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Planning & Development

Flood Risk Assessment

Penistone Cricket Club

Penistone Cricket Club, Queen Street, Penistone, Sheffield, S36 8JQ

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Executive Summary

Ashfield Flood Risk Solutions (“Ashfield”) was commissioned by Northern Design Partnerships on behalf of Penistone Cricket Club (“the client”) to undertake a Flood Risk Assessment (“FRA”), in support of a planning application for the construction of a new pavilion at Penistone Cricket Club, Queen Street, Penistone, Sheffield, S36 6HD (“the site”). This report has been commissioned as an update to the original FRA (Ashfield ref: 112319), with the location of the proposed pavilion changing location on site.

This FRA has assessed the risk of flooding from all potential sources at the site location. The River Don is located immediately to the west/south of the site. An unnamed ditch/watercourse which discharges into the River Don approximately 43m to the north-west of the existing clubhouse/pavilion is not considered to pose a significant risk to the site.

The majority of the site is located within Flood Zone 3 of the River Don. This is land assessed as having a 1 in 100 or greater annual probability of river flooding (>1%). To inform this report, EA flood data was obtained to inform this FRA which includes modelled flood outlines from the 2012 Sheffield CFR model. There are not, however, any defended or undefended flood depth/level grids available that cover the site. The modelled flood outlines show that the site is predicted to be at risk of flooding from the 1 in 25 year event and events of greater magnitude.

Ashfield has obtained the latest flood model data from the EA and this comprises the same data as assessed within the original FRA. Updates to the wider model are based closer to Sheffield to the south-east and there are no changes to the model at the site location.

In absence of site-specific flood depths/levels from the data available, in-channel one dimensional (1D) flood levels have been extracted from the EA data (2012 Sheffield CFR model), for the closest node point, located approximately 41m north-west of the existing clubhouse/pavilion. Only flood levels were provided and not flows. The design flood event in context of the proposed development is the 1 in 100 year event +28% allowance for climate change (CC). Climate change was not assessed as part of the 2012 modelling and therefore, the 1 in 1000 year flood level (189.26mAOD) has been used to inform design considerations. It is recommended that the finished floor level of the new pavilion is set to a minimum level of 189.56mAOD. This will provide a 300mm freeboard above the 1 in 1000 year (extreme event) in-channel flood level.

Setting the finished floor level of the proposed pavilion to 189.56mAOD will also mitigate against the risk of flooding from surface water, reservoir failure, groundwater and artificial sources. All of these quoted sources are considered to pose a low risk to the proposed development. The client’s development aspirations can therefore manage/mitigate any residual flood risk as part of the design. A Flood Management Plan will be in active use prior to the opening of the facility.

The proposed pavilion will be raised off ground level through using steel stilts. This will ensure that floodplain storage is not lost as a result of the construction of the structure. This report therefore demonstrates that the proposed development:

- Is suitable in the location proposed and will be adequately flood resistant and resilient;
- Is unlikely to place additional persons at risk of flooding, and will offer a safe means of access and egress; and,

- Is unlikely to increase flood risk elsewhere as a result of the proposed development through the loss of floodplain storage, impedance of flood flows or increase in surface water runoff.

1 Introduction

1.1 Authorisation and Context

Ashfield Flood Risk Solutions (“Ashfield”) was commissioned by Northern Design Partnerships on behalf of Penistone Cricket Club (“the client”) to undertake a Flood Risk Assessment (“FRA”), for Penistone Cricket Club, Queen Street, Penistone, Sheffield, S36 6HD (“the site”). The site location can be seen on Drawing 01 for reference. This report has been commissioned as an update to the original FRA (ref: 112319) in support of a planning application at the site. The development proposals are discussed further in Section 1.6.

1.2 Aim and Objectives

The overall aim is to demonstrate that the proposed development at the site is appropriate in context of flood risk. The proposed site plans are included within Appendix A for reference. Ashfield has undertaken this FRA in accordance with the most up to date local and national policies on development and flood risk by:

- Assessing whether the site is likely to be affected by flooding from different sources;
- Providing an assessment of the vulnerability of the proposed development and its suitability in relation to the identified flood risks;
- Providing an opinion in relation to the likely impacts of the proposed development on flooding elsewhere; and,
- Where required, presenting flood risk mitigation measures necessary to ensure that the proposed development and occupants will be safe, whilst ensuring flood risk is not increased elsewhere.

1.3 Information Sources Used

In order to prepare this FRA, the following information sources and general guidance documents have been used:

- National Planning Policy Framework (NPPF), Flood Risk and Coastal Change Planning Practice;
- Proposed Site Plan (Drawing No – 01) – Northern Design Partnership, June 2023;
- Proposed Plans and Elevations Option 2 (Drawing No – 02) – Northern Design Partnership, July 2023;
- Topographic Survey (Drawing No – MG/300/SP) – HH Surveys Ltd, June 2019;
- Barnsley Metropolitan Borough Council Preliminary Flood Risk Assessment (PFRA) – Barnsley Metropolitan Borough Council, July 2011;
- Barnsley Metropolitan Borough Council Preliminary Flood Risk Assessment (PFRA) Addendum – Barnsley Metropolitan Borough Council, December 2017;
- Barnsley Strategic Flood Risk Assessment (SFRA) – JBA Consulting, September 2010;
- Product 4 & 6 Environment Agency (EA) Data – Final Response Received September 2023;
- 1m Resolution Light Detection and Ranging (LiDAR) Data – Downloaded October 2023;
- Environment Agency interactive flood maps – accessed online October 2023; and,
- British Geological Survey (BGS) Drift & Geology Maps - accessed online October 2023.

1.4 Report Limitations

This assessment of flood risk has looked to use the most accurate and up to date flood mapping for the location. The site boundary has been supplied by the client and the assessment of risk is based on this. This report has been prepared with due care and diligence in accordance with industry best practice and guidance. The conclusions in this report are valid only to the extent that the information provided to Ashfield was accurate and complete at time of receipt.

1.5 Site Setting

The site is located at coordinates XY: 425431, 403461 (nearest post code S36 6HD) and occupies an area of approximately 2 hectares (ha). The site currently comprises the cricket field (centre) and existing clubhouse/pavilion inside of the western site boundary. A car parking area is located in the south-eastern corner.

The site is bound to the north and east by existing grassland fields and to the south and west by the River Don.

1.6 Development Proposals

The proposed development at the site comprises the construction of a new pavilion, with the Proposed Site Plans seen within Appendix A for reference. As previously mentioned within Section 1.1, this FRA has been commissioned as an update to the original FRA (ref: 112319), with the proposed pavilion changing location further to the south of the previously proposed location. This was due to the identification of a sewer main being located in the previous location proposed for the pavilion.

1.7 Topographic Mapping

A topographic survey has been undertaken by HH Surveys Ltd in June 2019 (Appendix B) for the north-western region of the site in the location of the existing clubhouse/pavilion and proposed new pavilion (seen on Appendix A plans). The levels within the region of the proposed pavilion are shown to range between 188.39mAOD in the north rising up to 188.90mAOD further south.

Freely available 1m resolution Light Detection and Ranging (LiDAR) data was downloaded for the whole site and local area as seen on Drawing 02. A review of the LiDAR shows the wider site falls to the south/south-east, towards the channel of the River Don.

1.8 Local Hydrology

The nearest EA designated Main River is the River Don, located immediately to the west/south of the site, flowing in a south-easterly direction. The Cubley Brook (also an EA designated Main River) is shown to discharge into the River Don to the south of the car parking area, flowing from the south-west.

An unnamed ditch/watercourse is shown to discharge into the River Don approximately 43m to the north-west of the existing clubhouse/pavilion. This ditch/watercourse flows from the north. The River Don, Cubley Brook and unnamed ditch/watercourse can be seen on Drawing 03 for reference.

1.9 Flood History

The open-source GIS layer for Recorded Flood Outlines (Drawing 04) indicates that flooding has occurred immediately south/west of the site boundary in June 2007. This event was caused due to the channel capacity of the River Don, exceeding its banks due to no raised flood defences.

The client has confirmed that the existing clubhouse/pavilion experienced flooding approximately 6-7 years ago from the River Don. The estimated flood depths at this event could not be confirmed.

According to the PFRA, table 4-2 shows records of 5 historical flood events and flooding hotspots were collected across the Barnsley Metropolitan Borough, with the June 2007 flooding shown to affect the site. This arose from intense rainfall for a prolonged period, culminated in severe flooding on the 15th of June throughout the whole of the borough. A second and more significant flood event took place on the 25th of June.

1.10 The Design Flood

The Planning Practice Guidance identifies that new developments should be designed to provide adequate flood risk management, mitigation, and resilience against the 'design flood' for their lifetime.

This is a flood event of a given annual flood probability, which is generally taken as fluvial (river) flooding likely to occur with a 1% annual probability (a 1 in 100 chance each year), or tidal flooding with a 0.5% annual probability (1 in 200 chance each year), against which the suitability of a proposed development is assessed and mitigation measures, if any, are designed.

1.11 Climate Change

In July 2021, the predicted future change in peak river flows were updated by the Environment Agency. This replaced the previous February 2016 update which was based around a range of projections applied to regionalised 'river basin districts'. The July 2021 update now requires consideration of the management catchment climate change allowances from the peak river flow map as benchmarks. This supersedes the previous 'regional' climate change allowances.

The site is located within the Don and Rother Management Catchment. Table 1 identifies the relevant peak river flow allowances from this management catchment. For reference, this management catchment is located within the Humber River Basin District.

Table 1 – Peak River Flow Allowance for the Don and Rother Management Catchment

Allowance Category	Total potential change anticipated for the '2020s' (2015 to 2039)	Total potential change anticipated for the '2050s' (2040 to 2069)	Total potential change anticipated for the '2080s' (2070 to 2115)
Upper End	25	36	50
Higher Central	15	21	38
Central	11	15	28

When determining the appropriate allowance for use in a Flood Risk Assessment the Flood Zone classification, flood risk vulnerability and the anticipated lifespan of the development should be

considered. Table 2 provides a matrix summarising the Environment Agency's guidance on determining the appropriate allowances.

Table 2 - Environment Agency Guidance on the Application of Climate Change

Flood Zone	Essential Infrastructure	Highly Vulnerable	More Vulnerable	Less Vulnerable	Water Compatible
2	Use the higher central allowance	Use the central allowance	Use the central allowance	Use the central allowance	Use the central allowance
3a	Use the higher central allowance	Development should not be permitted	Use the central allowance	Use the central allowance	Use the central allowance
3b	Use the higher central allowance	Development should not be permitted	Development should not be permitted	Development should not be permitted	Use the central allowance

*If (exceptionally) development is considered appropriate when not in accordance with Flood Zone vulnerability categories, then it would be appropriate to use the upper end allowance.

The whole site is located within Flood Zone 3, the proposed development is classified as 'water compatible', and it has an anticipated lifespan that falls within the '2080s' epoch. Therefore, the central allowance should be considered for the '2080s' epoch, equating to an additional 28% on flow volumes atop of the 1% annual probability (1 in 100 year) predicted flood event.

To ensure that the development is designed adequately for its lifetime, an allowance of 28% should be applied to the design flood 1 in 100 year event and will be considered further within Sections 2 and 3.

2 Flood Risk Evaluation

The following sections provide an evaluation of the risk posed by the key flood sources in relation to the site location. Consideration is given to the severity of flood risk to the site as a whole, making use of existing flood mapping, high-level local strategic studies and available topographic information.

2.1 Fluvial Flood Risk

Fluvial flood risk originates from a watercourse of any size that may affect a site when the channel capacity is exceeded. This type of flooding often occurs following an extreme rainstorm event or a prolonged period of wet weather.

As stated in Section 1.7, the River Don is located immediately to the west/south of the site. The unnamed ditch/watercourse which discharges into the River Don approximately 43m to the north-west of the existing clubhouse/pavilion is not considered to pose a significant risk to the site, unlike the River Don.

EA Flood Mapping

The Environment Agency's Flood Map for Planning (Rivers and Sea) divides the floodplain into risk-based categories and provides an indication of flood risk for the site. The EA Flood Map for Planning (Rivers and Sea) (Drawing 03) indicates that the site is located within Flood Zone 3. This is land assessed as having a 1 in 100 or greater annual probability of river flooding (>1%). A slightly more extensive region of the site close to the northern boundary is shown to be located within Flood Zone 2. This is land assessed as having between a 1 in 100 and 1 in 1,000 annual probability of river flooding (1% – 0.1%). The Flood Zones show the 'undefended' scenario, where any flood defences in the locality are not represented within the mapping.

The EA Risk of Flooding from Rivers and Sea (ROFRAS) mapping as seen on Drawing 05 indicates that the proposed pavilion is located within an area of 'Medium' risk, with the wider cricket pitches located within an area of 'High' risk. Medium risk is defined as an area that has a chance of flooding of between 1% and 3.3% each year. High risk is defined as an area that has a chance of flooding of greater than 3.3% each year. This mapping takes into account the representation of any flood defences that may exist in the local area.

