

CLIFF STABILISATION WORKS, DEMOLITION & RECONSTRUCTION OF A SINGLE HOUSE

Morlais, Lon Penrallt, Nefyn, Pwllheli, Gwynedd LL53 6EP

## CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

28 May 2024

*Revision 2 updates in red to make reference to the latest version of the Land Studio Precautionary Ecological Working Specifications dated May 2024 version P02 and also note the inclusion of the mitigation of sediment mobilisation through runoff from the site in Section 21.0*

Prepared by Nic Downs DMA and Richard Wyn Owen CJ(RE)Ltd

Reviewed and approved by Carolyn Merrifield DMA

## **Quality, Environment, Energy, Information Security, H&S Policy and Environmental Statements**

This plan is written in accordance with relevant Statutory Instruments and incorporates the 'CDM Construction Phase Health and Safety Plan' as well as the 'Construction Environmental Management Plan'

QES, Information Security and Energy Policy Statements stating commitment to our certified ISO standards will be displayed or made available at all of our site offices, and detail key corporate QES and Energy objectives and responsibilities.

As Principal Contractor, Colin Jones (Rock Engineering) Ltd, will cooperate with and exchange information to the Client, Principal Designer, Contractors and Site operatives on any Health & Safety or Environment matters associated with the scheme.

Where the Company is involved with any design work, this will be carried out in compliance with CDM Regulation 9; and information will be passed to appropriate organisations / personnel in accordance with Regulation 9(4).

This CEMP has been prepared by the Design Team and Rock Engineering for issue to Gwynedd Council for approval prior to any construction works commencing on site.

This CEMP is a live document. The CEMP will be reviewed and where necessary updated at least once per month or following any significant change. Details of the review will be recorded in the schedule below, even when no amendments are made.

A digital copy of this document shall be stored on the company SharePoint document management system in the relevant live project folder.

## 1 0 Background

The Blackham Family are looking to rebuild their Beach House on Nefyn Beach. Morlais (previously known as Waters Edge) was built in the early 1970's and has been used by four generations of the family on a frequent basis over the intervening period.

Recent cliff falls in the vicinity of Morlais has raised concerns about the safety of its inhabitants and users of the cliff path, consequently a detailed appraisal of protection measures was commissioned.

The findings of this report concluded that significant retention structures are required to be built behind the building, as well as additional cliff stabilisation and drainage works which can only realistically be carried out if the existing structure is removed.

Morlais, built in the early 1970's and still fairly original is now in need of extensive refurbishment as apart from essential maintenance it remains virtually unchanged. The building is a flat roof, timber framed, modern design somewhat at odds with the adjacent traditional stone cottages built just off the beach and although it has had replacement windows and some re-cladding works over the years it is now looking tired and no longer meets current requirements. The partially exposed timber frame is also showing signs of distress.

The Blackham's approached Downs Merrifield architects to investigate the options available to them, to provide the family with a long-term property, built to modern standards and as safe as possible from the risk of cliff falls.

This process commenced in late 2020 and a number of design options were investigated, before an option was approved which replicated the accommodation and proposed a similar sized building, albeit with a change in appearance, more suited to it's sensitive location.

The planning process was embarked upon in 2021 and involved detailed discussions with Gwynedd Council and Natural Resources Wales where all aspects of the ecological implications were covered.

## **2.0 The Location**

Morlais occupies a prime position on Nefyn beach with its own slipway and ownership not only of part of the cliff to the rear but also down to the mean high-water line.

The current building is located facing the bay and the coast line to the north east and can only be reached by foot unless a suitable four-wheel drive vehicle is driven along the beach when the tide is out having access via Lon Y Traeth down from Nefyn itself.

To the east are beach huts during the summer season and to the north west are a collection of small beach huts and traditional stone cottages.

The closest building is an original boat house, probably constructed when Nefyn was an important herring fishing centre when over 40 boats were operated from the beach.

## **3.0 Description of the Works**

The existing building will be demolished and a new house of a similar size and scale will be built. In order to carry out this work a number of civil engineering tasks need to be carried out. These comprise a new footpath down to the beach allowing a diversion of the existing path, the demolition of the existing sea defence wall and its replacement, a retaining wall above the sea defence wall and new footpath, the demolition of the existing house, the cliff stabilisation works, a new retaining wall to the rear of the house and a new ground floor slab with underground drainage.

