Welsh Government

M4 Corridor around Newport

Environmental Statement Volume 3: Appendix 10.8 Otter and Water Vole Survey 2014

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Welsh Government M4 Corridor Around Newport Otter and Water Vole Survey 2014

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1 Introduction

Ove Arup & Partners Ltd has been commissioned by Welsh Government to undertake baseline ecological surveys to inform proposals for the M4 Corridor around Newport. This report provides information to inform the development of the scheme, including a Design Manual for Road and Bridges (DMRB) Stage 3 environmental assessment (HA, 1993).

This report identifies the presence of important habitat areas for European otter (*Lutra lutra*) and water vole (*Arvicola amphibius*). Where appropriate, recommendations are made for further surveys to inform the development of the scheme.

1.1 Background to the Project

The M4 in South Wales forms part of the Trans-European Transport Network (TEN-T), which provides connections throughout Europe by road, rail, sea and air. The M4 plays a key strategic role in connecting South Wales with the rest of Europe, providing links to Ireland via the ports in South West Wales and England and mainland Europe to the east. It is a key east-west route being the main gateway into South Wales and also one of the most heavily used roads in Wales.

Providing a facility for transporting goods, linking people to jobs and employment sites as well as serving the Welsh tourism industry, the M4 is critical to the Welsh economy. Cardiff, Newport and Swansea have ambitious regeneration strategies and Monmouthshire County Council is developing areas around Junction 23A of the M4. Rhondda Cynon Taff has important gateways onto the motorway at Junctions 32 and 34. Bridgend is served by M4 Junctions 35 and 36. Neath Port Talbot straddles the motorway and gets important access from Junctions 38 to 43. Congestion on the M4 causing unreliable journey times and reduced service levels will therefore hinder economic development in South Wales.

The M4 between Junctions 28 and 24 was originally designed as the 'Newport Bypass' with further design amendments in the 1960s to include the first motorway tunnels to be built in the UK.

The M4 Motorway between Magor and Castleton does not meet modern motorway design standards. This section of the M4 has many lane drops and lane gains, resulting in some two-lane sections, an intermittent hard shoulder and frequent junctions.

It is often congested, especially during weekday peak periods resulting in slow and unreliable journey times and stop-start conditions with incidents frequently causing delays.

This is why problems with congestion and unreliable journey times have been a fact of life on the M4 around Newport for many years. The motorway and surrounding highway network does not cope with sudden changes in demand or operation, for example as a result of accidents or extreme weather events. These issues are worse at times of peak travel (rush hour) and have worsened as the number of users on the network has increased.

Since 1991, much assessment and consultation has been undertaken to develop a preferred solution to the problems on the motorway around Newport. A detailed history is documented in the M4 Corridor around Newport WelTAG (WG, 2008) Stage 1 (Strategy Level) Appraisal Report (Ove Arup & Partners Ltd, 2013). This included the adoption of a revised TR111 route¹ in April 2006, which remains protected for planning purposes. The alignment of this proposed new section of motorway has been developed following extensive consultation, investigation and analysis. The aim was to minimise the impact on the environment, whilst fully meeting motorway design and safety standards. The main element of the draft Plan (the Black Route) largely follows this TR111 alignment.

The survey design is informed by the Route Options defined in the Stage 2 DRMB Environmental Report (Ove Arup & Partners Ltd, 2014).

The proposed route includes a large area of the Gwent Levels, which includes four Sites of Special Scientific Interest (SSSIs) and also crosses the River Usk and River Ebbw. The River Usk is designated as a SSSI and as a European Designated Site (Special Area of Conservation, Special Protected Area and Ramsar site). An extensive otter population is known to inhabit the River Usk SSSI, and the otter is a designated feature of the site. The River Usk / Afon Wysg Special Area of Conservation (SAC) is an important site for otters in Wales, and they are an Annex 2 Species that are 'a primary reason for selection' of the site as a SAC. The River Usk SAC provides a key movement corridor for otters between mid-Wales and south-east Wales, the function of this aspect of the site should be protected through the maintenance of suitable resting sites through the major urban centre of Newport. They are believed to be using most parts of the main river, from Newport upstream, and in recent years signs of otters have increased. Otters and water voles share similar habitats therefore the surveys were combined.

1.2 Survey Objectives

The aims and objectives of the surveys were to:

- Determine the presence and distribution, or likely absence of both otters and water voles within the study area.
- Assess suitability of habitat within the study area for these two species.

1.3 Study Area

The study area for the purpose of this survey was based on a 500m buffer around the physical extents of the previous scheme studied in 2007/8, including the route alignment, potential junctions and water treatment areas. It is anticipated that any proposed route that might be taken forward would be within this corridor. The Preferred Route announced by

¹ Once a preferred route is announced, Welsh Government serves a statutory notice (TR111) on the local planning authorities requiring the line to be protected from development. This is enacted under Article 19 of The Town & Country Planning (Development Management Procedure) (Wales) Order 2012.

Welsh Government in July 2014 is located within the centre of this corridor as shown in Figure 1. Figure 1 The 2014 Preferred Route within the Study area shown in red.



1.4 Legislation

1.4.1 Otters

The otter is protected as a European Protected Species (EPS), under the Conservation of Habitats and Species Regulations 2010 (as amended), commonly referred to as the Habitats Regulations. Under this legislation it is an offence to:

- deliberately or recklessly kill, injure or capture an otter;
- to deliberately or recklessly disturb or harass an otter such as to affect its ability to breed or its local distribution;
- or to damage, destroy or obstruct access to a breeding site or resting place (e.g. shelter) used by an otter.

The otter is also fully protected under Section 9 of the Wildlife and Countryside Act 1981 (as amended). Legal protection makes it an offence to:

- intentionally kill, injure or take (capture) an otter;
- possess or control alive or dead otter, or any part of an otter;
- intentionally or recklessly damage, destroy or obstruct access to any structure or place which otters use for shelter or protection, or disturb otters while they are using such a place;

Otters are a feature of the River Usk SAC, and River Usk SSSI.

Otters have also been identified as a species that are a priority for nature conservation (Priority Species) within the 'UK Post-2010 Biodiversity Framework' Biodiversity Action Plan (UKBAP), which is reflected in their inclusion on lists produced under requirements of Section 42 of the Natural Environment and Rural Communities (NERC) Act 2006. The NERC Act places a duty on statutory authorities to have 'due regard' for Biodiversity in exercising their functions.

1.4.2 Water Voles

The water vole is fully protected under Schedule 5 and Section 9 of the Wildlife and Countryside Act 1981. Legal protection makes it an offence to:

- intentionally kill, injure or take (capture) a water vole;
- possess or control alive or dead water vole, or any part of a water vole;
- intentionally or recklessly damage, destroy or obstruct access to any structure or place which water voles use for shelter or protection, or disturb water voles while they are using such a place;
- sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative);
- advertise for buying or selling.

The water vole is a species of 'priority conservation concern' within the 'UK Post-2010 Biodiversity Framework' because of its declining status in the UK and is also a Section 42 species of 'principal importance' in Wales.

2 Methodology

The approach and broad methodology for the surveys was discussed and agreed with Natural Resources Wales prior to the commencement of surveys.

2.1 Desk Study

Previous data obtained from surveys undertaken in 2007/8 for the New M4 Project has been reviewed in the preparation of these surveys.

Both riparian species are included in the local biodiversity action plan, as they have previously been recorded on the Gwent Levels and River Usk.

A revised biodiversity information search was commissioned from the local biological records centre, South East Wales Biological Records Centre (SEWBReC), this report was dated 5th December 2013.

2.2 Survey methods

Information was recorded using standard recording sheets in the field using iPads, which had Global Positioning System (GPS) mapping capability. The GPS was used to record the location for each recording sheet completed. Field signs or features relevant to the survey were photographed, with a GPS location attached to the digital image.

An individual recording sheet was used for each survey of a water body, which included those water bodies that were dried up (defunct), or inaccessible. In those instances where the water body was dried up or inaccessible, the ditch length was walked and checked and a recording sheet was completed. Where possible binoculars were used to check areas that could not be accessed.

Due to the cross-over between water vole and otter survey methods, the two surveys were combined. The field survey involved surveying 1442 water bodies that were identified from Ordnance Survey data. For the purposes of this watercourse/water body type is defined as:

- **Estuary** the mouth of a river leading into a larger river or the sea e.g. River Usk estuary leading into the River Severn estuary;
- **River** Major natural watercourse always in flow and subject to flooding events e.g. River Usk;
- **Stream** Minor natural watercourse which is usually in flow but can dry out in places but also subject to flooding events e.g. Monk's Ditch;
- **Pond** A semi-stagnant and isolated water body, using filled by a stream or by man-made means and which can dry out e.g. Tata Steel-works settlement ponds;
- **Reen** Major man-made drainage channel or canalised stream which stays dry for the majority of the year e.g. Rush Wall reen;
- **Ditch** Minor man-made drainage channel which dries out on a regular basis e.g. field ditches.

The fieldwork was carried out between April and October 2014, and aimed to include all water bodies and watercourses within the study area. For each water body that was surveyed, a recording sheet was completed and any field signs photographed and location recorded. Surveying for field signs was carried out by

hand searching of the banks and any features that could have the potential to be used by the two species.

Surveying was avoided for at least three days after heavy rain, since this can serve to obscure signs of activity.

2.2.1 Otters

The survey methods adopted for otters was adapted from authoritive sources and best practice survey guidelines (Chanin, 2003); (Crawford, 2003)).

2.2.1.1 Presence / absence survey – Otters

The field signs that were searched for were: spraints, anal jelly, holts, laying—up sites, bank slides, runs, tunnels, prey remains and footprints. Features that have high potential to be attractive to otters were examined, including: suitable bridges, bases of large trees, dense vegetation, crossings, confluences of water bodies, culverts and boulders.

Resting areas for otters are usually referred to as either a holt (usually a hole in the ground covered by vegetation or under the roots of a bankside tree) or a couch (an uncovered laying up or nest like structure). Natal dens are usually found away from the coast, and indeed the majority of the study area was inland.

2.2.1.2 Habitat Suitability Assessment - Otters

Although a riparian mammal, otters will travel overland to reach other water bodies. They prefer to shelter where there is little disturbance and some cover provided by bankside vegetation.

Assessment of the habitat suitability indicates how likely otters are to use a site given the present habitat condition. Otters are tolerant of a wide range of habitat conditions and may use habitat for a number of reasons (e.g. shelter, foraging and passing through to other more suitable habitats).

Habitat suitability assessments were carried out at each water-body/watercourse visited with sites subsequently defined as being of high, moderate or low suitability based on the following criteria:

- Proximity of site to habitats meeting the species' requirements for shelter, foraging and breeding.
- Degree of modification to water-body/watercourse potentially resulting in negative impacts upon otters, e.g. canalisation or realignment.
- Levels of site disturbance, e.g. proximity to public rights of way, farm vehicle access tracks or road traffic.
- Levels of visible pollution potentially impacting upon prey species.
- Potential for otters to use culverts, bridges and dry watercourses for foraging, commuting and dispersal.

Otters use terrestrial vegetation as corridors and for breeding (e.g. holts) and this habitat requirement was included in the habitat suitability assessment.

Habitat features with potential benefit to otter in terms of shelter, foraging and breeding requirements were identified at each site; for example nearby woodland (especially floodplain woodlands), mature trees, fallen trees, dense scrub, bank substrate suitable for creating places of shelter, canals, pools, lakes, reed beds and marshes.

Modification of the watercourses was considered as a factor that may detrimentally impact on habitat suitability. Modifications, such as canalisation or realignment, may reduce channel naturalness, biodiversity and thus abundance of otter prey items.

Disturbance is a major factor that may deter otters from using sites with even the highest suitability. Examples of disturbance factors include farm traffic, road traffic, cattle trampling and close proximity to a Public Right of Way that will encourage dog walking.

Hydrology is another important factor. Otters are known to use a variety of freshwater habitats including main rivers, ponds, reens and ditches. As a general rule it is considered here that larger, deeper watercourses with a moderate to fast flow will provide a more plentiful food source. Nevertheless, small streams and ditches are also important foraging habitats since fish can be easier to catch. Ponds and reservoirs also provide potential foraging areas; especially in times of flood. In addition, pollution was also considered as a factor of habitat suitability (as recommended by Chanin, 2003).

Habitat suitability was measured according to the above criteria and defined as high, moderate, low or negligible as outlined in Table 1.

Table 1: Habitat Suitability Criteria

Habitat Suitability	Shelter Requirements	Food Supply	Modification & Disturbance	Hydrology	Pollutants
High	Many suitable habitat features adjacent to watercourse.	Suspected presence of abundant prey; particularly fish species.	Minor man- made modification of watercourse habitat and disturbance from the public e.g. dog walking.	Watercourse with fast to moderate flow velocity and more than 1 m deep.	'Good' or above chemical or biological water quality.
Moderate	Several suitable habitat features adjacent to watercourse.	Suspected presence of sufficient prey; particularly fish species.	Intermediate man-made modification of watercourse habitat or disturbance from the public e.g. frequent dog walking.	Watercourse with slow to moderate flow velocity or less than 1 m deep.	'Fair' chemical or biological water quality.
Low	Few suitable habitat features adjacent to the watercourse.	Suspected scarcity of prey.	Major man- made modification of watercourse habitat and disturbance by the public e.g.	Watercourse with slow to moderate flow velocity and less than 1m deep.	'Fair' or below chemical or biological water quality.

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Habitat Suitability	Shelter Requirements	Food Supply	Modification & Disturbance	Hydrology	Pollutants
			frequent dog walking.		
Negligible	No suitable habitat features.	No prey species present.	Major man- made modification of watercourse habitat and disturbance by the public e.g. frequent dog walking.	Dry with no indication of a water body present on site.	Low water quality with indications of pollution.

2.2.1.3 Camera traps

At locations where fresh footprints or fresh spraint had been recorded adjacent to optimal habitat for otters camera traps were set up to record activity. The equipment used was a Bushnell Camera trap and these were left in situ for periods of several days.

2.2.2 Water voles

The survey method for water voles was based on the best practice survey guidelines in the Water Vole Conservation Handbook (Strachan, Moorhouse, & Gelling, 2011). Banks of water bodies were surveyed from a minimum of 2 metres from the waters' edge, and where the water body was inaccessible the survey was carried out up to 4 metres from the top of the bank.

2.2.2.1 Presence / absence survey – Water voles

At each water body a search for the following field signs was undertaken: faeces, latrines, feeding stations, burrows, footprints. Droppings are the most distinctive field sign to indicate recent use of a water body by water voles (Strachan, Moorhouse, & Gelling, 2011). A thorough search of the bankside vegetation was performed at each water body until a latrine was found, thereafter point checks were performed.

2.2.2.2 Habitat Suitability Assessment – Water voles

Assessment of the habitat suitability indicates how likely water voles are to use a site given the present habitat conditions. Habitat suitability was assessed from observing the features of each water body, with consideration to the ecology and habitat requirements of water voles. The best sites for water voles according to Strachan, Moorhouse & Gelling (2011) are those that have a highly layered bank-side vegetation with tall grasses and stands of willow herb, loosestrife, meadowsweet or nettles, often fringed with think stands of rushes, sedges and reed. Each water vole utilises a series of burrows, which can extend 5-6 metres from the edge of the bank into the terrestrial habitat. Water voles require dense growth of herbaceous bankside and emergent vegetation (Strachan, Moorhouse, & Gelling, 2011), and the promotion of scrub or planting of trees is detrimental to them (Chanin, 2003).

Habitat suitability assessments were carried out at each water body/watercourse visited with sites subsequently defined as being of high, moderate or low suitability based on the following criteria:

- Rate of water flow.
- Bank profiles.
- Degree of shading from overhanging trees.
- Extent of suitable emergent and bankside herbaceous vegetation in providing shelter, food and nesting material.
- Degree of cattle poaching (i.e. extent of damage to banks resulting from trampling by cattle).
- Levels of site disturbance, e.g. proximity to public rights of way, farm vehicle access tracks or road traffic.
- Potential for the water body to dry out.
- Suitability of bank substrates for burrowing.
- Water quality.

Examples of habitat suitability assessments are as follows:

High Quality

Typical high quality water vole habitat is a slow-flowing watercourse, less than 3m wide and 1m deep with moderately steep banks, minimal shading by trees and shrubs and luxuriant growth of emergent and bankside herbaceous vegetation to provide shelter and an abundance of food and nesting material.

Moderate Quality

Moderate quality water vole habitat would consist of a combination of the features associated with both high and low habitat suitability. For example, the flow and bank type may be suitable; however heavy grazing by livestock may reduce the cover of herbaceous vegetation and trample suitable habitat for burrowing.

Low Quality

Factors which indicate that a habitat is of a low suitability for water vole include heavy shading by overhanging trees and/or shrubs reducing the cover of emergent and bankside vegetation and thus the availability of water vole food plants. Other factors that indicate habitat of low suitability include widely fluctuating water levels, seasonal drying out of the watercourse channel and banks that are unsuitable for burrowing.

Negligible

A negligible habitat suitability would be where there is either no water body present for example, a ditch which has completely overgrown and would not hold water. An example of this would be a ditch which has a double hedge and is no longer managed and therefore the water body has filled in. Settlement pools or ditches which are visibly polluted and low water quality and obviously their purpose is to act as a buffer to collect polluted material from industry.

2.2.3 Kayak surveys

The size and depth of some water bodies prevented the safe search of the bank by surveyors during the initial survey. In these instances a kayak was use as a floating platform from which to search for field signs of otter and water vole.

2.3 Surveyors

All surveys were undertaken by two surveyors, one of whom was an experienced ecologist familiar with the ecology and field signs of both otter and water vole.

2.4 Limitations and Assumptions

The findings presented in this study represent those at the time of survey and reporting, and data collected from available sources. Ecological surveys are limited by factors which affect the presence of flora and fauna, factors such as the time of year and natural behaviour of the animals. Nevertheless, these surveys were conducted at the optimal survey periods and using methodologies which were agreed with Natural Resources Wales prior to commencement of the survey.

Prior to the survey a desk study was carried out to identify water bodies and assign reference numbers which were then used when allocating areas to survey.

Where there were limitations, surveyors still strove to collect as much relevant information within the survey criteria as possible. The details of the limitations experienced during the survey are detailed in Appendix B. The main limitations of the survey were:

- Dense vegetation including vegetation growing in and adjacent to water body;
- Security fencing stopping access to water body;
- No access permission granted at time of survey;
- Health and safety concerns with regard to situations such as dangerous animals (e.g. cattle, horses, dogs);
- Poaching of bankside occluding field signs;
- Steep banks and deep water (although where possible a kayak was used to overcome this constraint);
- Heavy rain resulting in survey being cancelled.
- Rain showers wetting field signs

Access permission was not granted to all the water bodies within the proposed survey area. However, where water bodies were adjacent to public rights of way, or bordered by a field block which had access permission, then the water body was surveyed from an available viewing point.

Management of the bankside vegetation acted as a hindrance to survey effort in some instances. This was dependant on the extent of the works, which varied from strimming of the bank side vegetation, to bank re-profiling. In some instances it was recorded that the management of the bankside vegetation had hindered the

survey effort. During the 2014 survey, there were instances where although the bankside vegetation had recently been managed, evidence for water voles was found. Poaching of banksides were another limitation to survey, as the poached ground was difficult to survey and field signs could have been destroyed.

Habitat suitability is a subjective measure. The whole survey team was briefed with regard to these survey methods, in an aim to narrow differences in judgement between surveyors. Where a ditch was inaccessible due to dense vegetation, but the water body could be viewed, it was possible to make an assumption with regard to suitability for the two riparian mammal species. Where the vegetation was so dense that we were unable to view the water body, then an informed assessment could not be made.

Due to the nature of the Gwent Levels as a managed site, the water level fluctuates. Therefore, not all of the water bodies would hold water for the entire year. In some instances the field ditches did not hold water at the time of survey, but this does not mean that at another time of year that water body would not be suitable for water voles or otters. Other neighbouring water bodies could act as a corridor to aid dispersal.

Due to the unusually dry and warm autumn months the survey was able to continue into October.

There were a number of health & safety issues which limited the survey progress. There were water bodies where the channel contained contaminated water. Where dangerous animals such as young bullocks, bulls, mares with foals were present in the field, then these water bodies were marked to be surveyed on another occasion during 2014.

3 Results

3.1 Desk study Results

Records of both otter and water vole were identified within 500m of the study area, and these have been noted in Appendix A. Included in this report were 68 records of otter and 10 records of water voles. There were five records of water voles from the area of Magor Marsh reserve and nineteen records of otters in this area. In the Coedkernew area of the study area there are seven previous recent records of otters including Duffryn Pond (NRW Protected Species records), Tredegar Park, Percoed Reserve and along Percoed Reen There were recent records of otter on the Afon Ebbw, both spraints and footprints in 2000 and 2002. There are three previous records for otters in the area of Llanwern Steelworks and also records in the location of Blackwall and Monk's ditch. There were eleven records of dead otters mainly road casualties within the study area.

3.2 Field Surveys

All data were collected on site using iPads and the recording sheets generated from the surveys are provided in Appendix D. Of the 1442 water bodies identified during the desk study, 998 were surveyed. Some of these were surveyed on more than one occasion, this was due to being resurveyed after initial difficulty in accessing and subsequently a boat survey being carried out. Where a GPS reference was unable to be recorded (either due to human error or technological issues) then the water body reference was recorded and accuracy checked.

3.2.1 Weather

The details of the weather recorded during the survey period is detailed in Appendix B, this was generally recorded at the beginning of the day. Due to the nature of the interconnected ditch and reen system, during times of heavy rain this did not always affect all the water bodies uniformly as the water dispersed across the Gwent Levels site. During survey days where there had been rain, surveyors were told to abandon surveying any water bodies where it was obvious that rain had caused the water level to rise and cover any field signs.

3.2.2 Otter field signs

Otter field signs were found on 18 of the water bodies surveyed, as detailed in Table 3. The presence and absence of otter field signs are shown in drawings at the end of this report. The water bodies where otters were found to be present, ranged from a lake, a river, two streams, reens and ditches. One of the steams had a fast flow, but the other water bodies ranged from still to sluggish flows. The lake was over 20metres wide, but the other water bodies ranged from 1m to 10m in width. Depth of water ranged from 0.5m to over 2m. The vegetation recorded at these sites ranged from scrub and ruderal species on the bankside, to submerged vegetation within the water body. Only two of the water bodies were fenced, however one of the water bodies (333) had post and rail fencing which made the site accessible to otters, and water body 944 (along Mill Reen) near the Junction 28A also had access points.

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Table 3 Otter field signs recorded during the survey in 2014.

Date	Water body reference number	Field sign	GPS latitude	GPS longitude
15-08-2014	1129	Spraints;	51.565893	-2.88329
28-08-2014	944	Spraints; Slides; Laying up;	51.587898	-2.83245
08-09-2014	42	Spraints;	51.545477	-3.034294
30-09-2014	333	Footprints;	51.563682	-2.970409
30-09-2014	332	Slides;	51.563847	-2.972831
10-10-2014	6114	Slides;	51.560504	-2.939156
15-10-2014	1279	Spraints;	51.571253	-2.91453
20-10-2014	862	Spraints;	51.547886	-3.04133
20-10-2014	1384	Spraints;	51.548311	-3.041964
20-10-2014	55	Spraints;	51.546905	-3.036827
21-10-2014	1288	Slides;	51.566333	-2.909885
21-10-2014	321	Spraint with fish bones and feathers.	51.551237	-2.997363
21-10-2014	650	Slides; Laying up;	51.573747	-2.862647
23-10-2014	906	Footprints;	51.575276	-2.854565
23-10-2014	747	Spraints; Slides; Laying up;	51.575276	-2.854565
28-10-2014	578	Spraints; Slides;	51.571114	-2.914249
30-10-2014	935	Spraints	Not recorded	Not recorded
31-10-2014	867	Spraints;	51.571495	-2.845724

Field signs were recorded in the Coedkernew area and along Percoed Reen (waterbody 42). Three of the records were found on water bodies adjacent to a disused road South of the Imperial Park development (water bodies 1384, 862 and 55. There is dense vegetation and good quality water contained in water bodies, which appears to offer suitable habitat for otters.

There was a spraint found on a culvert crossing a stream adjacent to the Afon Ebbw (water body 321).

Field signs were found on two water bodies (332 and 333) adjacent to the River Usk which is known to support otters. To the east of this area, an otter slide was recorded going into a ditch adjacent to Broadstreet Common on water body 6114). This is an area where there is a good quality of ditches interconnecting with Julian's Reen.

Otter field signs were found as far north as the A4810 Queens Way road adjacent to Monk's Ditch on water body 1279, and along the ditch running south to the Black Wall reen (water body 578). There was also a field sign found along water body 1288 behind the electricity substation. Although there is heavy industry in this area, and also visually contaminated water bodies (e.g. water body 1295), there is also fresh water available in the Gwent Levels reen and ditch network, and vegetation cover provided in-between the industry. The dense vegetation is in areas that have limited human disturbance, which would be suitable for otters to use for places of refuge.

Field signs were also found on water body 1129 along with numerous mammal paths in adjacent vegetation within Tata steelworks. Much of the vegetation and water bodies in this area show heavy contamination, but interspersed there are water bodies with apparently better water quality such as 1129 with moderate flow, and also dense vegetation. There is also suitable scrub to the west and south which could be used by otters for a holt, refuge or as a corridor to move to more suitable areas. A camera trap was deployed at two locations along reen 1129.

Further to the east near Bareland Reen, there were three field signs for otters found in land adjacent to an industrial unit (water bodies 650, 747 and 906). The area to the north of Bareland Street has relatively low human disturbance as it is overgrown with dense vegetation, but with a water source of good water quality in Bareland Street Reen and interconnecting water bodies. There are hedgerows and ditches in this area which could also provide corridors for otters to move around the local landscape.

Field signs were found on the Mill Reen water body (935 and 944) near Junction 23A. Adjacent to Mill Reen there is vegetation which could be used as a corridor for otters to use to move to the Magor Marsh which is further south. However, the route south passes through the residential area of Magor, which would have high human disturbance. It is likely that otters would disperse north where there would be less human disturbance, however they could move through Magor at night.

3.2.3 Habitat suitability for Otters

A total of 998 water bodies were surveyed for their habitat suitability for otters. The results of this assessment are shown in Figure 2. Drawings illustrating the locations of these water bodies are included at the end of this report.

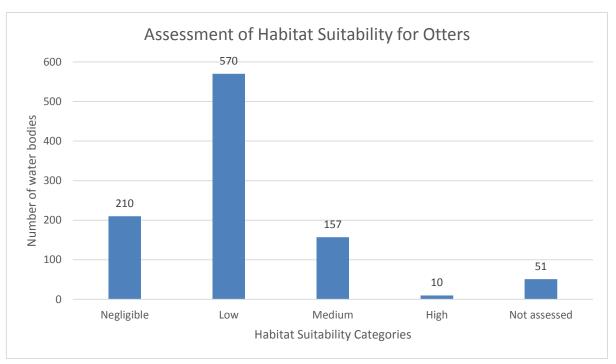


Figure 2 Assessment of Habitat Suitability of water bodies surveyed for otters.

The majority of the water bodies were assigned assessed as being of low suitability for otters (total of 570 waterbodies), with only 10 water bodies assessed as being highly suitable for use by otters. Water bodies described as not assessed were in situations where access to the land parcel was granted, but the water body itself could not be assessed, this was mainly due to dense vegetation making the water body inaccessible.

The River Usk (water body 2500) and River Ebbw (water body 2508) provided the most suitable habitat for otters, due to a relatively fast flow and high abundance of prey items (fish) available. These areas are also known to support otters (CCW, 2008). Culverts and bridges on streams running from the River Ebbw, which could be used as laying up sites and have low levels of human activity also increase the suitability of the Ebbw for use by otters. There are ponds (water bodies 322, 330, 333) and ditches (331, 332) running along the Eastern edge of the River Usk which were assessed as being moderate suitability for otters, this was due to the proximity to the River Usk SAC and also the cover with which these areas might provide for otters. A large section of woodland and scrub adjacent to water body 332 and 333, would be one of the only areas of refuge along the river for otters to. Recent fresh footprints and slides were found adjacent to these water bodies. Water body 335 adjacent to an access track in this area was assessed as being low due to high fencing and low water levels. A settlement ditch adjacent to the footpath and pond 330, which was assessed as being negligible due to the visibly poor water quality.

It is clear from the habitat suitability mapping that the majority of the water bodies which were assessed as having high or medium suitability for otters were reens or main ditches which were interconnected or managed as part of the Gwent Levels system. For example, Petty Reen (water body 875) and Stutwall Reen (water body 671) to the east of the study area which are interconnected and were classed as being of medium and high suitability. There are water bodies in the

vicinity of these reens which were also assessed as being of high and medium suitability (e.g. water bodies 847, 922 and 921).

