

COED ELY A4119 DUALLING PLANNING DORMOUSE SURVEY

JULY 2019





Project No: GC/002895

Doc Ref: GC2895-RED-30-XX-RP-L-006



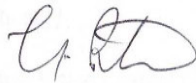
Rev: P01

CLIENT: Rhondda Cynon Taf County Borough Council

ISSUE DATE: July 2019

Coed Ely A4119 Dualling Planning

Dormouse Survey

	NAME	SIGNATURE	DATE
AUTHOR	Janine Burnham		09/07/2019
CHECKER	Holly Lewis		09/07/2019
APPROVER	Geraint Pitman		09/07/2019

ISSUE RECORD

REV	DATE	DESCRIPTION/COMMENTS	AUTHOR/ PREPARED BY:	APPROVED FOR ISSUE BY:
P01	09/07/19	Report Issued	J.Burnham	G.Pitman

"The report shall be for the private and confidential use of the clients for whom the report is undertaken and should not be reproduced in whole or in part or relied upon by third parties for any use whatsoever without the express written authority of the Consultant"



GENERAL DISCLAIMER:

This report has been prepared by Redstart in favour of Rhondda Cynon Taf County Borough Council (“the Client”) and is for the sole use and benefit of the of the client in accordance with the agreement between the Client and Redstart dated 12th February 2019 under which Redstart’s services were performed. Redstart accepts no liability to any other party in respect of the contents of this report. This report is confidential and may not be disclosed by the Client or relied on by any other party without the express prior written consent of Redstart.

Whilst care has been taken in the construction of this report, the conclusions and recommendations which it contains are based upon information provided by third parties (“Third Party Information”). Redstart has for the purposes of this report relied upon and assumed that the Third Party Information is accurate and complete and has not independently verified such information for the purposes of this report. Redstart makes no representation, warranty or undertaking (express or implied) in the context of the Third Party Information and no responsibility is taken or accepted by Redstart for the adequacy, completeness or accuracy of the report in the context of the Third Party Information on which it is based.

FREEDOM OF INFORMATION:

Redstart understands and acknowledges the Authority’s legal obligations and responsibilities under the Freedom of Information Act 2000 (the “Act”) and fully appreciates that the Authority may be required under the terms of the Act to disclose any information which it holds. Redstart maintains that the report contains commercially sensitive information that could be prejudicial to the commercial interests of the parties. On this basis Redstart believes that the report should attract exemption from disclosure, at least in the first instance, under Sections 41 and/or 43 of the Act. Redstart accepts that the damage which it would suffer in the event of disclosure of certain of the confidential information would, to some extent, reduce with the passage of time and therefore proposes that any disclosure (pursuant to the Act) of the confidential information contained in the report should be restricted until after the expiry of 24 months from the date of the report.

Contents

1. Executive Summary	1
2. Introduction	2
2.1 Site Description	2
2.2 Proposed Works	3
3. Dormouse Ecology	4
4. Legislation	5
4.1 Dormouse	5
5. Methodology	6
5.1 Desktop Study	6
6. Results	9
6.1 Desktop Study	9
6.2 Habitat assessment	9
6.3 Nest tube survey	9
7. Discussion	13
8. Recommendations	14
8.1 European Protected Species Licence (EPSL)	14
8.2 Toolbox Talk	14
9. References	15

Drawings

GC2895-RED-61-XX-DR-C-102 – 104	General arrangement
GC2895-RED-74-XX-DR-C-0025	Location of Dormouse Survey Tubes
GC2895-RED-74-XX-DR-C-0024	Dormouse Survey Results

1. Executive Summary

Site Location	A4119 (Ely Valley Road), Coed Ely, Rhondda Cynon Taf ST 02116 85420 to ST 03192 84601
Proposed Development	Dualling and road improvements on A4119 (Ely Valley Road)
Dates of survey and names of surveyors	23 rd & 24 th May, 28 th & 29 th June, 26 th & 27 th July, 28 th & 29 th August, 24 th & 25 th September 2018 and 29 th , 30 th , 31 st May 2019. Janine Burnham ACIEEM (Ecologist, NRW dormouse licenced), Trevor Fletcher (Ecologist, NRW licenced); Rebecca Howells (Graduate Ecologist) and Emma Carney (Graduate Ecologist).
Overview of Results	<ul style="list-style-type: none"> • No evidence of dormouse was identified on the southern side of the A4119. • Three unoccupied dormouse nests were identified in nest tubes located in hedges on the northern side of the A4119. The closest of these was situated 150 m from the A4119 carriageway. • Two probable dormouse nests were recorded in nest tubes on the northern side of the A4119 carriageway, the closest of which was approximately 60 m from the road. • Wood mice were recorded in a number of nest tubes throughout the duration of the survey.
Recommendations	<ul style="list-style-type: none"> • A European Protected Species Licence (EPSL) for dormouse from Natural Resources Wales (NRW) and method statement will be required prior to vegetation clearance works commencing. • The method statement is likely to include: directional clearance to displace dormice from the suitable habitat; specified timings of work and a two-stage methodology for vegetation clearance; inclusion of dormouse friendly planting in landscape schemes and possible compensatory planting to maintain habitat connectivity. • Directing any lighting during the development away from hedgerows, woodland and scrub areas to reduce light pollution and disturbance to dormice. • A suitably licenced ecologist should provide a toolbox talk to all contractors/site staff before any works begin. • An appropriately licensed ecologist should supervise the clearance of vegetation on site.

2. Introduction

Redstart was commissioned by Rhondda Cynon Taf County Borough Council to undertake a dormouse survey along the route and of the surrounding land of the proposed dualling of a section of the A4119 (Ely Valley Road), between Coed Ely and Ynysmaerdy (central Ordnance Survey grid reference: ST 02116 85420 to ST 03192 84601).

The survey was undertaken to identify any constraints that dormouse may present to the proposed development and to identify the need for further surveys/ mitigation measures.