Once these civil engineering works have been carried out the new house can be built, which will comprise a timber frame structure, built mostly off site, then all the external cladding materials, windows and doors, internal finishes and services etc to completion.

**Duty Holder Information:**

**Main Contractor:** Colin Jones (Rock Engineering) Ltd, Unit 11, Penamser Ind Est, Porthmadog, Gwynedd, LL49 9NZ

Named Representative: Richard Wyn Owen tel 07766 952606

Site Agent: Darren

**Client:** Blackham Family

Named Representative: Chris Blackham

**Principal Designer:** Downs Merrifield architects, The Studio, 5 Cefn Coed Crescent, Cyncoed, Cardiff CF23 6AT

Named Representative: Nic Downs tel 02921 672672

**Contract Administrator:** GroundSolve Ltd

Named Representative; Stefan Imiolczyk, Unit 1 Well House barns, Chester Road, Bretton, Flintshire CH4 0DH

**Structural Engineer:** Datrys

Named Representative: Josh Smart, Unit 6, Doc Fictoria, Caernarfon, Gwynedd LL55 1TH

**Ecologist:** Land Studio

Named Representative: Val Gateley, The Old Rectory, St Mary's Hill, Chester CH1 2DW

**F10**

An F10 has been issued to respect the start date on site of 13 February 2024

### Initial Assessment of Risks

	<i>Red Risks:-</i>	To be closed out by
1.	<p>The following surveys have been issued</p> <p>Measured Topo survey</p> <p>Geotechnical Report ref 22-10-19 Morlais, Nefyn Issue Rev E</p> <p>Asbestos within building report</p> <p>Ecology survey ref 223_MOR_700_GA and management plan ref 223_MOR_LEMP</p> <p>Services – water and drainage are believed to run through the site above the building up to the top of the cliff – the exact location of these to be investigated during site strip</p>	
2.	<p>Phase 0 Cut down the vegetation on the Cliff</p> <p>Phase 1 Construction of new alternative footpath providing access for the public down to the beach</p> <p>Phase 2 Close the existing footpath in front of Morlais and secure the construction site</p> <p>Phase 3 Demolish the existing house, rebuild the sea defence wall and cliff stabilisation works</p> <p>Phase 4 Construct high level footpath at the top of the new sea defence wall</p> <p>Phase 5 Construct rear retaining wall, building slab and services</p> <p>Phase 6 Construct Morlais</p>	Rock Engineering then Principal Contractor
3.	During site strip if any invasive or protected species are discovered, these to be notified to Val Gateley of Land Studio UK	Land Studio UK
4.	The existing building to be demolished (to be carried out in accordance with contractors H&S method statement) – note if possible, concrete elements to broken up on slab in sufficiently small and safe pieces for re-use? Scabbling of concrete, Demolition by hand held breakers	Rock Engineering, Datrys
5.	Note stabilisation of cliff needs to be undertaken before removal of structural remaining walls to the rear of the house. This to be done in alternating sections to avoid major collapse. Any voids to be filled in accordance with contractors H&S method statement	Rock Engineering, Groundsolve
6.	The site has a public footpath and public right of way running through it, including the access to the site which runs along the beach. This will be used by the public throughout the build, and consequently any construction works require segregation.	Rock Engineering then Principal Contractor

