



IMPORTANT – THIS COMMUNICATION AFFECTS YOUR PROPERTY

COUNCIL OF THE ISLES OF SCILLY

Old Wesleyan Chapel, Garrison Lane, St Mary's TR21 0JD
Telephone: 01720 424455 – Email: planning@scilly.gov.uk

Town and Country Planning Act 1990
Town and Country Planning (Development Management Procedure) Order 2015

PERMISSION FOR DEVELOPMENT

Application No: P/24/013/FUL **Date Application Registered:** 2nd September 2024

Applicant: Mr Keith Sanders
Hugh House,
The Garrison,
St Mary's,
Isles of Scilly,
TR21 0LS

Site address: The Downs Trenoweth St Mary's Isles of Scilly TR21 0NS
Proposal: Replacement of scantle slate roof covering with natural slate and insertion of 3 no. roof lights

In pursuance of their powers under the above Act, the Council hereby **PERMIT** the above development to be carried out in accordance with the following Conditions:

C1 The development hereby permitted shall be begun before the expiration of three years from the date of this permission.

Reason: In accordance with the requirements of Section 91 of the Town and Country Planning Act 1990 (as amended by Section 51 of the Planning and Compulsory Purchase Act 2004).

C2 The development hereby permitted shall be carried out in accordance with the approved details only including:

- P-24-013 Plan 1 Location Plan
- P-24-013 Plan 2 Block Plan
- P-24-013 Plan 3 Proposed Elevations
- P-24-013 Plan 4 Proposed Roof Plan
- P-24-013 Plan 5 Proposed Velux Heritage Conservation Roof Window
- P-24-013 Plan 6 Description of Materials
- P-24-013 Plan 7 Design and Heritage Statement
- P-24-013 Plan 8 Site Waste Management Plan
- P-24-013 Plan 9 Bat and Barn Owl Survey
- P-24-013 Plan 10 Bat and Bird Survey
- P-24-013 Plan 11 Bat Presence and Absence Survey
- P-24-013 Plan 12 Bat Presence and Absence Survey 2

These are stamped as APPROVED

Reason: For the clarity and avoidance of doubt and in the interests of the character and appearance of the Conservation Area, Area of Outstanding Natural Beauty and Heritage Coast in accordance with Policy OE1 and OE7 of the Isles of Scilly Local Plan (2015-2030).

C3 The materials used in the construction of the development hereby approved shall be as

detailed within the permitted application particulars and shall be retained permanently as such, unless prior written consent is obtained from the Local Planning Authority to any variation.

Reason: To safeguard the appearance of the building and the character of the area.

C4 The development hereby approved shall be undertaken in accordance with the Mitigation Strategy outlined in Chapter 4 of the Bat Presence/Absence Surveys (PAS) (24-3-1) dated 11 September 2024.

Reason: In the interests of protecting the residential amenities of the islands.

C5 No construction plant and/or machinery shall be operated on the premises, as part of the implementation of this permission, before 0800 hours on Mondays through to Saturdays nor after 1800 hours. There shall be no works involving construction plant and/or machinery on a Sunday or Public or Bank Holiday.

Reason: In the interests of protecting the residential amenities of the islands.

Further Information

1. In dealing with this application, the Council of the Isles of Scilly has actively sought to work with the applicants in a positive and proactive manner, in accordance with paragraph 38 of the National Planning Policy Framework 2023.
2. In accordance with the provisions of Section 96A of the Town and Country Planning Act which came into force on 1st October 2009, any amendments to the approved plans will require either a formal application for a non-material amendment or the submission of a full planning application for a revised scheme. If the proposal relates to a Listed Building you will not be able to apply for a non-material amendment and a new application for a revised scheme will be required. Please discuss any proposed amendments with the Planning Officer. There is a fee to apply for a non-material amendment and the most up to date fee will be charged which can be checked here: https://ecab.planningportal.co.uk/uploads/english_application_fees.pdf
3. This decision is not a determination under the Building Regulations. Please ensure that all building works accord with the Building Regulations and that all appropriate approvals are in place for each stage of the build project. You can contact Building Control for further advice or to make a building control application: buildingcontrol@cornwall.gov.uk.
4. Based on the information available this permission is considered to be one which will not require the approval of a biodiversity gain plan before development is begun because one or more of the statutory exemptions or transitional arrangements are considered to apply. These can be found in the legislation. The effect of paragraph 13 of Schedule 7A to the Town and Country Planning Act 1990 is that, unless an exception or a transitional arrangement applies, the planning permission granted for the development of land in England is deemed to have been granted subject to the condition ("the biodiversity gain condition") that development may not begin unless:
 - a. a Biodiversity Gain Plan² has been submitted to the planning authority, and
 - b. the planning authority has approved the plan.The planning authority, for the purposes of determining whether to approve a Biodiversity Gain Plan in respect of this permission would be the Planning Department at the Council of the Isles of Scilly.

Signed: 

Chief Planning Officer

Duly Authorised Officer of the Council to make and issue Planning Decisions on behalf of the Council of the Isles of Scilly.

DATE OF ISSUE: 01 November 2024



COUNCIL OF THE ISLES OF SCILLY

Planning Department
Old Wesleyan Chapel, Garrison Lane, St Mary's TR21 0JD
☎0300 1234 105
✉planning@scilly.gov.uk

Dear Mr Keith Sanders

Please sign and complete this certificate.

This is to certify that decision notice: P/24/013/FUL and the accompanying conditions have been read and understood by the applicant: Mr Keith Sanders.

1. **I/we intend to commence the development as approved:** Replacement of scantle slate roof covering with natural slate and insertion of 3 no roof lights at: The Downs Trenoweth St Mary's Isles Of Scilly TR21 0NS **on:**.....
2. I am/we are aware of any conditions that need to be discharged before works commence.
3. I/we will notify the Planning Department in advance of commencement in order that any pre-commencement conditions can be discharged.

You are advised to note that Officers of the Local Planning Authority may inspect the project both during construction, on a spot-check basis, and once completed, to ensure that the proposal has complied with the approved plans and conditions. In the event that the site is found to be inaccessible then you are asked to provide contact details of the applicant/agent/contractor (delete as appropriate):

Name: _____ **Contact Telephone Number:** _____
And/Or Email: _____

Print Name: _____

Signed: _____

Date: _____

Please sign and return to the **above address** as soon as possible.



COUNCIL OF THE ISLES OF SCILLY

Planning Department

Old Wesleyan, Garrison Lane, St Mary's, Isles of Scilly, TR21 0JD

☎ 01720 424455

✉ planning@scilly.gov.uk

**THIS LETTER CONTAINS IMPORTANT INFORMATION
REGARDING YOUR PERMISSION – PLEASE READ
IF YOU ARE AN AGENT DEALING WITH IS ON BEHALF OF THE
APPLICANT IT IS IMPORTANT TO LET THE APPLICANT KNOW
OF ANY PRE-COMMENCEMENT CONDITIONS**

Dear Applicant,

This letter is intended to help you advance your project through the development process. Now that you have been granted permission, there may be further tasks you need to complete. Some aspects may not apply to your development; however, your attention is drawn to the following paragraphs, which provide advice on a range of matters including how to carry out your development and how to appeal against the decision made by the Local Planning Authority (LPA).

Carrying out the Development in Accordance with the Approved Plans

You must carry out your development in accordance with the stamped plans enclosed with this letter. Failure to do so may result in enforcement action being taken by the LPA and any un-authorised work carried out may have to be amended or removed from the site.

Discharging Conditions

Some conditions on the attached decision notice will need to be formally discharged by the LPA. In particular, any condition that needs to be carried out prior to development taking place, such as a 'source and disposal of materials' condition, an 'archaeological' condition or 'landscaping' condition must be formally discharged prior to the implementation of the planning permission. In the case of an archaeological condition, please contact the Planning Department for advice on the steps required. Whilst you do not need to formally discharge every condition on the decision notice, it is important you inform the Planning Department when the condition advises you to do so before you commence the implementation of this permission. Although we will aim to deal with any application to discharge conditions as expeditiously as possible, you are reminded to allow up to **8 weeks** for the discharge of conditions process.

Please inform the Planning Department when your development or works will be commencing. This will enable the Council to monitor the discharge and compliance with conditions and provide guidance as necessary. We will not be able to provide you with any written confirmation on the discharge of pre-commencement conditions if you do not formally apply to discharge the conditions before you start works.

As with the rest of the planning application fees, central Government sets a fee within the same set of regulations for the formal discharge of conditions attached to planning permissions. Conditions are necessary to control approved works and development. Requests for confirmation that one or more planning conditions have been complied with are as follows (VAT is not payable on fees set by central government). More information can be found on the Council's website:

- Householder permissions - £43per application
- Other permissions - £145 per application

Amendments

If you require a change to the development, contact the LPA to see if you can make a 'non material amendment' (NMA). NMA can only be made to planning permissions and not a listed building consent. They were introduced by the Government to reflect the fact that some schemes may need to change during the construction phase. The process involves a short application form and a 14 day consultation period. There is a fee of £43 for householder type applications and £293 in all other cases. The NMA should be determined within 28 days. If the change to your proposal is not considered to be non-material or minor, then you would need to submit a new planning application to reflect those changes. Please contact the Planning Department for more information on what level of amendment would be considered non-material if necessary.

Appealing Against the Decision

If you are aggrieved by any of the planning conditions attached to your decision notice, you can appeal to have specific conditions lifted or modified by the Secretary of State. All appeal decisions are considered by the Planning Inspectorate – a government department aimed at providing an unbiased judgement on a planning application. From the date of the decision notice attached you must lodge an appeal within the following time periods:

- Householder Application - 12 weeks
- Planning Application – 6 months
- Listed Building Consent – 6 months
- Advertisement Consent - 8 weeks
- Minor Commercial Application - 12 weeks
- Lawful Development Certificate – None (unless for LBC – 6 months)
- Other Types - 6 months

Note that these periods can change so you should check with the Planning Inspectorate for the most up to date list. You can apply to the Secretary of State to extend this period, although this will only be allowed in exceptional circumstances.

You find more information on appeal types including how to submit an appeal to the Planning Inspectorate by visiting <https://www.gov.uk/topic/planning-development/planning-permission-appeals> or you can obtain hard copy appeal forms by calling 0303 444 5000. Current appeal handling times can be found at: [Appeals:](#)

[How long they take page.](#)

Building Regulations

With all building work, the owner of the property is responsible for meeting the relevant Planning and Building Regulations. Building Regulations apply to most building work so it is important to find out if you need permission. This consent is to ensure the safety of people in and around buildings in relation to structure, access, fire safety, infrastructure and appropriate insulation.

The Building Control function is carried out on behalf of the Council of the Isles of Scilly by Cornwall Council. All enquiries and Building Control applications should be made direct to Cornwall Council, via the following link [Cornwall Council](#). This link also contains comprehensive information to assist you with all of your Building Control needs.

Building Control can be contacted via telephone by calling 01872 224792 (Option 1), via email buildingcontrol@cornwall.gov.uk or by post at:

Building Control
Cornwall
Council Pydar
House Pydar
Street Truro
Cornwall
TR1 1XU

Inspection Requests can also be made online:

<https://www.cornwall.gov.uk/planning-and-building-control/building-control/book-an-inspection/>

Registering/Altering Addresses

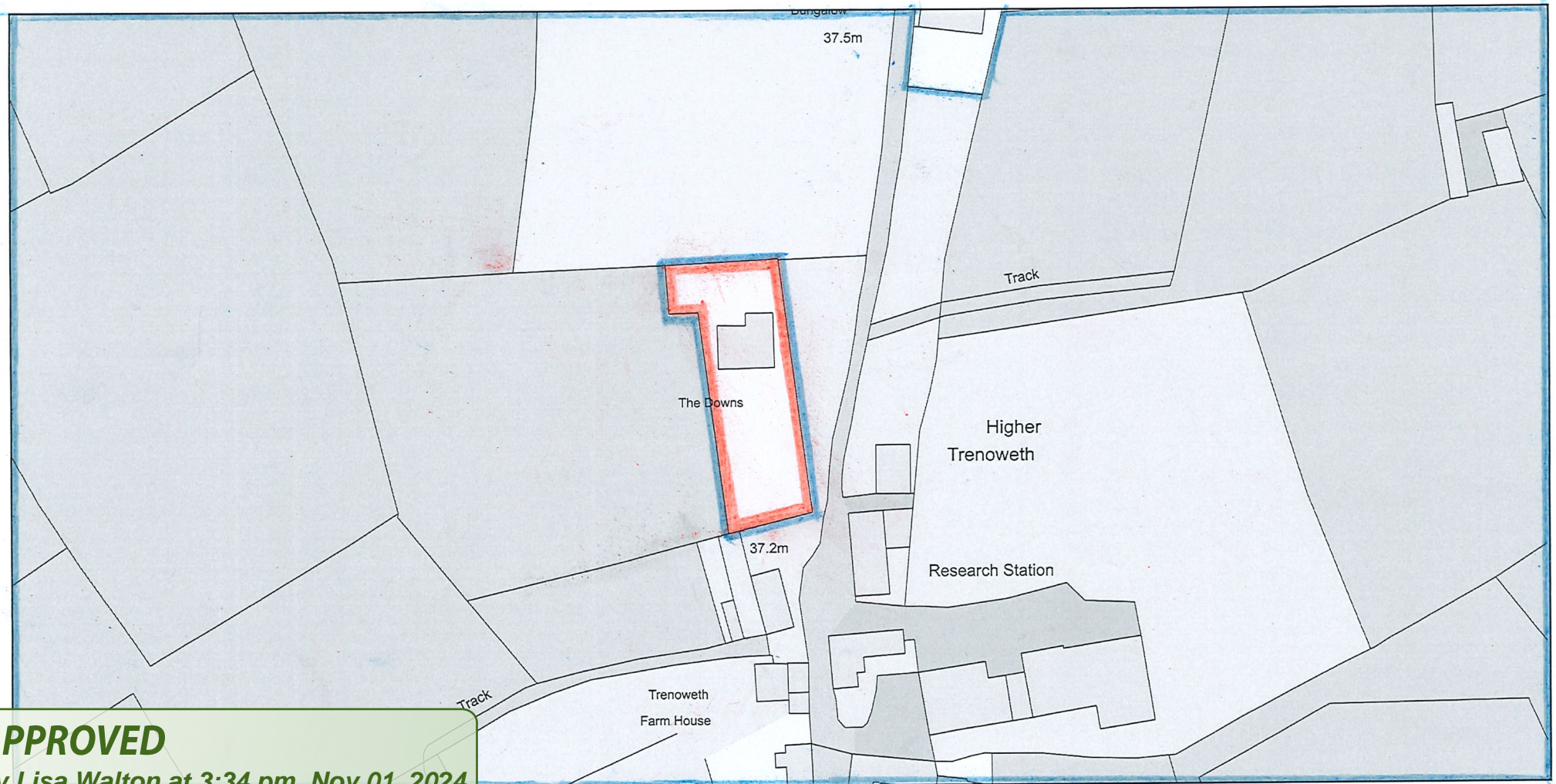
If you are building a new dwelling, sub dividing a dwelling into flats or need to change your address, please contact the Planning Department who will be able to make alterations to local and national databases and ensure postcodes are allocated.

Connections to Utilities

If you require a connection to utilities such as water and sewerage, you will need to contact South West Water on 08000831821. Electricity connections are made by Western Power Distribution who can be contacted on 08456012989.

Should you require any further advice regarding any part of your development, please contact the Planning Department and we will be happy to help you.