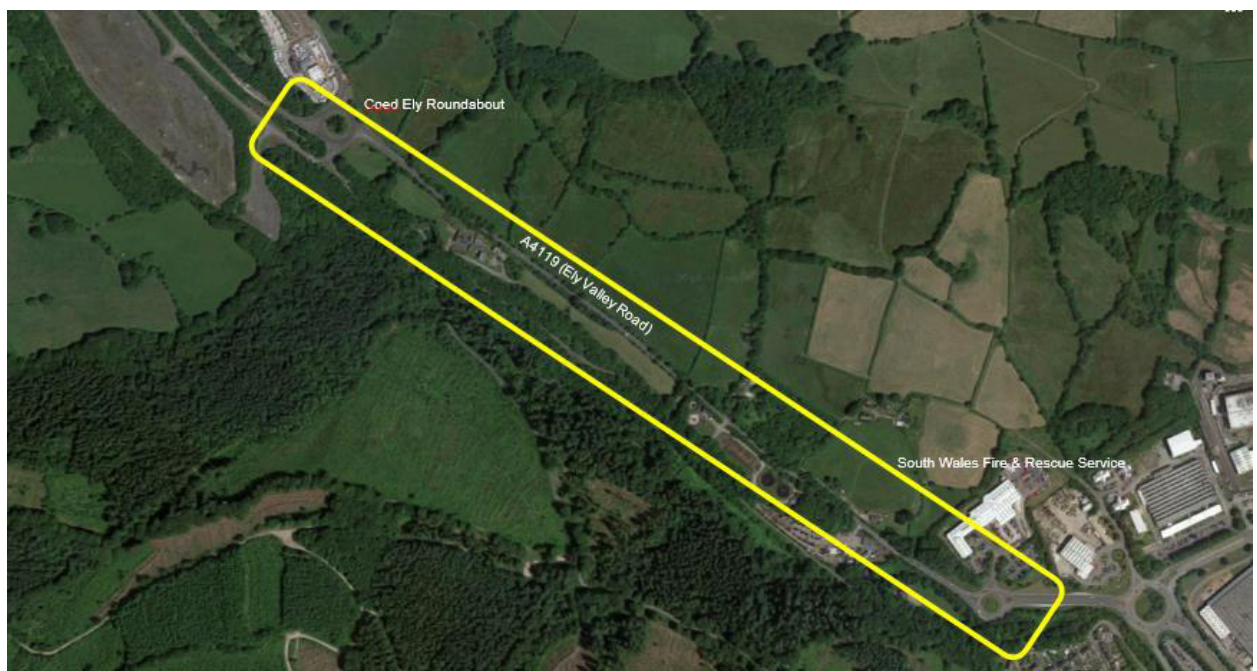
This report includes details of the survey methodologies, results and discussion and contains recommendations for further survey/ mitigation where appropriate.

2.1 Site Description

The proposed scheme is for road improvements to the section of the A4119 (Ely valley Road) between Coed Ely and Ynysmaerdy. The route runs through the steep sided Ely Valley, with the River Ely running parallel to the west of the A4119 and the majority of the surrounding land consists of agricultural land, woodlands and hedgerows. The South Wales Fire and Rescue Service, industrial units and car dealerships are located to the south of the site and a caravan dealership to the north. The proposed scheme does not pass through a residential area, however the carriageway is characterised by a number of access points directly onto the road, including a scrapyard, sewage works and farms.

The A4119 is currently a single carriageway road in the Coed Ely area and traffic congestion is an issue on this section of road at peak travel periods, which impacts on the A4119 to the south.

Figure 1 – Photograph of site adapted from Google Earth. The site is highlighted by a yellow boundary (Google Earth, 2018).



2.2 Proposed Works

The proposed dualling will take place between the Fire Service roundabout and the Coed Ely roundabout over a 1.3 km section and will include the following works;

- Widening the existing carriageway from a single carriageway to dual carriageway. This will be achieved by both online and offline widening.
- Site Clearance – To facilitate the widening, site clearance will need to take place on both sides of the existing road.
- Associated drainage and infrastructure works.

The proposed scheme is shown on the general arrangement Drawing GC2895-RED-61-XX-DR-C-102 – 104.

3. Dormouse Ecology

The hazel dormouse is a native species to the United Kingdom and has undergone a rapid decline in numbers and distribution over the last century.

The common dormouse is distinctive from other native small mammals, possessing an orange-brown coat (when adult), large dark eyes and a thickly furred tail.

The species is nocturnal and is active between April and late October, spending the remainder of the year in hibernation. However, even in the active season cold and wet weather can reduce activity and induce torpor. It is a highly arboreal species and in general dormice only descend to the ground to hibernate during the winter months.

Dormice typically live 2-3 years and first breed in the year following birth. Young are born between June and September and are weaned between 6-8 weeks later. The dormouse builds three types of nest: summer, breeding, and hibernation. The summer and breeding nests are usually located above ground in dense vegetation, holes in trees and hedgerows whilst winter hibernation nests are usually at ground or below ground level under moss, leaf-litter, old coppice stools and wood piles.

Optimal dormouse habitat is traditionally thought of as ancient semi-natural woodlands with mixed species rich under storey and coppiced woodland and hedgerows are also important habitats, however the species have been recorded in other habitats such as dense scrub and conifer woodlands.

The rapid decline in dormouse populations can be attributed to a variety of factors including direct habitat loss, isolation and other habitat fragmentation effects.

4. Legislation

4.1 Dormouse

Dormouse and their habitats are strictly protected by a range of legislation and policy, including the following:

- Conservation of Habitats and Species Regulations 2017, as amended;
- Wildlife and Countryside Act 1981, as amended; and
- Countryside and Rights of Way Act 2000;

Offences under this legislation include:

- deliberate capture, injury or killing;
- deliberate disturbance; and
- damage or destruction of a breeding site or resting place of such an animal.

Additionally, dormouse is a Species of Principal Importance (SPI) for the conservation of biodiversity under the Environment (Wales) Act 2016 and local authorities are to have regard for the conservation of these species.

5. Methodology

5.1 Desktop Study

The following organisations/persons were consulted for ecological information about the site and surrounding areas (Capita, 2018):

- South East Wales Biodiversity Records Centre (SEWBRc, 2017);
- Multi-Agency Geographic Information System (MAGIC, 2017);

A request was made for information on any ecologically designated sites and protected/notable species within a 2 km radius of the site (5km for bats) and dated within the last ten years. For the purposes of this report the data was inspected for records of dormouse in the search area.

5.1.1 *Habitat assessment*

The habitats adjacent to the A4119 were assessed for their potential to support habitat dormouse. The features considered included:

- Presence of broad-leaved woodland;
- Structurally diverse canopy cover;
- Structurally diverse understory;
- Presence of nest making materials;
- Dense understory to provide shelter during hibernation.

5.1.2 *Nest tube survey*

Dormouse nest tubes placed in suitable habitat may be used by dormouse to nest in. Their summer nests can often be identified by a number of key characteristics:

- they often incorporate strips of honeysuckle (*Lonicera periclymenum*) bark, or other shredded bark and green leaves and
- lack an obvious entrance hole.

Nest tubes constructed from folded corrugated plastic sheeting (approximately 60 mm x 60 mm wide and 250 mm long) were used. A sliding plywood base, provides a platform extending 50mm from the end of the plastic tube, provides access to the tube for small mammals at one end. The opposite end of the tube is sealed with a wooden block mounted on the tray.

A total of 275 nest tubes were installed on 20th and 23rd April 2018, approximately a month before the first survey visit, in order to allow dormouse time to find and nest in the tubes before the first survey visit. Each nest tube was given a number and its location recorded on a handheld GPS unit. The location of the nest tubes is shown on Drawing GC2895-RED-74-XX-DR-C-0025.

Nest tubes were fastened to horizontal tree branches and within hedges and scrub at heights between 1 – 2 m using plastic cable ties. Tubes were positioned with the entrance of the tube orientated towards the centre of the tree or hedge and angled slightly downwards to prevent water collecting within the tube. Nest tubes were installed at approximately 20 m intervals where possible.

The nest tubes were left in situ for the duration of the survey and were removed on completion of in the final survey in May 2019 2019, excluding any nest tubes which contained dormice or dormouse nests during the survey as these might still be in use by dormouse.

All tubes were checked for the presence of dormice or their nests once a month for a total of six survey visits between May and September 2018 and in May 2019. The dates of each survey visit are provided in Table 1.

