PRELIMINARY ECOLOGICAL APPRAISAL OF:

ON THE QUAY
THE QUAY
HUGH TOWN
ST MARY'S
ISLES OF SCILLY
TR21 OHU

Client: Phil Moon

Our reference: BS41-2020

Report date: 9th March 2021

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REPORT ISSUED IN ELECTRONIC FORMAT ONLY

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Non-technical Summary

On 9th March 2021, the Isles of Scilly Wildlife Trust (IoSWT) conducted a Preliminary Ecological Appraisal (PEA) of On the Quay, The Quay, Hugh Town, St Mary's, Isles of Scilly, TR21 0HU (BS41-2020), for which there is a proposal to install a new dormer on the western aspect of the eastern double-ridged roof section and the installation of a single Velux on the southern roof aspect, by removing and re-using the easternmost of the 2 existing windows.

- The PEA was undertaken to ascertain the potential for protected habitats and species to be present within the site.
- The habitats on site are assessed as being of **low** ecological value.
- The property was deemed as having negative bat roost potential.
- The property was deemed to have **low** ecological value for breeding birds.
- The property was deemed to have **negligible** ecological value for reptiles, amphibians, and invertebrates.
- No additional surveys are recommended.
- Due to the nature of the proposal, mitigation will be required to minimise the low risk that bats and breeding birds may be present during phases of the work and/or time of the year.
- A net gain in biodiversity is possible on this site if bat boxes are erected on the southern elevation of the development.
- If works have not been completed by December 2021, it is recommended that this ecological appraisal is updated.
- This report is sufficient to support a planning application.

1.0 Introduction

1.1 Survey and reporting

This report details the results of a preliminary ecological appraisal (PEA) of On the Quay, The Quay, Hugh Town, St Mary's, Isles of Scilly TR21 0HU, National Grid Reference SV9020110873 (see Figure 1.). The survey, carried out on 9th March 2021, was undertaken to inform the installation of a new dormer on the western aspect of the eastern double-ridged roof section and the installation of a single Velux on the southern roof aspect, by removing and re-using the eastern-most of the 2 existing windows.

1.2 Aims and Scope of the report

This report is a Preliminary Ecological Appraisal (PEA). According to the Chartered Institute of Ecology and Environmental Management (CIEEM) guidelines, a PEA "can be used as a scoping report (for non-Environmental Impact Assessment (EIA) projects) but should not be submitted as part of a planning application unless it can be determined that the project would have no significant ecological effects, no mitigation is required and no further surveys are necessary."

This report is based on a desktop study and rapid on-site assessment aimed at assessing the suitability of the site to support notable habitats and protected species. This report will assess the compliance of the scheme with relevant local and national planning policy and will provide an initial assessment of the biodiversity value of the site to be made, identifying the likely ecological constraints associated with the project and identifying any mitigation measures likely to be required following the 'Mitigation Hierarchy'². Any additional surveys that may be required to inform an Ecological Impact Assessment (EcIA) will be identified, as will any opportunities to deliver ecological enhancement.

1.3 Site Setting and Description

On the Quay is situated in the Isles of Scilly National Character Area (NCA), described by Natural England as follows³; "The Isles of Scilly comprise over 200 granite islands scattered across 200 km2, set out in the Atlantic some 45 km south-west of Land's End. Of these islands only five are currently inhabited, namely the islands of St Mary's, St Agnes, St Martin's, Tresco and Bryher. The occupied islands cover a total area of just over 14 km². The islands contain 26 Sites of Special Scientific Interest and one Special Area of Conservation (SAC), designated for a range of geological and biological features, including maritime heathland and grassland, as well as one Special Protection Area and Ramsar site, highlighting the important seabird colonies. The marine environment between and around the islands is designated as an

SAC and a Marine Conservation Zone for the wealth of marine species it supports, from diverse rocky reef to grey seals that breed around the islands. For such a small land area, the islands display a striking diversity of landscape, including lowland heath and small pastures enclosed by stone walls and banks, plus tiny-hedged bulb fields and a varied coastline. Many of these features have been in place for 4,000 years, and still retain their original purpose. Harsh conditions created by the maritime climate mean that woodland cover is minimal. It is a landscape rich in history, with 900 historic monuments. The most notable features are the outstanding prehistoric monuments of chambered barrows and standing stones of the late Neolithic and early Bronze Age. The entire NCA has been designated as an Area of Outstanding Natural Beauty (AONB) and is recognised as a Heritage coast.

