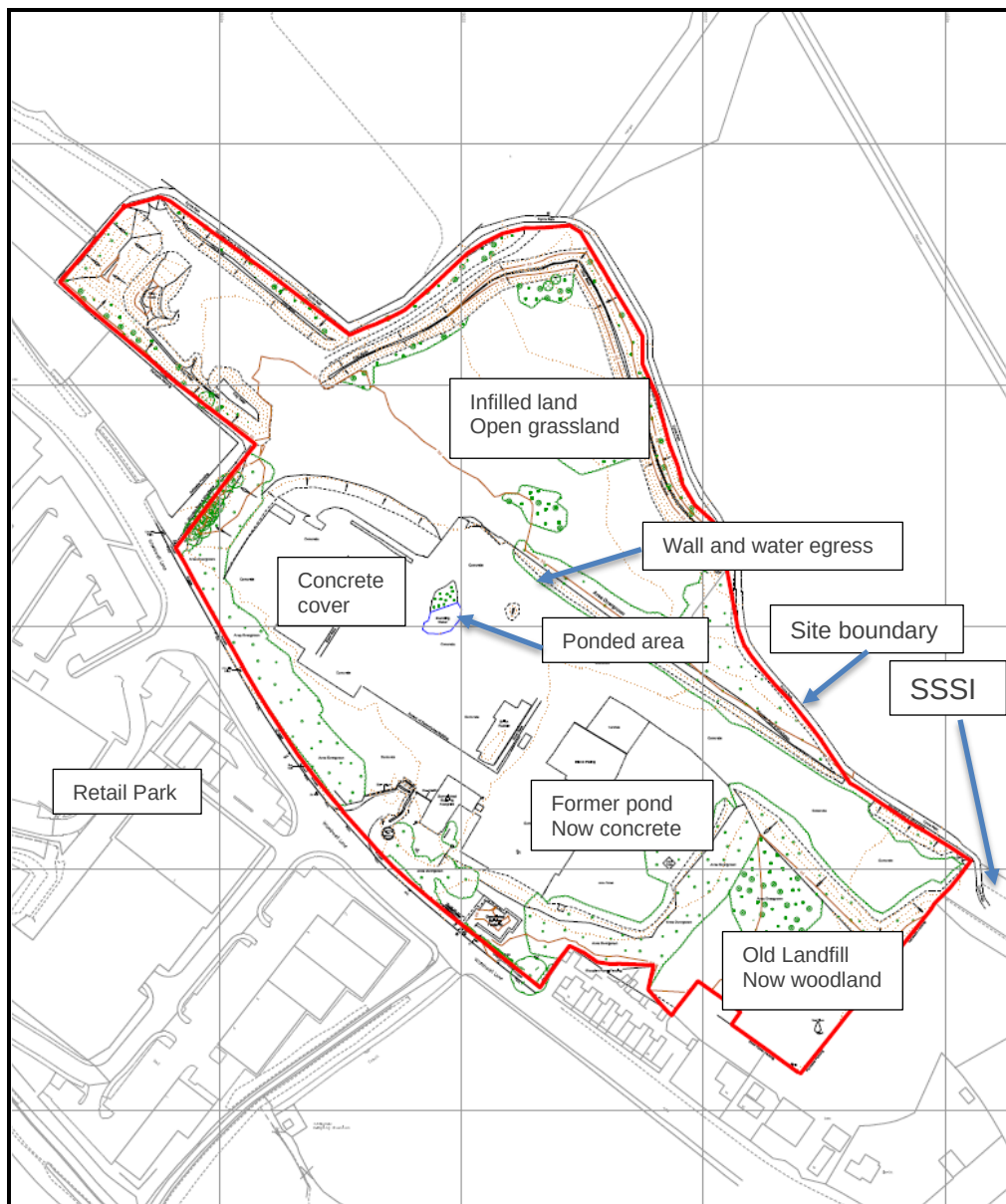


**Figure 4 Plan of Proposed Development Site**

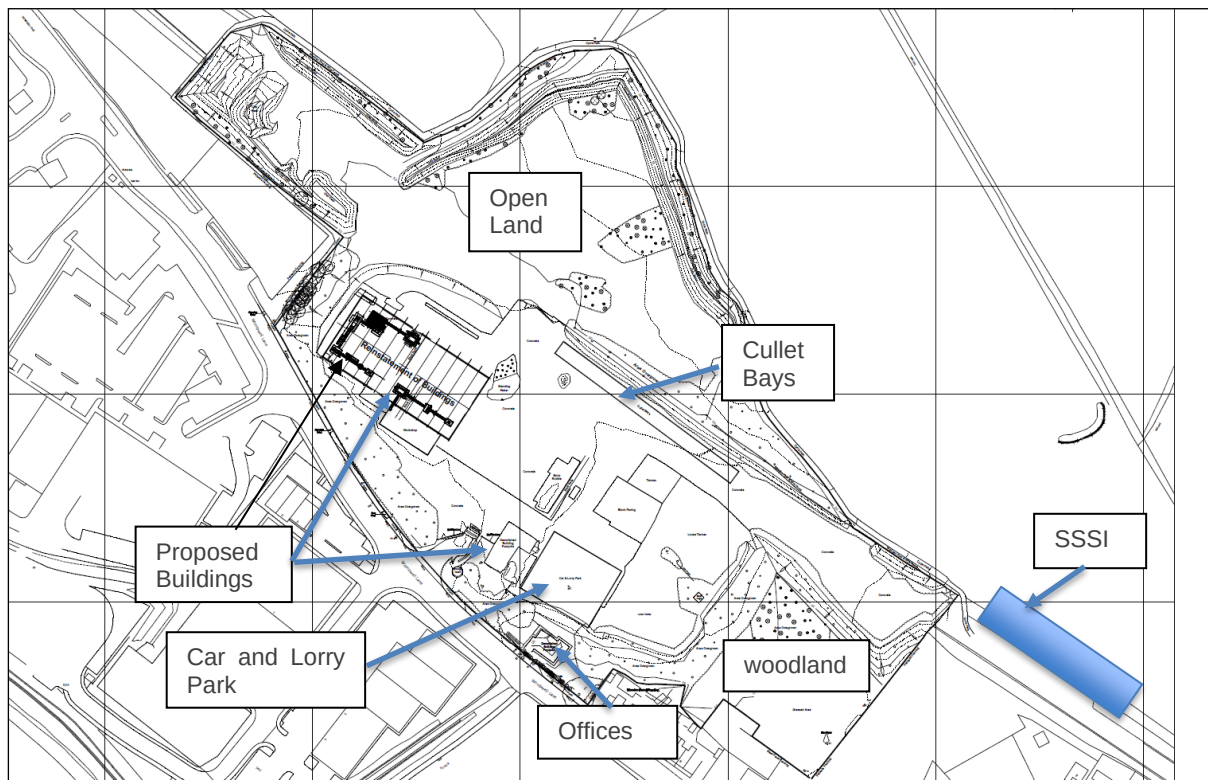


**Figure 5 Plan of Development Site Proposals**

## **4. GEOLOGY AND HYDROGEOLOGY**

### **4.1 Geology**

The published British Geological Survey (BGS) geological maps of the area, Sheet 87 Barnsley at 1:50,000, show the development site and the SSSI to be underlain by bedrock of the Carboniferous Coal Measures. The western area of the development site is shown to be underlain by the Oaks Rock Sandstone overlain by mudstone and shale with the overlying Ackton Rock Sandstone outcropping along the eastern part of the site.

The Oaks Rock Sandstone extends to a thickness of 20m to 30m beneath the site and is overlain by the Wheatworth Coal, a poor quality coal often absent around Barnsley. Above this is the Aegiranum or Mansfield Marine Band forming the SSSI overlain to the east by the Ackton Rock Sandstone. The strata dip at shallow angles to the horizontal to the east.

One geological fault runs in a west to east direction across the southern tip of the development site which has down thrown younger geological strata to the north of the fault compared to the south, thus bringing the Oaks Rock Sandstone to the surface in the extreme south of the site.

There is a very low risk of mining subsidence occurring to the development site or to the SSSI site as deep mining (>30m bgl) was undertaken at a time when subsidence of the ground should have ceased by now. There is no recorded shallow (<30m bgl) mining where voids remaining in the ground from coal extraction could migrate to the surface over time and cause ground subsidence. The Boggard Coal is expected to have been removed over most of the site during excavation of the clay / fireclay for brickmaking. The Swinton Pottery Coal is deeper, and if worked, any voids will lie beneath nearly 25m of competent strata which would prevent any voids reaching the ground surface and causing subsidence.