Table 1: Dates of dormouse nest tube checks

Survey visit number	Date of survey visit
1	23 rd and 24 th May 2018
2	28 th and 29 th June 2018
3	26 th and 27 th July 2018
4	28 th and 29 th August 2018
5	24 th and 25 th September 2018
6	29 th , 30 th and 31 st May 2019 (including removal of nest tubes)

The number of the nest tubes deployed, and the timing of the survey met the requirements for a robust survey (Bright et al., 2006). This is defined as a survey in which the combined dormouse detection probability scores from Table 2 below exceed 20 points and the survey is conducted over a minimum period of five months. The calculation takes 50 nest tubes as a standard and therefore, for example, 50 tubes left out for the whole season scores 25 (the sum of the indices for all 8 months), (Chanin & Woods 2003). For this survey, as the site is large, 275 tubes were surveyed between May and September 2018 and in May 2019 and therefore the calculation is adjusted to account for the higher number of tubes.

This survey covered a large area and therefore the calculation for survey effort is:

$$(4+2+2+2+5+7+4=26) \times (275 / 50 = 5.5) = 143.$$

Table 2: Index of the likelihood of recording dormice in any one month (Chanin and Woods, 2003)

Month	Score
April	1
May	4
June	2
July	2
August	5
September	7
October	2
November	2

Informal nut and nest hunts were undertaken during all nest tube check visits, checking for the presence of distinctively opened nuts in areas of suitable habitat.

5.1.3 *Constraints*

Dormice are nocturnal and difficult to observe, surveys therefore rely on finding evidence of their presence such as their nests and dormouse opened nuts. Nests can be removed by heavy rain, high winds and human disturbance. Opened nuts on the ground are often covered by vegetation and leaf litter and can be hidden by the activities of foraging animals and humans.

Nest tubes deployed in hedgerows may be subject to disturbance from the weather and agricultural activities such as browsing cattle and hedge management.

Nest tubes located on the southern side of the A4119 were affected by human disturbance and were tampered with on a regular basis. Nest tubes and inserts were replaced when necessary and the reduction in the time the nest tubes were available to dormice is not considered significant as the habitat was assessed as being sub-optimal, due to the species composition of trees and shrubs, large areas of open canopy and high levels of human activity.

Some nest tubes located on the northern side of the A4119, on agricultural land, were disturbed or destroyed by browsing cattle and hedge management activities, but the number of damaged tubes was low and destroyed tubes were replaced where necessary. The level of tubes affected was considered low enough not to have a negative impact on the results of the survey.

Any ecological survey can only identify what was present on site at the time it was conducted and habitat usage by species can change over time. The length of time that survey data remains valid will depend on a case-by-case basis but generally it is considered that if a development does not begin within 2 years of the date of the survey report an update may be required.

6. Results

6.1 Desktop Study

Although no SEWBRc records of dormouse exist within the 2 km search area specified for the desktop study, several records of dormouse exist within Coed Trecastell woodland, which is located approximately 3 km south of the site (Redstart, 2018). There is some habitat connectivity between Coed Trecastell and the site in the form of hedgerows and woodland areas, however, the A473 between Llanharan and Talbot Green presents a significant barrier to movement.

6.2 Habitat assessment

The habitats to the north of the A4119 comprise fields of improved grassland immediately adjacent to the carriageway and a linear parcel of semi-broadleaved woodland located between the field boundary and the River Ely. Sycamore (*Acer pseudoplatanus*) and ash (*Fraxinus excelsior*) are the dominant canopy species. Alder (*Alnus glutinosa*) was also present within the canopy in the wetter area associated with the river. There is limited diversity of structure within the woodland, with mature trees dominating and hazel (*Corylus avellana*) rarely present. A public cycle path bisects the woodland resulting in high levels of human disturbance. This habitat was assessed as having low potential to support dormouse.

To the north of the road the predominant habitat is improved grassland, agricultural fields adjacent to the A4119 with hedges and lines of broadleaved trees forming field boundaries. Most of the hedgerows across the site are species-rich and offer a well-connected network across and around the site. Hazel, hawthorn (*Crataegus monogyna*) and bramble (*Rubus fruticosus* agg.) were present in the majority of the hedges providing shelter, nesting materials and foraging opportunities for dormice. Evidence suggested that the hedges are regularly managed by flailing and that the fields are frequently used by cattle. The hedges were assessed as having low to moderate potential based on the species composition, connectivity and level of management and the presence of livestock.

6.3 Nest tube survey

No evidence of dormouse or any other small mammals was recorded during the nest tube checks on the southern side of the site.

Evidence of dormouse and other small mammals was found on the third survey visit on the northern side of the site.

Two suspected dormouse nests were recorded in the third tube check in July 2018, but both were in early stages of building and therefore positive identification was not possible at this stage. The records were located within the same hedge, bordering an agricultural field on the north side of the A4119, at a distance approximately 350 m from the existing carriage way. These nests were present in the nest tubes in subsequent visits in August and September 2018 and were fully constructed with shredded plant material and green leaves and were confirmed as unoccupied dormouse nests (shown in Photograph 1).

Photograph 1: Dormouse nest recorded, grid ref: ST0315685072, in August 2019



A further nest was identified in a tube (see Photograph 2) approximately 60 m north east of the A4119 carriage way during the fourth tube check in August 2018. The tube contained green leaves and shredded plant material and was considered to probably be the early stages of a dormouse nest. The nesting material was still present in the tube at the time of the fifth tube check in September 2018, but construction had not progressed any further and a definite identification of dormouse nest was not possible.

Photograph 2: Start of probable dormouse nest, grid reference: ST0254185173, August 2018



During the fifth tube check on September 2019 two further nests were recorded. A dormouse nest constructed of shredded plant material and green leaves was recorded in nest tube 29 (see Photograph 3), approximately 150 m from road and a probable dormouse nest, constructed of shredded plant material in nest tube 107, an approximate distance of 230 m from the road (see Photograph 4).

Photograph 3: A dormouse nest constructed of shredded plant material and green leaves in nest tube 29, September 2018



Photograph 4: Probable dormouse nest, grid ref: ST0263085321, Sept 2018



All locations of dormouse nests and probable dormouse nests are shown on Drawing GC2895-RED-74-XX-DR-C-0024. The confirmed dormouse nests were between 150 – 350 m from the road, and one of the two probable nests recorded was much closer, at approximately 60 m from the carriageway.

Evidence of wood mice (*Apodemus sylvatica*) such as nesting material and cached nuts were recorded in 10 of the nest tubes throughout the survey, the animals, if in occupancy, and nests were removed from the nest tubes if young were not present. Bird droppings were also recorded within the nest tubes.

Table 3 summarises the results of the survey.

Table 3: Dormouse survey results

Grid reference	July 2018	August 2018	September 2018	May 2019
ST0240485240				Disused wood mouse nest
ST 02604 85253			Dormouse nest	
ST0263385154				Disused wood mouse nest
ST0264785142	Wood mouse nest			
ST0254185173		Start of probable dormouse nest	Probable dormouse nest still present, but construction not progressed	Old nesting material present in tube
ST0263185234	Wood mouse nest			
ST0267985220				Wood mouse nut cache
ST0263085321			Probable dormouse nest	Old probable dormouse nest material still present in tube

ST0306785130	Start of dormouse nest	Dormouse nest	Dormouse nest	Nest tube missing, possibly destroyed by browsing cattle
ST0308485119	Wood mouse nest	Wood mouse nest		Disused wood mouse nest
ST0310085110	Wood mouse nest, 2 adult wood mice	Wood mouse, 1 adult wood mouse		Disused wood mouse nest
ST0311885101		Wood mouse, 2 adult wood mice		
ST0314285084	Wood mouse nest			
ST0315685072	Start of dormouse nest	Dormouse nest	Dormouse nest	Deteriorated nesting material present
ST0307384962				Disused wood mouse nest
ST0304385139				Wood mouse nut cache

7. Discussion

No evidence of dormouse was recorded in the habitats to the south of the A4119; they are unlikely to be present and the species therefore presents no constraints to works on this side of the carriageway.

