MVV Environment Devonport Ltd
Energy from Waste Combined Heat and Power Facility, North Yard, Devonport

Tree Inspection for the Potential to Support Roosting Bats

February 2011

Prepared for

MVV Environment Devonport Ltd

Revision Schedule

Tree Inspection for the Potential to Support Roosting Bats

28th February 2011

Rev	Date	Details	Prepared by	Reviewed by	Approved by
01	28 February 2011	Report	**Melanie Pritchard** Assistant Ecologist	**Paul Gregory** Senior Ecologist	**Ian Roach** Principal Environmental Consultant

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1 Introduction

1.1 Background

1.1.1 Through a competitive tendering process, MVV Environment Devonport Limited (MVV) has been awarded the South West Devon Waste Partnership's (SWDWP) residual waste treatment and disposal contract. The SWDWP is a collaboration that has been established between Plymouth City Council, Torbay Council and Devon County Council to provide a long term solution to deal with the waste from the southwest Devon area that cannot be recycled, reused or composted.

1.1.2 MVV's proposal is to construct and operate an Energy from Waste (EfW) facility, incorporating Combined Heat and Power (CHP) technology, on land currently situated in the north east of Her Majesty's Naval Base (HMNB) Devonport, Plymouth.

1.1.3 Scott Wilson Limited has been employed by MVV as planning and environmental consultants and is undertaking the necessary environmental studies to support the planning application.

1.1.4 Scott Wilson Limited has undertaken an inspection of two trees to assess their potential to support roosting bats; this report will support the ecology chapter of the ES.

1.2 Site Description

1.2.1 The surveyed area occupies *c.* 6.3 ha of land centred on national grid reference: SX 446 573. The site access is via the Camel's Head entrance into Her Majesty's Naval Base (HMNB) Devonport, located *c.* 4 km north west of Plymouth city centre. The site lies in the north of the naval base / dockyard complex. The surrounding landscape is dominated by the urban environments of the city of Plymouth, mainly industrial and residential buildings. The Tamar estuary is located *c.* 500m to the west of the site. A location plan is provided as Figure 1 in Appendix A.

1.2.2 Until recently the site was used by a firm called Ashcroft to process demolition rubble, created from different construction projects throughout the Naval Base and dockyard. Semi-natural broadleaved woodland occurs towards the north and north western areas of the site, whilst semi-improved grassland and mudflats, associated with the estuarine tributaries, occur towards the west of the site.

1.2.3 The land to the south-west of the site is currently used as a car park, whilst to the east is the Devonport Distribution Facility (DDF), which stands approximately 8m high. The DDF is bordered to the north and south by large areas of tarmac which are currently used as loading bays and service yards. Directly to the south of the site is Weston Mill Lake naval dock.

1.3 Development Description

1.3.1 As detailed in paragraph 1.1.1, MVV proposes to construct and operate an EfW CHP facility at the site. The land requirement is 3.4 ha. This will include the EfW CHP plant itself, buildings, ancillary equipment, storage areas, office and amenity buildings, weighbridges, an ash recycling plant, on site access and landscaping.

2 Methodology

2.1 Tree Survey for the Potential to Support Roosting Bats

2.1.1 Surveying for the presence or potential for roosting bats is undertaken by inspecting the area, structure or tree(s) for signs of bat occupancy, such as presence, droppings, scratch marks, staining and feeding remains. Features such as crevices, fissures and gaps with structures or trees that a bat(s) may use as access/egress points to a roost may also be an indication of the potential to support bats. The features are assessed from the ground with binoculars and the use of a 1,000,000 candlepower lamp for illumination of identifiable features. For further information and terminology see Appendix B.

3 Results

3.1 Tree Survey for the Potential to Support Roosting Bats

3.1.1 Two mature trees have been surveyed from the ground for their potential to support roosting bats. Reference is made to tree numbers (in brackets) identified on the tree survey sheet for the potential to support roosting bats (Appendix C).

3.1.2 A mature multi-stemmed pedunculate oak (*Quercus robur*) (T1) located at grid reference SX44621 57361 had a small amount of ivy growth on the main trunks. This tree has negligible potential to support roosting bats.

3.1.3 A semi-mature pedunculate oak (T2) located at grid reference SX 44625 57368 had no cavities or ivy on the trunk or branches. This tree has negligible potential to support roosting bats.

4 Conclusions and Recommendations

4.1 Tree Survey for the Potential to Support Roosting Bats

4.1.1 The two trees have negligible potential to support roosting bats. No further action or special treatment with regard to bats is required.