Flood Defences

The original Product 4 response is included within Appendix C (19th November 2019) and includes flood defence asset information. A flood defence (asset ID 171892) comprising high ground is shown to stretch along the left bank of the River Don in proximity to the site. Although the River Don is an EA designated Main River, this high ground is shown to be maintained by a private third party, rather than the EA. It has a target condition of 3, with an overall condition of 2 across its length (4,190.33m). No information is provided on the design standard of protection that this asset offers.

The nearest flood defences to the site are aligned to the western and southern extent of the site boundary (along the northern bank of the River Don). From interrogation of the open-source layer for flood defences in a GIS viewer, this defence is identified to comprise natural high ground. The Design

Standard of Protection has not been provided; however, it is assumed that this aligns with the EA information mentioned above.

EA Flood Risk Data

To inform this FRA, Product 4 and 6 flood model data was obtained from the EA with their response included within Appendix C (20th January 2020). This states that the site is covered by the modelled flood outlines from the 2012 Sheffield CFR model, however, no defended or undefended depth grids are available that cover this particular site. The modelled flood outlines show that the site (including the proposed pavilion location) is predicted to be at risk of flooding from the 1 in 25 year event and events of greater magnitude. The EA states that the Lower Don Valley FAS Post Scheme Modelling was expected to be completed in February 2020.

Ashfield has consulted with the EA (Appendix D) and confirmed that the above data remains the most up to date for the site location. Lower Don Valley FAS Post Scheme Modelling, however, this is further downstream of the site towards Sheffield and not applicable.

In absence of site specific two-dimensional flood depths/levels from the data available, in-channel one dimensional (1D) flood levels have been extracted from the Product 6 data (2012 Sheffield CFR model), for the closest node point in Table 3. The closest node point (DON18-26643) is located approximately 41m north-west of the existing clubhouse/pavilion. No flow information is available for this node point, just flood levels.

Table 3 – In-Channel (1D) Flood Levels for the Adjacent River Don

Model Node	1 in 25 Year (mAOD)	1 in 50 Year (mAOD)	1 in 75 Year (mAOD)	1 in 100 Year (mAOD)	1 in 200 Year (mAOD)	1 in 1000 Year (mAOD)
DON18_26643	188.79	188.96	188.97	188.97	188.99	189.26

The lowest ground level in the region of the proposed new pavilion is 188.39mAOD. Comparing this to the in-channel flood levels seen in Table 3, the site is predicted to be at risk of fluvial flooding from the River Don for all modelled return periods (1 in 25 year up to 1 in 1000 year). As stated in Section 1.9, the design flood event is the 1 in 100 year event +28% CC. Climate change was not assessed as part of the 2012 modelling and without undertaking detailed hydraulic flood modelling, the in-channel/on-site flood level at this event is not currently available.

In summary, the overall risk to the site from fluvial flooding is considered to be **High**. Further considerations are made within Section 3 of this FRA to mitigate against this potential risk for the proposed development's lifetime.

2.2 Tidal Flood Risk

Tidal flood risk can affect the coastline as well as estuaries and rivers that are tidally influenced. Flood events often coincide with the tidal regime, high rainfall events or other natural phenomena, which can lead to water levels covering low-lying land or exceeding natural or man-made defences. The site is located >50km from the Humber estuary and furthermore has an elevation of >180mAOD.

The site is significantly removed from the tidal network; therefore, tidal risk is considered to be **Negligible**.

2.3 Surface Water Flooding

Surface water flooding occurs when local drainage networks are overwhelmed during an extreme rainfall event, causing water to flow over the surface and follow gravity to the lowest point where it often pools. This flood source is increasingly becoming one of the major contributors of flood risk, due to changing weather patterns and increased extreme rainfall events occurring across the UK. This places more pressure than ever on drainage systems, which are often overwhelmed during flash flood events, normally only designed to take between a 1 in 20 and a 1 in 30 return period event.

When interpreting the surface water flood map information, it needs to be taken into account that surface water mapping is generated from information that is largely high-level. The flood mapping must be correctly interpreted in order to give a fair representation of the site's surface water flood risk and used only as a guide.

The EA Surface Water Flood Map (Drawing 06) indicates that the majority of the site is considered to be at 'very low risk' of surface water flooding.

A high risk (1 in 30 year event) flow route is shown to flow in a south-eastrly direction, with the high risk depths seen on Drawing 07, with the majority of the depths being in the region of 150-300mm. From review of LiDAR data across the site, there is no obvious topographic low spot along this flow route, and the site is shown to slope gently to the south/south-east. Therefore, the surface water mapping may be overly conservative in this location.

In the north-east corner in the region of the proposed pavilion, medium risk (1 in 100 year) and low risk (1 in 1000 year) is illustrated as seen in Drawings 08 and 09, originating further to the north of the site. The majority of flood depths at the medium risk event range between 150-300mm with flood depths at the low risk event in the region of between 150-300mm, with more extensive depths further to the east in the region of 300-600mm. A wall is located around the north-west corner of the site and any overland flows would therefore be impeded by this wall in reality.

Furthermore, the cricket pitch is understood to have had a new drainage system implemented in the past 3-5 years to assist with surface water drainage. There is no evidence to suggest the site has previously experienced flooding from surface water.

The overall risk of surface water flooding affecting the site is considered to be **Low**. Further considerations are made within Section 3 in relation to keeping this risk to a low designation in the long-term.

2.4 Reservoir Failure

Assessment of risk of a reservoir failure may be interpreted as the extent of flooding that would occur, should any reservoir that has a capacity larger than 25,000m³, suffer a catastrophic failure. Mapping of this nature is described by the Environment Agency as a very worst-case scenario, with a flood event of this type being extremely unlikely to occur.

The EA Risk of Flooding from Reservoir Failure mapping (Drawing 10) is based on two extents:

- Wet Day (National) - This data shows the individual flood extents for all large, raised reservoirs in the event that they were to fail and release the water held on a “wet day” when local rivers had already overflowed their banks.
- Dry Day (National) - This data shows the individual flood extents for all large, raised reservoirs in the event that they were to fail and release the water held on a “dry day” when local rivers are at normal levels.

A Risk of Flooding from Reservoir Failure mapping shows that the site is located within an area that is predicted to be at risk from both the dry and wet day reservoir extents. Current legislation ensures that reservoirs are inspected regularly and essential safety work is carried out as required.

There are no reportable instances of reservoir failure located at or within the vicinity of the site from review of the PFRA and SFRA.

The site is located within an area predicted to be at risk of reservoir failure. However, due to current legislation all reservoirs are inspected regularly and the likelihood of failure occurring is considered to be low and the resultant risk is also considered to be Low. No further consideration is deemed necessary as part of this FRA.

2.5 Groundwater

Flooding from a groundwater source often occurs during or following a period of prolonged wet weather within areas that are low lying underlain by permeable rocks (aquifers). When aquifers are at their maximum holding potential, flooding at surface level can occur from beneath the ground.

Groundwater as a sole flooding mechanism is often regarded as low risk as it often relies on a coinciding rainfall, or flood event from an additional source to become a flood risk. The main contributory factor that will enhance the risk of groundwater flooding, is prolonged periods of high rainfall, which result in the groundwater saturation level rising to the point where it reaches the surface.

Online BGS mapping shows the bedrock geology at the site to comprise Grenoside Sandstone. This is designated by the EA as ‘Secondary A’ aquifer. This is defined as permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers.

The superficial deposit which overlays the bedrock geology at the site comprises Alluvium. This is also classed as a ‘Secondary A’ Aquifer.

The nearest borehole to the site is BGS Ref: (SE20SE19), which has a depth of 4.9m below ground level (bgl), although no groundwater information was available. There are no boreholes in close proximity to the site with information on groundwater.

According to the SFRA, groundwater flooding is a significant but localised issue that has attracted an increasing amount of public concern in recent years, although Penistone is not included within the

likely regions for groundwater flooding. The site is not understood to have previously experienced flooding from groundwater.

The risk of flooding from groundwater flooding is therefore considered to be **Low**. Further considerations are made within Section 3 in relation to keeping this risk to a low designation in the long-term.

2.6 Artificial Flood Sources

Flood risk from artificial sources would include the failure of man-made drainage or water supply network. Although the likelihood of such an occurrence is highly unpredictable, it is recommended that any proposed designs for the site take into account the location of any existing below ground services, in order to avoid any inadvertent flooding taking place during the construction phase and in the future.

A review of Appendix 4 within the PFRA, shows the Yorkshire Water DG5 flooded properties register which shows that the site is not located, or near an area which has experienced sewer flooding.

The site has its own drainage network serving the cricket pitch to assist with drainage. There are not understood to be any incidents of flooding from this source at the site.

In summary, the overall risk to the site from artificial sources is considered to be **Low**. Further considerations are made within Section 3 in relation to keeping this risk to a low designation in the long-term.

2.7 Summary

Table 4 provides a summary of the classification of risk to the site from all flood sources and indicates where further considerations are required in the context of the proposed development.

Table 4 - Flood Risk Summary

Flood Source	Overall Risk Classification	Additional Considerations
Fluvial	High	See Section 3
Tidal	Negligible	None
Surface Water	Low	See Section 3
Reservoir Failure	Low	None
Groundwater	Low	See Section 3
Artificial Sources	Low	See Section 3

3 Flood Risk in Planning Context

This report has so far evaluated all potential flood risk sources that may affect the site. The following sections describe the identified flood risks in the context of the proposed development and provide recommendations, where required, for the mitigation or reduction of those risks to enable safe development.

3.1 Flood Risk Status

The EA's Flood Map for Planning locates the majority of the site within Flood Zone 3. Flood Zone 3 is land assessed as having a 1 in 100 or greater annual probability of river flooding (>1%). The EA flood outlines and in-channel 1D flood levels obtained as part of the EA data show the site to be at risk of fluvial flooding from the River Don at the 1 in 25 year event and events of greater magnitude. The site is not shown to be located in an area that is benefitting from defences, with the overall risk of fluvial flooding considered to be High.

3.2 Development Viability

The Environment Agency classifies different types of development according to their perceived vulnerability to flood risk. The proposed development is understood to comprise the construction of a new pavilion.

In accordance with Table 2 of the NPPG: Flood Risk and Coastal Change the development is considered to be 'water compatible' (*Amenity open space, nature conservation and biodiversity, outdoor sports and recreation and essential facilities such as changing rooms*) As detailed in Table 3 of the NPPG: Flood Risk and Coastal Change, water compatible developments are considered acceptable in Flood Zone 3b (functional floodplain).

The proposed pavilion will be raised off ground level through using steel stilts. This will ensure that floodplain storage is not lost as a result of the construction of the new pavilion.

3.3 Design Principles for Development

It is recommended that, based on the current design proposals, the following design principles should be incorporated to demonstrate its long-term resilience and resistance to flooding.

Development Levels

As stated in Section 2.1, without undertaking detailed hydraulic flood modelling, there is not currently any on-site/in-channel flood level for the design flood event (1 in 100 year +28% CC). Therefore, the 1 in 1000 year flood level (189.26mAOD) will be used to inform development levels as a conservative approach. It is recommended that the finished floor level of the new pavilion is set to a minimum level of 189.56mAOD. This will provide a 300mm freeboard above the 1 in 1000 year (extreme event) in-channel flood level.

Setting the finished floor level of the proposed pavilion to 189.56mAOD will also mitigate against the risk of flooding from surface water, reservoir failure, groundwater and artificial sources.

Flood Resilience & Resistance

The following recommendations are made to bolster the proposed developments resilience and accelerate its recoverability immediately following any localised flooding.

- Wherever possible, the raising of low-level electrical equipment 300mm above the FFL 189.86mAOD should be undertaken to mitigate against any residual flood risk. This includes isolation points, sockets and fuse boards. The storage of any mobile electrical items should also be made above this level where possible.
- Any changes to the pavilion wall construction should utilise flood engineering bricks for further flood resilience.
- Wooden skirting should be avoided where possible or treated with an adequate flood resilient sealant;
- Floor finish should be kept as flood resilient as possible (concrete finish/ceramic tiles as opposed to carpet/vinyl/lino) so the floor can be easily cleaned down following any residual flooding;

It is recommended that the overall construction methods below ground, as well as immediately above ground level, should consider the potential for localised surface water accumulation. The type of design assurances would include less permeable building materials such as engineering brick and the most appropriate damp proof membrane.

Drainage – Surface Water

As part of the development design, it should be ensured that any modification of external surface water drainage systems, does not increase surface water flooding elsewhere. This should be done by minimising hard surfacing where possible and by adopting the use of permeable surface materials.

External ground levels immediately outside of the building should ensure the minimisation of internal storm water ingress. This can be achieved by either lowering external ground levels a sufficient level below internal floor levels or incorporating an 'ACO' type drainage grating system along all entrances into the building to effectively carry away overland flow.