An isolated pond near Castleton (water body 4) was classed as being of medium suitability which was due to the presence of suitable habitat for both foraging and commuting. However, in this area only three (water bodies 6, 7, 8) other water bodies were surveyed as having low potential due to the low water levels, and these were not interconnected. The other three water bodies surveyed in this area were of low potential due to the low water levels in these ponds, but presence of potential habitat for refuge or for dispersal.

In the area of Parc Golf Club, many of the water bodies (including water bodies 12, 13, 14, 17, 18, 26 and 1383) were actively managed by the Golf Club, with vegetation such as trees and scrub on the site which could provide refuge for otters. Water quality in the ponds and ditches was good, and these water bodies contained potential food source for otters. The other water bodies surveyed in this area were assessed as being of low potential (including water bodies 15, 16, 25, 30, 31) this was due to low water levels and inaccessibility due to dense vegetation which would hinder otters utilising these water bodies for foraging.

Percoed Reen (water body 43) was assessed as having medium potential for otters, as this water body was deep (more than 2m) and between 2-5metres wide. Water body 42 which runs parallel to Percoed reen was also assessed as being of medium potential. However, the water bodies that interconnected with this water body were assessed as being of low potential for otters (including 45, 47, 49 to the north, and 46, 48 to the south), this was due to factors such as fencing up to the reen obstructing access and poaching from livestock grazing adjacent land.

To the north of Percoed Reen, towards the Imperial Park there are water bodies which had trees and scrub growing adjacent to them. This vegetation could provide laying up sites for otters, and water bodies 60, 862, 1391 were all assessed as being of medium potential for otters due to the potential for foraging and vegetation cover. There were also water bodies that were assessed as being of negligible and low potential for otters. For example, water body 59 was assessed as being negligible for otters as there was no water present and there was also evidence of fly tipping at this location.

In the area to the south of the Duffryn Estate, there are two water bodies which were assessed as being medium (water bodies 127 and 289), with the surrounding water bodies in this area being of low and negligible habitat suitability. Factors affecting the suitability for otters were low water level, low water quality, dense vegetation such as double hedged ditches. There are also settlement ditches (such as 112 and 254) which are negligible due to the pollution from the railway line adjacent, low water level and dense vegetation making the water body unsuitable.

There are water bodies (198, 206, 207, 210, 239, 242) to the east of Lighthouse Road which were recorded as being medium suitability for otters. These ditches were managed which meant that they were deep and had moderate water quality. Four waterbodies (ie. 185, 194, 218 and 240) were assessed as being negligible due to these being dry ditches or field grips with only damp ground. The other water bodies in this area were assessed as being low potential (such as 212, 215) which were densely overgrown, but still contained a low water level with a Phragmites reed bed. The ditches in this area are in amongst farmland mainly used

for cattle grazing. The areas of scrub and reedbed in this area could provide cover for commuting otters.

Along Pont y Cwcw Reen running parallel to the Afon Ebbw, water bodies 317, 320, 321 and 686 were assessed as being of both high and medium potential for otters to use. This was due to the good water quality and presence of fish and potentially other prey items. There was vegetation cover in the vicinity which otters could use for cover. One water body (687) adjacent to Heol Pont y Cwcw was assessed as being negligible due to being dry and overgrown with bramble and nettles.

Within the Solutia nature reserve there are interconnecting water bodies which were assessed as being of medium potential for otters, including ditches 430, 441, 443 and 445 which is a pond on the edge of a woodland. Water body 419 was of medium potential as a damp ditch that is in amongst dense woodland and could provide habitat for laying up and a holt. There are also water bodies of low potential (439 and 442) due to the dense vegetation and the water body drying up in places, and one water body of negligible potential (418) due to this ditch being dry with shallow bank profile.

To the north of this area the water bodies were assessed as being low and negligible habitat suitability. For example, water bodies 6106 and 6107 which are assessed as being negligible due to being areas of marshy grassland. Water bodies with low potential included 392 which was heavily poached and held only a small amount of water.

In the Pye Corner area, there were a number of water bodies along Julian's Reen which were assessed as being of medium potential for otters, these included water bodies 451, 469 and 465 as these are managed water bodies with suitable habitat adjacent which could be used by otters for refuge. Along Broad Street Common to the south-east there are also water bodies of medium potential (i.e. 497, 499, 503) which are similar to those of Julian's Reen. Water body 450 was assessed as being negligible due to being double hedged and inaccessible. To the north-east of Broad Street Common there are water bodies which interconnect of medium potential for otters (including 495, 1094), however to the north of this cluster the water bodies were mainly assessed as being of low and negligible potential.

Main water bodies interconnecting with Blackwall reen (water body 1298) were assessed as being of medium suitability. Waterbody 516 running south from the A4810 ending at Llanwern steelworks was also considered to be of medium suitability. Water bodies adjacent to Broadstreet Common and a section of Julian's Reen were also considered to be of medium suitability for otters. The settlement ditch (waterbody 1295) which runs along the perimeter of the Tarmac site was assessed as being negligible due to the visibly polluted water.

Water bodies which ran parallel to the A4810 were assessed as being of negligible (e.g. 1267, 1321) and of low potential (e.g. 1204, 1273). This was due to these water bodies acting as settlement ditches from the adjacent land use resulting in a low water quality.

There were areas within the Tata Steelworks land which included reedbed, ditches and reens, which were assessed as being high and medium suitability for otters, such as water bodies 1129, 1141, 1210. In these water bodies there was moderate flow of water (on the ditches and reens) and prey availability, along with relatively undisturbed stretches and dense vegetation which could be used as

refuge. Within this area there were heavily contaminated settlement pools which were assessed as being negligible (e.g. 1184, 1226, 1228). Reens and ditches in this area were also assessed as being of low potential (such as 1067) due to being inaccessible because of dense woodland. To the west of this area there are ponds which were dried out (e.g. 790, 1206, 1220).

In the area near the sub-station below the Tata steelworks, there is water body 1251 which is of medium potential for otters, as it could provide a corridor for movement and is an open ditch. The water bodies surrounding the substation are of low potential due to the heavy livestock grazing, dense hedgerows occluding the water body and poor water quality. On the edge of the Tata steelworks land lie water bodies 1250 and 1257 which have poor water quality and are overgrown, therefore assessed as being of negligible potential habitat for otters. To the south of these water bodies there are many negligible water bodies (e.g. 561, 567, 537) in areas which are heavily poached and these water bodies are unmanaged, with low water quality. These water bodies could be influenced by and connected to 1250 and 1257. During the survey there was evidence of heavy flytipping adjacent to water body 560 which was of low potential for otters.

Water body 537 which again runs along the edge of the Tata steelworks, was of negligible suitability due to being a dry and overgrown ditch. There are two large pools (1141 and 1210) to the east of this water body which contained areas of Phragmites reed bed and also scrub habitat. These were assessed as being of medium potential for otters. Adjacent to these ponds there is one pond of negligible potential (water body 1138) which was a reed bed which was inaccessible and had low water level, and another pond (water body 1139) which was of low potential.

The water bodies (including 638, 639, 652, 971, 648) adjacent to the industrial buildings at Bareland Street were assessed as being medium habitat suitability. This was due to the open water bodies, with good water quality which could provide foraging opportunities for otters. There are areas of scrub and woodland in this area which could provide refuge for otters. Along Bareland Street there is a ditch (waterbody 644) of negligible potential as there was no water and the site was densely overgrown with terrestrial vegetation. To the north of Bareland Street is an area of overgrown land with tall ruderals and hedgerows. In this area there is a water body of medium potential (930, 969) due to the water body being of good water quality, amongst the terrestrial vegetation there are low potential areas (including water bodies 927, 928, 931) due to being overgrown hedges holding little water but with potential to be used as refuge and as a corridor for otters. Water body 747 is of high potential for otters, due to the presence of field signs for otters.

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little water but with potential to be used as refuge and as a corridor for otters. Water body 747 is of high potential for otters, due to the presence of field signs for otters.

To the south of the A4810 lies Stutwall Reen, a sections of which (water body 671) was assessed as high, with another high potential water body within 200m to the south (water body 950); both had adjacent vegetation to act as a corridor and potential availability of food source. Petty Reen lies to the south, and sections of this (water bodies 850, 921, 950) were assessed as being of medium potential. In this area there are interconnecting water bodies of negligible and low potential, however otters are capable of travelling across land for foraging. Adjacent to the negligible water body 845 there is an area of wet woodland which could be utilised by otters for refuge, or a holt. They could also use the vegetation along the A4810 as a corridor. Adjacent to Junction 23A there is Mill Reen (935, 936, 944) which was assessed as being of medium quality for otters. This water body is well connected to other water bodies in the Gwent Levels system. Connecting with these water bodies to the north there is water body 693 which has a low water level and is an overgrown hedge but could act as a potential corridor for otter. Water body 692 also connects to Mill Reen to the north, but is dry, hedged and fence providing no food source or accessibility for otters, therefore was assessed as being negligible.

At the eastern extent of the study area, Prat reen (water body 726) was assessed as being of medium quality with an interconnecting dry ditch (water body 718) being of low potential along with a ditch adjacent to the M4 (water body 704) which interconnects with three other water bodies (water bodies 699, 701, 722) of medium potential. The ditches that were surveyed between these water bodies (e.g. 710, 712), were assessed to be of low potential for otters, due to low water level and the vegetation present was nettles and grasses.

3.2.4 Camera trap results

Camera traps were set up at locations where fresh field signs for otter had been found. Table 4 gives details of these locations.

Table 4 Locations of camera traps

Dates camera trap was deployed	Location description	GPS Latitude	GPS Longitude
25/04/2014 - 28/04/2014	Steel Access Road Culvert	51.57252	-2.85475
17/06/2014 - 04/07/2014	Adjacent to River Usk	51.564245	-2.974158
12/06/2014 - 17/06/2014	On cycle path near Solutia	51.561287	-2.955688
01/09/2014 - 02/09/2014	Steelworks reen	51.564778	-2.886917
09/09/2014 - 13/09/2014	Steelworks sluice gate camera	51.564581	-2.974928
16/09/2014 - 24/09/2014	Steelwork Reen bridge (High on fence)	51.56478	-2.886949
09/10/2014 - 24/10/2014	Drainage pond next to River Usk	51.563557	-2.970669
14/10/2014 - 20/10/2014	Steelwork Reen bridge (Low on fence)	51.56478	-2.886949

Video footage captured by the camera traps were individually analysed and species were identified that had triggered the camera to record. Otters were only recorded at two locations. Both observations were made on land within land owned by (and historically used by) the Tata steelworks. Details of the observations made of otters are summarised in Table 5 and images shown in Figures 3 to 6.

Table 5 Results from camera traps

Location description	Date	Time	Observation	GPS Latitude	GPS Longitude
Steelworks reen bridge (low on fence)	15/10/2014	20:57	Otter walking in front of camera into distance.	51.56478	-2.886949
	15/10/2014	20:58	Otter sniffing camera.	51.56478	-2.886949
Steelworks sluice gate camera	09/09/2014	18:11	Otter walking directly in front of camera onto bank, walking and appears to be foraging.	51.564581	-2.974928
	09/09/2014	18:13	Otter walking across bank in front of camera.	51.564581	-2.974928



Figure 3 - Steelworks reen bridge 15/10/2014 20:57



Figure 4 - Steelworks reen bridge 15/10/2014 20:58

An adult otter is seen walking in front of the camera at the Steelworks Reen bridge location (Figures 5 and 6). This is within 100 metres of the other camera location at the Steelworks sluice gate camera, where an adult otter was also recorded Within 10 metres of the two camera locations (steelworks sluice gate and steelworks reen bridge), there are areas of dense vegetation with suitable habitat for otter holts or refuge. As the water quality of the managed reen system of the Gwent Levels is good, the reen system could provide food sources for otter.



Figure 5 Steelworks sluice gate camera 18:11



Figure 6 Steelworks sluice gate camera 18:13

3.2.5 Water vole field signs

Water vole field signs were found on 126 of the 1442 water bodies. Drawings illustrating the locations at which field signs were found are provided at the end of this report, and details are provided in Table 6. Detailed recording sheets can be found in Appendix D. The water bodies where water voles were present, flow of water was either still, sluggish or slow. Two streams and three ponds had field signs, but the rest of the water bodies were either reens or ditches, many of these

were regularly managed. There was a range of bank side profiles (from <10° to vertical / undercut) and depth of water (from between <0.5m to >2m) and width of between 1m to more than 20m. There was also a range of vegetation recorded at each water body, from lush reed sweet-grass (*Glyceria maxima*), to *Phragmites* reed bed, to areas of grassland and ruderal with little ditch vegetation. As water voles require a range of plants for both food and cover (Strachan, Moorhouse, & Gelling, 2011), it is considered that the best sites for water voles would offer a continuous swathe of tall and luxuriant riparian plants (at least 60% bank-side ground vegetation).

Table 6** Water vole field signs recorded during the survey in 2014.

Date	Water body reference number	Field sign	GPS Longitude	GPS Latitude
04/07/2014	258	Pathways; Feeding Stations;	51.547802	-3.01653
05/08/2014	1238	Feeding Stations;	51.571102	-2.89987
05/08/2014	1244	Feeding Stations;	51.571002	-2.89923
05/08/2014	1243	Feeding Stations;	Not recorded	Not recorded
05/08/2014	1243	Latrines; Pathways; Feeding Stations;	51.571008	-2.89856
05/08/2014	1205	Feeding Stations;	51.570815	-2.89451
05/08/2014	1204	Feeding Stations;	51.570762	-2.89332
05/08/2014	1185	Feeding Stations;	51.570764	-2.89295
05/08/2014	1194	Feeding Stations;	51.570666	-2.89102
05/08/2014	1237	Latrines; Pathways; Feeding Stations;	Not recorded	Not recorded
05/08/2014	1196	Pathways; Feeding Stations; Latrines;	Not recorded	Not recorded
05/08/2014	1198	Pathways; Feeding Stations;	Not recorded	Not recorded
05/08/2014	1197	Pathways; Feeding Stations;	Not recorded	Not recorded
05/08/2014	1273	Latrines; Feeding Stations;	Not recorded	Not recorded
06/08/2014	1152	Pathways; Feeding Stations;	51.565402	-2.89102
06/08/2014	566	Feeding Stations;	51.563046	-2.90708
06/08/2014	559	Feeding Stations;	51.564124	-2.89896
06/08/2014	560	Sighting	51.564782	-2.89969
07/08/2014	1350	Feeding Stations;	51.564325	-2.8772
07/08/2014	1068	Latrines;	Not recorded	Not recorded
07/08/2014	1148	Feeding Stations;	51.562037	-2.8743
12/08/2014	612	Pathways; Feeding Stations;	51.565961	-2.86879
12/08/2014	901	Feeding Stations; Pathways	51.562957	-2.86492
12/08/2014	631	Lawns;	51.569811	-2.85795
12/08/2014	978	Burrows; Feeding Stations;	51.564763	-2.86347
12/08/2014	899	Feeding Stations;	51.565595	-2.86153
12/08/2014	787	Feeding station.	51.570883	-2.85424
12/08/2014	981	Pathways; Feeding Stations;	51.567374	-2.86018
13/08/2014	950	Feeding Stations;	51.572342	-2.84622

Date	Water body reference number	Field sign	GPS Longitude	GPS Latitude
13/08/2014	880	Feeding Stations;	51.570548	-2.84465
14/08/2014	1135	Latrines; Feeding Stations; Sighting;	51.568587	-2.88503
14/08/2014	1200	Feeding Stations;	51.570471	-2.88428
15/08/2014	1129	Latrines; Burrows;	51.565893	-2.88329
15/08/2014	1211	Latrines; Feeding stations;	51.564916	-2.88701
15/08/2014	1229	Latrines;	51.56604	-2.88796
15/08/2014	1350	Pathways; Feeding Stations;	51.56447	-2.87728
20/08/2014	555	Feeding stations.	51.561295	-2.89546
20/08/2014	557	Pathways; Feeding Stations;	51.562279	-2.89691
21/08/2014	845	Pathways; Feeding Stations;	51.57446	-2.85013
21/08/2014	676	Latrines; Burrows; Pathways; Feeding Stations; Lawns;	51.570374	-2.86252
26/08/2014	876	Latrines; Pathways; Feeding Stations;	51.575782	-2.84587
26/08/2014	850	Feeding Stations;	51.573374	-2.84646
26/08/2014	915	Pathways; Feeding Stations;	51.572297	-2.84481
27/08/2014	845	Feeding Stations;	51.573477	-2.85028
28/08/2014	701	Pathways;	51.582289	-2.78839
28/08/2014	704	Pathways;	51.582176	-2.79109
28/08/2014	700	Sightings; Latrines; Lawns;	51.583313	-2.79229
29/08/2014	722	Latrines; Burrows;	51.577815	-2.80762
02/09/2014	60	Latrines; Feeding Stations;	51.550194	-3.04566
02/09/2014	861	Latrines; Pathways; Feeding Stations;	51.547702	-3.04142
02/09/2014	861	Latrines; Pathways; Feeding Stations;	51.547847	-3.04139
02/09/2014	862	Latrines; Feeding Stations;	51.547323	-3.04075
02/09/2014	1390	Latrines; Pathways; Feeding Stations;	51.547449	-3.0405
02/09/2014	42	Latrines; Pathways;	51.542207	-3.04529
08/09/2014	42	Latrines; Burrows; Feeding Stations;	51.542906	-3.04225
15/09/2014	27	Burrows;	51.546653	-3.05346
15/09/2014	1383	Pathways;	51.545964	-3.05123
15/09/2014	24	Pathways; Feeding Stations;	51.54392	-3.05164
15/09/2014	26	Sighting;	Not recorded	Not recorded
16/09/2014	146	Feeding Stations;	51.552864	-3.011
16/09/2014	125	Pathways; Feeding Stations;	51.549973	-3.0185
17/09/2014	1313	Latrines;	51.573293	-2.9334
17/09/2014	797	Feeding Stations;	51.571329	-2.92933
17/09/2014	794	Sightings; Feeding Stations;	51.571197	-2.92935
17/09/2014	797	Feeding Stations;	51.569474	-2.93265

Date	Water body reference number	Field sign	GPS Longitude	GPS Latitude
24/09/2014	305	Feeding Stations; Burrows;	51.54332	-3.02199
24/09/2014	43	Sightings; Burrows;	51.545344	-3.03472
25/09/2014	244	Latrines; Pathways; Feeding Stations;	51.54596	-3.01004
25/09/2014	242	Pathways; Feeding Stations;	51.54594	-3.00838
26/09/2014	181	Sighting;	51.555537	-3.00724
26/09/2014	210	Latrines;	51.54711	-3.00572
01/10/2014	822	Latrines; Pathways; Feeding Stations;	51.543122	-3.04912
06/10/2014	479	Latrines; Feeding Stations;	51.564584	-2.94925
07/10/2014	1312	Latrines; Burrows; Feeding Stations	51.567995	-2.93517
07/10/2014	1180	Feeding Stations;	51.570922	-2.93533
07/10/2014	1327	Feeding Stations;	51.570673	-2.93516
07/10/2014	1183	Feeding Stations;	51.567843	-2.93527
07/10/2014	503	Feeding Stations;	51.558417	-2.94135
07/10/2014	452	Feeding Stations;	51.562966	-2.94048
07/10/2014	505	Latrines; Feeding Stations;	51.559126	-2.9389
08/10/2014	1118	Latrines; Feeding Stations;	Not recorded	Not recorded
09/10/2014	1107	Latrines; Feeding Stations;	51.56454	-2.92631
09/10/2014	447	Burrows;	51.561292	-2.94508
09/10/2014	552	Feeding stations;	51.558726	-2.89827
09/10/2014	547	Latrines.	51.558365	-2.89773
10/10/2014	622	Latrines; Burrows; Pathways; Feeding Stations;	51.566161	-2.86784
13/10/2014	516	Feeding station	Not recorded	Not recorded
13/10/2014	573	Feeding Stations;	51.564285	-2.91093
13/10/2014	1288	Latrines; Pathways; Feeding Stations;	51.56633	-2.90988
14/10/2014	587	Latrines; Burrows; Pathways; Feeding Stations;	51.561375	-2.88446
14/10/2014	1300	Feeding Stations;	51.567826	-2.92214
15/10/2014	213	Burrows;	51.549133	-3.00833
16/10/2014	1359	Feeding Stations;	51.565365	-2.8791
16/10/2014	1352	Feeding Stations;	51.565304	-2.88009
20/10/2014	861	Latrines; Pathways; Feeding Stations;	51.547886	-3.04143
21/10/2014	495	Latrines; Feeding Stations;	51.561371	-2.9346
21/10/2014	320	Feeding Stations;	51.551751	-2.99899
21/10/2014	321	Latrines;	51.551237	-2.99736
22/10/2014	788	Feeding Stations;	51.561805	-2.87154
22/10/2014	619	Latrines; Burrows;	51.562679	-2.86545
22/10/2014	638	Feeding Stations;	51.574681	-2.85467

Date	Water body reference number	Field sign	GPS Longitude	GPS Latitude
23/10/2014	1329	Latrines; Feeding Stations;	51.56736	-2.93894
27/10/2014	579	Latrines; Feeding Stations;	51.565668	-2.91197
28/10/2014	578	Sightings; Latrines; Burrows; Feeding Stations;	51.571114	-2.91425
29/09/2014	476	Feeding Stations	51.5637	-2.94845
29/10/2014	957	Feeding Stations;	51.56802	-2.85208
29/10/2014	847	Sightings;	51.574166	-2.84716
30/10/2014	971	Feeding Stations;	51.571076	-2.86173
30/10/2014	844	Latrines; Feeding Stations;	Not recorded	Not recorded
30/10/2014	1382	Feeding Stations; Latrines.	51.570455	-2.86435
30/10/2014	636	Latrines; Burrows; Footprints; Pathways; Feeding Stations;	51.575521	-2.84978
30/10/2014	4	Feeding station; Latrines;	51.545025	-3.08408
31/10/2014	885	Latrines; Burrows; Footprints; Pathways; Feeding Stations; Lawns;	Not recorded	Not recorded
31/10/2014	867	Latrines; Burrows; Footprints; Pathways; Feeding Stations; Lawns;	51.571495	-2.84572
31/10/2014	915	Latrines; Burrows; Pathways; Feeding Stations; Lawns;	51.572067	-2.84587
31/10/2014	859	Latrines; Burrows; Footprints; Pathways; Feeding Stations; Lawns;	51.573276	-2.84649
31/10/2014	962	Latrines; Burrows; Footprints; Pathways; Feeding Stations; Lawns;	51.57278	-2.84664
31/10/2014	881	Feeding Stations;	51.573478	-2.84433
31/10/2014	875	Latrines; Burrows; Footprints; Pathways; Feeding Stations; Lawns;	51.572017	-2.84889
31/10/2014	921	Pathways; Feeding Stations;	Not recorded	Not recorded
31/10/2014	950	Latrines; Burrows; Pathways; Feeding Stations;	51.572443	-2.84632
31/10/2014	877	Latrines; Burrows; Feeding Stations;	51.571062	-2.84557
31/10/2014	880	Latrines; Burrows; Pathways; Feeding Stations; Lawns;	Not recorded	Not recorded
31/10/2014	889	Feeding Stations;	51.57242	-2.84209
31/10/2014	922	Feeding Stations;	51.571377	-2.84203

Water vole field signs were recorded in a marshy area with a small pond near Castleton (water body 4) where there does not appear to be any connecting water bodies in this area. At Parc Golf Club field signs were found on water bodies 24, 26, 27, 1383, the water bodies are managed on this site with suitable plants such as reed sweet-grass and common reed present.

In the area of Coedkernew and Percoed Reen (water body 43) there were over five locations where fields signs such as water vole latrines, pathways and feeding stations were recorded on water bodies 60, 861, 1382, 1390 which were in close

proximity to each other. To the south of Percoed Reen on water body 305 both burrows and feeding stations were found. It is possible that as with the otters, water voles use the Percoed Reen as a corridor for dispersal along the Gwent Levels.

Water vole field signs were found in ditches located to the West of the Afon Ebbw, to the south of the Duffryn Estate where water vole field signs were found on water bodies 125, 242, 244, 258, plus burrows on water body 213. On water bodies adjacent to Heol Pont-y-Cwcw, on water bodies 181, 320 and 321 field signs were also found. Here the reen and field ditches are managed and open providing interconnectivity.

Water vole field signs were found on water bodies 476 and 479 adjacent to Nash Road which were managed and interconnected. Near Pye Corner on Julian's Reen burrows were found on water body 447 which had been recently managed, this burrow had been plugged with vegetation by the water vole. Feeding signs of water voles were found along Julian's Reen (water body 452, 1183) and nearby ditches to the south-east (water bodies 495, 503, 505, 1329). Field signs were found on water bodies 1107 and 1118 which are north of Common Reen. Interconnected to these is water body 516 where feeding stations were also found. Many of these ditches and the reens are managed which maintains the openness, connectivity and good water quality.

Field signs for water vole were found in the area around Llanwern Steelworks. These field signs were confined to managed water bodies, such as Wainbridge Reen (water body 573), Bowleaze Reen (water body 559), Monkscroft Reen (water body 566), Black Wall Reen (waterbody578), and on the reen (water body 1273) which runs parallel to the A4810 Queens Way road. All these water bodies are regularly managed. The other interconnecting ditches where water voles field signs were found, are also regularly managed by the landowners. Within an area of land owned by Tata steelworks to the south of the A4810, water vole field signs were found on water bodies (1129, 1211, 1350) which are regularly managed. These are open water bodies which have healthy vegetation suitable for water voles.

Feeding stations were also found along Wilcrick Moor Reen (water body 971), which lies adjacent to an industrial building; which is bordered by Bareland Street (water body 638), where water vole field signs were also found. Latrines, burrows, footprints, pathways, feeding stations were also found on the reen 636 which is located to North of Bareland Street within 10 metres of water body 638. To the south-west of Wilcrick Moor Reen water bodies 676 and 844 fresh field signs (including latrines) were found.

Along Petty Reen (water bodies 915, 921, 950, 962) there were also field signs (including latrines, burrows, pathways, feedings stations and lawns), and also along the interconnecting ditches (water bodies 880, 881, 899). This reen joins with Pwll Uffern, a reen which travels within the Magor Marsh Wildlife Trust site, where there is a water vole release programme being carried out. It is possible that water voles from this release programme have used the reens to disperse West along such reens as Petty Reen. Water vole field signs were found north of the M4 on ponds and ditches (water bodies 700, 701, 704). This area is approximately 2 km from the Magor Marsh Wildlife Trust site, where water voles have been released. There were also field signs found on Prat Reen (water body 722, which is within 1 km of Magor Marsh.

3.2.6 Habitat suitability for Water Voles

Habitat suitability for water voles was assessed on 998 of the water bodies. The results are shown in Figure 7. Drawings illustrating the location of these water bodies are provided at the end of the report.

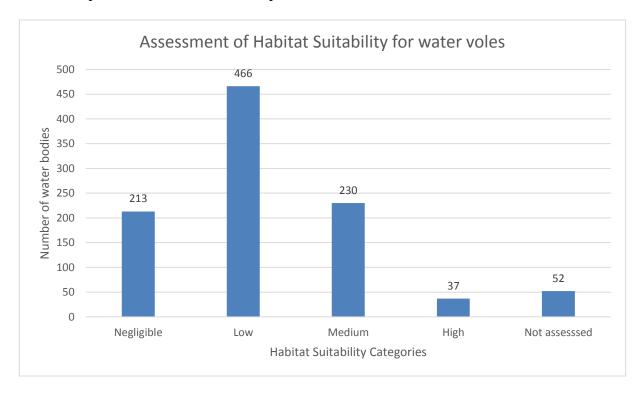


Figure 7 Habitat Suitability of water bodies surveyed for water voles

The majority of the water bodies (total of 466) were assessed as having a low habitat suitability for water voles, and a total of 37 of the water bodies were assessed as being high. The low suitability was primarily due to disturbance immediately adjacent to the watercourse, and also due to the lack of luxuriant vegetation for shelter, food and also low water quality. The reasons for water bodies being assessed as being of negligible quality were as follows: infilled, dry, dense vegetation smothering the water body, low water quality, heavily shaded or disturbed by farming. Water bodies described as not assessed were in situations where access to the land parcel was granted, but the water body itself could not be assessed, this was mainly due to dense vegetation making the water body inaccessible.

Water body 4 which is an isolated pond in the Castleton area was assessed as being of medium potential. The other three water bodies (5, 6, 7) surveyed which are in close proximity were assessed as being low (5, 6) as they were wooded and overgrown water bodies but had potential to be used as a corridor; and water body 7 was negligible due to being low water level with fly-tipping adjacent. Other water bodies close by which were not surveyed in 2014 could provide connectivity to other areas to the east.