Appendix A: Site Location Plan

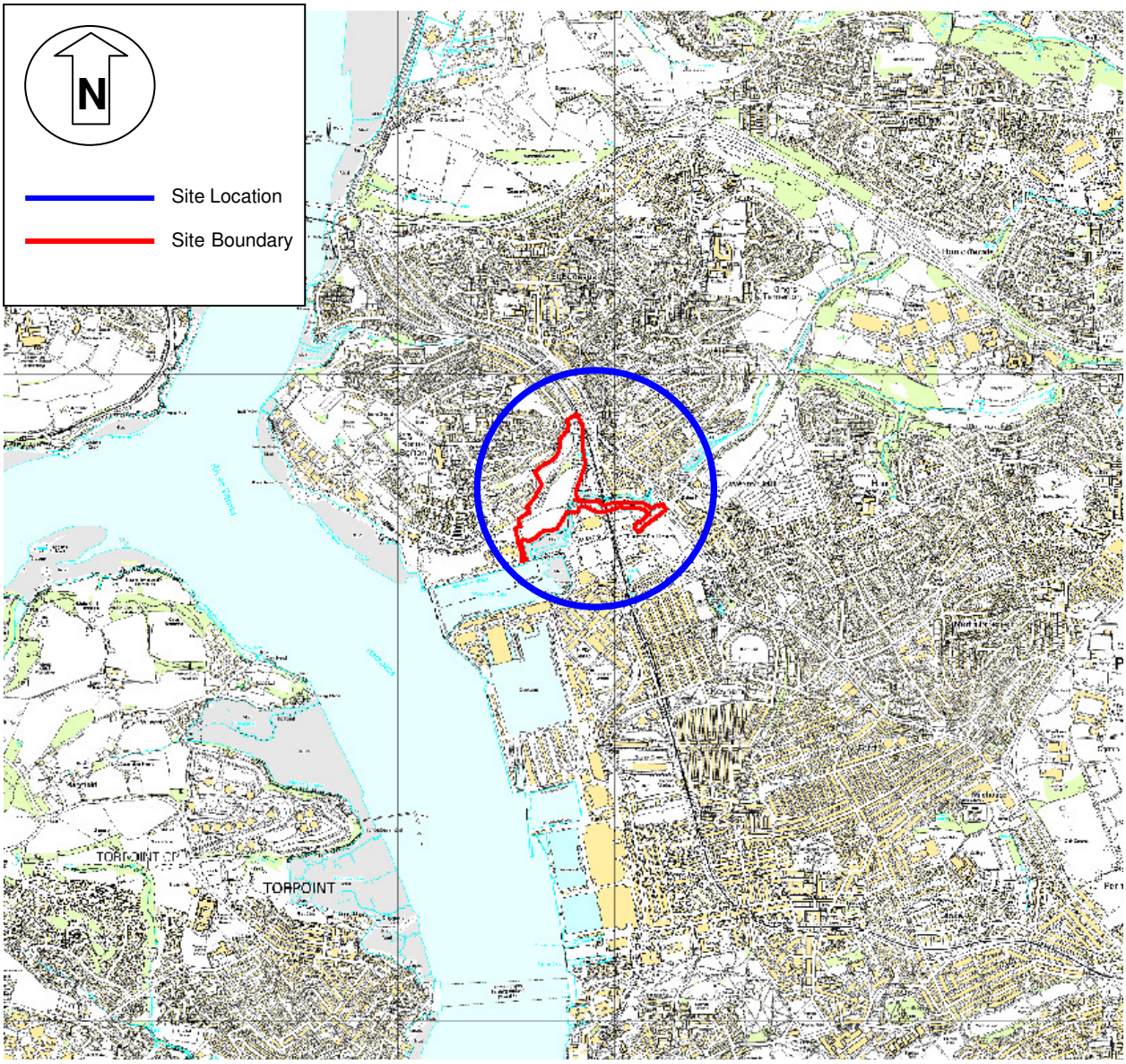

Figure 1. Site Location Plan
Not to Scale
Date 28/02/11
Project Title:
Devonport Dockyard: Tree survey for the potential to support roosting bats.

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Appendix B: Bat Roost Potential Terminology

Trees are classified as possessing **negligible**, **low**, **moderate** or **high** potential for bats based upon a range of features (presence of cavities, size and accessibility of cavities, droppings below the tree, ivy cover *etc.*). These were assessed from the ground with binoculars. The degree of potential dictates the degree of caution with which the trees must be treated if it is intended to fell them:

Negligible or Low Potential

No further action or special treatment is required with regard to bats.

Moderate Potential

Cavities in these trees should be investigated for evidence of bats (droppings, fur staining, insect remains *etc.*), where possible. If evidence is found, a licence is required from Natural England prior to felling. If no evidence is found, either the cavities should be filled with expanding foam to remove the roost potential or the tree should be felled under an ecological watching brief. Alternative roost provision may be required such that the potential roost resource does not decline.

High Potential

Cavities in these trees should be investigated for evidence of bats, where possible. If evidence is found, a licence is required from Natural England prior to felling. If no evidence is found, the tree should be subject to further surveys (emergence surveys) in order to determine the presence of bats with certainty for EIA and licensing purposes. If no evidence of bats is found and none are observed during the emergence survey, the cavities can be filled with expanding foam to remove the roost potential and felled at a later date. Alternative roost provision should be made such that the potential roost resource does not decline.

Appendix C: Tree Assessment Form

SCOTT WILSON ECOLOGY - Tree assessment form (features with potential to support roosting bats)

Job number: D123356 | Date: 10/12/10 | Location: Devonport, Weston Mill | Weather: Clear/Sunny/Cold

Recorder: PG and MP

NB. Use one line per feature present

Photo no.	Tree number (or grid ref)	Tree species (if known)	Diameter at 1.5m height (m)	Description of feature: Split	Loose bark	Trunk cavity	Branch cavity	Ivy	Callus Rolls	Other (add note)	Height of cavity	Direction of cavity	Uncluttered drop zone (Y/N)	Signs (1)	Position in landscape (2)	Summary of Potential: Confirmed	High	Moderate	Low	Negligible	Cavity filled (Y/N)	Roost type (3)	Recommendations / Additional Comments
N/A	(T1) SX44621 57361	*Quercus robur*	0.6					x					Y		Edge of Scrub					x			Old oak, multi stemmed, coppiced.
N/A	(T2) SX 44625 57368	*Quercus robur*	0.3										Y		Edge of Scrub					x			Semi-mature, in ditch.

1) Check for urine staining, grease marks, droppings, smell of bats, noise of bats and feeding debris. (NB. Note lack of features is common even when a roost is present)

2) Mention features that may increase the likely use of the tree by bats such as possible foraging areas or likely flight lines (e.g. high hedges; river corridors) or conversely things that may decrease use (e.g. strong lighting or isolation in landscape).

3) e.g would the feature be considered a transient summer roost/winter hibernation roost/maternity roost etc? (put T/H/M)