The Sizewell C Project

6.3 Volume 2 Main Development Site
Chapter 14 Terrestrial Ecology and Ornithology
Appendix 14C10: Otter Method Statement

Revision: 2.0

Applicable Regulation: Regulation 5(2)(q)

PINS Reference Number: EN010012

July 2021

Planning Act 2008
Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

SizewellC
Doing the power of good for Britain
EDF CGN

CONTENTS

Otter Method Statement 1

1 INTRODUCTION 1

1.1 Background and scheme overview 1

1.2 Site Location and Setting 3

1.3 Full details of proposed works on site that are to be covered by the licence 5

1.4 Planning Status 6

1.5 Compliance with Best Practice 6

2 OTTER SURVEY INFORMATION 6

2.1 Introduction 6

2.2 Survey results 7

3 IMPACT ASSESSMENT 9

3.1 Introduction 9

3.2 Incidental mortality 9

3.3 Short-term impacts: disturbance 9

3.4 Long-term impacts: habitat loss (permanent) 10

3.5 Habitat fragmentation 10

3.6 Predicted scale of impact 10

4 PROPOSED MITIGATION DETAILS 10

4.1 Overview 10

4.2 Modification of existing habitat 11

4.3 New habitat creation 11

4.4 Monitoring and management 12

REFERENCES 14

TABLES

Table 1-1: Otter holt locations 2020 7

Table 1-2 Works timetable 12

PLATES

Plate 1.1 Aerial imagery of the site and redline boundary (not including sports pitches at Leiston) 4

FIGURES

Figure 1: Habitats to be created in the north-eastern extent of the site

Figure 2: 2020 Locations of Otter Holts and Proposed Artificial Holt Locations

APPENDICES

APPENDIX A: FIGURES 15

APPENDIX B: SUFFOLK WILDLIFE TRUST LOG PILE HOLT LIVING LANDSCAPRE DOCUMENT 16

Otter Method Statement

1 INTRODUCTION

1.1 Background and scheme overview

1.1.1 Sizewell C Co (SZC Co.) is proposing to build and operate a new nuclear power station on the Suffolk coast, between Felixstowe and Lowestoft, known as Sizewell C Power Station (hereafter referred to as 'Sizewell C') located to the north of the existing Sizewell B Power Station.

1.1.2 The project is considered to be a Nationally Significant Infrastructure Project (NSIP) and if consented would be granted a Development Control Order (DCO).

1.1.3 This otter method statement outlines the key approaches to mitigating potential impacts to the otter (*Lutra lutra*) populations present within or adjacent to the construction site for Sizewell C main development site. It will be used to inform the Regulator, Natural England, and the consultant ecologist, SZC Co. and any relevant subcontractors, in relation to the proposal to build the Sizewell C. This document should be read alongside the following documents:

- Sizewell C ES Volume 2 Main Development Site; Chapter 14 Terrestrial Ecology and Ornithology;
- Sizewell C ES Chapter 14 Technical Appendix 14A9 Terrestrial Mammals
- Sizewell C ES Addendum Volume 3, Chapter 2 Appendix 2.9.A2 Water Vole and Otter Survey Report 2020

1.1.4 The proposed Sizewell C nuclear power station would comprise two UK EPR™ units with an expected net electrical output of approximately 1,670 megawatts (MW) per unit, giving a total site capacity of approximately 3,340MW. The design of the UK EPR™ units is based on technology used successfully and safely around the world for many years, which has been enhanced by innovations to improve performance and safety. The UK EPR™ design has passed the Generic Design Assessment process undertaken by UK regulators (Office for Nuclear Regulation and Environment Agency), and has been licenced and permitted at Hinkley Point C. Once operational, Sizewell C would be able to generate enough electricity to supply approximately six million homes in the UK.

1.1.5 In addition to the key operational elements of the UK EPR™ units, the Sizewell C Project comprises other permanent and temporary development to support the construction and operation of the Sizewell C nuclear power station. The key elements are the main development site, comprising the Sizewell C nuclear power station itself, offshore works, land used temporarily to support construction including an accommodation campus and a series of off-site associated development sites in the local area. These are:

