Technical Memorandum

Machen Quarry – Green Infrastructure Statement

Site Address

Machen Quarry, Commercial Road, Lower Machen, Caerphilly, CF83 8YP.

Proposed Development

The proposal is for a new C&D Waste Recycling Operation. The recycling operation would essentially be a follow on from the previous recycling permissions granted at Machen Quarry, but in a location which provides for enhanced space for stockpiling raw material and processed stock.

Site Description

The site is comprised of two separate areas shown as Area A (of 1.41 hectares) and Area B (of 0.38 hectares) on Plan MR1 (comprising 1.79 hectares combined)

Area A is situated on level ground at the base of the mineral extraction area at Machen Quarry, being part of the site of the former quarry fixed processing plant. This area is bounded to the south west by a large dust shed and a mobile plant/lorry parking area, and to the north, north east and south east by existing quarry faces which serve to provide an enclosed location which is not readily visible from external vantage points. In particular, the rim of the quarry above the western side of the proposed site is some 40 metres above the floor of the site, with three former quarry faces and benches. Area A is where the crushing and screening operation will take place, should permission be granted. The southern part of it overlaps an area which is already used for recycling road planings under permission 18/0955/FULL.

Area B is a second smaller area located near the quarry entrance. This area would be used as a light goods vehicle loading/unloading area. It is currently used to store road planings before they are transferred into the main quarry area for processing.

There is no green infrastructure within either Area A or area B.

Machen Quarry itself is a long-established dolomitic limestone quarry which supports markets in south-east Wales and beyond, and is the only rail linked quarry in South Wales. It is located between the villages of Machen and Lower Machen, with the larger town of Caerphilly (to the west), and cities Cardiff (to the south) and Newport (to the east).

Figure 1: Satellite Image of the wider site - Machen Quarry

Surrounding Area Description

The surrounding area, with the exception of the villages and residential areas, is predominantly agricultural with larger pockets of woodland. It is notable that the wider site (Machen Quarry) is mainly surrounded by woodland and tree belts, most of which have been planted by the quarry operator as woodland / landscape screening.

Relevant Planning History

The quarry has been operational since 1948 and has permission to work minerals until 2042. The planning history of the quarry is complex and has more recently seen the consolidation of older mineral planning permissions under a single planning permission P/05/1100 dated 22nd June 2006 which covers the whole of the quarry. In addition to this there have been three applications approved for recycling operations at three separate locations within the quarry (see details below). Of these, only the most recent permission for the recycling of road planings (ref. 18/0955/FULL) remains extant.

P/05/1100: *Extend existing quarry, continuation of quarry workings, related processing of minerals and production of concrete*: Approved 22nd June 2006.

This application was for a northern extension to the quarry and the consolidated of earlier planning permissions for quarrying operations. It was supported by a full Environmental Statement which detailed a phased working programme of operations and included a conceptual Restoration Masterplan for the whole of the quarry. The decision notice contained certain conditions which are relevant to the current development proposal, which are as follows:

Condition 8

The mitigation measure identified in the ecology and nature conservation assessment (David Clements Ecology Ltd – May 2005) shall be carried out in full at the appropriate times during the operations hereby permitted unless a variation is agreed in writing with the Mineral Planning Authority.

Condition 16

Throughout the period of operations the operator shall:-

- *Protect and support any ditch, watercourse or culvert passing through the permission area and shall not impair the flow or render less effective drainage onto and from adjoining land.*
- *Provide for the collection, treatment and disposal of all water entering or arising on the site, including any increased flow from the land to ensure that there is no pollution of any watercourse by the approved operations."*

Condition 19

Within three months of the date of this permission details of a scheme for the management of tree and woodland areas shall be submitted for the approval of the Mineral Planning Authority; the scheme shall include provision for the identification, protection and management of all trees within the application area but outside the limits of excavation and upon approval such scheme shall be implemented in full and complied with throughout the duration of the permission unless otherwise agreed in writing with the Mineral Planning Authority.

No such scheme has been submitted, but the landscape plantations on the western and eastern sides of the quarry have reached full maturity and along with areas of ancient semi-natural woodland are managed through a Site Biodiversity Action Plan which is appended to this document.