3.4 Flood Awareness & Access/Egress

Given the nature of the proposed development being set at a cricket club, no persons would be present in the event of flooding at the site. It is recommended that an appointed person (preferably an individual who is in charge with the overall running of the cricket club) signs up to the EA Flood Alerts/Warnings service to know in advance of any potential high water levels in the River Don/flooding on site. A Flood Management Plan will be in place prior to the opening of the facility to ensure that residual risk on site can be managed.

4 Conclusion

The site has been assessed for a variety of flood sources, and based upon detailed analysis, this FRA has identified that fluvial risk is considered to be high, and flood risk from surface water, reservoir failure, groundwater and artificial sources considered to be low. Flood risk from the sea is considered negligible. The client's development aspirations can manage/mitigate flood risk (namely fluvial) as part of the design.

The proposals at the site comprise the construction of a new pavilion. This FRA has outlined that flood risk can be managed for the development's lifetime through:

- Using steel stilts to raise the pavilion off ground level;
- Setting the finished floor level to a minimum level of 189.56mAOD. This would provide a 300mm freeboard above the 1 in 1000 year in-channel flood level of the River Don as well as mitigating against all other flood sources;
- Incorporating flood resilient construction methods as part of the design, up to the finished floor level;
- Designing a surface water drainage strategy for the proposed pavilion at the detailed design stage; and,
- Appointing a designated person to receive EA Flood Alerts/Warnings and use of a Flood Management Plan prior to the facility opening.

This report therefore demonstrates that the proposed development:

- Is suitable in the location proposed and will be adequately flood resistant and resilient;
- Is unlikely to place additional persons at risk of flooding, and will offer a safe means of access and egress; and
- Is unlikely to increase flood risk elsewhere as a result of the proposed development through the loss of floodplain storage, impedance of flood flows or increase in surface water runoff.

Limitations of this report

This report has been prepared by Ashfield Flood Risk Solutions Limited (Ashfield) for the sole benefit of the client.

This report has been prepared solely for the benefit of Penistone Cricket Club (the “Client”) and has not been assigned to any other third parties. If reliance on this report was required by a third party, this could be arranged for an agreed fee. This report should not be used by the client in relation to any other matters not covered specifically by the scope of the report. If this report does not contain a signature in the Document Control window, then this is an uncontrolled electronic copy and should not be relied upon by the client or any other recipient, as Ashfield cannot give assurances on the source or content of the document. Ashfield has used all reasonable skill, care and diligence in the preparation of this report.

The Flood Risk Assessment report has been designed to satisfy planning requirements, as outlined in Section 1. It is a desktop review of information provided by the client and from selected private and public databases. It only includes a site investigation where specifically referenced. This report does not make a detailed site-specific assessment of the suitability of the existing drainage on the Site. Ashfield accepts no responsibility for the accuracy or completeness of third party data reviewed within this assessment.

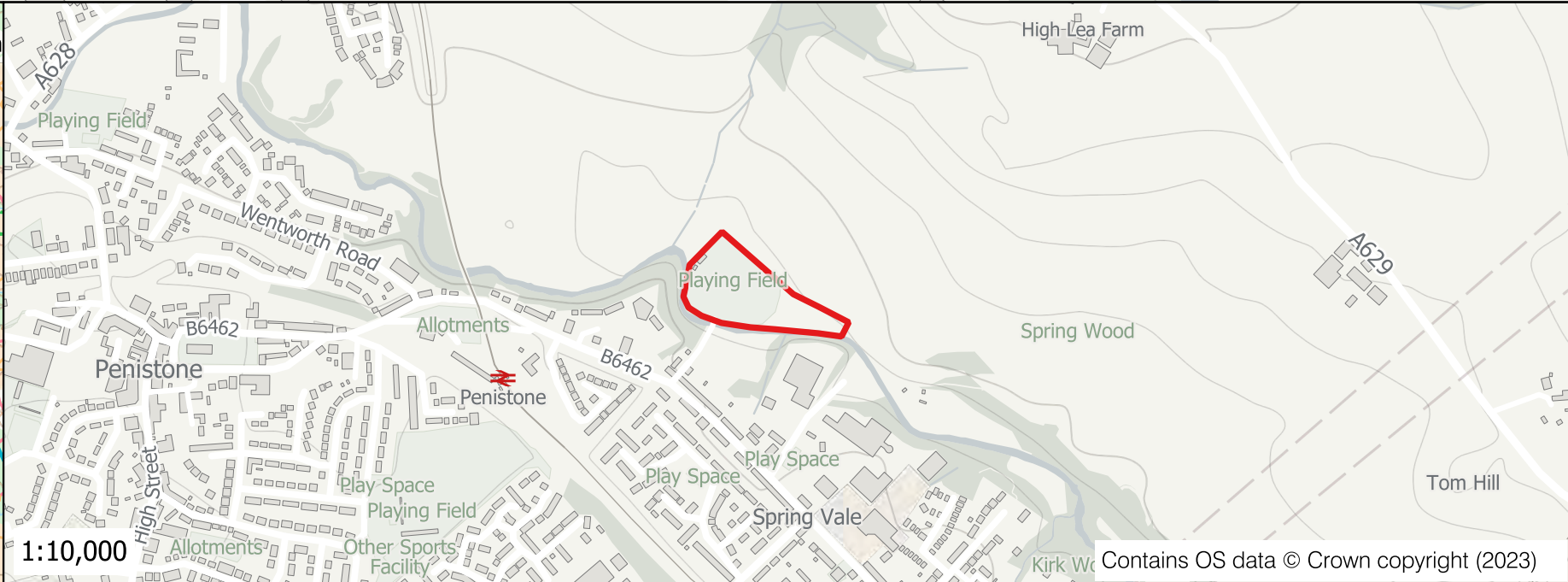
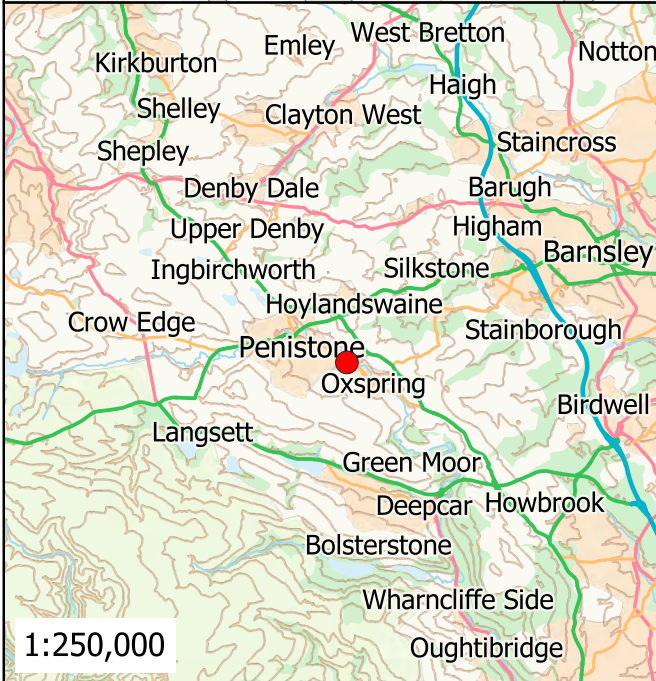
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Drawings



- Legend
- Site Boundary
 - Site Location

Client
Penistone Cricket Club

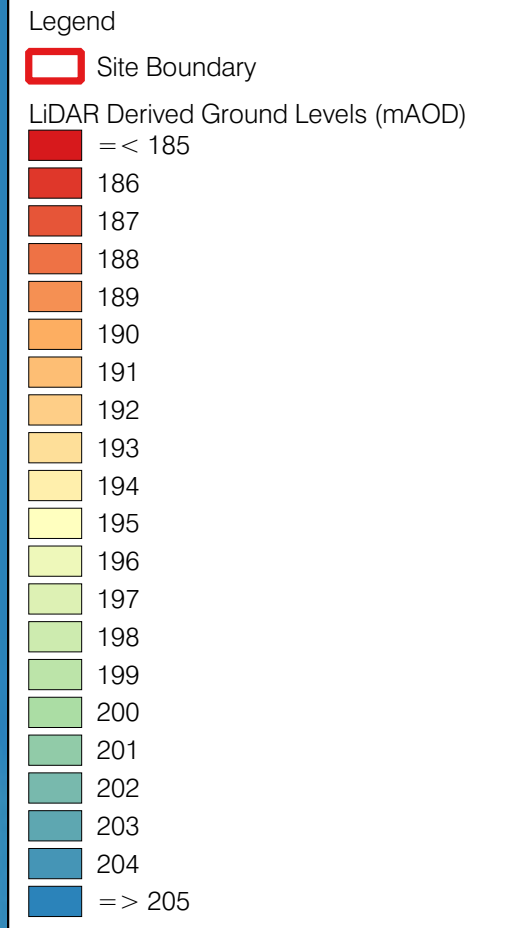
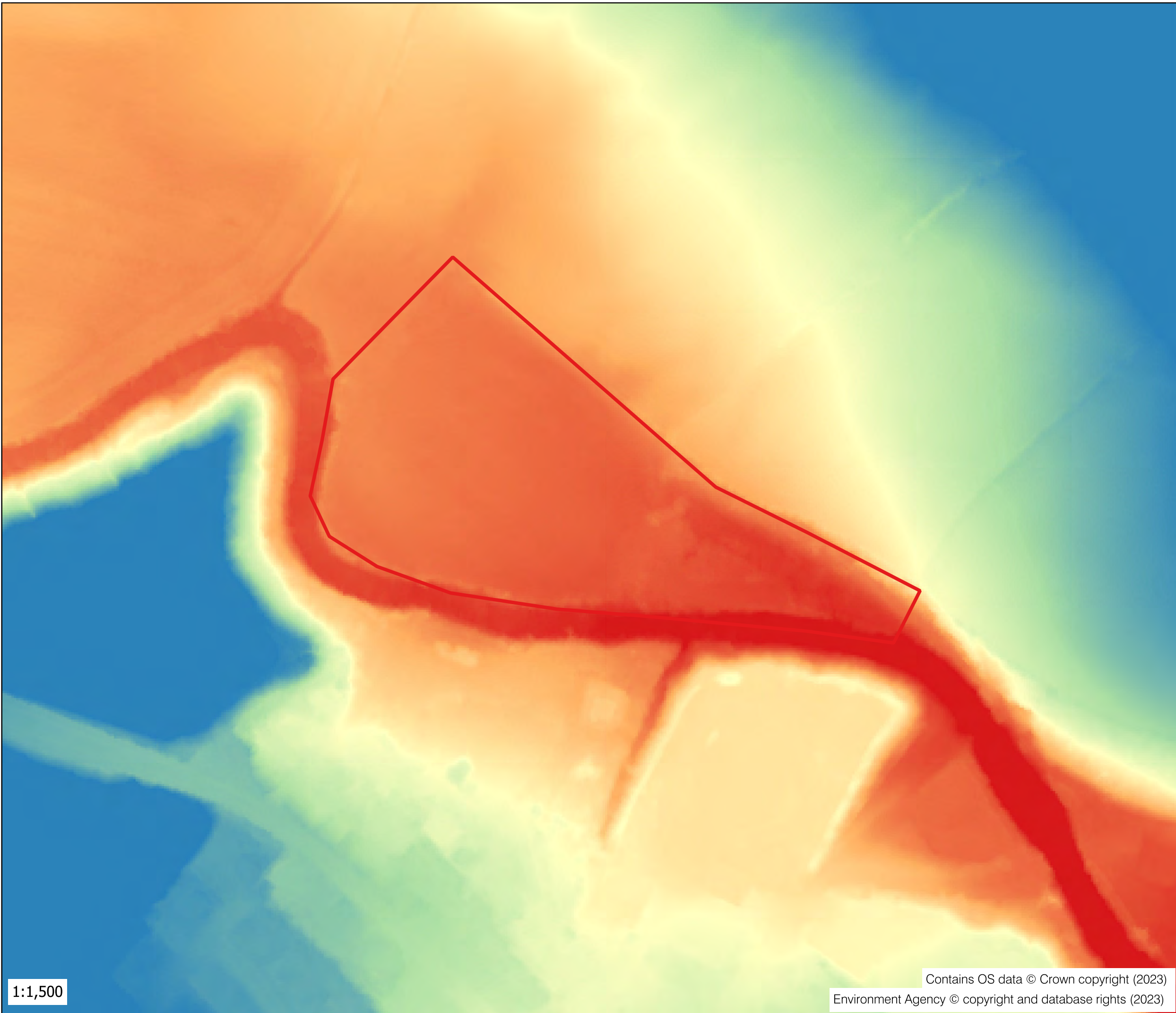


Project
Penistone Cricket Club, Queen Street,
Penistone, Sheffield, S36 8JQ

Title
Site Location Plan

Report No. 181023-F01	Drawing No. 01	Revision -
Scale As Shown	Date 19/10/2023	Frame Size A3
Produced By LC	Drawn By LC	Approved By JM

