

Tylorstown Landslip Phase 4




Environmental Statement Volume 4: Non-Technical Summary

December 2021

Produced for Rhondda Cynon Taf County Borough Council 2021



Quality Management

Job No	CS100303		
Project	Tylorstown Landslip Phase 4		
Location	Wales		
Title	Volume 4: Non-Technical Summary		
Document Reference	GC3613-RED-0074-XX-RP-L-0022	Issue / Revision	P05 / S4
File Reference	P:\Schemes_CGC\GC003613 - RCT Tylorstown Landslip\1 - Documents\EIA\Phase 4\05 Environmental Statement\Volume 4 - NTS		
Date	December 2021		
Prepared by	Bethan Williams Graduate Environmental Consultant	Signature (for file)	
Checked by	Nick Holmberg Senior Environmental Consultant	Signature (for file)	
Authorised by	Rachel Taylor Associate Director	Signature (for file)	

Revision Status / History

Rev	Date		Prepared	Checked	Authorised
P01	20/05/2021	S4 Issued for client review	BW	NH	RT
P02	06/07/2021	S4 Issued for client review	BW	NH	RT
P03	16/08/2021	S4 Issued for client review	BW	NH	RT
P04	13/09/2021	S4 Issued for client review	BW	NH	RT
P05	10/12/2021	S4 Issued for client review	LH	NH	RT

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Purpose of the Non-Technical Summary

This document is the Non-Technical Summary (NTS) of the Environmental Statement (ES) for the Tylorstown Landslip- Phase 4 project, hereafter referred to as the “Proposed Scheme”.

Its purpose is to summarise the main findings of the Environmental Impact Assessment (EIA) process in non-technical language. It enables anyone with an interest in the Proposed Scheme, including the general public, to understand how the Proposed Scheme could affect them and the environment in which they live.

This NTS provides an overview of the findings reported in the ES. It does not and is not intended to convey all of the information relating to the Proposed Scheme and its potential effects on the environment. For detailed information pertaining to any part of this NTS, please refer to the ES (Volume 1 of the EIA).

This document covers:

- a description of the Proposed Scheme, including details of; the site location, why the project is needed and what is being proposed;
- an overview of the EIA process, its objectives and the scope of assessment;
- a summary of the construction, operational and residual effects identified through the EIA process and reported under topic headings covering different aspects of the environment; and
- a summary of the Proposed Scheme, as identified through the EIA.

A digital copy of this NTS can be obtained via the RedStart Wales Website. As specified in Volume 1 of this EIA, the NTS can be accessed through the below methods.

Digital and hard copies of the ES can be obtained upon request from Rhondda Cynon Taf County Borough Council via the following methods:



Website: <https://www.rctcbc.gov.uk/EN/GetInvolved/TylorstownLandslip/Tylorstownlandslipremediationprocess.aspx>



Email: consultation@rctcbc.gov.uk



Telephone: 01443 425014

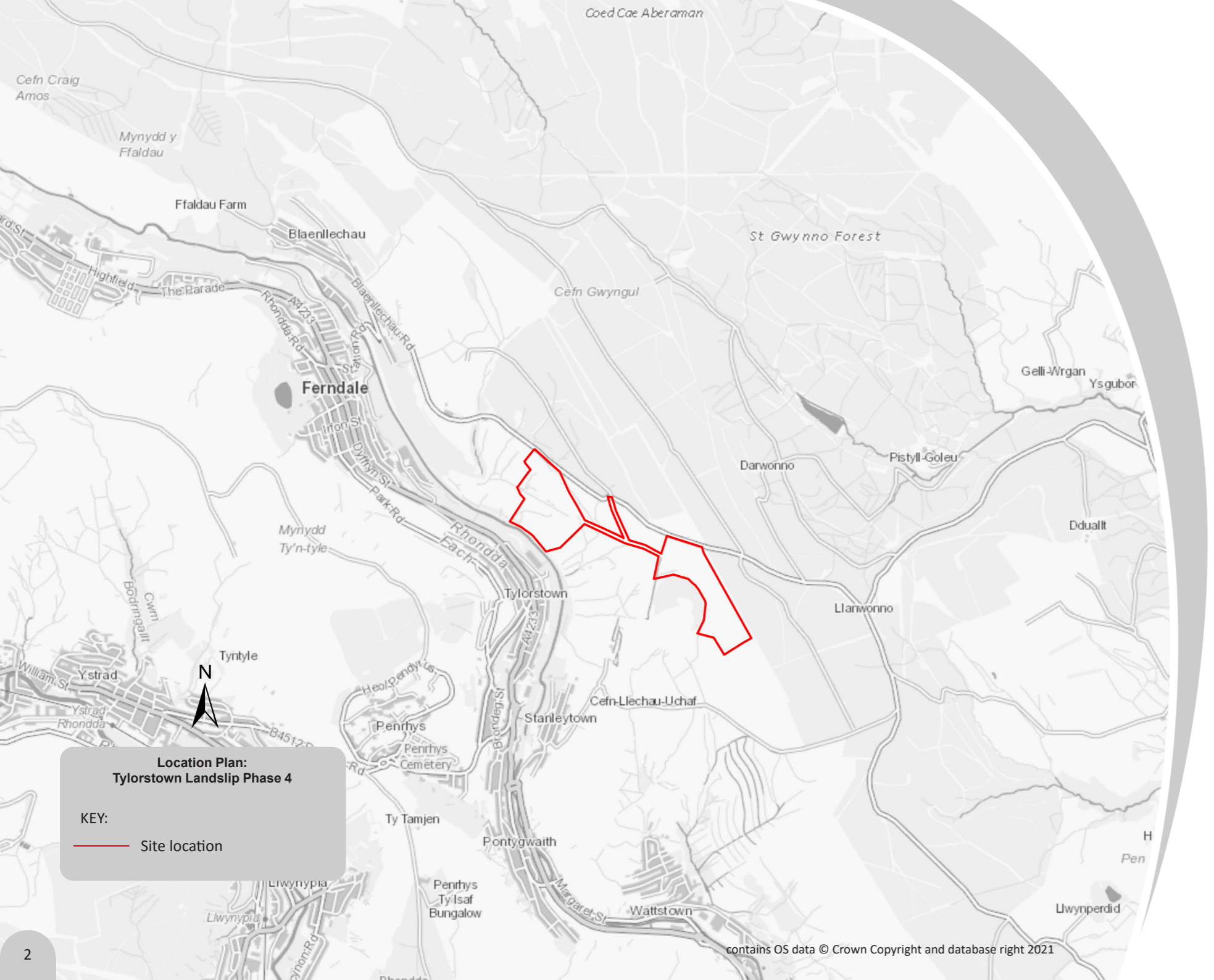


Post: Freepost, RSBU-HJUK-LSSS, Research & Consultation, Public Relations & Strategy, The Pavilions, Cambrian Industrial Park, Clydach Vale, Tonypandy, CF40 2XX

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Tylorstown Landslip Phase 4

Why is the scheme needed?

On Sunday 16th February 2020, Storm Dennis caused the Llanwonno Upper Tip to fail above the village of Tylorstown. Approximately 60,000m³ of material slipped down the valley, filling the valley bottom and diverting the course of the Afon Rhondda Fach.

Emergency works (referred to as Phases 1, 2 and 3 of the Tylorstown Landslip scheme) have been undertaken to remove the slipped material from the river and valley bottom.