7.	The access to the site is down a narrow winding road, Lon y Traeth in Nefyn. This route then runs along the beach, alongside a large number of beach huts during the summer months. Access is dependent on tide times and access is not possible during high tides and in poor weather. Transfer of materials from delivery vehicles to tractor trailer will need to take place in Nefyn, at a location to be agreed that doesn't impede other traffic	Rock Engineering then Principal Contractor
8.	A zone has been identified on A(P)-52 the CEMP Site Plan for parking and unloading of tradesmen's vehicles and offloading. Note this vehicle movement must be managed and this area must not become a carpark during the build	Rock Engineering then Principal Contractor
9.	All structural steelwork and timber frame to be constructed with safety nets and or fall cushions. Note upper floors sacrificial decking to joists to be provided	Principal Contractor
10.	Specification of fragile rooflights, photovoltaic panels, 2 <sup>nd</sup> floor windows. Consider access of glazing for cleaning – pole and reach in future maintenance –reversible windows specified where possible	Dma , 3D Consulting
11.	Processes giving rise to large quantities of dust (eg dry cutting, blasting) to be avoided or damping to be undertaken to eliminate.	Principal Contractor
12.	Design of roof mounted services or in confined spaces	3D Consulting
13.	Slip hazard on ceramic floors which might get wet	DMA
14.	Choice of material for external ramps	Rock Engineering
15.	Consider fire containment during construction – note this is a timber frame building and will be flammable until completion	Principal Contractor
16.	Falling from upper floors – window cills and balconies to be designed with secure edges both during construction and after handover.	Principal Contractor, DMA
	<i>Amber Lists:-</i>	
17.	Manholes and inspection chambers in circulation areas, Loft Hatch	Datrys
18.	External manholes in vehicle access areas, changes of level	Datrys
19.	Specification of lip details (trip hazards) at thresholds/ stairs etc	DMA
20.	Specification of small or single steps in external paved areas	DMA
21.	Large building elements – ie more than 20kgs	Datrys
22.	Large and heavy glass panels	DMA
23.	Avoidance of chasing out of concrete or block walls and floors	Principal Contractor
24.	Specification of heavy Lintels – slim metal or hollow concrete better	Datrys, Timber Frame installer
25.	Specification of Solvent Based Paints and Thinners, particularly in confined areas	Dma, Principal Contractor
26.	Site traffic onto site and turning or reversing into road/storage/ unloading of materials	Principal Contractor
27.	On site welding to be avoided if possible	Datrys
28.		
	<i>Green Lists – to be encouraged</i>	
29.	Provision of adequate access and headroom for maintenance in plant room, and adequate provision for replacing heavy components.	3D Consulting

30.	Thoughtful location of mechanical and electrical equipment, light fittings, security devices and so on to facilitate access	3D Consulting
31.	Specification of concrete products with pre-cast fixings to avoid drilling.	Datrys
32.	Specification of half board sizes for plasterboard to make handling easier.	DMA
33.	Early installation of permanent means of access, and prefabricated staircases with hand rails	Principal Contractor
34.	Off-site timber treatment if PPA- and CCA-based preservatives are used (boron or copper salts can be used for cut ends on site).	Principal Contractor
35.	Off-site fabrication and prefabricated elements to minimise on site hazards.	Principal Contractor
36.	Encourage the use of engineering controls to minimise the use of personal protective Equipment	Principal Contractor
37.	Early installation of staff welfare Provisions	Principal Contractor
38.		

#### **4.0 Planning Permission**

A Pre-App was submitted to Gwynedd in 2021, which was then followed by a Full application later in the same year.

Planning permission C21/1220/42/LL was granted in August 2023 to carry out cliff stabilisation works, demolish the existing building and reconstruct a new house.

#### **5.0 Construction Planning Overview**

Since planning permission was received, the design team have been working closely with Colin Jones (Rock Engineering) Ltd to develop a strategy to deliver the project.

Part of this process is to write a Construction Environmental Management Plan which has now been prepared by the Design Team in conjunction with the now appointed contractor, Colin Jones (Rock Engineering) Ltd for issue to Gwynedd Council.

Vehicular access to the site is only achievable via the beach, which is accessed via Lon y Traeth in Nefyn itself. This will need to be carefully co-ordinated depending on the time of year, the state of the tide and the weather conditions. Traffic is permitted on the beach.

A major building project was carried recently at Penogfa, about 7 properties away utilising a tractor and trailer to move materials across the beach. The tractor can negotiate the sand, which can be soft in places. The transfer of materials from delivery vehicles to the tractor trailer combination will need to take place at a suitable location in Nefyn that doesn't impede other traffic. There will also need to be careful control of tradesman's vehicles to ensure that the area of the beach in front of Morlais doesn't become a car park.