Evidence of dormouse was identified within the hedges to the north of the A4119, with three dormouse nests and two probably dormouse nests being recorded during the survey. The dormouse nests were between 150 – 350 m from the road, and one of the two probable nests recorded was much closer, at approximately 60 m from the carriageway.

The hedges form a well-connected network across the whole of this agricultural area and dormouse are likely to be using the hedges across the site for travel, nesting and foraging.

It is likely that only the road junctions will be lit and therefore any impact on dormouse are likely to be minimal as the confirmed dormouse nest records are located away from the carriageway and landscape planting around the junctions should help to reduce light spill into the surrounding habitat. However, measures to minimise the risk of artificial lighting disturbing the nocturnal behaviour of dormouse should be considered.

It is therefore likely that the proposed works will have a negative impact on dormice, including loss and fragmentation of breeding and foraging habitat and disturbance from construction activities. It is unlikely that dormouse are crossing the existing road and therefore any loss of habitat connectivity across the road is unlikely to have a major impact on the dormouse population.

Recommendations to ensure that the development is compliant with wildlife legislation relating to dormice are outlined in Section 8.

8. Recommendations

8.1 European Protected Species Licence (EPSL)

A European Protected Species Licence (EPSL) from Natural Resources Wales (NRW) will be required. The EPSL application will require the production of a detailed method statement which is likely to include:

- Consideration to maintain habitat connectivity on the site;
- Employing techniques during vegetation clearance to persuade any dormice present to move away to suitable habitat that is being retained;
- Specified times and a two-stage methodology for vegetation clearance carried out (best practice is that above ground vegetation is removed in the winter, to encourage dormouse to move to retained areas of suitable habitat when they emerge from hibernation and stump extraction in the following spring);
- Searches for nests and animals, in vegetation both above ground and at ground level, by a suitably licenced ecologist immediately prior to any clearance;
- Landscaping proposals for the road scheme should include dormouse friendly plant species such as hazel, hawthorn, and honeysuckle and habitat connectivity should be maintained or re-instated with the wider landscape.
- Like-for-like planting of dormouse friendly plant species to compensate for any suitable habitat lost may also be required.
- Directing any lighting during the development away from hedgerows, woodland and scrub areas to reduce light pollution and disturbance to dormice. Lighting designs should be discussed and agreed by appropriately qualified ecologists.
- An appropriately licensed ecologist should supervise the clearance of vegetation on site. The ecologist will conduct a finger-tip search of areas that are to be cleared for dormouse nests and individual animals.

8.2 Toolbox Talk

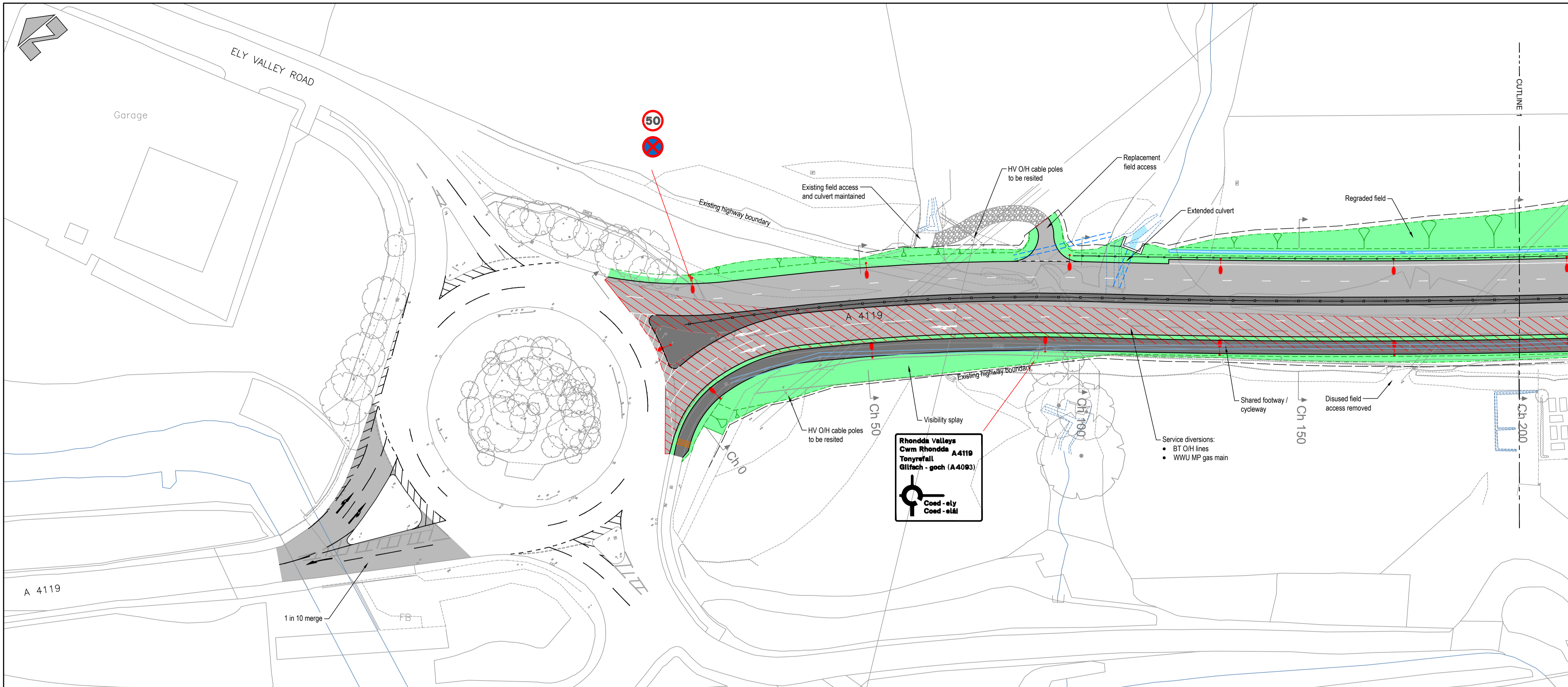
A suitably licenced ecologist will provide a toolbox talk to all contractors/site staff and advise them of the ecological constraints presented by dormice on the site and any mitigation required before any works begin.

9. References

- Bright, P., Morris, P. & Mitchell-Jones, A. (2006) The dormouse conservation handbook 2nd Edition. English Nature, Peterborough
- Capita, 2018. Environmental Impact Assessment Screening Report.
- Chanin, P. & Woods, M. (2003). *Surveying dormice using nest tubes: results and experiences*
- *from the South West Dormouse Project*. English Nature Research Report 524. Peterborough:
- English Nature
- Redstart (2018). Coed Ely Business Case – Ecological Appraisal
- SEWBRcC. (2017). Smilog Road (ST0308984081) Report, [Ref: 0178-374].