Reroofing of The Downs, Trenoweth, St Marys, IoS - Location Plan



APPROVED
By Lisa Walton at 3:34 pm, Nov 01, 2024



Plan Produced for: Duchy of Cornwall
Date Produced: 09 Feb 2024
Plan Reference Number: TQRQM24040165813952
Scale: 1:1250 @ A4

RECEIVED
By Liv Rickman at 3:39 pm, Feb 12, 2024

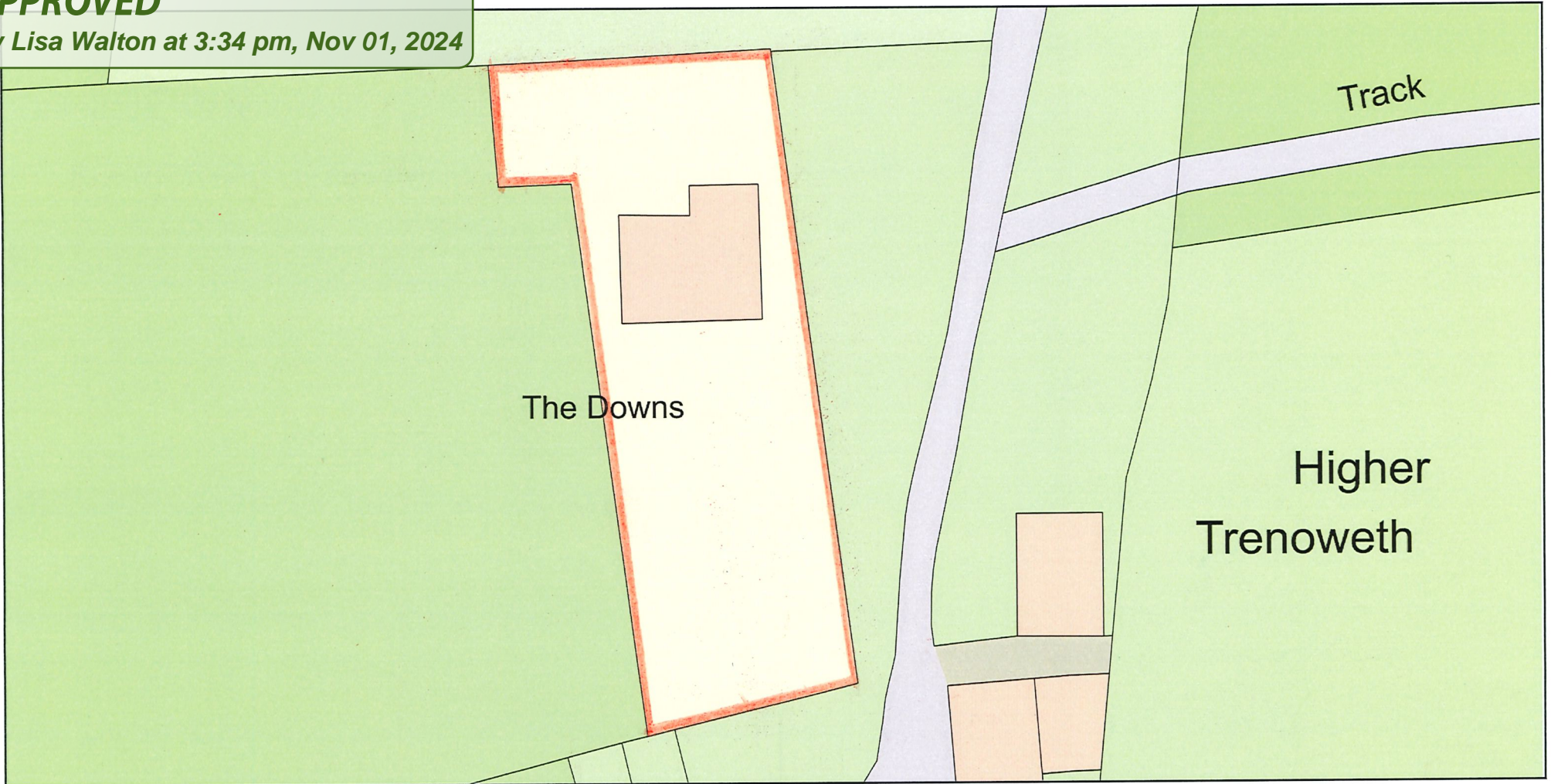
RECEIVED

By Liv Rickman at 3:38 pm, Feb 12, 2024

Reroofing of The Downs, Trenoweth, St Marys, IoS - Block Plan

APPROVED

By Lisa Walton at 3:34 pm, Nov 01, 2024



Plan Produced for: Duchy of Cornwall

Date Produced: 09 Feb 2024

Plan Reference Number: TQRQM24040165453906

Scale: 1:500 @ A4

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APPROVED

By Lisa Walton at 3:35 pm, Nov 01, 2024

RECEIVED

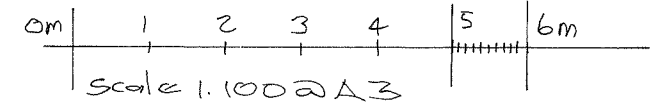
By Liv Rickman at 12:25 pm, Aug 27, 2024



EAST ELEVATION 1:100 @ A3

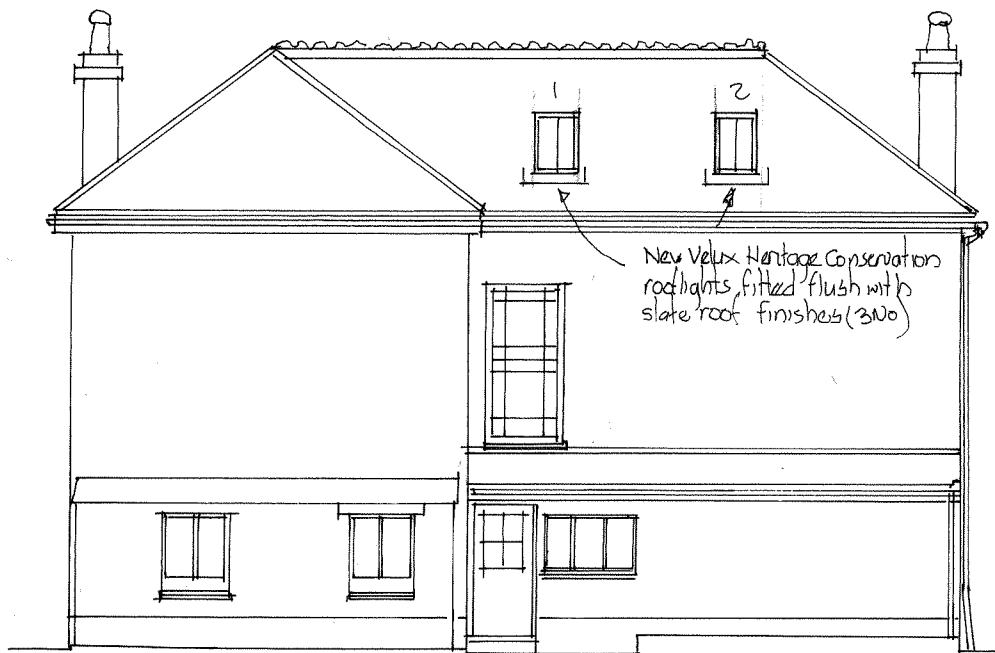


SOUTH ELEVATION 1:100 @ A3

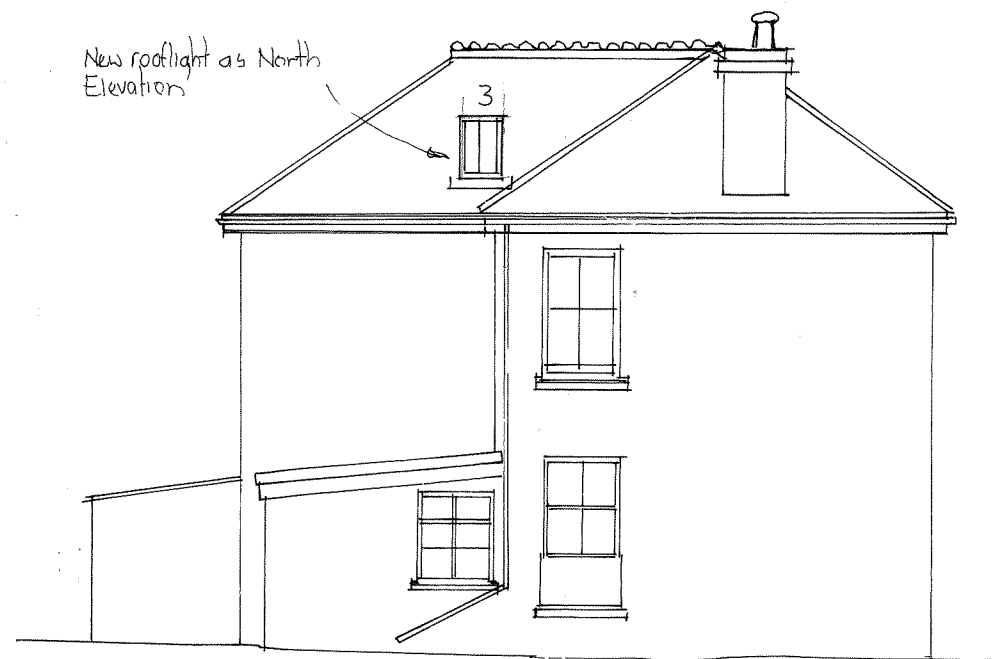


REROOFING THE DOWNS + LITTLE DOWNS, TRENOWETH

Scale 1:100 @ A3



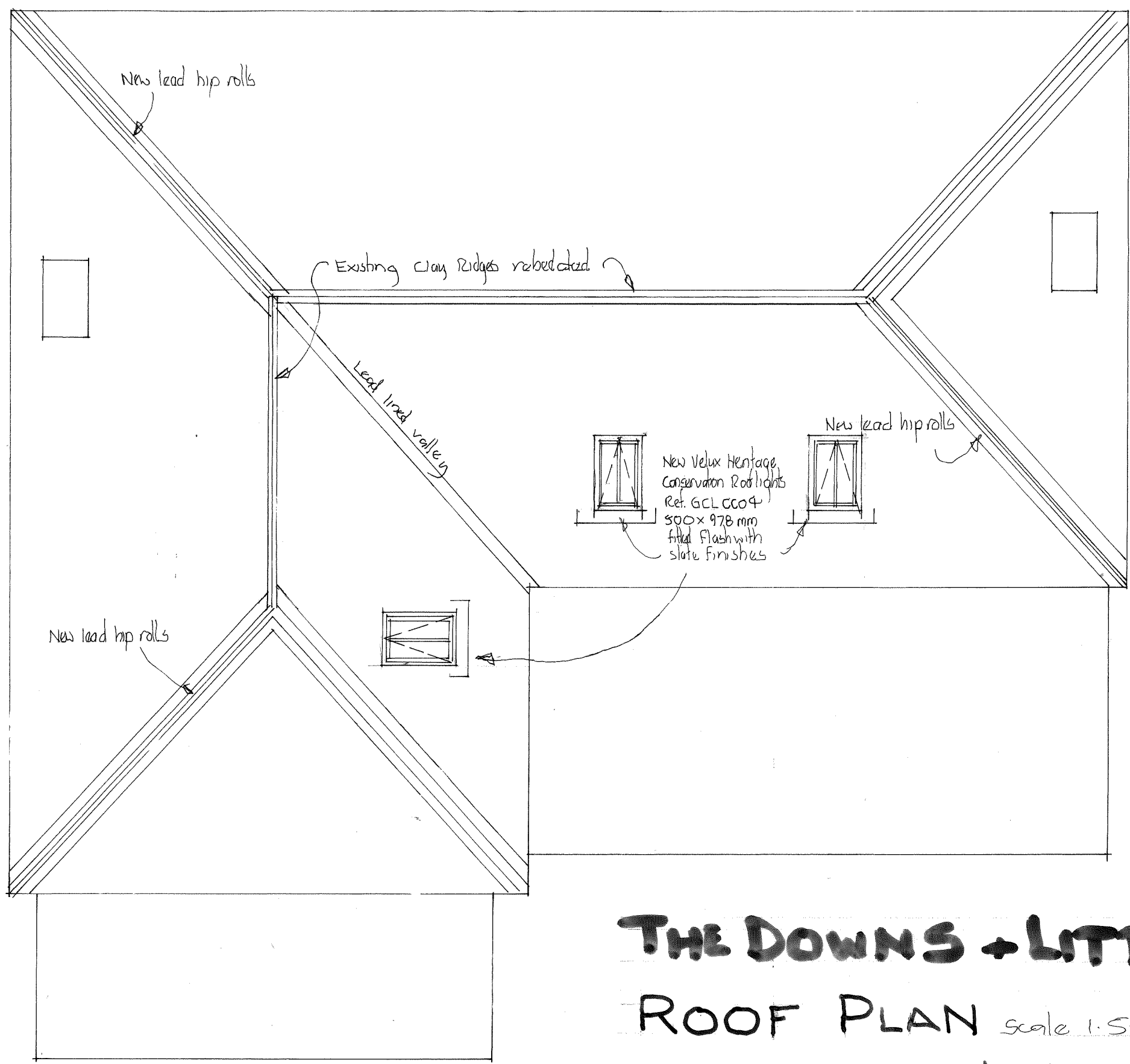
NORTH ELEVATION 1:100 @ A3



WEST ELEVATION 1:100 @ A3

DRWG. No. 2024/08/01

APPROVED
By Lisa Walton at 3:35 pm, Nov 01, 2024



THE DOWNS + LITTLE DOWNS

ROOF PLAN scale 1:50 @ A3

DRWG. No. 2024/08/02



RECEIVED
By Liv Rickman at 12:17 pm, Aug 27, 2024

RECEIVED

By Liv Rickman at 12:24 pm, Aug 27, 2024

APPROVED

By Lisa Walton at 3:35 pm, Nov 01, 2024

VELUX Heritage conservation roof window, GCL

VELUX®

Glazing 01



The VELUX Heritage conservation roof window is designed to be in keeping with historic façade aesthetics. Slim and elegant and sitting flush to the tiles, it blends beautifully into historic roofs.

- Authentic top-hung design in keeping with heritage aesthetics
- Slimmer black exterior profile for a perfect fit
- Seamless and stunning glass-to-edge fit
- Near flush installation blends into the roofing material, in keeping with the building's original character
- Central glazing bar that fulfils the design requirement for period authenticity
- Double glazing with glass-to-edge technology that comes with premium features, including safety lamination, toughened outer glass, UV filter, easy-to-clean coating and unique rain noise reduction
- The traditional roof window winding handle mechanism combines a simple operating method with a timeless heritage design



Application guidance operation method

The window can be installed in roof pitches between 20° and 65° to the horizontal.



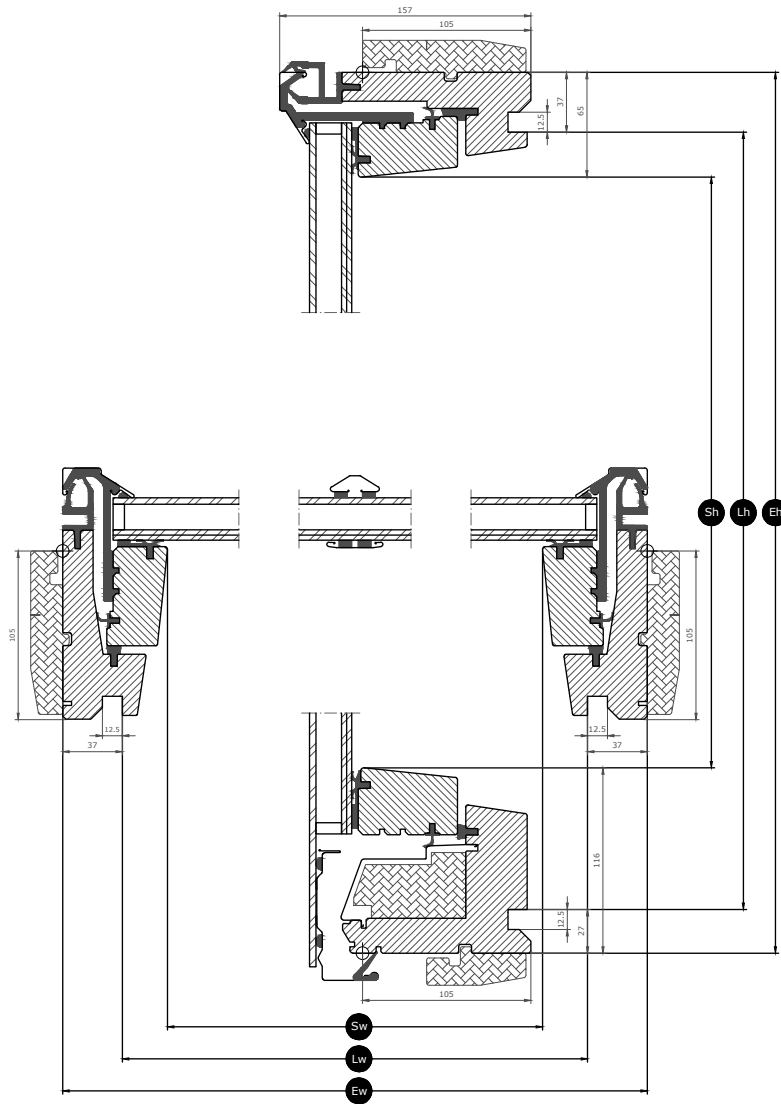
The Heritage conservation roof window GCL is a top-hung window that is operated with a hand-winder fixed to the bottom frame. The window can be opened to a maximum of approx. 150 mm. The black profiles, central glazing bar and flashing beautifully match historical buildings.