Hoardings initially comprising Heras fencing will be used to protect the public from the site works but it is intended to replace these with more permanent ply panels fixed to timber posts cast in concrete to secure the site prior to the construction of the house. This will incorporate gates in the same finish to allow access. The public right of way will be kept open at all times. The hoardings will include safety information including contact details of the contractor and other responsible members of the design team.

General Site Management will be completed by the contractor but this will include details of the construction programme including timetable, details of site clearance; details of site construction drainage, containment areas, appropriately sized buffer zones between storage areas (of spoil, oils, fuels, concrete mixing and washing areas) and any watercourse or surface drain.

The existing building will be carefully demolished by the contractor in accordance with industry guidelines. The resultant materials will be carefully segregated for re-use or disposal on site and then transported off the beach using the tractor and trailer.

Remediation works to the existing seawall will be carried out, using the same techniques as the existing construction, namely an inclined pre-cast concrete wall.

In accordance with the Protected Species and Habitat Survey and in accordance with current guidelines and legislation, the Non-native Species, namely Himalayan balsam and Montbretia will be removed and disposed of in accordance with the current guidelines. **Methods for dealing with the removal of these Non-native invasive species are included in the updated Land Studio Precautionary Ecological Working Specifications dated May 2024 version P02.**

Once the existing dwelling has been demolished the cliff stabilisation works will be carried out in accordance with the Potentially Damaging Operation Consent.

The new retaining wall at the rear of the new property has been designed as a series of precast concrete sections, to be brought onto the site and positioned in accordance with a pre-determined installation procedure. Once these are installed the new foundations and ground floor slab for the new dwelling will be formed and poured.

The design of the house is based on a timber frame construction which will be largely constructed off site and brought to site in sections. This will include the floors and roof. The timber wall panels will be transported across the beach using the tractor and trailer. Once the timber frame is complete the roof and wall finishes will be built. The roof comprises interlocking zinc panels, the walls are charred timber and the base of the building is locally sourced natural stone walling. Windows will then be installed so that a weather tight environment is created allowing first and second fix internal finishes to be completed.

Restrictions on timing and duration of works will be determined by Gwynedd but additional input from the contractor will include details to minimise noise and vibration from building operations, measures to control light spill and the conservation of dark skies.

Additional input from the contractor will include details of fuel and chemical storage and containment; details of waste generation and its management; details of water consumption and wastewater during construction.

This plan is being written in conjunction with the contractor when appointed with reference to national legislation, particularly that of the Guidance for Pollution Prevention (especially GPP5 'Works and maintenance in or near water' & PPG6 'Working at construction and demolition sites') and the CROW Act (2000) and EU Habitats Directive (1992)

It will identify potential pollutants and describe strategies for dealing with pollution incidents and waste materials management throughout the various phases of the project.

The site hoardings will include contact details of the persons and bodies responsible for activities associated with the CEMP and emergency contact details, both during construction hours and out of work hours.

## **6.0 Site Access Arrangements**

Vehicular access to the site is only achievable via the beach, which is accessed via Lon y Traeth in Nefyn itself. This will need to be carefully co-ordinated depending on the time of year, the state of the tide and the weather conditions.

Traffic is permitted on the beach.

A major building project was carried recently at Penogfa, about 7 properties away utilising a tractor and trailer to move materials across the beach. The tractor can negotiate the sand, which can be soft in places. The transfer of materials from delivery vehicles to the tractor trailer combination will need to take place at a suitable location in Nefyn that doesn't impede other traffic. There will also need to be careful control of tradesman's vehicles to ensure that the area of the beach in front of Morlais doesn't become a car park.

See drawing Downs Merrifield architects drawing A(P) 52 rev 1 Site Plan – CEMP as well as Colin Jones (Rock Engineering) Ltd Construction Phase Plan dated 15 February 2024

## 7.0 Site Set-Up

Hoardings comprising painted marine ply panels fixed to timber posts cast in concrete will be used to secure the site prior to demolition and construction activities. This will incorporate gates in the same finish to allow access. The public right of way will be kept open at all times. The hoardings will include safety information including contact details of the contractor and other responsible members of the design team.

The hoarding will include images of the completed design together with some historical information of the site for the benefit of the public. This has proved to be a useful facility on other projects to help allay fears and inform the public about timescales etc

During the works, the public will need to pass in front of the gates, especially at high tide when the crossover point takes place on the slipway. This will need to be carefully managed so that the gates are closed at all times when deliveries and contractor access are not taking place.