Condition 22

Within twelve months of the date of this permission, a progressive restoration scheme shall be submitted for the approval of the Mineral Planning Authority. The progressive restoration scheme will outline the general principles for the restoration of the quarry and will include details of:-

- *The nature of the intended afteruse of the site.*
- *The sequence and phasing of reclamation showing clearly the relationship to the working scheme.*
- *The re-spreading over the quarry floor of overburden subsoil and topsoil previously stripped from the sit and shall specify the depths of the replaced materials and the methods used to replace the material.*
- *The ripping of any compacted layers of final cover to ensure adequate drainage and aeration.*
- *The machinery to be used in soil re-spreading operations.*
- *Drainage of the reclaimed land including the formation of suitable graded contours to promote natural drainage and the installation of artificial drainage.*
- *The proposed final configuration and levels of any restored areas.*
- *Unless otherwise agreed in writing with the Mineral Planning Authority, the reinstatement of the plant site and access roads by clearing plant, buildings, machinery and concrete or brickwork, deep cultivation to remove rocks or other obstructions and replacing of subsoil then topsoil.*
- *Grass seeding of reclaimed areas with a suitable herbage mixture.*
- *An indicative timetable for the implementation of restoration works.*
- *Measure to mitigate the impact of the development on protect species of nature conservation value through the provision of appropriate habits.*

Progressive restoration schemes were submitted and approved by the LPA in 2014 and 2018, the latter covering a 10 year period until 2028.

Condition 23

The site shall be reclaimed and managed for nature conservation amenity use in accordance with a detailed final restoration scheme, which shall identify full restoration proposals for the site in accordance with the broad principles of the progressive restoration scheme, to be submitted for approval of the Mineral Planning Authority by the 31st December 2040, or within three months of the earlier permanent cessation of operations, whichever is the sooner.

Condition 24

The scheme detailed in (Condition 23) shall be implemented within two years following the expiry of this permission or the earlier cessation of operations, whichever is the sooner.

Condition 25

An aftercare scheme providing for a five year period of aftercare shall be submitted for the approval of the Mineral Planning Authority within three months of the permanent cessation of operations at the site, specifying such steps as may be necessary to bring the land to a condition reasonably fit for the proposed amenity use.

10/0134/FULL: *Operate construction and demolition waste recycling facility*: Approved 10th June 2010.

This application was a for a small-scale C&D waste recycling operation outside the mineral extraction area, within an area corresponding to Area B of the current proposals. The resulting planning permission contained no specific conditions relating to ecology and landscape. However, there was a relevant condition regarding restoration:

Condition 5

The use of the site shall cease by 31 December 2042 or by the date the permanent cessation of quarrying operations at Machen Quarry and restoration of the site shall be completed within two years from the date in accordance with the approved restoration scheme for the quarry.

14/0582/FULL: *Relocate existing inert recycling operation to new location within the confines of Machen Quarry*: Approved 6th November 2014.

This application was to relocate the recycling operation approved under 10/0134/FULL to a larger site within the quarry excavation area. The submission referred to the criteria within the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 and the Welsh Office Circular 11/95 which concluded that the application did not need to be supported by and Environmental Statement as it would not be considered EIA development. No additional landscaping and no green infrastructure was proposed during this application. There were no specific conditions imposed relating to ecology or landscape. However, the relevant condition regarding restoration repeated that from the 2010 permission:

Condition 7

The use of the site shall cease on or before 31 December 2042 or by the date of the permanent cessation of quarrying operations at Machen Quarry, whichever is the sooner, and the site shall be restored within two years from that date in accordance with the approved restoration scheme for the quarry.

18/0955/FULL: *Relocate existing road planings recycling operation to new location within the confines of Machen Quarry*: Approved 21st January 2019.

Following 14/0582/FULL, this application was submitted to again relocate the recycling operation to the floor of the Quarry, but this time for the recycling of road planings only. As with the 2010 and 2014 applications this application was not considered and EIA development and accordingly it was not supported by an Environmental Statement. The Officer's delegated

report notes that the site falls within the North Caerphilly Special Landscape area (NH1.4) and made reference to Policy CW4 and the need to conserve and enhance the distinctive or characteristic features of the SLA. It was concluded that due to the location that it would not significantly impact the SLA. As such permission was granted and no specific conditions for ecology or landscape were imposed. The only relevant condition, as with the 2010 and 2014 permissions, is for restoration:

Condition 7

The use of the site shall cease on or before 31 December 2042 or by the date of the permanent cessation of quarrying operations at Machen Quarry, whichever is the sooner, and the site shall be restored within two years from the date in accordance with the approved restoration scheme for the quarry.