- Two temporary park and ride sites; one to the north-west of Sizewell C at Darsham (the 'northern park and ride'), and one to the south-west at Wickham Market (the 'southern park and ride') to reduce the amount of traffic generated by the construction workforce on local roads and through local villages;
- A permanent road to bypass Stratford St Andrew and Farnham (referred to as the 'two village bypass') to alleviate traffic on the A12 through the villages;
- A permanent road linking the A12 to the Sizewell C main development site (referred to as 'Sizewell link road') to alleviate traffic from the B1122 through Theberton and Middleton Moor;
- Permanent highway improvements at the junction of the A12 and B1122 east of Yoxford (referred to as the 'Yoxford roundabout') and other road junctions to accommodate Sizewell C construction traffic;
- A temporary freight management facility at Seven Hills on land to the south-east of the A12/A14 junction to manage the flow of freight to the main development site;
- A temporary extension of the existing Saxmundham to Leiston branch line into the main development site ('the green rail route') and other permanent rail improvements on the Saxmundham to Leiston branch line, to transport freight by rail in order to remove large numbers of HGVs from the regional and local road network; and
- Green rail route extension and rail improvements to the Saxmundham to Leiston branch line.

1.1.6 The components of the Project listed above are referred to collectively as the 'Sizewell C Project'.

1.2 Site Location and Setting

1.2.1 The main development site is located on the Suffolk coast, to the north of EDF's existing Sizewell B power station, and is centred at the grid reference TM 472 640. The proposed development encompasses five land parcel components, which are described below:

- Main platform: the area that would become the power station itself;
- Sizewell B relocated facilities and National Grid land: the area that certain Sizewell B facilities would be moved to in order to release Sizewell B land for the proposed development and the area required for the National Grid transmission network;
- Offshore works area: the area where offshore cooling water infrastructure and other marine works would be located;
- Temporary Construction Area (TCA): the area located primarily to the north and west of the proposed Sizewell Marshes Site of Special Scientific Interest (SSSI) crossing, which would be used to support construction activity on the main platform; and
- Land east of Eastlands Industrial Estate (LEEIE): the area including and directly to the north of Sizewell Halt, which would be used to support construction on the main platform and TCA.

1.2.2 The main development site location is presented below in Plate 1-1.

Plate 1-1 Aerial imagery of the site and redline boundary (not including sports pitches at Leiston)

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

1.2.3 The existing Sizewell power station complex, including Sizewell B and Sizewell A, which is being decommissioned, comprises a series of buildings associated with the power station, parking areas, access infrastructure and ancillary structures. The proposed development footprint is dominated by arable fields with field boundaries comprising native, species poor hedgerows or tree lines. Areas of woodland encompasses the power station complex on the northern, western and southern boundaries, whilst several woodland blocks, comprising plantation, mixed plantation and broadleaved semi-natural woodland, are scattered across the site. The larger area present to the north-east includes Hilltop Covert, Dunwich Forest, Goose Hill and the northern boundary of Kenton Hills. Numerous farm buildings and structures are also scattered to the north and west of the site. Portions of the site falls within the following designated sites:

- Sizewell Marshes SSSI – an area of grazing marsh, including fen meadow, reedbed, wet woodland, open water and ditch habitat;
- Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB);
- Sizewell Levels and Associated Areas County Wildlife Site (CWS) – largely plantation woodland and acid grassland; and
- Suffolk Shingle Beaches CWS – dune grassland and vegetation shingle.

1.3 Full details of proposed works on site that are to be covered by the licence

1.3.1 In order to enable the proposed development of the main development site, as detailed above, a number of facilitating works are required.

1.3.2 A flood compensation area is proposed in the north-eastern corner of the marsh harrier mitigation land (central grid reference TM 46190 65811) (**Figure 1**), north of the construction site. This would comprise open water habitat interspersed with reedbed and some wet woodland. An existing hedgerow separating this area from Minsmere reserve is to be reinforced to improve ecological connectivity and screening. The proposed wetland habitat will be beneficial for otters, however there are four holts in the vicinity of this area which will be disturbed during habitat creation works.

1.3.3 In addition, the Sizewell drain is planned to be realigned to pass along the western edge of the proposed platform and connect to Leiston drain to the north-east. Initial access to the current drain would be made via the north or south for vegetation clearance. The trench for the realigned drain would be excavated from the east, using standard wheeled equipment. Sheet piling would be installed off set from the eastern bank of the realigned drain to the depth of the first suitable crag level. Matting may be used during the works to prevent settlement of machinery into the soft ground. Whilst the realignment works are taking place, short-term temporary blind bunds are likely to be necessary to restrict water flow. These works will result in the loss of an otter holt.

1.3.4 This document is presented as a draft. SZC Co. and its consultant ecologists are committed to working with Natural England and other stakeholders to develop the approaches outlined within this document to ensure a legally robust approach to otter before the document is finalised. Further surveys will be undertaken as relevant and these will also inform the final draft of this and related documents, sufficient to inform any relevant licence.

1.3.5 Otters are protected under are protected under Schedule 5 of the W&CA (Ref 1.1) and are included under Section 41 of the NERC Act (Ref 1.2). As a result, this licence is required to permit the project.