The hoarding will run from the Boat House to above the public access path as shown on drawing A(90) 52, in order to keep the public off the construction site.

Site welfare facilities will be required, including toilets, drying facilities and a mess room for preparing hot food and drinks.

See Downs Merrifield architects drawing A(P) 52 rev 1 Site Plan – CEMP and Colin Jones (Rock Engineering) Ltd Construction Phase Plan dated 15 February 2024

## 8.0 General Site Management

Refer to Colin Jones (Rock Engineering) Ltd Construction Phase Plan dated 15 February 2024

## 9.0 Removal of Invasive Non-Native Species

In accordance with the Protected Species and Habitat Survey by Cambrian Ecology dated 28 January 2022 and as covered in Land Studios Landscape Management Plan dated December 2022 and Precautionary Ecological Working Specifications dated January 2024 **and subsequently updated in May 2024**, the Non-native Species, namely Himalayan balsam and Montbretia will be removed and disposed of in accordance with the current guidelines.

## 10.0 Proposed Temporary Footpath

The Llyn Coastal Path extends for 180 miles around the Llyn Peninsula from Llanfairfechan to Machynlleth. As it approaches Porth Nefyn at the western end of Nefyn Beach, there is a Public Footpath that runs down the cliff to provide pedestrian access to the beach.

The lower part of the footpath from the coastal path to the beach is in a poor state, the handrails are in need of attention and the path itself suffers during heavy rain from continuous erosion.

There is also a stream that runs through the lower corner of the current path which wets the steps on the last corner making them perilous when the cliff behind is full of water.

A consequence of the proposed rebuilding of Morlais will be the formation of a temporary footpath in order to create a safe building site and to ensure the path is closed for the minimum period possible.

This temporary footpath will comprise a number of piled concrete landings linked by pre-cast concrete steps with handrails where applicable.

See Downs Merrifield architects drawings A(90)-10 rev 4 Public Footpath, A(90)12 rev 5 Footpath Sections, A(90)52 rev 2 Retaining Wall Details, A(90)57 rev 2 Retaining Wall Section – Handrail, A(90)11 rev 6 Public Footpath – Views

## 11.0 Seawall Repairs

Remediation works to the existing seawall will be carried out, using similar techniques as the existing construction along the remainder of the beach back towards the access road, namely an pre-cast concrete wall.

The toe of this wall will be restrained by a sheet piled structure with a cast insitu concrete capping. At the top of the new sea defence wall is a further cast insitu concrete path with handrails with the ground above the path restrained by a pre-cast concrete wall panel.

This design is currently the subject of a Marine Licence application via Natural Resources Wales. The application has been registered and is currently being assessed. The reference is CML2407 for Morlais, Nefyn.

See Downs Merrifield architects drawings A(90)52 rev 2 Retaining Wall Details, A(90)57 rev 2 Retaining Wall Section – Handrail, A(90)11 rev 6 Public Footpath – Views

## 12.0 Site Clearance and Demolition

The existing building will be carefully demolished by the contractor in accordance with industry guidelines. The resultant materials will be carefully segregated for re-use or disposal on site and then transported off the beach using the tractor and trailer.

Kimberley Gulf Limited have prepared an Asbestos Survey of the house dated 19 October 2020. A further more intrusive Asbestos Demolition Survey has since been carried out by Sentinel. Their report dated 01 March 2024 is included as part of this CEMP.

Vinyl floor tiles have been found to contain Chrysotile Asbestos and a number of fire protection boards encountered both internally and externally which were proven to contain Chrysotile and Amosite asbestos

As the building is due for demolition / major refurbishment, all of the asbestos containing materials located during the course of the surveys will be removed strictly in accordance with the requirements of The Control of Asbestos Regulations 2012 and other supporting regulations, approved codes of practice and HSE guidance documents.

Whilst every reasonable effort has been made to locate all asbestos containing materials within the building surveyed, it is possible that during the course of the refurbishment / demolition that further suspect asbestos containing materials be encountered. Should this be the case, works in the area should stop immediately and the material should be sampled and analysed to confirm or refute the presence of asbestos and dealt with accordingly.