ASHFIELD
— SOLUTIONS GROUP —



Client
Penistone Cricket Club

Project
Penistone Cricket Club, Queen Street,
Penistone, Sheffield, S36 8JQ

Title
LiDAR Derived Ground Levels Plan

Report No. 181023-F01	Drawing No. 02	Revision -
Scale As Shown	Date 19/10/2023	Frame Size A3
Produced By LC	Drawn By LC	Approved By JM

1:1,500

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- Legend
- Site Boundary
 - Main Rivers
 - OS Ordinary Watercourse
 - Flood Defences
 - Areas Benefiting from Flood Defences
 - Flood Zone 3
 - Flood Zone 2

Client
Penistone Cricket Club

Project
Penistone Cricket Club, Queen Street,
Penistone, Sheffield, S36 8JQ

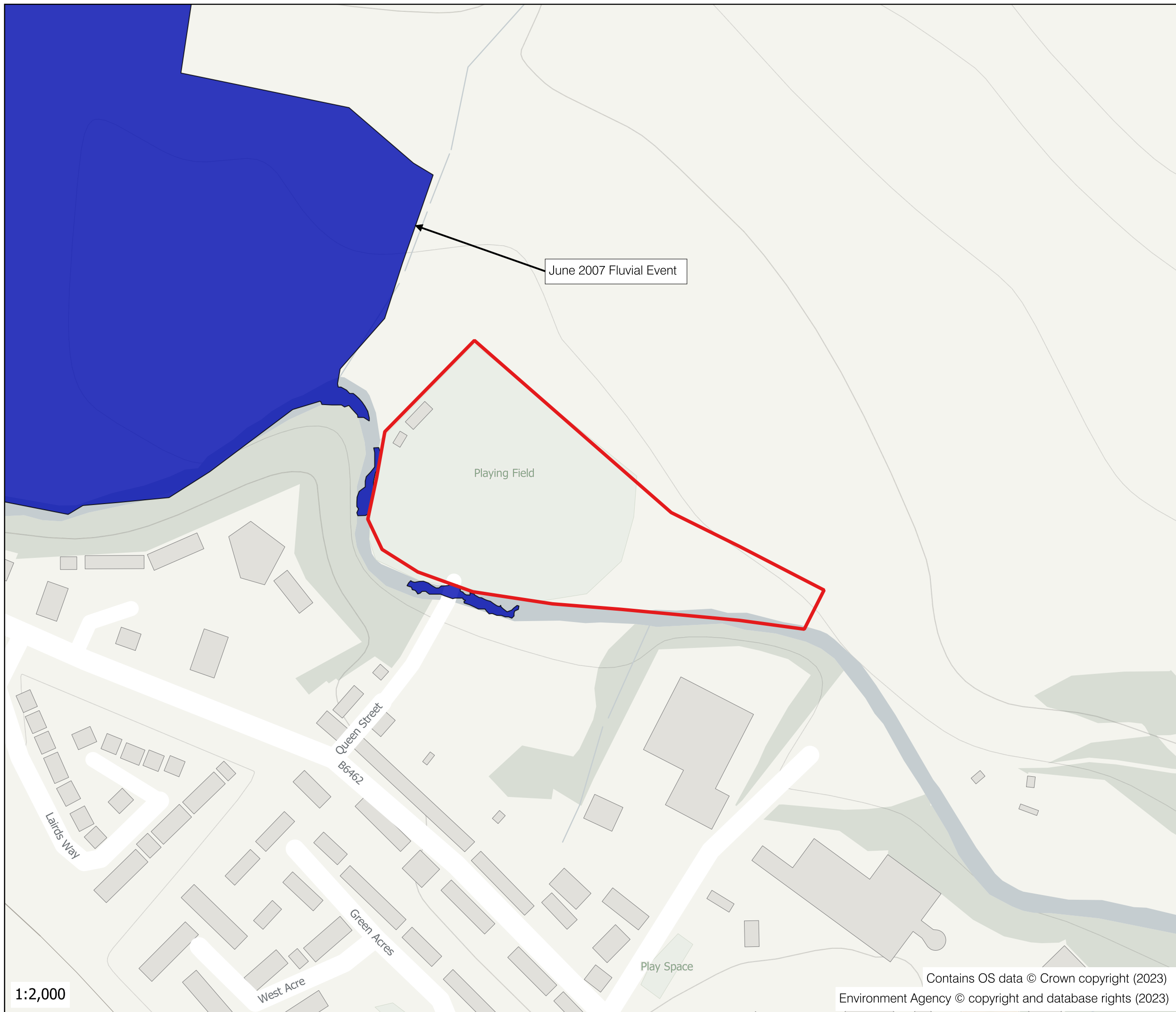
Title
EA Flood Map for Planning

Report No. 181023-F01	Drawing No. 03	Revision -
Scale As Shown	Date 19/10/2023	Frame Size A3
Produced By LC	Drawn By LC	Approved By JM

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- Legend
- Site Boundary
 - Recorded Flood Outlines

June 2007 Fluvial Event

Playing Field

Play Space

Queen Street
B6462

Green Acres
West Acre

Lairds Way

1:2,000

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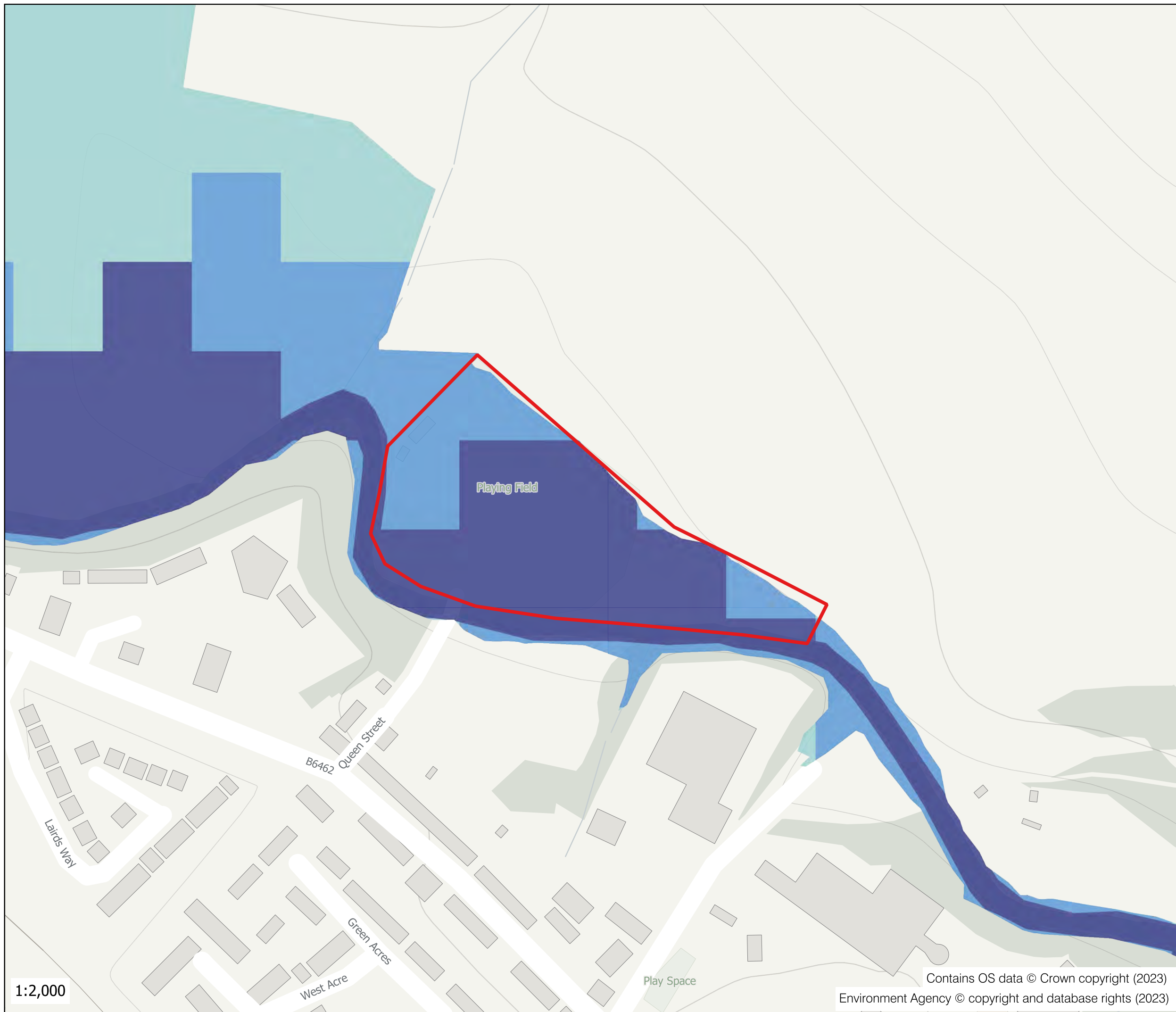
Client
Penistone Cricket Club

Project
Penistone Cricket Club, Queen Street,
Penistone, Sheffield, S36 8JQ

Title
EA Recorded Flood Outlines

Report No. 181023-F01	Drawing No. 04	Revision -
Scale As Shown	Date 19/10/2023	Frame Size A3
Produced By LC	Drawn By LC	Approved By JM





Legend

- Site Boundary
- EA Risk of Flooding from Rivers and Sea (ROFRAS)
 - High Risk
 - Medium Risk
 - Low Risk
 - Very Low Risk

Client
Penistone Cricket Club

Project
Penistone Cricket Club, Queen Street,
Penistone, Sheffield, S36 8JQ

Title
EA Risk of Flooding from Rivers and Sea
Mapping (ROFRAS)

Report No. 181023-F01	Drawing No. 05	Revision -
Scale As Shown	Date 19/10/2023	Frame Size A3
Produced By LC	Drawn By LC	Approved By JM

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- Legend
- Site Boundary
 - High Risk - 1 in 30 Year Extent
 - Medium Risk - 1 in 100 Year Extent
 - High Risk - 1 in 1000 Year Extent

Client
Penistone Cricket Club

Project
Penistone Cricket Club, Queen Street,
Penistone, Sheffield, S36 8JQ

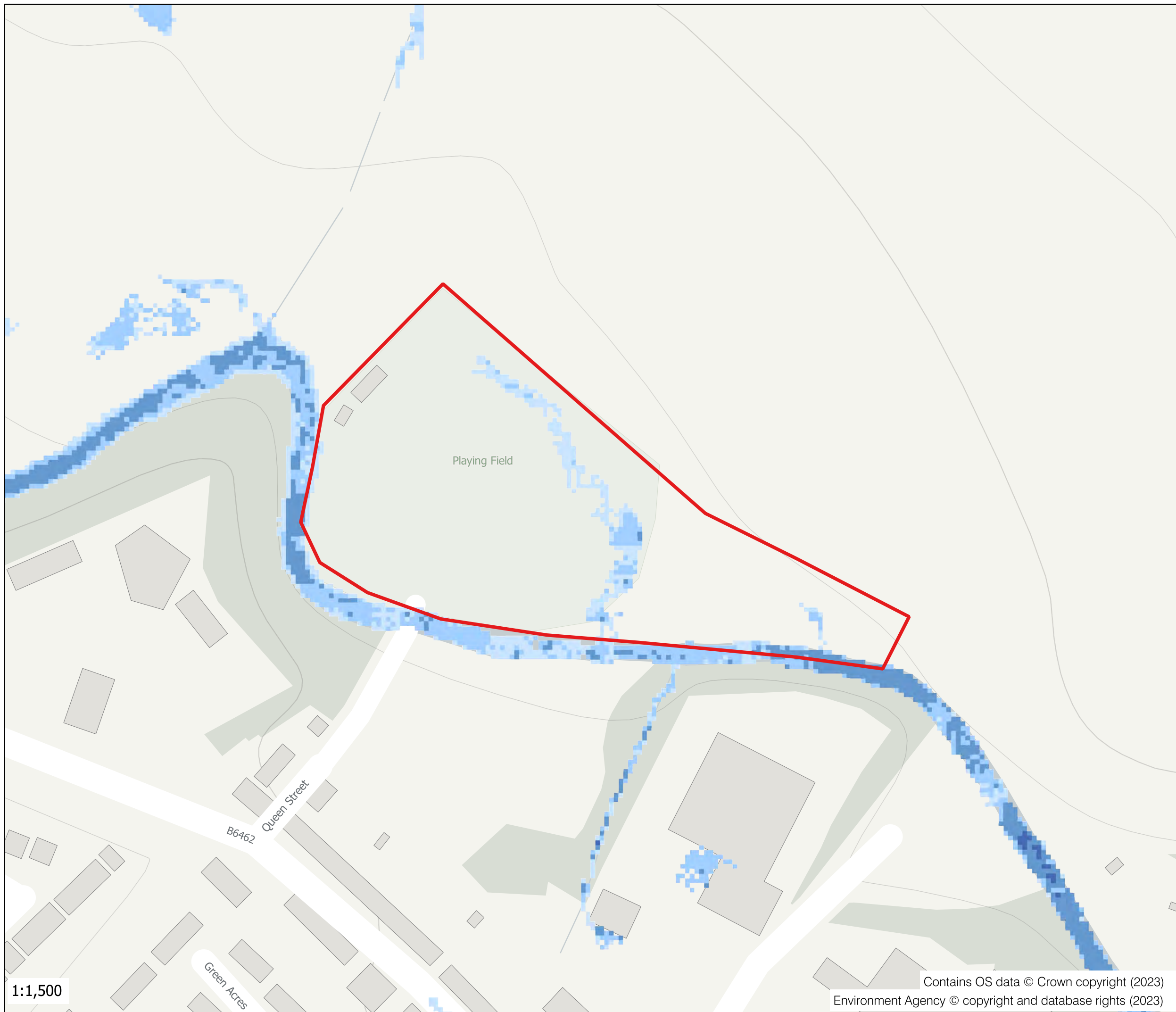
Title
EA Risk of Flooding from Surface Water