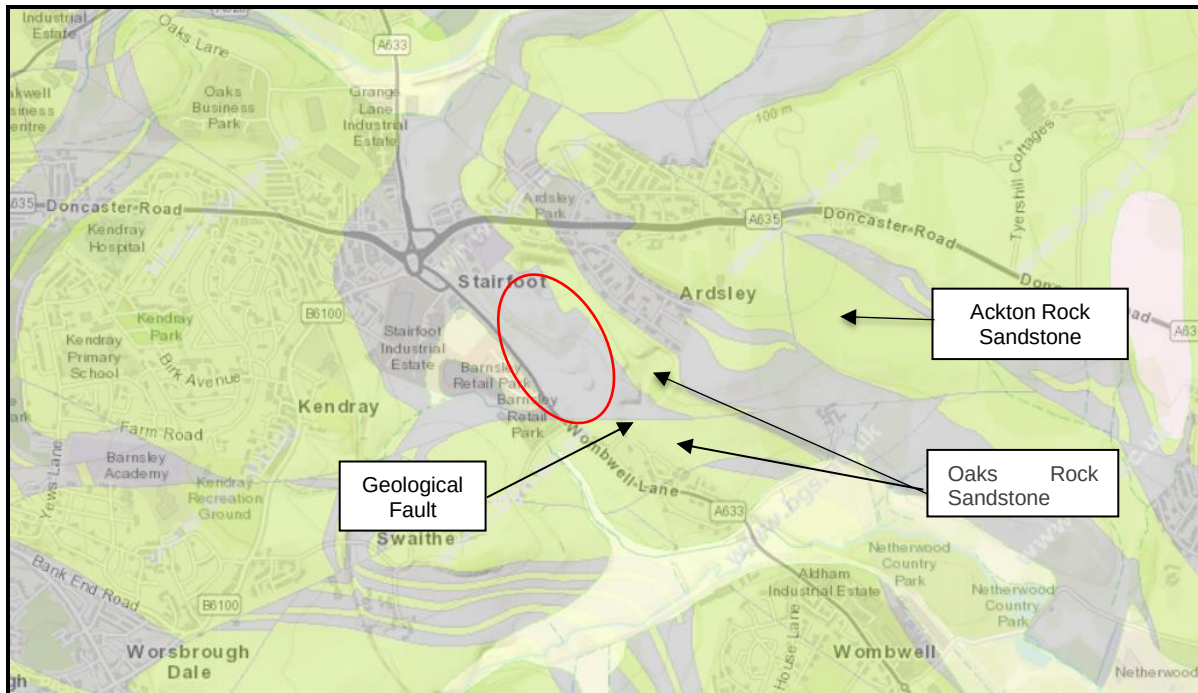


**Figure 6 Bedrock Geology Plan**

The Aegiranum (Mansfield) Marine Band marks the base of the Duckmantian-Bolsovian (Westphalian C) Measures and is well documented. The Marine Band comprises a dark grey mudstone and bioturbated siltstone with rare layers of impure limestone or calcareous siltstone, and commonly overlies a thin coal and seatearth.

Exposures are recorded in Monk Bretton, Park Hill and Manvers Main, but the extant type locality is at Stairfoot. The section at Stairfoot was recorded in 1998 as follows:

|                                                         |        |
|---------------------------------------------------------|--------|
| Dark grey mudstone                                      | 1.00m+ |
| Cank, a line of large flat carbonate nodules            | 0.30m  |
| Grey micaceous fairly fissile mudstone with goniatites  | 0.90m  |
| Fissile black mudstone                                  | 0.01m  |
| Coal                                                    | 0.05m  |
| Seatearth mudstone, pale grey + small ironstone nodules | 0.30m+ |

The marine band is around 2.50m in thickness with *Lingula* and *Dunbarella* in a few cored sections. In Sprotborough nearly 3m were described and in places it reaches 4m in thickness.