Available sizes and daylight area

	550	660	780	942	1140
978	GCL CC04 (0.33)				
1178	GCL CC06 (0.42)	GCL FC06 (0.53)	GCL MC06 (0.65)		
1398		GCL FC08 (0.64)	GCL MC08 (0.79)	GCL PC08 (0.99)	GCL SC08 (1.23)
1600					GCL SC10 (1.43)

All measurements are in mm. () = Effective daylight area, m²











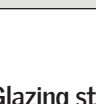
Cross section dimensions



Width		CC--	FC--	MC--	PC--	SC--
Sw	Sash aperture width	419	529	649	811	1009
Lw	Distance between lining grooves, width	475	585	705	867	1065
Ew	External frame width	550	660	780	942	1140

Height		--04	--06	--08	--10
Sh	Sash aperture height	797	997	1217	1419
Lh	Distance between lining grooves, height	913	1113	1333	1535
Eh	External frame height	978	1178	1398	1600

Glazing features

Glazing 01		
	Heat insulation The low energy glazing unit reduces heat loss through the window and enhanced indoor comfort.	$U_g = 1.1 \text{ W}/(\text{m}^2\text{K})$
	Solar gain In colder climates and in rooms with large window areas, solar gain provides a better indoor climate during winter periods.	0.56
	Solar protection In warm climates and in rooms with large window areas, a sun protective glazing unit provides a better indoor climate during summer periods.	★★☆☆
	Security Thicker laminated inner glass increases resistance to manual attack (burglary).	★★☆☆
	Safety lamination Prevents glass from falling into the room in case of accidental breakage.	✓
	Toughened glass Adds strength to the outer glass surface to protect from wayward balls and extreme weather such as heavy storms and hail.	✓
	UV filter Protects your interior furnishings from fading due to the sun's harmful UV rays.	✓
	Rain noise reduction Rain noise reduction creates a barrier between the window and the weather outside for undisturbed moments during rainy days – or nights.	✓
	Easy-to-clean Dirt-repellent coating lets you spend less time cleaning and more time enjoying the view.	✓
	Anti-dew The anti-dew coating significantly reduces the days with dew on the outer glass and thus gives you a clear view.	

Glazing structure

Glazing unit	Variant composition
Double-glazed	6.8 mm laminated float glass - 16 mm Argon - 4 mm toughened glass with enamel

Technical values for the window

Overview of technical values for the product, covering among other, CE marking in accordance with EN 14351-2.

Window characteristics	Performance
Thermal transmittance	1.3 W/(m ² K)
Light transmittance	0.75
Total solar energy transmittance	0.56
Sound insulation	35(-1;-3)
Air permeability	4
External fire performance - British	NPD
External fire performance - European	Broof(t4)
Impact resistance	3
Load-bearing capacity of safety devices	N/A
Reaction to fire	C-s1, d2
Resistance to snow load	See glazing composition
Resistance to wind load	C3
Water tightness	E900

NPD: No performance determined

Visible features



Glass-to-edge technology

This roof window is precisely crafted with glass-to-edge technology for a seamless and stunning fit. The glass-to-edge technology allows water to run off the window easily.



Glazing bar

The vertical glazing bar delivers a classic, traditional look to the conservation window.



Hand-winder

The window is delivered with a hand-winder that is fixed to the bottom frame. When the handle is turned, the winder pushes out the window sash approx. 150 mm.



Blind bracket, manual

Easily install blinds on the window without the need for extra tools. Simply click on the blind in the pre-fitted brackets.



Gasket

Forming the air and sound seal between the frame and sash.



Data plate

Every VELUX roof window has a unique data plate with information that can be used to look up CE marking documentation, when purchasing accessories or in case of service or replacement.

Interior finish

Material Description	White-painted Finished with triple coat, white painted.
Colour code NCS, inner surface	S 0500-N
Colour code nearest RAL, inner surface	9003

Exterior covers

Material Description	Aluminium, black Black
Colour code NCS, outer surface	S 9000-N
Colour code nearest RAL, outer surface	9005

Cleaning and maintenance



The window can be cleaned inside with ordinary household cleaners. Cleaning of exterior glass must be done from the outside, but to reduce the frequency for exterior cleaning of the glass it comes with an easy-to-clean coating.



VELUX repair and maintenance kits are available.

Guarantee period



The full terms and conditions of the VELUX Product Guarantee are available on our website www.velux.co.uk or www.velux.ie

Flashings and installation products

Flashings

The Heritage conservation roof window is constructed with a built-in insulation collar in the window frame. Install the VELUX Heritage conservation roof window by using a genuine VELUX flashing solution into slates and plain tiles. Our EDU 1500 flashing is designed specifically for the exact size and shape of the Heritage conservation roof window and includes underfelt collar BFX to create a perfect weathertight fit. The flashing is made by use of aluminum only.

Blinds, awnings and shutters

VELUX Heritage conservation roof window is compatible with translucent and blackout energy interior pleated blinds for ultimate light control. Please contact your local VELUX sales company for more details.

Further information

We reserve the right to make technical changes.

For more information on our products, please visit <https://www.velux.co.uk> or <https://www.velux.ie>.

NATURAL SLATE SSQ
RIVERSTONE ULTRA COVER RE
ROOFING THE DOWNS ST
MARYS IOS

APPROVED

By Lisa Walton at 3:36 pm, Nov 01, 2024



REPORT DETAIL

An Introduction to the Riverstone Phylite rock and the properties that make it unique for natural slate projects in Cornwall.

Natural Slate Performance and specification criteria.

Riverstone NBS project design service.

Random Width diminishing course fixing method.

SSQ RIVERSTONE

SSQ RIVERSTONE NATURAL SPECIFICATION

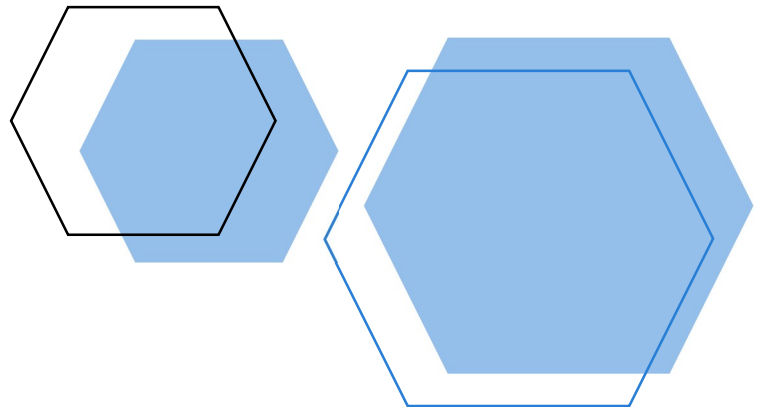
SSQ have been asked to prepare a Slate Specification Proposal document for The Duchy of Cornwall to provide a turnkey roofing Solution using Riverstone Ultra slate roofing as an The objective of using this method of 400 x 250 slating dry laid is to protect the fabric of historically important buildings where traditional slate roofing, is prohibitive due to budgetary constraints.



SSQ RIVERSTONE QUARRY

THE ORIGINS OF THE RIVERSTONE QUARRY.

Riverstone is phyllite stone. Phyllite marks a culmination: It is what happens when the geological forces that form slate are permitted to continue. With each step- from sediment to shale, from shale to slate and from slate to phyllite - the stone becomes harder, denser and stronger. Phyllite is rare - there are just a handful of quarries worldwide. Of these, only a few produce stone with the cleavage characteristics needed to make roofing slate. The Delabole and Trevillet indigenous slate are both Phyllite. SSQ own and operate the San Luis quarry in La Repressa, deep in central Argentina, between the Pampas and the high Andes. Quarried for centuries, its enormous reserves date back 640 million years to the pre-Cambrian era. Riverstone phyllite offers superior performance for the most demanding Roofing slate applications and is unique as it is geologically identical to the indigenous slates of both the Delabole and Trevillet slate Quarries.



TRUSTED SOURCE

LISTED BUILDING AND CONSERVATION PROJECTS CONSERVATION AREA AND WORLD HERITAGE SITES

Riverstone is one of the few slates that have been accepted in the past as a suitable alternative to indigenous slates on buildings of historical significance across the county. An example of this can be found on projects like the Driftwood Public House St Agnes Cornwall, where Riverstone was chosen to replace a 300-year roof supplied from local Random Width diminishing Course Cornish slate. Riverstone slate has also been chosen for the protection of iconic projects like the Kresson Kernow Cornish Records office where there was a minimum design life cycle of 100 years in a severe coastal environment. Riverstone has also been accepted for use in conservation areas to help preserve the character of these parts of the country and has been installed in World Heritage sites to protect the integrity and character of Building for generations.





RIVERSTONE PERFORMANCE

ACD DOCUMENT INCLUDED

Riverstone unique phyletic structure and composition produce a slate that is highly resistant to the physical and chemical processes that age building stone of any type. Riverstone slate is characterized by:

Low Water Absorption

Riverstone Slate has been established as the only realistic alternative to the Cornish Indigenous slate of the Delabole and Trevillet Mill Hill Slate quarries, not only because of its striking similarity in terms of Color, Mica Content and age (Precambrian Phylite rock) but also for its low water absorption levels that surpass those of both the Delabole and Mill Hill Quarry. Riverstone slate Water absorption rate is far lower at .1% compared to Delabole and Trevillet of .3%.

The life cycle expectancy of Riverstone extends to between 75 -100 years depending on the selection.

Table 1.1 Riverstone Mineral content and Water Absorption compared to Indigenous UK slate types

Geology Performance Slates										
Slate	RU	Montana	Guresa	DCU	Welsh	Glendyne	Trevillet	Delebole	Burl Grey	Burl Green
CMOR T	21	Same	Same	46	41.9	54	20.47	Ave 37N	41	28
CMOR L	44			66	56.3	52	52.39	Ave 37N	42	30
MEAN T	32			54						
MEAN L	54			82						
MEAN T				591			900		1400	1500
MEAN L				1043			1377		1600	1950
CARBON	1.40%			0.39	2.25	1.8	0.05	Nil	8.5	17.5
NON CARBON	0.00%			0.48	0.8	1.3	0.01		0.2	0.1
WATER	0.1			0.24	0.12	0.3	0.35	0.3	0.26	0.3
Thickness						4-5mm			7-9mm	12-15mm
Guarantee	100Yr	100Yr	100Yr	100yr		75Yr				
ASTM	RU	Montana	Guresa	DCU						
Flexure S1				807						
Water S1	0.11			0.17						
Weath/R S1	0.01			0.00008						









FAR OUT PERFORMING TEST REQUIREMENTS.

Riverstone slate’s exceptional weather resistance makes it nearly impervious to atmospheric pollutants.

Virtual absence of deleterious minerals such as pyrite and calcite (achieves T1 classification) and surpasses all Spanish and non-indigenous imported slates.

Riverstone’s virtual absence of deleterious minerals prevents fading and weakening caused by oxidation and mineral conversion. The low calcium carbonate content prevents the calcification of the slate which has been prevalent amongst the lower cost light colored Spanish slates and Brazilian slates which are prolific in the Cornwall region. The service life cycle of these slate are lower than 30 years, with developer only requesting the absolute minimum performance standards to achieve an accredited NHBC or LABC insurance standard.

COMPARISON OF WATER ABSORPTIONS

Roofing Slate	Water absorption (typically)		BRAZILIAN SHALE	RIVERSTONE PHYLLITE
Phyllite	0.1-0.2%	00:00 minutes		
Slate	0.25-0.5%	15:00 minutes		
Shale	0.5-1%	30:00 minutes		
Standard	Water absorption threshold	45:00 minutes		
Old BS 680	≤ 0.3%			
EN 12326	≤ 0.6%			
NF 228	≤ 0.4%			



FURTHER ANALYSIS OF WATER ABSORPTION

The table detailed above demonstrates a further comparison between the water absorption between Brazilian slates and Riverstone Phyllite slate. No Brazilian shale slate meets the requirements of the British Standard. All roof slate development has to reach the minimum requirements of BSEN12326 of .6% water absorption. This criteria allows slate to be installed with a service life cycle of 30 years or less. The minimum service life cycle for Riverstone Random slate is 100 years design life and so most slate that are, BSEN12326 would be non-compliant. We consider that the minimum standard for mid-range and top range slate should be formed from Phyllite roofing slate or Similarly approved.

WHAT CAN HAPPEN

Severe rusting – from reactive pyrite



THE COSEQUENCES OF UNCONTROLLED ROOFING SLATE SPECIFIATIONS

The slate installation above demonstrates the consequences of installing Spanish slates with high levels of reactive pyrite and high water absorption slate in a sever exposure coastal Environment.

WHAT CAN HAPPEN

High water absorption levels – moss growth

Moss is also likely to flourish in wet environments



The photo above demonstrates the calcifications failure of light colored high water absorption slates in Falmouth Cornwall sourced from the Lugo region of Spain. In this specific example the water absorption rates exceeded .4% where a Spanish slate has been installed with excessive calcium carbonate content. The high levels of salt water exposure and the absorption of that water into the calcium carbonate content of the slate will ultimately lead to the failure of the installation before the minimum life expectancy of the slate in this case the Spanish slate was guaranteed 30 – 40 years.

PRODUCER DETAILS AND GUARANTEE.

NHBC AND LABC

As part of any slate specification, sufficient details are required to identify the source quarry of the slates installed on sites.

*In most all cases a developer only receives the Supplier and a rough Location where the Quarry is. Most slates entering the UK market place are re branded and the details of the original source quarry are removed either for commercial reasons or to hide the potential less favorable test results. By working with the quarry direct the origins of a low water absorption slate are always known to the investor and the guarantee is always held by the capital investor developer for the entire housing stock. Minimum performance criteria should be set at a **sub .4% or NF228** slate specification to ensure that at least the performance criteria of **Cornish indigenous slate is met, in reality a sub .3% water absorption level.** Where **Random Width slating is proposed the water absorption for Historic Buildings should be .1%, to preserve the fabric and historic features including the origin roof structure for a further 100 years and beyond.***

The document below shows the Ultra Cover Specification and Method Statement for Riverstone 400 x 250 Ultra Cover. SSQ will guarantee slate specifications without roof modification down to pitches as low as 18 degrees. Shallow roof pitches below 18 degrees can also be design with a modified roof substructure.

Ref: EU2985

Project: Re Roofing the Downs Higher Trenoweth St Mary's Isle of Scilly

Date: 19th July 2019

**NOTE: Only SSQ Assured Installers are approved to install Cover projects;
Please contact SSQ to discuss suitable SSQ Assured in the locality of the project.**



**Ultra-
Installers**

H62 NATURAL SLATING

To be read with Preliminaries/ General Conditions.
BS 5534: 2014, Code of Practice for Slating and Tiling.
BS 8000: part 6: 2013 Code of Practice for Workmanship, Slating & Tiling.
SSQ, Technical Fixing Guide.
NHBC Chapter 7.2 Pitched roofs 2012.