Drawings

- GC2895-RED-61-XX-DR-C-102 – 104 General arrangement
- GC2895-RED-74-XX-DR-C-0025 Location of Dormouse Survey Tubes
- GC2895-RED-74-XX-DR-C-0024 Dormouse Survey Results



Key

- New Road
- Existing Road
- New Footway / Traffic Islands
- New verge and re-graded embankment
- New / altered unbound field access
- Area of Accommodation Works

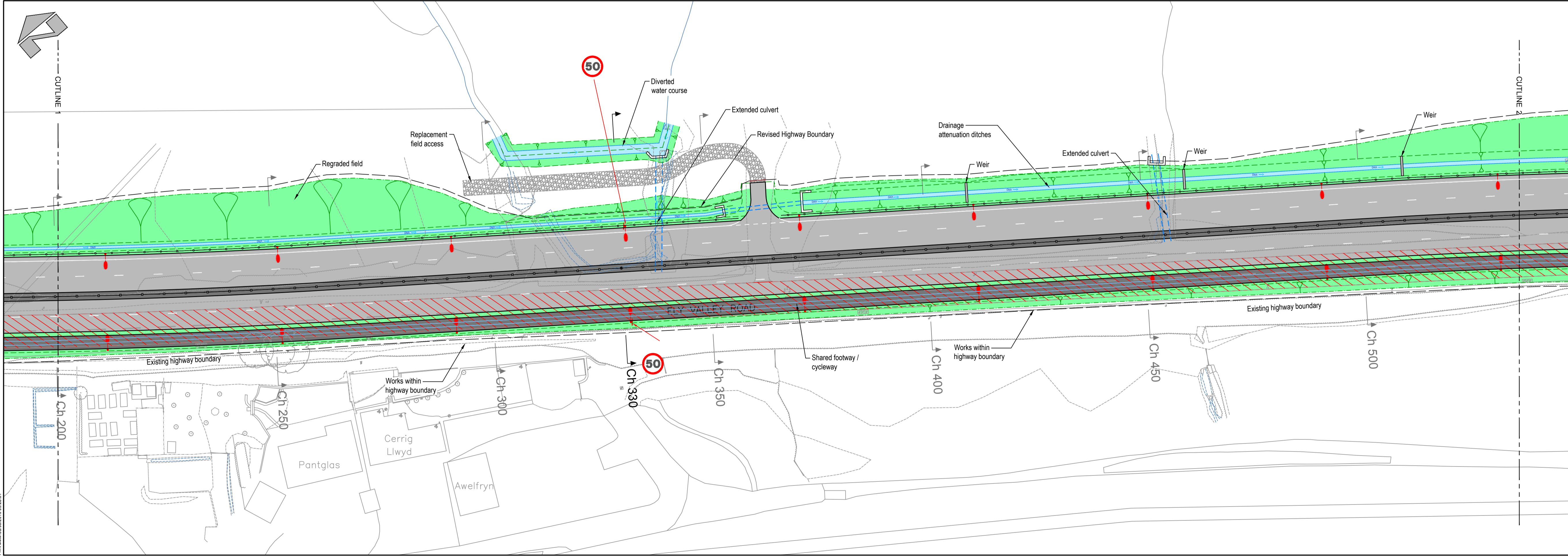
Highway Features

- New tactile paving at uncontrolled pedestrian crossings and entries to shared cycle routes
- New structures - retaining walls/bridge and approx height
- New drainage attenuation ditch
- New culvert headwall
- New traffic sign
- New lamp column (indicative location)
- New vehicle restraint system
- New highway boundary fence
- New gate

Scale 1:500

10m 0m 10m 20m 30m

Twydded yr Arolwg Ordnans 100023458
Ordnance Survey Licence 100023458

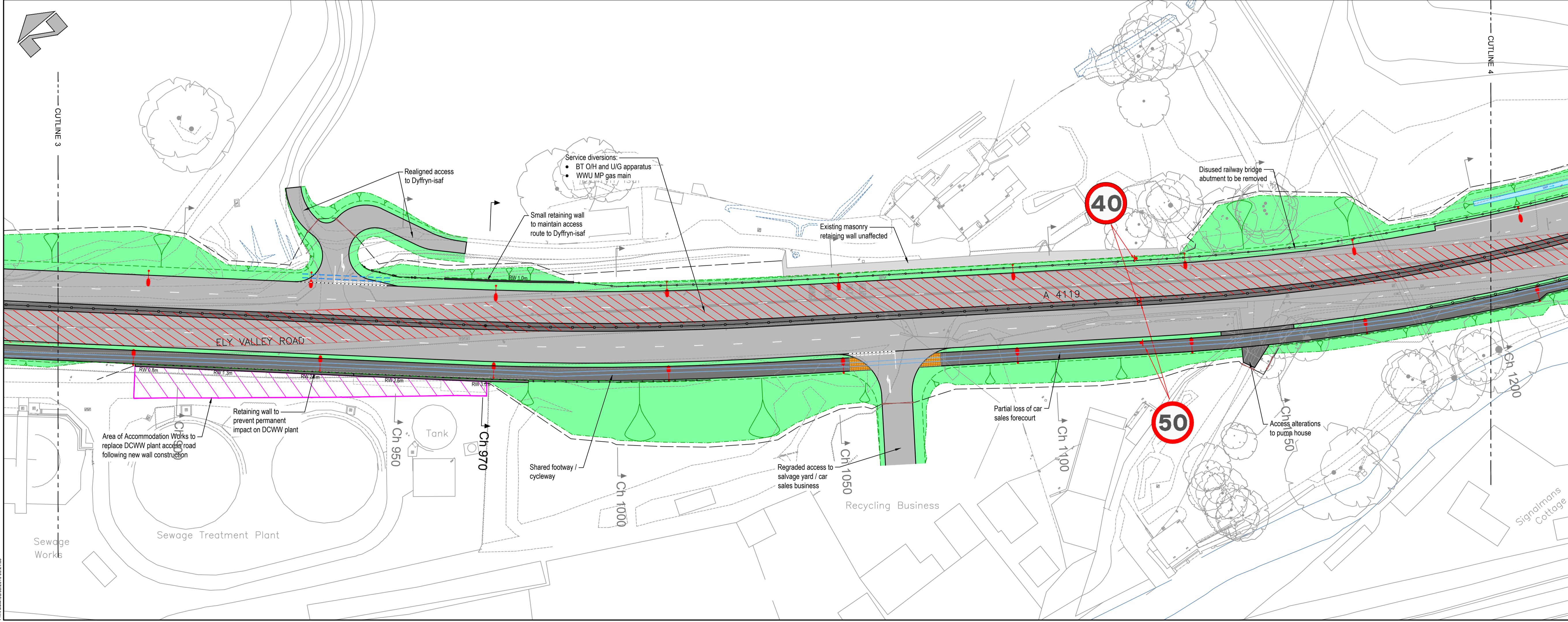
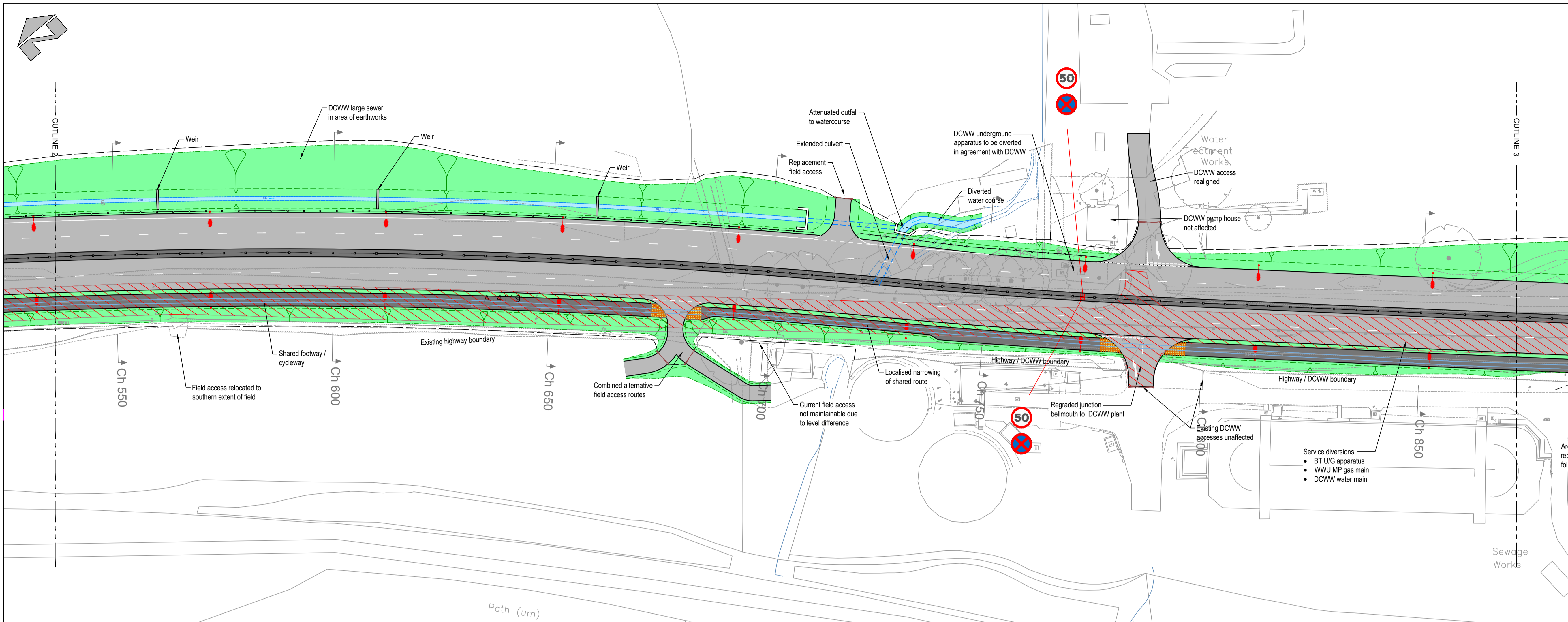