While the lower and upper parts of the marine band only contain fish fragments and *Naiadites* bivalves, the middle part of the marine band contains a fauna which includes an assemblage of ammonoids (including the index species *Donetzoceras Aegiranum*), as well as numerous nautiloids, pectinoid bivalves, gastropods and crinoids.

The site provides the best available exposure of the Aegiranum Marine Band within the Pennine Basin as well as the best known exposure of the ammonoid bearing part of the marine band in the world. The site is particularly good for the study of the index species *Donetzoceras aegiranum* and numerous well-preserved adults and juveniles are preserved.



**Figure 7A      Photos of Marine Band (2021)**



**Figure 7B      Photo of Marine Band (1993)  
(supplied by SAGT)**

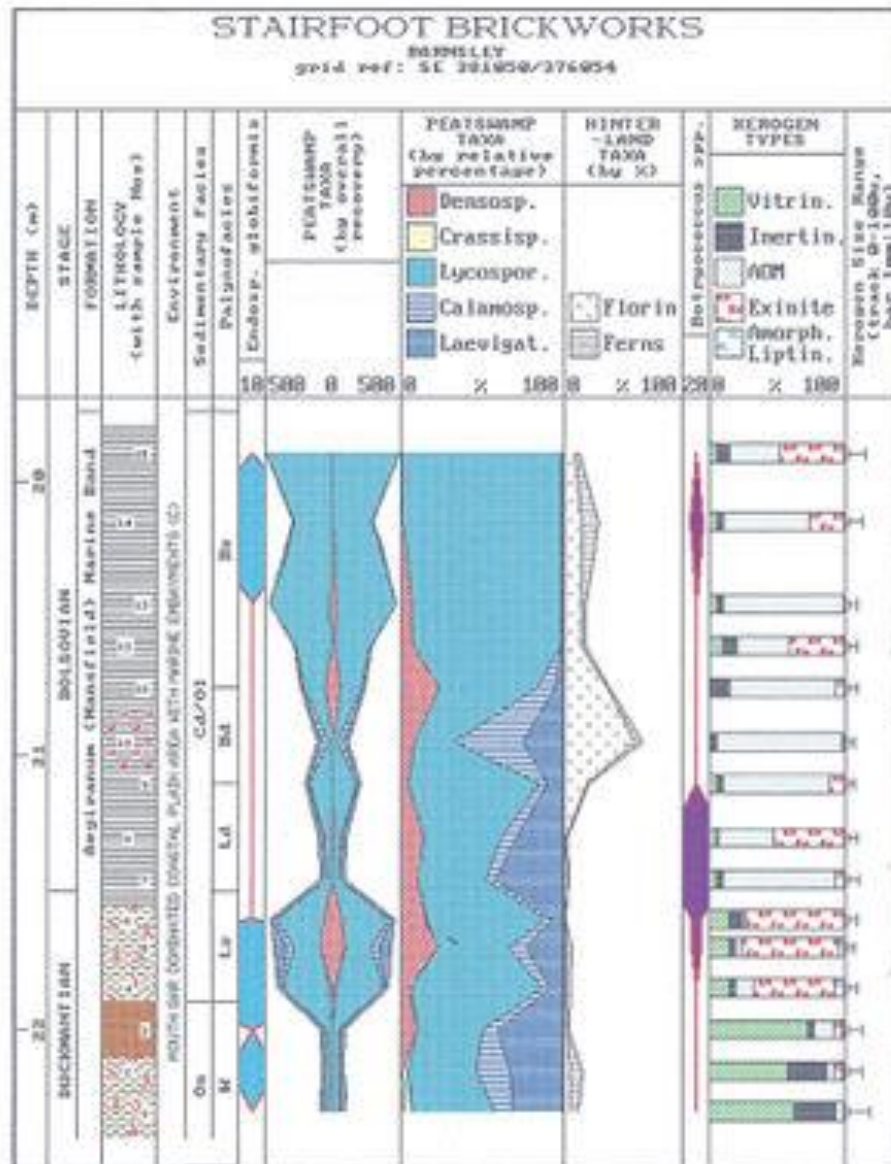


**Figure 8 Fossil Horizon Description**

## 4.2 Hydrogeology

The groundwater held within the sandstone bedrock beneath the SSSI and the development site is classified by the Environment Agency (EA) as Secondary A, which indicates permeable layers capable of supporting water supplies at local rather than strategic scale, and in some cases forming an important source of base flow to rivers. They were formerly classified by the EA as minor aquifers.