See Colin Jones (Rock Engineering) Ltd Construction Phase Plan dated 15 February 2024 as well as Sentinel Asbestos Demolition Survey dated 01 March 2024

## 13.0 Cliff Stabilisation

Once the existing dwelling has been demolished the cliff stabilisation works will be carried out in accordance with the Potentially Damaging Operation Consent.

The design of the cliff stabilisation works behind Morlais has been engineered to provide as much cover to the proposed new building as possible.

The stabilisation will comprise a combination of nails inserted into the cliff face every few metres in a grid pattern with a mesh then restrained on top of the cliff by the nails.

In order to facilitate this the plants and shrubs on the cliff will be cut down to between 200 and 300mm above ground level, which will ensure that the planning soon recovers and then re-greens the cliff once the stabilisation is complete.

Larger trees have been earmarked as being retained.

This work has been carried out and completed during February 2024, before the start of the bird nesting season.

The extent of the stabilisation area is shown on Downs Merrifield architects drawing no. A(P)52 rev 1 where the area to be stabilised extends beyond the Boathouse to ensure that should there be a fall, any dislodged material doesn't simply fall around the stabilised area because of the topography.

In order to carry out the cliff stabilisation works it will be necessary to temporarily close the Cliff Top Footpath, in order to protect the public. An application to temporarily divert the footpath was submitted to Nefyn Town Council on 13 March 2024, via existing public rights of way. It was appreciated that wheelchair access would not be possible during this time, but all of the proposals were accepted by the Council as a temporary issue.

See Downs Merrifield architects drawing no. A(p)52 rev 1 Site Plan CEMP as well as Colin Jones (Rock Engineering) Ltd Construction Phase Plan dated 15 February 2024

#### **14.0 Construction Methods**

As well as the nails and netting approach, a pre-cast concrete retaining wall will be constructed at the rear of Morlais together with vertical netting above the wall. This is part of the belts and braces approach so that should there be a fall then at least 1m of pre cast concrete additional cover against loose material falling down the cliff and a further 1m of netting.

As part of this extra security the retaining wall will also be taken behind the Boathouse.

The design of the house is based on a timber frame construction which will be largely constructed off site and brought to site in sections. This will include the floors and roof. The timber wall panels will be transported across the beach using the tractor and trailer. Once the timber frame is complete the roof and wall finishes will be built. The roof comprises interlocking zinc panels, the walls are charred timber and the base of the building is locally sourced natural stone walling. Windows will then be installed so that a weather tight environment is created allowing first and second fix internal finishes to be completed.

See Colin Jones (Rock Engineering) Ltd Construction Phase Plan dated 15 February 2024

## 15.0 Construction Programme

The cliff stabilisation works can only be carried out after a series of other operations have been completed. The sequence of events will be as follows:

- Phase 0 Cut down the vegetation on the Cliff
- Phase 1 Construction of new alternative footpath providing access for the public down to the beach
- Phase 2 Close the existing footpath in front of Morlais and secure the construction site
- Phase 3 Demolish the existing house, rebuild the sea defence wall and cliff stabilisation works
- Phase 4 Construct high level footpath at the top of the new sea defence wall
- Phase 5 Construct rear retaining wall, building slab and services
- Phase 6 Construct Morlais

Timing wise, Phase 0 commenced on 13 February 2024. The definitive contractors programme has not yet been confirmed but Phase 1 is expected to be started in April 2024 with Phases 2 to 5 carried out during the summer and early autumn. Phase 6 will start in the autumn with completion expected in mid 2025.

See Colin Jones (Rock Engineering) Ltd Construction Phase Plan dated 15 February 2024

## 16.0 Waste Management

Waste management to be carefully controlled by the contractor, including the segregation whenever possible of waste into separate groups depending on their recyclability.

All waste to be taken off site for further processing.

See Colin Jones (Rock Engineering) Ltd Construction Phase Plan dated 15 February 2024

## 17.0 Biodiversity Management

Land Studio have produced a Precautionary Ecological Working Specification and will be monitoring the removal of the invasive species and to provide a proactive approach to minimising ecological impacts during the cliff stabilisation works. **This has now been updated to the Land Studio Precautionary Ecological Working Specifications dated May 2024 version P02**

Also within the report is the translocation of the woodland ground flora on the slope adjacent to the existing dwelling.