1.3.6 In the absence of mitigation, the works proposed have the potential to impact otter through:

- Direct mortality;
- Fragmentation of habitats;

- Loss of habitats; and
- Disturbance.

1.3.7 This Method Statement outlines Reasonable Avoidance Measures (RAMs) and artificial holt creation to mitigate potential impacts to otter. It is considered that the measures outlined will ensure that the favourable Conservation Status of otters will be maintained whilst allowing the works to proceed under a derogation licence.

1.4 Planning Status

1.4.1 The project has been submitted as a Nationally Significant Infrastructure Project (NSIP) and if consented, this would be via a Development Control Order (DCO).

1.5 Compliance with Best Practice

1.5.1 The proposed survey methodology, habitat modification and creation and monitoring requirements all comply with best practise guidelines.

1.5.2 The staff named on the licence by the appointed contractor would be members of the Chartered Institute of Ecology and Environmental Management (CIEEM) at the appropriate level and follow their code of professional conduct when undertaking ecological work.

2 OTTER SURVEY INFORMATION

2.1 Introduction

2.1.1 The following otter surveys have been undertaken to date:

- Walkover surveys of the main development site were undertaken by Wood Group in 2007 (Wood Group 2012) which included searching for otter signs.
- A more extensive survey programme was undertaken during 2009 and 2010 (Wood Group, 2012) which focused on waterbodies within.
- Surveys of Aldhurst Farm and the SSSI triangle (+200m) were undertaken by Arcadis in 2013.
- Suffolk Wildlife Trust collected incidental records of otter sightings and field signs between 2001 – 2018. Incidental sightings and records were also recorded by Royal Holloway College and The Royal Society for the Protection of Birds (RSPB).

- Waterbodies within the main development site boundary +50m and Aldhurst Farm were surveyed for otter signs by Arcadis in 2020.
- Surveys to classify holt type are being undertaken by Arcadis in 2021.

2.2 Survey results

2.2.1 Previous surveys undertaken within the site recorded otter widely across the site and within the wider landscape with sightings indicating a year-round presence. The 2020 updated survey results for otter confirmed the continued presence of otter within the proposed development site which was consistent with previous surveys with otter signs found widely across the survey area.

2.2.2 In 2013 and 2020, Arcadis undertook otter surveys at Aldhurst Farm mitigation area which was considered suitable to support otters. Presence was confirmed in 2021 however when an adult was recorded by a camera trap.

2.2.3 Five otter holts and one potential otter holt were recorded during surveys undertaken in 2020. Further information is provided in **Table 2-1** and presented on **Figure 2**.

Table 2-1: Otter holt locations 2020

OS Grid Reference	Further information	Photo (where available)
TM 45931 65931	**Holt A** Holt not regularly used. Spraint present	

OS Grid Reference	Further information	Photo (where available)
TM 46478 66013	**Holt B**	
TM 46462 66028	**Holt C** Spraint present	N/A
TM 46481 65991	**Holt D** Spraint Present	N/A
TM 46421 65828	**Holt E** Possible holt	N/A
TM 47015 63750	**Holt F** Tree with cavity. Loose material inside. looks like the cavity has been made or enlarged	

2.2.4 Holt A is located near Lower Abbey Farm and Holts B-E are located along the border of the wetland habitat creation area. Holt F is located along the Sizewell Drain to the east of Sizewell B.

2.2.5 Surveys are being undertaken in 2021 to classify the status of the holts on site however none of the holts expected to be impacted upon by these works is considered to support a natal holt (where a female otter would raise her young). Holt F is small and within a tree cavity and located within Sizewell Marshes SSSI which is a potential flood zone, albeit above the water line. Female otters would not characteristically choose to use such a site for breeding due to its small size and the risk of flooding.

3 IMPACT ASSESSMENT

3.1 Introduction

3.1.1 This Section describes potential impacts of the Sizewell C and the main development site on otter.

3.1.2 The impact assessment identified the potential for the Sizewell C Project to have an impact upon otter and their habitats, namely through realignment of the Sizewell Drain and wetland habitat creation at the main development site. Potential impacts are detailed within the sub-sections below.

3.2 Incidental mortality

3.2.1 Incidental mortality will be avoided by ensuring RAMs are adhered to. Pre-construction surveys are being undertaken in 2021 to confirm that no natal holts are present within the construction footprint. Natal or breeding holts may be used at any time of the year. Although no natal holts have been found within the site boundary, there remains the possibility that otter may set up a new natal den site.