The water collected behind the SSSI is considered to be run off water from higher ground to the east collecting in an old clay pit with an impermeable base.

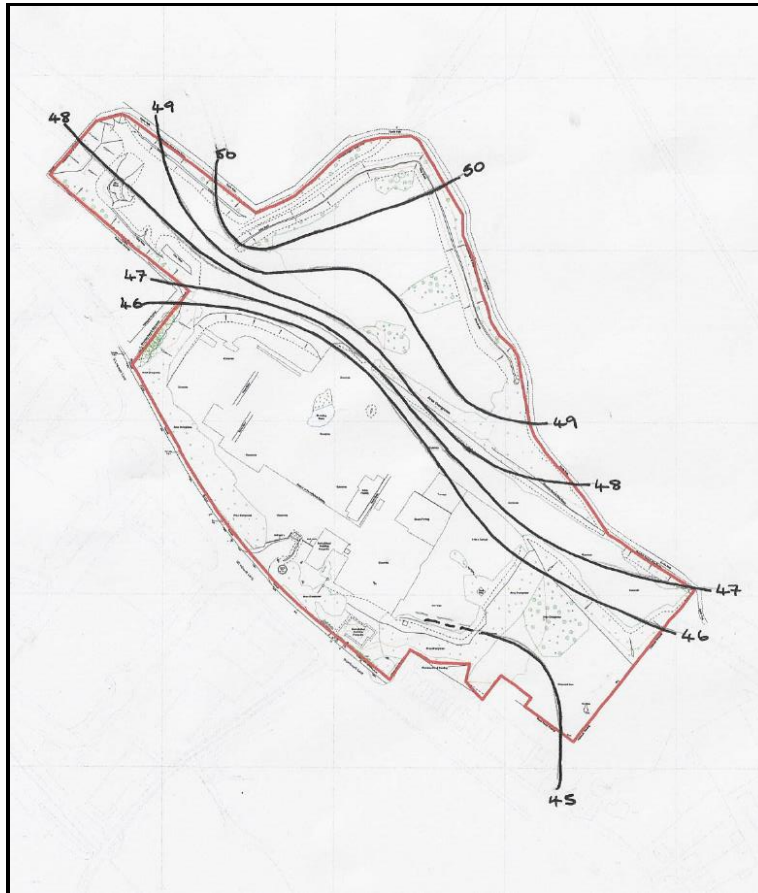


**Figure 9 Contours of Groundwater Levels in m aOD (2021)**

During a ground investigation undertaken on the proposed development site, the groundwater depth in each borehole was monitored and converted into a level above OD and the highest groundwater levels recorded were used to draw groundwater contours across the site as shown in Figure 9. This shows the groundwater at a level of around 50m aOD in the northern extremity of the site reducing to 45m aOD at the front of the site along Wombwell Lane.

The level in the area of the SSSI is 47m aOD. Groundwater flow is from the north and north east flowing to the south and south west across the site.

## **5 ENVIROMENTAL RISK TO SSSI**

### **5.1 Sources of Contamination**

The SSSI could be damaged by contamination which may accelerate deterioration of the fissile mudstone. Drilling of 28 boreholes on the development site and laboratory testing of soil samples indicated the soil was not contaminated for commercial use of the site. The results indicate that it is highly unlikely the site could be causing the SSSI to be contaminated.

Laboratory testing of perched groundwater and the stream issuing on the development site indicated contamination by arsenic, boron, chloride, nickel, ammonia and sulphate, which are contaminants derived from landfill. It is possible that the water adjacent to the SSSI may also be contaminated from water issuing from landfill to the north, not associated with the development site.

## 6. RISK ASSESSMENT

The risk assessment has included consideration of various activities which could cause deterioration to the SSSI.