Rhondda Cynon Taf County Borough Council is now proposing essential stabilisation and remediation works to ensure the colliery material within the Llanwonno Upper Tip is made safe, preventing future landslips such as the one that occurred in February 2020 and demonstrating that the relocated and remaining in-situ material can be regenerated for a beneficial end-use. To achieve this, the majority of the colliery material at Llanwonno Upper Tip will be excavated and transported along a haul road to a new location, referred to as the 'Receptor Site', next to Old Smokey.

How has sustainability been integrated into the Scheme design?

By keeping material on-site, the Scheme is avoiding the use of large numbers of HGVs to transport the material to a nearby tip as well as the associated carbon cost and air quality implications of moving the material off-site.

The proposed re-establishment of 'Colliery Spoil' and 'Ffridd' ecological habitats on the Receptor Site and existing tip site will be carefully managed and monitored to maximise the success of iconic Valleys habitats and ensure there is an ecologically beneficial and sustainable after use of both sites.

How will this scheme help inform the stabilisation of colliery tips across Wales?

As well as solving the immediate risk posed to Tylorstown and the Rhondda Fach valley from future slips, the intention is for this scheme to act as a pilot project for the sustainable and ecologically sound stabilisation and repurposing of colliery spoil.

The careful management and monitoring of the re-establishment of vegetation on the Receptor Site and remaining tip site will further the practical understanding of the challenges and best-practice

measures associated with re-vegetating stabilised colliery material and provide a timely case-study of how to better manage and promote Valleys habitats in the future, for the wider benefit of similar scenarios in the country.

History of Mining in the Area

Tylorstown and the surrounding area has a 100-year history of colliery mining. The first colliery mines were sunk in Tylorstown between 1873 and 1876 by Tylor's Colliery Company, after Alfred Tylor bought the mineral rights of Pendyrys farm in 1872.

These mines were part of the Ferndale Colliery that was a series of nine mines located around Ferndale. The first was Ferndale No.1 developed in Blaenllchau in 1857 and the final one, No.9, was developed in 1907. By the 1930's, all but three of the mines were still in operation until the entire complex was closed by the National Coal Board in 1959.

Although the mining activity has ceased, remnants of the industry remain scattered across the Ferndale area and the Afon Rhondda Fach valley, such as Llanwonno Tip, Old Smokey as well as abandoned tramways and buildings.

What progress has been made so far?

Key event / milestone	Key Date
Investigating long-term stability solutions for Llanwonno Tip	Summer 2020
Preferred solution for Llanwonno Tip identified	Summer 2020
Consultation with NRW, RCT and other key stakeholders about the content of the Environmental Statement	November 2020 to Spring 2021
Submission of Planning Application documents for Pre-Application Consultation	Winter 2021

Scheme Descriptions

What does the Proposed Scheme entail?

Llanwonno Tip

A substantial amount of the material within Llanwonno Tip will be removed as part of the Proposed Scheme to improve stability and safety of the area. To achieve this, material deposited above the natural gradient of the valley side will be removed, and some of that removed material will be used to infill the slip scar created during the landslide in 2020.

Overall, the valley side will be evened out, improving its stability, safety and visual amenity. Drainage features will also be added to the tip, to ensure that surface water and groundwater are appropriately managed.

This site will then be formalised with appropriate aftercare management and monitoring to promote the natural re-establishment of 'Colliery Spoil' and 'Ffridd' habitats. The footpath running below

Llanwonno upper tip will also be reinstated, to restore direct access between the river and Old Smokey.

Receptor Site

The Receptor Site has been designed to fit into the surrounding uneven landscape. It is an irregular oblong shape, reaching a total height of just over 7m at its highest point, and located behind the prominent Old Smokey.

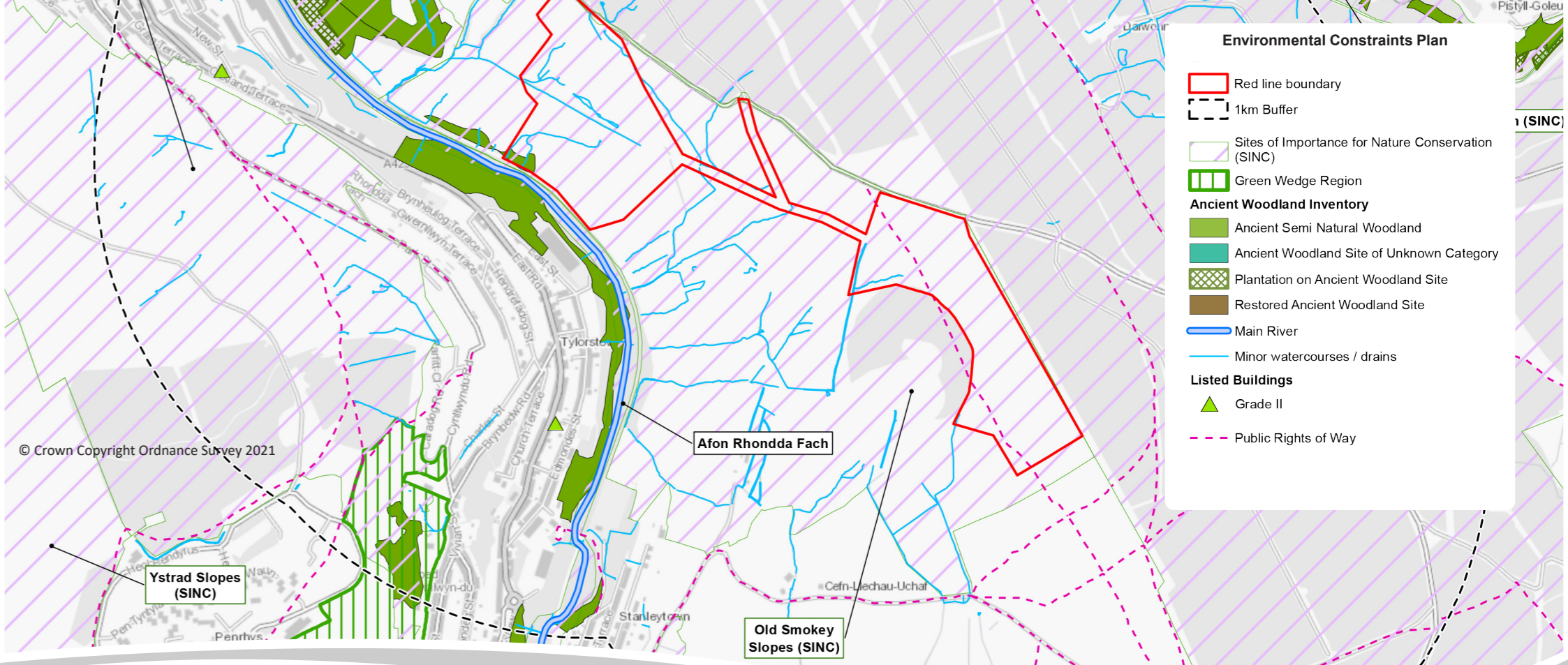
Drainage features such as swales will be provided to ensure that surface water is appropriately drained. Existing topsoil in this location will be stripped, stored and spread across the Receptor Site to encourage the establishment of vegetation after construction.

Once completed, the site will become a nature reserve and the establishment of the vegetation

on the colliery material at the receptor site will be formalised with appropriate aftercare management and monitoring to promote and conserve two iconic Valleys habitats, 'Colliery Spoil' and 'Ffridd'.