3.3 Short-term impacts: disturbance

3.3.1 Habitat creation in the north of the main development site could result in the disturbance of five holts (A-E). Dry grassland habitat provision is proposed in proximity to Holt A and therefore disturbance is unlikely to be substantial. Holts B – E are located <10m from other proposed habitat creation works, including the digging of a lagoon and associated earthworks/landscaping, reedbed planting, reinforcement of existing hedgerow and woodland planting. Despite the short-term disturbance, the addition of the created wetland habitat will be beneficial to otter.

3.3.2 The disturbance activities, particularly the initial earthworks, are thought to take place over a period of several weeks although temporary. Holts A – E

will be retained and would not be directly impacted by the construction phase.

3.4 Long-term impacts: habitat loss (permanent)

3.4.1 The realignment of the Sizewell drain will lead to the permanent loss of some riparian habitat, including the loss of Holt F. Given the nature of the surrounding habitats present and the scale of habitat loss to facilitate the drain realignment, the Sizewell C Project is not considered to negatively impact upon the local otter population, particularly given the large number of natural, alternative resting sites present.

3.5 Habitat fragmentation

3.5.1 The works at both areas will not result in any long-term fragmentation or isolation of existing otter habitat. The new wetland habitat to the north of the main development site will be beneficial to otters in the long-term. Also, once Sizewell drain has been realigned, otters will be able to re-utilise the habitat, therefore no long-term habitat fragmentation is envisioned.

3.6 Predicted scale of impact

3.6.1 During the construction phase, there will be a slight, temporary adverse effect as a result of disturbance to otters using Holts A-E, although these will be avoided, and an artificial holt will be constructed as enhancement. Once the temporary construction phase activities have been completed, a local, long-term benefit should be seen to the local otter population due to improved wetland habitat quality. Although Holt F will be permanently lost, a replacement resting site / artificial otter holt will be constructed as compensation and considering the habitat availability in the wider area of the site, there will be no permanent adverse effect upon the local otter population.

4 PROPOSED MITIGATION DETAILS

4.1 Overview

4.1.1 This section outlines the proposed mitigation strategy for otter, a justification of why this strategy was chosen and an explanation of how this strategy will be implemented.

4.1.2 In summary, the approach to mitigation for otter on site includes:

- Pre-construction checks, as per guidance, of each holt to confirm the presence or absence of otter, and to ensure that no natal holts are present.

- Avoidance of Holts A-E or other Holts identified in future surveys. This would constitute no activity within a 30m buffer of confirmed Holts (Figure 2).
- In the unlikely event that an otter is found within Holts A-F, works within the area will not take place until the otter has left.
- As part of the scheme design, a lighting strategy will be put in place for the construction phase to avoid light spill as far as possible, where possible. The works should comply with the measures and approaches defined in the Lighting Management Plan.
- An artificial holt will be created compensate for the permanent loss of Holt F.
- Further enhancement will be provided with the provision of an artificial holt to the south-east of the flood compensation/wetland creation area, described in paragraph 1.3.2.

4.1.3 All works that have the potential to impact otter will be undertaken under licence from Natural England following an agreed Draft Method Statement and would be overseen by the licence holder or appointed agent.

4.1.4 No otters are to be captured as part of these works, however precautions will be put in place during the construction phase as appropriate, such as the closure of excavations overnight, or the provision of a means of egress (i.e., a wooden plank or soil ramp) through construction activities.

4.2 Modification of existing habitat

4.2.1 Holt F is to be permanently lost beneath the footprint of drain realignment. Given the nature of the works to take place, it is not anticipated that any otters will be present as construction disturbance will discourage use.

4.2.2 Habitat creation in the north of the site (adjacent to Holts A-E) will comprise dry grassland, reedbed and woodland and wet woodland creation. The increase in wetland habitat and increased connectivity and screening will be beneficial to otter in the long-term.

4.3 New habitat creation

a) Artificial holts

4.3.2 Two artificial holts will be created. Final locations will be subject to detailed design and micro sited under the supervision of an ecological clerk of works. The artificial holts will be created in the following areas (Figure 2):

- Artificial holt 1 is to be constructed within The Grove woodland to the south-east of the wetland development area to provide a permanent resting site / feature for use by otters (proposed artificial holt area 1).

- Artificial holt 2 will be created within Leiston Carr woodland (adjacent to the Leiston Drain), approximately 800m west of holt F (proposed artificial holt area 1.

4.3.3 The artificial otter holts will be above ground structures, the design of which will follow that detailed within the Suffolk Wildlife Trust Log Pile Holt Living Landscape document (**Appendix B**).