Permission 18/0955/FULL is the only extant planning permission for recycling at Machen Quarry

21/0386/ROMPSP: *Postponement of periodic Review of Minerals Planning Permission (ROMP)*: Agreement of Postponement confirmed on 28th April 2021.

The application for the 10 year postponement of the minerals periodic review to 22nd June 2031 was agreed to on the basis that measures set out in the approved Environmental Statement of P/05/1100 and the imposed conditions remain satisfactory. It reconfirmed that the Environmental Statement was comprehensive and included a full assessment of the impacts on ecology and the landscape. It also reiterated, for the avoidance of doubt that the restoration of the whole of the quarry site after cessation of winning and working on minerals would be focused on natural regeneration and recolonisation of the quarry faces and benches and creating areas of grassland. It also recommended that a review of restoration and aftercare requirements would be undertaken during the Review in 2031 which would be in sufficient time before the 2040 date as required in Condition 23. The submission also noted that the ecological measures have been adhered to and have followed through into a Quarry Biodiversity Action Plan (BAP) (appended to this document). Progressive restoration schemes have been submitted and approved by Caerphilly County Borough Council, most latterly by way of an email from the LPA's Principal Planning Officer dated 11/05/2018.

Relevant Policy

On 11th October 2023 the Minister for Climate Change issued a letter on the need to focus on *'meeting the challenges laid down by the Global Biodiversity Framework agreed at COP15'*. This was achieved by way of proposed changes to planning policy which had a formal consultation between 9th March 2023 to 31st May 2023. In respect for this document, they suggested the following changes for Green Infrastructure:

> ***'Green Infrastructure**: stronger emphasis on taking a proactive approach to green infrastructure covering cross boundary considerations, identifying key outputs of green infrastructure assessments, the submission of proportionate green infrastructure statement with planning applications and signposting Building with Nature standards.'*

Following this letter, Planning Policy Wales (Edition 12) was updated and published in February 2024 with an updated Chapter 6, Section 6.2 and 6.4 in particular are relevant to this Green Infrastructure Statement.

Paragraph 6.2.1 notes that green infrastructure is *'the network of natural and semi-natural features, green spaces, rivers and lakes that intersperse and connect places.'* It goes further to give a range of examples at different scales:

> *'Universal scale – Trees and woodland*

At a landscape scale – ecosystems such as wetlands, waterways, peatlands and mountain ranges or connected networks of mosaic habitats.

At a local scale – parks, fields, ponds, natural green spaces, public rights of way, allotments, cemeteries and gardens or may be designed or managed features such as sustainable drainage systems.

At smaller scales – street trees, hedgerows, roadside verges and green roofs/walls.'

Paragraph 6.2.5 notes that Planning Authorities should adopt *a 'strategic and proactive approach to green infrastructure, biodiversity and ecosystems resilience'* by way of updating *'inventories and maps of existing green infrastructure and ecological assets and networks*' such as *'Green Infrastructure Assessments'*. It is expected that these Assessments would form part of the local plan preparation and be informed by *'existing datasets, and the best available information, to develop an integrated map-based evidence resource for biodiversity, ecosystem resilience an ecosystem service provision'*. Caerphilly County Borough Council have a Biodiversity Action Plan which was adopted in 2002, the Action Plan is considered an interim plan and is in the process of being updated along with the Adopted Local Development Plan (2010). Whilst the Action Plan and the adopted Local Development Plan do make provision for the Council's aspirations for biodiversity within the plan area, they predate the update to Planning Policy Wales and therefore specific measures for Green Infrastructure. However, the Council noted in a 2021 review of the Local Development Plan that it is in need of a formal review and updating, it is considered that once this review is undertaken Green Infrastructure Assessments will be included. As there does not appear to be an up-to-date mapping of green infrastructure assets within the Council this can not be referenced within this document.