Haul Road

The excavated material will be transported from Llanwonno Upper Tip to the Receptor Site along a disused tramway, formalised as a haul road.



Key Environmental Constraints

What are the key features likely to be affected by the Proposed Scheme?

The key environmental constraints of the area that were taken into consideration during the assessment are:

- historical mining and existing old tips in the area;
- ecological features including four Sites of Importance for Nature Conservation (SINC) in the area, with Old Smokey SINC on site and several habitats of county importance and ecological value onsite. Also, protected species present on site;
- Public rights of Way (PRoWs) including footpath TYL 9/1 that runs directly to the east of the Receptor Site and cuts through the Red Line Boundary (RLB);
- the Afon Rhondda Fach in the valley below the site; and
- the nearby town of Tylorstown in the valley below and the local leisure centre located directly beneath the Site of Llanwonno Tip.

The Environmental Impact Assessment

What is an Environmental Impact Assessment or EIA?

The Environmental Impact Assessment (EIA) is a technical process carried out in accordance with relevant legislation and government guidance. The EIA is a study of potential impacts the Proposed Scheme will have on the environment. It is undertaken to identify the potential impacts through the construction and operation phases of the Proposed Scheme and provide mitigation to reduce the effect of those impacts on the environment.

The main objectives of the EIA process are to:

- ensure that consideration and reporting of the likely significant effects is undertaken so that planning and design decisions can be fully informed;
- ensure that the relative importance of the likely impacts and their effects are properly evaluated;
- aid the identification of measures that could reduce the magnitude of potentially negative effects and the scope for such mitigation; and
- to provide opportunities for stakeholders, including the public and statutory environmental bodies, to comment on proposals.

The process of EIA is iterative alongside the Proposed Scheme design. As the environmental effects of the design are recognised, the design can be adjusted to mitigate against these effects. The technical findings of the EIA are presented in the form of an ES, consisting of four volumes:

- **Volume 1 Environmental Statement:** contains the introduction, detailed assessments for individual topic chapters and a summary of key findings.
- **Volume 2 Plans:** contains a series of plans and figures to support the environmental assessments.
- **Volume 3 Appendices:** comprises all the topic technical assessment reports.
- **Volume 4 Non-Technical Summary (NTS):** as the Environmental Statement is a lengthy technical document, a Non-technical Summary has been produced to describe the findings of the EIA process in a manner that is both accessible and easily understood by the general public.

What topics are covered in the EIA?

The findings of the EIA are summarised in this document under separate topic chapters, as scoped into the assessment. These topics are:

- Air Quality
- Cultural Heritage
- Landscape and Visual Effects
- Biodiversity and Nature Conservation
- Geology, Soils and Waste
- Noise
- Water Environment and Flood Risk
- Major Accidents and Disasters (MAAD)
- Pedestrians, Cyclists and Equestrians (PCE)
- Cumulative Effects

How have impacts been assessed?

Where potential impacts and their effects have been identified, the EIA makes an assessment of the significance of these effects on the environment. The significance of an effect is typically assigned to one of five categories (very large, large, moderate, slight or neutral).

Whilst the process of assigning significance into one of these categories may vary between topics, by placing all identified issues on the same scale, the decision-making process can be informed appropriately by being comparable across all topics.

In general, the greater the value (or sensitivity) of an environmental feature or receptor, and the greater the magnitude (or extent) of the impact, then the more significant the effect on the environment will be. Effects can be adverse (negative) or beneficial (positive) in nature and they can be temporary or permanent.

Where potentially significant adverse environmental effects have been identified, appropriate mitigation has been selected following a hierarchy of: avoidance, reduction, remediation and compensation.

Significance Category	Typical descriptors of effect
Very Major	Effects at this level are material in the decision-making process.
Major	Effects at this level are likely to be material in the decision-making process.
Moderate	Effects at this level can be considered to be material decision-making factors.
Slight	Effects at this level are not material in the decision-making process.
Negligible	No effects or those that are beneath levels of perception, within normal bounds of variation or within the margin of forecasting error.



Air Quality

The Proposed Scheme has the potential to lead to dust and air quality effects during the construction phase. These effects would be associated with the removal and transport of the colliery material from Llanwonno Tip to the Receptor Site. Therefore, in this assessment, focus was on potential human health impacts from poor air quality, particularly from dust.

Environmental Effects

Six sensitive environmental receptors (i.e. residential properties) were identified and the air quality assessment focusses on concentrations of the air pollutant Nitrogen Dioxide (NO₂) and inhalable Particulate Matter (PM₁₀).

The predicted concentrations of these air pollutants have been compared against National Air Quality Objectives (NAQOs) to determine the extent to which the effects identified are significant.

Construction

The largest impacts during the construction of the Proposed Scheme will come from the excavation and deposition of the colliery material, the amount of dust produced will vary from day to day dependent on level of activity, operations being completed and the weather conditions.

Construction traffic impacts are unlikely to be significant because most traffic movements will be along the disused tramway over 1km from the nearest residential housing and the Tylorstown Air Quality Management Area (AQMA).

Construction impacts to human health from air quality are therefore expected to be Negligible.

Operation

There is not expected to be any impacts on air quality from the Proposed Scheme during operation.

Mitigation

Construction

Throughout excavation and deposition of the colliery material, mitigation measures based on the Institute of Air Quality Management (IAQM) guidance documents will be implemented to reduce the potential for any negative impacts to air quality.

These include:

- dampening of material e.g. stockpiles;
- setting appropriate speed limits on site;
- vegetate exposed surfaces; and
- minimise handling and reduce drop heights.

Operation

The Proposed Scheme will not lead to long-term impacts on air quality. Therefore, no mitigation is required for the operational phase of the Proposed Scheme for air quality.

Noise

The assessment of noise focuses on impacts of unwanted sound (noise) from construction machinery and activities, such as excavation and transportation of material, during the construction phase of the Proposed Scheme.

Environmental Effects

To assess the impacts from the Proposed Scheme, ten noise sensitive receptors within 1km of the Proposed Scheme were selected.

Construction

Noise is only likely to be noticeable at one of the noise sensitive receptors (Cefn Llechau Uchaf), with noise at the other nine receptors predicted to be below existing background noise levels.

Noise levels at Blaenllechau and in Tylorstown might be noticeable at times when works are undertaken at Llanwonno Tip and along the haul route, but not at the Receptor Site.

The noise limit for daytime construction and earth moving activities is not exceeded at any residential receptor and is only expected to be exceeded occasionally at Rhondda Fach Leisure Centre. Adverse effects could, however, occur if works are undertaken at night-time.

Operation

No impacts on noise levels from the Proposed Scheme during operation are anticipated.

Mitigation

Construction

Construction works should only take place during the daytime on weekdays and Saturday mornings.

The number and type of construction plant used on site will be kept to a minimum and is anticipated to be approximately three excavators and four heavy goods vehicles (HGVs), in line with the assumptions stated within the assessment.

Operation

No mitigation is required during operation as no impacts are expected.



Cultural Heritage

The cultural heritage chapter assesses the impact of the Proposed Scheme on archaeology, historic buildings, and the historic landscape. The study area consisted of a 250m buffer around the site for the assessment of impacts of the Proposed Scheme on archaeological remains and non-designated heritage assets. A wider study area consisting of a 1km buffer was used for statutory designated heritage assets.

Environmental Effects

Eleven heritage assets were identified within the site and a further nine identified within 250m of the Proposed Scheme. These included seven Historic Landscape Character Areas (HCLAs).