4.3.4 The new otter holt will be constructed in conjunction with vegetation clearance works elsewhere on site so that the materials can be salvaged and used for the holt construction. The landscape planting for the new wetland habitat will also improve general habitat and will increase the quantities of vegetation / cover available for use by otters in the long-term.

b) Works timetable

4.3.5 **Table 1-2** outlines the indicative timescale for the licensable activities.

Table 1-2 Works timetable

Activity	Timeframe	Notes
Artificial holt creation.	2021/2022	
Pre-construction checks	2022	
Wetland habitat creation	2022/2023	
Sizewell Drain realignment	2023	In the unlikely event that an otter is found within Holts A-F, works within the area will not take place until the otter has left.
Artificial holt inspections by a the licence holder or appointed agent.	During construction and operation	

4.4 Monitoring and management

a) Mechanisms for ensuring delivery of mitigation and compensation measures

4.4.2 The licensed ecologist and / or their accredited agents will be present on site to oversee the vegetation clearance activities / removal of Holt F, ensure the buffer zones (detailed in paragraph 4.1.2) around Holts A-E are

in place and to ensure that the content and agreed working methods are adhered to. The construction of the two artificial otter holts within the decided areas will be overseen by the licensed ecologist and / or their accredited agents and documentation provided to NE and the County Ecologist to confirm / demonstrate the works that have been carried out.

4.4.3 The site clearance / habitat creation contractor will be familiar with working alongside ecologists and following the instructions provided. Prior to any works taking place, the named ecologist will carry out a toolbox talk and inform all site personnel on the works to be carried out and the methodologies to be implemented in relation to otters (and water vole) and will also discuss field signs and behavioural characteristics of otters which are relevant to the scheme and construction phase activities.

4.4.4 Methods and timings for monitoring otter are set out in the Terrestrial Ecology Monitoring & Mitigation Plan and includes the following:

- Artificial holts created would be monitored during the construction phase and operational phase to ensure that they remain in good condition and accessible for use by otters.
- Known holt and couch locations at the north-eastern extent of the site (Holt A-E), on the boundary between the marsh harrier habitat creation area and the Minsmere to Walberswick Heaths and Marshes SSSI would be monitored during the construction phase.

b) Mitigation contingencies

4.4.5 Given the nature of the works, the approach to mitigation is considered to be straight forward. Sufficient time will be provided in order to carry out the works within an appropriate timeframe to ensure that no adverse effects are sustained to the local otter population. All works will be carried out on site under approved method statements and in line with the Project's Code of Construction Practice and Risk Assessments which will be produced for each task.

c) Post-development site safeguard

4.4.6 The artificial otter holts will be inspected during the operational phase, as per the TEMP, to ensure that it remains in good condition and accessible for use by otters. In the unlikely event that the otter holt has been tampered with, or destroyed, a new otter holt will be constructed. Depending upon the extent of damage, if this was to occur, a different site would be sought for the construction of a replacement holt and this would be agreed in advance with NE. As stated in Section 4.4a), no direct, long-term monitoring of the otter holt is proposed.

REFERENCES

1. HMSO (1981) The Wildlife and Countryside Act 1981 (as amended) [Accessed online April 2021] http://www.legislation.gov.uk/ukpga/1981/69