TYPES OF SLATING

105 ROOF SLATING

- Substrate: As Existing
- Pitch: 37.5 deg
- **Underlay:**
- Recycled content: None.
- Direction: Parallel to eaves.
- Underlay Head-lap (minimum): 150mm
- **Battens:**
- Size: 50x25mm
- Fixing: 65x3.35mm ring shank galvanised nails.
- **Slates:**
- Supplier: **SSQ Ltd, 301 Elveden Road, Park Royal, London, NW10 7SS.**
- Contact: Simon Johnson simon@ssq.co.uk 07443804537
- Product reference: **Riverstone Phyllite**
- Type:
- Size: 400 x 250 mm Ultra
- Head-lap 90mm (minimum):
- Fixing: Two nails each slate. 35x3.35mm X 10MM dia, head copper nails.

SLATING GENERALLY

110 SUB CONTRACTORS INFORMATION

It is the roofing subcontractor's responsibility to check that the background to which he is applying slating is square, plumb and level. If the backgrounds are defective then this should be brought to the attention of the Site Manager and under no circumstances should, felt, battens or slating be applied to defective roof slopes.

205 SUPPLIERS INFORMATION

Check the existing supporting roof structure to be slated is in a suitable state to receive the roof covering. It must be sound and true to its flatness and square.

SSQ cannot be held responsible for problems that exist prior to roof slating

Comply with SSQ Natural Roofing Slate Design and Fixing Guide and the following British Standards;

BS 5534:14 code of practice for slating and tiling,

BS 8000:13 part 6 Workmanship, slating and tiling.

Specification and drawings take precedence over SSQ slates data sheets.

210 BASIC WORKMANSHIP

Grading: All slates to be sorted and graded on the ground prior to going on the scaffold, into a minimum of three thicknesses, thin, medium and thick, with the thicker slates at the eaves etc.,

- General: Fix slating and accessories to make the whole sound and weather tight at earliest opportunity.
- Setting out: To true chalk lines and regular appearance, with neat fit at edges, junctions and features.
- Vertical Joints: to be no more than 5mm. Do not form tight butt joints.
- Fixings for slating accessories: As recommended by manufacturer.
- Gutters and pipes: Keep free of debris. Clean out at completion.

220 REMOVING EXISTING SLATING

- General: Carefully remove slates, battens, underlay, etc. with minimum disturbance of adjacent retained slating.
- Undamaged slates: Set aside for reuse.

230 MINERAL WOOL INSULATION

- Manufacturer:
- Product reference:
- Recycled content:
- Thickness: As Architects Detail
- Installation: Fix securely with closely butted joints, leaving no gaps.
- Fasteners: Use where necessary to prevent slumping.
- Ventilation paths: Do not obstruct.

240 UNDERLAY

- Handling: Do not tear or puncture.
- Breather Membrane: Apex
- Manufacturer: Permavent (available via SSQ)
- Contact: Simon Johnson SSQ simon@ssq.co.uk 07443804537
- Laying: Maintain consistent tautness.
- Vertical laps (minimum): 100 mm wide, coinciding with supports and securely fixed.
- Fixing: Galvanized steel, copper or aluminium 20 x 3 mm extra large clout head nails.
- Eaves: Where exposed, underlay must be BS 8747 Annex B, type 5U, or equivalent UV durable type.
- Penetrations: Use proprietary underlay seals or cut underlay to give a watertight fit around pipes and components.
- Ventilation paths: Do not obstruct.

245 BATTENS/ COUNTERBATTENS - TREATED

- Timber: Sawn softwood
 - Supplier; John Brash Ltd., or similar
 - Type; PNSY, WPCA, WPCE, or WPNE
 - Species: To BS 5534, clause 4.12.1.
 - Permissible characteristics and defects: Not to exceed limits in BS 5534, annex C.
 - Grading: mechanically graded to comply with BS5534 and treated to BS8417:2003 and carry a 60year guarantee and be FSC or PEFC certified..
 - Moisture content at time of fixing and covering (maximum): 22%.
 - Preservative treatment: As section Z12 and Wood Protection Association Commodity Specification C8.
 - Type: Red/Blue
- NB: It is not advisable to use Green Batten (semi graded) as further on site, grading is not always carried out, and could cause problems for the future.

259 COUNTERBATTENS ON RAFTERS

Size: 50x25mm

- Fixing: Into rafters at not more than 300 mm centres.

265 BATTEN FIXING

- *Setting out: Align parallel to ridge in straight horizontal lines to gauge of slates. Align on adjacent areas.*
- *Batten length (minimum): Sufficient to span over three supports.*
- *Joints in length: Square cut. Butt centrally on supports. Joints must not occur more than once in any group of four battens on one support.*
All cut ends to be brush treated.
- *Additional battens: Provide where unsupported laps in underlay occur between battens.*
- *Fixing: Each batten to each support. Splay fix at joints in length.*
- *Top batten to have an additional 25x6mm lath nailed to it to take head bearing of tops slate.*

270 BATTENS FIXED TO MASONRY

- *Setting out: In straight horizontal lines. Align on adjacent areas.*
- *Batten length (minimum): 3 m.*
- *Fixing centres (maximum): 400 mm.*

272 TIMBER FOR SLATING SUBSTRATE WORK

- *Timber: Sawn softwood, free from wane, pitch pockets, decay and insect attack (ambrosia beetle excepted).*
- *Moisture content at time of fixing and covering (maximum): 22%.*
- *Preservative treatment: As section Z12 and Wood Protection Association Commodity Specification C8.*
- *Type: .*

275 SLATE FIXING

- *Setting out: Lay slates with an even overall appearance with slightly open (maximum 5 mm) butt joints. Align tails.*
- *Slate thickness: Consistent in any one course. Lay with thicker end as tail.*
- *Ends of courses: Use extra wide slates to maintain bond and to ensure that cut slates are as large as possible. Do not use slates less than 150 mm wide.*
- *Top course: Head-nail short course to maintain gauge.*
- *Fixing: Centre nail each slate twice through countersunk holes 20-25 mm (maximum) from side edges.*
- *Nails: SSQ Copper Clout 3.35x35mm.*
- *Manufacturer: SSQ*
- *Product Reference: CN33535*
- *Nail dimensions: Determine in accordance with BS 5534 to suit site exposure, With drawl resistance, and slate supplier's recommendations.*

280 SLATES - PERFORMANCE SPECIFICATION

- *Standards:*
- *Product specification: To BS EN 12326-1.*
- *Methods of test: To BS EN 12326-2.*
- *Slate type: Riverstone Ultra 500 x 300 Phyllite Slate*
- *Dimensional tolerances:*
- *Deviations from declared length, width, edge straightness, rectangularity, and flatness are not to exceed values specified in BS EN 12326-1, clause 5.12.*
- *Thickness:*
- *Nominal thickness and individual thickness variation: To BS EN 12326-1, clause, 5.2.*
- *Strength:*
- *Characteristic modulus of rupture: (What the minimum requirement is)*
Transverse: MPa.
Longitudinal: MPa.
- *Mean MoR: (SSQ results when tested to BS EN12326)*
*Transverse: **MPa.***
*Longitudinal: **MPa.***
- *Water absorption: Code: **W1: .1%***
- *Freeze-thaw resistance: Not required.*
- *Thermal cycle test: **Complies: Code: T1.***
- *Carbonate content: **Complies: 1.4 %***
- *Sulphur dioxide test **Code: S1.***
- *Non-carbonate carbon content: Less than or equal to 2%, **Complies: 0%***
100 Year Guarantee,
ASTM 75 years
Guarantee will not rust/run or fade,
Every Crate Barcoded,
Full Labour Backed and insurance backed guarantee.

290 MORTAR BEDDING/ POINTING

- Mortar: 1:3 cement / sand, with plasticizing admixtures permitted.
- Bond strength providing resistance to uplift: To BS 5534.
- Sand: To BS EN1313.
- Cement: To BS EN197-1:2011 (Portland cement to class 42.5)
- Admixtures: To BS EN 934-3
- Pigments: To BS EN12878
- Weather: Do not use in wet or frosty conditions or when imminent.
- Preparation of concrete and clay tile accessories to be bedded: Wet and drain surface water before fixing.
- Appearance: Finish neatly as work proceeds and remove residue.

ROOF SLATING EDGES/ JUNCTIONS/ FEATURE

305 GENERALLY

Ensure that related trades are provided with all relevant information relating to carpentry and other work, etc. Before starting work ensure that previous related work is complete and in accordance with the project documents.

- Form all details using the specified recommended fittings and accessories: do not improvise without prior approval.
- Please be aware that this specification complies with the minimum requirements set out in British Standards so as to conform to, Building Regulations. For certain projects such as new housing there may be additional non-regulatory technical requirements from third party insurers that have to be satisfied. For example there is now a requirement for all mortar bedded ridges and hips must be mechanically fixed to comply with the NHBC Technical Standards so as to be eligible for NHBC Buildmark Warranty Cover. It is your responsibility to check.
- Fittings and accessories: As recommended by slate supplier, to match in colour and finish unless specified otherwise. do not improvise.
- Exposed fittings and accessories: To match slate colour and finish.
- Cut slates: Cut only where necessary, to give straight, clean edges.
- Fix edge slates and fittings securely to give neat and true lines. Ensure that all lead flashings are fixed with or immediately after the slating and are neatly dressed down, to the LSA requirements.

325 FIRE SEPARATING WALLS

- Separating walls: Completely fill space between top of wall and underside of slates with mineral wool quilt to provide fire stopping.
- Boxed eaves: Completely seal air paths in plane of separating wall with wire reinforced mineral wool, not less than 50 mm thick, fixed to rafters and carefully cut to shape to provide fire stopping.

355 VENTILATED EAVES WITH SEPARATED GRILLES/ TRAYS

- Fascia grilles: SSQ Over-fascia Vent 1000x10mm
- Manufacturer: SSQ
- Product reference: OFV10-1000
- Ventilator trays: SSQ Continuous Rafter Tray 6000x400mm
- Manufacturer: SSQ
- Product reference: RPV-400
- Underlay support: SSQ Eaves Protection Boards 1500mm
- Manufacturer: SSQ
- Product reference: EPB-150
- Fix to provide free passage of air over insulation.
- Continuous to prevent water retaining troughs.
- Gutter: Dress underlay or underlay support tray to form drip into gutter.
- Under course and first course slates: Fix with tails projecting 50 mm over gutter or to centre of gutter, whichever dimension is the lesser.

525 MITRED HIPS

- Underlay: Take underlay over the hip rafter from both directions and additionally lay a full width of underlay down the rake of the hip rafter length.
- Overlaps (minimum): 150 mm.
- Hip slate fixing battens: 50x25mm running into the hip.
- Mitred slates: Cut extra wide slates and fix to form a straight, close mitred junction.
- Soakers: Code 3 lead soakers treated with patination oil, should interleave with the slates and fixed so that they extend a minimum of 150mm down each side of the mitred hip Interleave. Fix by turning down over head of mitred slates.
- Lead to BS EN 12588:2006.

530 LEAD

To be read in Conjunction with clauses set in H71 and to BS EN12588:2006.

615 METAL VALLEYS-OPEN.

- Lay an additional piece of 5mm external quality plywood on top of the valley board, the valley board should extend 225mm each side of the valley with tilting fillets positioned 150mm each side of the centre.
- Valley lining boards should not be less than 19mm thick.
- Underlay: Cut to rake. Dress over tilting fillets to lap onto lead valley. Do not lay under lead
- Roof slates: Cut extra wide slates adjacent to valley to fit neatly.
- Valley width between slates, minimum 100mm.

660 SIDE ABUTMENTS-

- Abutment slates: Cut as necessary, **slates less than 150mm wide should not be used. Fix close to abutments.**
- Underlay: Turn up not less than 100 mm at abutments. -
- Code 3 lead soakers length; gauge + lap + 25mm.
- Fix cover flashing over soaker up stands and secure into brickwork joints.
- Soakers: Interleave with abutment slates. Fix by turning down over head of abutment slates.

670 TOP EDGE ABUTMENTS

- Underlay: Turn up not less than 100 mm at abutments.
- Top slate courses: Fix close to abutments batten

750 MORTAR BEDDED RIDGES

- Underlay: Lay courses over ridge.
- Overlap (minimum): 150 mm.
- Ridge tile fixing battens: In accordance with BS 5534
- Re use the existing according to Architects Detail.
- Gable end ridge tiles: Fill ends with mortar and slips of tiles finished flush.
- Ridge terminals
- Manufacturer:
- Product reference:

855 BAT ACCESS

Bat Slate: SSQ Eclipse Bat Vent

Manufacturer: SSQ BATVENT

Product reference: Technical Author: Richard F G Cook 07734 199449; richard@ssq.co.uk



APPROVED

By Lisa Walton at 3:37 pm, Nov 01, 2024

RECEIVED

By Liv Rickman at 12:58 pm, Aug 30, 2024

Design and Heritage Statement

**The Downs and Little Downs
Higher Trenoweth
St Mary's
Isles of Scilly
TR21 0NS**

30 AUGUST 2024 REV A

Prepared by: Keith Sanders ACIOB



DUCHY *of* CORNWALL

Introduction

The proposal is to replace the slate roof covering of the dwellings and install three number flush with slate finish Velux Heritage Conservation Roof lights into two of the rear facing roof slopes as part of the reroofing works.

The Downs is a 3 bedroom dwelling with self contained ground floor Annex used as holiday accommodation found in a cluster of dwellings and agricultural buildings at Higher Trenoweth. The property is constructed of coursed granite with a Cornish scantling wet bedded roof finish of slate with clay cockscomb ridge tiles, lead valleys and shaped in situ cement mortar as a caping to hips.



The Downs/Little Downs is not an imposing building as most will view it from the farm access track that runs past it to access the coastal path around the north of St Marys at Bar Point and Innisidgen.

The property is well screened from the coastal path by a shelter belt of trees and from the complex of farm buildings by the tree lined boundary hedge to the east side of the property.



The building is not listed but sits to the north edge of the settlement of Higher Trenoweth where Trenoweth Farmhouse and attached Cottage and garden wall are listed grade II and the adjoining barn to the north of the farmstead is also grade II listed.

The Trenoweth farmhouse listing states : *Farmhouse and cottage. C18 with late C19 extension. C18 fabric of painted and rendered granite rubble with gabled scantle slate roof; large granite stack finished in brick to north gable and brick rear lateral stack. Late C19 extension of coursed granite rubble with dressed quoins and lintels, gabled slate roof (scantle slate to C18 wing and dry slate to C19 wing) and brick end stacks. C18 range is linked to late C19 range by two-storey link of coursed granite with dressed quoins, slate roof hipped to right (east) and tarred boarding. Overall L-plan, with the lower C18 house of 2-room plan extended to front left (NW) in late C19. C18 house of 2 storeys, with west front of 3 windows across having late C19/C20 horned 2/2-pane sashes and off-centre mid C20 half-glazed door. Rear elevation has C19 6/6-pane sash under eaves and 6-pane narrow casement in deep recess to right; C20 lean-to service extensions. Late C19 range has symmetrical 3-window south front, with horned 2/2-pane sashes and panelled door with overlight.*

INTERIOR: C19 plank doors, exposed timber joists (roof not seen). Late C19 extension has panelled doors and shutters, moulded cornice to left-hand drawing room and fine spiral staircase to hall, with polished wood balustrade, stick balusters and moulded nosings to risers.

SUBSIDIARY FEATURES: low granite wall to west side of front garden, joining the outer angles of the L, with rounded coping and piers flanking C20 iron gates. The C18 cottage comprises one of the earliest inhabited structures to have survived on the islands and has survived in a relatively unaltered state of preservation.

The proposal is to remove the defective existing slate roof covering, carry out repairs as found necessary and provide a new natural slate roof covering using natural Trevilletts from the Tintagel quarry in either 400 x 250 with the addition of a continuous roofing membrane that is suited to the roosting of bats but will act as a secondary defence against water ingress. The opportunity is being taken as part of the roof recovering works to install three number Velux Heritage Conservation rooflights of size 550 x 978 mm.

The cockscomb ridge tiles will have been removed with care and will be rebedded on the new slate coverings. Valleys will be relined with lead and the mortar hip finishes will not be reinstated but the hips will be finished with a mop stick roll and lead capping.



The Existing Issues

The current roof finishes are allowing the fabric of the building to deteriorate. Whilst temporary repairs have been carried out, issues continue.