This report, together with the original Cambrian Ecology Protected Species and Habitat Survey dated 28 January 2022 and Land Studios Landscape Management Plan dated December 2022 form the basis of the Biodiversity Management Plan

See Cambrian Ecology Protected Species and Habitat Survey dated 28 January 2022, Land Studios Landscape Management Plan dated December 2022 and Land Studios Precautionary Ecological Working Specifications dated January 2024 **Updated in May 2024 version P02**

## 18.0 Soil Management

There is no intention to carry out a soil strip. This is covered under the Cambrian Ecology Protected Species and Habitat Survey dated 28 January 2022, Land Studios Landscape Management Plan dated December 2022 and Land Studios Precautionary Ecological Working Specifications dated January 2024

See Cambrian Ecology Protected Species and Habitat Survey dated 28 January 2022, Land Studios Landscape Management Plan dated December 2022 and Land Studios Precautionary Ecological Working Specifications dated January 2024 **Updated in May 2024 version P02**

## 19.0 Control of Nuisances

Restrictions on timing of work is stated as being from 08 00 to 16 30 Monday to Friday, as stated in the CPP. There will be no weekend working or work on Bank Holidays.

See Colin Jones (Rock Engineering) Ltd Construction Phase Plan dated 15 February 2024

## 20.0 Resource Management

The CPP includes details of fuel and chemical storage and containment; details of waste generation and its management; details of water consumption and wastewater during construction.

See Colin Jones (Rock Engineering) Ltd Construction Phase Plan dated 15 February 2024

## 21.0 Pollution Prevention Plan

This CPP includes spill prevention and containment of potential pollutants and describes strategies for dealing with pollution incidents and waste materials management throughout the various phases of the project. Also to be included are a number of measures to mitigate sediment mobilisation through runoff from the site. These are to comprise:

- Formation and maintenance of protected drainage channels to divert clean water from entering construction areas.
- Suitably designed haul roads with silt fences to reduce traffic areas and contain sediment.
- Water from pumped excavations to be treated prior to discharge from site.
- Consideration given to silt mats and/or lagoons to capture sediment. Sediment captured on site to be carted off site for responsible disposal.

See Colin Jones (Rock Engineering) Ltd Construction Phase Plan dated 15 February 2024

## 22.0 Details of Responsible Persons

The site hoardings will include contact details of the persons and bodies responsible for activities associated with the CEMP and emergency contact details, both during construction hours and out of work hours.

See Colin Jones (Rock Engineering) Ltd Construction Phase Plan dated 15 February 2024

## 23.0 Summary

The net impact of the cliff stabilisation works, the temporary public footpath, improvements to the sea defence wall and the retaining walls to the rear of the new house will bring significant long-term protection against cliff falls, which currently doesn't exist.

Not only will this help to protect users of the building and the public footpath which runs through the site but also members of the public utilising all the benefits of the beach. It will ensure that access to the numerous properties to the north of Morlais is maintained, preserving their sole method of access.

## Appendices

- A Downs Merrifield architects drawing A(P)52 Rev 1 Site Plan – CEMP
- B Colin Jones (Rock Engineering) Ltd Construction Phase Plan Issue 1 dated 15 February 2024
- C Cambrian Ecology Protected Species and Habitat Survey dated 28 January 2022
- D Land Studios Landscape Management Plan dated December 2022
- E Land Studios Precautionary Ecological Working Specifications **updated in May 2024 version P02**
- F Downs Merrifield architects drawing A(90)-10 rev 4 Public Footpath
- G Downs Merrifield architects drawing A(90)12 rev 5 Footpath Sections
- H Downs Merrifield architects drawing A(90)52 rev 2 Retaining Wall Details
- I Downs Merrifield architects drawing A(90)57 rev 2 Retaining Wall Section - Handrail
- J Downs Merrifield architects drawing A(90)11 rev 6 Public Footpath – Views,
- K Sentinel Asbestos Demolition Survey dated 01 March 2024