Report No. 181023-F01	Drawing No. 06	Revision -
Scale As Shown	Date 19/10/2023	Frame Size A3
Produced By LC	Drawn By LC	Approved By JM

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- Legend
- Site Boundary
 - High Risk Depths (m)
 - Below 150mm
 - 150 - 300mm
 - 300 - 600mm
 - 600 - 900mm
 - 900 - 1200mm
 - Over 1200mm

Client
Penistone Cricket Club

Project
Penistone Cricket Club, Queen Street,
Penistone, Sheffield, S36 8JQ

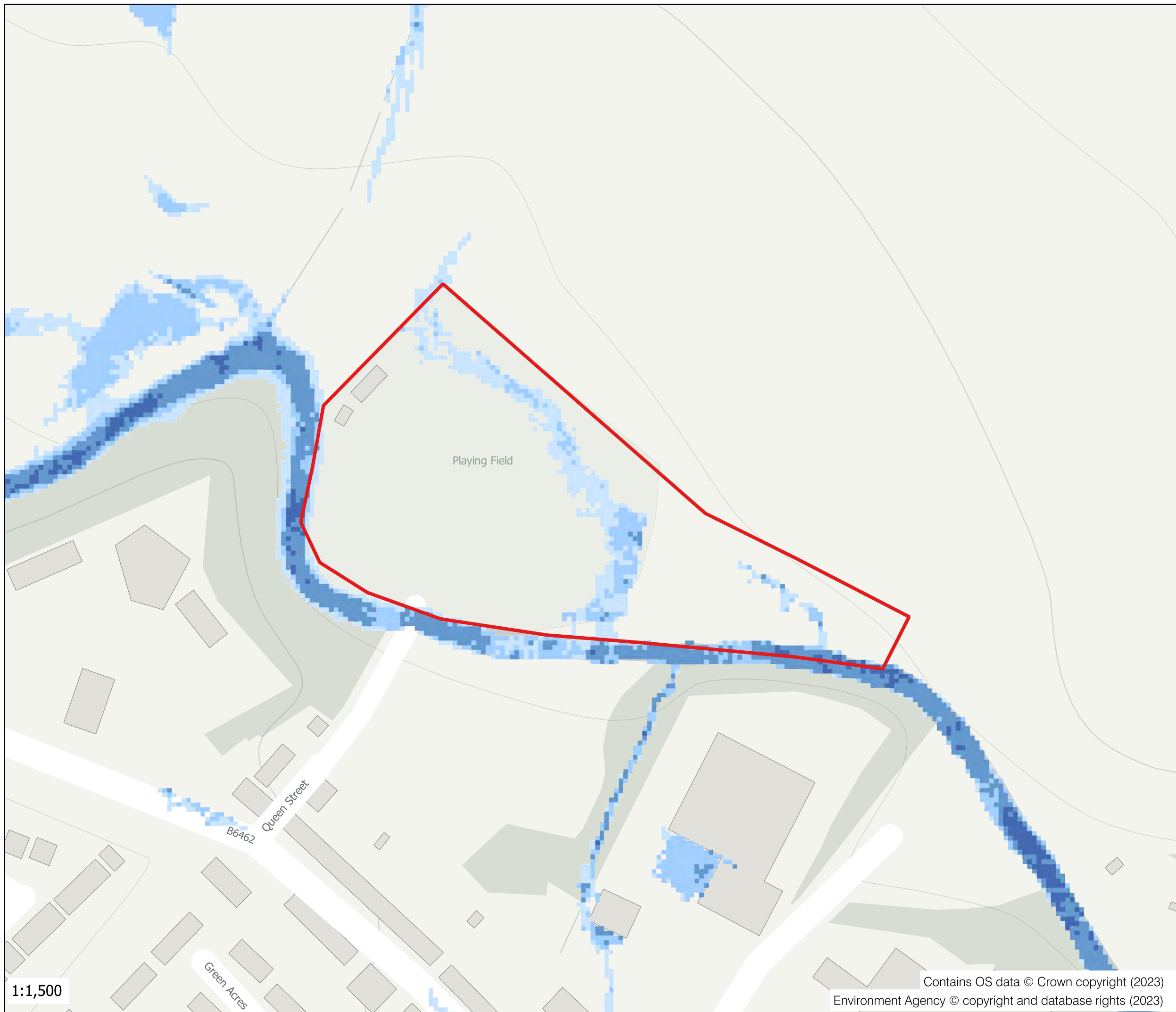
Title
High Risk of Flooding from Surface Water

Report No. 181023-F01	Drawing No. 07	Revision -
Scale As Shown	Date 19/10/2023	Frame Size A3
Produced By LC	Drawn By LC	Approved By JM

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Legend

- Site Boundary

Medium Risk Depths (m)

- Below 150mm
- 150 - 300mm
- 300 - 600mm
- 600 - 900mm
- 900 - 1200mm
- Over 1200mm

Client
Penistone Cricket Club

Project
Penistone Cricket Club, Queen Street,
Penistone, Sheffield, S36 8JQ

Title
Medium Risk of Flooding from Surface
Water

Report No. 181023-F01	Drawing No. 08	Revision -
Scale As Shown	Date 19/10/2023	Frame Size A3
Produced By LC	Drawn By LC	Approved By JM

1:1,500

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- Legend
- Site Boundary
 - Low Risk Depths (m)
 - Below 150mm
 - 150 - 300mm
 - 300 - 600mm
 - 600 - 900mm
 - 900 - 1200mm
 - Over 1200mm

Client
Penistone Cricket Club

Project
Penistone Cricket Club, Queen Street,
Penistone, Sheffield, S36 8JQ

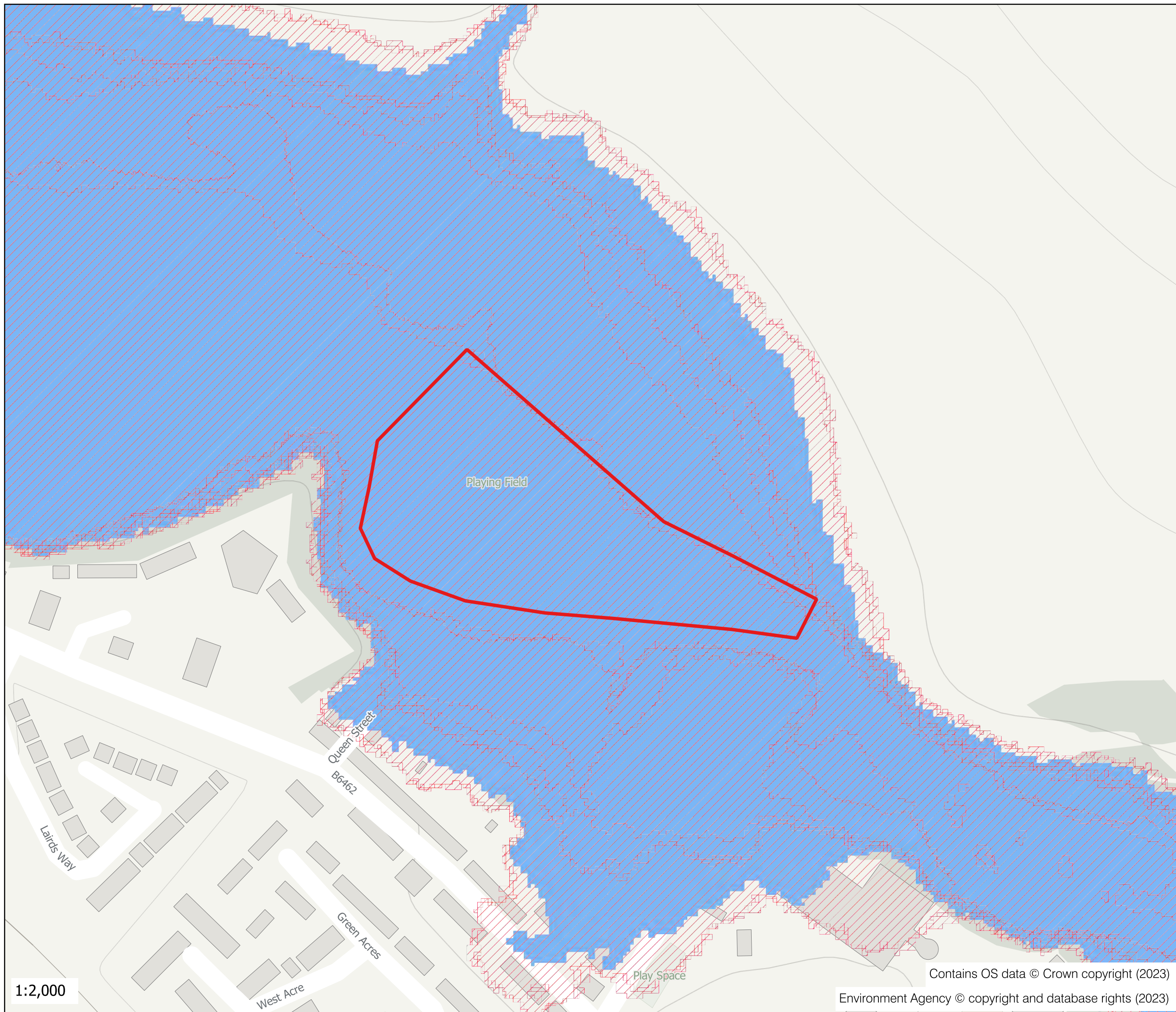
Title
Low Risk of Flooding from Surface Water

Report No. 181023-F01	Drawing No. 09	Revision -
Scale As Shown	Date 19/10/2023	Frame Size A3
Produced By LC	Drawn By LC	Approved By JM

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- Legend
- Site Boundary
 - Dry Day Reservoir Extent
 - Wet Day Reservoir Extent

Client
Penistone Cricket Club

Project
Penistone Cricket Club, Queen Street,
Penistone, Sheffield, S36 8JQ

Title
EA Risk of Flooding from Reservoir Failure

Report No. 181023-F01	Drawing No. 10	Revision -
Scale As Shown	Date 19/10/2023	Frame Size A3
Produced By LC	Drawn By LC	Approved By LC

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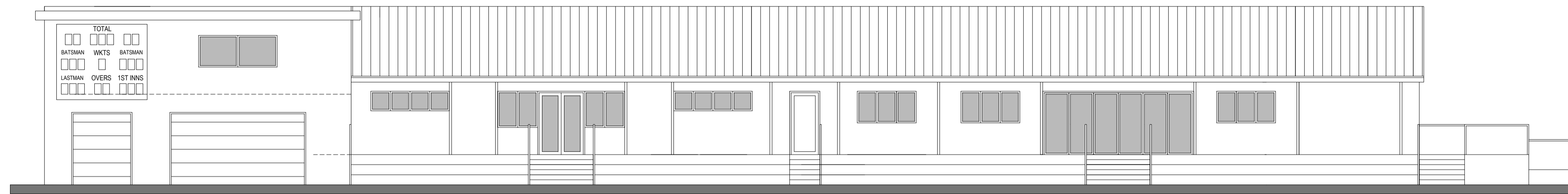