There are a cluster of water bodies which are interconnected or in close proximity to each other (including 12, 13, 14, 15, 16, 17, 19, 20, 25) with medium suitability for water voles on the Parc Golf Club land. Waterbody 26 and 24 which are ponds were also assessed as being of high suitability. The ponds and ditches in this area

are regularly managed and contain plenty of suitable food sources such as reed sweet-grass and water mint *Mentha aquatica* but also bankside cover to provide protection from predators. There were only three water bodies which were assessed as being of low potential at Parc Golf Club (water bodies 23, 30, 31). Percoed Reen (water body 43) which lies to the south of Parc Golf Club was also assessed as having high potential for water voles, and this water body could provide a corridor for movement of dispersing water voles across the Gwent Levels. The water bodies that interconnected with water body 43 were assessed as being of medium potential (e.g. 44, 45, 48, 49) due to the presence of suitable foraging (reed sweet-grass, bulrush).

Adjacent to a disused road in Coedkernew, there were ditches and ponds assessed as being medium potential for water voles (water bodies 55, 60, 862, 1389, 1391) which are interconnected with Percoed Reen (water body 43). This area has little human disturbance, and the vegetation has been allowed to become naturally wild providing cover for wildlife. Water body 59 in this area, was of negligible potential due to no water present in the concrete banked ditch, and fly-tipping adjacent to the water body. There would be no potential for burrowing on this water body. Within the industrial land, water bodies 9960 and 64 were of low potential, with water body 62 of negligible potential. Water body 62 was a dry ditch.

There is a large area south of the Duffyn Estate where the water bodies were assessed as being of low and negligible potential habitat for water voles, for example water bodies 101, 111, 138, 230. Many of these water bodies were double hedged and overshaded. Water quality is poor in this area, especially in those water bodies which acted as drainage from the railway lines and roads – these water bodies were assessed as being of negligible value to water voles. However, in this area there are also some water bodies that were assessed as being of high potential (water bodies 258 and 261) and medium potential (water bodies 125, 127, 256 and 263).

There are water bodies to the east of Lighthouse Road which have medium suitability for water voles (including 206, 210, 213, 217, 244, 806) and water body 242 was of high suitability (these are in close proximity to each other). There are also water bodies interconnected with these which are of low and negligible potential, with heavy poaching and low water quality. This area is mainly used for horse and other livestock grazing. Similar water bodies along Heol Pont-y-Cwcw (water bodies 179, 188), which are interconnected with Ponty-Cwcw Reen have both high (water body 321) and medium (water body 320) potential as habitat for water voles. Seawall reen (water body 170) is also of medium potential. The water bodies that were assessed as being medium or high suitability were open and obviously managed regularly, with a range of submerged and bankside plant species which could provide a food source for water voles. The water quality of these water bodies was assessed as being good. However, the ditches on the land in between the Pont-y-Cwcw Reen and the Seawall Reen are of low potential as they have low water levels and are overshaded (e.g. water body 173) or dry (e.g. 175).

The River Ebbw and River Usk are assessed as being of negligible potential for use by water voles, due to the relatively fast flow of water compared to the Gwent Levels ditch network, very deep water, large width of the water bodies and lack of food sources. On the eastern bank of the River Usk there is a footpath where there are catchment ditches (e.g. water bodies 331, 332) and ponds (e.g. water bodies

330, 333) which collect water from the industry adjacent. Due to the low water quality and lack of interconnecting habitat suitable for use by water voles, these water bodies are assessed to have low potential for water voles.

In the Solutia reserve there are ditches that were assessed as being of medium potential for water voles, for example water bodies 428, 441, 443. The reason that water bodies in this area were assessed as medium, was mainly due to the fact that many were not open throughout the water body, and with hedgerow overshading. It appears that the ditches are regularly managed, with suitable plants for water voles to feed upon. There are water bodies in this area that were double-hedged and inaccessible to survey (e.g. water bodies 429, 442). The land is grazed by cattle and the banks were heavily poached in places.

To the north of Solutia there are interconnecting ditches which are of low and negligible potential for water voles. For example, water bodies 478, 480, 833 which are interconnected are all dry ditches. There are two sections of a reen (water bodies 473, 476) which are of medium potential because of presence of food source and suitable habitat for burrowing.

There are reens and interconnecting ditches near Pye Corner and to the east that have medium potential, for example water bodies 499, 500, 503 837. These are connected with Julian's Reen (water body 447, 451, 452) which travels towards the north-east and had sections of medium potential for water vole, and one section (water body 1180) of high potential. Water body 447, had been recently managed, but during the survey burrows and pathways were found under the cut vegetation. In some instances following bankside management, it was possible to uncover field signs if the vegetation that had been cleared was not trampled onto the bank. However, on other water bodies the bankside management had included stripping the bank of vegetation leaving only the substrate visible and only remnants of the vegetation present. In the Pye Corner area there were also water bodies that were assessed as being low and negligible. For example, water body 450, 497 which had a low water level, double-hedged and assessed as being low potential.

To the east of Julian's Reen, there are interconnecting water bodies of medium potential (e.g. 794, 795, 1334) and high potential (e.g. water bodies 1107, 1118, 1164, 1338). Interconnecting with these however, are both water bodies of low and negligible potential for water voles. In close proximity to the south is Common Reen (water body 513) of medium potential.

In the area of Llanwern Steelworks there are water bodies of medium potential including Blackwall reen (water body 578). The water body that runs along the periphery of the site (water body 1295) is of negligible potential due to low water quality. There are also ponds (water bodies 1264, 1280) which are negligible for water voles, because they are dried out with no suitable food source. Interconnecting with water body 578 to the north there are water bodies of medium potential running parallel to the A4810, these include water bodies 1196, 1197, 1273. There are also water bodies interconnecting with Blackwall Reen to the south which are of medium potential, such as water bodies 1178, 1288. There is pond of high potential (water body 1314) which is a large deep pond with good water quality, however the water bodies adjacent were of low and negligible potential. The water bodies that run parallel to the A4810 to the west (e.g. water bodies 1284, 1316, 1321) are of low potential due to man-made banks (i.e. concrete) on one side of the reen.

Sections of Bowleaze Reen were considered to be of high potential (water body 560), with water bodies of medium potential interconnecting (e.g. water body 557, 563). These water bodies are to the south of Tata Steelworks. Within the Steelworks land there are ditches and reens of medium potential, such as water bodies 1170, and Newcut Reen (water body 603) which is also of medium potential. There is also a water body (1129) which was assessed as having high potential. All these water bodies are maintained as open and have suitable vegetation (e.g. willowherb species and reed sweet-grass) for water voles to forage. Water body 587 was also assessed as being of high potential, which has water bodies (e.g. 586, 1060) of medium potential interconnecting. However, there are water bodies running along the periphery of the Tata Steelworks (e.g. water bodies 1250, 1257) which are of negligible potential for water voles due to poor water quality. There are also ponds within the Tata Steelworks land which are of negligible potential for water voles, for example waterbody 790, 1206, 1220, which are dry ponds with overgrown banks within contaminated minespoil.

To the east of this section of the Tata Steelworks there are reed beds (e.g. waterbody 1138, 1210) of low potential due to containing shallow water but Phragmites which could be a food sources for water voles. To the south east of Tata Steelworks Cock Street Reen (water bodies 622, 619) had high potential, and contained reed canary grass (*Phalaris arundinacea*) and yellow flag iris (Iris pseudacorus). Cock Street Reen is connected with other water bodies of medium potential (618, 901).

Along Bareland Street there are industrial buildings, surrounding this site are water bodies which are of medium potential (including 639, 1342). They are managed, with good water quality suitable for water voles. Walcrick Moor Reen (water bodies 842, 960) runs from north to south along an access road in this industrial area, and is a managed water body. Interconnecting with this reen is Bareland Street Reen, and sections of this water body (646, 647) were assessed as being of medium potential. The ditch which runs parallel to Bareland Street is of negligible potential due to being overgrown with dense terrestrial vegetation. To the north, connecting with Bareland Street Reen, there is a managed ditch running parallel to the A4810 which is of high potential (water body 636). Although to the east of this high suitability water body, the water bodies were assessed as being negligible and low, due to dense vegetation and low water level. To the South of the industrial site the water bodies lie within land which is heavily grazed by livestock and these water bodies were mainly considered to be of low and negligible suitability. To the east there is Stutwall Reen (water body 671) which is of high potential and connected with other main water bodies on the Gwent Levels. Along a lane which connects to the A4810, the water body 666 and 662 were of low water quality and heavily shaded, therefore were assessed as being negligible and low (respectively).

To the south of this area there are ditches which run parallel to the A4810, where one section is managed and of high potential (water body 676). Along Petty Reen there are water bodies (including 921, 962, 950) of high potential, with interconnecting water bodies of high and medium potential. The Petty Reen is connected to Pwll Uffern Reen, which crosses the Magor Marsh Wildlife Trust Reserve where water voles have recently been released.

Mill Reen (water bodies 935, 944) near to Junction 28A, was assessed as being of low potential for water voles. This was due to the low water level and reen being heavily poached by cattle grazing adjacent land. The water bodies nearby were of

negligible suitability, this included 934 which had no suitable burrowing areas as the banks of the water body were manmade. Water bodies to the north such as 690 had no suitable food plants for water voles or a dry ditch, fenced with hedgerow (e.g. 692).

At the eastern extent of the study area, Prat reen (water bodies 722, 726) was assessed as being of medium quality. Prat reen is connected with other main water bodies which travel through the Magor Marsh Reserve. To the east of these water bodies there are water bodies 710, 712, 724 which are of medium potential. Connected with this water body are water bodies 711 and 713 which are of low potential due to being double fenced, overgrown and with low water level Adjacent to the M4 there are water bodies which were assessed as being of medium potential for water voles, which were water bodies 699, 701, 703, 704, and waterbody 705 which is of negligible suitability as it has concrete banks

4 Conclusions and Recommendations

4.1 Conclusions

Otter field signs were recorded across the majority of the study area. No field signs were found in the Castleton area, however in an area at nearby Coedkernew which experiences little human disturbance, presence of otter was found. It appears that the otters use the main reen network, for example Percoed Reen, due to their high water quality and connectivity to other favourable habitat. Spraint was found on a reen adjacent to the River Ebbw. Slides and footprints were seen on water bodies adjacent to the River Usk SAC, of which Otters are a feature. A slide was also found heading into a field ditch near Pye Corner. Otter presence was found in the area of Llanwern Steelworks. Field signs were also found on Mill Reen on the Eastern extent of the study area.

In the study area, otters are finding a niche amongst the industry, housing and farming, utilising suitable habitat which has good water quality, prey availability and provides cover.

Water vole field signs were found on 126 of the 1442 water bodies across the entire study area. These were mainly on water bodies which were managed such as reens which are part of the Gwent Levels ditch system. The current management regime allows for a mosaic of habitats for water voles to utilise, with areas of open water body, good water quality, a bank for burrowing, marginal vegetation, vegetative cover from predators and emergent vegetation for foraging. Through habitat suitability mapping both high and medium potential habitat was identified; the majority of these water bodies were interconnected with other suitable habitat allowing corridors for water voles to disperse. Water voles have recently been released at Magor Marsh, and could be using the interconnecting water bodies within the study area to disperse across the Gwent Levels. Water vole field signs were found adjacent to water bodies with low water potential in the Tata steelworks land, utilising marginal habitat.

4.2 Recommendations

In line with the guidance in DMRB, it is recommended that where otters and water vole are likely to be affected, mitigation and/or compensation, should be incorporated into the design of any scheme. Consideration with regard to fragmentation of the current habitat should be considered, and also consideration not only to the water bodies but the vegetation adjacent that support the two species of concern.

It is recommended that an additional survey during the spring/summer (June / July) would allow for a more thorough understanding of how water voles and otters use the water bodies in the survey area throughout the year (*pers comm* with Derek Gow). It is also recommended that future surveys to inform the new M4 design should include those water bodies which could not be surveyed in 2014.

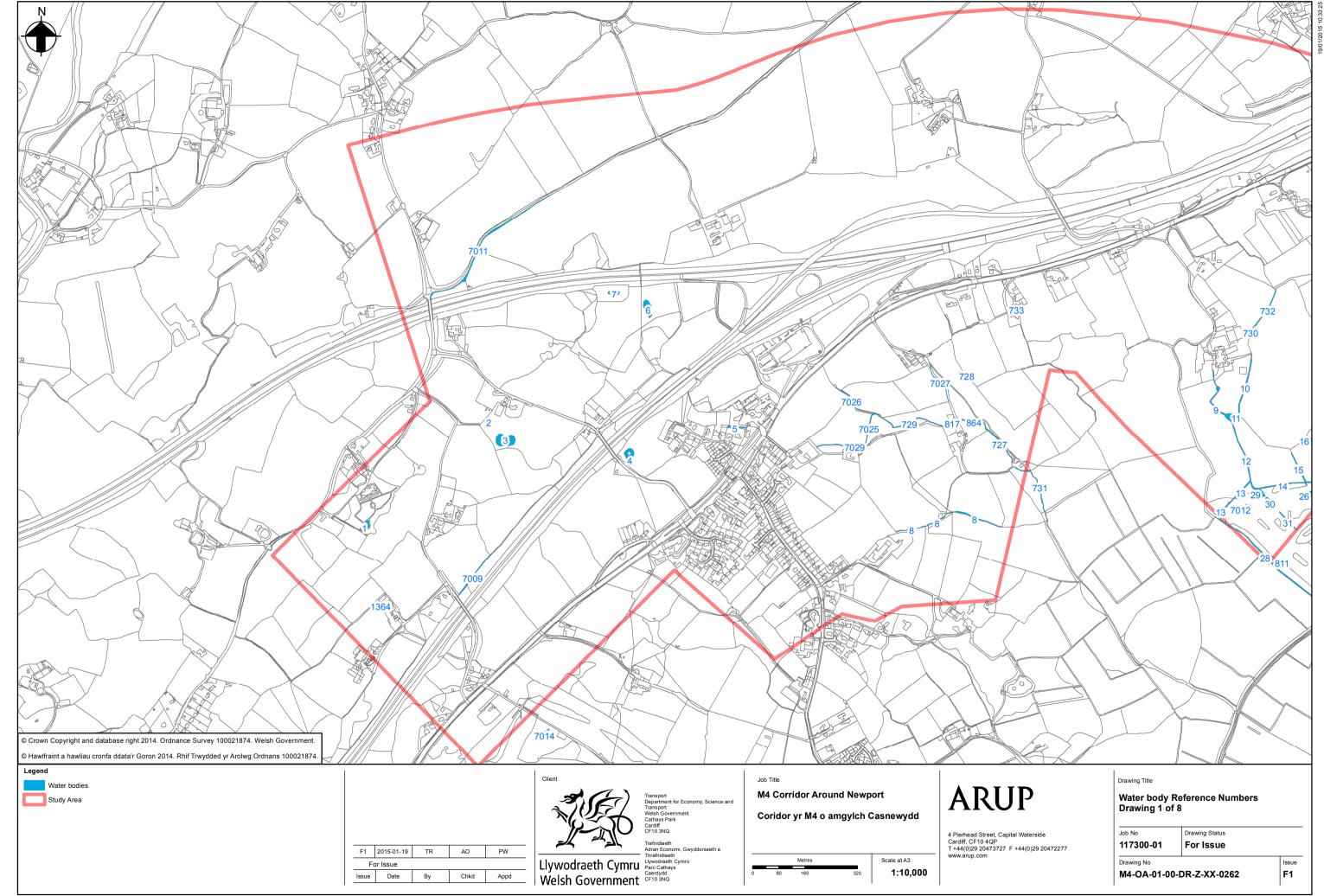
Finally, it is also recommended that commitments be incorporated in to any scheme to undertake pre-construction surveys to inform any subsequent licence applications that might be required.

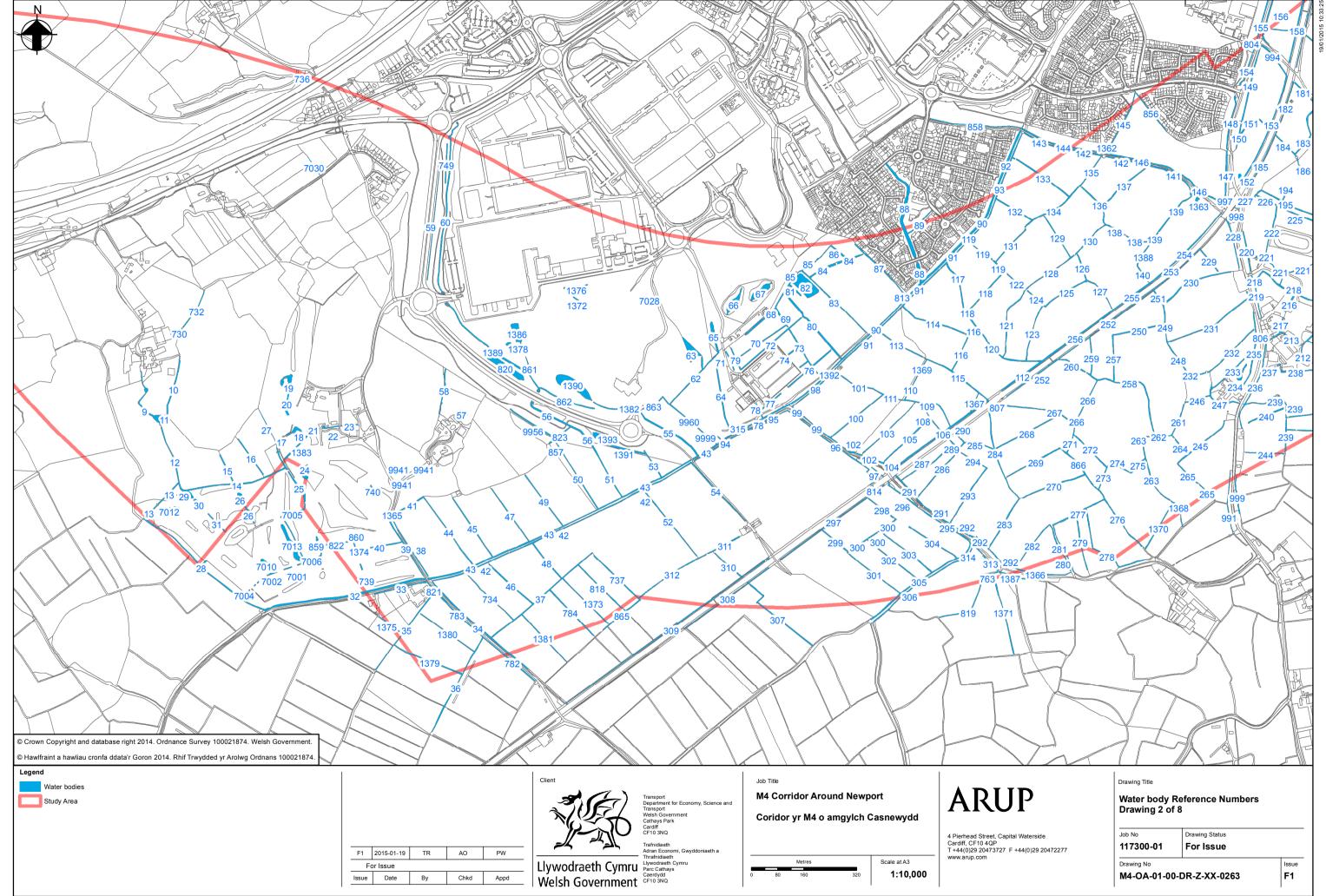
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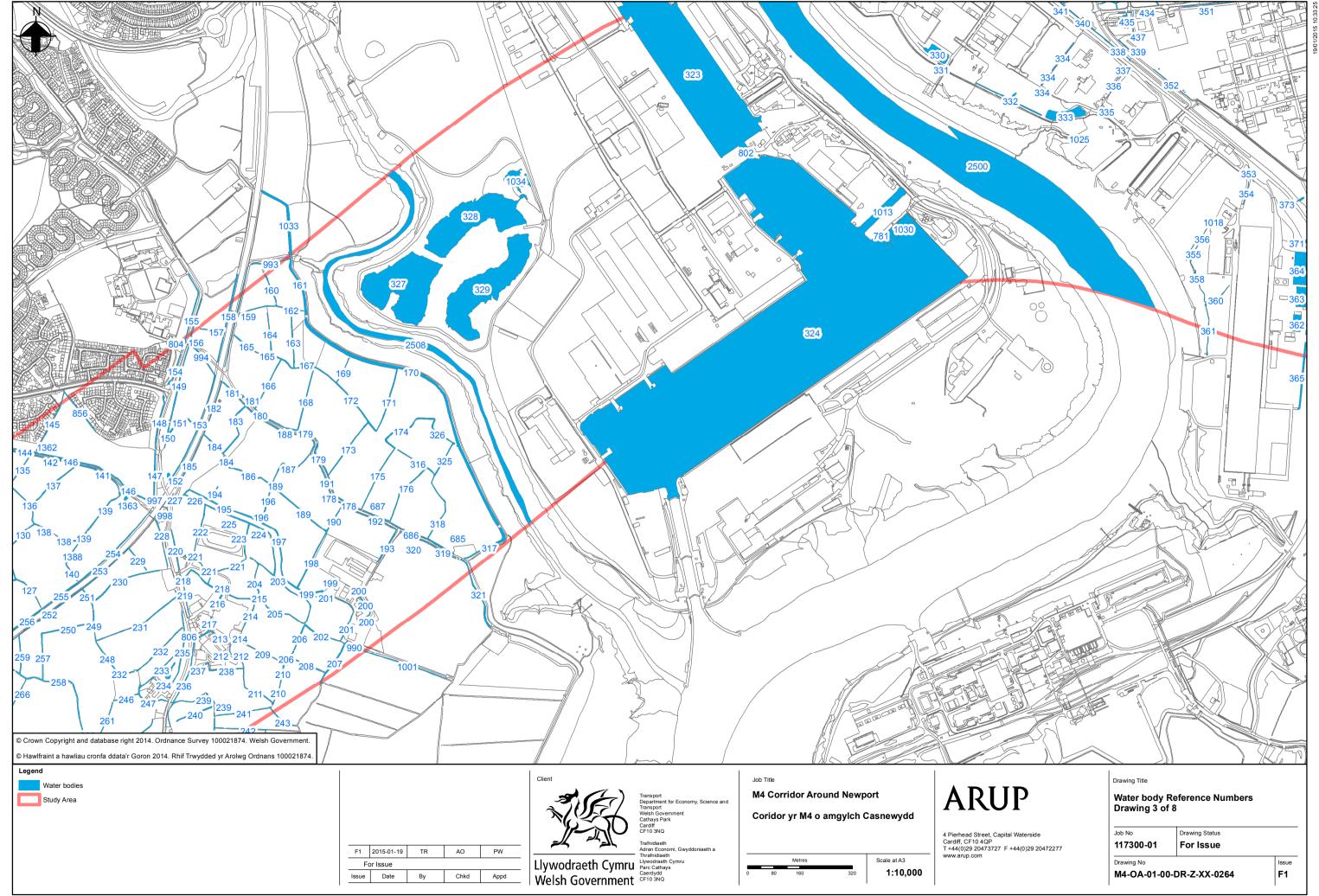
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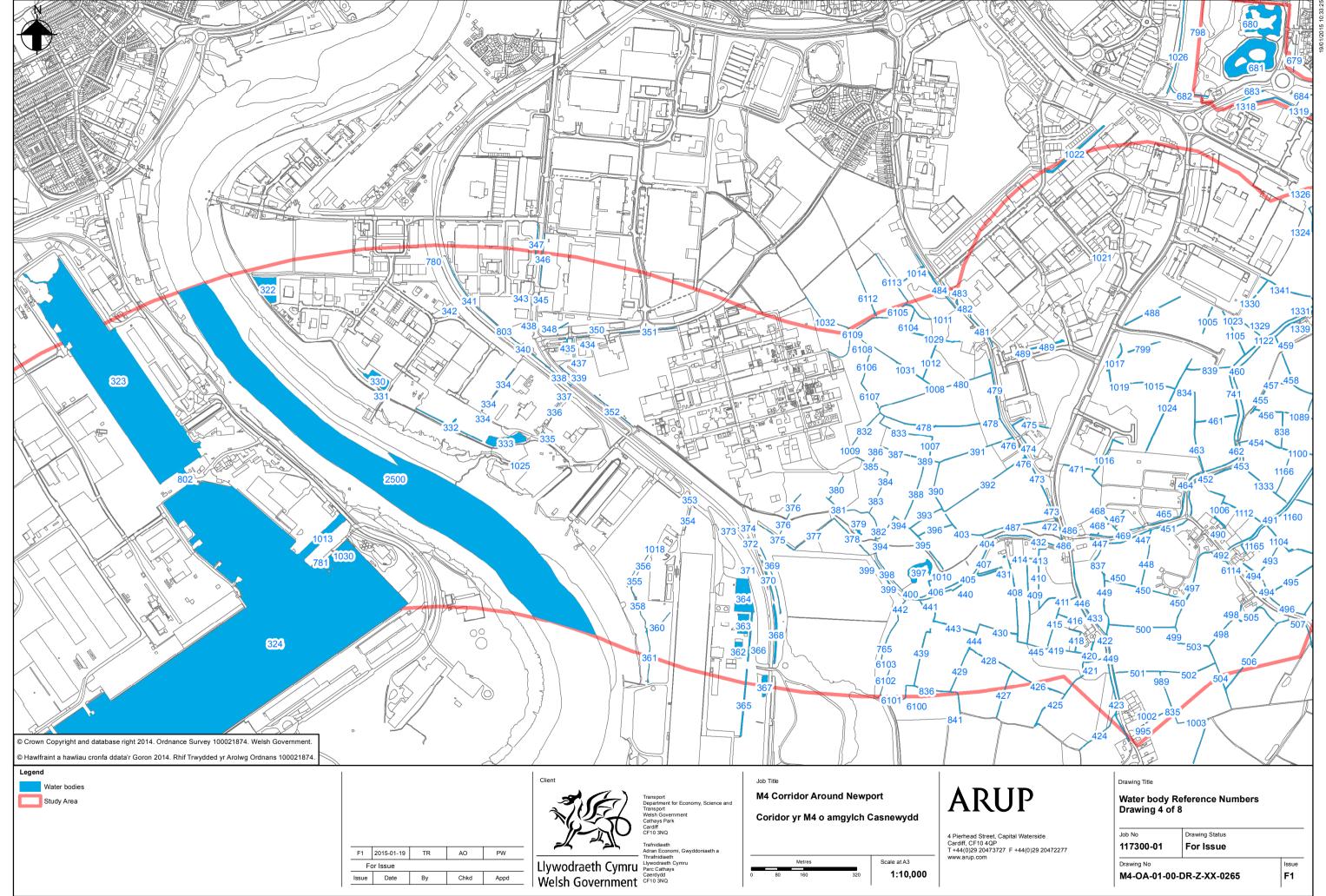
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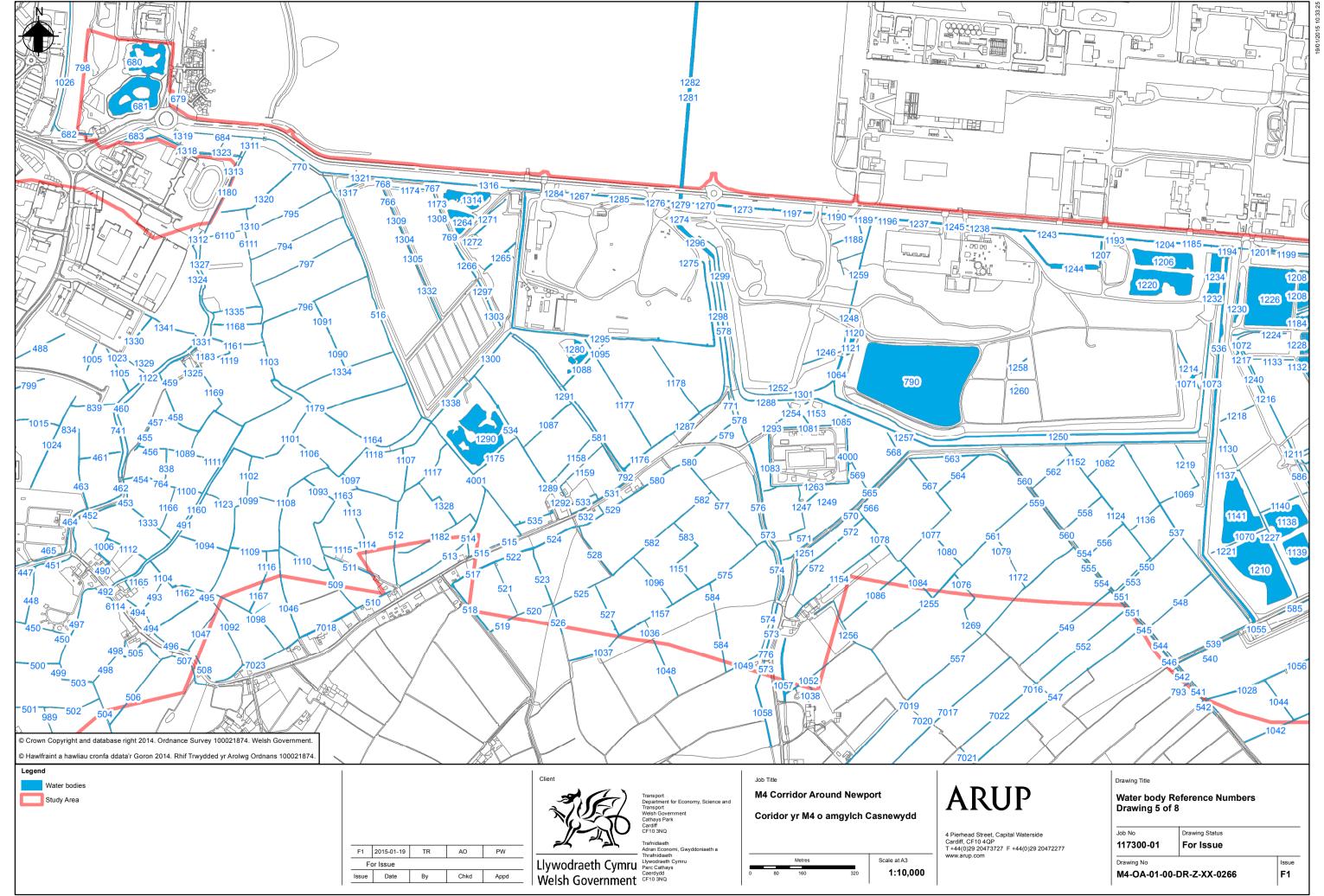
Drawings