On the Quay is located just north of the Built-Up Areas Boundaries² (2011) for England and Wales (published by the Office for National Statistics, Geography, situated on Rat island, which forms part of the main harbour complex for St Mary's. The development is approximately 378 sq. metres in size, is located on the first floor and at the southern end of a much larger industrial property which sits within a working harbour. Its west aspect overlooks a small complex of granite built industrial units, with its eastern aspect overlooking the harbour.



Figure 1 Site Location

1.4 Site proposals

This report is provided in advance of a planning application for the installation of a new dormer on the western aspect of the eastern double-ridged roof section and the installation of a single Velux on the southern roof aspect, by removing and re-using the eastern-most of the 2 existing windows.

2.0 Methodology

2.1 Zone of Influence (ZoI)

The ZoI is the area encompassing all predicted negative ecological effects from the proposed scheme and is informed by the habitats present within the site and the nature of the proposals. Due to the scale and nature of the proposals it is considered that a ZoI of 1km from the centre of the site is appropriate for the gathering of information for the desk study.

2.2 Desk Study

A full biological record centre desktop study was undertaken for the presence of bats but was not taken for the remaining assessment of the development, as it was not considered necessary given the limited scale of impacts and the nature of the on-site and surrounding habitats. The desk study also included accessing the Multi-Agency Geographic Information for the Countryside (MAGIC)⁴ database in order to establish the presence of statutory designated sites, including all internationally and nationally designated sites such as Special Protection Areas (SPAs), Special Areas of Conservation (SACs), Ramsar sites and Sites of Special Scientific Interest (SSSIs) within 1km of the site.

Other resources used were aerial photography to identify the presence of habitats such as woodland blocks, watercourses and hedgerows in close proximity to the site. This assists in the assessment of the potential of the site and its surrounding habitat to support protected species.

2.2.1 Vegetation

An assessment was made of all areas of vegetation within the site based on the standardised Phase 1 survey methodology⁵. This involved a walkover survey to identify broad vegetation types, which were then classified against Phase 1 habitat types, where appropriate. A list of characteristic plant species for each vegetation type was compiled and any invasive species⁶ encountered as an incidental result of the survey are noted.

2.2.2 Bats

An assessment was made of the suitability of the building up to the site boundary to support roosting bats based on the presence of features such as loose or missing tiles, lifted lead flashing for buildings and holes. An assessment was made of the suitability of the site and surrounding landscape to support foraging and/or commuting bat species. This survey confirmed to current Bat Conservation Trust (BCT) guidelines⁷.

2.2.3 **Birds**

The assessment of breeding and wintering birds on the site was based on the suitability of habitat present, evidence of nesting such as old or currently active nests and the presence of bird species that may potentially nest within the available habitat.

2.2.4 Reptiles/Amphibians

The reptile survey was based on an assessment of the suitability of habitat present within the site to support a population of reptiles. Reptiles particularly favour scrub and grassland interfaces and the presence of these is a good indication that reptiles may be present on site. In addition, reptiles are known to utilise features such as bare ground for basking, tussocky grassland for shelter and compost heaps and rubble piles for breeding and/or hibernating.

2.2.5 Invertebrates

An assessment was made of the site for its potential value to support diverse communities of invertebrates. The assessment was made based on the presence of habitat features which may support invertebrate communities. These features include: an abundance of dead wood, the presence of diverse plant communities, the presence of varied woodland structure, sunny woodland edges, presence of ponds and water courses and free-draining soil. At the time of the survey no attempt was made to identify species present and where a site supports features that may be of importance to invertebrates then further surveys (Phase 2) may be required to assess the importance of the site.

2.3 Preliminary Ecological Appraisal Limitations

Ecological surveys are limited by factors which affect the presence of plants and animals such as the time of year, migration patterns and behaviour. Therefore, the field survey has not produced a complete list of plants and animals and in the absence of evidence of any particular species should not be taken as conclusive proof that the species is not present or that it will not be present in the future. The survey was undertaken at a time of year when many species of plant and animal are either dormant, not visible above

ground or simply not present in the UK (such as migratory birds). Therefore, the survey was based upon an assessment of the habitat present on site and the suitability of this habitat to support protected species.