Like many solid stone built older properties, the domestically occupied property has suffered continual issues with dampness particularly through the roof coverings. This has been monitored over a number of years now and isolated reactive repairs have been carried out.

Parts of the roof have a modern nonbreathable membrane, whilst other parts use a traditional technique of lime torching and some include both. The present occupiers have made attempts to channel the water leaking through the roof coverings away from the internal areas by underlining rafters with sarking felt in attempt to channel the water to the eaves of the building. This in turn, and over time, will cause deterioration to the heads of the external walls.

Water is penetrating the slate roof covering, concentrating where it is unable to penetrate the non-breathable membrane but subsequently overwhelming the lime torching and entering the structure of the building.

The ecological surveys have found that bats are present so timing the works will be critical. Further emergence surveys have been commissioned and the results will be made available, together with a method of working and any compensatory measures required, following the start of the activity season.

Materials and techniques

It is proposed to replace the wet laid slate with a dry laid slate so that a protective membrane can be effectively introduced.

The sole reliance on the existing wet laid scantle slate roof covering as currently in place, although a noble conservation technique is not conducive to the harsh environment and humid conditions observed for the locality. The proposal is therefore to use somewhat larger slates laid to a 75mm gauge but with TLX Bat safe breather membrane. The TLX breather membrane has been recommended in the ecological study due to the presence of bats. It is thought the proposal would enhance the space for bats and would ensure the structure of the building, once repairs to the timbers have been carried out, would be better preserved.

Timber repairs will be inevitable.

Impact

There will be a subtle change to the external appearance of the roof however the building will be better protected from the elements.

By changing from the problematic wet lay scantle slate to a dry lay slate there will be a subtle change in the appearance as viewed from the outside with some of the lime torching visible sandwiched between the slates. The use of small 250 x 400 mm slates with a 75mm lap will achieve a similar gauge. The lime torching would have been introduced originally to prevent drafts and lifting of slates as well as a means of fixing the slates. This technique was before modern membranes existed. Buildings evolve with the technology available at the time. The latest attempt to replicate the traditional technique has not been good for the long-term preservation of the building. It is hoped by introducing modern roofing membranes and ventilation along with keeping small slates to a tight gauge the building will be preserved for decades to come sympathetic to the hamlet of buildings and the ecology of the area.

APPROVED

By Lisa Walton at 3:37 pm, Nov 01, 2024

RECEIVED

By Liv Rickman at 12:08 pm, Aug 27, 2024



Site Waste Management Plan for roof covering replacement at

Site: The Downs, Higher Trenoweth, St Marys, Isles of Scilly

Applicant: Duchy of Cornwall

Contractor: To be appointed

Start Date: October 2024 subject to Planning approval and the issue of a NE European Protected Species Mitigation Licence (EPSML)

Project duration: 4 weeks

Persons responsible for the management of waste: Contractor and third-party waste handling – Third Parties handling waste arising from the proposed works will be required to provide documentary evidence of their licence to handle, transport recycle and dispose of waste.

Introduction

This document (**SWMP**) constitutes the Best Practice initiatives to be adopted by the appointed contractors employed to carry out proposed roof replacement works.

The selected contractor is to embrace the principals of the Site Waste Management Plan as required by the Site Waste Management Regulations 2008

Description of works and arisings:

The existing wet laid scantling slate finishes are to be removed and replaced with dry laid Trevilletts slate. All existing wet-laid scantling slate roof finish will be removed; where possible the contractor will save the slates for use elsewhere where they can be cleaned off, where this is not possible, removed slates will be deposited in skips to be transported to a local recycling centre and will be crushed locally and recycled into building aggregate for resale.

All battens will be replaced; removed battens will be de-nailed and either reused by contractor elsewhere or taken to the local waste site and recycled.

NB The replacement natural slate to be used is: 400 mm x 250 mm Trevilletts slate which will be sourced from merchants on the mainland who deal with the Trevilletts quarry directly.

Objectives:

- a) To take all responsible steps to ensure that waste management controls are observed.
- b) To minimise the amount of waste generated and maximise the amount of waste reused and recycled.
- c) To reuse as much waste as possible on site. Where not possible to be reused to identify the most appropriate waste management option in line with the waste hierarchy.
- d) To manage the waste as close as possible to the site location and keep transport to and from the site to a minimum.
- e) To make and improve awareness of waste management issues by all contractors and sub-contractors and to ensure the correct waste management practices are followed on site.

Responsibilities:

Responsibility for the **SWMP** rests with the Principal Contractor on site.

Their duties include but are not limited to:

Ensuring waste is managed on site in accordance with the SWMP. This will include the appropriate segregation of waste on site, making arrangements for its removal, ensuring all staff and sub-contractors understand their duties in relation to the SWMP, organising appropriate training, the keeping of accurate records and documentation of waste handling to include checking of waste transfer documentation and selecting a named site-specific waste coordinator for the company undertaking the works.

All contractors' operatives and waste contractors working on site are responsible for adhering to the principles for the movement and segregation of waste on site.

Waste Contractors: The waste contractors are to be listed with contact details. The list is to be compiled by the site waste coordinator. All waste contractors will be responsible for adhering to the SWMP.

All waste contractors are responsible for ensuring compliance with their duty of care and for providing all appropriate records to the Site Waste Coordinator.

All mainland contractors receiving waste are responsible for ensuring waste is managed as specified by the SWMP and that their waste treatment facility providers have the necessary licences to operate. They also provide all necessary records to the Site Waste Coordinator. Mainland waste contractors receiving waste are responsible for transportation to a licenced waste management facility. Mainland waste contractors are responsible for providing adequate marked containers for the collection and segregation of waste as specified in the SWMP.

Management of waste on site: The principal contractor will adopt the materials that will be reused or recycled on site, and these will be segregated in designated areas ready for mainland transportation or to local recycling centre. The location of the dedicated area will be identified by the contractor prior to any work being commenced and recorded on the site management plan. Materials that will be removed from site for recycling will be segregated from the waste stream and collected in containers for transportation. Potential contamination of the waste containers will be monitored on a frequent basis. Any problems found with arrangements for waste segregation/storage should be reported directly to the site waste coordinator.

Training: As part of adopting the principles of the SWMP the contractor shall implement training and as such the site waste coordinator shall be responsible for ensuring that all contractors operatives receive training on the management of waste on site.

Monitoring: The site waste coordinator will be responsible for frequent monitoring of the waste management throughout the duration of the contract works.

APPROVED

By Lisa Walton at 3:42 pm, Nov 01, 2024

**BAT AND BARN OWL SURVEY
OF THE DOWNS, TRENOWETH,
ST MARY'S, ISLES OF SCILLY**

January 2019



**Spalding Associates (Environmental) Ltd.
10 Walsingham Place
Truro
Cornwall
TR1 2RP**

Tel: 01872 272711

E-mail: office@spaldingassociates.co.uk

**BAT AND BARN OWL SURVEY OF THE DOWNS,
TRENOWETH, ST MARY'S, ISLES OF SCILLY**

O.S. Grid Ref: SV 9180 1243

Survey date: 16th January 2019

Surveyor: Simon Barnard BSc (Hons) MSc CEcol MCIEEM
Class Survey Licence Reg. Nos. 2017-32208-CLS-CLS
(Level 3) & 2015-13541-CLS-CLS (Level 4)

Time spent on site: ¾ hour

Taxonomic groups: Bats
Barn Owls

Report author: Simon Barnard BSc (Hons) MSc CEcol MCIEEM

Report compiled by: Simon Barnard BSc (Hons) MSc CEcol MCIEEM

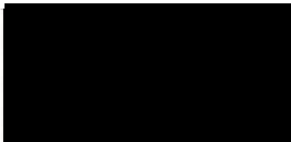
Report completed: 6th February 2019

Filename & issue number BBO_The Down, Trenoweth, St Mary's_Final 1

Report for: Mr Nathan Dean, Duchy of Cornwall

Report No: 18-30T/DofC/The Down, Trenoweth, St Mary's_BBO

Document approved by: Adrian Spalding PhD Director

Signature: 

Date: 7th February 2019

1. INTRODUCTION

Spalding Associates (Environmental) Ltd were instructed by Mr Nathan Dean of the Duchy of Cornwall to carry out a Bat and Barn Owl survey on a property known as The Downs, Trenoweth, St Marys, Isles of Scilly. The property is in need of re-roofing.

2. DESCRIPTION OF BUILDING

The property subject to this survey is a detached two storey stone house which is divided into two dwellings, there is a small flat on the ground floor and a larger dwelling occupying the remainder of the ground and all of the 1st floor. The house is L-shaped with a hipped slate covered roof, clay ridge tiles and deep soffits with cavities and gaps giving access to the roof void, see photos 1 and 2. At the rear of the building is a single storey lean-to containing the kitchen with another small lean-to on the end of the return on the rear of the building.



Photo 1. Showing the front of the house



Photo 2. Showing the rear of the house

The roof void is a single open L-shaped space with the roof being supported on timber trusses. The underside of the roof is unlined with the roof being covered with wet laid scantle slate but has started leaking, see photo 3. In an attempt to prevent water ingress into the property from leaks in the roof the tenants have started tacking modern roofing membrane to the underside of the rafters, see photo 4. This is not ideal as if bats are using the roof space this could obstruct access to roosting sites and bring bats into contact with the modern roofing membrane which is known to cause bat fatalities through bats becoming entangled with the microfibres which coat such membranes. The floor is covered with fibreglass insulation and the tenants have now started boarding out the floor.



Photo 3. Showing roof void in return arm



Photo 4. Showing roof void over main part of the house where works have been done

Externally the stone work is well sealed but there appear to be gaps around the soffits, chimney flashings and under some of the ridge tiles, all of which could be used for roosting by bats or allow access into the roof void.

The Downs is located within a small collection of stone buildings in the hamlet of Trenoweth on the northern end of the island of St Mary's. The land around this building is used for growing flowers and is divided by hedges into small fields. St Mary's is covered with small fields laid to pasture and used to grow crops, which are bounded by hedges and hedge banks with small areas of moorland and areas of plantation woodland along with small groups of stone houses and barns. The habitats surrounding the property represent good bat foraging habitat and a number of Common Pipistrelle roosts are known to be present on the island.

3. METHODS

3.1. Bats

With the aid of a pair of high power torches and set of ladders the building was carefully searched internally and externally, where access allowed, for bats or any signs of bat presence, past or present. This included searching for droppings, feeding remains and individuals as well as searching for potential entry points, polishing or scratching of woodwork (indicating use by bats) and for cavities capable of providing roosting space for bats.

All surfaces were examined where accessible, internally and externally, as well as ledges, hanging tiles and other protruding features for bat droppings and feeding evidence. Any cavities present and open areas were searched with a torch, for roosting bats, as were any cavities present along the wall tops, between the roof timbers and walls and around any openings.

As bats can leave little evidence of their occupation, this survey included an assessment of the potential of the building and features of the building to support roosting bats.

The survey was carried out at in the early afternoon and weather was sunny, dry and still with 60% cloud cover and the temperature was 12°C.

3.2. Barn Owls

With the aid of a torch any access points which could admit Barn Owls into the building were searched for and any ledges present within the buildings which were thought to have the potential to be used by nesting or roosting Barn Owls were searched for owl pellets, feathers and nest debris, as were the floors and beneath crossing timbers.

3.3. Swallows and other birds

Suitable ledges and spaces which could provide nesting space for Swallows and other birds were inspected for evidence of previous or current nest building attempts.

4. RESULTS

4.1. Bats

Within the roof void over the house an accumulation of scattered bat droppings belonging to Common Pipistrelles on top of the insulation (approximately 40 to 60 droppings) was found on the floor below the ridge close to the junction where the two arms of the roof meet, see photo 5. In addition directly above this there were droppings caught in cobwebs below the ridge beam which is where it is near certain the bats roost, see photo 6.



Photo 5. Showing a scattering of Common Pipistrelle droppings on the insulation



Photo 6. Showing ridge beam where it is near certain the bats roost and droppings in cobwebs

4.2. Barn Owls

No evidence of the use or occupation of this building by Barn Owls was found and there are no suitable access points which would allow Barn Owls to gain entry to the interior of the building.

4.3. Swallows and other bird species

No evidence of the use or occupation of this building by nesting birds was found

5. RECOMMENDATIONS

5.1. Bats

During this survey evidence was found which indicates that this building is used for regular day roosting by Common Pipistrelles. As a result further survey work should be undertaken.

This further survey work will aim to establish the number of bats using the building, the status of the roost, and the number of individuals of each species present, confirm if any other species are present and identify the roosting sites and access points.

The further survey should take the form of a pair of emergence surveys, using two surveyors. This further survey work can only be carried out during the active bat season, between May and September.

Once the results of the further survey work have been completed further recommendations can be made.

5.2. Barn Owls

No recommendations necessary.

5.3. Swallows and other bird species

No recommendations necessary.

6. MITIGATION AND ENHANCEMENTS

6.1. Bats

The full details of any mitigation needed can only be determined after the further survey work has been completed and full details will be provided in the report of this further survey work.

6.2. Barn Owls

No evidence of the use of this building by Barn Owls was found and so no mitigation is required.

6.3. Swallows and other bird species

No evidence of the use of this building by nesting birds was found and so no mitigation is required.

7. LEGISLATION

7.1. Bats

Bats in England have been protected under a number of regulations and amendments but the most up-to-date and relevant are:

- The Conservation of Habitats and Species Regulations 2017
- Wildlife and Countryside Act 1981 (Section 9)

The result of Regulations and Acts is that all species of bat and their breeding sites or resting places (roosts) are protected under law. It is an offence to:

- Deliberately capture, injure or kill a bat
- Deliberately disturb a bat in a way that would affect its ability to survive, breed or rear young or significantly affect the local distribution or abundance of the species
- Intentionally or recklessly disturb a bat at a roost
- Intentionally or recklessly obstruct access to a roost whether bats are present or not
- Damage or destroy a roost whether bats are present or not
- Possess, control, transport, sell exchange or offer for sale/exchange any live or dead bat or any part of a bat

Through the Conservation (Natural Habitats &c.) Regulations 1994 (this has been updated and consolidated with subsequent amendments by the Conservation of Habitats and Species Regulations 2017 mentioned above) bats were designated a European protected species as part of Europe wide effort to conserve certain plant and animal species.

Any development which is likely to result in the disturbance of a European protected species, or damage to its habitat usually requires a European protected species licence from Natural England. 'Development' is interpreted broadly to include projects involving demolition of buildings, rebuilding, structural alterations and additions to buildings.

7.2. Birds

All birds, their nests and eggs are protected by law and it is an offence, with certain exceptions, to intentionally:

- Kill, injure or take any wild bird.
- Take, damage or destroy the nest of any wild bird while it is in use or being built.
- Take or destroy the egg of any wild bird.

The Conservation of Habitats and Species (Amendment) Regulations 2012 require public bodies to help "*preserve, maintain and re-establish habitat for wild birds.*"

Barn Owls and other birds listed in Schedule 1 of the Wildlife and Countryside Act 1981 are given a further level of protection against disturbance whilst breeding.

APPROVED

By Lisa Walton at 3:45 pm, Nov 01, 2024

**RESULTS OF FURTHER SURVEY WORK ON
THE DOWNS, TRENOWETH, ST MARY'S,
ISLES OF SCILLY**

July to September 2019



Spalding Associates (Environmental) Ltd.

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RESULTS OF FURTHER SURVEY WORK ON THE DOWNS, TRENOWETH, ST MARY'S, ISLES OF SCILLY

O.S. Grid Ref: SV 9180 1243

Survey dates: Emergence surveys: 31st July and 7th September 2019
Remote detector survey: 31st July to 14th August 2019

Main surveyor: Simon Barnard BSc (Hons) MSc CEcol MCIEEM
Class Survey Licence Reg. Nos. 2017-32208-CLS-CLS
(Level 3) & 2015-13541-CLS-CLS (Level 4)

Time spent on site: 2 x (2 x 1 ¼ hours)
2 x ¼ hour

Taxonomic groups: Bats

Report author: Simon Barnard BSc (Hons) MSc CEcol MCIEEM

Report compiled by: Simon Barnard BSc (Hons) MSc CEcol MCIEEM

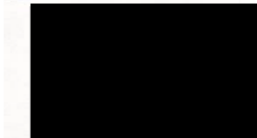
Report completed: 19th September 2019

Filename & issue number: Further Bat Surveys_The Downs, St Marys_Final 1

Report for: Mr Nathan Dean, Duchy of Cornwall

Report No: 18-211T/DofC/The Downs, St Marys/Further bats 1

Document approved by: Adrian Spalding PhD Director

Signature: 

Date: 21st October 2019

1. SUMMARY

Spalding Associates (Environmental) Ltd were instructed by Mr Nathan Dean, of the Duchy of Cornwall, to carry out further bat survey work on The Downs, Trenoweth, St Mary's, Isles of Scilly. The proposal is to replace the roof covering.