Appendices

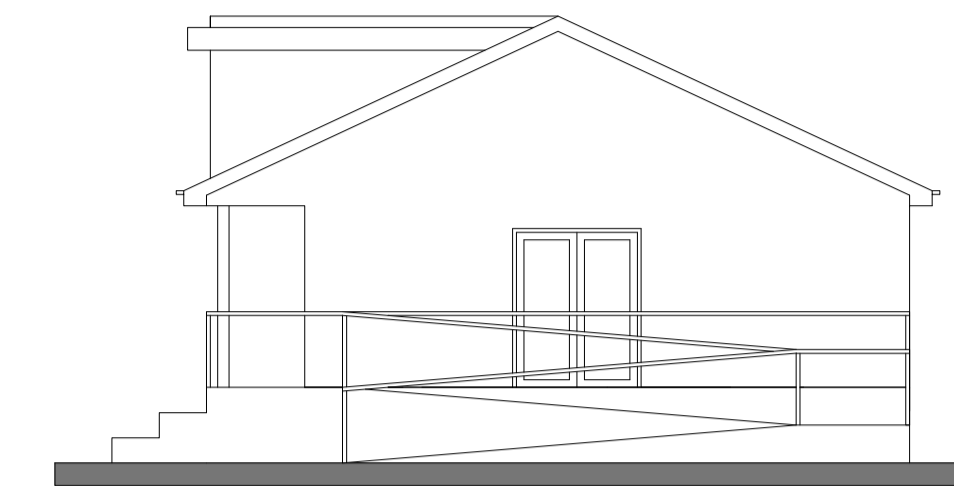
Appendix A

Proposed Site Plans

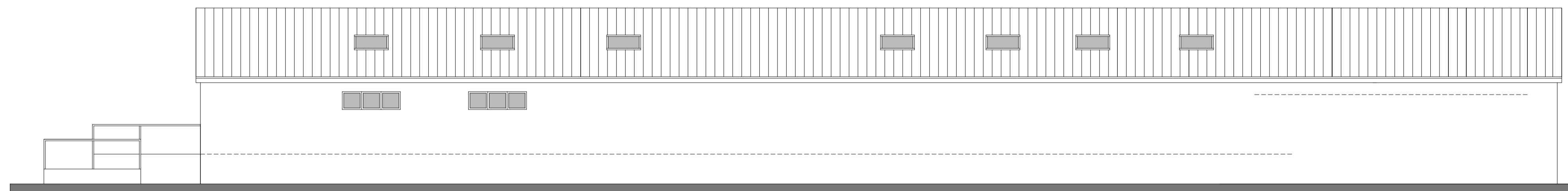
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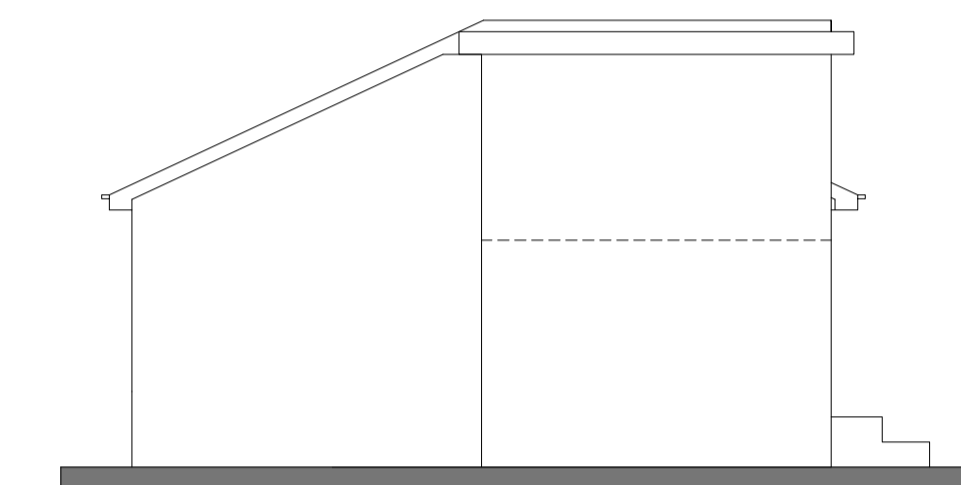
FRONT ELEVATION



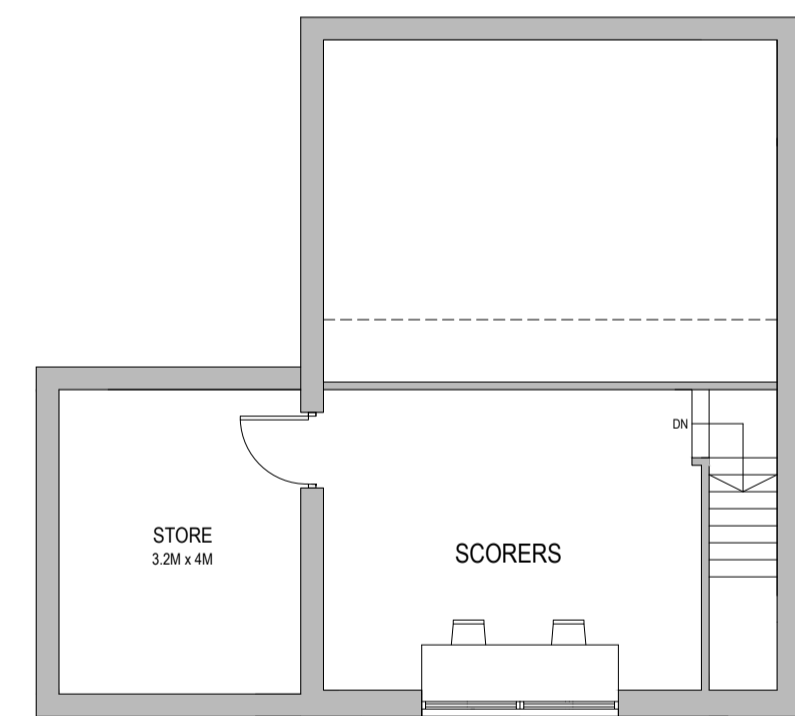
SIDE ELEVATION



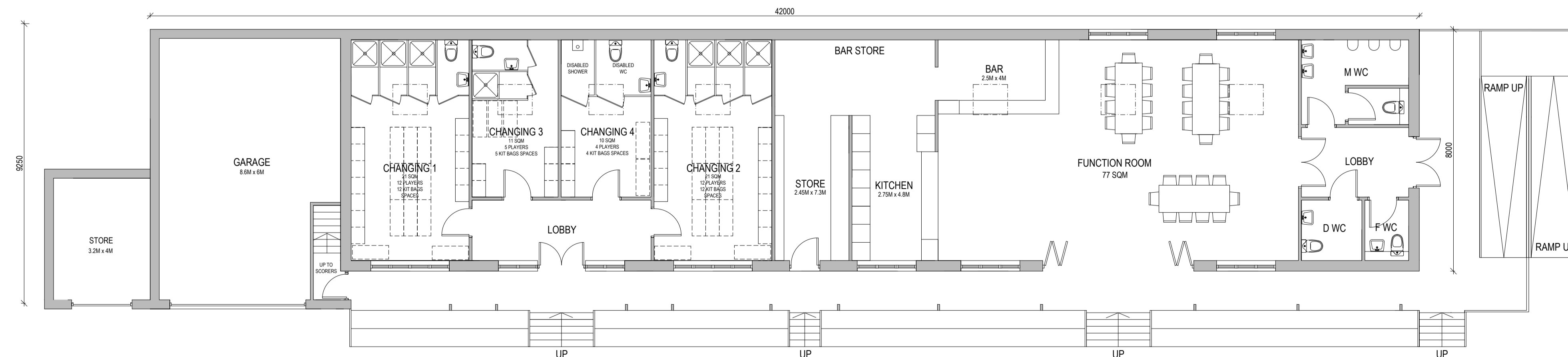
REAR ELEVATION



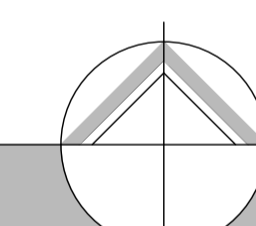
SIDE ELEVATION



ATTIC PLAN



GROUND FLOOR PLAN



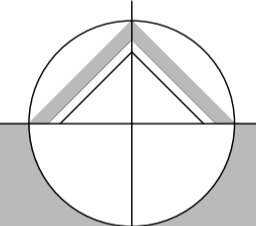
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Instagram: @northerndesignp
Telephone: (01484) 854848

client	PENISTONE CRICKET CLUB		
project	PROPOSED PAVILION PENISTONE CRICKET CLUB QUEEN STREET PENISTONE S36 6HD		
drawing	PROPOSED PLANS AND ELEVATIONS OPTION 2		
revision	notes	date	drawn
scale :	1:100 AT A1	07.23	MG
project no.	2280	drawing no.	02
		revision	

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Instagram: @northerndesignp
Telephone: (01484) 854848

client	PENISTONE CRICKET CLUB		
project	PROPOSED PAVILION PENISTONE CRICKET CLUB QUEEN STREET PENISTONE S36 6HD		
drawing	PROPOSED SITE PLAN		
revision	notes	date	drawn
scale :	1:100 AT A1	06.23	MG
project no.	2280	drawing no.	01

Appendix B

Topographic Survey

Appendix C

EA Product 4 Data

Joel Read

From: Harris, Amanda <Amanda.Harris@environment-agency.gov.uk>
Sent: 20 January 2020 14:55
To: Joel Read
Subject: Your Enquiry: RFI/2019/146339

Our Ref: RFI/2019/146339

Your Ref:

Dear Joel

**RE: Product 6 depth/level grids available for Penistone
Request for information under the Freedom of Information Act 2000 (FOIA) / Environmental Information
Regulations 2004 (EIR)**

Thank you for your 2nd follow on enquiry which was received on 23 December 2019. Our technical team has now had chance to consider it and provide their comments below. For ease of reference your questions are in black and the answers are in purple:

- If there is no Product 6 depth/level grids available for Penistone, can you confirm that the Product 4 depth/level PDF outputs are also therefore not available, and that there is no flood level/depth information at all for our site? For reference, part of the Product 6 data we have received includes the modelled flood outlines in a GIS format. The screenshot below shows these loaded into QGIS, so I would assume that Product 6 depth/level grids should be available for this location? **The site is covered by the modelled flood outlines from the 2012 Sheffield CFR model, however, we do not have defended or undefended depth grids that cover this particular site, as seen in your email to us on 17/12/2019.**
- In the supporting information attachment, I note that the Lower Don Valley FAS Post Scheme Modelling is expected to be available in December 2019. Please could you indicate when the results of this modelling will be available? **The Lower Don Valley FAS Post Scheme Modelling is now expected to be completed in February 2020. Please note that this is an estimated timescale and is therefore subject to change.**

I hope that we have correctly interpreted your request. Please see the Open Government Licence ([here](#)) for details of permitted use.

We respond to requests for recorded information that we hold under the Freedom of Information Act 2000 (FOIA) and the associated Environmental Information Regulations 2004 (EIR).

If you are not satisfied with our response to your request for information you can contact us within 2 calendar months to ask for our decision to be reviewed.

If you require any further help, please do not hesitate to contact me.

Yours sincerely

Amanda Harris
Customers and Engagement Team
Environment Agency | Lateral, 8 City Walk, Leeds, LS11 9AT

Amanda.Harris@environment-agency.gov.uk
External: 0208 4747926 | Internal :47926

Enquiries Team Tel: 020 847 48174 | **Email:** neyorkshire@environment-agency.gov.uk

Working days: Monday to Friday



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The Flood Map for Planning

The Flood Map for Planning (Rivers and Sea) can be viewed and downloaded as a PDF file on GOV.UK by following this link: <https://flood-map-for-planning.service.gov.uk> or downloaded in GIS format under an open data licence from the following address: <https://data.gov.uk/publisher/environment-agency>

Please type Flood Map for Planning in the search box.

What is the Flood Map for Planning?

The Flood Map for Planning provides information on flooding from rivers and the sea for England and Wales. The Flood Map also has information on flood defences and the areas benefiting from those flood defences.

The Flood Map for Planning shows the following:

1. Flood Zone 3 (dark blue area on the enclosed map): natural flood plain area that could be affected by flooding from rivers and/or the sea – not taking into account the presence of any flood defences
 - For flooding from rivers the map indicates the extent of a flood with a 1% (1 in 100) chance of happening each year;
 - For flooding from the sea the map shows the extent of a flood with a 0.5% (1 in 200) chance of happening each year.
2. Flood Zone 2 (light blue area): natural flood plain area that could be affected by flooding from rivers and/or the sea – not taking into account the presence of any flood defences. Flood Zone 2:
 - indicates the extent of a flood with a 0.1% (1 in 1000) chance of happening each year.
 - and/or indicates the greatest recorded historic flood, whichever is greater.
3. Flood defences built in the last five years to protect against river floods with a 1% (1 in 100) chance of happening each year, together with some natural or constructed entities which retain, store or channel water and which may protect against smaller floods.
4. Areas benefiting from flood defences - areas that benefit from the flood defences shown, in the event of a river flood with a 1% (1 in 100) chance of happening each year, or a flood from the sea with a 0.5% (1 in 200) chance of happening each year. If the defences were not there, these areas would flood.

Flood History

To the best of our knowledge there is no known flood history for this site. However, in close proximity to this location we do have some flood history available (see enclosed map). The extent of flooding, and/or flood level information is only shown for those watercourses surveyed after the flood. Other flooding may have occurred which is not shown. This is the best information currently available.