Construction

Eight heritage assets were identified as being directly physically impacted by the construction activities the Proposed Scheme. These include:

- The tramway;
- Tylor's Newydd Tip Group Site;
- Llanwonno Upper Tip; and
- The Winding engine house remains.

Operation

Five heritage assets were identified as being subject to indirect visual impacts, including Welfare Hall (a Grade II Listed Building located in Tylorstown), as a result of the presence of the new Receptor Site, the removal of a substantial part of the Llanwonno Upper Tip and the widening of the tramway.

Mitigation

Construction

Recording of the heritage assets either prior to or during construction would help preserve the archaeological and heritage value of the area. This would be done through:

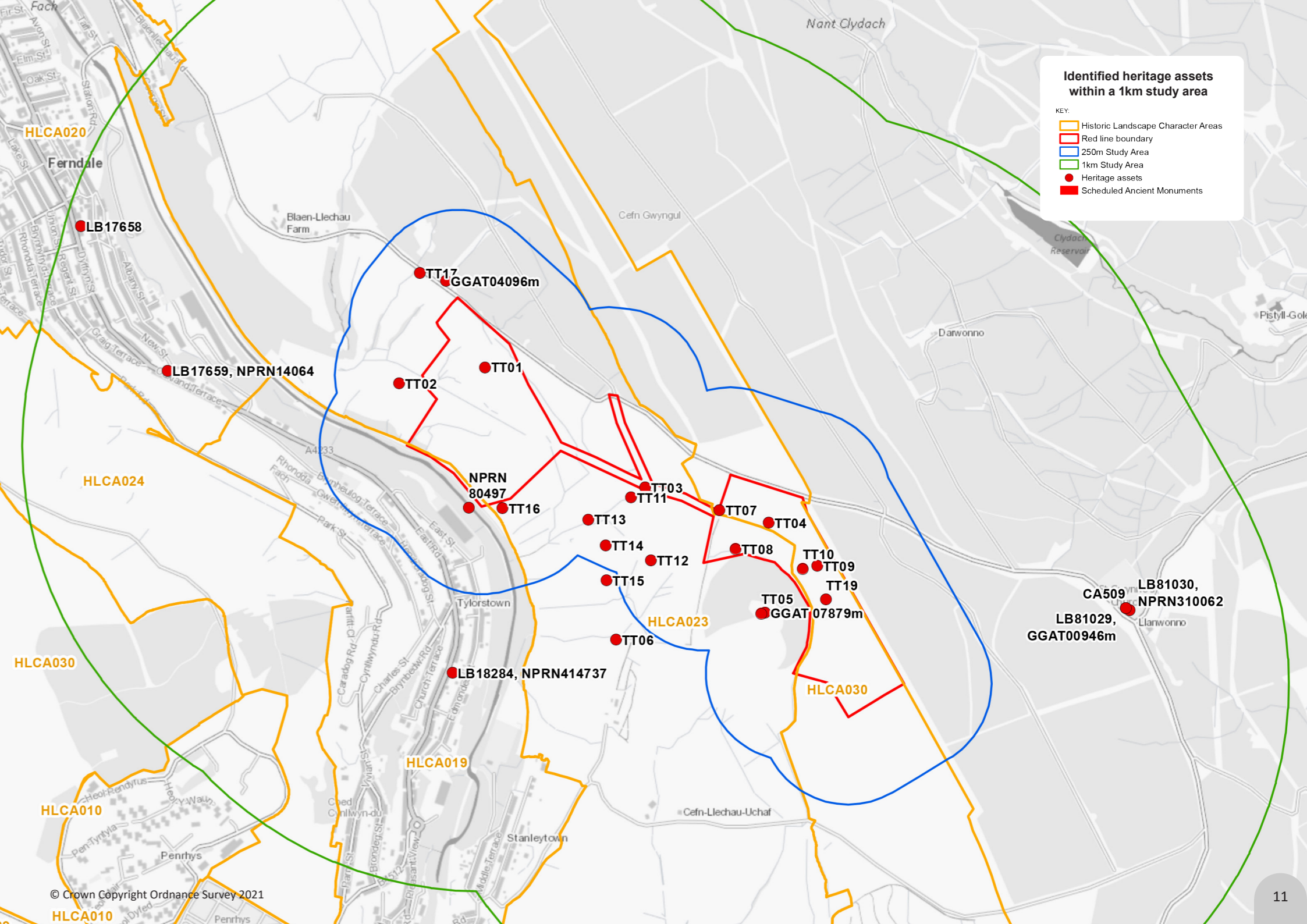
- an archaeological watching brief of the final stages of the removal of Llanwonno Upper Tip;
- topographical surveys and archaeological investigation trenches along the tramway; and
- Strip, map and record of the Receptor Site prior to construction commencing.

Operation

Sensitive landscaping of the Receptor Site and resurfacing of the tramway to minimise any indirect visual impact on surrounding heritage assets and HCLAs.



Remains of Winding Engine House (TT07) on Site



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Landscape and Visual Effects

The landscape is an important natural resource with its character widely appreciated for its appearance and contribution to regional identity and sense of place.

Any impacts of the Proposed Scheme on features in a landscape (landforms, vegetation or topography), may affect the overall character of that landscape.

The assessment of visual impact considers how the views of the landscape from sensitive locations, such as residential properties and outdoor locations with public access, will be changed as a result of the Proposed Scheme.

Environmental Effects

The impacts on seven different viewpoints (from residential areas, PRowS and recreational areas) and four different landscape character areas, were considered for this assessment and are summarised below.

Construction

Construction activities will negatively impact the views through:

- Excavation and earthworks, including stockpiles;
- The siting of temporary buildings and the construction compound; and
- Loss of vegetation, including trees.

These impacts will also negatively impact the Hillside and Scarp Slopes Mosaic Valley East landscape character area, as the landscape character area that the Proposed Scheme is located within.

Operation

The introduction of engineered slopes as part of the Receptor Site is the main negative impact of the Proposed Scheme on the landscape and views of the area during operation.

Mitigation

Construction

Mitigation for the construction phase will be detailed in the Construction Environmental Management Plan (CEMP) and will include:

- a plan of the layout of the site to ensure visually intrusive features, such as stockpiles and construction plant, are located away from sensitive visual receptors;
- a plan of the traffic management on site;
- only removing vegetation when essential;
- ensuring temporary stockpiles are kept below 2m in height; and
- use of directional lighting on site.

Operation

The slopes will be seeded with a low maintenance reclamation mix and will be allowed to green over and the topsoil at the Receptor Site will be stripped and reused as a top dressing to promote natural regeneration of vegetation. This will reduce the landscape and visual impacts of the Proposed Scheme as vegetation regrows. Moreover, landscape and visual impacts were considered throughout the design of the new landform at the Receptor Site, ensuring its location, size and shape causes as little disruption to views and the local landscape as possible.



View from the South of "Old Smokey"



View of Llanwonno Landslip from Tylorstown



Colliery material in the valley bottom at Tylorstown

Biodiversity and Nature Conservation

The assessment for biodiversity considers impacts on sites, habitats and species recognised for their ecological value. It considers both 'designated' sites, afforded protection under law or local authority planning controls, and 'non-designated' sites which may not be protected but nevertheless have some wildlife value.