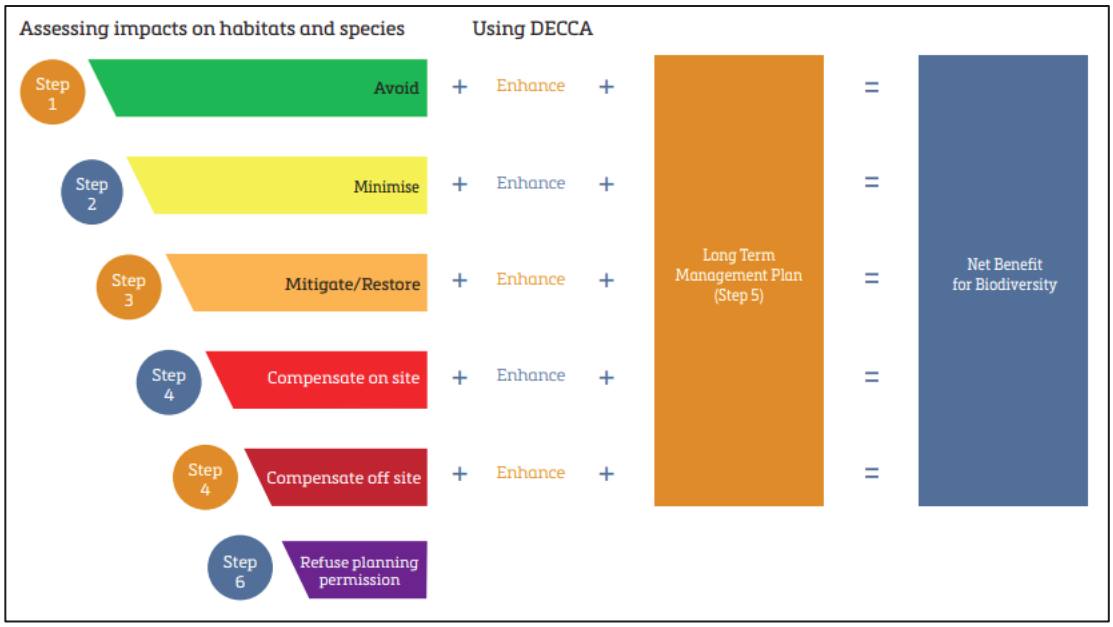
Whilst Green Infrastructure Assessments haven't been undertaken yet by the Council, paragraph 6.2.8 notes importantly that they *'must include identifying ways to avoid or reverse the fragmentation of habitats, and to improve habitat connectivity where appropriate, through the promotion of wildlife corridors, protection of riverine corridors and identifying opportunities for land rehabilitation, reducing pollution, landscape management and habitat restoration, creation and nature recovery.*' This can be implemented within green infrastructure statements where appropriate in lieu of the updates to Local Plans and the Green Infrastructure Assessment being undertaken.

Paragraph 6.2.11 notes that the *'built environment should be enhanced by integrating green infrastructure into development through appropriate site selection and use of creative design.*' It is important to note that this proposal and the wider quarry would not fall under *'built environment'* as minerals extraction and recycling operations would not be considered built environment. Additionally, it is a temporary use of the land and the quarry will be fully restored once the operations and mineral workings cease. Therefore, it isn't possible at this time to *'embed the benefits of biodiversity and ecosystem services into new development and places, help to overcome the potential for conflicting objectives, and contribute to health and well-being outcomes.'* This is covered in more detail within the Development Impacts and Biodiversity Enhancements sections of this document.

The requirement for all planning applications to be supported by a green infrastructure statement is addressed within Paragraph 6.2.12. It is noted that the statements *'will be proportionate to the scale and nature of the development proposed and will describe how infrastructure has been incorporated into the proposal.'* Further guidance expands on this and allows for varying scaled schemes to have different level of detail in the green infrastructure statements. Importantly *'the green infrastructure statement will be an effective way of demonstrating positive multi-functional outcomes which are appropriate to the site in question and must be used for demonstrating how the step-wise approach has been applied.'*

The Step-Wise approach mentioned in Paragraph 6.2.12 is comprehensively detailed within Paragraph 6.4.15 with Figure 12 of Planning Policy Wales illustrating the approach (included in Figure 2 below).