Name	Start Date	End Date	Flood Source	Flood Cause	Source of data
2007 River Don Penistone	15/06/2007	30/06/2007	Main River	Channel Capacity	Local Authority
123 Autumn 2000	07/11/2000	04/12/2000	Main River	Unknown	Aerial Photograph
2007 River Don - Oxspring	15/06/2007	30/06/2007	Main River	Channel Capacity	Local Authority
2007 Thurlstone - Scout Dike	15/06/2007	30/06/2007	Main River	Unknown	Local Authority
2007 River Don Thurlstone	15/06/2007	30/06/2007	Main River	Channel Capacity	Local Authority

Water causing flooding can come from different places, for example from rivers or the sea; surface water (i.e. rainwater flowing over or accumulating on the ground before it is able to enter rivers or the drainage system); overflowing or backing up of sewers or drainage systems which have been overwhelmed or from groundwater rising up from underground aquifers.

Assets

Asset Location Map

Please find attached asset map(s) showing location of all (Agency and non Agency maintained) flood defences and channels.

Description of Works

See attached table with description of the defences and structures shown on the above drawing, including condition ratings, upstream and downstream crest levels, where available.

Risk of Flooding – Environment Agency Defences

The risk of flooding in this area is now reduced by the presence of flood defences that we maintain, but there still is a residual risk of flooding if these were to breach or be overtopped by a flood greater than that for which they were designed.

Risk of Flooding – Privately Maintained Defences

You will see that the Environment Agency does not maintain any of those defences. However we undertake regular risk based visual inspections. We do not hold design levels and have no height information on these defences or structures.

Asset Condition Ratings

The performance of a flood defence asset is recorded as the condition of the asset. Our asset inspectors subjectively assess the conditions of assets (during visual inspection site visits) with reference to a national standard template. Each asset is given a rating between one and five with one being very good condition and five being very poor. A condition rating of 3, or 'fair' is the minimal acceptable standard for a critical asset, such as a defence wall that protects properties. We are striving to improve all assets below 'fair' to an acceptable standard.

Asset inspections are done on average every six months, although some critical assets are assessed on a more regular basis. It is possible that adjacent assets are inspected on different dates, which may result in two assets of a similar state of repair having different condition ratings.

Condition ratings of assets may also be affected by the time of year the surveys are conducted, as vegetation may obscure the asset in the summer months, or accessibility may be an issue during winter months. These factors would not usually affect the recorded condition rating of an asset unless the asset is on a borderline between two ratings.

Asset Standard of Protection

Please note that the provided Design Standard of Protection is an estimate and should not be relied on. Please note that where available the defended flood extents provide more reliable information relating to the protection offered by the defence (i.e. at which return period the water levels are likely to overtop the defence). If available and required the defended flood extents can be provided on request.

Modelling

2012 Sheffield Comprehensive Flood Review Model

We have provided you with a copy of the Model Data Files for the **2012 Sheffield Comprehensive Flood Review Model**. Also provided is a copy of the Modelling Reports (Product 5). They can be downloaded from the ShareFile link below:

<https://ea.sharefile.com/d-s4835817591d4466a>

There is a Conditional Data Licence associated with the provision of the Model. This sets out the Terms and Conditions for the uses of the Data.

Please note that as you requested both Product 4 and 6, in order to avoid duplication of information, data provided in digital form such as in-channel water levels, flows and location of the cross sections are not provided as maps and tables in pdf format.

Please note that the climate change scenario for this model is not available. *If this information will be used to produce a flood risk assessment you will be expected to generate climate change levels for setting finished floor levels etc.*

Lower Don Valley FAS Post Scheme Modelling is expected to be available in December 2019. However please note that this is an estimate timescale and therefore subject to change.

Climate Change

Updated guidance on how climate change could affect flood risk to new development - '[Flood risk assessments: climate change allowances](#)' was published on gov.uk on 19 February 2016. You should confirm the flood risk vulnerability classification and lifetime of your proposed development in line with NPPF and apply the appropriate climate change allowances.

Bespoke Flood Risk Assessment (FRA) advice:

If the pre-application advice is required with regards the preparation of a site-specific Flood Risk Assessment, this can be requested via the Yorkshire Sustainable Places team (email: sp-yorkshire@environment-agency.gov.uk). Charges may apply for any advice that is provided, this currently stands at £100 per hour per person. The [.gov.uk](https://www.gov.uk) pages provide a good starting point on what to include within a site-specific Flood Risk Assessment and can be accessed via <https://www.gov.uk/guidance/flood-risk-assessment-for-planning-applications>. A site-specific Flood Risk Assessment will need to consider flood risks from all sources, including those associated with defence failure (e.g. breach) and accounting for the predicted impacts as a result of climate change. Please contact the Sustainable Places team if you require advice on how to include these within a Flood Risk Assessment.

Other

Surface Water Map

Lead Local Flood Authorities (LLFA) are responsible for managing local flood risk from surface water flooding and groundwater flooding. You should check with the LLFA as they may have more up to date information regarding this type of flooding.

The Risk of Flooding from Surface Water Flood Map can be viewed and downloaded as a PDF file on GOV.UK by following this link: <https://flood-warning-information.service.gov.uk/long-term-flood-risk>

Surface Water Drainage

The Lead Local Flood Authority is the statutory consultee for planning matters relating to surface water drainage, therefore it is recommended they should be consulted separately regarding this.

Surface water discharge from new development should ideally 'mimic' the pre-development situation using a sustainable drainage system so that the flow and volume of water in watercourses is not increased.

A permit may be required, under the Environmental Permitting Regulations 2010 from the Environment Agency for any proposed works or structures in, under, over or within eight metres of a 'main river' (e.g. a new outfall). A permit is separate to and in addition to any planning permission granted. Further details and guidance are available on the GOV.UK website: <https://www.gov.uk/guidance/flood-risk-activities-environmental-permits>

Risk of Flooding from Reservoirs Map

Outlines and simplified depth and velocity maps can be viewed on our website:

<https://flood-warning-information.service.gov.uk/long-term-flood-risk/#x=438988&y=406600&scale=2>

Please, zoom into the location of interest, and then click on the inundated location for details. As a result a list of reservoirs will be provided with supporting information and a links to other data, such as estimated depths and speed of flooding, at the bottom of the result page.

A map of showing the outlines can also be provided on request.

Flood Warning

The site is not covered by a Flood Warning.

LIDAR Data

Please note that our LiDAR data is now available free of charge (Open Data) from

<http://environment.data.gov.uk/ds/survey/index.jsp#/survey> (once zoomed to the relevant location the available LiDAR products will be listed below the map).

Two LIDAR products are available:

1. Tiled LIDAR data - The full tiled dataset consists of historic LIDAR data which has been gathered since 1998. For some areas we have carried out repeat surveys and data is available in a range of resolutions.
2. Composite LIDAR data - The composite dataset is derived from a combination of our full tiled dataset which has been merged and re-sampled to give the best possible spatial coverage.

Light Detection and Ranging (LIDAR) is an airborne mapping technique, which uses a laser to measure the distance between the aircraft and the ground. This technique results in the production of an accurate, cost-effective terrain model suitable for assessing flood risk and other environmental applications.

The Environment Agency owns two LIDAR systems, which are installed in a survey aircraft along with its other operational remote sensing instruments.

The aircraft is positioned and navigated using Global Positioning System (GPS) corrected to known ground reference points. The aircraft typically flies at a height of about 800 metres above ground level and a scanning mirror allows a swath width of about 600 metres to be surveyed during a flight.

The Rights & Responsibilities of a Riverside Owner

The owner of property adjacent to a watercourse is usually deemed to be the riparian owner and, as such, has both riparian rights and responsibilities with regard to the watercourse within their ownership.

For more information on Rights and Responsibilities of a riverside owner, you can visit our website at:

<https://www.gov.uk/guidance/owning-a-watercourse>

Ordnance Survey Data

Under the terms of our licence agreement with the Ordnance Survey, we are unable to supply the OS data. Under this agreement we can only supply OS data to consultants/contractors carrying out work on our behalf.

Flood Portal

It's a new 'one-stop shop' web portal providing guidance and information on flood risk management in the UK. Arup have written and designed the site, in conjunction with CIRIA, the Local Government Association, the EA and Defra, primarily as a resource for local authority officers, flood risk management professionals, and others with an interest in flood risk. It's a part of the Capacity Building Strategy. <http://www.local.gov.uk/floodportal>

RFI/2019/146339 Flood History Map, centred on S36 6HD

Date created: 19/11/2019



www.environment-agency.gov.uk

Scale: 1:8,000



when reproduced @ A3

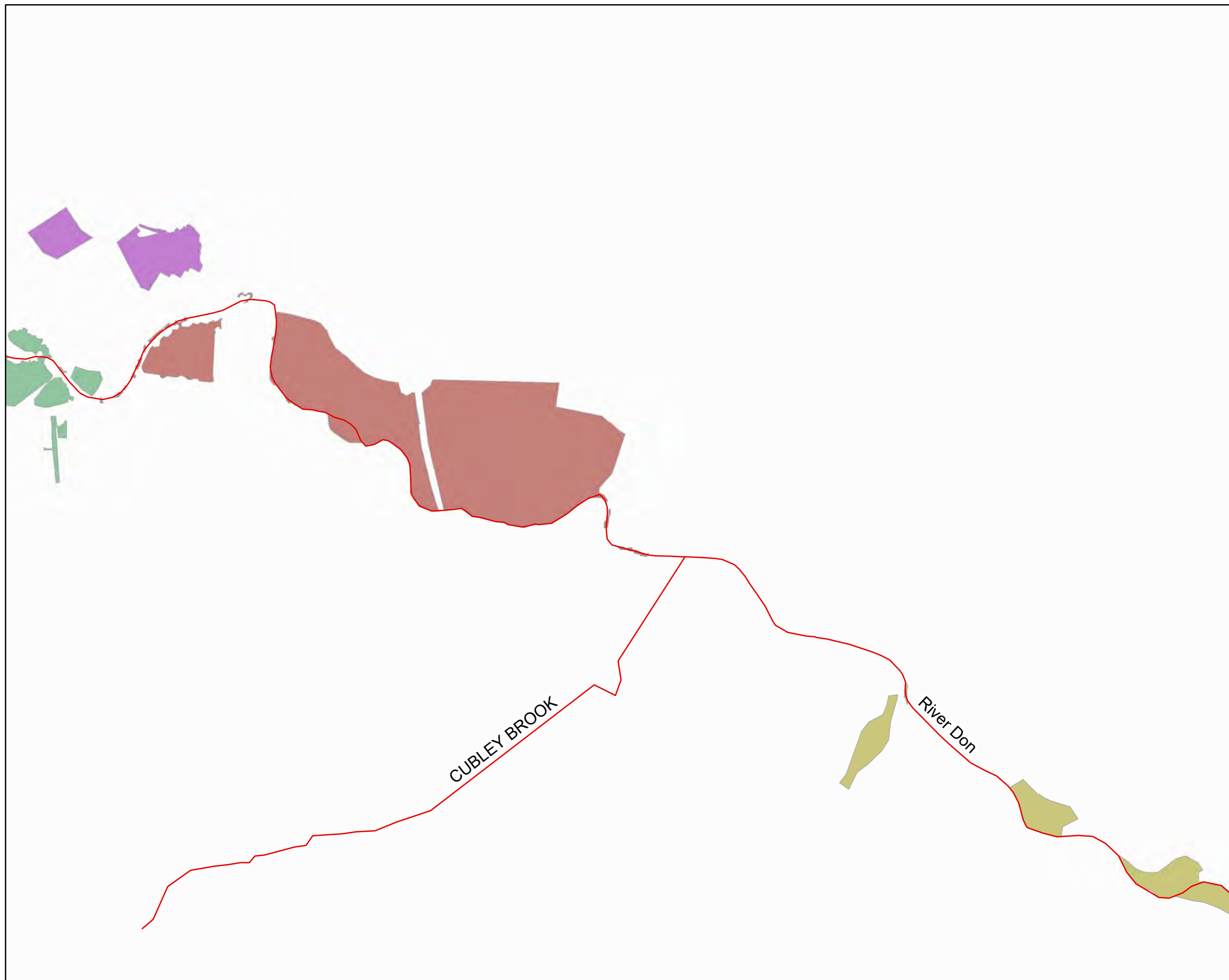


LEGEND

— Main River

Recorded Flood Outlines

-  2007 River Don - Oxspring
-  2007 River Don Penistone
-  2007 River Don Thurlstone
-  2007 Thurlstone - Scout Dike
-  123 Autumn 2000