These include the Old Smokey Slopes Site of Importance for Nature Conservation SINC, St. Gwynno Forest SINC, Taf and Rhondda Rivers SINC and Blaenllechau Woodland SINC. A variety of habitats listed as priority habitats under the Environment (Wales) Act 2016 are also present on the site. A number of protected species, including bats, reptiles, and breeding and wintering birds, are known to be present within the wider site area. Other species, such as great crested newts, have been found within close vicinity of site but not within the site itself.

Environmental Effects

Construction

Without mitigation, construction activities have the potential to cause impacts on biodiversity through:

- degradation/loss of habitats from:
 - topsoil removal and storage for the Receptor Site;
 - changes in groundwater around the Receptor Site; and
 - from potential chemical and dust pollution along the edge of the haul road; and
- direct mortality of species such as birds and bats through the clearance of vegetation pre-construction.

Operation

No negative effects from the operational phase of the Proposed Scheme are anticipated for the biodiversity of the area.

Mitigation

Construction

The design of the Receptor Site ensures that the habitats of a higher biodiversity value are either avoided, or the area lost is minimised.

A CEMP will be prepared and implemented detailing measures to minimise construction dust/

air quality impacts, noise and pollution controls to water and soils.

Best practice measures will be followed in respect to environmental protection during construction.

Site clearance will be undertaken at appropriate times of year; or under ecological supervision if appropriate. The removal of vegetation will also be undertaken in line with specific method statements, ensuring that a precautionary approach is followed to avoid harm to protected species.

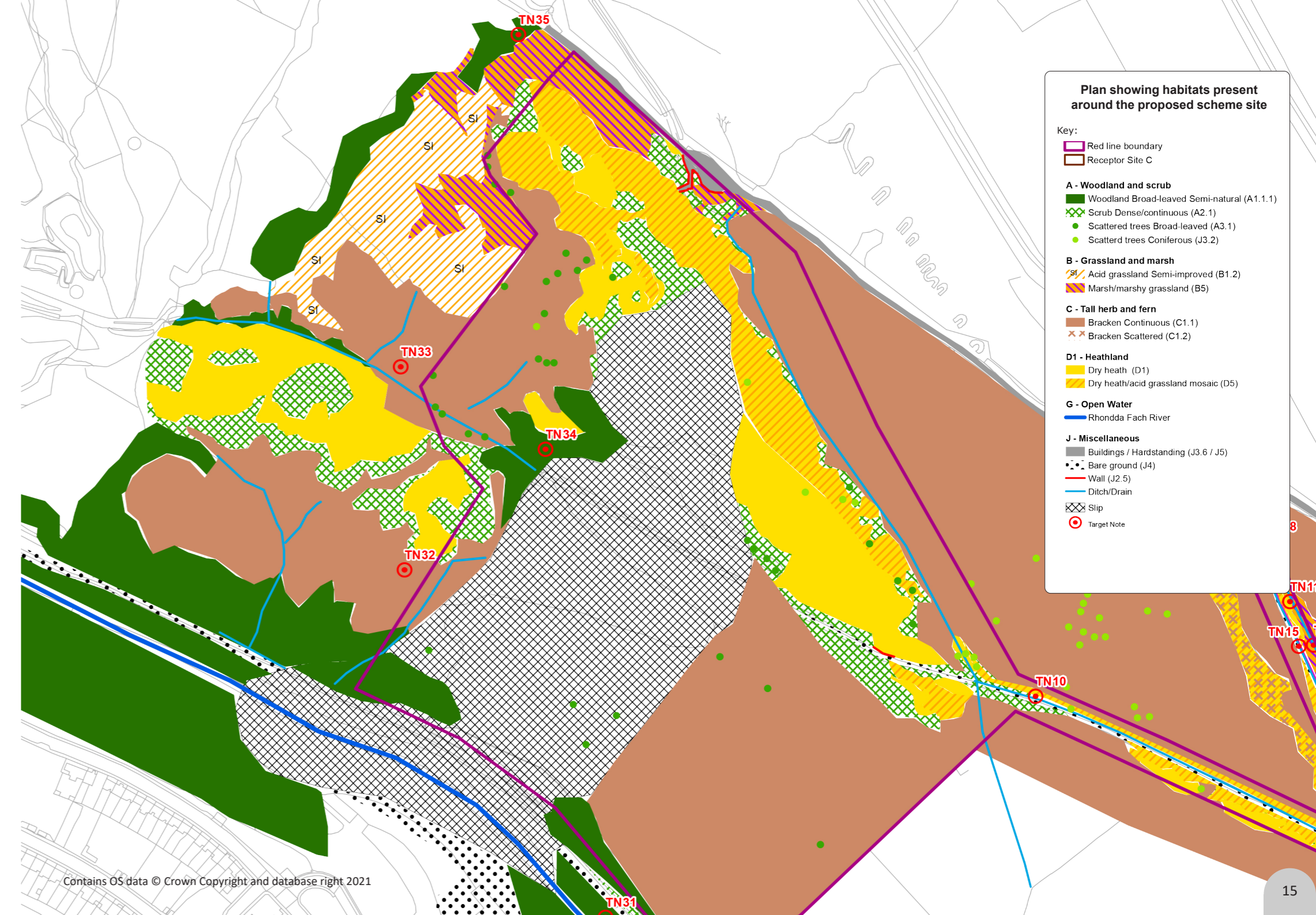
Operation

As discussed above, the Scheme design has sought to reduce ecological impacts from the outset by encouraging the natural regeneration of two iconic Valleys habitats, 'Colliery Spoil' and 'Ffridd'. A comprehensive five-year aftercare plan will be followed to ensure the successful re-establishment of translocated vegetation and reused top soils.

Enhancements

A number of additional enhancements have been proposed and will be integrated into the detailed design, with the assistance of an ecologist. These include:

- Installation of at least one kestrel nesting box;
- Installation of some starling boxes; and
- Installation of at least ten closed and open fronted boxes for a range of common breeding bird species.



Geology, Material Assets and Waste

This assessment considers the impacts of the Proposed Scheme on the geology and soils of the area, with some consideration of the use of materials and the generation and management of waste. Therefore, the study area for this assessment extends to the construction material resources and waste management facilities in the vicinity of the Proposed Scheme.

Environmental Effects

Construction

No sites of geological importance will be affected by the Proposed Scheme. With the use of mitigation measures, construction activities will not have significant impacts on mineral resources in the area or the waste capacity of the region, as the majority of the colliery material will be repurposed on site.

Operation

The site is underlain by high specification aggregate and shallow coal reserves, these are unlikely to be mined in the future however due to the site's location next to Old Smokey where any mining would likely cause instability. Therefore, the presence of the Proposed Scheme will not have any impact on the extraction of mineral reserves in the area.

The Proposed Scheme will not use any materials or produce any waste during operation.