Figure 2: Figure 12[1] – Summary of the Step-Wish Approach



The overall goal is to ensure that planning applications consider, protect, minimise, mitigate and enhance biodiversity and ecosystems. Any proposal within any statutory designated site would be considered unacceptable unless there are wholly exceptional circumstances. Additionally, it is noted that all stages of the *'step-wise approach must be accompanied by a long term management plan of agreed and appropriate avoidance, minimisation, mitigation/restoration and compensation measures alongside the agreed enhancement measures.'*

Development Impacts

As noted above the application site and the wider quarry have an extensive planning history which has seen the evolution of the operations on site. Therefore, any original green infrastructure (assumed mix of agricultural and woodland habitats) has already been removed over this time as the quarrying operations date back to 1948. However, due to the planning history the site has been worked progressively in accordance with approved plans, conditions and surveys attached to the site since 1948 and through subsequent planning approvals.

The type of development proposed has already been approved in principle due to the previous permissions (10/0134/FULL, 14/05821/FULL and 18/0955/FULL) and given the nature of this proposal being located within the 'quarry bowl' then the development impacts on green infrastructure is considered negligible as there is no green infrastructure on the immediate site or wider site that would be impacted.

It is important to note that by the very nature of quarrying it is considered a temporary use of land and the quarry will be restored to a nature conservation/amenity afteruse when mineral extraction ceases by the end of 2042. As such the previous permissions for the recycling on site have all had a similarly worded restoration condition to be in line with the restoration requirements imposed on the quarry. A request to postpone the Periodic Review was agreed in 2021 as the Council considered the existing development controls through planning

[1] Planning Policy Wales - Edition 12 (gov.wales)

condition to be satisfactory and in line with legislation and policy requirements. The next Periodic Review will be in 2031 at which time further measures may be required by the Council. Therefore, given the current situation it is considered that the improvement of green infrastructure is tied to planning condition 22 – 25 (inclusive) of P/05/1100 (detailed further in Table 1 below). It is proposed that, should planning permission be granted for this proposal, similar conditions as previously imposed are included within the approval to safeguard the full restoration of the whole quarry to achieve a positive gain on biodiversity and green infrastructure.

The Step-Wise Approach

As noted above all developments need to adopt the Step-Wise Approach as detailed within Paragraph 6.4.15 of Planning Policy Wales in order to demonstrate this this proposal has been assessed against the Step-Wise Approach and the findings are laid out in the table below.

Table 1: Proposal Specific Step-Wise Approach

Step	Step-Wise Criteria	SLR Comments
1a	The first priority for planning authorities is to avoid damage to biodiversity in its widest sense (i.e. the variety of species and habitats and their abundance) and ecosystem functioning. Where there may be harmful environmental effects, planning authorities will need to be satisfied that any reasonable alternative sites (including alternative siting and design options) that would result in less harm, no harm or benefit have been fully considered.	The proposal is within the already established Machen Quarry on areas of land where the development impacts on green infrastructure are considered negligible as there is no green infrastructure on the immediate application site or wider site that would be impacted. Consideration for biodiversity, landscape and by associated green infrastructure at the wider site has been achieved due to the formal assessments within the submitted Environmental Statement of the planning application P/05/1100 with damage being avoided or mitigated where possible. Additionally, there are no alternative sites which would be suitable for this proposal due to the close connection to Machen Quarry and the development needing to be in close proximity to the quarry. Thus, the proposal would accord with Step 1a.
1b	Proposals in statutory designated sites are, as a matter of principle, unacceptable and therefore must be excluded from site searches undertaken by developers. This principle also extends to those sites containing protected species and habitats which are irreplaceable and must be safeguarded. Such sites form the heart of resilient ecological networks and their role and the ecosystem services they provide must be protected, maintained and enhanced and safeguarded from development. It will be wholly exceptional for development to be justifiable in such instances.	The site does not fall within a statutory designated site nor currently supports any opportunities for protected species due to the extractive nature of the wider quarry. Step 1b therefore is not relevant for this proposal.
2	When all locational, siting and design options for avoiding damage to biodiversity have been exhausted, applicants, in discussion with planning authorities, must seek to minimise the initial impact on biodiversity and ecosystems by:	Whilst this proposal is not considered to impact biodiversity, it would not be possible to maintain any existing habitat areas within the application areas as there are not habitats present. The areas to be taken up by the