Potential risks identified by Natural England and Ashton Bennett include deterioration of the exposure by:

- Dumping, spreading or discharge of any materials.
- The introduction of tree and/or woodland management (including planting).
- Extraction of minerals.
- Destruction, construction, removal, rerouting or regrading of roads, tracks, walls, fences, hardstands, banks, ditches or other earthworks, including soil and soft rock exposures or the laying, maintenance or removal of pipelines and cables, above or below ground.
- Storage of materials on or against rock outcrops.
- Erection of permanent or temporary structures, or the undertaking of engineering works, including drilling.
- Modification of natural or man-made features and clearance of boulders, large stones, loose rock or scree and battering, buttressing or grading of geological exposures.
- Building too close to SSSI and undermining its stability
- Creating pipework or drainage that may leak and undermine the stability of the SSSI
- Access for maintenance adjacent to the SSSI
- Walkers and Cyclists using the Trans Pennine Trail.

The proposals for development on the former Stairfoot brickworks are for a glass recycling facility with workshop, cullet bays for glass storage and offices. The development site will benefit from fencing surrounding the entire facility.

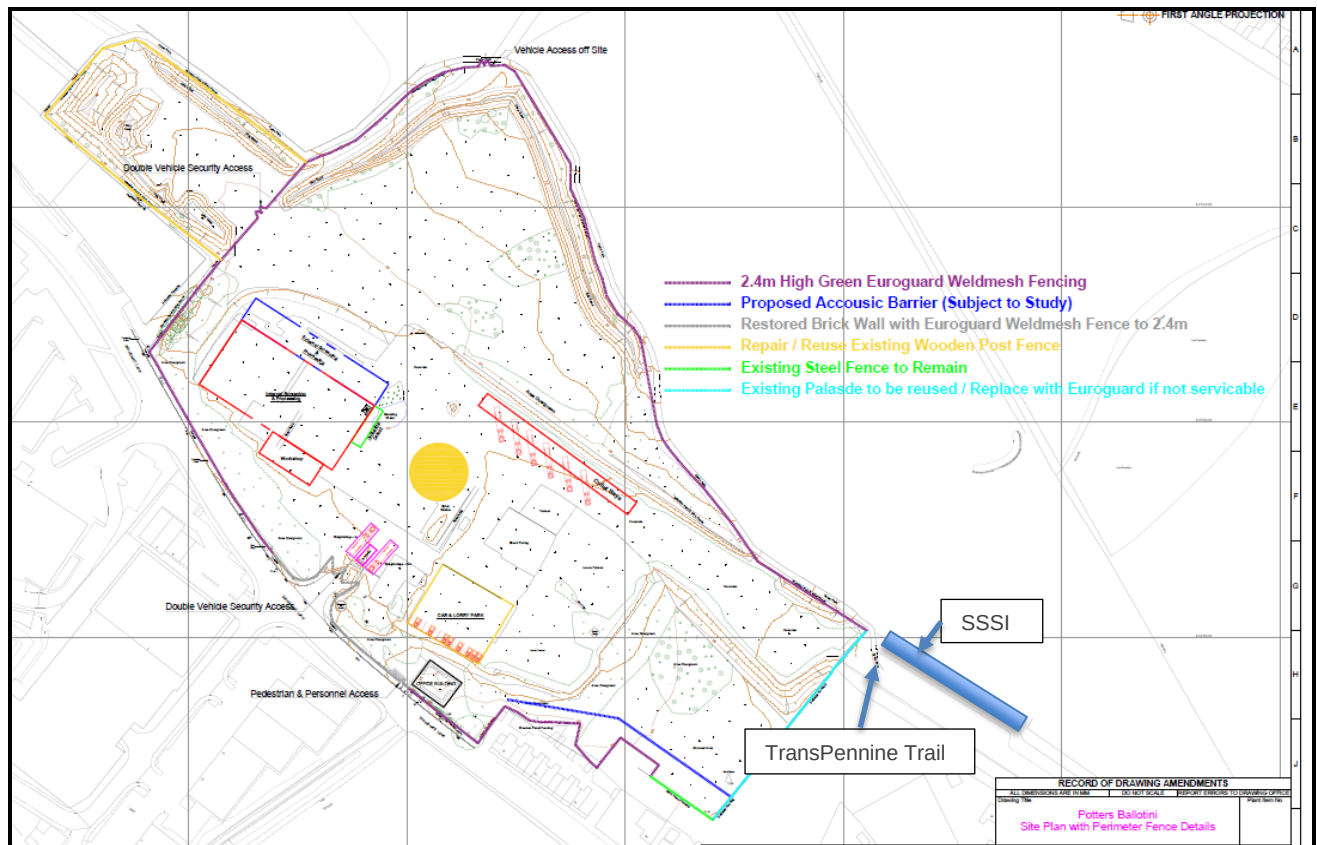


**Figure 10 Fencing detail around Proposed Development Site.**

The facility will deal with its own waste off site, there will be no dumping or disposing of soil or other materials on or in the region of the SSSI. The site will be fenced to prevent unauthorised access and to retain staff and materials within its boundaries.