2.4 Initial Protected Species Assessment

As part of a PEA, the assessment criteria is based on the potential for the site to support the species considered, this is usually based on habitat features, their suitability for the species and the results of any desk study data obtained as part of the appraisal. In many cases Phase 2 surveys will be required to assess the status of species and hence the importance of a population at a site. Therefore, the assessment should be considered a provisional assessment. Tables 1 and 2 below define the criteria used to assess the potential of the site to support protected species.

2.5 Criteria used to Assess Ecological Value

The ecological values provided within this report are based around both the professional judgement of the author of this report and current published relevant guidance, including information sources such as "A Nature Conservation Review" and "Guidelines for Ecological Impact Assessment in the United Kingdom"."

Table 1 – Description of the categories used to classify a building's bat roost potential and the survey effort required to determine the likely presence or absence of bats

	Roost status	Description	Survey effort required to determine the likely presence or absence of bats
ial	High	Numerous features potentially suitable for use by roosting bats, optimal or good quality bat foraging habitat nearby and good habitat connectivity. Alternatively, a building with fewer features potentially suitable for use by roosting bats and optimal foraging habitat nearby.	Three dusk emergence and/or pre-dawn re-entry surveys between May and September. Optimum period May – August. Two surveys should be undertaken during the optimal period and at least one survey should be a pre-dawn survey.
Bat Roost Potential	Moderate	More than a few features potentially suitable for use by roosting bats, good foraging habitat nearby and limited habitat connectivity. Alternatively, a building with a few features potentially suitable for use by roosting bats but optimal foraging habitat nearby.	Two or three dusk emergence and/or pre-dawn re-entry surveys between May and September (but only if features will be affected by the proposals).
Bat R	Low	Only a few features potentially suitable for use by roosting bats but good bat foraging habitat nearby. Alternatively, a building with more than a few features potentially suitable for use by roosting bats but sub-optimal foraging habitat nearby and limited habitat connectivity.	One or two dusk emergence and/or pre-dawn re-entry surveys between May and September (but only if features will be affected by the proposals).
	Negligible	Very few features potentially suitable for use by roosting bats and / or in an area (such as a densely populated urban area) which has limited habitat connectivity and poor foraging habitat.	No further surveys required.

Table 1. Categorising and classifying a building's bat roost potential

7 Collins, J. (ed.) (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust

Table 2 – Description of the categories used to classify a sites potential and the survey effort required to determine the likely presence or absence of a protected species or protected group of species

	Potential	Description	Survey effort required to determine the likely presence or absence of the species
	High	On site habitat is of high quality for a species or species group. The site is within or near a geographic stronghold. Good quality surrounding habitat and good connectivity.	If species are likely to be affected by the proposals, further Phase 2 surveys will be required to establish the presence/likely absence of the species.
	Moderate	On site habitat is of moderate quality, providing most of the species/species group requirements. Limiting factors may include small habitat area or disturbance	If species are likely to be affected by the proposals, further Phase 2 surveys will be required to establish the presence/likely absence of the species.
	Low	On site habitat is of poor to moderate quality for the species or group. Presence cannot be discounted on the basis of distribution, isolation or surrounding habitats etc.	If species are likely to be affected by the proposals, further Phase 2 surveys will be required to establish the presence/likely absence of the species.
	Negligible	Site includes very limited or poor quality habitat for the species or group. Surrounding habitat is unlikely to support wider populations.	Further Phase 2 surveys are unlikely to be required as species is unlikely to be present

Table 2. Categorising and classifying a sites protected species potential

3. Results

3.1 Surveyor Details

The survey was undertaken by Darren Mason BSc (Hons) of the Isles of Scilly Wildlife Trust. Darren has undertaken professional Bat Licence Training and holds a Natural England WML-A34-Level 2 (Class 2 License); registration number: 2020-46277-CLS-CLS which permits him to survey bats using artificial light and endoscopes and capture bats using hand and hand-held static nets.

3.2 Desktop Study

3.2.1 Statutory Designated Sites

There are two statutory designated sites of conservation importance situated within a 1km radius of the site. Details of these designations are provided below. For further information on statutory designated sites please see Appendix 2.