Mitigation

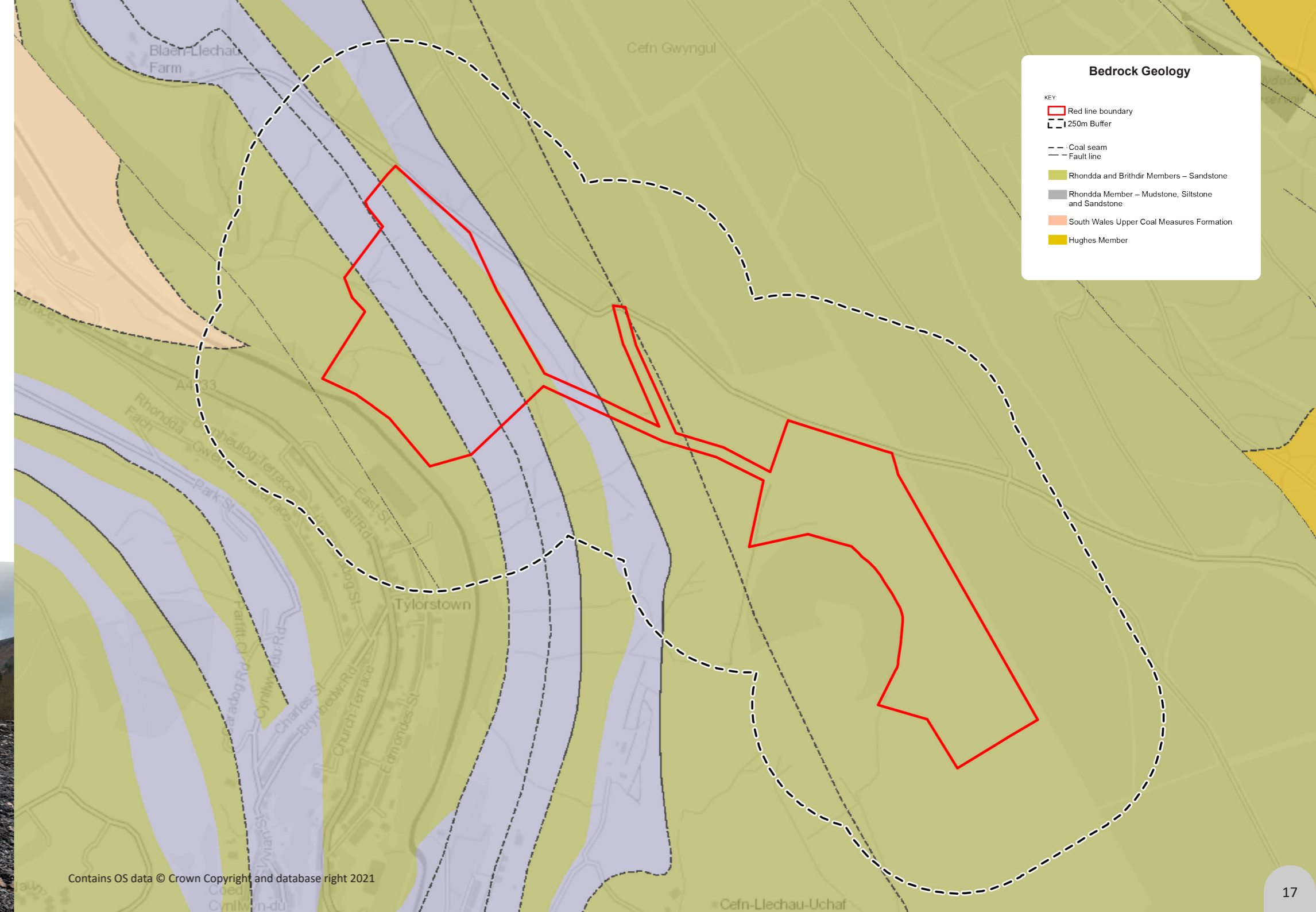
Construction

The following measures will be applied during construction:

- Any outcropping coal seams which may have become exposed during the 2020 landslip will be rebuilt to remove the potential for oxidation and subsequent combustion of the coal;
- Construction works will be monitored to identify any high coal containing pockets;
- A Materials Management Plan (MMP) has been drafted in accordance with the CL:AIRE protocol and will be implemented to ensure materials are carefully managed to promote re-use and waste reduction. The management and temporary storage of materials during construction will also be detailed in the detailed CEMP.

Operation

Due to the minimal effects anticipated from the Proposed Scheme during operation there are no mitigation measures recommended for geology, material assets and waste.



Water Environment and Flood Risk

This chapter assesses any changes to river quality and geomorphology, as well as groundwater quality, that could occur as a result of the proposed works. Also considered, are the potential impacts on surface water drainage and flooding. The Proposed Scheme is located within the Afon Rhondda Fach valley and interacts closely with a network of existing drains that feed into the Afon Rhondda Fach. The Scheme location also lies above pockets of groundwater.

Environmental Effects

Construction

During construction, the Proposed Scheme has the potential to have the following adverse effects on the local water environment:

- The release of soils, dust and pollutants during construction could enter and harm local watercourses and groundwater;
- Metals currently present in Llanwonno Tip and within the vicinity of the Receptor Site could be mobilised and adversely affect watercourses and groundwater;
- The proposed works will cause physical changes to the existing drainage network at Llanwonno Tip;
- Potential to temporarily alter surface water flows and increase runoff and flood risk to construction sTaff as well as equipment and plant on site, as a result.

Operation

During operation, the proposed Scheme is anticipated to have both beneficial and adverse effects on the water environment.

Adverse effects include:

- Potential increase in the amount of metals and sediment entering the Afon Rhondda Fach and groundwater, due to mobilisation of metals and sediment during construction;
- Potential for increased surface water flood risk at the Receptor Site; and
- Potential change to groundwater mobility and availability in the area.

Beneficial effects include:

- Reduced likelihood of major water pollution events or severe hydromorphological changes occurring, as a result of future landslips;
- Potential reduction in the amount of metals and sediment entering the Afon Rhondda Fach and groundwater, by moving the colliery material to the Receptor Site, which is further away from the Afon Rhondda Fach than Llanwonno Tip and in an area with deeper lying groundwater; and
- Reduction of surface water flood risk posed within the Llanwonno Tip area and downstream.

Mitigation

Mitigation measures have been proposed to avoid and reduce the adverse effects identified above for the construction and operational stages of the Scheme.

Construction

Pollution prevention measures will be included in the CEMP and applied across the construction site to prevent any pollution events during construction, particularly during the excavation and handling of material. This will also include measures to manage drainage and surface water flood risk during construction.