Although there may be planting of trees this will only be within the site boundaries and will not extend or encroach upon the SSSI.

There will be no further extraction of minerals on the site.

There will be no destruction, construction, removal, rerouting or regrading of roads, tracks, walls, fences, hardstands, banks, ditches or other earthworks, including soil and soft rock exposures or the laying, maintenance or removal of pipelines and cables, above or below ground that will interfere with the SSSI.

There will be no storage of materials outside the site fencing.

There will be no erection of permanent or temporary structures, or the undertaking of engineering works, including drilling outside the site fencing. A site investigation has been undertaken already for the proposed redevelopment and did not encroach outside the site boundaries.

Erection of the site fencing will be on the far side of the Trans Pennine Trail from the SSSI and will not disturb the geological marine band.

There will be no modification of natural or man-made features, clearance of boulders, large stones, loose rock or scree and battering, buttressing or grading of geological exposures.

There will be no buildings in close vicinity to the SSSI. The land adjacent may in the future be used for storage of dry materials which will not impact the SSSI.

There will be no access for maintenance adjacent to the SSSI apart from erection of the boundary fencing which will be on the far side of the Trans Pennine Way from the SSSI.

There will be no cyclists or walkers adjacent to the SSSI in order to access the development site. The development site owner cannot control any deterioration of the marine band by users of the Trans Pennine Trail.

There are drains at the east end of the development site adjacent to the Trans Pennine Trail and these are currently being investigated for their condition. Any leaking drains will be repaired during construction.

In addition to standing water collecting on an area of low ground behind the SSSI, it has also been noted by Potters that the bend on the Trans Pennine Trail, located a short distance beyond the development site boundary, (adjoining the SSSI at the opposite side), also floods during periods of heavy and persistent rainfall.

On occasions, the lower part of the development site just within the site boundary adjacent to this point on the Trans Pennine Trail has also been observed to flood. It subsequently appears to drain away either via soakaway into soft ground located adjacent the site boundary itself, or via a square chamber fitted with a grille and a slightly raised makeshift metal cover bolted to the concrete hardstanding a short distance inside the site depending on the amount of rainfall. An open gully is present just to the west of the metal cover which collects surface water from the concrete hardstanding and drains into this chamber.

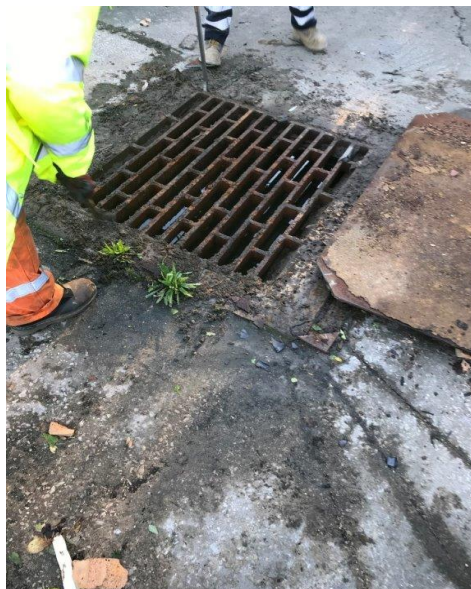


**Figure 11 Chamber 1 within Potters Site**

The metal drain cover was temporarily removed by Potters during the first phase of CCTV investigation of the site drainage by a specialist contractor during October 2021. It was noted that there were three inlets to the drain in total and that the fourth leaves the chamber in a south-easterly direction towards the Trans-Pennine Trail.



**Figure 12 Chamber 1 within Potters' Site**

A few metres to the south-east, the camera identified a blockage or collapse in the drain. Potters responded by appointing a drainage contractor to carry out an emergency repair.