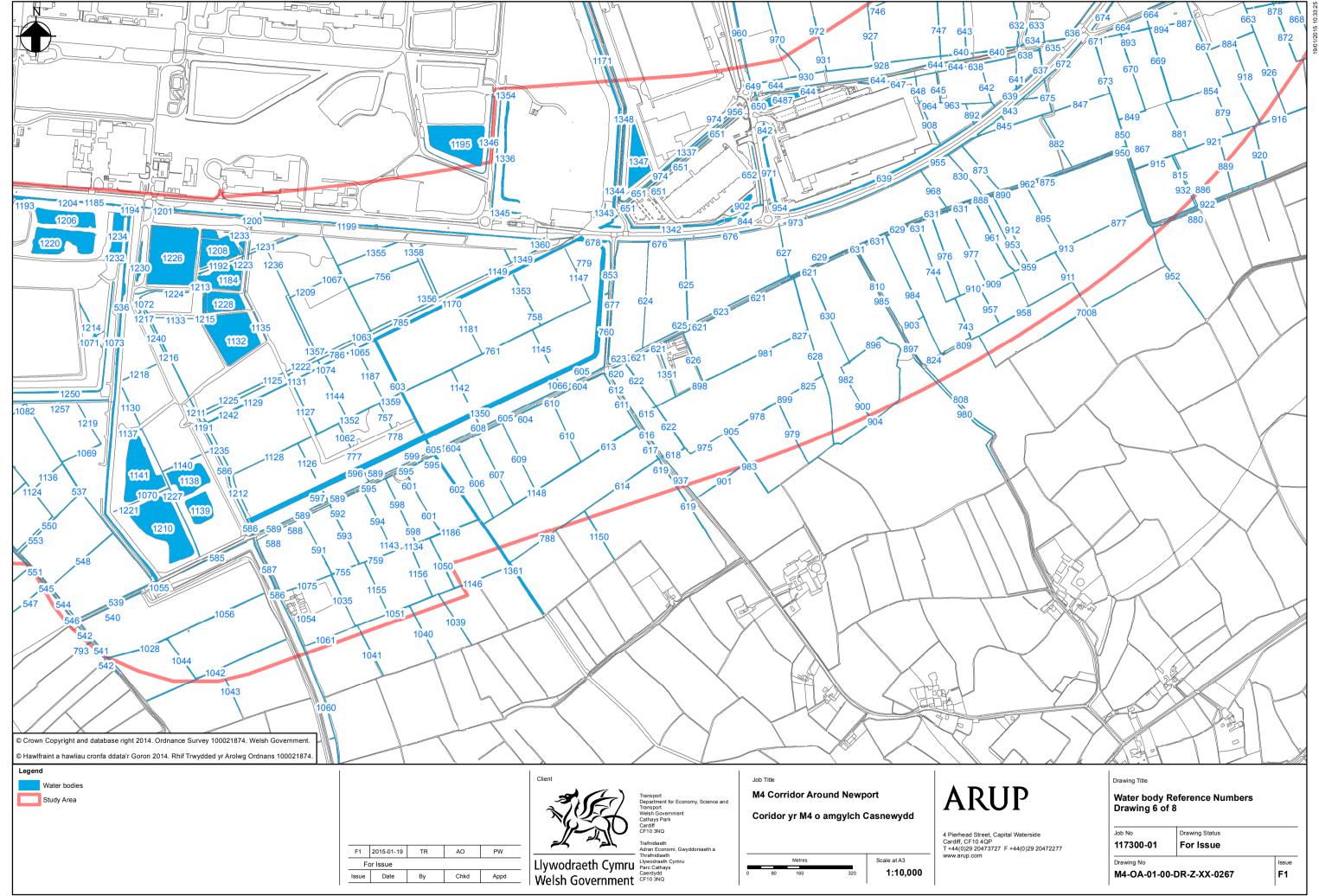


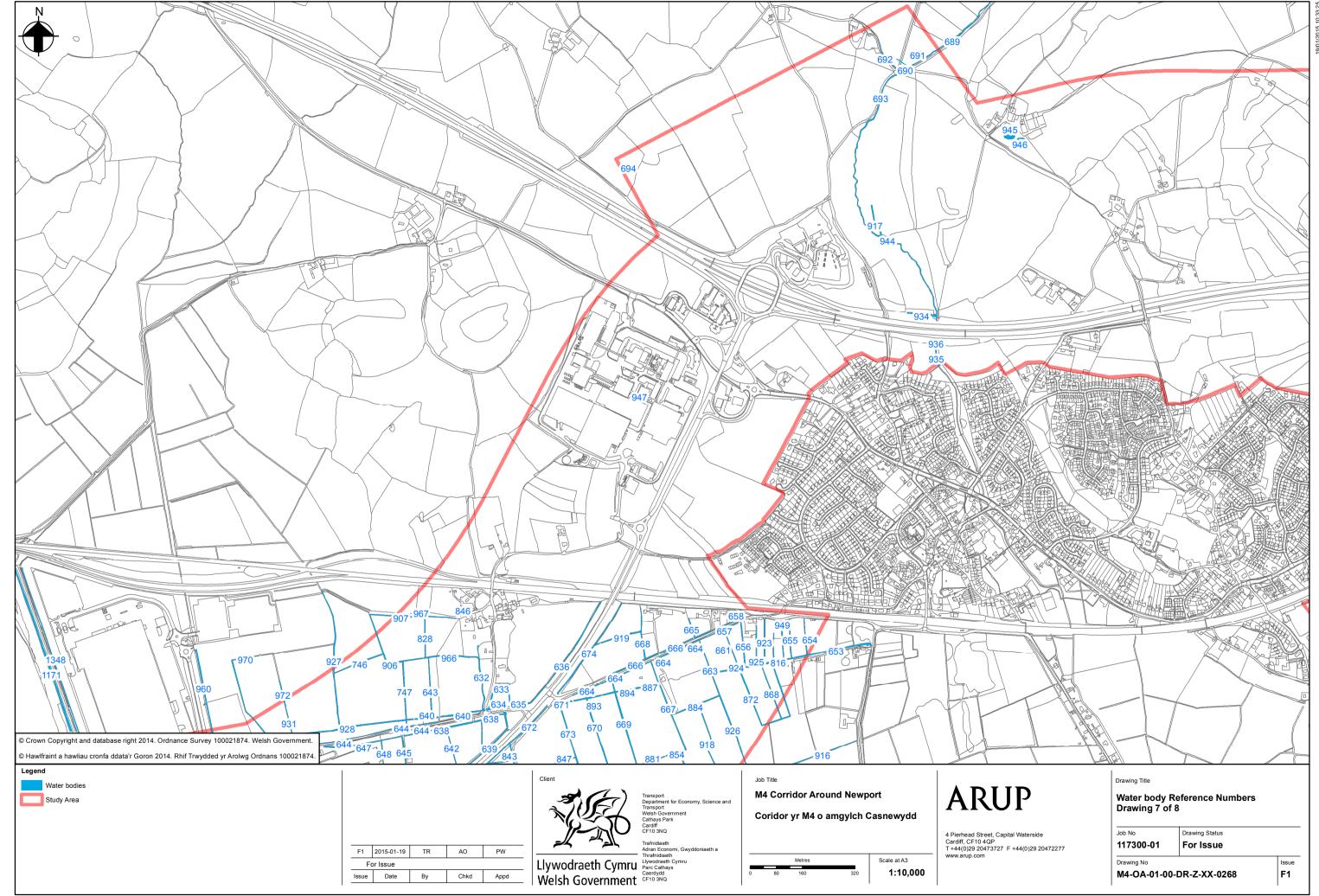


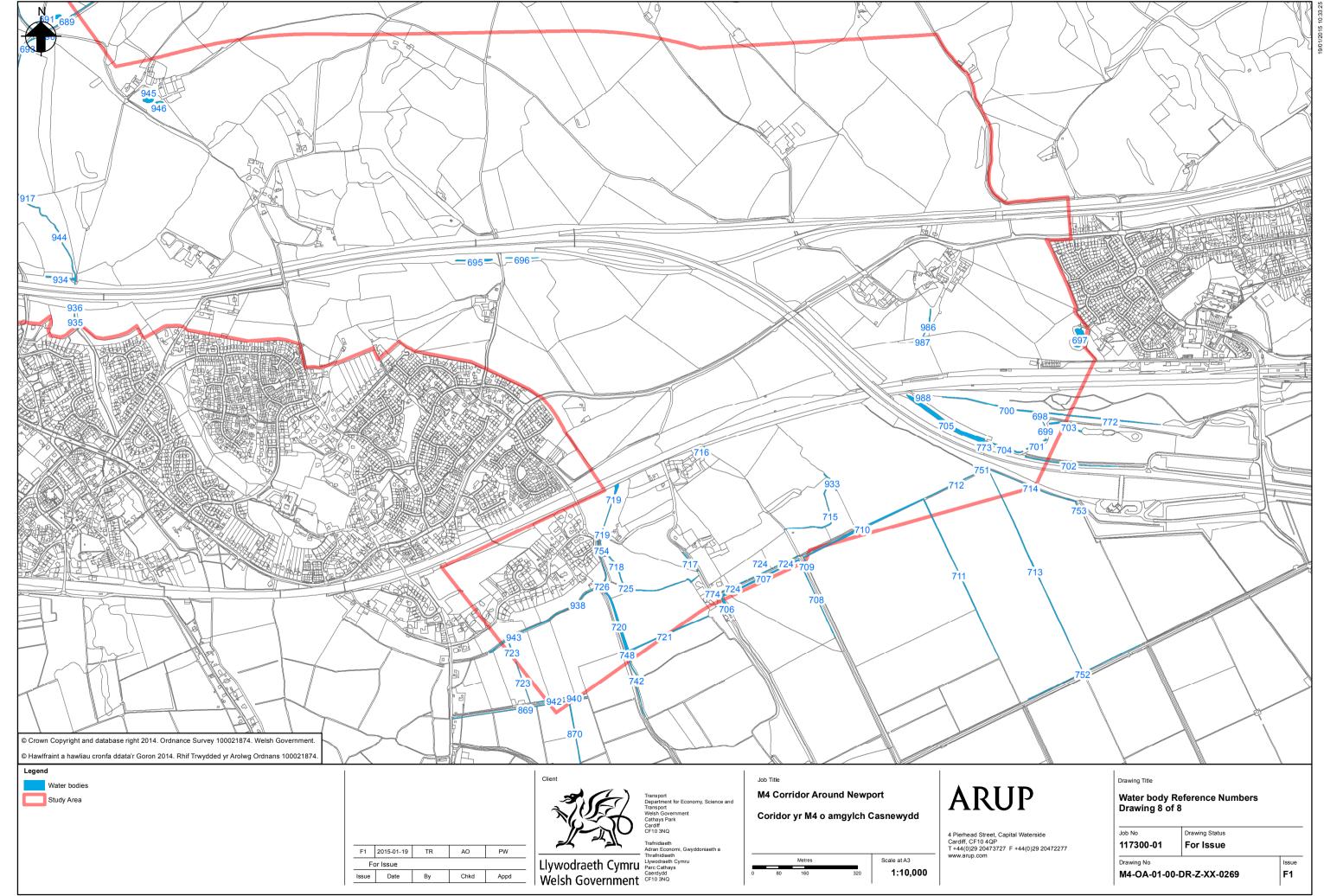


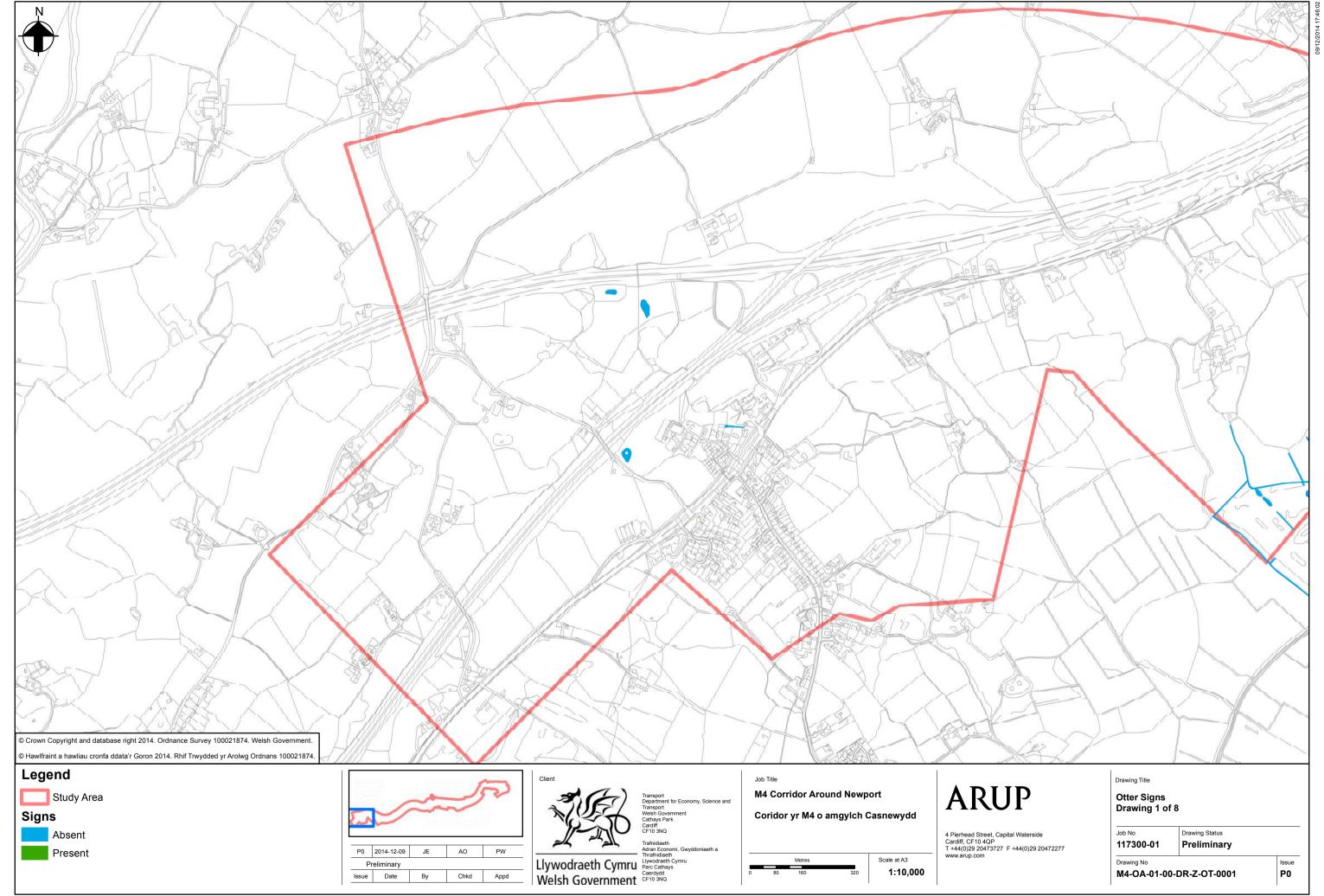


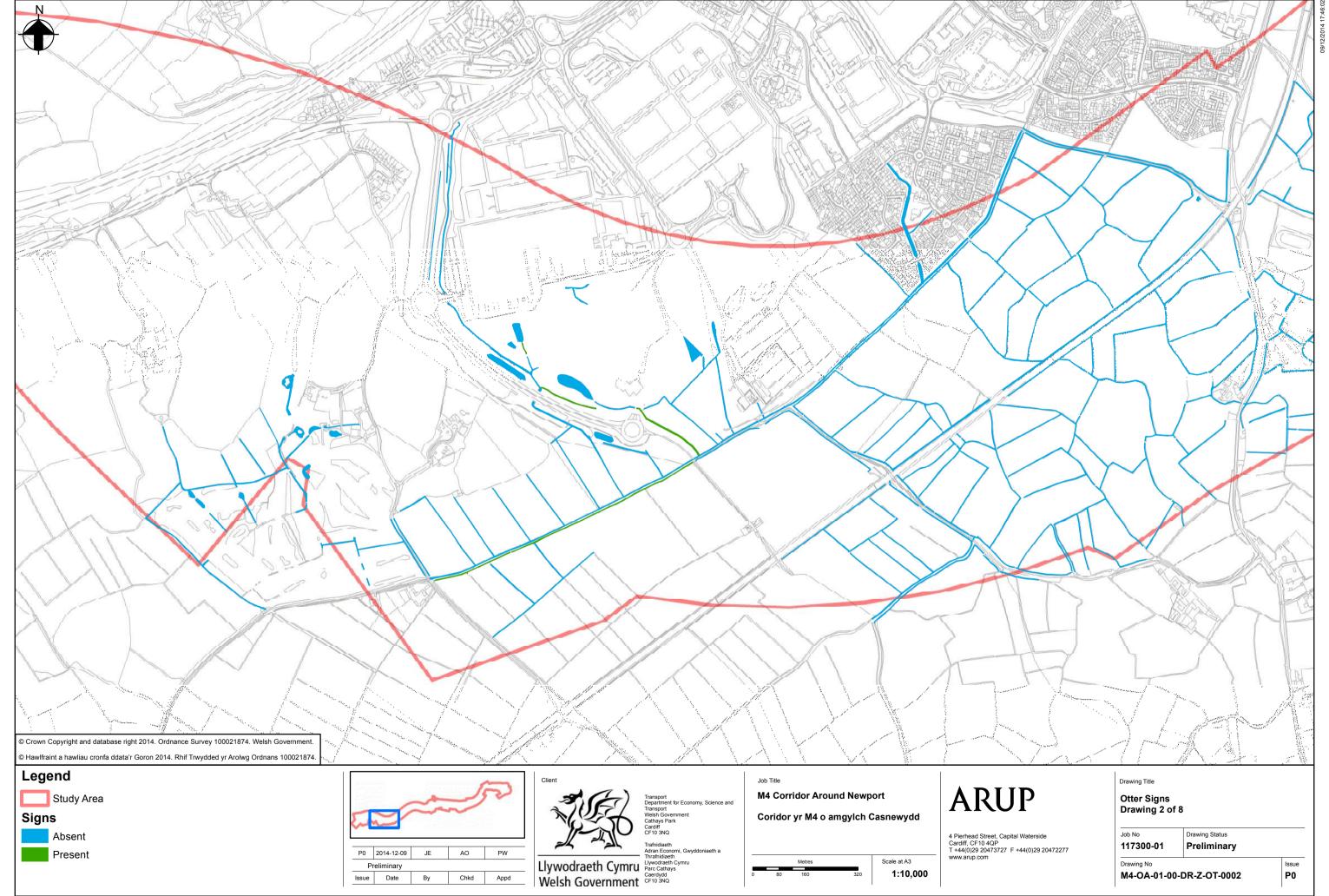


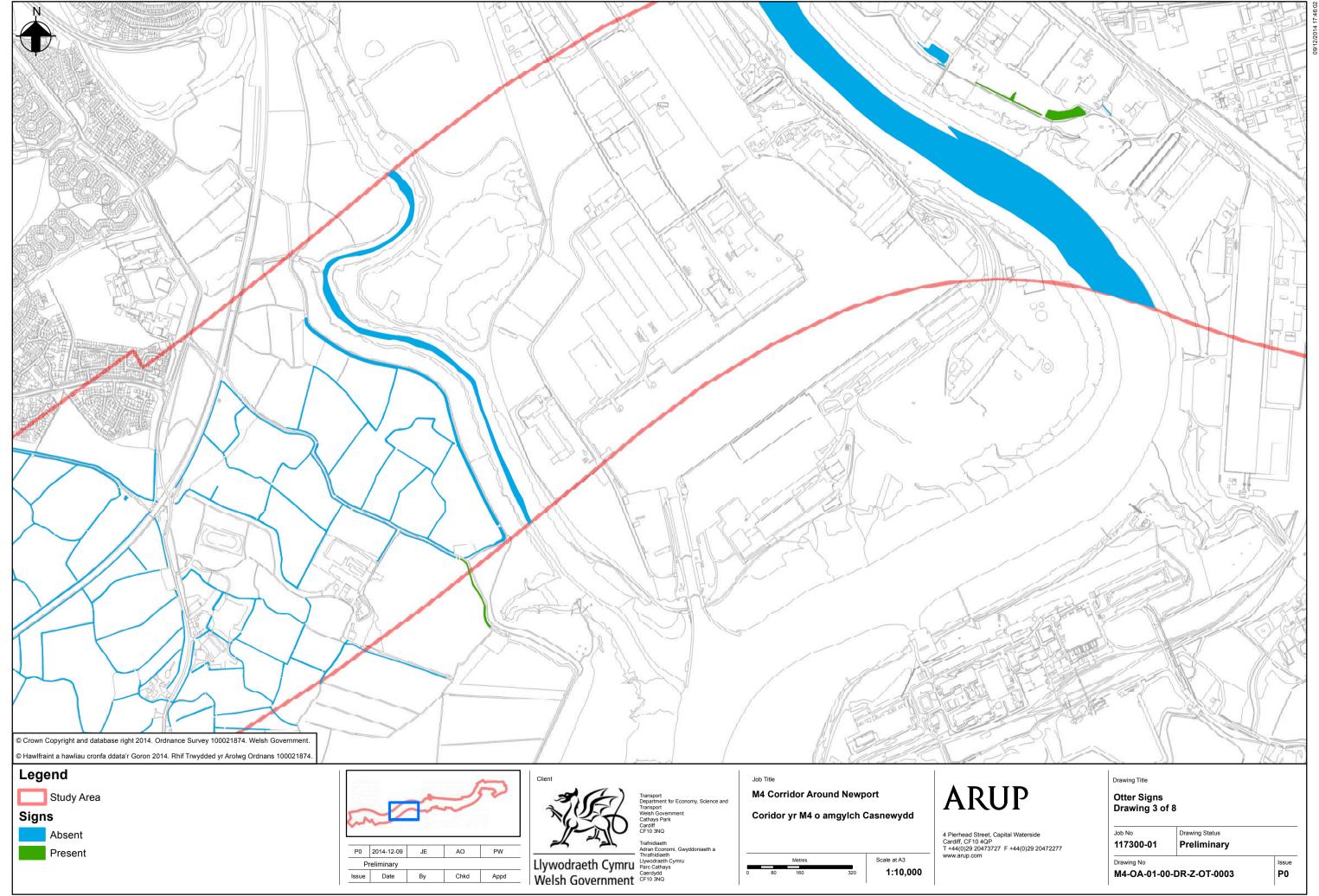


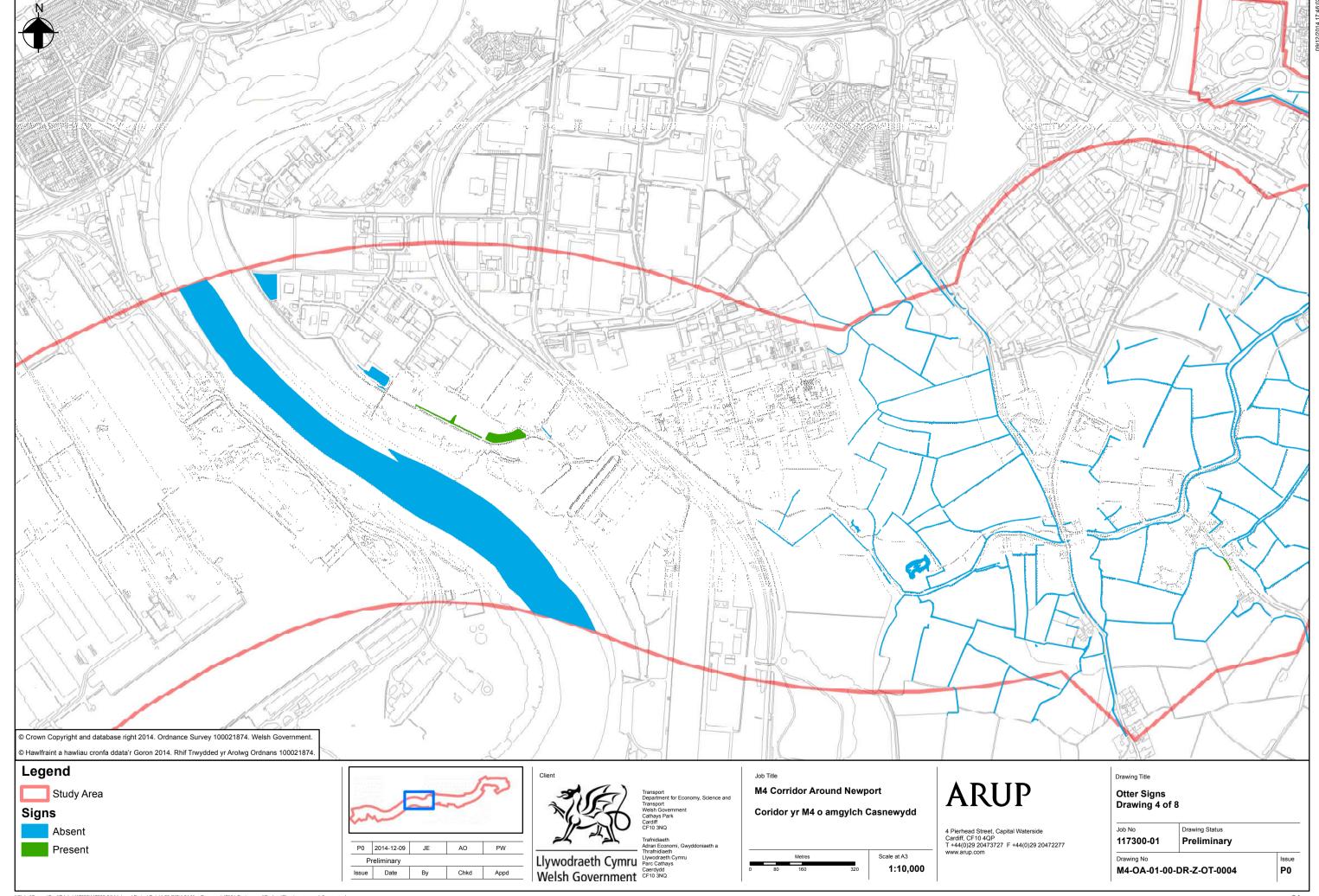


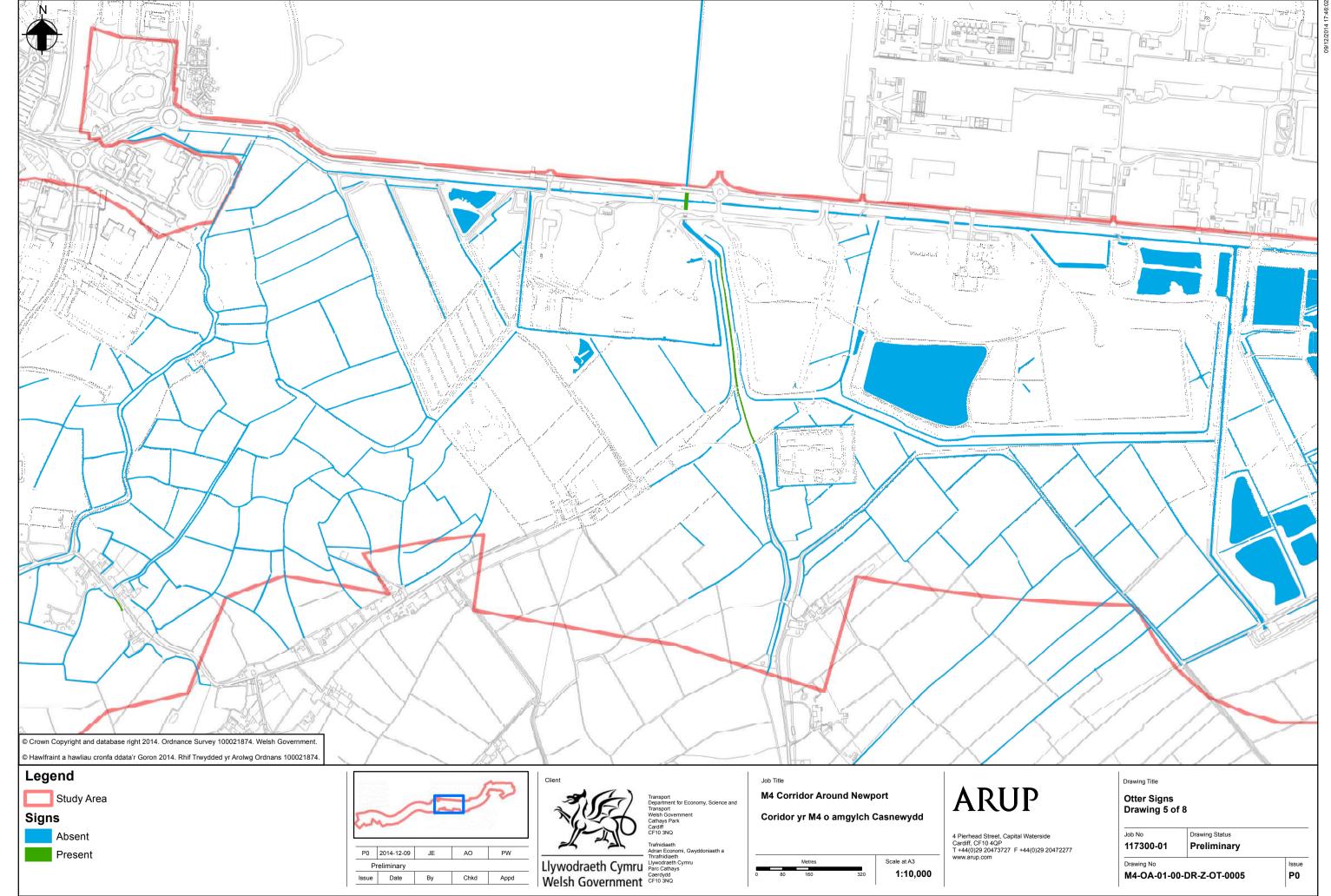


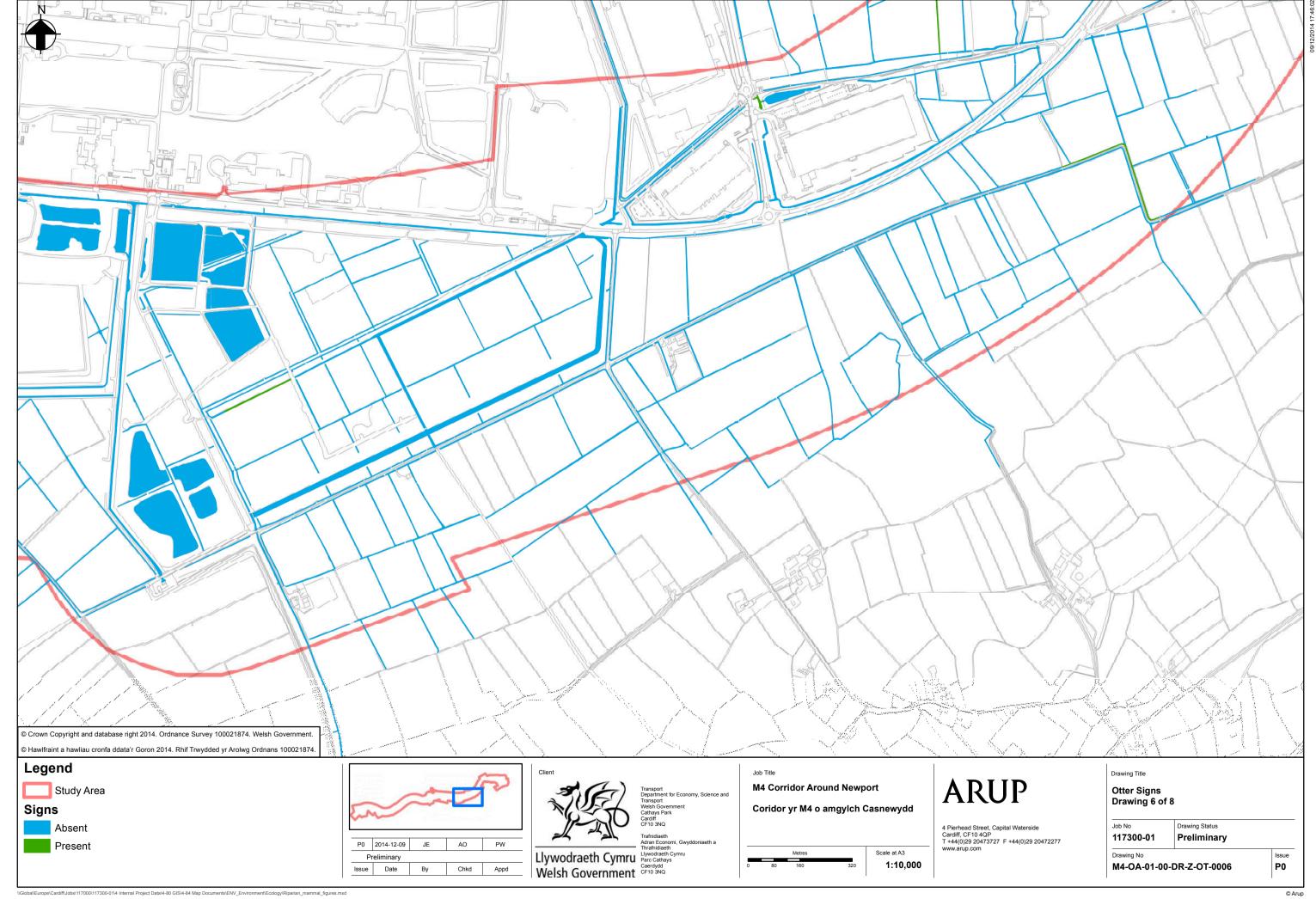


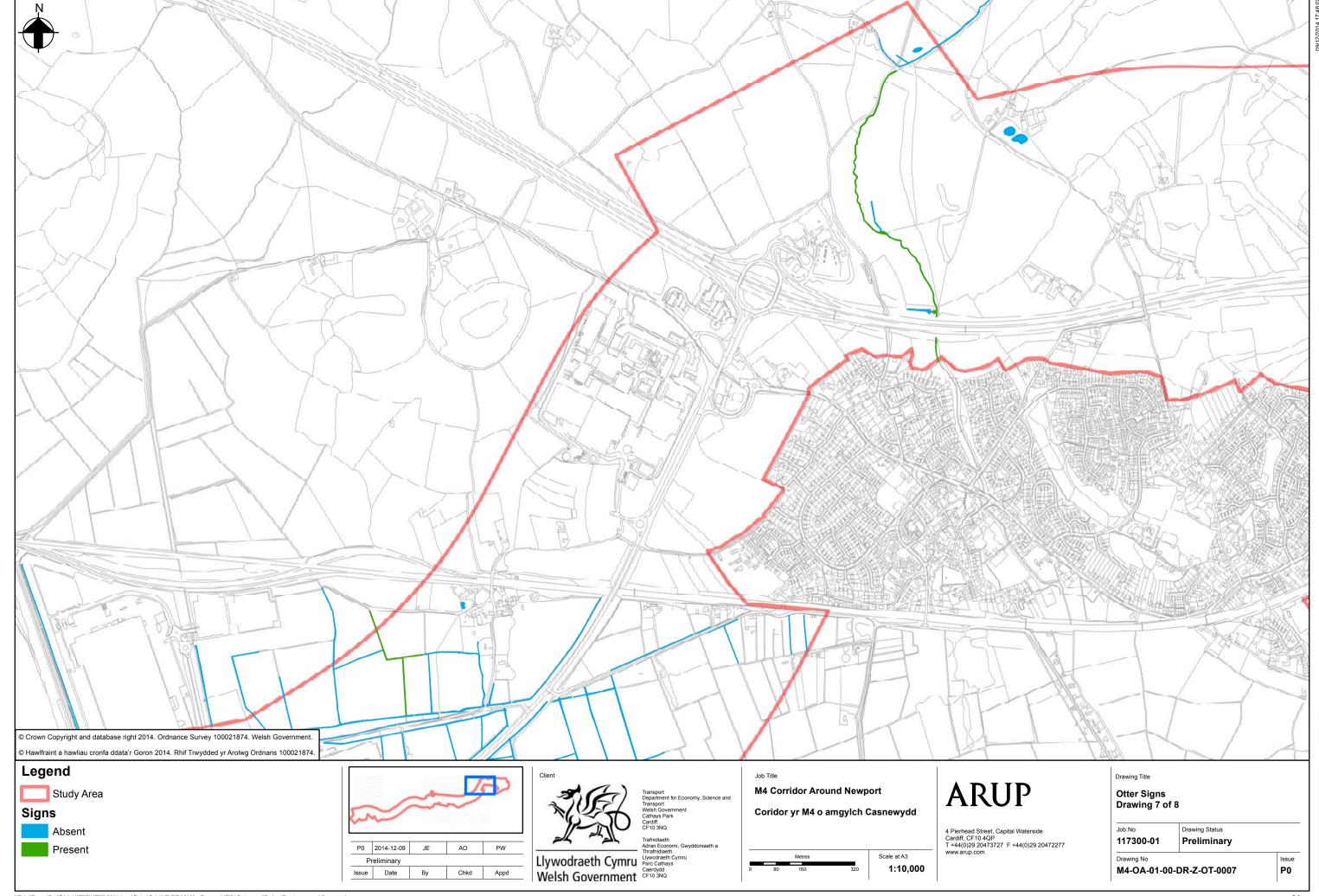


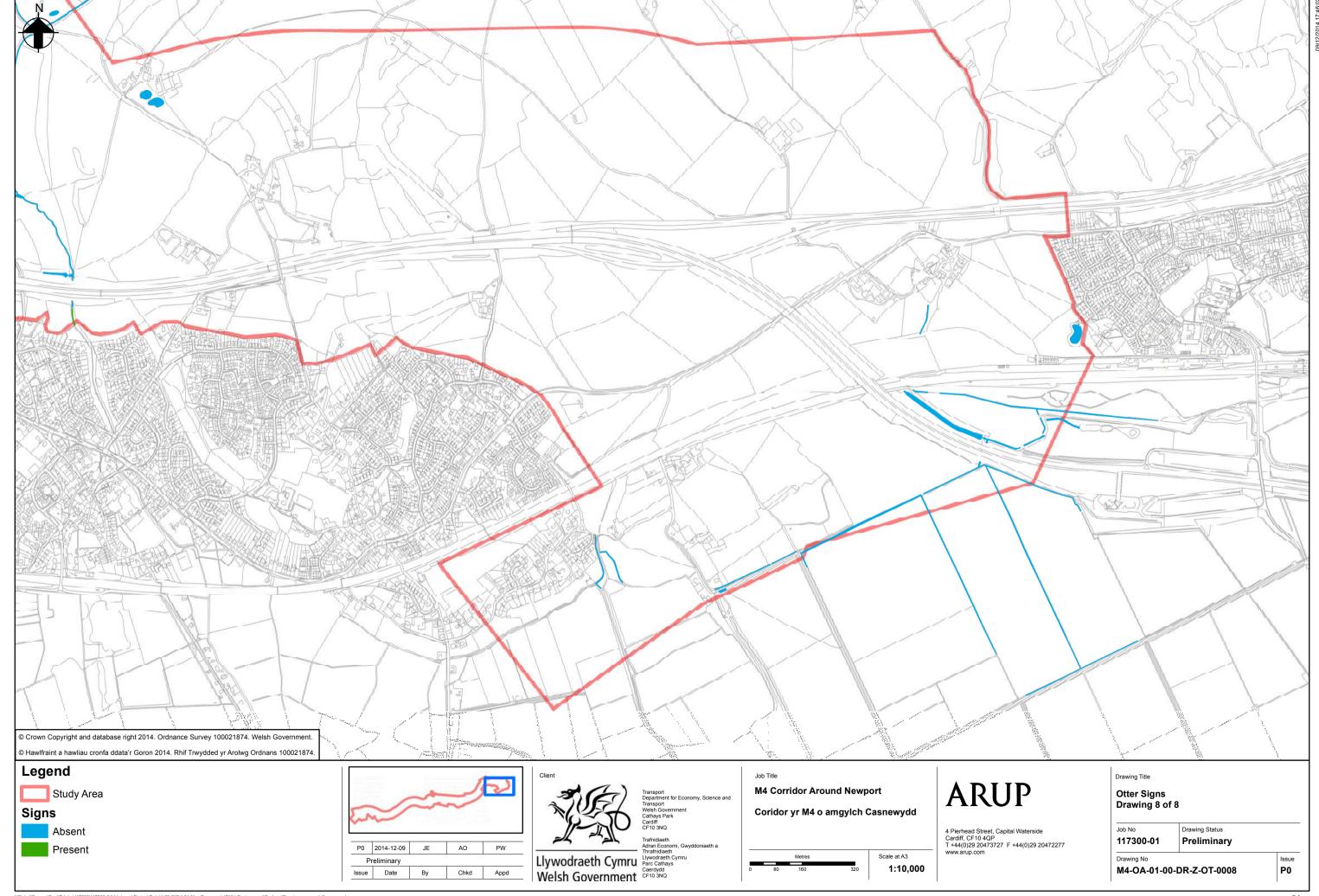


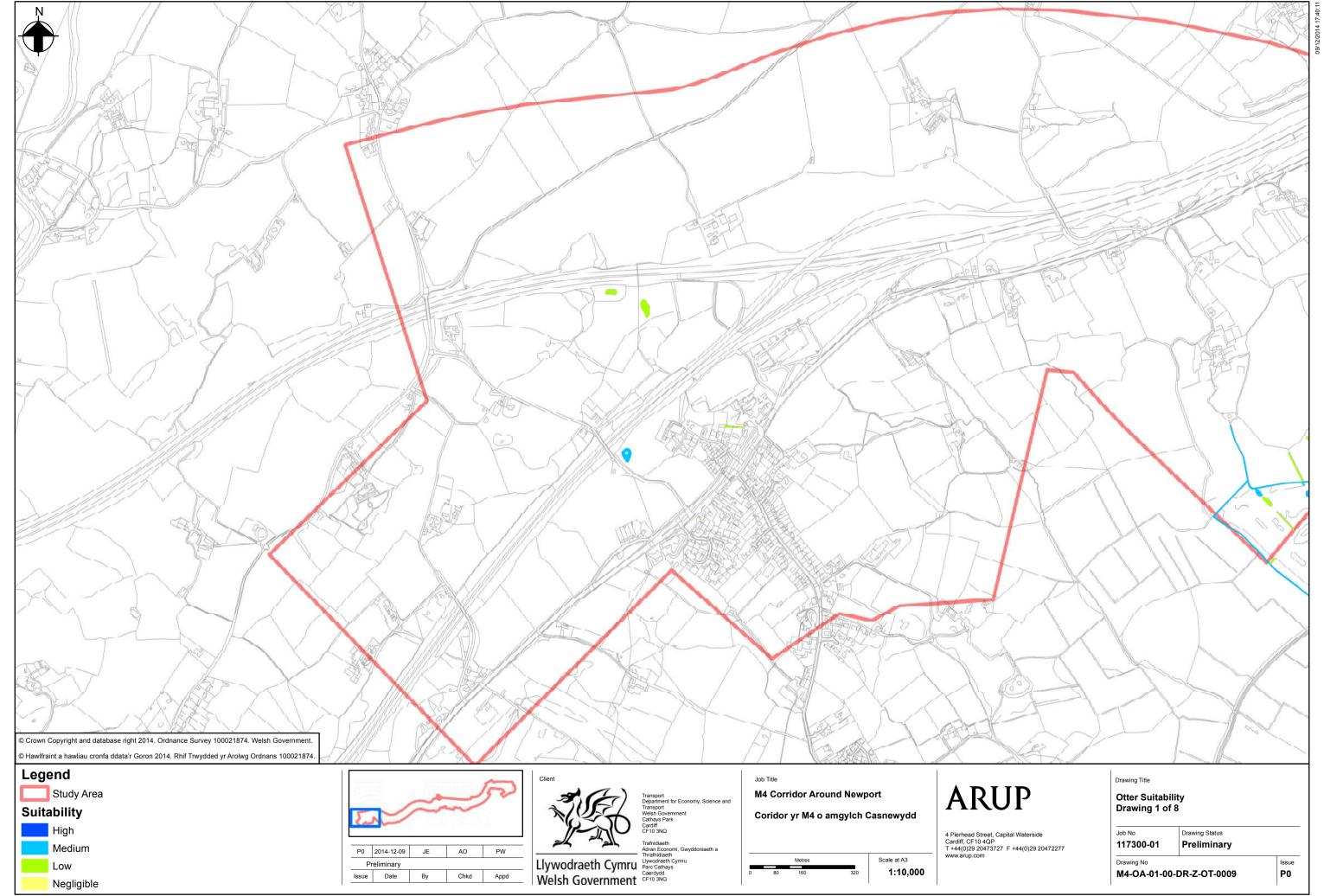


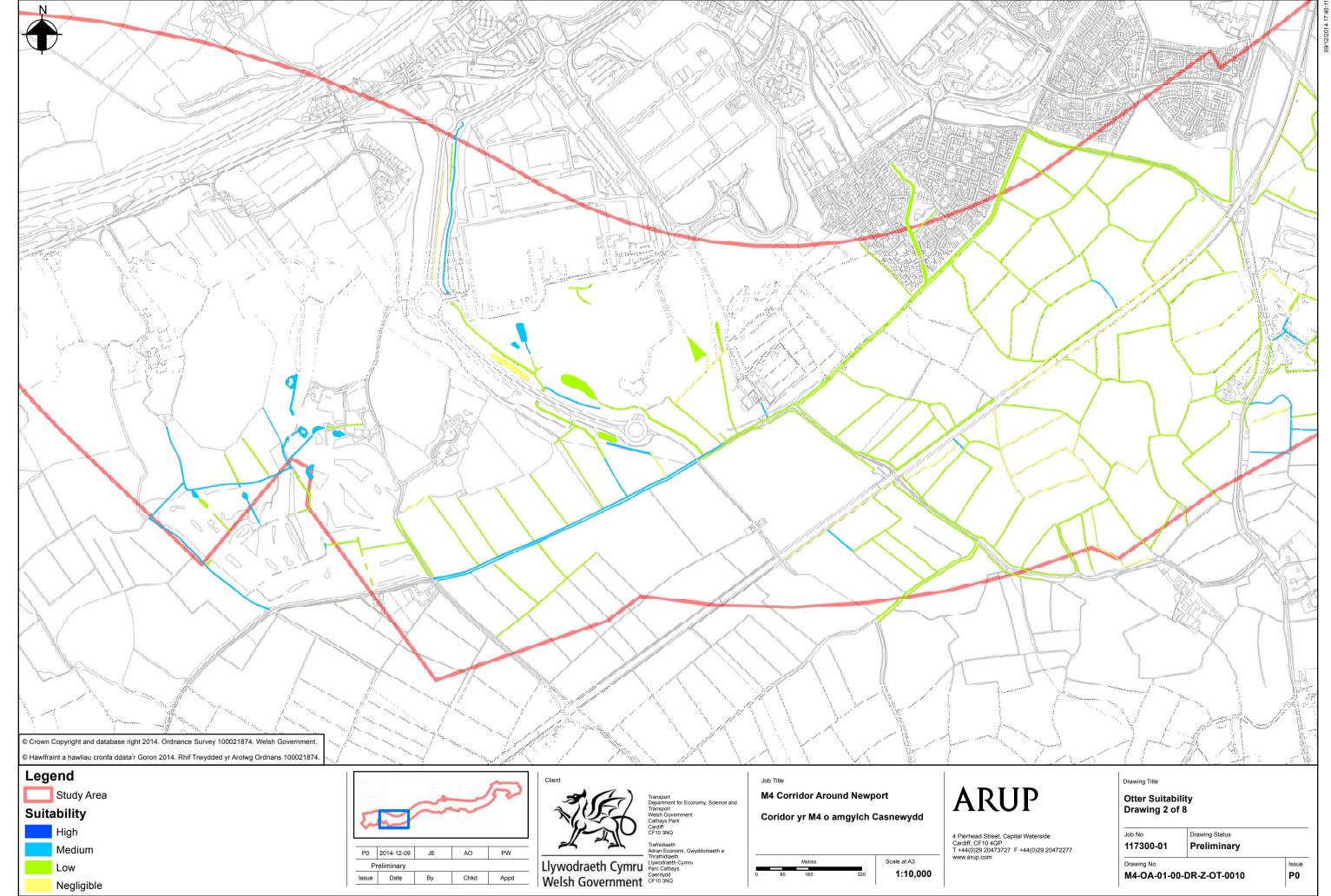


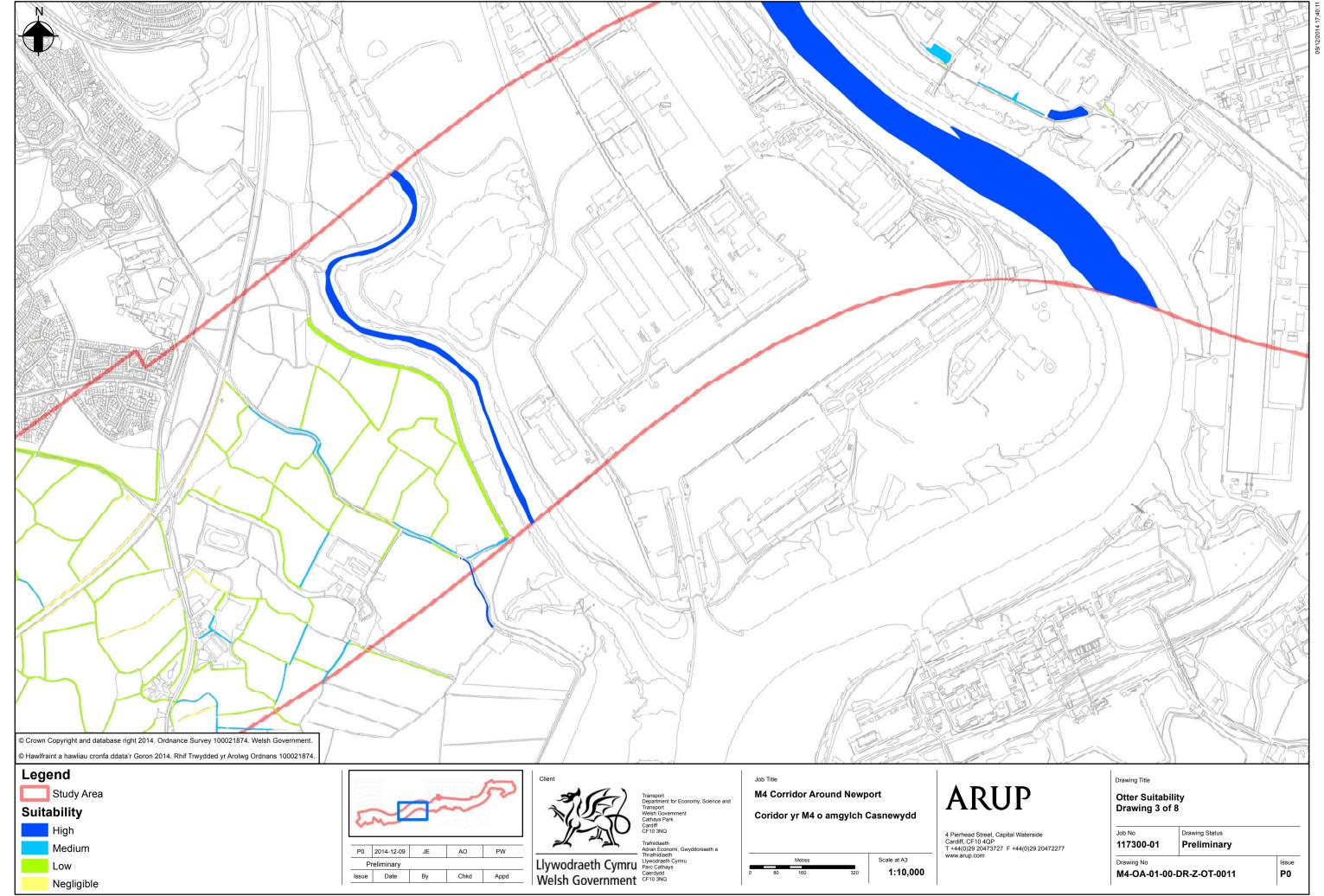


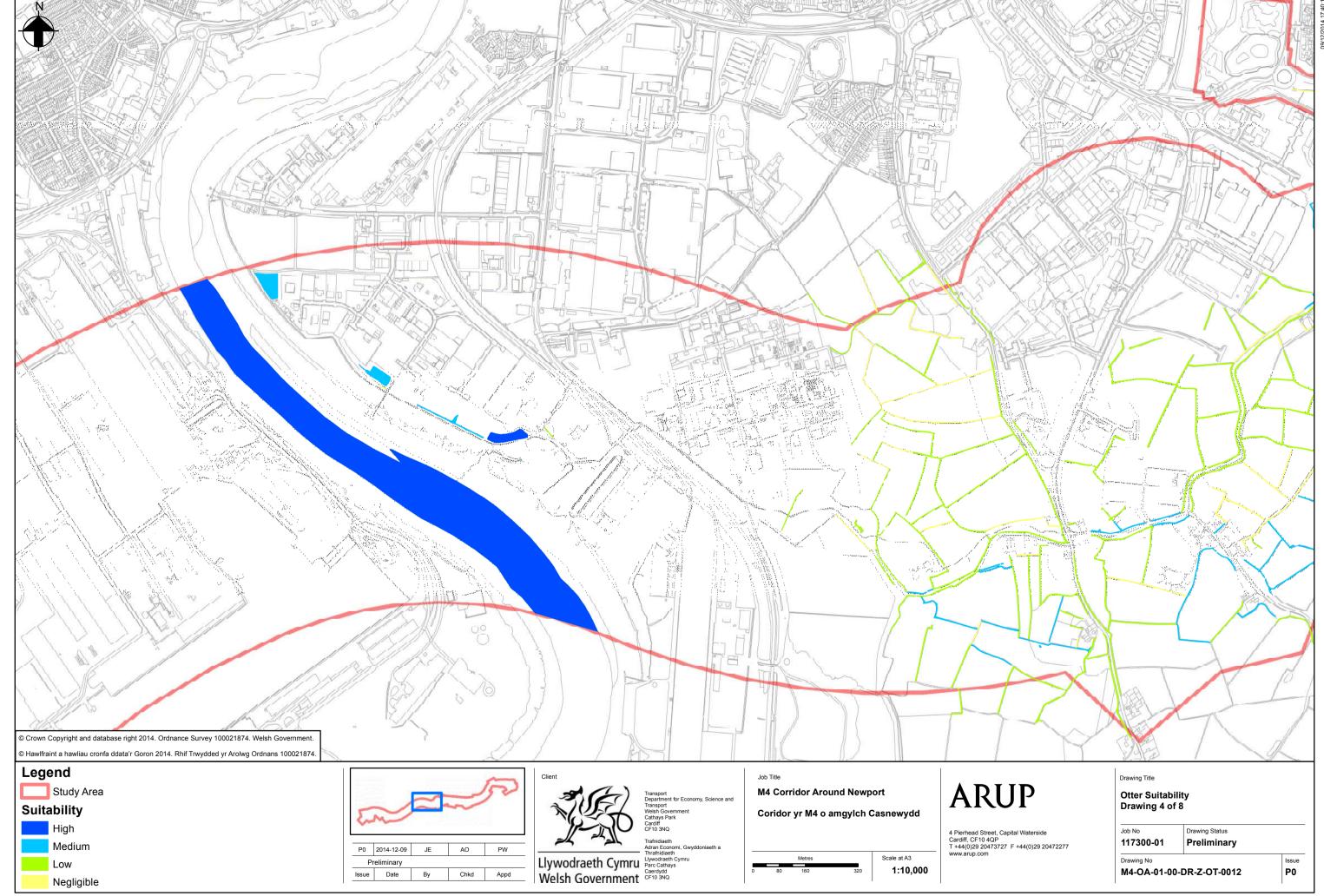


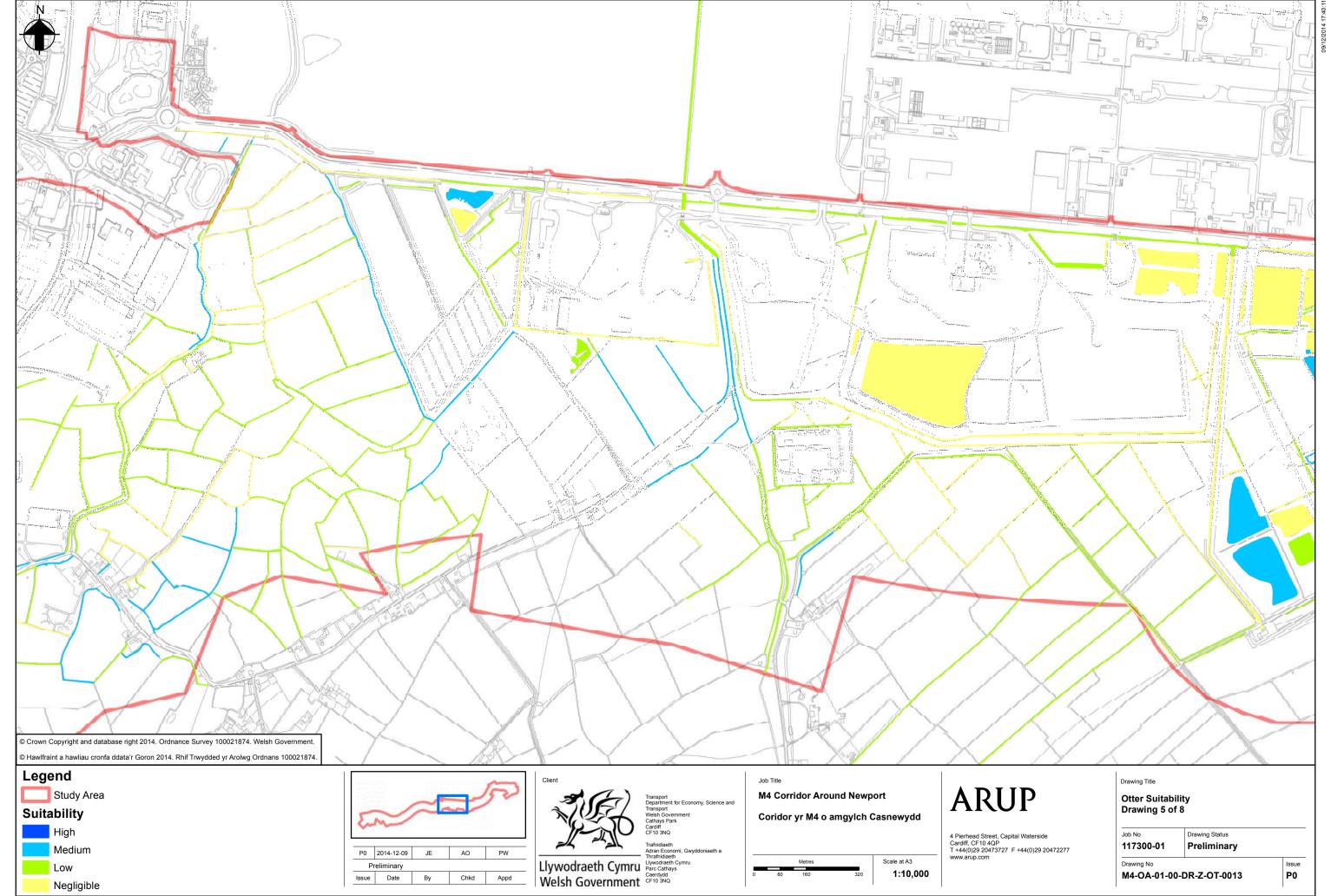


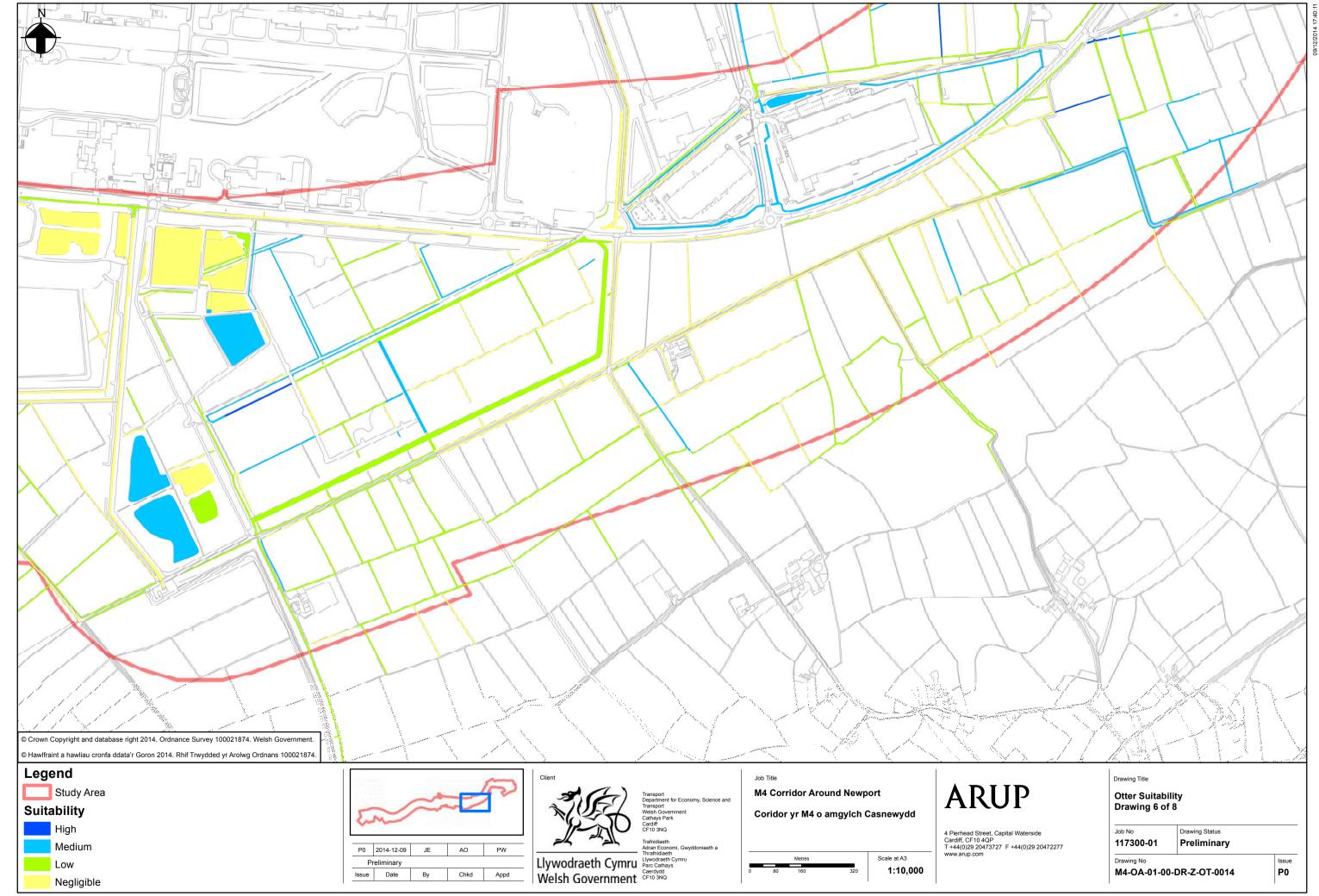


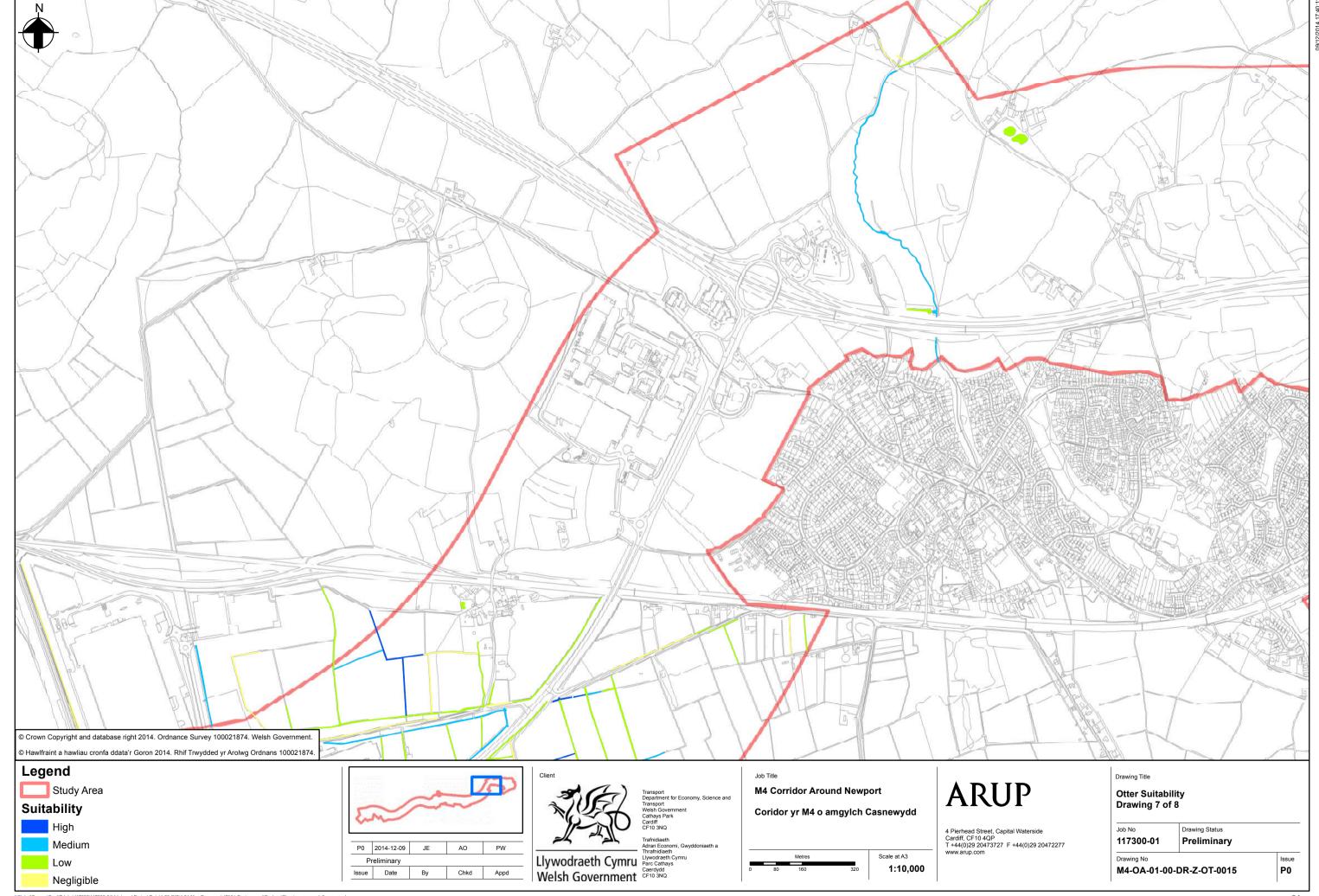


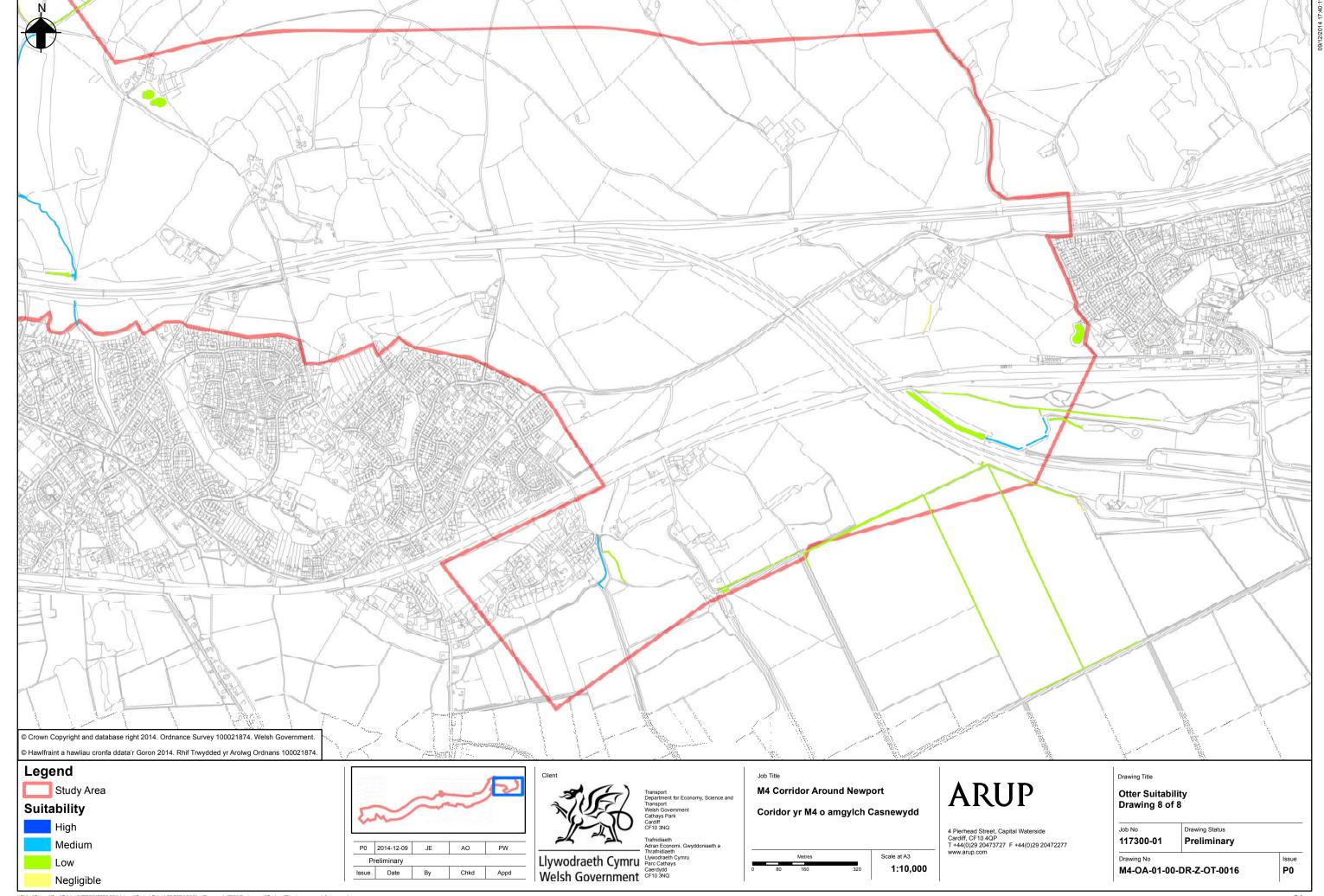


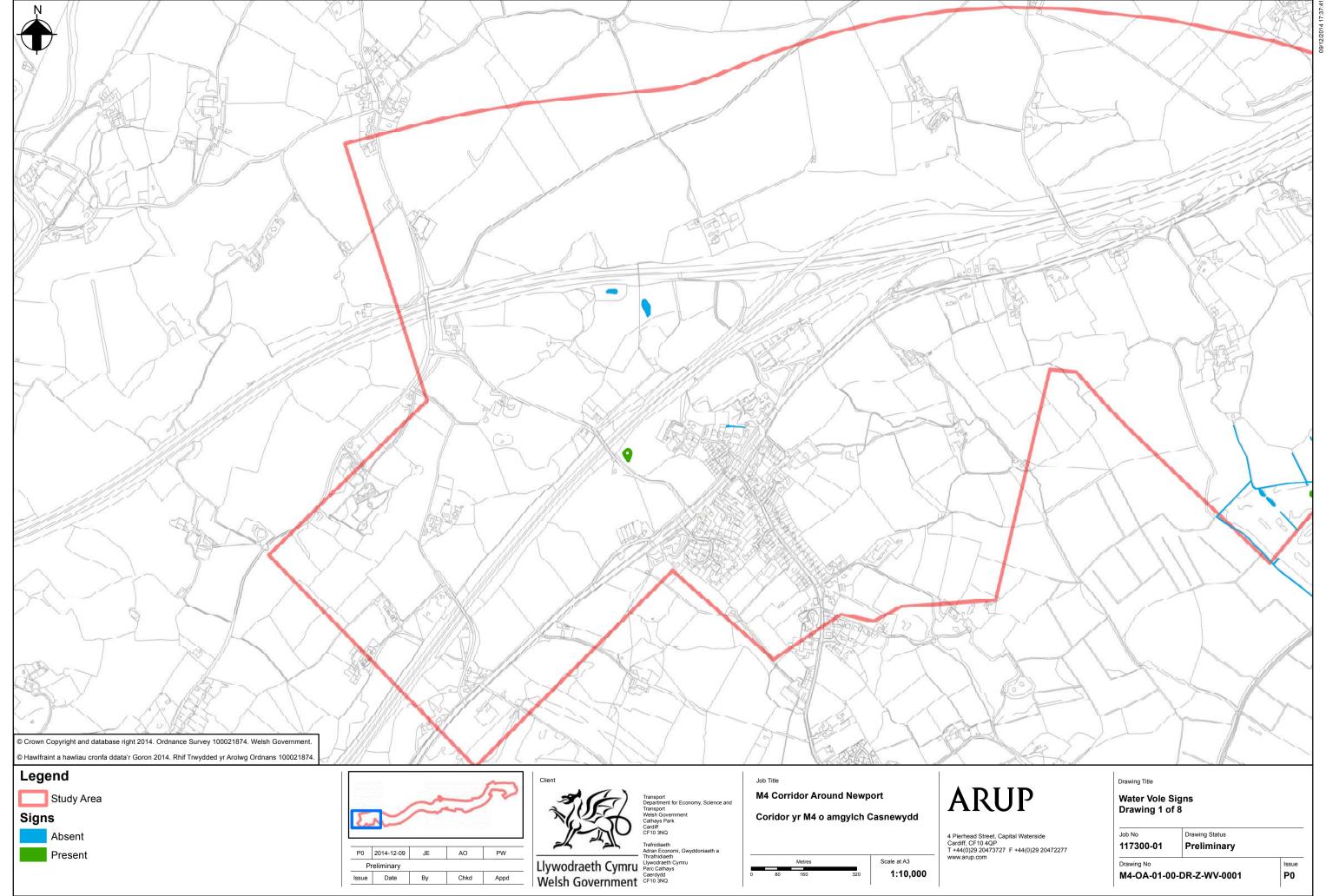


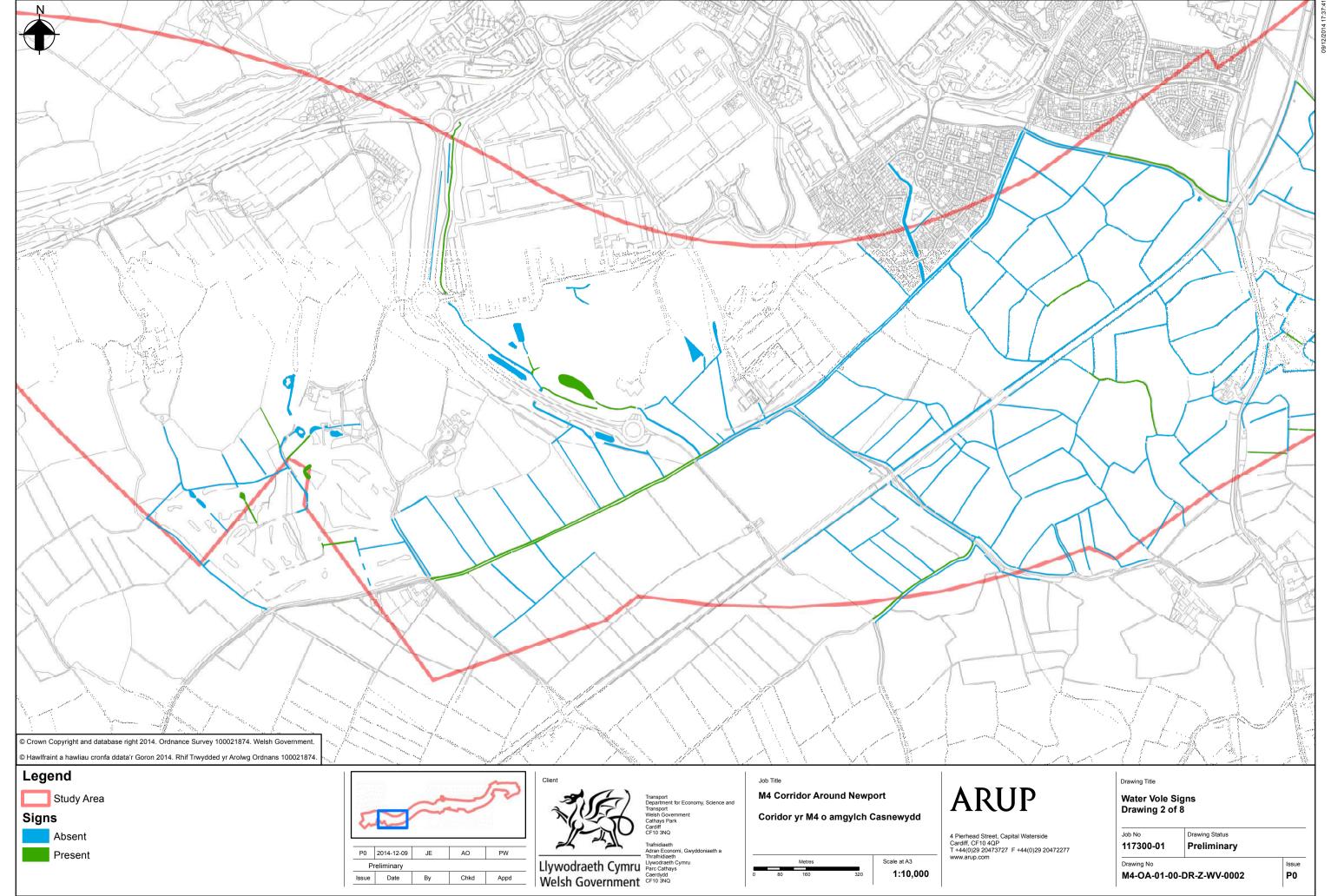


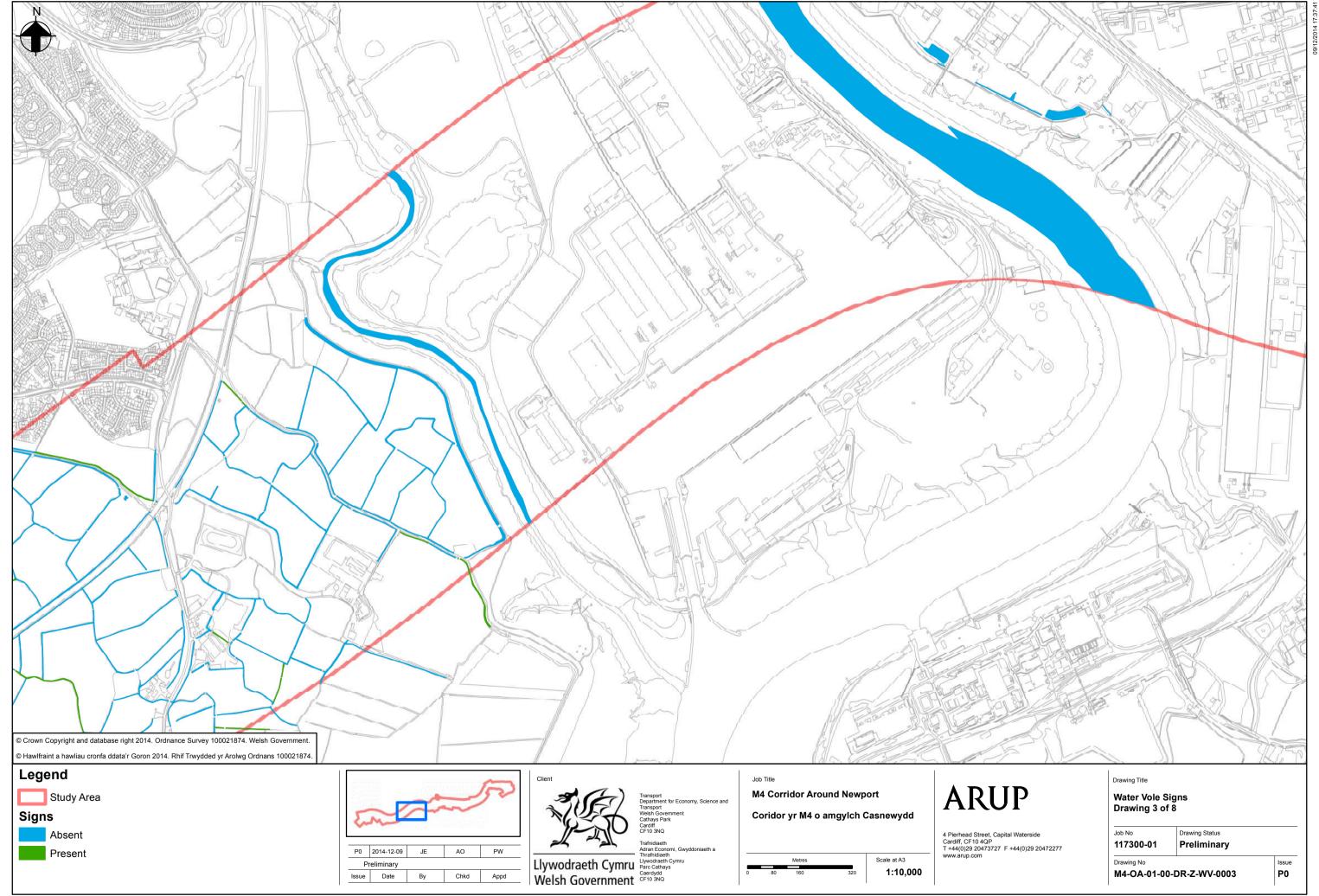


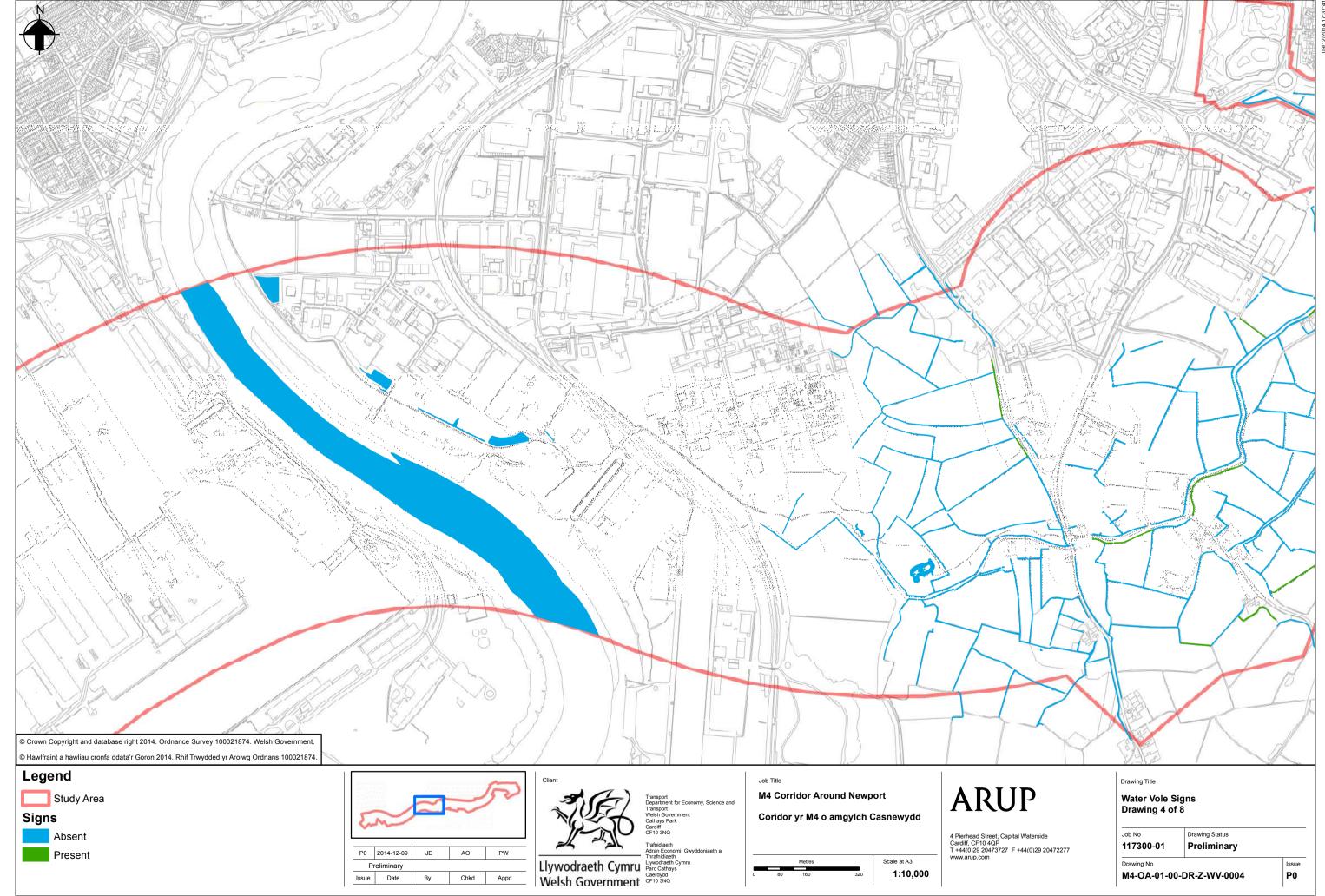


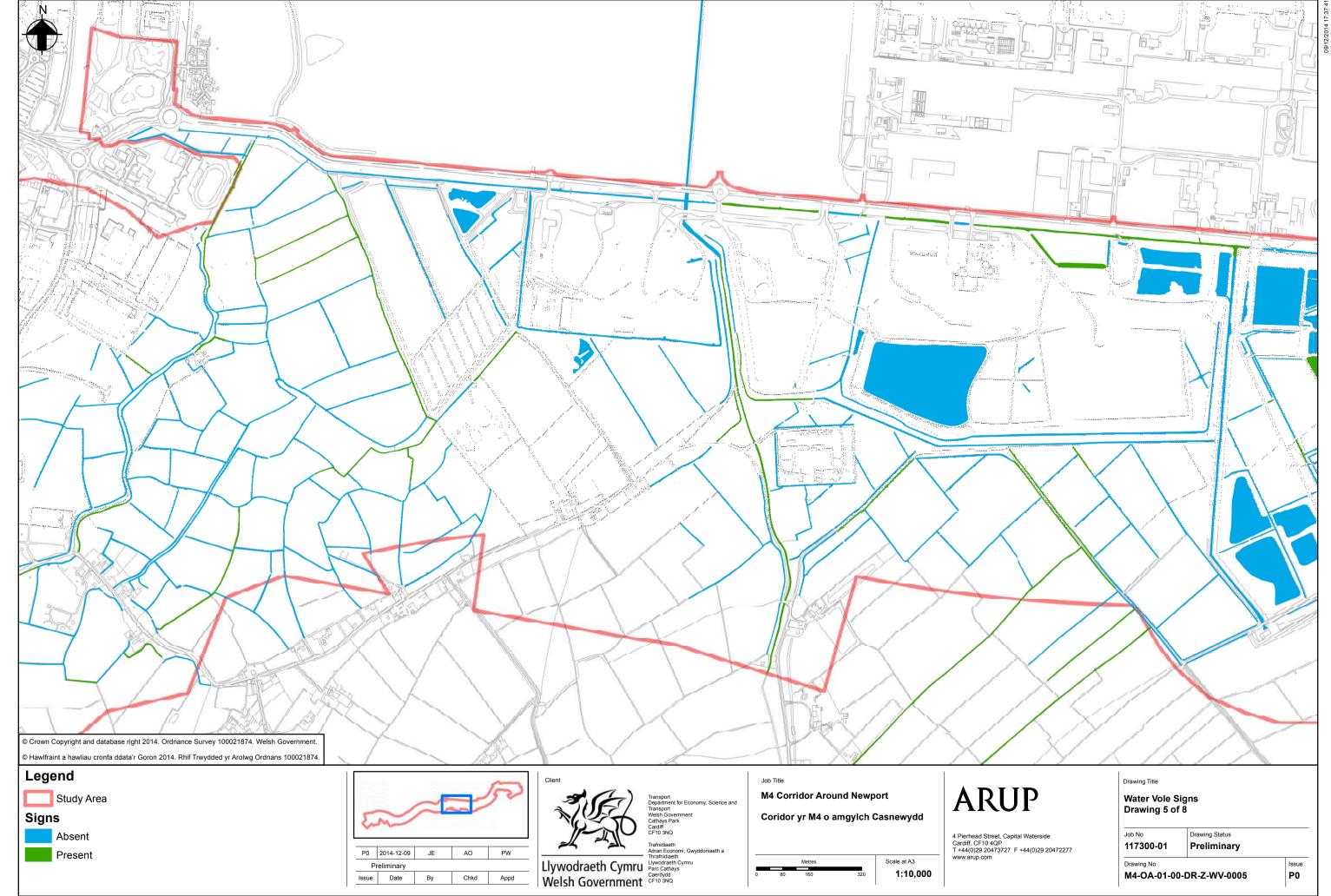


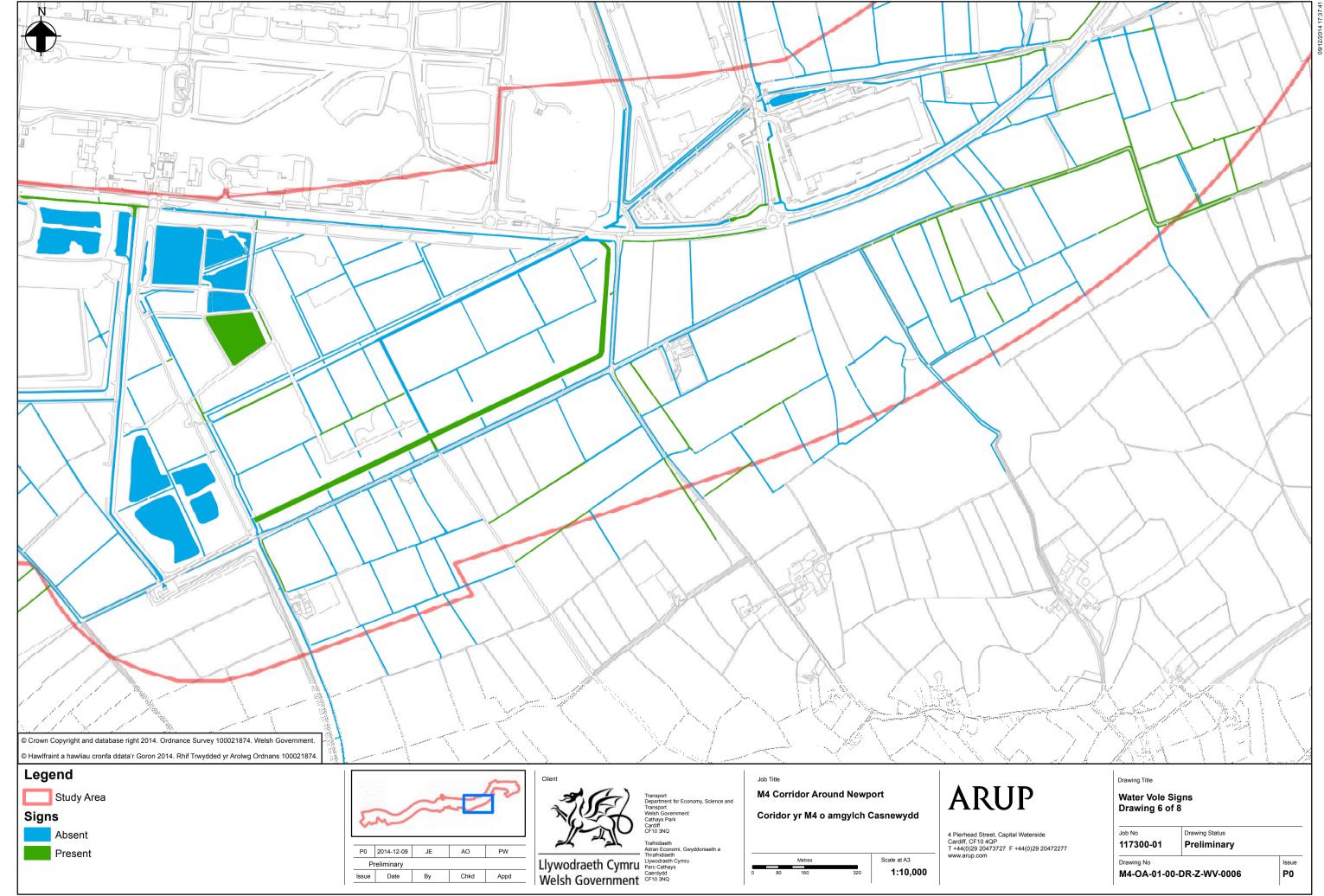


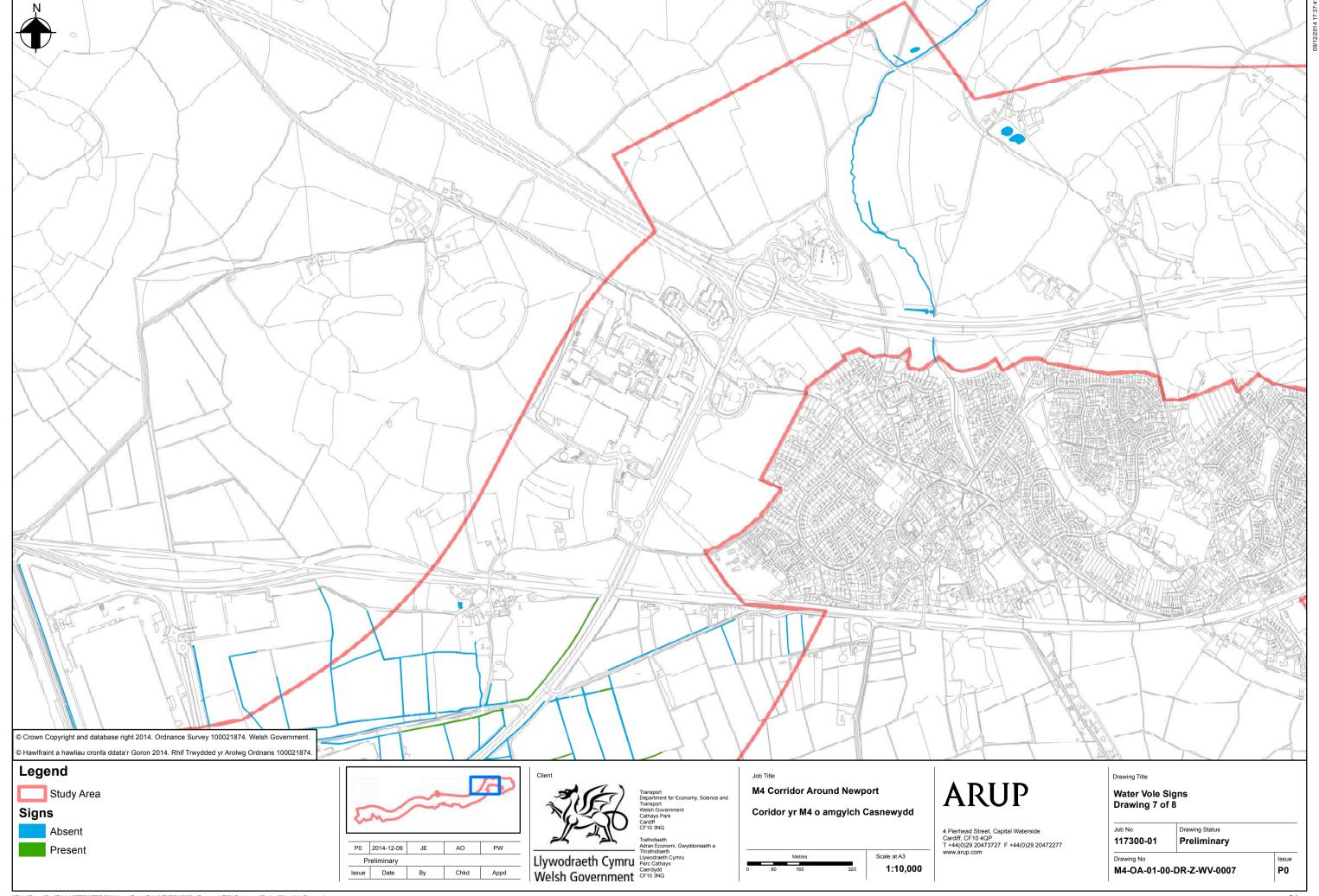


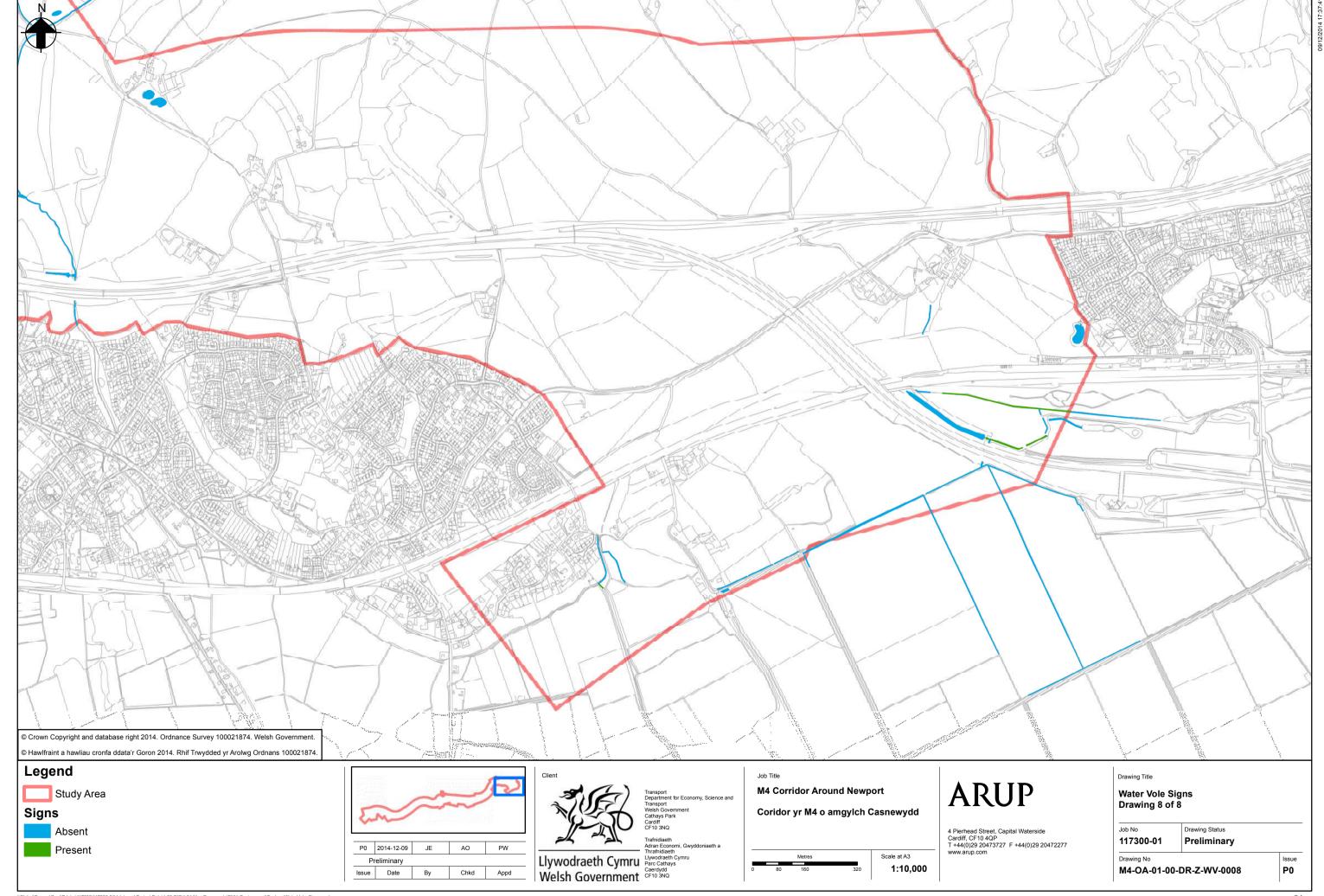


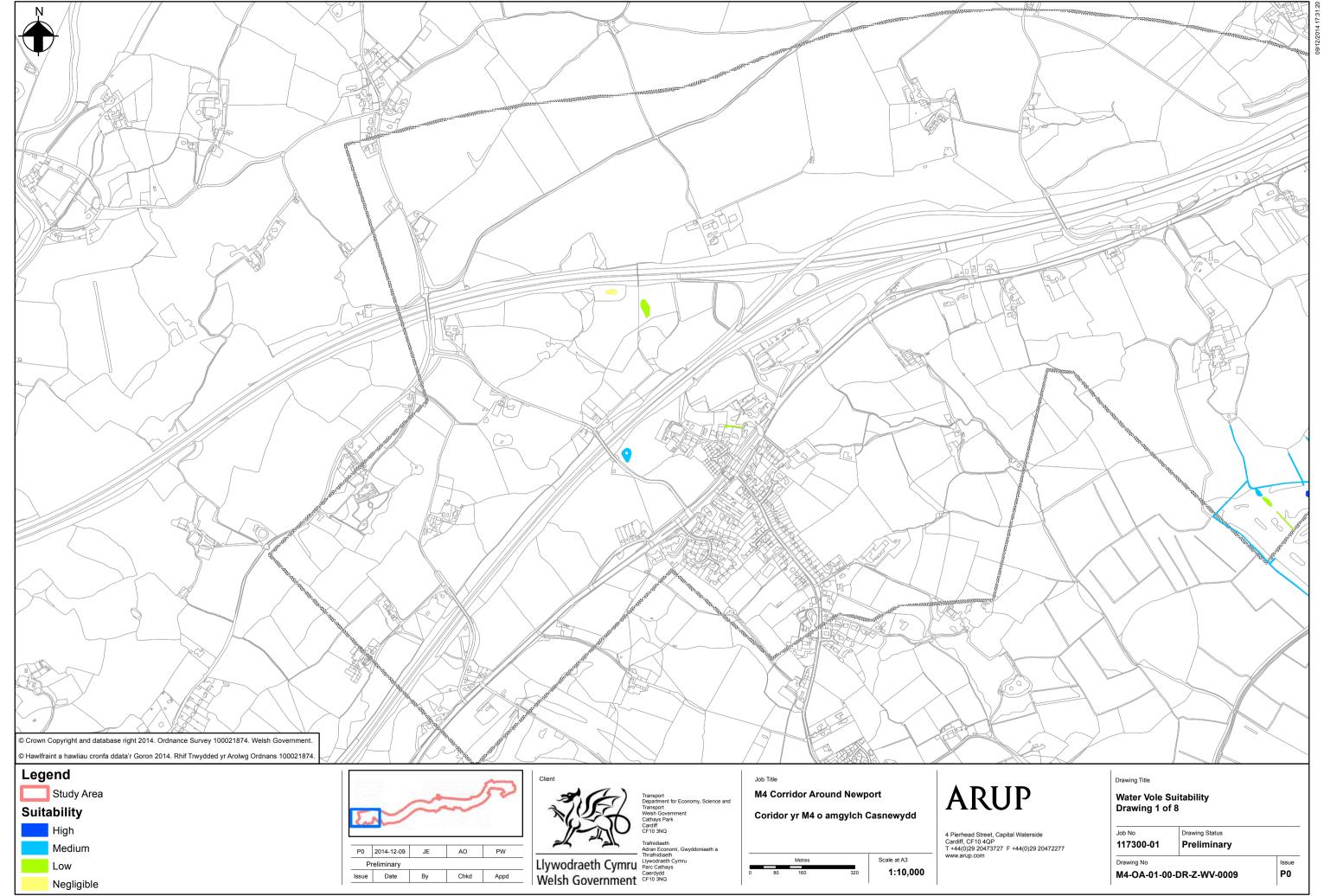


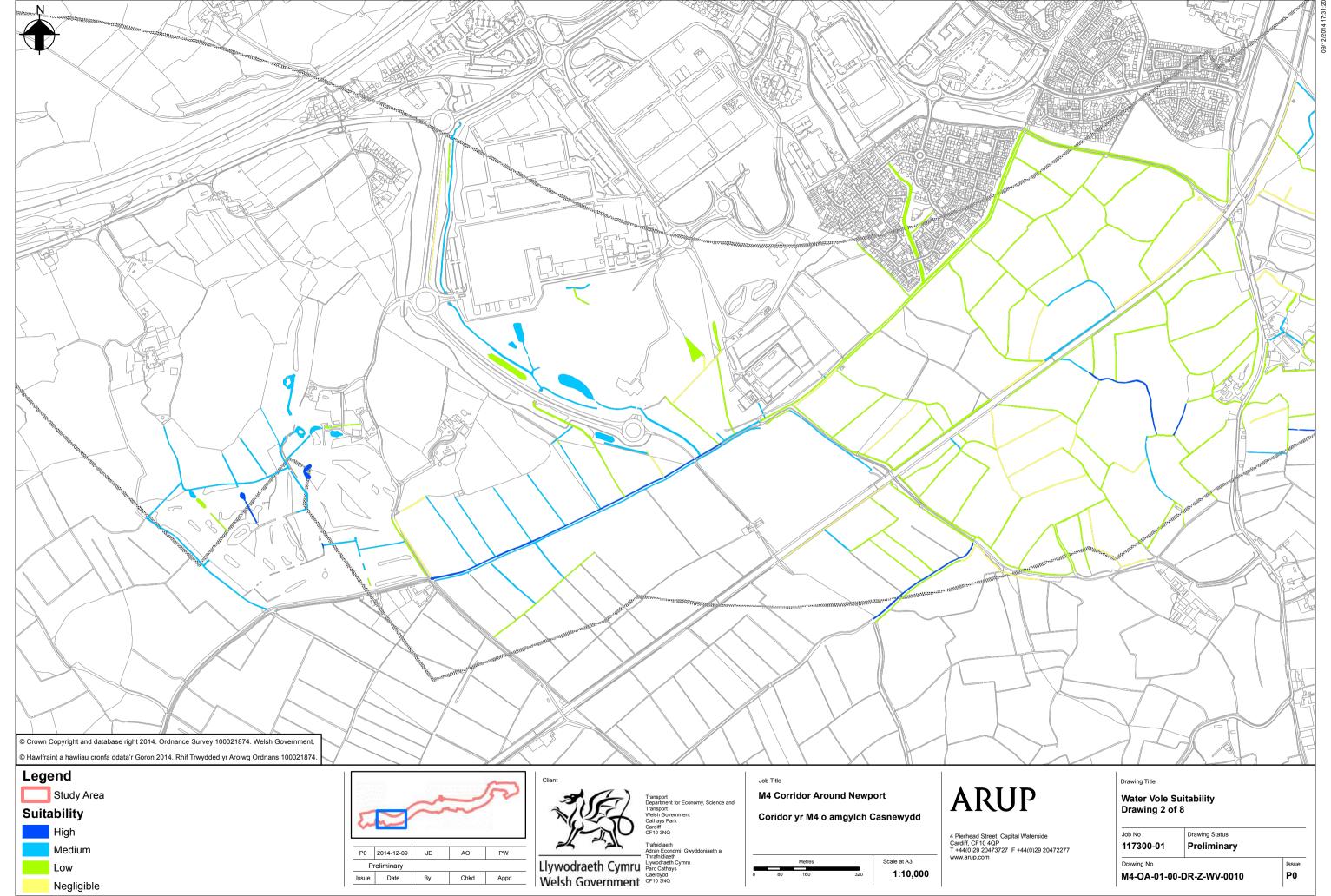


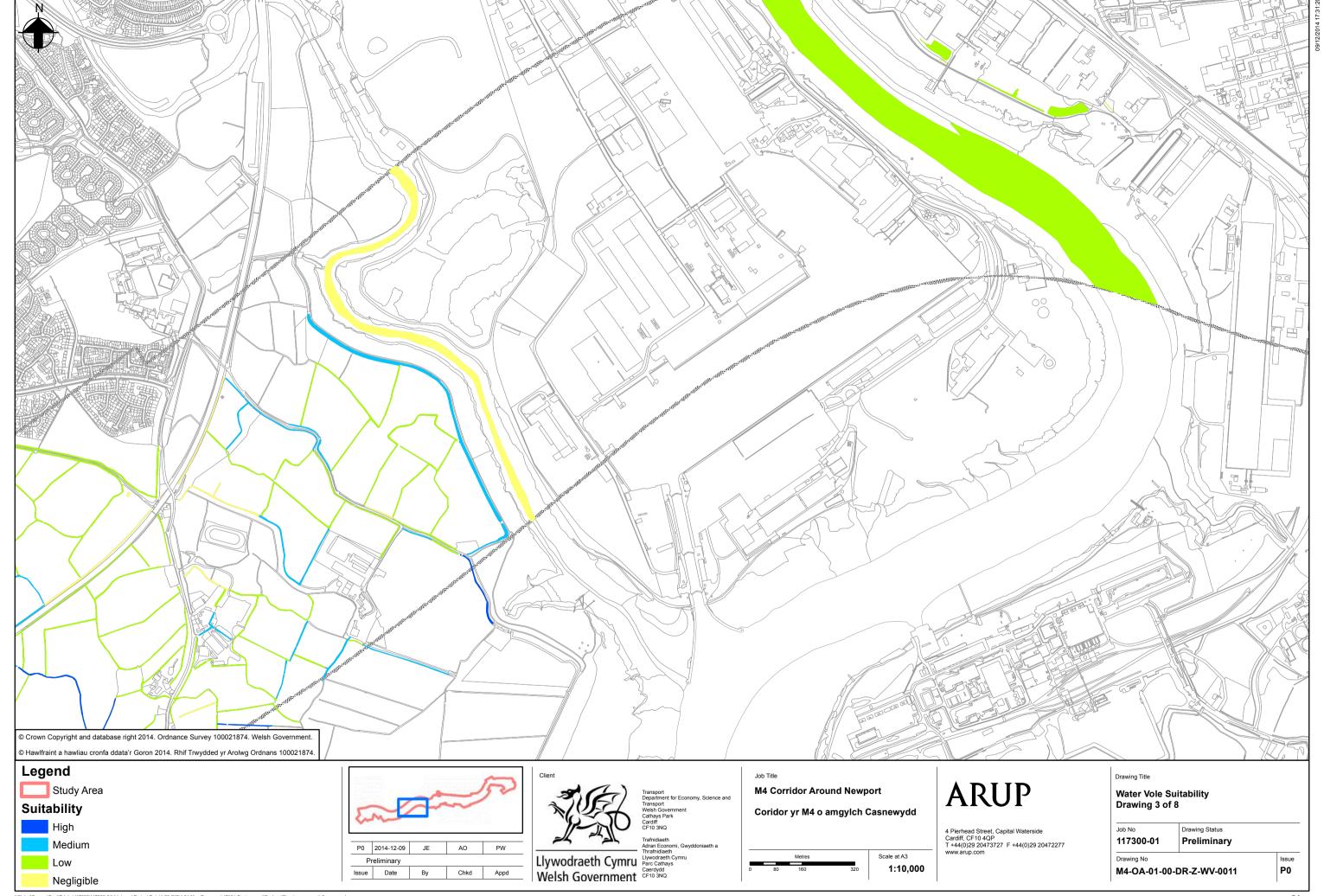


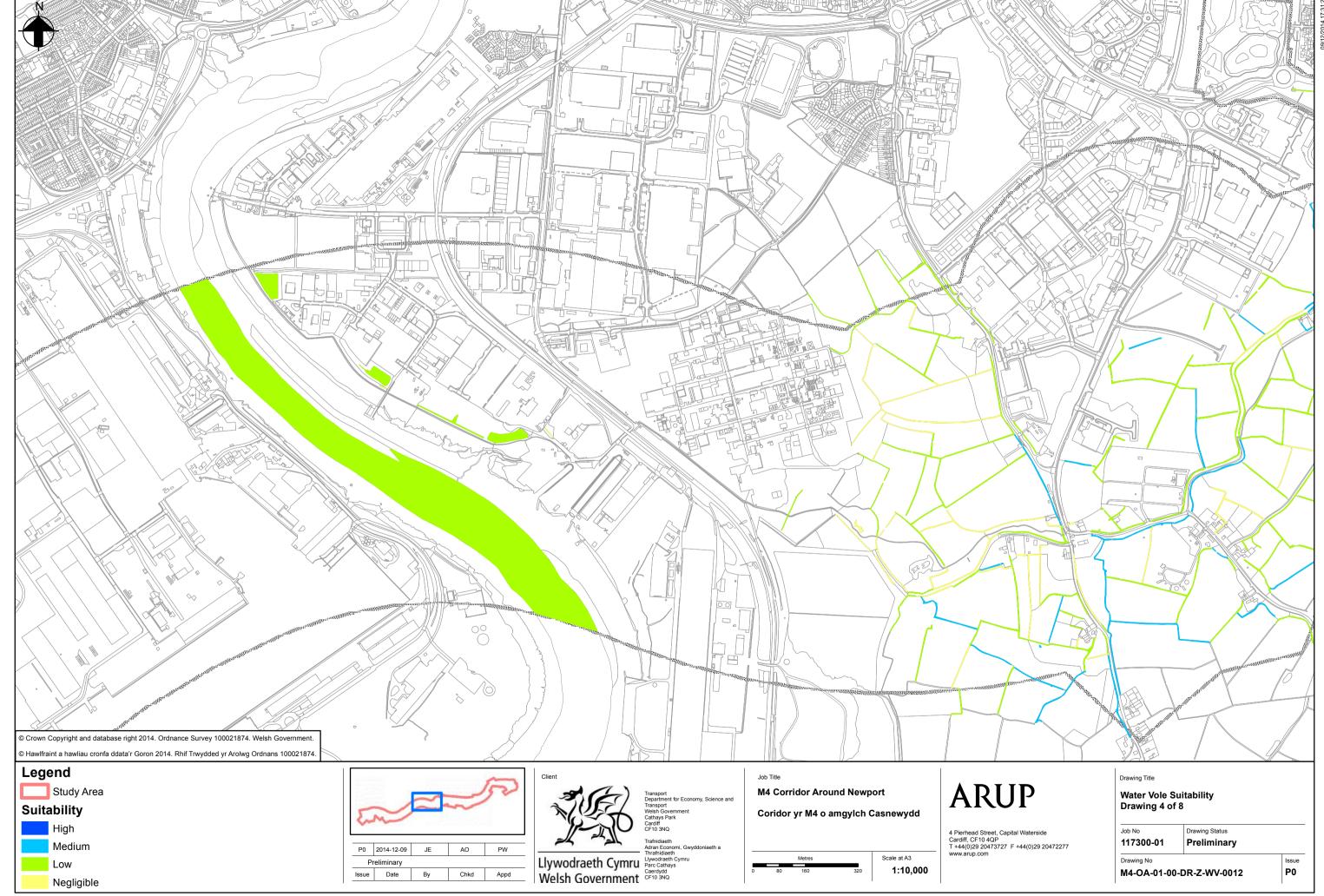


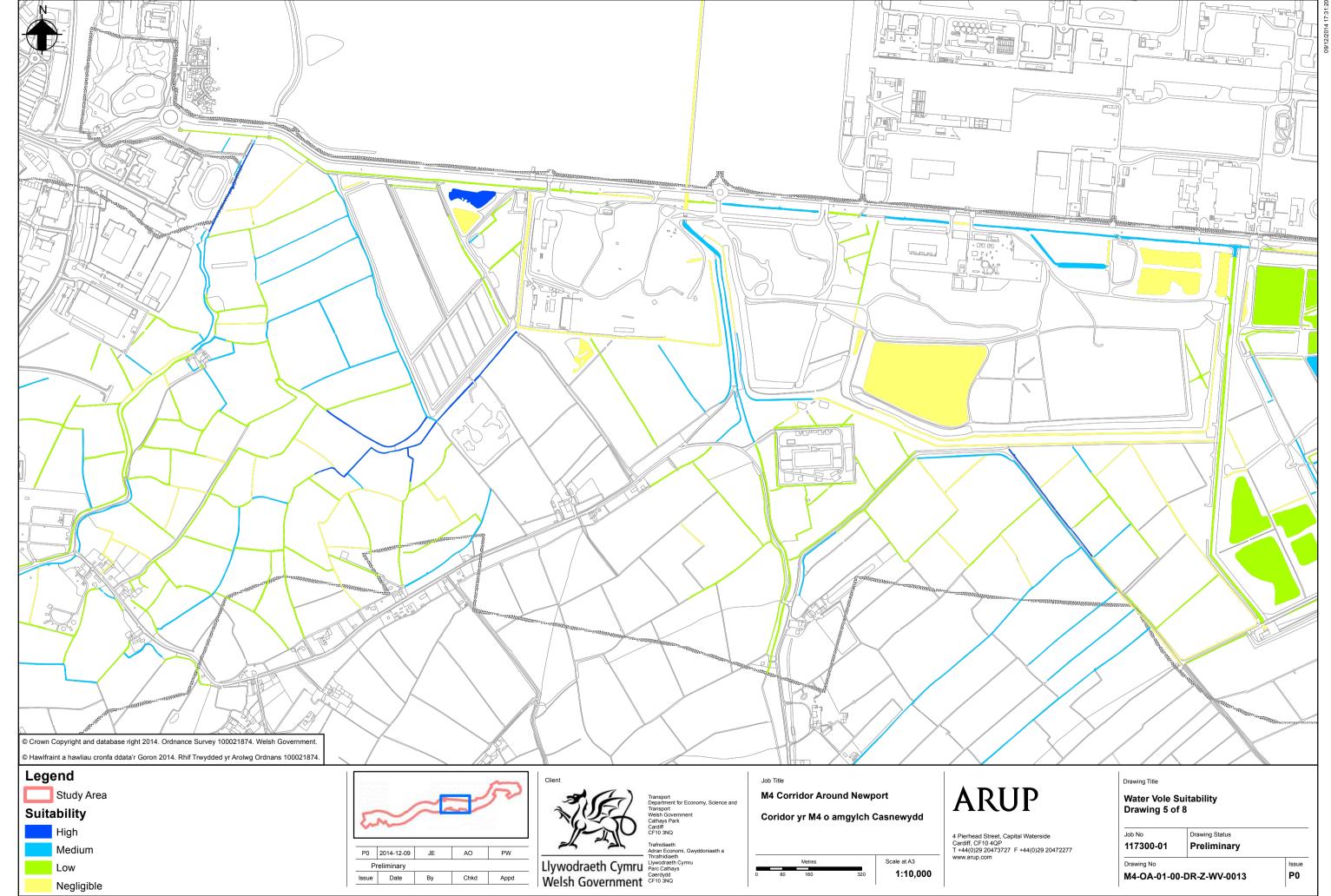


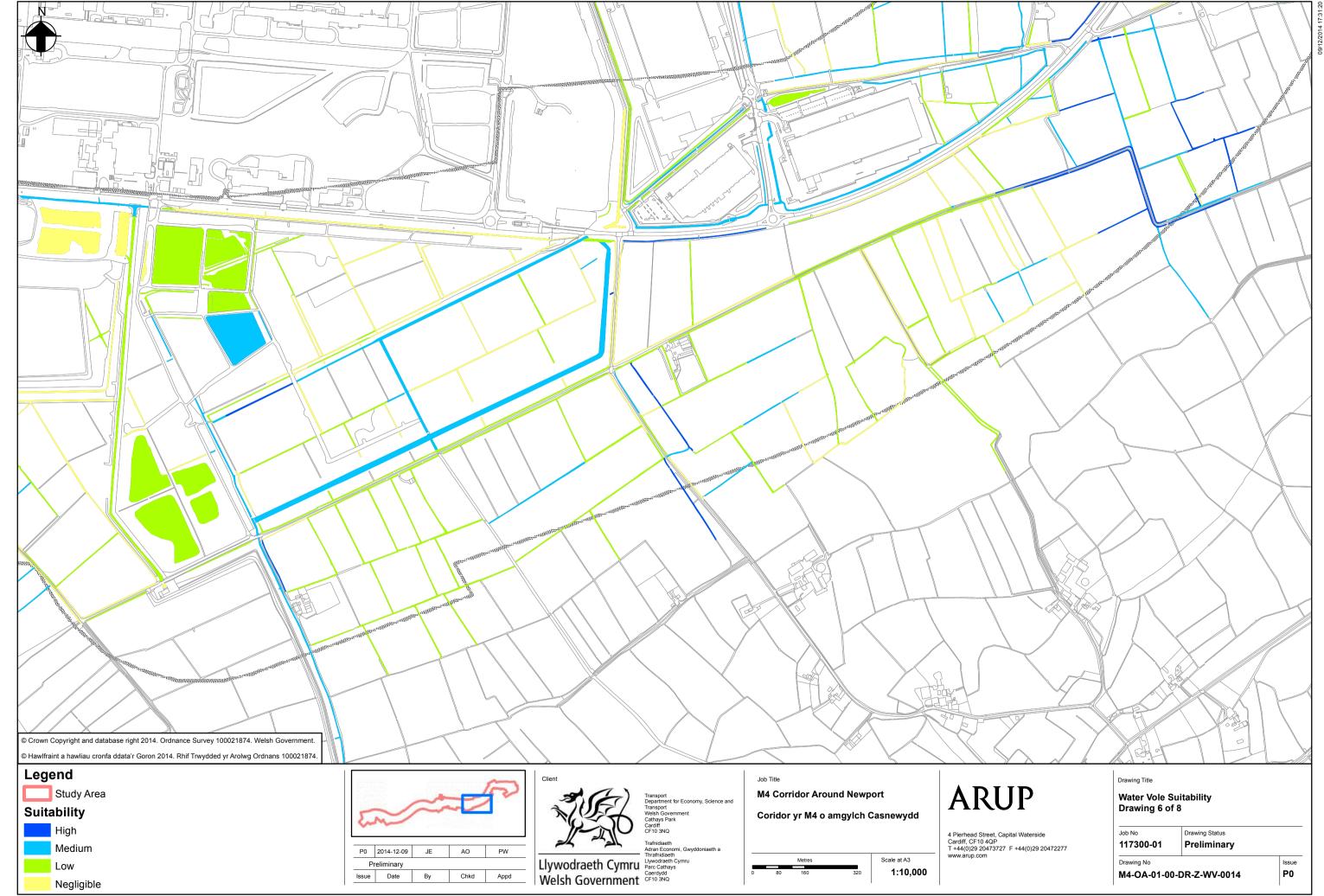


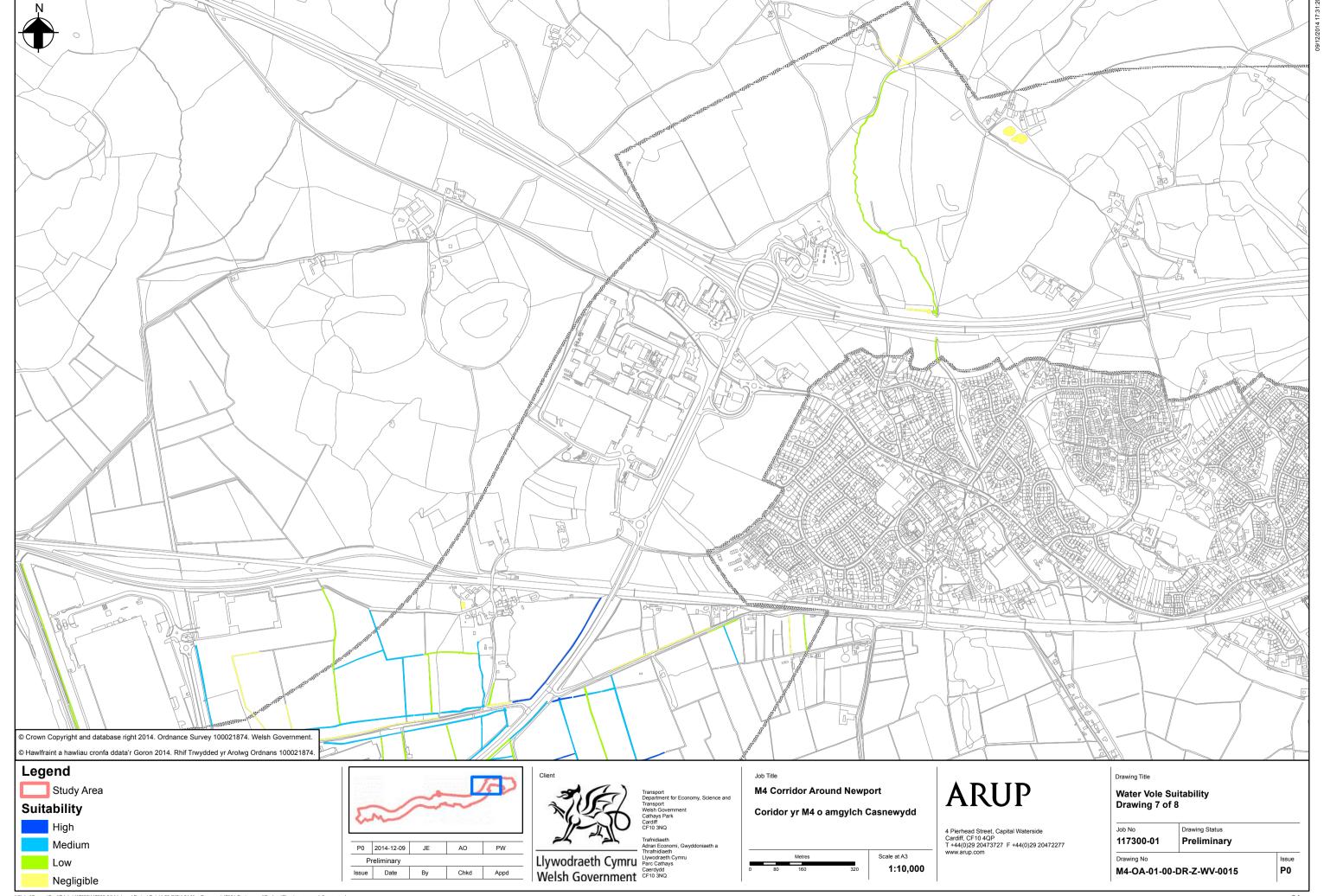


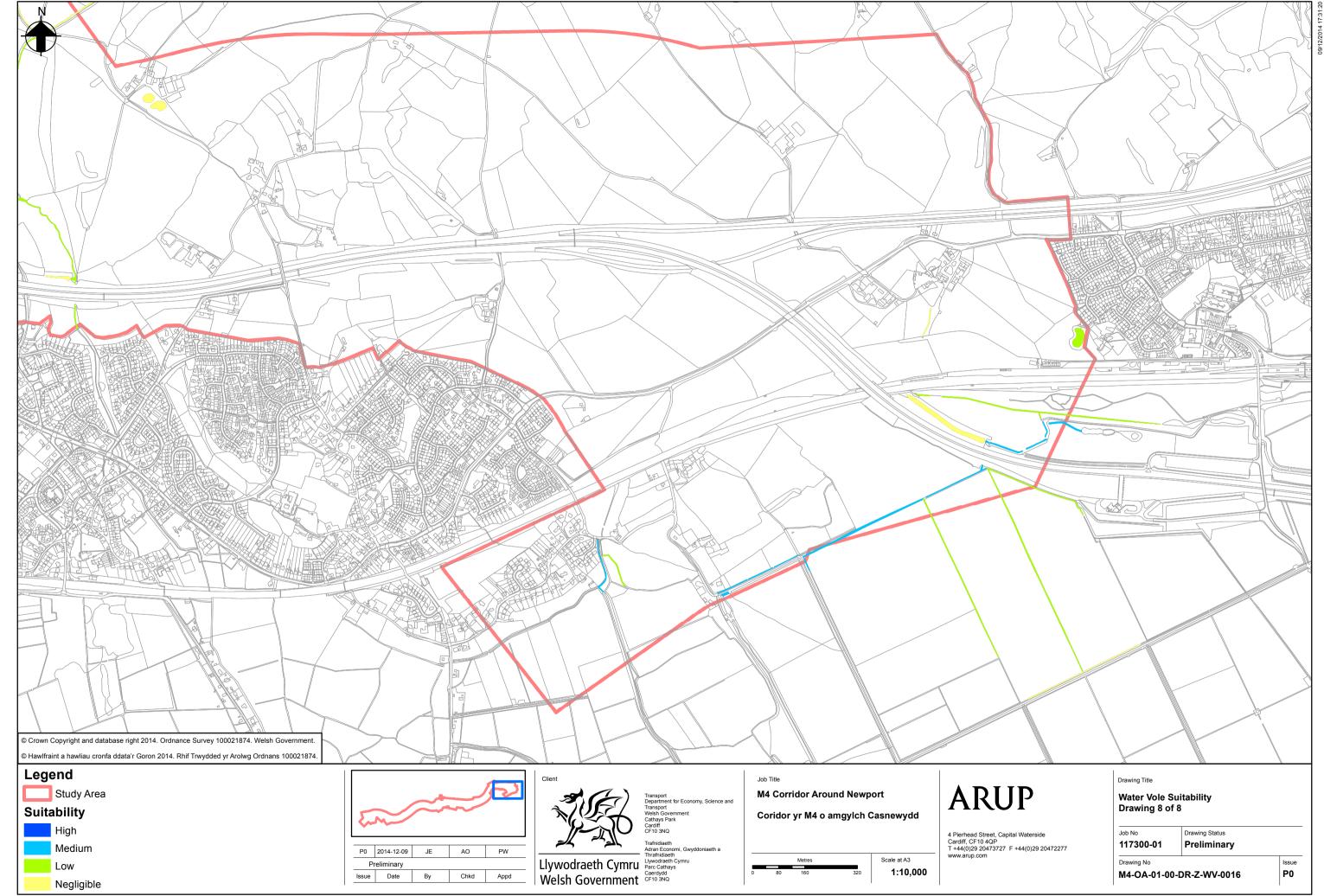












Appendix A

Otter and water vole records from SEWBReC

A1 Otter and water vole records extracted from SEWBReC data search (dated 5 December 2014)

Species	Date	Count	Description	Location
Otter	03/02/2008	1	Dead otter	M4, Near Cefn Mably
Otter	03/02/2008	1	Dead otter	M4, near Began Farm
Otter	03/02/2008	1	Dead otter	
Otter	18/02/2006	1	Sub-adult male. Dead on road	A48 Trunk Road, St Mellons
Otter	18/05/2004	1	Adult	
Otter	17/03/2000		Footprint	River Rhumney
Otter	17/03/2000		Footprint	River Rhumney
Otter	1990 to 1999		Spraint	Wentloog levels
Otter	1990 to 1999		Spraint	Wentloog levels
Otter	20/12/1997	1	Dead male otter	Castleton. ST2690083500
Otter	07/01/1993 to 19/01/1993		Spraint	Percoed reserve, Gwent Levels