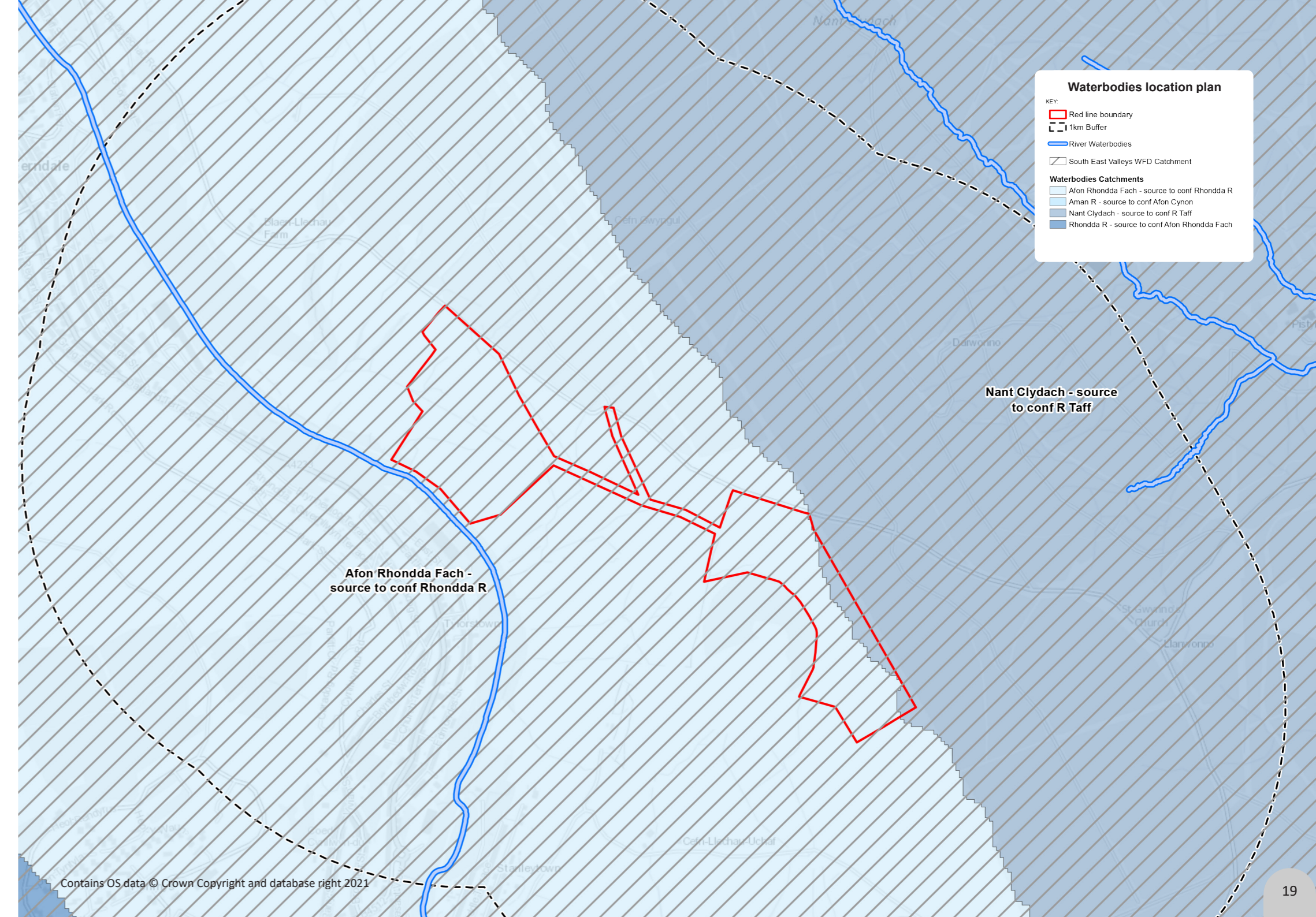
Groundwater monitoring will continually be undertaken during construction to detect any significant changes.

Operation

The design of both Llanwonno Tip and the Receptor Site include surface water drainage networks that will ensure no surface water flood risk is posed to the area and downstream. This network will be vegetated with semi-aquatic plants that are capable of absorbing metals and reduce the amount reaching the Afon Rhondda Fach and groundwater.

Topsoil will be reinstated and spread across the Receptor site and Llanwonno Tip, to encourage vegetation growth and prevent sediment and metals from entering the water environment.

Monitoring wells will be installed to monitor the groundwater levels at the Receptor Site and Llanwonno Tip during construction and operation of the Scheme, to ensure no significant changes occur.



Pedestrians, Cyclists & Equestrians

The assessment of effects on pedestrians, cyclists and equestrians considers how the Proposed Scheme changes access to open access land, PRowS, informal footpaths and national cycle routes.

Environmental Effects

Construction

There is one PRow footpath and some open access land that will be directly affected by closure to the public during the construction of the Proposed Scheme. There are, however, alternative routes and areas that local amenity users can access as alternatives.

There will be some short-term change in the ambience to the footpaths directly surrounding the Proposed Scheme caused by construction activities which may deter people from using them throughout the construction period.

The PRow will also require a permanent diversion of approximately 80m, to accommodate the drainage elements of the Receptor Site, displacing the footpath by up to 26m westwards.

Operation

The Proposed Scheme is anticipated to improve the open access land through improved landscaping and help define the PRow that runs through the site making it easier for the public to access. The safety of the cycle route beneath the site will also be improved for users.

The reinstatement of the footpath running below Llanwonno Tip will improve public access and amenity to the area and restore connectivity between the river valley and Old Smokey.