RFI/2019/146339 Assets Map, centred on S36 6HD

Date created: 19/11/2019

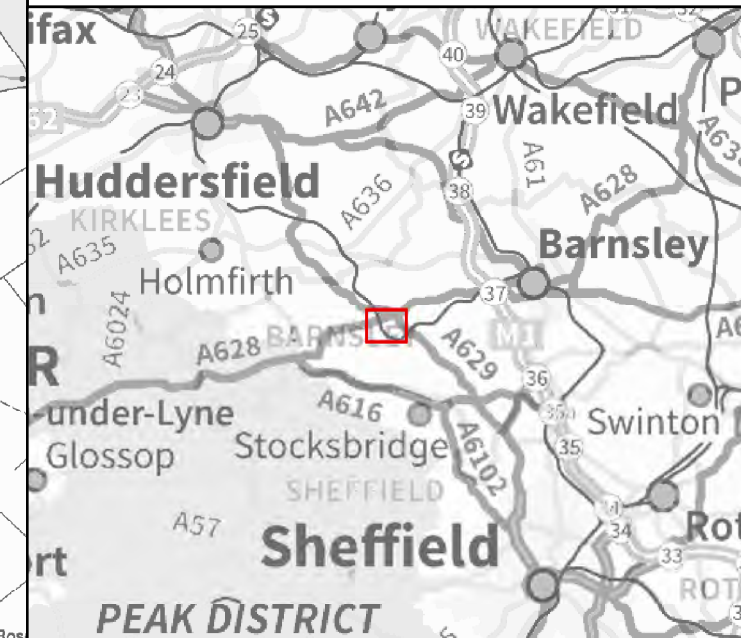


www.environment-agency.gov.uk





Scale: 1:8,000

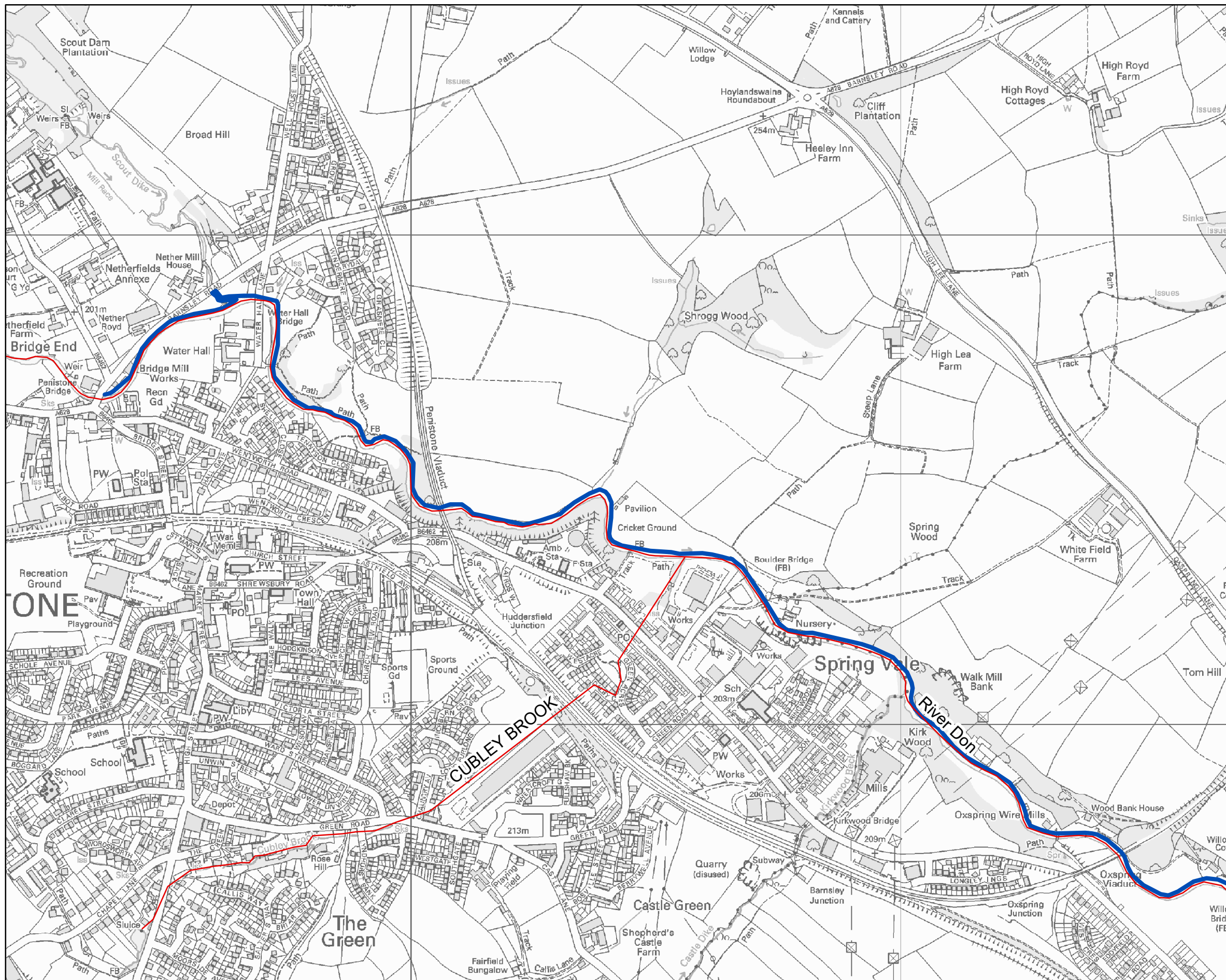


when reproduced @ A3



LEGEND

-  Main River
-  Defences (3rd party maintained)
-  ASSET_ID
-  171892



Defences (3rd Party Maintained) - RFI/2019/146339										
ASSET ID	DESCRIPTION	ASSET MAINTAINER	ASSETS TYPE	LENGTH (m)	ACTUAL Downstream Crest Level (mAOD)	ACTUAL Upstream Crest Level (mAOD)	PROTECTION	TARGET CONDITION	OVERALL CONDITION	DESIGN STANDARD OF PROTECTION (SOP)
171892	high_ground	private	flood_risk_management	4190.33			fluvial	3	2	

Please find the required modelled data for **2012 Sheffield CFR Model** available in the following link:

<https://ea.sharefile.com/d-s4835817591d4466a>

Please also find below the conditional licence relevant to the use of this model.

RE: Outputs for 2012 Sheffield CFR Model

Request for information under the Freedom of Information Act 2000 (FOIA) / Environmental Information Regulations 2004 (EIR)

This information is not available with the Open Government Licence but we may be able to license it to you under the [Environment Agency Conditional Licence](#):

Title: 2012 Sheffield CFR Model

- **Third Party Rights:** Centre for Ecology and Hydrology

The condition below applies to this model:

- 1.1 We are supplying the Information to you without charge in the public interest and request that you likewise agree to the following paragraphs in the public interest
- 1.2 You agree, in the public interest, unless you advise us otherwise in writing within fourteen days of receipt of the data, to supply to the Environment Agency, copies of any assessments/studies and related outputs, modifications or derivatives created pursuant to the supply to you of the Information, all of which are hereinafter referred to as "the Data".
- 1.3 You agree, in the public interest, unless you advise us otherwise in writing within fourteen days of receipt of the data, to the Environment Agency using the Data or any part thereof for its internal purposes or using it in any way as part of Environment Agency derivative products which it supplies free of charge to others such as incorporation into the Environment Agency's Open Data mapping products.
- 1.4 Please be aware that model data is not raw, factual or measured but comprises of estimations or modelled results based on the data available to us.
- 1.5 For technical reasons the Licensed Content you have been supplied may be greater than strictly necessary for the site or project you are working on and so contain more data than specified above. You must not use such additional Licensed Content.

However, you must first check the supporting information above to determine if the conditions on use are suitable for your purposes. If the conditions are not suitable, this information is not provided with a licence for use, and the data is provided for read right only.

I hope that we have correctly interpreted your request.

We respond to requests for recorded information that we hold under the Freedom of Information Act 2000 (FOIA) and the associated Environmental Information Regulations 2004 (EIR).

If you are not satisfied with our response to your request for information you can contact us within 2 calendar months to ask for our decision to be reviewed.

Appendix D

EA Response Email

From: [Reilly, Hilary](mailto:Reilly.Hilary)
To: enquiries@ashfieldfloodrisk.com
Subject: Your Enquiry: RFI/2023/321647
Date: 12 September 2023 14:26:13
Attachments: [image001.png](#)
[Planning advice for developers.pdf](#)
[Automated Product 4 321647.pdf](#)

Our Ref: RFI/2023/321647

Your Ref:

Dear Heidi

RE: Provision of Product 4 for Penistone Cricket Club, Queen Street, Penistone, Sheffield, S36 6HD.

Request for information under the Freedom of Information Act 2000 (FOIA) / Environmental Information Regulations 2004 (EIR)

Thank you for your enquiry which was received on 2nd August 2023.

The requested Product 4 data is attached.

This information is provided subject to the Open Government Licence ([here](#)). Please read for details of permitted use.

Products 5, 6 and 8

With regards to your request for Products 5 6 and 8 we advise there is no modelling for this site therefore we are refusing this part of your request.

Catchment Flood Management Plan (CFMP)

Unfortunately, we don't hold any water levels at this location as no detailed modelling has been undertaken for this area. The Flood Map for Planning was updated in 2012 with the results of our 2008 Catchment Flood Management Plan model, which have been produced by a re-run of NGM (National Generalized) JFLOW model with improved DTM (Digital Terrain Model) – LiDAR. This study has been undertaken on a large regional scale and no detailed results (such as water levels) have been produced.

They are not suitable for use in site specific Flood Risk Assessments or Strategic Flood Risk Assessments and must not normally be used for these studies. '

As a public body we are required under the Freedom of Information Act / Environmental Information Regulations to give reasons for this partial refusal. In this case, the information you have requested is not held by the Environment Agency, and we are therefore refusing your request on the grounds that there is no information we can provide. **You can find the details in the appendix below.**

Planning Advice

If you are using our data to inform a development proposal, we encourage you to contact our Sustainable Places team for pre-planning application advice. Their advice can help you solve key environmental issues early, reduce the chance of an objection, and help you design a more sustainable development for proposed planning applications. If you would like to take advantage of this service, our advisers will be able to provide further information and estimated costs for any detailed advice. Please contact our Sustainable Places Team by e-mail at sp-yorkshire@environment-agency.gov.uk for further information.

For general enquiries relating to your development or our role within the planning system, please refer to the attached 'Planning advice for developers' document.

I hope that we have correctly interpreted your request. We respond to requests for recorded information that we hold under the Freedom of Information Act 2000 (FOIA) and the associated Environmental Information Regulations 2004 (EIR).

If you are not satisfied with our response to your request for information you can contact us within 2 calendar months to ask for our decision to be reviewed.

If you require any further help, please do not hesitate to contact me.

Yours sincerely

Hilary Reilly

Customers and Engagement Team

Environment Agency | Lateral, 8 City Walk, Leeds, LS11 9AT.

hilary.reilly@environment-agency.gov.uk

External: 02084 747695 **Internal:** 27695

Enquiries Team Tel: 020 847 48174 | **Email:** neyorkshire@environment-agency.gov.uk

Working days: Monday to Friday

Appendix

Information not held

With regard to your request for Products 5 6 and 8, we have considered your request under the provisions of the Environmental Information Regulations 2004 (EIR). The Regulation requires that we respond to requests by advising you whether or not information is held, and if so by providing you with that information.

EIR Regulation 3(2) states that information is held if it is in our possession and has been produced or received by us, or it is held by another person on our behalf at the time the request is received.

In this case, the information you have requested is not held by the Environment Agency, and we are therefore refusing your request on the grounds that there is no information we can provide.

Where a request is for environmental information, the Regulations allow us to refuse to disclose it if the exception at EIR Regulation 12(4)(a) applies. The regulation states that a public authority may refuse to disclose environmental information to the extent that it does not hold that information when an applicant's request is received.

It is not possible for us to conduct a public interest balancing test because the reason for non-disclosure is that the information is not held.

Rights of appeal

If you are not satisfied you can contact us within 2 calendar months to ask for our decision to be reviewed. We shall review our response to your request and give you our decision in writing within 40 working days.

If you are still not satisfied following this, you can raise a concern with the Information Commissioner, who is the statutory regulator for Freedom of Information and the Environmental Information Regulations. The contact details are:

Information Commissioner's Office
Wycliffe House
Water Lane
Wilmslow
Cheshire
SK9 5AF
Tel: 0303 123 1113
Website: <http://ico.org.uk>

CORONAVIRUS PROTECT YOURSELF & OTHERS	For the latest guidance: - INTRANET.EA.GOV - NHS.UK/coronavirus - GOV.UK/coronavirus	 Environment Agency
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**Creating a better place
for people and wildlife**



Information in this message may be confidential and may be legally privileged. If you have received this message by mistake, please notify the sender immediately, delete it and do not copy it to anyone else. We have checked this email and its attachments for viruses. But you should still check any attachment before opening it. We may have to make this message and any reply to it public if asked to under the Freedom of Information Act, Data Protection Act or for litigation. Email messages and attachments sent to or from any Environment Agency address may also be accessed by someone other than the sender or recipient, for business purposes.