Otter	20/09/2007		Dead on grass verge	Cardiff Road, Newport. Near ONS building, by Tredegar Park Roundabout.
Otter	06/10/2007			Tredegar House, Newport
Otter	27/10/2000		Spraint	High Cross near Canal Bridge
Otter	17/03/2000		Spraint	Percoed reen
Otter	20/09/2007	1	Adult male, dead.	A48, maes glas
Otter	07/04/2000		Spraint	Duffryn Pond * NRW Cardiff Protected Species Data
Otter	19/04/2000		Spraint	Duffryn Pond * NRW Cardiff Protected Species Data
Otter	22/06/2000		Spraint	Duffryn Pond * NRW Cardiff Protected Species Data
Otter	19/08/1991		Site key: Usk 23	
Otter	23/08/2002		Site key: Usk 24	
Otter	23/08/2002		Field signs, otter spraints.	River Ebbw, Newport
Otter	07/04/2000 to 12/10/2000		NRW Protected Species Data	Blackwall reen, Newport

Species	Date	Count	Description	Location
Otter	08-Oct-08		Seen from car, along the Sealand Reen.	Along edge of the B4239, St Brides, Wentlooge
Otter	07 Apr 2000 to 13 Oct 2000		Spraint (9 in total)& prints.	River Ebbw, Maesglas - Rogerstone* NRW Protected Species Data
Otter	15/02/2009	1	Live sighting. Large dog otter, just under railway bridge.	North-west of Newport landfill
Otter	20/12/2000		Spraints & prints, east bank.	George St. Bridge
Otter	23/06/2008		Field signs, otter spraint (1, recent).	SDR Bridge, right bank shoreline
Otter	12/11/2007			Newport Wetlands, Reed Bed 6
Otter	01/07/2001			Newport Wetlands, Perry Lane
Otter	27/11/2001			Newport Wetlands, Field R2
Otter	09/11/2001			Newport Wetlands, Field R2
Otter	22/06/2001			Newport Wetlands, Field R2
Otter	13/01/2008		Otter prints on mink raft.	Newport Wetlands, Field R8
Otter	26/06/2000		Sighting, date when told and not sighting date. GR approx.	Gwent Levels Wetland Reserve
Otter	26/06/2000		Sighting, date when told and not sighting date. GR approx.	Gwent Levels Wetland Reserve* NRW Protected Species Data
Otter	Sep 1999 to Oct 1999		Latrines and feeding remains observed.	Caldicot Level
Otter	Sep 1999 to Oct 1999		Latrines and feeding remains observed.	Caldicot Level
Otter	1999			Access road to Llanwern Steelworks
Otter	1990 to 2005		RTA, access road to works.	Llanwern Steelworks* NRW Protected Species Data
Otter	20-Apr-93		Sighting	Red House Reen
Otter	20-Apr-93		Sighting.	Red House Reen*NRW Protected Species Data
Water Vole	Sep 1999 to Oct 1999		Latrines and feeding remains observed.	Caldicot Level