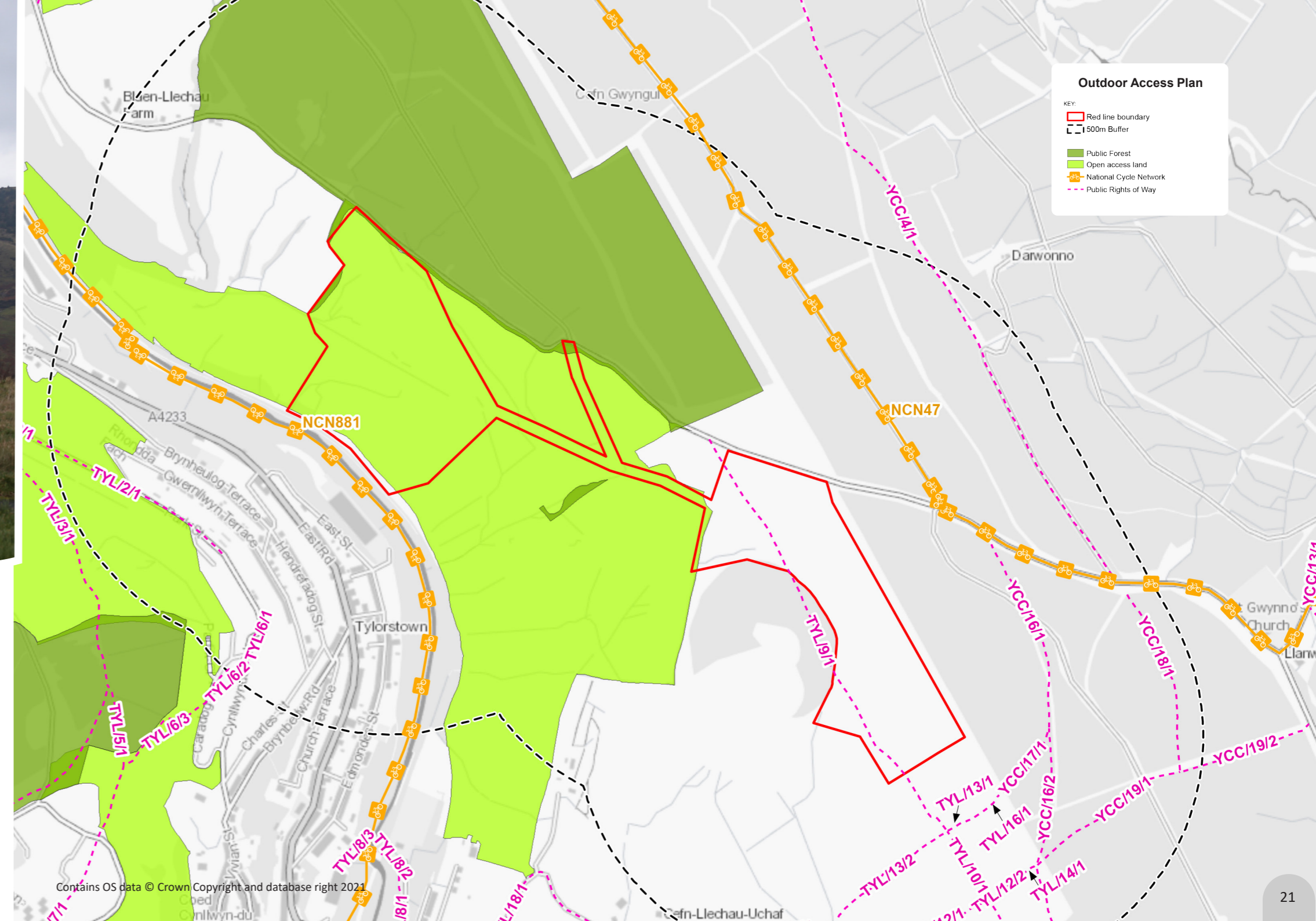
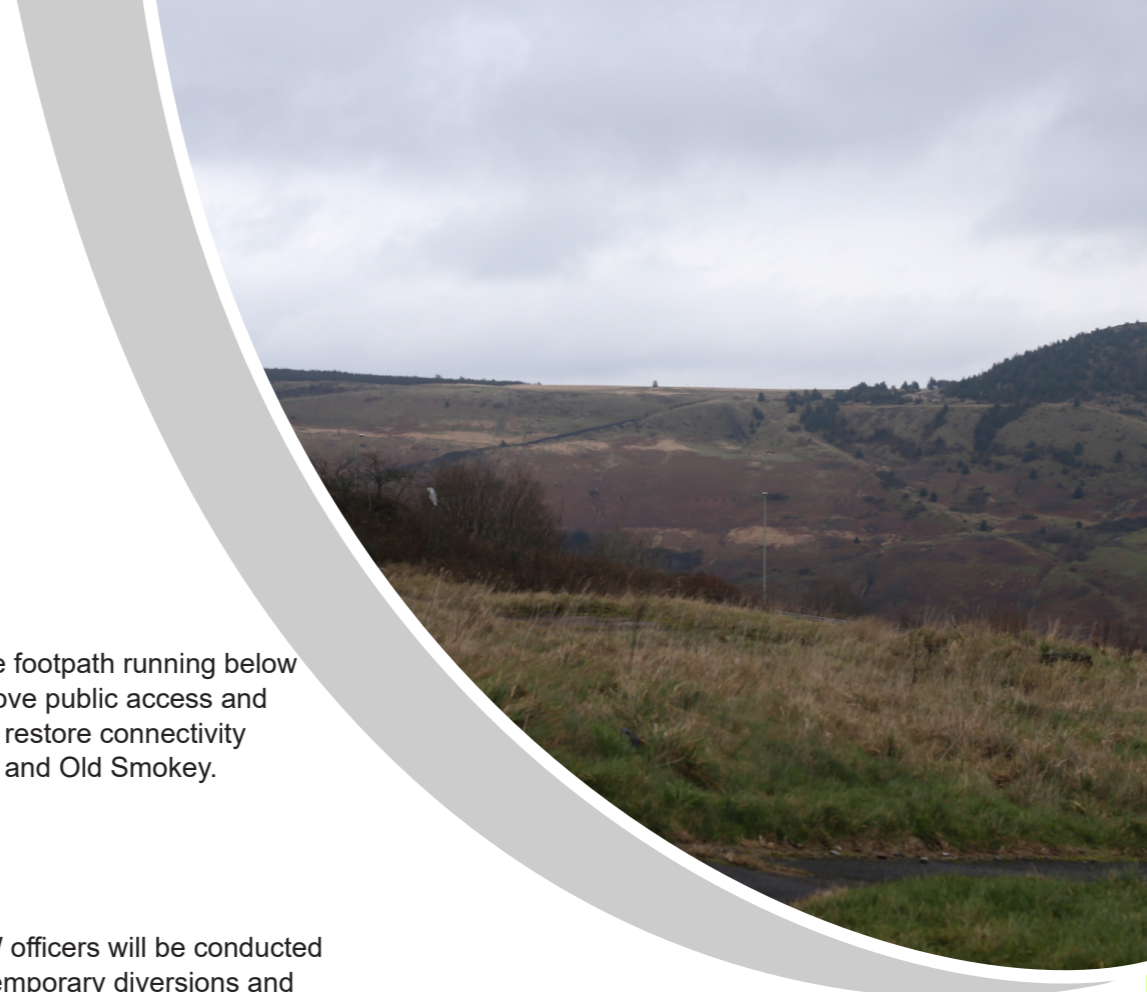
Mitigation

Construction

Liaison with local PRow officers will be conducted to identify appropriate temporary diversions and signage for footpaths and open access land closed during the construction of the Proposed Scheme. Liaison with local PRow officers will also inform the final alignment of the proposed PRow diversion and ensure that appropriate consents are obtained for the permanent diversion.

Operation

Landscaping completed as part of the design of the Proposed Scheme will ensure users can travel safely through the area and that the ambience and setting of the PRow footpath encourages people to use it more regularly.



Major Accidents and Disasters

Major accidents and disasters are considered to be natural or man-made events with a low likelihood of occurring but that would have high consequences, such as the loss of life or significant damage or disruption to infrastructure.

The assessment undertaken in this chapter is different to that in other chapters of the environmental assessment. It identifies environmental hazards that increase risk or reduce the safety of both human and environmental receptors before considering appropriate ways of managing and reducing those hazards.

Environmental Effects

Construction

The greatest risk for major accidents and disasters would be from potential ground instability causing another landslide or subsidence caused by the construction activities or extreme weather, particularly during periods of high rainfall. This could impact construction site workers, potentially users of the Rhondda Fach Leisure Centre and recreational users of the nearby footpaths and could require an emergency response

Operation

The Proposed Scheme will improve the stability of the valley side through moving the colliery material to a safer location and therefore reduce the risk of major accidents and disasters occurring in the area. Moreover, an improved drainage network is

being provided at Llanwonno Tip that will also help maintain the stability of the valley side.

Mitigation

Construction

Geotechnical surveys and groundwater monitoring have been conducted to measure the risk to the ground stability on site and continued groundwater monitoring will ensure that construction activities are undertaken with the best understanding of the local ground conditions and stability.

Best practice measures will be implemented on site throughout the construction phase to ensure the safety of construction workers and receptors in the surrounding area during this phase.

Operation

The potential for groundwater flooding and related instabilities will be mitigated through six months of groundwater monitoring to observe water levels. This will ensure that any changes to water levels are picked up quickly, both during and after construction.

Cumulative Effects

Construction

During the construction phase, no cumulative effects on local receptors are expected.

Operation

During the operational phase, the Proposed Scheme will overall have a beneficial impact on the area for biodiversity and public access, as well as for the long-term record/preservation of known heritage features, but most importantly the Proposed Scheme will improve the safety of

residents of Tylorstown, recreational users of the Rhondda Fach Leisure Centre and the open access land/public footpaths. Moreover, the Scheme will facilitate the safe implementation of RCT's aspirations for a new active travel route along the Rhondda Fach Valley.

What happens next?

Following the Pre-Application Consultation (PAC) process, the Environmental Statement, as well as the planning application will be updated before final submission to Rhondda Cynon Taf County Borough Council.

An outline CEMP has been drafted and will be further developed to ensure that all environmental issues identified during the Environmental Impact Assessment process are appropriately managed throughout the subsequent stages of the Scheme's design and construction. The following time-line is expected between now and the completion of the Scheme:

Key event/milestone	Key Date
Planning application update	Winter 2021/2022
Submission of planning application	Winter 2021/2022
Appointment of contractor	Winter 2021/2022
Start of construction	Spring 2022
Construction completion	Autumn 2022
Continued consultation with NRW, RCT and other key stakeholders throughout the remainder of the scheme	