Rev	Drawn	Chkd	Appd	Description	Date
Purpose of Issue					
S2 - Suitable for information					
Classification					
Commercial in Confidence					
Client					
Rhondda Cynon Taf County Borough Council					
Project					
A4119 Coed Ely Dualling					
Drawing					
Planning Application General Arrangement (Sheet 1 of 3)					
Scale @ A1	Drawn	Checked	Approved		
1:500	JS	LM	LS		
Project No.				Date	
GC/002895				November 2018	
Drawing Identifier					BS1192 Compliant
Project - Originator - Zone - Level - File Type - Role - Number					revision
GC2895-RED-61-XX-DR-C-0102					P01

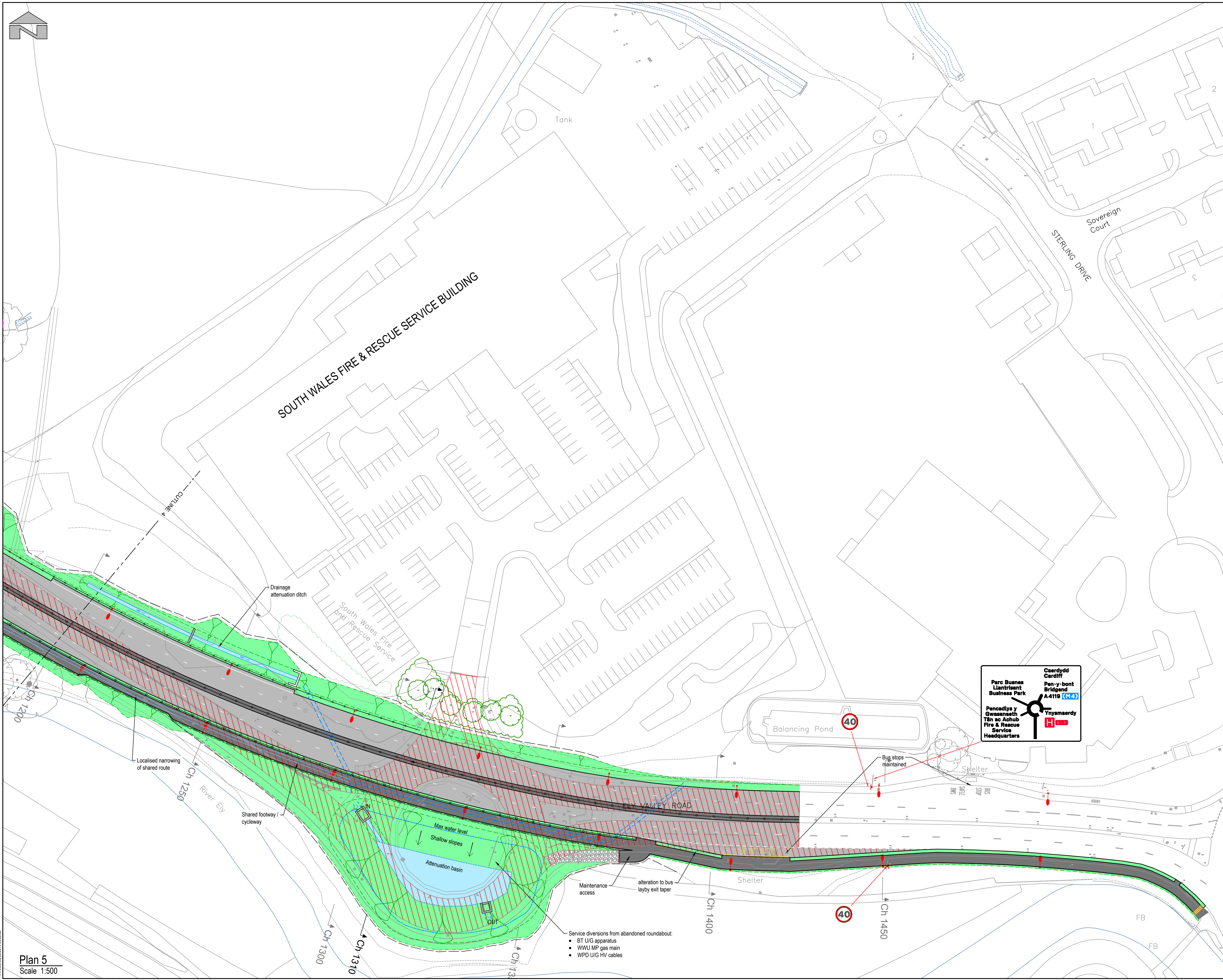
REDSTART

St David's House, Pascal Close, St Mellons, Cardiff, CF3 0LW
www.redstartwales.com