Step	Step-Wise Criteria	SLR Comments
	• maintaining the largest possible area of existing habitat supporting biodiversity and functioning ecosystems, particularly Section 7 habitats and species where present, by minimising development size and appropriate orientation on site, paying due regard to the potential for continued long term maintenance and management of retained areas to benefit biodiversity; • ensuring that retained habitats continue to be well connected to adjacent habitats to provide connectivity for key species and ensuring that the favourable conservation status of local species populations is maintained; • retaining existing features, develop a management plan for their future care (e.g., trees, hedgerows, species rich grasslands, heath, wetlands, ponds and freshwater habitats) and use appropriate buffers to protect these from construction and operational impacts; and • using proven innovative/creative solutions (where required) to minimise damage and maintain existing biodiversity features and ecosystems in tandem with robust monitoring and rectification strategies.	proposals are dictated by the available space not already taken up by quarrying and ancillary activities and account for a relatively small proportion of the quarry overall. It is considered that through the conditions requiring restoration of the wider quarry and by association this proposed development areas that there will be a significant benefit to biodiversity and habitats which will be in full accordance with all criteria of Step 2.
3a	Where, after measures to minimise impact, biodiversity and ecosystems could still be damaged, or lost through residual impacts, the proposed development should mitigate that damage. Mitigation measures must be put in place to limit the negative effects of a development	It is not considered this proposal would impact upon biodiversity and ecosystems as it is a minor development proposed to be sited within an established quarry. However, within the consolidation application P/05/1100 for the quarrying activities a number of mitigations measures were agreed and have been implemented through extensive landscape tree planting, ongoing progressive restoration and a Site BAP since the permission was granted in 2006. Therefore, by association with the quarrying operations this proposal is in accordance with Step 3a.
3b	Effective mitigation or restoration measures should be incorporated into the design proposal following the consideration of steps one and two above. Mitigation or restoration measures must be designed to address the specific negative effects by repairing damaged habitats and disturbed species. They should seek to restore in excess of like for like, accounting for disturbance and time lags for the recovery of habitat and species, and in every case, mitigation or restoration measures should seek to build ecosystem resilience within the site and where possible the wider area. In some circumstances, where like for like mitigation measures are not possible, particularly in respect	Restoration of the quarry site is already controlled by way of Condition 22 and 23 of P/05/1100 and the subsequent permissions for recycling operations on site have been granted subject to conditions for restoration to be in line with those measures under P/05/1100. Further details of these are included in the 'Biodiversity Enhancements' section below. It is anticipated that if this proposal is approved, a similar condition would be imposed to be in line with the overall quarry restoration.

Step	Step-Wise Criteria	SLR Comments
	of restoration measures, it may be necessary to consider on site compensation measures in the first instance. In designing mitigation measures where uncertainty exists, applicants should follow the precautionary principle and assume a significant effect. Off-site compensation measures (as set out in step four below) should be considered as a last resort.	
4	When all the steps above have been exhausted, and where modifications, alternative sites, conditions or obligations are not sufficient to secure biodiversity outcomes further on-site/immediately proximate, as a last resort off-site compensation for unavoidable damage must be provided. This must be of significant magnitude to fully compensate for any loss. In the absence of a planned approach, compensation measures must be guided by place-based evidence and the onus is on applicants to address the following: a. Off-site compensation should normally take the form of habitat restoration, or habitat creation, or the provision of long-term management agreements to enhance existing habitats and deliver a net benefit for biodiversity. It should also be informed by a full ecological assessment to establish a formal baseline before habitat creation or restoration starts and secured far enough in advance before the loss of biodiversity on site. b. The Green Infrastructure Assessment should be used to identify suitable locations for securing off-site compensation. Where possible, a landscape–scale approach, focusing on promoting wider ecosystem resilience, should help guide locations for compensation. The Green Infrastructure Assessment should provide a spatial guide to opportunities already identified for securing a net benefit for biodiversity. Using the assessment will help determine whether locations for habitat compensation should be placed close to the development site, or whether new habitat or additional management located further away from the site would best support biodiversity and ecosystem resilience at a wider scale. c. Where compensation for specific species is being sought, the focus should be on maintaining or enhancing the population of the species within its natural range. This approach might also identify locations for providing species-specific compensation further away from the site. Where they exist, Spatial Species Action Plans should be used to help identify suitable locations. d. Any proposed compensation should be place based, take account of the Section 6 Duty	It is considered that Step 4 would not be required for this proposal as the overall restoration of the quarry within which the proposal is to be located would ensure that there are biodiversity and green infrastructure improvements.