Otter	12/06/2006	1	Adult female (lactating). Dead on road	Newport Wetlands
Otter	19/09/2000		Spraint	Monk's Ditch, Whitson Arch

Species	Date	Count	Description	Location
Otter	19/09/2000		Spraint.	Monk's Ditch, Whitson Arch* NRW Protected Species Data
Water Vole	16/04/2007			Near Half Acre Corner, Caldicot Level
Otter	02/05/2007	2	One female with single weaned young, seen chasing swans and playing (7.40 am).	Near Half Acre Corner, Caldicot Level
Otter	10/03/2013	1	Otter footprints under bridge on Yoke Reen. Very clear, recent prints in mud. Large adult otter.	Cock Street Nr Redwick
Otter	16/09/1999	1	Killed by truck.	Road to Llanwern Steelworks
Otter	17/01/2008	1	Female. Dead on road	Newport Wetlands
Otter	08/09/2004			Magor
Otter	15/05/2004			Magor
Otter	15/05/2004			Link to M4 J32, Magor
Otter	28/04/2008			M4, Junction 23A
Otter	03/09/2005		Spraint*Grid ref estimated*	Magor Marsh
Water Vole	28/11/2006		Near hide on bridge going into hide	Magor Marsh Reserve
Water Vole	23/07/2003		Live sighting	Magor Marsh Reserve
Water Vole	Mar 1978 to Feb 1979			Magor Marsh
Water Vole	1968 to 1973		In comments section of BTO register form.	Magor Reserve
Otter	23/01/2013			Magor Marsh
Otter	01/02/2013			Magor Marsh
Otter	01/03/2010			Magor Marsh
Water Vole	13/12/2007		Sighted at approx 2.30pm at the banks of a freshwater pond within Magor Marsh reserve, estimated length 18-20cm. Sighted from distance of c.4-5 metres.	Magor Marsh Nature Reserve
Otter	10/03/2013	1	Male on pond. Caught & ate fish in front of recorder.	Magor Marsh
Otter	06/01/2012		In reen	Magor Marsh
Otter	01/12/2000		On right side of Island in Artificial otter holt.	Magor Marsh Reserve
Otter	01/02/1999			Magor Marsh
Otter	21/06/1905		Sighting, outside Newport boundary	Magor Marsh

Species	Date	Count	Description	Location
Water Vole	1965 to 1971		pSSSI site report.	Blackwall Reen NR, Magor
Otter	24/01/2006			Whitewall
Otter	24/01/2006	1	Adult. Dead on road	Whitewall Common
Water Vole	Sep 1999 to Oct 1999		Latrines and feeding remains observed.	Caldicot Level
Water Vole	Sep 1999 to Oct 1999	1	1 live water vole / latrines and feeding remains observed.	Caldicot Level

Appendix B

Dates of survey and weather conditions

B1 Dates of survey and weather conditions