P:\Schemes_CG\GC002895-99\GC002895 - RCT Coed Ely Planning2 - Drawings\61 - Planning\GC2895-RED-61-XX-DR-C-102 104 GA.dwg



Rev	Drawn	Chkd	Appd	Description	Date
Purpose of Issue					
S2 - Suitable for information					
Classification					
Commercial in Confidence					
Client					
Rhondda Cynon Taf County Borough Council					
Project					
A4119 Coed Ely Dualling					
Drawing					
Planning Application General Arrangement (Sheet 2 of 3)					
Scale @ A1	Drawn	Checked	Approved		
1:500	JS	LM	LS		
Project No.	Date				
GC/002895	November 2018				
Drawing Identifier	BS1192 Compliant				
Project - Originator - Zone - Level - File Type - Role - Number	revision				
GC2895-RED-61-XX-DR-C-0103	P01.1				

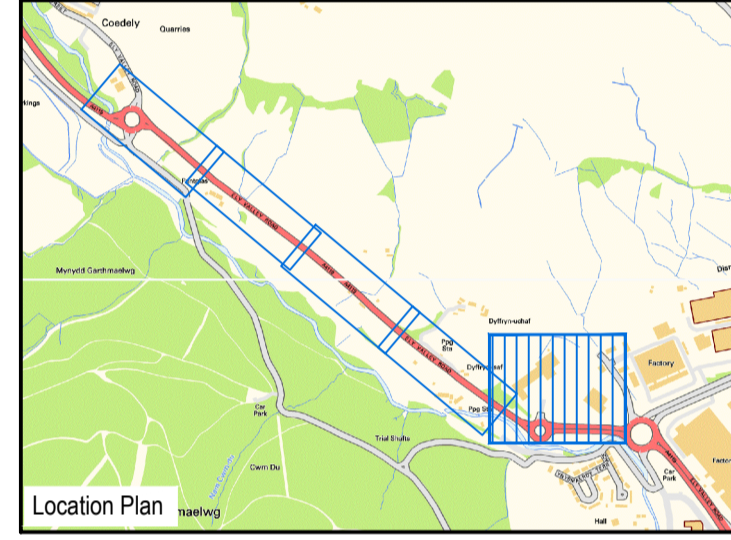
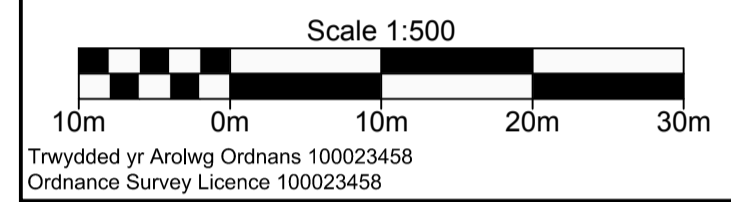


Key

- New Road
- Existing Road
- New Footway / Traffic Islands
- New verge and re-graded embankment
- New / altered unbound field access
- Area of Accommodation Works

Highway Features

- New tactile paving at uncontrolled pedestrian crossings and entries to shared cycle routes
- New structures - retaining walls/bridge and approx height
- New drainage attenuation ditch
- New culvert headwall
- New traffic sign
- New lamp column (indicative location)
- New vehicle restraint system
- New highway boundary fence
- New gate



Rev	Drawn	Chkd	Appd	Description	Date

Purpose of Issue
S2 - Suitable for information

Classification
Commercial in Confidence

Client
**Rhondda Cynon Taf
County Borough Council**

Project
A4119 Coed Ely Dualling

Drawing
**Planning Application
General Arrangement
(Sheet 3 of 3)**

Scale @ A1	Drawn	Checked	Approved
1:500	JS	LM	LS

Project No.	Date
GC/002895	November 2018

Drawing Identifier	BS1192 Compliant
GC2895-RED-61-XX-DR-C-0104	revision P01.1



Plan 5
Scale 1:500



Key

- Dormouse Nest
- Probable Dormouse Nest

Rev	Dwn	CHK'd	App'd	Description	Date
-----	-----	-------	-------	-------------	------