- i.) **Porthloo SSSI** Situated 820m north-east of the proposed development lies Porthloo SSSI designated for its geology, particularly for its Quaternary sediments in the cliffs that show changes in the climates and environments of the Quaternary period in Scilly.
- ii.) Lower Moors SSSI Situated 463m east of 12 Higher Strand is Lower Moors SSSI. A topogenous mire that has a range of wetland habitats supporting a diverse range of wetland wildflower species, including the Nationally Scarce Tubular Water-dropwort (*Oenanthe fistulosa*). The site also holds locally important populations of Royal Fern (*Osmunda reglis*) and Southern Marsh Orchid (*Dactylhoriza praetermissa*) and is particularly important feeding for passage and wintering birds including Corncrake (*Crex crex*) and Spotted Crake (*Porzana porzana*).

3.3 Vegetation

The vegetation within the site is described here in general terms using Phase 1 habitat survey terminology and refers to dominant, characteristic and other noteworthy species in each vegetation type within the survey area. The habitat types on site consist of:

Building and hardstanding

3.3.1 Buildings and hardstanding

The property is detached and has mixed modern cladding with a main east/west aspect. The roof is built in a double ridge and valley style, with an approximate pitch of 45°. The tiling throughout has mixed types including fibre cement and slate, all in good condition. 8 Velux windows are installed, 2 each on the north and southern hipped roof aspects and 4 within the western aspect of the western double ridge. 2 dormer windows, with vertical hanging tiles and wooden fascia, are also present in the same aspect. No windows are present on the west aspect of the eastern double ridge (see Photo 1.). Immediately surrounding the property is concrete hardstanding used by vehicles to transport freight and by the public travelling to and from the ferry.



3.3.2 Summary

The site comprises an industrial property surrounded on all sides by a working harbour. The most significant habitat features in the context of the site itself are the maritime lichen species. However, these are not rare or notable and overall, the site is assessed as being of **low ecological value**.

3.4 Bats

Throughout, the building presents with little or no gaps, crevices, or holes in the areas of the proposed new dormer, or the alteration of the Velux window. No tiles are missing and are tightly bound to each other; the lead flashing is well-fitting and not raised; the fenestration presents with no gaps between the window frames and the cladding is in good condition. Externally, at the ceiling height of the ground floor on the southern, western, and northern aspects, 10 large security lights are present illuminating the area immediately around the building (see Photo 2.). On the eastern aspect a first-floor, full length veranda is present which hosts dining guests throughout the Spring, Summer and Autumn. Beyond the building the habitat quickly becomes optimal for bats due to the strandline of Town Beach and the old school site at Carn Thomas with its associated scrub, open grassland and trees. Both provide access to the wider countryside for commuting and foraging bats. However, it must be noted that on a small island links to the wider countryside are easily reached.



Photo 2. – showing velux (right side) which will be moved and the numerous security lights

In summary, the building and the proposed development has negligible features suitable for use by roosting bats, in particular crevice-dwelling species of the pipistrellus genus. The immediate habitat surrounding the development has no vegetation and is illuminated by numerous security lights. The area is heavily used throughout the year including at night by vehicles delivering and collecting freight and between spring and autumn by the public dining late on the veranda on the building's eastern aspect. However, beyond the buildings immediate surroundings the habitat becomes more favourable for foraging and commuting bats, providing links to the wider countryside. Overall, the site is assessed as being of negligible roost potential.

3.5 Birds

During the survey no birds were seen and no active or used bird nests were recorded. The wider landscape comprises ample suitable feeding habitat in the form of the beach strandline, areas of scrub, grassland and Elm copses at Carn Thomas and mature gardens throughout the rest of Hugh Town. Overall, the property is considered to have **low potential** for supporting nesting birds.

3.6 Reptiles/amphibians

With no ponds on site, the extensive hardstanding and exposure to very saline conditions, the property presents with no apparent features suitable for reptiles or amphibians. Though suitable hibernating habitat is present within Hugh Town which has good connectivity in the form of mature gardens and hedgerows the nearest pond (used for breeding) is situated 900m away to the east. Overall, the property is considered to have **negligible potential** to support reptiles and amphibians.