2. HMSO (1996) The NERC Act [Accessed online April 2021] http://www.legislation.gov.uk/ukpga/2006/16/contents

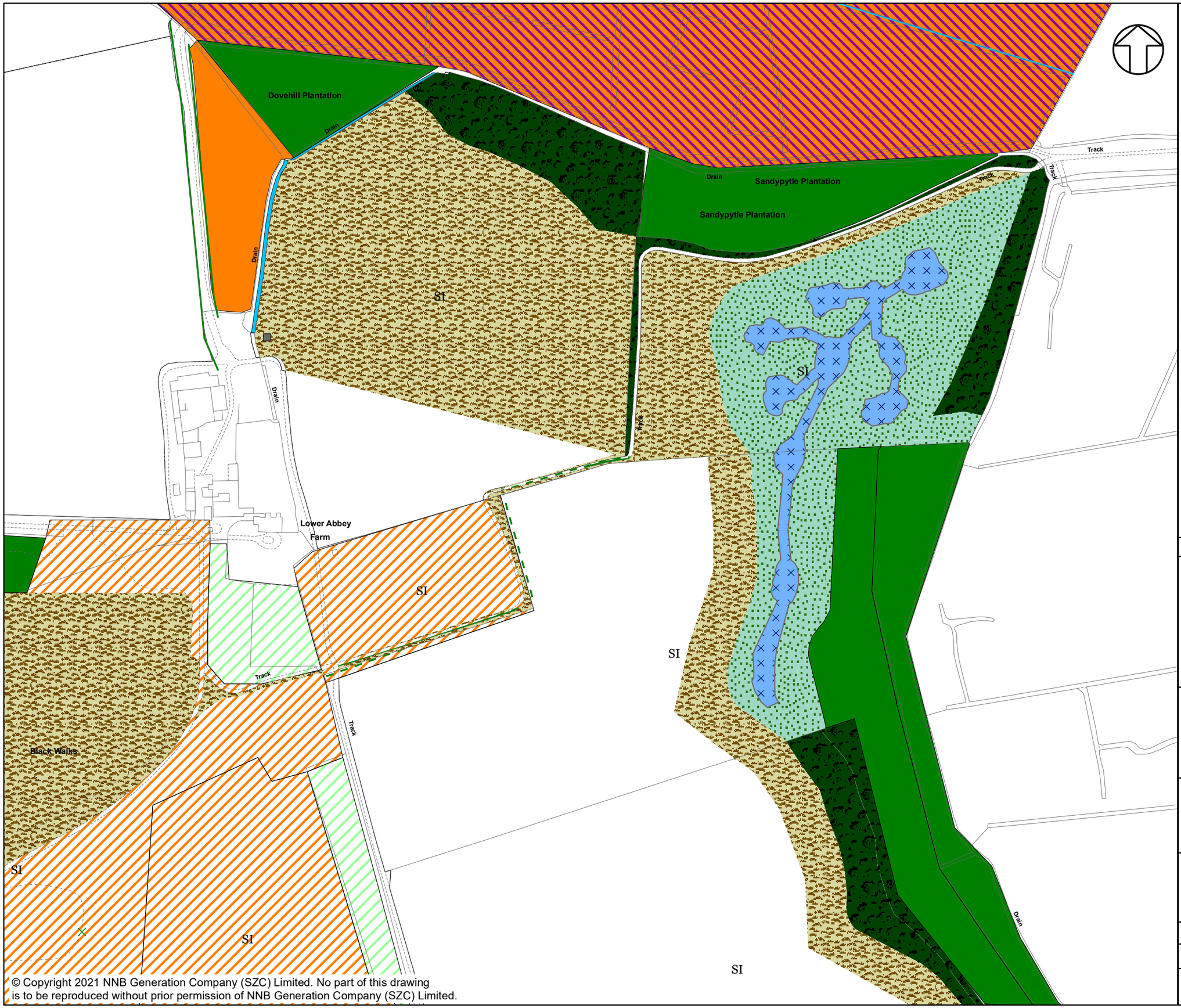
3. Natural England. 2014. Otters: surveys and mitigation for development projects. [Accessed April 2021] https://www.gov.uk/guidance/otters-protection-surveys-and-licences#mitigation-compensation-methods-and-avoiding-impacts

4. NGL. 1996–2018. Sizewell Land Management Reports.

APPENDIX A: FIGURES

Figure 1: Habitats to be created in the north-eastern extent of the site

Figure 2: 2020 Locations of Otter Holts and Proposed Artificial Holt Locations



NOTES

KEY

- AdditionalPhase1Habitat_ply

OPPERATIONAL INFORMATION

- WATER COURSE
- BAT BARN
- DRY SANDLINGS GRASSLAND
- EXISTING VEGETATION
- WET GRASSLAND

PHASE 1 SURVEY INFORMATION

- SCATTERED SCRUB
- DEFUNCT HEDGE - SPECIES-POOR
- INTACT HEDGE - SPECIES-POOR
- RUNNING WATER
- BROADLEAVED WOODLAND - SEMI-NATURAL
- CONIFEROUS WOODLAND - PLANTATION
- SI ACID GRASSLAND - SEMI-IMPROVED
- SEMI-IMPROVED NEUTRAL GRASSLAND
- MARSH/MARSHY GRASSLAND
- POOR SEMI-IMPROVED GRASSLAND
- SI STANDING WATER
- A CULTIVATED/DISTURBED LAND - ARABLE