Date	Temperature °C	Wind Speed (Beaufort wind scale)	Wind Direction	Cloud Cover	Description of conditions
02/04/2014	10	2	SE	100	Steady rain
02/07/2014	20	2	SW	60	Sunny
04/07/2014	18	1	SW	60	Dry
05/08/2014	17	3	S	100	Dry
05/08/2014	22	2	SW	20	Sunny
06/08/2014	19	3	SW	20	Sunny
07/08/2014	17	1	Е	30	Sunny
12/08/2014	18	3	W	50	Dry
13/08/2014	19	1	N	50	Dry
14/08/2014	18	2	S	70	Dry
15/08/2014	14	2	SE	40	Sunny
19/08/2014	14	2	SE	40	Sunny
20/08/2014	14	2	NW	70	Dry
21/08/2014	13	2	NW	95	Light drizzle
26/08/2014	18	3	NW	99	Light drizzle
27/08/2014	17	1	SE	40	Sunny
28/08/2014	17.5	1	SW	100	Dry
29/08/2014	16	4	NW	90	Dry
02/09/2014	20	2	SW	50	Dry
08/09/2014	19	1	SE	10	Sunny
09/09/2014	22	1	SW	0	Sunny
10/09/2014	19	1	SE	0	Sunny
11/09/2014	18	2	S	0	Sunny
15/09/2014	18	1	SW	50	Dry
16/09/2014	14	1	Е	60	Dry
17/09/2014	18	2	Е	40	Sunny
22/09/2014	18	1	SW	10	Sunny
24/09/2014	18	3	SW	40	Dry
25/09/2014	15	3	SE	60	Dry
25/09/2014	20	1	SW	30	Sunny
26/09/2014	17	2	SW	40	Sunny
29/09/2014	18	1	SW	80	Dry
30/09/2014	18	2	S	30	Dry
01/10/2014	16	1	SW	95	Light showers

Date	Temperature °C	Wind Speed (Beaufort wind scale)	Wind Direction	Cloud Cover	Description of conditions
06/10/2014	16	1	W	65	Dry
07/10/2014	12	2	SE	50	Heavy showers
08/10/2014	14	2	SW	100	Light showers
09/10/2014	15	3	SW	50	Light showers
10/10/2014	16	3	SE	30	Sunny
13/10/2014	14	4	SW	100	Light drizzle
14/10/2014	14	1	SW	100	Steady rain
15/10/2014	13	3	S	100	Light drizzle
16/10/2014	17	1	SW	40	Sunny
17/10/2014	15	3	SW	30	Sunny
20/10/2014	16	3	SW	95	Light drizzle
21/10/2014	14	3	SW	60	Dry
22/10/2014	13	3	W	70	Dry
23/10/2014	13	3	SW	70	Dry
24/10/2014	14	3	SW	100	Light drizzle
27/10/2014	14	2	SE	80	Dry
28/10/2014	19	1	SW	20	Sunny
29/10/2014	9	1	W	100	Light drizzle
30/10/2014	17	1	SW	40	Dry
31/10/2014	13	1	SW	25	Sunny

Appendix C

Details of limitations of the survey

C1 Details of limitations of the survey

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
02/07/2014	268	Reed choked with dense vegetation.	Yes
04/07/2014	112	Inaccessible, due to dense vegetation enclosing ditch.	Yes
04/07/2014	266	Overgrown ditch but adjacent to good ditch.	Yes
04/07/2014	218	Dry ditch	Yes
04/07/2014	231	Dry ditch	Yes
04/07/2014	249	Wet ditch enclosed by hedge.	Yes
04/07/2014	257	Densely vegetated and overgrown by hedge.	Yes
05/08/2014	1190	Bank recently managed by IDB.	Yes