3.7 Invertebrates

The presence of the strandline at Town beach nearby is likely to support invertebrate species, but the immediate habitat surrounding the property and the strandline itself are highly unlikely to support an important food plant or rare or notable species, or species assemblage of terrestrial invertebrates.

Therefore, the site is considered to offer **negligible potential** for supporting any rare or scarce species or species assemblage of invertebrate.

4. Planning Policy Context

4.1 Planning Policy

4.1.1 National Policy

The National Planning Policy Framework (NPPF)¹⁰ sets out the government's requirements for the planning system in England. A number of sections of the NPPF are relevant when taking into account development proposals and the environment. As set out in within Paragraphs 7 to 10 of the NPPF "the purpose of the planning system is to contribute to the achievement of sustainable development." The general impetus of the NPPF in relation to ecology and biodiversity is for development proposals to not only minimise the impacts on biodiversity but also to provide enhancement. Paragraph 170 states that "Planning policies and decisions should contribute to and enhance the natural and local environment and minimise impacts on and providing net gains for biodiversity." A number of principles are set out in Paragraph 175 including the principle that where harm cannot be adequately avoided then it should be adequately mitigated, or, as a last resort, compensated for.

In addition to the NPPF, the Office of the Deputy Prime Minister (ODPM) circular 06/05¹¹ provides guidance on the application of law relating to planning and nature conservation as it applies in England. Paragraph 98 states "the presence of a protected species is a material consideration when a planning authority is considering a development proposal, that if carried out, would be likely to result in harm to the species or its habitat." Whilst Paragraph 99 states "it is essential that the presence or otherwise of a protected species, and the extent that they may be affected by the proposed development, is established before planning permission is granted."

4.1.2 Local Policy

Local planning policy with the Isles of Scilly Council is provided by the current Local Plan 'A 2020 Vision.' A single over-arching policy within this document makes specific reference to environmental protection.

Policy 1 – Environmental protection

• Protect a statutorily-protected plant or animal species and the wildlife, geological and geomorphological interest and features of designated Sites of Special Scientific Interest; and locally important biodiversity habitats, species and landscape features;

5. Evaluation, Potential Impacts and Recommendations

5.1 Site Evaluation

The site is approximately 378 sq metres in size and forms part of a larger industrial property. The protected species potential on site is very limited, restricted to common maritime lichen species. Therefore, the site is assessed as being of **low ecological value**.

5.2 Summary of Potential Impacts

The proposed development entails the installation of a new dormer on the western aspect of the eastern double ridge roof and the removal of the eastern most Velux on the southern aspect roof and its installation further west along the southern aspect. In the absence of mitigation, the potential ecological impact of these works are:

 A very low risk of disturbing bats during the demolition phase of the removal of tiles during the installation of the dormer and Velux window.

5.3 Summary of Key Recommendations

The following recommendations have been designed to minimise the potential impacts and enhance the site for wildlife:

- Work ideally should take place between 1st March and 1st May inclusive.
- If not possible, then avoidance measures to minimise the risk of disturbing bats during the demolition phase should be undertaken (See Appendix 1 for avoidance measures).
- If work were to commence between March and August inclusive, the proposed development would need to be checked first for nesting birds and if, any evidence of breeding activity was found, or nests are identified works that would disturb the adults, the nest or young must be postponed until all young have fledged the nest and it is no longer in use.
- Undertake enhancement measures to meet NPPF net gain in biodiversity principles by installing 1 stand-alone bat box on the cladding of the lower south elevation.

5.4 Evaluation Against Relevant Planning Policy

Given the impacts identified and the subsequent recommendations made it is considered that the proposals will accord with all relevant national and local planning policy in relation to ecology (see Section

4). Providing there is scope within the proposals to support the necessary mitigation for roosting bats.