Purpose of Issue
S2 - Suitable for Information

Classification
Commercial in Confidence

Client
**Rhondda Cynon Taf
 County Borough Council**

Project
Coed Ely Planning

Drawing
Dormouse Survey Results

Scale @ A3	Drawn	Checked	Approved
1:3,000	JF	JB	JB

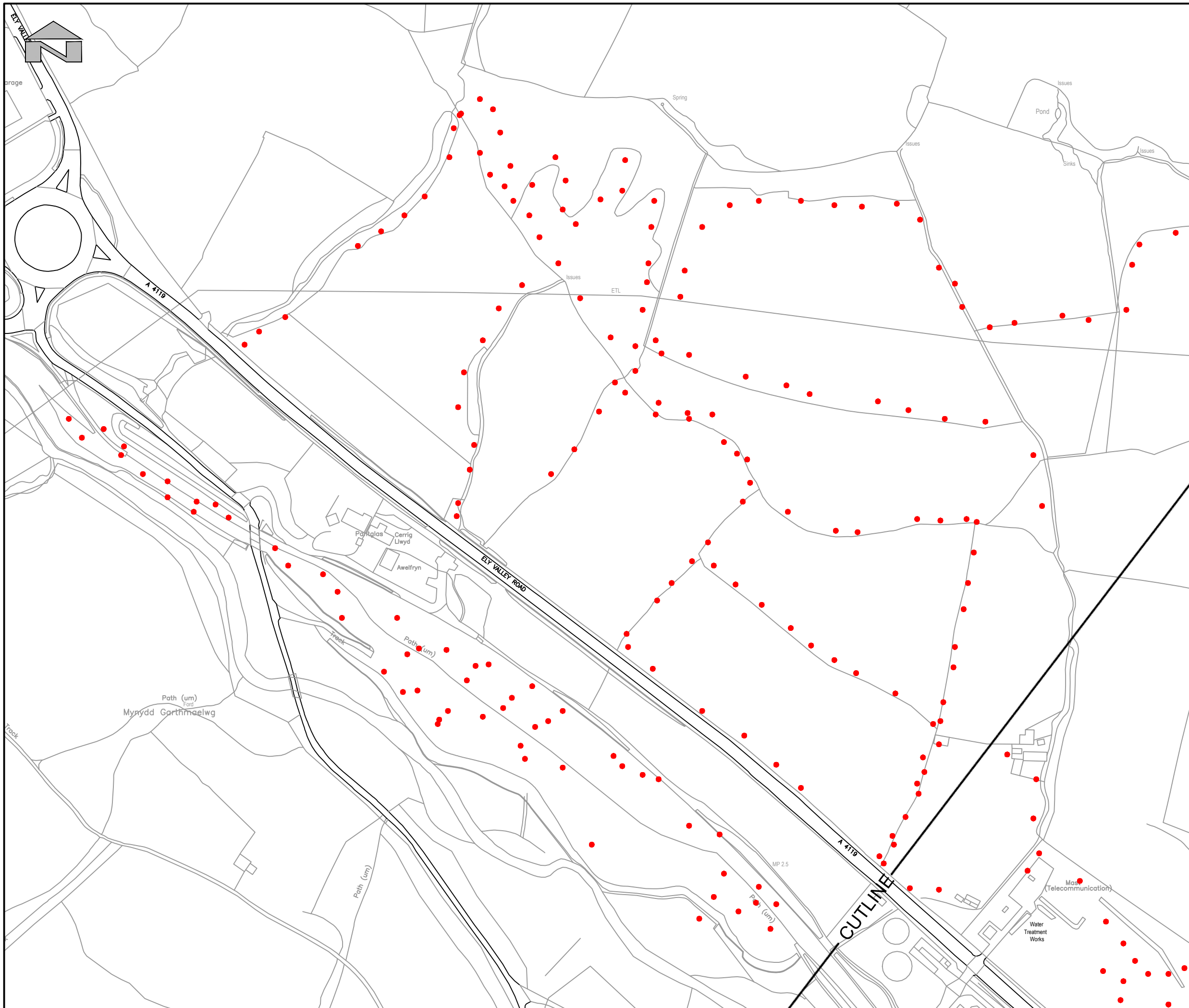
Project No.	Date
GC/002895	June 2019

Drawing Identifier	BS1192 Compliant
Project - Originator - Zone - Level - File Type - Role - Number GC2895-RED-74-XX-DR-C-0024	rev P01



St David's House, Pascal Close, St Mellons, Cardiff, CF3 0LW
www.redstartwales.com

Print Date: 07/06/2019 10:52:42



Key

Dormouse Tubes

Rev	Drawn	Chkd	App'd	Description	Date
-----	-------	------	-------	-------------	------

Purpose of Issue
S2 - Suitable for Information

Classification
Commercial in Confidence

Client
**Rhondda Cynon Taf
 County Borough Council**

Project
Coed Ely Planning

Drawing
**Location of Dormouse Survey Tubes
 Sheet 1**

Scale @ A3	Drawn	Checked	Approved
1:2,500	JF	JB	JB

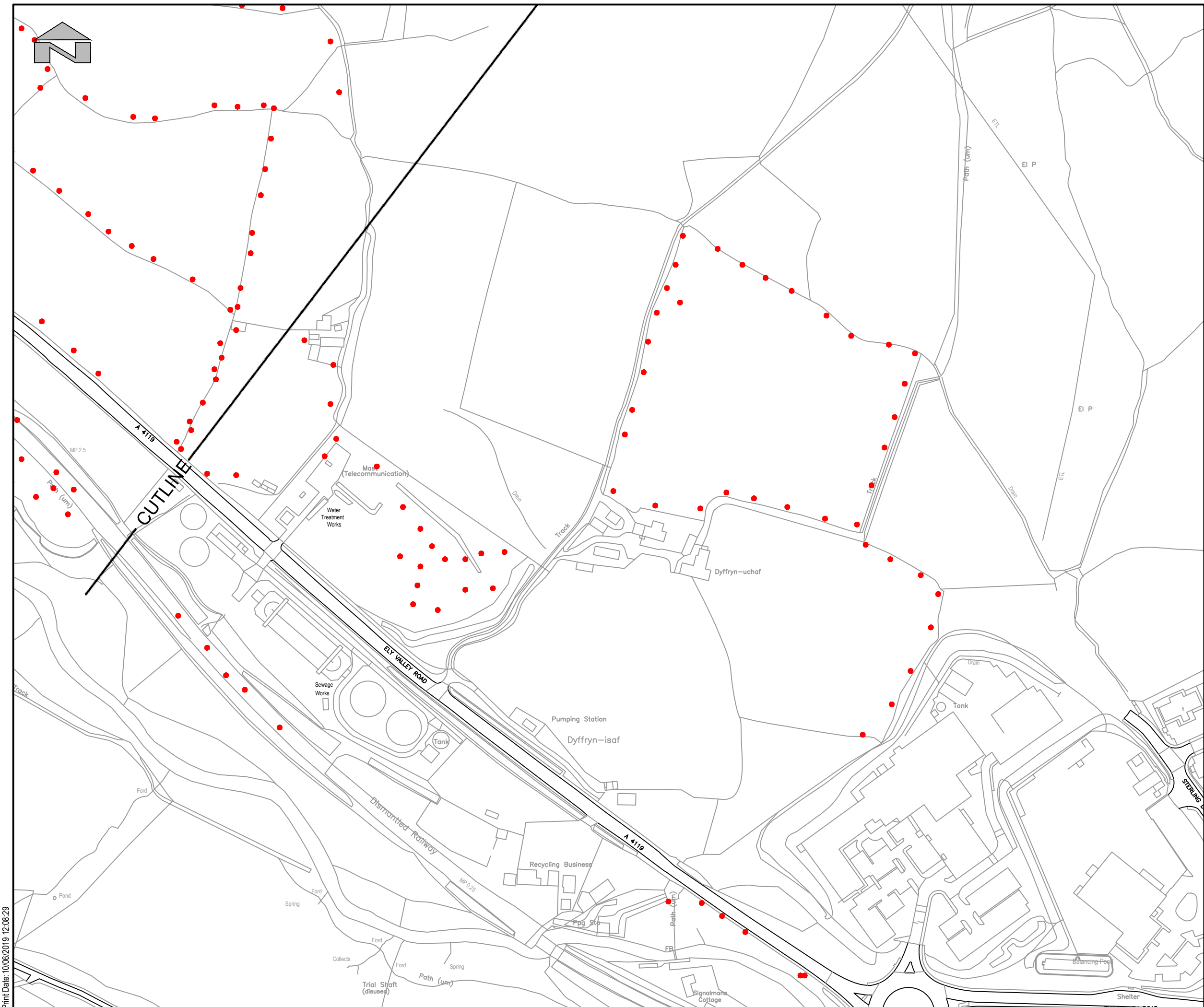
Project No.	Date
GC/002895	June 2019

Drawing Identifier	BS1192 Compliant
Project - Originator - Zone - Level - File Type - Role - Number	rev
GC2895-RED-74-XX-DR-C-0024	P01



St David's House, Pascal Close, St Mellons, Cardiff, CF3 0LW
www.redstartwales.com

Print Date: 10/06/2019 12:08:23



Key

- Dormouse Tubes

Rev	Dwn	Chkd	App'd	Description	Date
-----	-----	------	-------	-------------	------

Purpose of Issue
S2 - Suitable for Information

Classification
Commercial in Confidence

Client
**Rhondda Cynon Taf
 County Borough Council**

Project
Coed Ely Planning

Drawing
**Location of Dormouse Survey Tubes
 Sheet 2**

Scale @ A3	Drawn	Checked	Approved
1:2,500	JF	JB	JB

Project No.	Date
GC/002895	June 2019

Drawing Identifier	BS1192 Compliant
Project - Originator - Zone - Level - File Type - Role - Number	rev
GC2895-RED-74-XX-DR-C-0024	P01



St David's House, Pascal Close, St Mellons, Cardiff, CF3 0LW
www.redstartwales.com

Print Date: 10/06/2019 12:08:29

REDSTART

St David's House
Pascal Close
St Mellons
Cardiff
CF3 0LW

www.redstartwales.com