During the repair works, it became apparent that this drain turned through 90° within a second circular chamber, and into a third circular chamber, both located on the site boundary in the south-easternmost corner. This was not initially apparent due to the chamber lids being obscured beneath vegetation and several inches of mud and sediment. The third chamber was observed to drain via pipework to a fourth rectangular chamber on the Trans Pennine Trail, on its eastern side just beyond the SSSI. The third chamber is just outwith the land now in Potters' ownership.



**Figure 13 Chamber 2 on the Site Boundary**

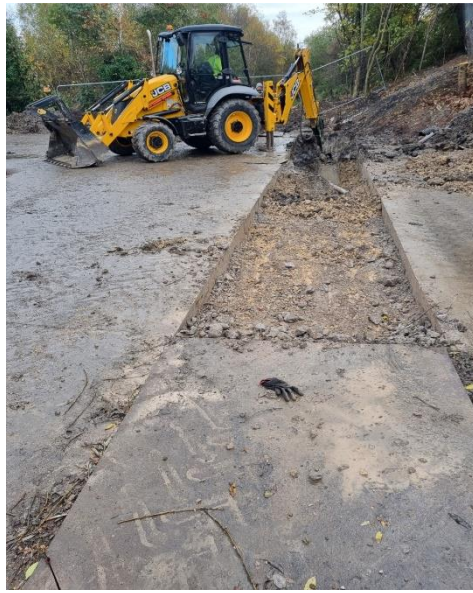


**Figure 14**      **Drainage Run between Chamber 1 and Chamber 2**



**Figure 15**      **Drainage Run Between Chamber 2 and Chamber 3**

Despite the repairs, it is proving difficult to maintain the flow within this part of the drainage system. Within the first chamber (with the metal cover and grille), a 300mm black plastic field drain was noted to enter from the east as identified by the CCTV Contractors. The field drain was blocked with compacted soil and silt.



**Figure 16 Chamber 3 with blue field drain visible at the bottom of the picture**

During the jetting process it became apparent that the field drain was partially exposed at the surface within the adjacent field and there was no cover fitted to the end of the drain. Mud and sediment has since been observed to enter the drainage system from the field. The functional part of the field drain is not on land in the ownership of Potters.

Also, within the third chamber, a 150mm blue plastic field drain enters from the east which was also unblocked during a later phase of jetting. This pipe was identified as having root damage. It would appear logical that this drain was installed to drain the area behind the SSSI and does not cross any land in the ownership of Potters.

It is concluded that if repairs to the field drainage were to be carried out by the third party responsible for its upkeep, then the drainage system would be more likely to remain clear and free of sedimentation for longer. It could require some additional works within the field and on the Trans Pennine Trail itself to prevent the ponding of water in the vicinity of the SSSI. Potters will have to maintain their part of the drainage system as part of their Management System for the site, and, are willing to co-operate with BMBC and the owner to assist in the resolution of the immediate and ongoing drainage issues.

It is concluded that there are no identified circumstances where the proposed development on the former Stairfoot Brickworks could cause deterioration of the SSSI.

## **7. REMEDIATION**

The SSSI is according to Natural England, in a favourable state. However, the exposure is covered in young trees, brambles and weeds and does not now have the appearance of a site of national importance.

The previous owners of the brickworks site enhanced the outcrop with a special notice as shown in Figures 3A and 3B.

The future owners will be willing to discuss the enhancement of the SSSI in consultation with Natural England.

There is a brick enclosure associated with the Marine Band SSSI located on the west side of the Trans Pennine Trail just beyond the site boundary. This was almost completely obscured by vegetation but was cleaned off and re-exposed by Potters Contractor during the course of preparing for the CCTV survey during November 2021. Potters would like to offer to carry out repairs to the enclosure by removing roots, improving the floor, cleaning up the brickwork and sponsoring a suitable bench and / or signage that could be put up inside the enclosure to provide information about the Marine Band located opposite along with a practicable element of ongoing maintenance. A further suggestion is to carry out a small amount of vegetation removal to a limited section of the embankment within the SSSI to re-expose the Marine Band for the benefit of interested parties.



**Figure 17      Brick Enclosure on West side of Trans Pennine Trail**

## **8.      GENERAL REMARKS**

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