NOT PROTECTIVELY MARKED

SizewellC
Doing the power of good for Britain
EDF CGN

DOCUMENT:
SIZEWELL C MAIN DEVELOPMENT SITE
OTTER METHOD STATEMENT

DRAWING TITLE:
HABITATS TO BE CREATED IN THE NORTH EASTERN EXTENT OF THE SITE

DRAWING NO:
FIGURE 1

DATE:	DRAWN:	SCALE :	REV:
JULY 2021	R.C.	1:2,500 @A3	01

SCALE BAR
0 20 40 60 80 100 M

Holt A
Holt B
Holt C
Holt D
Holt E
Holt F

Proposed Artificial Holt - Area 1

Proposed Artificial Holt - Area 2

England Covert
Willow Farm
Drift End Cottage
Eastbridge Farm
Drift Farm
Dovehill Plantation
Sandypytle Plantation
Lower Abbey Farm
Plantation Cottages
Black Walks
The Grove
Chapel (remains of)
Keepers Cottage
Broom Covert
Potter's Farm
Birchwood Farm
The Round House
Ash Wood
Ash Wood Cottages
Walk Barn
Stonewall Belt
Greenhouse Plantation
Upper Abbey
Abbey Cottage
Old Abbey Farm
Pit (dis)
Dunwich Forest
Hilltop Covert
Goose Hill
Nursery Covert
Kenton Hills
Grimseys
Leiston Carr
Sizewell Belts
Reckham Pits Wood
Leiston Common
Recycling Site
Common Cottages
Keepers Cottage
Round Covert
Power Station

NOTES

KEY

- SIZEWELL C MAIN DEVELOPMENT SITE BOUNDARY
- DEMARCATION LINE
- 2020 OTTER HOLT LOCATIONS
- 30M AVOIDANCE BUFFER
- PROPOSED ARTIFICIAL OTTER HOLT AREAS

NOT PROTECTIVELY MARKED

SizewellC
Doing the power of good for Britain
EDF CGN

DOCUMENT:
SIZEWELL C MAIN DEVELOPMENT SITE OTTER METHOD STATEMENT

DRAWING TITLE:
2020 LOCATIONS OF OTTER HOLTS AND PROPOSED ARTIFICIAL HOLT LOCATIONS'

DRAWING NO:
FIGURE 2

DATE:	DRAWN:	SCALE :	REV:
JULY 2021	R.C.	1:10,000 @A3	01

SCALE BAR
0 70 140 210 280 350 M

APPENDIX B: SUFFOLK WILDLIFE TRUST LOG PILE HOLT LIVING LANDSCAPE DOCUMENT

Log pile holts

The information in this leaflet sets out practical details for the construction of log pile holts using materials readily available with an indication of time and labour required.

Introduction

The European otter, *Lutra lutra,* is largely nocturnal in England and Wales, and usually spends the day in secure lying-up sites close to water. A home range (territory) may consist of up to 40km of waterway, and an individual otter will regularly use more than 20 resting sites. The three most common places used by otters are bankside tree roots, dense scrub and piles of bankside timber debris, along with reedbeds in parts of the country such as East Anglia.

Land drainage schemes, bankside clearance and river regulation, road schemes and other developments have resulted in the loss of many resting sites over the last 40 years. For otters to make use of these barren rivers, and to enable the otter population to expand, work must include the recreation of resting sites through tree and scrub planting combined with fencing to keep out livestock. However, this takes time to become effective.

Surveys have shown that log pile holts are a quick and effective way of providing immediate resting sites for otters. They also provide places of shelter for other animals. Log pile holts are usually more cost effective than other artificial holts.

Consents will be needed from the Environment Agency before any work can take place so it is advisable that they are contacted early on in the process.

The Water for Wildlife Project Officer may be able to provide additional advice, visit the site and help decide on a location as well as advise on an after care and monitoring programme. In some instances fencing and tree planting will be necessary - grant aid is often available for this work.

Otter

Requirements

Time (for 5 - 10 people)

- Approximately half a day for chainsaw work (only to be undertaken by a qualified chainsaw operator), trimming poles and brashing.
- Approximately half a day for holt construction with pre-cut materials.

Tools

- Chainsaw, bowsaw, billhooks, scythe, heavy duty gloves. If the area is liable to flooding then sheep or wire netting, wooden stakes and a mallet will be necessary.

Location

- Build the log pile holt as near to the water's edge as possible and where otters can climb the bank.

Suffolk Wildlife Trust *Brooke House, Ashbocking, Ipswich IP6 9JY Tel: 01473 890089 Fax: 01473 890165*
Email us at info@suffolkwildlifetrust.org or visit our website at www.suffolkwildlifetrust.org

- As long as the site has minimal disturbance from humans and particularly dogs, the log pile holt can be built anywhere along rivers, streams, lakes and ponds, in meanders, field corners, riverside woodlands, islands and stream confluences.
- If possible, fence off the patch of land particularly if livestock are present, and either plant with species typical of the locality, or leave it to develop scrub cover naturally. A large area is not necessarily required.

Suggested spacing for tree planting

- Plant blackthorn or hawthorn whips at 20cm intervals adjacent to the holt, and alder, ash or willow whips at two to three metre intervals on the periphery of the area.