This survey work follows on from a Bat and Barn Owl survey, carried out by Spalding Associates in January 2019, during which an accumulation of scattered bat droppings were observed within the roof void on top of the insulation (approximately 40 to 60 droppings), belonging to Common Pipistrelles. In addition, directly above this there were droppings caught in cobwebs below the ridge beam which is where it is near certain the bats roost, see the Bat and Barn Owl survey report for full details.

As a result, further survey work was recommended in the form of a pair of bat emergence or re-entry surveys and the deployment of a remote detector into the roof void for at least 7 consecutive nights. These surveys were designed to determine the species, number of individuals, bat access points and timings of usage. This further survey work can only be carried out during the active bat season, between May and September.

The results of the survey work indicate that the house is used regularly by small numbers of day roosting Common Pipistrelles with up to 4 individuals being seen to emerge. The bats have previously roosted in the roof void and now appear to roost around the edge at the eaves within the soffit boxes and wall tops.

The roosting sites used by the bats will be directly impacted by the works as they will be opened up when the roof is stripped with any bat present being disturbed and potentially being harmed or injured. In addition, if the works resulted in the gaps behind the soffits being filled in this would result in the bats being permanently sealed out of the building and, if inappropriate materials are used (such as breathable roofing membrane which has been shown to cause harm to bats), being harmed.

These works in the absence of appropriate mitigation could result in bats being disturbed, harmed or killed when the works commence, with bat roosts being damaged or permanently destroyed, all of which are offences.

In this instance the aim will be to retain all of the existing roosting sites and access points so that the bats can continue to roost within the roof void. As the site is not a maternity site and as bats on Scilly are unlikely to go into full hibernation, but are more likely to remain in the same building all year around, the works could proceed at any time of year subject to a licence being in place. The stripping of the roof will need to be undertaken under the direct supervision of a suitably licenced ecologist and a temporary roosting site, in the form of a bat box erected onto a nearby tree, will need to be provided for the duration of the works and ideally would be retained onsite into the future as an enhancement.

As it not going to be possible to carry out the works in such a way that offences can be avoided, a Licence from Natural England will need to be obtained prior to works commencing. Due to the small numbers of individuals present and species involved the site should qualify to be covered by the Bat Mitigation Class Licence. The site registration form will need to have been submitted and confirmation of acceptance received from Natural England before the works can lawfully commence.

2. INTRODUCTION AND BACKGROUND

Spalding Associates (Environmental) Ltd were instructed by Mr Nathan Dean, of the Duchy of Cornwall, to carry out further bat survey work on The Downs, Trenoweth, St Marys, Isles of Scilly. The proposal is to replace the roof covering.

This survey work follows on from a Bat and Barn Owl survey, carried out by Spalding Associates in January 2019, during which an accumulation of scattered bat droppings were observed within the roof void on top of the insulation (approximately 40 to 60 droppings), belonging to Common Pipistrelles. In addition, directly above this there were droppings caught in cobwebs below the ridge beam which is where it is near certain the bats roost, see the Bat and Barn Owl survey report for full details.

As a result, further survey work was recommended in the form of a pair of bat emergence or re-entry surveys and the deployment of a remote detector into the roof void for at least 7 consecutive nights. These surveys were designed to determine the species, number of individuals, bat access points and timings of usage. This further survey work can only be carried out during the active bat season, between May and September.

3. METHODS

3.1. Emergence surveys

Emergence surveys aim to establish if the building being surveyed is used by roosting bats and if so to establish the levels of use, confirm the species present, identify the number of individuals present and identify the access points. In this instance a pair of emergence surveys using two trained surveyors for each survey was carried out.

An emergence survey involves positioning surveyors, experienced with the use of bat detectors, around the outside of building identified as having the potential to support roosting bats. These surveyors watch the roof line, openings or features identified as having the potential to support roosting bats from a quarter of an hour before sunset until at least one hour afterwards for emerging bats. These surveys were carried out under favourable weather conditions (no precipitation and not during strong winds) and in temperatures above 9 C.

1st Emergence survey

On 31st July 2019, Simon Barnard and Amy Horn-Norris were positioned on opposite corners of the building being surveyed so that all aspects could be watched. The survey was carried out during suitable weather conditions for bat activity; i.e. overcast but dry with a light breeze, 100% cloud cover and a constant temperature of 16°C. The survey started at 20.54 and continued until 22.09 with sunset being at 21.09.

Bat activity was monitored using an two Elekon Batscanner stereos.

2nd Emergence survey

On 17th September, Simon Barnard and Matthew Thurlow were positioned on opposite corners of the building being surveyed so that all aspects could be watched. The survey was carried out

during suitable weather conditions for bat activity; i.e. clear, still and dry with 0% cloud cover and a starting temperature of 19°C. The survey started at 19.20 and continued until 20.35 with sunset being at 19.35.

Bat activity was monitored using two Elekon Batscanner stereos.

3.2. Remote detector survey

A remote detector was deployed into the roof void over the house on 31st July 2019 and collected on the 17th September 2019. In this instance an AnabatTM Express was used and was fully operational for the first 4 days of its deployment.

A remote detector survey involves installing a remote detector into the building to be surveyed and leaving it in place for a pre-decided period of time. During this time the device will log all the bat calls emitted by bats passing within its range allowing the surveyor to assess the levels of use by bats and the species making use of the structure, over the course of the installation. Usually a remote detector is deployed once, in the peak activity period, for 7 consecutive days.

The weather conditions during the survey period were settled being mostly warm, dry and still with mild nights. The average night time temperatures were between 13°C and 18°C.

3.3. Surveyors

3.3.1. Simon Barnard

Simon Barnard is an experienced bat surveyor with more than 12 years' experience of carrying out all aspects of professional bat survey work including activity surveys, call analysis and emergence surveys. He has held a Natural England survey licence for more than 9 years, currently being registered on the Level 3 (CL19) and level 4 (CL20) Class Survey Licence. He has been involved in designing numerous mitigation schemes and obtaining European Protected Species development licences for the full range of species of bats found in Cornwall and is a registered consultant on Natural England's Bat Mitigation Class licence.

3.3.2. Matthew Thurlow

Matthew Thurlow is a trained bat surveyor experienced with the use of remote detectors and undertaking activity surveys and emergence surveys and is training towards his survey licences.

3.3.3. Amy Horn-Norris

Amy Horn-Norris is an experienced bat surveyor with five years' experience carrying out bat activity surveys and emergence surveys.

4. RESULTS

4.1. Building description

The property subject to this survey is a detached two storey stone house which is divided into two dwellings, there is a small flat on the ground floor and a larger dwelling occupying the remainder of the ground and all of the 1st floor. The house is L-shaped with a hipped slate covered roof, clay ridge tiles and deep soffits with cavities and gaps giving access to the roof void, see photos 1 and 2. At the rear of the building is a single storey lean-to containing the kitchen with another small lean-to on the end of the return on the rear of the building.



Photo 1. Showing the front of the house



Photo 2. Showing the rear of the house

The roof void is a single open L-shaped space with the roof being supported on timber trusses. The underside of the roof is unlined with the roof being covered with wet laid scantle slate but has started leaking, see photo 3. In an attempt to prevent water ingress into the property from leaks in the roof the tenants have started tacking modern roofing membrane to the underside of the rafters, see photo 4. This is not ideal as if bats are using the roof space this could obstruct access to roosting sites and bring bats into contact with modern roofing membrane which is known to cause bat fatalities through bats becoming entangled with the microfibres which coat such membranes. The floor is covered with fibreglass insulation and the tenants have now started boarding out the floor.



Photo 3. Showing roof void in return arm



Photo 4. Showing roof void over main part of the house where works have been done

Externally the stone work is well sealed but there appear to be gaps around the soffits, chimney flashings and under some of the ridge tiles all of which could be used for roosting by bats or allow access into the roof void.

The Downs is located within a small collection of stone buildings in the hamlet of Trenoweth on the northern end of the island of St Mary's. The land around this building is used for growing flowers and is divided into small fields by hedges. St Mary's is covered with small fields laid to pasture and used to grow crops, bounded by hedges and hedge banks with small areas of moorland and areas of plantation woodland along with small groups of stone houses and barns. The habitats surrounding the property represent good bat foraging habitat and a number of Common Pipistrelle roosts are known to be present on the island.

4.2. Emergence surveys

1st Emergence survey, 31st July 2019

The first bat activity noted was a pass up the adjacent lane by a single Common Pipistrelle at 21.05 from a bat heading northwards. At 21.33 a single Common Pipistrelle was seen to emerge from the south western corner of the house from behind the soffit board and was followed by a second individual at 21.35. At 21.38 a further Common Pipistrelle was seen to emerge from the eastern side of the house from behind the soffit board and was followed by a second and final individual at 21.39.

In total 4 Common Pipistrelles were seen to emerge from the house during this survey.

2nd Emergence survey, 17th September 2019

The first bat activity noted was a pass up the adjacent lane by a single Common Pipistrelle at 20.05 from a bat heading northwards. At 20.09 a single Common Pipistrelle was seen to emerge from the south western corner of the house from behind the soffit board. At 20.16 a further Common Pipistrelle was seen to emerge from the eastern side of the house from behind the soffit board and was followed by a second and final individual at 20.17.

In total 3 Common Pipistrelles were seen to emerge from the house during this survey.

4.3. Remote detector survey and brief visual inspection

The remote detector was deployed into roof void over the house on 31st July 2019 and recorded for 14 consecutive days. It did not record any bat activity but was fully operation throughout this time. This may be a result of the work carried out inside the roof void to prevent water leaks, namely lining the underside of the roof from inside with breathable roofing membrane.

4.4. Summary of all results

The results of the survey work indicate that the house is used regularly by small numbers of day roosting Common Pipistrelles with up to 4 individuals being seen to emerge. The bats have previously roosted in the roof void and now appear to roost around the edge at the eaves within the soffit boxes and wall tops.

4.5. Status of the roost

4.5.1. Status at the local, county and regional levels

Species	UK Conservation Status	UK distribution (Richardson 2000 & Altringham 2003) Numbers from The state of the UK's bats NBMP Trends 2017	County occurrence Cornwall RDB 2009	Local occurrence
Common Pipistrelle <i>Pipistrellus pipistrellus</i>	Common.	Throughout the UK 2,430,000 in UK, 1,280,000 in England. Possible upward trend in Field Count and negative trend in Colony Count to 2017.	Common and widespread.	Common Pipistrelles are the main species on the Isles of Scilly with a main maternity roost and small number of further individuals known to roost across St Mary's.

4.5.2. Status at site level

Common Pipistrelles

During the emergence surveys up to 4 Common Pipistrelles were seen to emerge from features on the house during each emergence survey.

This indicates that the building is regularly used by small numbers day roosting Common Pipistrelles.

Estimated population in any given year: 4 adult Common Pipistrelles.

4.5.3. Roost Status

Based on the building supporting “small numbers of common species. not a maternity roost”, it would be considered as being of low conservation significance*.

* Bat Mitigation Guidelines, p. 39 Fig. 4.

5. PROPOSAL, POTENTIAL IMPACTS ON BATS AND MITIGATION

5.1. Proposal

The proposal is to strip and renew the roof covering over the house.

5.2. Potential impacts

The results of the survey work indicate that the house is used regularly by small numbers of day roosting Common Pipistrelles with up to 4 individuals being seen to emerge. The bats have previously roosted in the roof void and now appear to roost around the edge at the eaves within the soffit boxes and wall tops.

The roosting sites used by the bats will be directly impacted by the works as they will be opened up when the roof is stripped with any bat present being disturbed and potentially being harmed or injured. In addition, if the works resulted in the gaps behind the soffits being filled in this would result in the bats being permanently sealed out of the building and, if inappropriate materials are used (such as breathable roofing membrane which has been shown to cause harm to bats), being harmed.

These works in the absence of appropriate mitigation could result in bats being disturbed, harmed or killed when the works commence, with bat roosts being damaged or permanently destroyed, all of which are offences.

As it not going to be possible to carry out the works in such a way that offences can be avoided, a Licence from Natural England will need to be obtained prior to works commencing. Due to the small numbers of individuals present and species involved the site should qualify to be covered by the Bat Mitigation Class Licence. The site registration form will need to have been submitted and confirmation of acceptance received from Natural England before the works can lawfully commence.

5.3. Mitigation

The aim of the mitigation should be to minimise the potential impacts of the works on the bats and ensure that adequate and appropriate roosting provisions are maintained/incorporated to allow bats to continue to roost onsite in the same way following the completion of the works as before they commenced, preserving their conservation status.

In this instance the aim will be to retain all of the existing roosting sites and access points so that the bats can continue to roost within the roof void. As the site is not a maternity site and as bats on Scilly are unlikely to go into full hibernation, but are more likely to remain in the same building all year around, the works could proceed at any time of year subject to a licence being in place. The stripping of the roof will need to be undertaken under the direct supervision of a suitably licenced ecologist and a temporary roosting site, in the form of a bat box erected onto a nearby tree, will need to be provided for the duration of the works and ideally would be retained onsite into the future as an enhancement.

5.3.1. Exclusions

No exclusions will be necessary as a careful inspection of the roof void over the building followed by the supervision of the stripping of the roof covering will be carried out by a suitable trained and licenced ecologist at the start of works.

5.3.2. Timing

As the building only supports small numbers of day roosting bats (and is not a maternity site) and as bats on the Scilly's are unlikely to go into full hibernation the works could proceed at any time of year, subject to a licence being in place.

5.3.3. Watching Brief

A careful inspection of the roof void over the building followed by the supervision of the stripping of the roof covering and dismantling of any features in which bats have been found to roost will need to be carried out by a suitable trained and licenced ecologist at the start of works. All of the roof coverings will need to be carefully stripped by hand under the direct supervision of the named ecologist or an accredited agent. As a result, any bats present will be revealed and can be carefully picked up in a gloved hand and safely relocated out of harm's way.

A short briefing will also be given to the builder at the start of works on the status of the building with regards to bats, on what to do if a bat were to be found unexpectedly during the works and on the form of the mitigation to be provided along with a brief inspection of the interior of the building. A temporary roosting site, in the form of a bat box erected onto a nearby tree, will need to be provided for the duration of the works and ideally would be retained onsite into the future as an enhancement

5.3.4. Retention of roosting sites

It should be possible to retain or recreate all of the existing roosting sites. These include the gaps behind the soffit boards. In addition, as access to the roof void will be maintained the underside of the new roof will need to be lined with bitumen type 1F roofing felt and not modern breathable roofing membrane. This is because the modern breathable roofing membrane has been shown to cause bat fatalities and is not permitted for use in bats roosting by Natural England.

6. CONCLUSIONS AND RECOMMENDATIONS

The results of the survey work indicate that the house is used regularly by small numbers of day roosting Common Pipistrelles with up to 4 individuals being seen to emerge. The bats have previously roosted in the roof void and now appear to roost around the edge at the eaves within the soffit boxes and wall tops.

The roosting sites used by the bats will be directly impacted by the works as they will be opened up when the roof is stripped with any bat present being disturbed and potentially being harmed or injured. In addition, if the works resulted in the gaps behind the soffits being filled in this would result in the bats being permanently sealed out of the building and, if inappropriate materials are used (such as breathable roofing membrane which has been shown to cause harm to bats), being harmed.

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Any development which is likely to result in the disturbance of a European protected species, or damage to its habitat usually requires a European protected species licence from Natural England. 'Development' is interpreted broadly to include projects involving demolition of buildings, rebuilding, structural alterations and additions to buildings.