Step	Step-Wise Criteria	SLR Comments
	(Biodiversity and Resilience of Ecosystems Duty), the DECCA framework and appropriate ecological advice from the local authority Ecologist, NRW or a suitably qualified ecologist.	
5	Each stage of the step-wise approach must be accompanied by a long term management plan of agreed and appropriate avoidance, minimisation, mitigation/restoration and compensation measures alongside the agreed enhancement measures. The management plan should set out the immediate and on-going management of the site, future monitoring arrangements for all secured measures and it should clearly identify the funding mechanisms in place to meet the management plan objectives. The management plan must set out how a net benefit for biodiversity will be achieved within as short a time as possible and be locally responsive and relevant to local circumstances.	The long term management plan for the quarry has been initially established through Conditions 22, 23, 24 and 25 of P/05/1100 and at the time of the postponed Periodic ROMP in 2031 if further information is required at that time, then this will be presented to the Council. Given that this proposal is comparatively minor in nature and will be sited within the main quarry the conditions attached to permission P/05/1100 provide an ongoing long term management plan through progressive restoration (condition 2) , full terminal restoration on completion of quarrying operations (conditions 23 and 24) and a 5 year period of aftercare (condition 25).It would not be necessary to provide an individual long term management plan for this proposal as it is presence is not a separate entity to the wider quarry and it would see a fragmented approach to the wider benefits of a full quarry restoration.
6	Finally, where the adverse effect on biodiversity and ecosystem resilience clearly outweighs other material considerations, the development should be refused.	The proposal has been assessed against the Step-Wise Approach and it would not have an adverse effect on biodiversity and ecosystem resilience (or green infrastructure) which would outweigh other material considerations. It also accords with the other Steps within Paragraph 6.4.15 and therefore the proposal should not be automatically refused based on Step 6.