Ecological Feature	Summary	Potential Impacts of the Development	Recommendations
Decisional City	2 Isles of Scilly SSSIs	There are no anticipated impacts associated with	There are no recommendations to be made in
Designated Sites		designated sites.	respect to designated sites.
Vacatation	The site comprises no managed garden landscape and is	There are not anticipated impacts associated with	There are no recommendations to be made in
Vegetation	deemed as having low ecological value	vegetation of the proposed development.	respect to vegetation.
	The site has no features suitable to host roosting bats, with	Installation of the dormer window and the replacement	Avoidance measures (see Appendix 1) should be
	the immediate habitat is illuminated by 3 streetlights.	of the velux window may lead to the disturbance of	undertaken during the demolition phase of the
Bats	Despite having links to the wider countryside and optimal	bats or may cause harm to roosting bats.	works. Install 1 stand-alone bat box on the
	foraging habitat the development is deemed to have		cladding of the lower southern elevation.
	negligible bat roost potential		
	The site has been assessed as having low potential to	Installation of the dormer window may lead to the	If during the months of March to August
Birds	support nesting birds.	disturbance of nesting birds and/or their young	inclusive evidence of nesting birds is found
biras			(nests, nesting birds or young) work should stop
			until all breeding activity is over.
	The drystone wall has the potential to support hibernating	There are no anticipated impacts associated with	There are no recommendations to be made in
Reptiles/Amphibians	amphibians, but, overall the site is assessed as having	reptiles and amphibians.	respect of reptiles and amphibians
	negligible potential to support reptiles/amphibians		
	The site is assessed as having negligible potential to	There are no anticipated impacts associated with rare	There are no recommendations to be made in
Invertebrates	support any rare or notable invertebrate species or species	or notable invertebrates.	respect of reptiles and amphibians
	assemblages		

Table 4. Potential impacts and recommendations cont.....

5.5 Updating Survey

If the works have not commenced by December 2021, it is recommended that this PEA is updated. This recommendation is made as many of the species considered during the current survey are highly mobile and the ecology of the site is likely to change over a two-year period. Similarly, if the planning application boundary changes or the proposals of the site alter, a re-assessment of the impacts may be required.

6.0 Conclusion

On the Quay forms part of a larger industrial complex that services the local harbour. The immediate habitat surrounding the proposed development has been assessed as having low ecological value. The property has been assessed for its bat roost potential and has been categorised as having negligible potential to host roosting bats in its current state. Avoidance measures should be undertaken during the demolition phase of works to minimise the risk of disturbing or causing harm to bats if they were to be found (see Appendix 1). However, the site does have the potential to provide a net gain in biodiversity, in keeping with national and local planning policy, via the erection of bat boxes on each of the north-east and south-west elevations of the extended dormer window. No impact on reptiles/amphibians and invertebrates is anticipated.

7. Bibliography

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APPENDIX 1

Avoidance Measures – Bats

- i. When roofing works are planned these should avoid the main breeding and mating season of Vespertilionidae bats, work should typically take place between the 1st November and 1st May inclusive.
- **ii.** Ensure all workers on site (including sub-contractors) are made familiar with bat legislation and agree to work in accordance with and fully follow best practice measures.
- **iii.** Carry out prior to demolition careful checks of any cracks/crevices and cavities in or on the building. Signs of usage include; bat droppings, dis-colouration or polishing of access points where bats rub against them, urine stains and a lack of cobwebs, particularly if other crevices around them have plenty.
- iv. Individual bats may be found in/under; cladding, between timber boards, between corrugated sheeting, in soffit boxes, behind lead flashing and sometimes just clinging to timber beams around joins as well as other areas. When any of these are removed, please do so carefully, lifting outwardly, and checking for bats continually. If in doubt, consult a licensed bat worker.
- v. Try to minimise any dust generated from demolition works from entering off-site buildings and gardens
- vi. In the unlikely event that a bat is found please see below:
 - 1. At no point should a worker handle a bat. Untrained handling may cause undue stress and injury to the bat, and if bitten may expose the worker to rabies-related European Bat Lyssavirus
 - 2. Where possible replace any covering without damaging the bat, then halt works and contact **Natural England** (Tel: 0845 601 4523), or the **Bat Conservation Trust Helpline** (0845 1300 228), or **IoSWT** (01720 422153) for advice.
 - **3.** Any bats that go to ground should be covered with a box and left alone until a licensed bat worker arrives to assess the condition of the bat
 - **4.** If the bat attempts to fly at any point allow it to do so. Preventing natural behavior will cause unnecessary stress and may cause injury. Attempt to see where bat goes. If the bat returns to the building, halt works and report the escaped bat to the local bat worker