APPROVED

By Lisa Walton at 3:45 pm, Nov 01, 2024

RECEIVED

By Liv Rickman at 12:31 pm, Aug 27, 2024

BAT PRESENCE/ABSENCE SURVEYS (PAS) PRELIMINARY RESULTS

THE DOWNS and LITTLE DOWNS,
TRENOWETH, ST MARY'S, ISLES OF SCILLY



Client: Duchy of Cornwall

Our reference: 24-3-1

Planning reference: Report produced in advance of submission

Report date: 11th August 2024

Revision: -

Author: James Faulconbridge BSc (Hons), MRes, MCIEEM

Contact: ios.ecology@gmail.com

Executive Summary

Overview

Three Presence/Absence Surveys (PAS) and corresponding static detector deployments are required to meet the evidence base required by the Best Practice Guidance on The Downs and Little Downs.

This interim report presents the results of the first two PAS surveys and first two static detector deployments.

The results of the final surveys would be required to ensure that this report meets the requirements to determine the Planning Application and to support an EPSML.

Results

Two common pipistrelle bats were recorded emerging from roosting locations around the soffits of the property on each of the first two PAS surveys.

The static deployments did not identify any flight activity within the loft space itself, indicating that the roosts are likely to be associated with the fascias and wall plate of the roof, rather than within the loft space itself.

These results are consistent with a non-breeding summer roost used by a small number of common pipistrelle bats.

The surveys generally recorded moderate activity levels of common pipistrelle bats foraging or commuting in the vicinity of the building.

Mitigation Strategy

A European Protected Species Mitigation Licence (EPSML) must be obtained before re-roofing works are undertaken. The works must then comply with the mitigation strategy outlined in the EPSML. This would include ecological oversight of roof removal around the eaves; use of appropriate roofing membrane in the replacement roofing works; and the restoration of the roosting feature at the completion of works. The inclusion of roof lights within the new design would necessitate the creation of dark, secure roosting features around the eaves to ensure that roost sites remain unlit and undisturbed.

This strategy is presented based on the evidence base gathered to date – it is essential that this is reviewed and amended, if required, based on the results of the final surveys. For the avoidance of doubt, the current evidence baseline is not sufficient to support determination of planning in accordance with Circular 06/05 (ODPM, 2005).

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1. Introduction

1.1. Background to Survey

The property is a two-storey residential property with a hipped roof situated in a small conurbation known as Trenoweth in the north of St Mary's, Isles of Scilly. The property known as the Downs also has a self-contained holiday let within the structure known as Little Downs.

The proposed schedule of works involve the replacement of the roof covering including battens and tiles; and the installation of rooflights within the loft space.

A Preliminary Roosting Assessment (PRA) was carried out in February 2024 - this assessment identified High Potential for use by roosting bats. The Downs is recorded as a confirmed bat roost known to support up to 4 common pipistrelle bats established through PRA and PAS surveys completed in 2019.

The PRA report stated that further PAS surveys and corresponding static detector deployments within the loft space would be required to provide an evidence base sufficient to identify the status of the building with regards to bats, and inform any mitigation measures required to ensure legislative compliance.

This PAS report provides the interim results of the first two recommended surveys and outlines an interim mitigation strategy. It should be read alongside the PRA report to provide a comprehensive assessment of the building with regards to roosting bats.

1.2. Survey Objectives

In accordance with the Best Practice Guidance¹ for a High Potential building, the structure will be subject to three PAS surveys with surveyors positioned to observe those locations where potential access or roosting features were identified.

The overall objective is to provide a comprehensive ecological baseline upon which to assess the potential impact of the proposed re-roofing works to roosting bats.

¹ Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition). The Bat Conservation Trust, London

2. Survey Methodology

2.1. Surveyor Details

The surveys were led by Darren Hart. Darren has undertaken Professional Bat Licence training and is a Level 2 Licenced Bat Worker with experience in undertaking emergence, re-entry and activity surveys.

Additional surveyors are experienced in undertaking emergence and re-entry surveys and worked under the supervision of the Licenced Bat Worker.

2.2. Survey Methodology

The dusk emergence surveys were conducted following Best Practice methodology for bat surveys.

The first two PAS surveys were carried out on the evenings of 24th May 2024 and 18th July 2024 – scheduled over three weeks apart in accordance with Best Practice guidance.

The dusk emergence surveys commenced from approximately 15 minutes before sunset and continued until 90 minutes after sunset. The surveys were undertaken with regard for the appropriate weather conditions ($\geq 10^{\circ}\text{C}$ at sunset, no/light rain or wind).

Frequency division bat detectors were used to detect and record all bat passes. The surveyors recorded metadata including the time the pass occurred, the behaviour observed (foraging/commuting) and where possible, the species of bat observed. Results from the bat detector recordings were analysed using BatSound/Analook sonogram analysis computer software.

Night Vision Aids (NVAs) were used on all survey positions – these were three Nightfox Whisker infra-red cameras with additional infra-red torches. The footage from these NVAs was watched back to verify or update the survey results confirmed in the field.

2.3. Survey Validity and Update

Bats are transient in their use of habitats such as these, and apparently minor changes in condition or use of the building can affect suitability. However in the absence of significant changes in condition or building use, the nature and character of the site suggest that the results of the PAS surveys can be considered proportionately valid until the next active season in May 2025.

3. Results

3.1. Surveyor Positions

In order to ensure that the survey was comprehensive with regards to coverage and vantage points, two surveyor positions (S1 – S2) with corresponding NVAs, and an additional unmanned NVA (NVA3) were used. These are identified in Map 01 below.



Map 01 – showing surveyor positions around the buildings. See the PRA report for full details of the different structures indicated by the various colour washes.

3.2. PAS Survey 1

3.2.1. Survey Conditions

The first dusk survey was undertaken on 24th May 2024. The survey commenced at 9:02pm, approximately 15 minutes before sunset at 9:17pm. It was completed at 10:47pm.

The temperature throughout the survey was 13°C - the evening was dry and calm with 20% high cloud cover.

3.2.2. Survey Results - Emergence

The emergence survey identified two common pipistrelle bats emerging from two separate roosting sites behind fascias on the northern and eastern aspects of the property at 9:35pm and 9:45pm. These locations are indicated in Photo 01 and 02 below.



Photo 01 – showing the location where 1x common pipistrelle bat was recorded emerging from a roosting location on the northern aspect of the property at 21:35.



Photo 02 – showing the location where 1x common pipistrelle bat was recorded emerging from a roosting location on the eastern aspect of the property at 21:46.

Two further bats were recorded emerging from the single-storey roof on the eastern aspect at 9:32pm. This structure would not be impacted by the proposals.

3.2.3. Survey Results - Activity

There were moderate levels of foraging activity from the time of the recorded emergences at 9:32pm until the end of the survey by both surveyors.

No species other than common pipistrelle bats were recorded during the survey.

3.3. PAS Survey 2

3.3.1. Survey Conditions

The second dusk survey was undertaken on 18th July 2024. The survey commenced at 9:10pm, approximately 15 minutes before sunset at 9:25pm. It was completed at 10:55pm.

The temperature throughout the survey was 17°C - the evening was dry and still with 60% high cloud cover.

3.3.2. Survey Results - Emergence

The emergence survey identified two common pipistrelle bats emerging from two separate roosting sites behind fascias on the northern and eastern aspects of the property at 9:28pm and 9:46pm. These locations are indicated in Photo 03 and 04 below. The roost location on the northern aspect corresponds with the location confirmed in PAS1 - the location on the eastern aspect utilised a different feature closer to the southern corner of the property.



Photo 03 – showing the location where 1x common pipistrelle bat was recorded emerging from a roosting location on the eastern aspect of the property at 21:28.



Photo 04 – showing the location where 1x common pipistrelle bat was recorded emerging from a roosting location on the northern aspect of the property at 21:46.

No other emergence activity was recorded on this survey.

3.3.3. Survey Results - Activity

No species other than common pipistrelle bats were recorded during the survey.

High levels of foraging activity were recorded by common pipistrelle bats around the eastern aspect of the building – the surveyor on the western aspect recorded regular but lower intensity foraging behaviour.

3.4. PAS Survey 3

This survey is scheduled for end-August 2024 and the results of this would be required in order to confirm the assessment of the roost and the proposed mitigation strategy.

3.5. Static Deployments

The static detectors were left in the loft space to remotely record any bat passes during the following times:

- 29th June – 11th July 2024 (12 nights);
- 18th July – 29th July 2024 (11 nights).

No bat echolocation was recorded during this time. This does not conclusively preclude the potential for bats to be roosting in the loft space itself, with access gained via confirmed features in the soffits, but does indicate no active flight within the void during the timeframes in which the static detector was deployed.

This would indicate that the sheltered void of the loft space itself does not perform a functional role in the suitability of the roost.

3.6. Limitations and Constraints

3.6.1. Seasonal Timing

The surveys were undertaken within the main active season in 2024 and spaced more than three weeks apart – this conforms with the recommended survey timings within the Good Practice Guidelines.

3.6.2. Survey Conditions

The weather conditions were optimal with no precipitation or other adverse conditions which might be expected to affect bat behaviour.

3.6.3. Visibility and Coverage

The surveys were comprehensive with regards to surveyor visibility across those aspects of the building where roosting features were identified. The southern aspect of the property did not have a manned survey position but utilised an NVA for this reason.

3.6.4. NVA Footage

The NVA camera coverage of the property was approximately 90% with minor aspects outside of the Field of View (FOV) of the cameras. The cameras were strategically positioned so that any areas of the property not covered were those where no roosting opportunities were noted; or where the surveyors had excellent visibility.

The NVA3 camera was allowed to record remotely, as the front aspect of the property had very few potential roosting features; there was no recorded emergence on this aspect in the previous 2019 surveys; and the open view allowed a comprehensive survey of this aspect. This footage was watched back to confirm the absence of emergence results.

The emergence of bats from the flat-roof extension by surveyor S2 in PAS1 was not recorded as this was outside of the FOV of the NVA. This roof would not be impacted by the works and was therefore not the focus for the NVA monitoring.

4. Mitigation Strategy

4.1. Impact Assessment

The PAS surveys completed to date confirmed behaviour consistent with the following roosts:

- A non-breeding summer roost used by two common pipistrelle bats behind the fascias on the eastern and northern aspects of the property.

The results are consistent with those recorded in 2019 when 4x and 3x bats respectively were recorded emerging from the same features indicating broad continuity of use of the building over time.

The re-roofing proposals, in the absence of mitigation, would result in the modification/destruction of the roosts and the potential to disturb, kill or injure the roosting bats.

The installation of the roof lights, in the absence of mitigation, would modify the internal conditions of the loft space which could result in the modification or destruction of the roosts depending on the precise situation of the bats at the soffits/eaves.

These impacts can be controlled through an appropriate method of working which would be secured by a European Protected Species Mitigation Licence (EPSML).

4.2. Final Survey Requirements

The results and mitigation strategy outlined to date are preliminary based on the results of the first two PAS and static deployment surveys.

The results of the outstanding surveys would be required to confirm this assessment and mitigation strategy; and to provide an evidence base suitable to support determination of a planning application.

4.3. European Protected Species Mitigation Licence (EPSML)

4.3.1. Overview

The re-roofing works undertaken on the property must be completed under an EPSML which would need to be in place prior to works commencing. The works must then proceed in accordance with the requirements of the EPSML.

An EPSML is a derogation licence which allows an otherwise-unlawful act to be undertaken – in this case the modification/destruction of a bat roost and the disturbance of roosting bats. The method of working would ensure avoidance of impacts such as roost destruction or the killing/injuring of bats. The EPSML

would include mitigation measures and other commitments which must be met in order for the licence to be valid.

The EPSML can be applied for either under the standard EPSML application process; or the streamlined Site Registration under the ER programme. It is recommended that the latter option is selected as this comes with a reduced cost and a shorter decision timeframe, typically 15 days after application.

Planning Permission must be secured prior to application for Natural England for the EPSML derogation.

Works must adhere to the methodology and measures outlined in the EPSML.

4.3.2. Mitigation Measures

The following conditions and caveats would be included within the EPSML and must be strictly adhered to during the works in order to ensure legislative compliance. Please note this is not necessarily comprehensive. Additional minor constraints or requirements may be necessary in the final EPSML document and the strategy is contingent on the results of the final surveys:

- Works can proceed during the transitional or winter periods from mid-September to end-April inclusive;
- Prior to the commencement of licenced works, the Licenced Bat Worker would provide a Toolbox Talk to contractors to ensure they understand the locations where bats may be found; the methodology which would minimise the risk of harm to bats; and the protocol to follow if a bat is identified.
- Installation of a bat box in a suitable location in the grounds of the property prior to works commencing in order to ensure that there is a place where any bats encountered during works can be safely placed. This should then be retained undisturbed in perpetuity.
- Key elements of the works should be undertaken under a 'soft strip' methodology whereby the fascia boards are removed by hand, as well as tiles within 1m of the eaves under the ecological oversight of a Licensed Bat Worker. If bats are identified, they would be captured by hand and moved to a place of safety.
- Once the soft-strip has been completed, and the Licenced Bat Worker is satisfied that the roosting locations have been fully explored and rendered unsuitable for bats, re-roofing works can proceed with distance supervision. The roof restoration works should be completed as soon as possible to minimise the duration of time when bats would not have access to the roost.
- Following completion of the works, the roost would be restored in situ. This would involve the retention/replacement of existing soffits, or the incorporation of a cavity 100mm wide and 25mm deep behind the soffits boards in the locations of confirmed access features to permit continued

access for bats. This would be completed under the direction of the Licensed Bat Worker who would confirm and sign off the restored roosting feature at the end of works.

- Any replacement of woodwork in locations where bats may access should ensure that wood treatments are safe for bats – a list of approved treatments will be provided by the Licenced Bat Worker.
- A bitumen membrane or bat-safe breathable roofing membrane (BRM) must be specified rather than standard BRM which can cause entanglement and death to roosting bats as well as deterioration of the BRM resulting in poor material performance.
- The eaves of the loft space must be boxed in with ply/chipboard or similar to create sealed, dark voids at the edges of the loft space. These should create a triangular void with a minimum apex height of 30cm to ensure access to suitable dark niches for bats accessing roosting features via gaps behind fascias.

4.4. Adjacent Features

The confirmation of a roost within the flat-roof structure would not be directly impacted by the proposed works, but there is potential for indirect impacts arising from disturbance or obstruction from scaffolding.

The design of scaffolding installation must ensure that the flat roof building is not impacted, damaged or disturbed during the works.

4.5. Planning Conditions

It is recommended that the following requirements should be incorporated into appropriate Planning Conditions if the LPA are minded to approve the application:

- A compliance condition requiring that works proceed with regards to Mitigation Strategy outlined in **Chapter 4** of this report.

Natural England cannot issue an EPSML if any pre-commencement conditions related to protected species have not been discharged. Therefore the condition should be compliance rather than pre-commencement in order to ensure there is not an impediment to seeking the EPSML upon determination.

APPROVED

By Lisa Walton at 3:46 pm, Nov 01, 2024

RECEIVED

By A King at 8:29 am, Sep 20, 2024

BAT PRESENCE/ABSENCE SURVEYS (PAS)

THE DOWNS and LITTLE DOWNS,
TRENOWETH, ST MARY'S, ISLES OF SCILLY



Client: Duchy of Cornwall

Our reference: 24-3-1

Planning reference: Report produced in advance of submission

Report date: 11th September 2024

Revision: A

Author: James Faulconbridge BSc (Hons), MRes, MCIEEM

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Executive Summary

Overview

Three Presence/Absence Surveys (PAS) and corresponding static detector deployments are undertaken to meet the evidence base required by the Best Practice Guidance on The Downs and Little Downs.

The results of the surveys are presented here to provide an evidence base which meets Best Practice Guidance following the initial findings of the Preliminary Roost Assessment (PRA) report.

Results

A maximum of four common pipistrelle bats were observed emerging from roosting sites associated with the soffits and roof tiles in the third PAS survey; whilst a maximum of two common pipistrelle bats were recorded emerging from roosting locations around the soffits of the property on each of the first two PAS surveys.