Biodiversity Enhancements

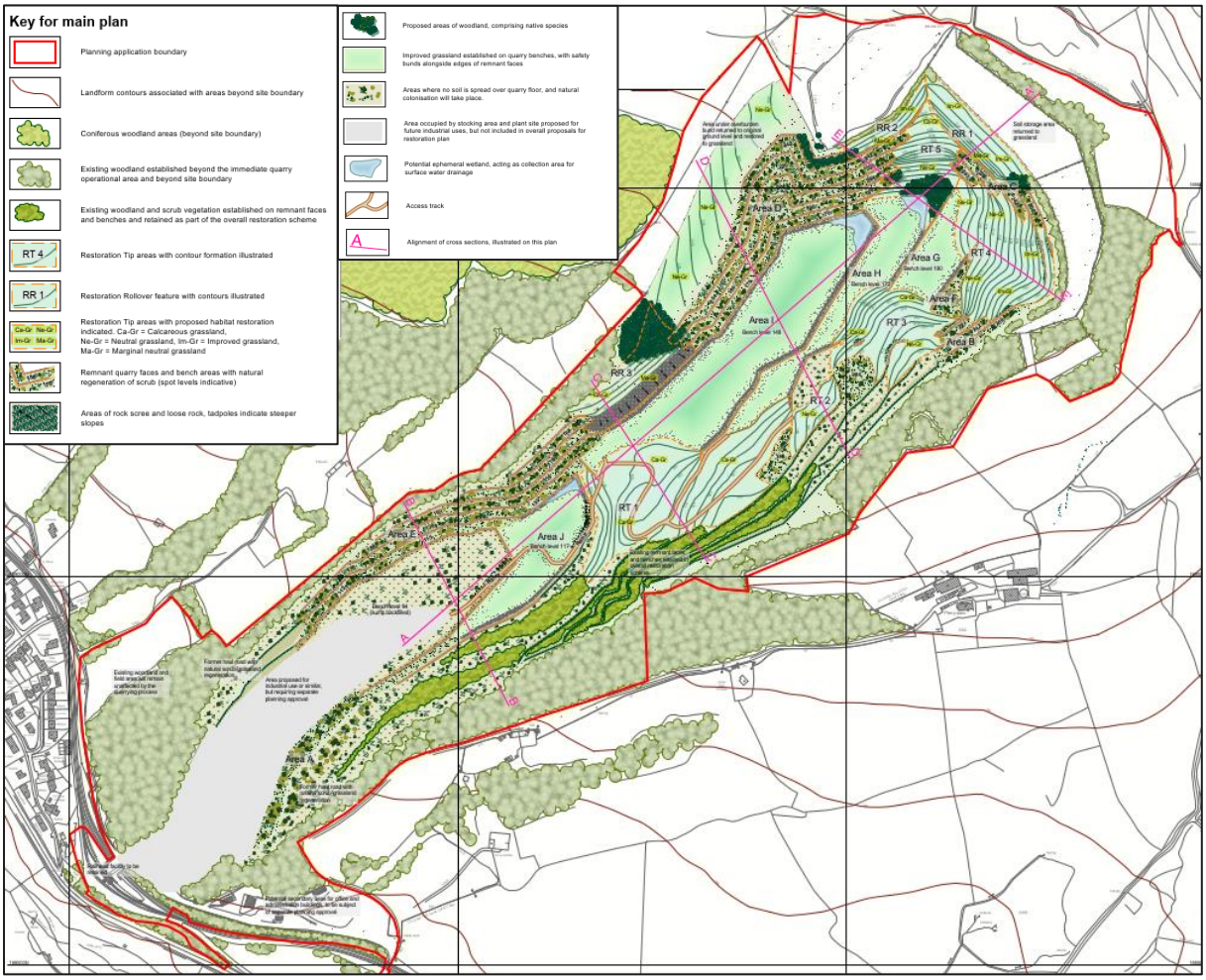
It is important to note that the wider quarry site, of which this proposal will be situated within, has been assessed for its impacts on biodiversity, landscape and ecology by way of planning permission P/05/1100 which was supported by an Environmental Statement (ES). It was concluded that the details assessments and mitigation were acceptable, and the site was subsequently approved permission ensuring that the measures within the ES were applied through relevant imposed conditions (see section on Relevant Planning History). The wider site has since been developed in accordance with those conditions. Whilst a detailed final restoration scheme has not been submitted, Condition 23 of P/05/1100 requires a scheme to be submitted by the end of 2040, or upon the earlier permanent cessation of minerals extraction. Condition 3 requires the detailed final restoration scheme to be in accordance with a Restoration Master Plan (Plan 8a) submitted with the application which shows the restoration concept for the quarry to be focussed on natural regeneration and recolonisation of the quarry faces and benches and creating areas of grassland. For the avoidance of doubt a copy of Plan

8a has been included as an appendix of this document but a snippet has been included below for a visual representation of the scheme.

The biodiversity and green infrastructure benefits of the site restoration will include:

- Calcareous grassland;
- Neutral grassland;
- Improved grassland;
- Marginal neutral grassland;
- Natural regeneration of scrub on quarry faces;
- Woodland comprising on native species;
- Natural colonisation of the quarry floor; and
- Ephemeral wetland

Figure 3: Restoration Masterplan (Plan 8a)



As noted, there was no requirement for biodiversity or ecological assessments for the previous recycling operations applications. Nor were there any subsequent conditions imposed for future provision of such assessments. Finally, any changes to the existing requirements for the restoration of the whole quarry is beyond the scope of this application and therefore not included.

Conclusion.

It is considered that subject to the above, the proposed development accords with Planning Policy Wales Chapter 6 and has where possible implemented a Step-Wise Approach. The development would reintroduce biodiversity and green infrastructure once the temporary uses of land ceased, and the quarry is fully restored.

Thus, ensuring that any adverse environmental effects are avoided where possible and if they can't be avoided, they will be minimised and mitigated as per the details of the submitted Environmental Statement for the wider quarry and the subsequent restoration scheme which will be submitted by the end of 2040, or within 3 months of the earlier permanent cessation f quarrying operations, as per Condition 23 of P/05/1100.

Signed

Angela Collins

Principal Planner

Dated: 23/09/2024

Appended: Machen Site Biodiversity Action Plan (BAP)