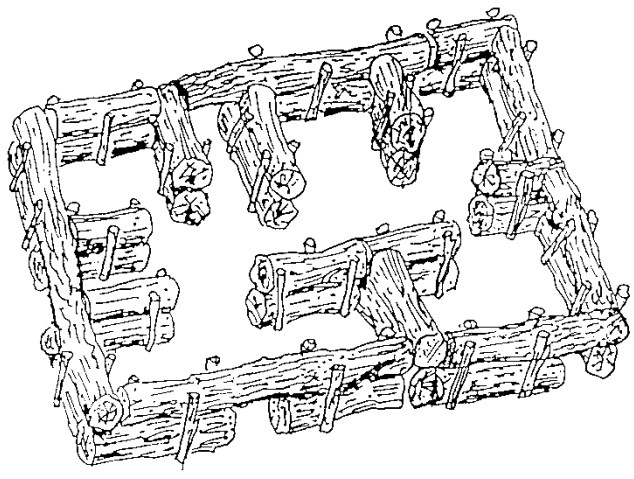
Timber requirements

- Timber can be used from fallen trees, and poles and brashing from a dense hedgeline. Products from woodland or general management work can also be used. Any species can be used, but hardwoods tend to decompose less easily than softwoods and therefore the holt will last longer.
- 12 -15 Logs - ideally these should be up to 1m long and 30 - 40cm in diameter.
- 50 - 65 Poles - use stout fairly straight tree branches of 3 - 15 cm in diameter and cut to lengths of 2 - 3m. shorter poles can be used to infill gaps.
- Brashings - use large quantities of small branches (trimmings from the poles above), hedge brashings or conifer plantation trimmings.

Construction

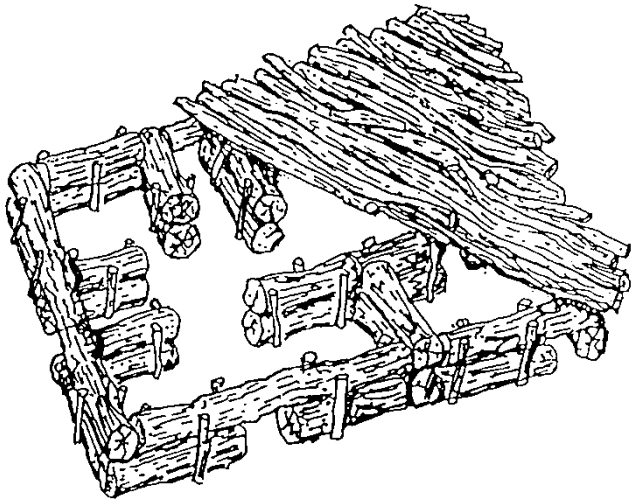
The aim is to try and provide a number of interconnecting chambers which are dark and reasonably dry. The shape of the holt is determined by the location and can be rectangular, square or round. Construction is in three stages forming three layers:

STAGE 1:



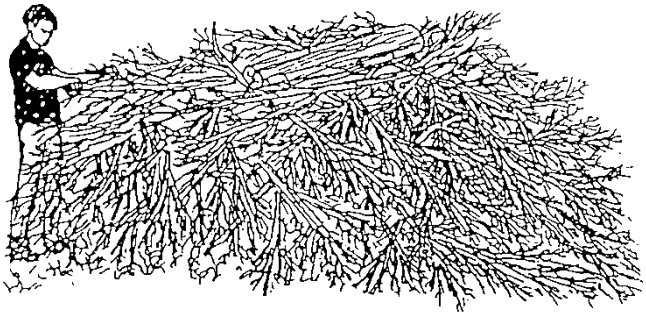
Place logs to form chambers of about 1 metre square. Two to eight chambers should be included. Leave gaps of about 15 - 20cm round as entrances. One or two entrances should be immediately on the river or water's edge, with other entrances onto the land.

STAGE 2:



Use poles across the logs and chambers to form the roof. Small pieces of wood can be used to fill the gaps to make the chambers darker and more water resistant.

STAGE 3:



Pile the brashings on top of the structure to completely hide the logs and poles and make the chambers dry and dark. It is best to break or saw branches so that they lay flat and pack down. Lay branches stems inwards, with smaller branches and fronds overlapping logs and poles to form an outer fringe.

If the site is liable to flooding, stretch sheep netting over the brashings and stake netting down on both sides of the holt. Wooden stakes can be made on site. Place more brashings on tope to hide the wire.

For further advice, contact Suffolk Wildlife Trust on:
01473 890089
wildline@suffolkwildlifetrust.org