The static deployments did not identify any flight activity within the loft space itself, indicating that the roosts are likely to be associated with the fascias and wall plate of the roof, rather than within the loft space itself.

These results are consistent with a non-breeding summer roost and likely transient period roost used by a small number of common pipistrelle bats.

The surveys generally recorded moderate activity levels of common pipistrelle bats foraging or commuting in the vicinity of the building.

Mitigation Strategy

A European Protected Species Mitigation Licence (EPSML) must be obtained before re-roofing works are undertaken. The works must then comply with the mitigation strategy outlined in the EPSML. This would include ecological oversight of roof removal around the eaves; use of appropriate roofing membrane in the replacement roofing works; and the restoration of the roosting feature at the completion of works.

The inclusion of roof lights within the new design would necessitate the creation of dark, secure roosting features around the eaves to ensure that roost sites remain unlit and undisturbed.

Report Status

The PRA and PAS reports together provide an ecological evidence baseline which conforms to the Best Practice Requirements to support a Planning Application.

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1. Introduction

1.1. Background to Survey

The property is a two-storey residential property with a hipped roof situated in a small conurbation known as Trenoweth in the north of St Mary's, Isles of Scilly. The property known as the Downs also has a self-contained holiday let within the structure known as Little Downs.

The proposed schedule of works involve the replacement of the roof covering including battens and tiles; and the installation of rooflights within the loft space.

A Preliminary Roosting Assessment (PRA) was carried out in February 2024 - this assessment identified High Potential for use by roosting bats. The Downs is recorded as a confirmed bat roost known to support up to 4 common pipistrelle bats established through PRA and PAS surveys completed in 2019.

The PRA report stated that further PAS surveys and corresponding static detector deployments within the loft space would be required to provide an evidence base sufficient to identify the status of the building with regards to bats, and inform any mitigation measures required to ensure legislative compliance. This PAS report provides the results of the recommended surveys. It should be read alongside the PRA report to provide a comprehensive assessment of the buildings with regards to roosting bats.

1.2. Survey Objectives

In accordance with the Best Practice Guidance¹ for a High Potential building, the structure was subject to three PAS surveys with surveyors positioned to observe those locations where potential access or roosting features were identified.

The overall objective is to provide a comprehensive ecological baseline upon which to assess the potential impact of the proposed re-roofing works to roosting bats.

¹ Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition). The Bat Conservation Trust, London

2. Survey Methodology

2.1. Surveyor Details

The surveys were led by Darren Hart. Darren has undertaken Professional Bat Licence training and is a Level 2 Licenced Bat Worker with experience in undertaking emergence, re-entry and activity surveys.

Additional surveyors are experienced in undertaking emergence and re-entry surveys and worked under the supervision of the Licenced Bat Worker.

2.2. Survey Methodology

The dusk emergence surveys were conducted following Best Practice methodology for bat surveys.

The PAS surveys were carried out on the evenings of 24th May 2024; the 18th July 2024; and the 29th August 2024 – scheduled over three weeks apart in accordance with Best Practice guidance.

The dusk emergence surveys commenced from approximately 15 minutes before sunset and continued until 90 minutes after sunset. The surveys were undertaken with regard for the appropriate weather conditions ($\geq 10^{\circ}\text{C}$ at sunset, no/light rain or wind).

Frequency division bat detectors were used to detect and record all bat passes. The surveyors recorded metadata including the time the pass occurred, the behaviour observed (foraging/commuting) and where possible, the species of bat observed. Results from the bat detector recordings were analysed using BatSound/Analook sonogram analysis computer software.

Night Vision Aids (NVAs) were used on all survey positions – these were three Nightfox Whisker infra-red cameras with additional infra-red torches. The footage from these NVAs was watched back to verify or update the survey results confirmed in the field.

2.3. Survey Validity and Update

Bats are transient in their use of habitats such as these, and apparently minor changes in condition or use of the building can affect suitability. However in the absence of significant changes in condition or building use, the nature and character of the site suggest that the results of the PAS surveys can be considered proportionately valid until the next active season in May 2025.

3. Results

3.1. Surveyor Positions

In order to ensure that the survey was comprehensive with regards to coverage and vantage points, two surveyor positions (S1 – S2) with corresponding NVAs, and an additional unmanned NVA (NVA3) were used. These are identified in Map 01 below.



Map 01 – showing surveyor positions around the buildings. See the PRA report for full details of the different structures indicated by the various colour washes.

3.2. PAS Survey 1

3.2.1. Survey Conditions

The first dusk survey was undertaken on 24th May 2024. The survey commenced at 9:02pm, approximately 15 minutes before sunset at 9:17pm. It was completed at 10:47pm.

The temperature throughout the survey was 13°C - the evening was dry and calm with 20% high cloud cover.

3.2.2. Survey Results - Emergence

The emergence survey identified two common pipistrelle bats emerging from two separate roosting sites behind fascias on the northern and eastern aspects of the property at 9:35pm and 9:45pm. These locations are indicated in Photo 01 and 02 below.



Photo 01 – showing the location where 1x common pipistrelle bat was recorded emerging from a roosting location on the northern aspect of the property at 21:35.



Photo 02 – showing the location where 1x common pipistrelle bat was recorded emerging from a roosting location on the eastern aspect of the property at 21:46.

Two further bats were recorded emerging from the single-storey roof on the eastern aspect at 9:32pm. This structure would not be impacted by the proposals.

3.2.3. Survey Results - Activity

There were moderate levels of foraging activity from the time of the recorded emergences at 9:32pm until the end of the survey by both surveyors.

No species other than common pipistrelle bats were recorded during the survey.

3.3. PAS Survey 2

3.3.1. Survey Conditions

The second dusk survey was undertaken on 18th July 2024. The survey commenced at 9:10pm, approximately 15 minutes before sunset at 9:25pm. It was completed at 10:55pm.

The temperature throughout the survey was 17°C - the evening was dry and still with 60% high cloud cover.

3.3.2. Survey Results - Emergence

The emergence survey identified two common pipistrelle bats emerging from two separate roosting sites behind fascias on the northern and eastern aspects of the property at 9:28pm and 9:46pm. These locations are indicated in Photo 03 and 04 below. The roost location on the northern aspect corresponds with the location confirmed in PAS1 - the location on the eastern aspect utilised a different feature closer to the southern corner of the property.



Photo 03 – showing the location where 1x common pipistrelle bat was recorded emerging from a roosting location on the eastern aspect of the property at 21:28.



Photo 04 – showing the location where 1x common pipistrelle bat was recorded emerging from a roosting location on the northern aspect of the property at 21:46.

No other emergence activity was recorded on this survey.

3.3.3. Survey Results - Activity

No species other than common pipistrelle bats were recorded during the survey.

High levels of foraging activity were recorded by common pipistrelle bats around the eastern aspect of the building – the surveyor on the western aspect recorded regular but lower intensity foraging behaviour.

3.4. PAS Survey 3

3.4.1. Survey Conditions

The final dusk survey was undertaken on 29th August 2024. The survey commenced at 7:59pm, approximately 15 minutes before sunset at 8:14pm. It was completed at 9:44pm.

The temperature throughout the survey was 16°C - the evening was dry and calm with 5% high cloud cover.

The third NVA unit (NVA3) was manned by an additional surveyor on this occasion measure to record activity at the front of the property and provide additional confidence of the assessments made in the first two PAS surveys.

3.4.2. Survey Results - Emergence

The emergence survey identified four common pipistrelle bats emerging from roosting sites behind fascias on the eastern aspects of the property at 8:15pm, 8:23pm (2x bats) and 8:30pm. Two of the emergences were associated with the

soffits, as recorded in the previous PAS1 and PAS2, though two bats were identified emerging from beneath roof tiles on the eastern aspect of the building. The limitations of the available vantage points did not allow confirmation of the precise location of these emergences.

Three further bats were recorded emerging from the single-storey roof on the eastern aspect between 8:24pm and 8:27pm. This structure would not be impacted by the proposals.

No emergence from other aspects of the property including the western and southern roof pitches was identified.

3.4.3. Survey Results - Activity

There were moderate levels of foraging activity from the time of the majority of emergences at 8:23pm until the end of the survey by the surveyors in positions S1 and S2 whilst lower levels were recorded by the surveyor in the NVA3 position where the habitat is more open.

No species other than common pipistrelle bats were recorded during the survey.

3.5. Static Deployments

The static detectors were left in the loft space to remotely record any bat passes during the following times:

- 29th June – 11th July 2024 (12 nights);
- 18th July – 29th July 2024 (11 nights);
- 29th August – 8th September 2024 (11 nights).

No bat echolocation was recorded during these deployments. This does not conclusively preclude the potential for bats to be roosting in the loft space itself, with access gained via confirmed features in the soffits, but does indicate no active flight within the void during the timeframes in which the static detector was deployed.

This would indicate that the sheltered void of the loft space itself does not perform a functional role in the suitability of the roost in the form of a flight space before emergence/after re-entry; or in providing access to roosting features.

3.6. Limitations and Constraints

3.6.1. Seasonal Timing

The surveys were undertaken within the main active season in 2024 and spaced more than three weeks apart – this conforms with the recommended survey timings within the Good Practice Guidelines.

3.6.2. Survey Conditions

The weather conditions were optimal with no precipitation or other adverse conditions which might be expected to affect bat behaviour.

3.6.3. Visibility and Coverage

The surveys were comprehensive with regards to surveyor visibility across those aspects of the building where roosting features were identified. The southern aspect of the property did not have a manned survey position but utilised an NVA for this reason.

3.6.4. NVA Footage

The NVA camera coverage of the property was approximately 90% with minor aspects outside of the Field of View (FOV) of the cameras. The cameras were strategically positioned so that any areas of the property not covered were those where no roosting opportunities were noted; or where the surveyors had excellent visibility.

The NVA3 camera was allowed to record remotely for the first two PAS surveys, as the front aspect of the property had very few potential roosting features; there was no recorded emergence on this aspect in the previous 2019 surveys; and the open view allowed a comprehensive survey of this aspect. This footage was watched back to confirm the absence of emergence results. The survey position was manned with an additional surveyor for PAS3 as a precaution and no emergence or change in activity levels was noted. This provides additional confidence in the assessment of the PAS1 and PAS 2 surveys.

Technical issues resulted in reduced quality of NVA footage for the surveyor in position S1 in the early part of PAS3 – therefore the emergence activity identified in the field during this period is assumed to be correct on a precautionary basis as it could not be subsequently verified. The consistency of the results with the prior two surveys in PAS1 and PAS2 however provide confidence that this constraint on verification does not significantly impact the overall reliability of the results gathered.

The emergence of bats from the flat-roof extension by surveyor S2 in PAS1 and PAS3 was not recorded as this was outside of the FOV of the NVA. This roof would not be impacted by the works and was therefore not the focus for the NVA monitoring.

4. Mitigation Strategy

4.1. Impact Assessment

The PAS surveys completed confirmed behaviour consistent with the following roosts:

- A non-breeding summer roost used by a maximum of four common pipistrelle bats; primarily behind the fascias on the eastern and northern aspects of the property with occasional use of roof tiles on the eastern aspect.

As a precaution, given the slight increase in numbers in the final PAS3 which is late in the maternity season, the following additional roost use is also assumed:

- A transitional period roost used by individual common pipistrelle bats.

The results are consistent with those recorded in 2019 when two PAS surveys confirmed 4x and 3x bats respectively were recorded emerging from the same features indicating broad continuity of use of the building over time.

The re-roofing proposals, in the absence of mitigation, would result in the modification/destruction of the roosts and the potential to disturb, kill or injure the roosting bats.

The installation of the roof lights, in the absence of mitigation, would modify the internal conditions of the loft space which could result in the modification or destruction of the roosts depending on the precise situation of the bats at the soffits/eaves.

These impacts can be controlled through an appropriate method of working which would be secured by a European Protected Species Mitigation Licence (EPSML).

4.2. European Protected Species Mitigation Licence (EPSML)

4.2.1. Overview

The re-roofing works undertaken on the property must be completed under an EPSML which would need to be in place prior to works commencing. The works must then proceed in accordance with the requirements of the EPSML.

An EPSML is a derogation licence which allows an otherwise-unlawful act to be undertaken – in this case the modification/destruction of a bat roost and the disturbance of roosting bats. The method of working would ensure avoidance of impacts such as roost destruction or the killing/injuring of bats. The EPSML would include mitigation measures and other commitments which must be met in order for the licence to be valid.

The EPSML can be applied for either under the standard EPSML application process; or the streamlined Site Registration under the ER programme. It is recommended that the latter option is selected as this comes with a reduced cost and a shorter decision timeframe, typically 15 days after application.

Planning Permission must be secured prior to application for Natural England for the EPSML derogation.

Works must adhere to the methodology and measures outlined in the EPSML.

4.2.2. Mitigation Measures

The following conditions and caveats would be included within the EPSML and must be strictly adhered to during the works in order to ensure legislative compliance. Please note this is not necessarily comprehensive. Additional minor constraints or requirements may be necessary in the final EPSML document:

- Works can proceed during the transitional or winter periods from mid-September to end-April inclusive;
- Prior to the commencement of licenced works, the Licenced Bat Worker would provide a Toolbox Talk to contractors to ensure they understand the locations where bats may be found; the methodology which would minimise the risk of harm to bats; and the protocol to follow if a bat is identified.
- Installation of a bat box in a suitable location in the grounds of the property prior to works commencing in order to ensure that there is a place where any bats encountered during works can be safely placed. This should then be retained undisturbed in perpetuity.
- Key elements of the works should be undertaken under a 'soft strip' methodology whereby the fascia boards are removed by hand, as well as tiles on the eastern aspect; and all tiles within 1m of the eaves on other aspects under the ecological oversight of a Licensed Bat Worker. If bats are identified, they would be captured by hand and moved to a place of safety.
- Once the soft-strip has been completed, and the Licenced Bat Worker is satisfied that the roosting locations have been fully explored and rendered unsuitable for bats, re-roofing works can proceed with distance supervision. The roof restoration works should be completed as soon as possible to minimise the duration of time when bats would not have access to the roost.
- Following completion of the works, the roost would be restored in situ. This would involve the retention/replacement of existing soffits, or the incorporation of a cavity 100mm wide and 25mm deep behind the soffits boards in the locations of confirmed access features to permit continued access for bats. This would be completed under the direction of the Licensed Bat Worker who would confirm and sign off the restored roosting feature at the end of works.

- Any replacement of woodwork in locations where bats may access should ensure that wood treatments are safe for bats – a list of approved treatments will be provided by the Licenced Bat Worker.
- A bitumen membrane or bat-safe breathable roofing membrane (BRM) must be specified rather than standard BRM which can cause entanglement and death to roosting bats as well as deterioration of the BRM resulting in poor material performance.
- The eaves of the loft space must be boxed in with ply/chipboard or similar to create sealed, dark voids at the edges of the loft space. These should create a triangular void with a minimum apex height of 30cm to ensure access to suitable dark niches for bats accessing roosting features via gaps behind fascias.

4.3. Adjacent Features

The confirmation of a roost within the flat-roof structure would not be directly impacted by the proposed works, but there is potential for indirect impacts arising from disturbance or obstruction from scaffolding.

The design of scaffolding installation must ensure that the flat roof building is not impacted, damaged, obstructed or disturbed during the works.

4.4. Planning Condition Recommendations

It is recommended that the following requirements should be incorporated into appropriate Planning Conditions if the LPA are minded to approve the application:

- A compliance condition requiring that works proceed with regards to Mitigation Strategy outlined in **Chapter 4** of this report.

Natural England cannot issue an EPSML if any pre-commencement conditions related to protected species have not been discharged. Therefore the condition should be compliance rather than pre-commencement in order to ensure there is not an impediment to seeking the EPSML upon determination.

Appendix 1 – NVA Screenshots



NVA1 – showing footage from the Nightfox Whisker at survey position S1 – this covers the eastern and part of the northern aspects of the property.



NVA2 – showing footage from the Nightfox Whisker at survey position S2 – this covers the western and part of the northern aspects of the property.



NVA3 – showing footage from the Nightfox Whisker at survey position NVA3 – this covers the southern aspect of the property.