05/08/2014	1238	Water body is quite inaccessible due to overgrown reeds and also dense vegetation near bridge.	Yes
05/08/2014	1234	Bad water quality	Yes
05/08/2014	536	Poor water quality	Yes
05/08/2014	1207	Bad water quality, polluted, not suitable	Yes
05/08/2014	1220	Dry pond	Yes
05/08/2014	1206	Dry pond with overgrown banks	Yes
05/08/2014	1250	Overgrown. Bad water quality.	Yes
05/08/2014	1071	Dry	Yes
05/08/2014	1257	Overgrown by Phragmites. Bad water quality.	Yes

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
05/08/2014	1241	No access	No
05/08/2014	1260	Inaccessible due to dense vegetation	No
05/08/2014	790	Dry	Yes
05/08/2014	1121	Overgrown, bad water quality, no access	Yes
05/08/2014	1120	Inaccessible, overgrown	Yes
05/08/2014	1248	Overgrown, inaccessible, bad water quality	Yes
05/08/2014	1259	Polluted/bad water quality, open reen.	Yes
05/08/2014	1258	Inaccessible due to dense vegetation	No
05/08/2014	1245	Poor water quality.	Yes
05/08/2014	1196	Reen is inaccessible due to being overgrown vegetation.	Yes
05/08/2014	1259	Reen vegetation in process of being cut by IDB. Due to health and safety risks of surveying whilst heavy machinery is in use, suggest returning at a later date.	Yes
05/08/2014	1197	Inaccessible from one side	Yes
05/08/2014	1273	IDB have cut vegetation back on both sides.	Yes
05/08/2014	1270	Poor water quality. Banksides have recently been managed by the IDB.	Yes
06/08/2014	1152	Moderate water quality.	Yes
06/08/2014	536	Poor water quality	Yes
06/08/2014	1286	Moderate water quality	Yes
06/08/2014	1296	Moderate water quality. On the unmanaged side of reen (west) difficult to access but surveyed 50m. Surveying along managed/cut side (east) no evidence due to management but cannot discount presence.	Yes
06/08/2014	578	Moderate water quality.	Yes

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
06/08/2014	1299	Inaccessible. Overgrown reen.	Yes
06/08/2014	1152	Inaccessible, overgrown.	Yes
06/08/2014	1082	Field ditch, double sided hedge. Moderate water quality.	Yes
06/08/2014	1124	Inaccessible, double hedged, overgrown field ditch.	Yes
06/08/2014	555	Poor water quality	Yes
06/08/2014	562	Inaccessible, double hedged, field ditch	Yes
06/08/2014	1188	Inaccessible reed bed	Yes
06/08/2014	1246	Inaccessible reed bed	No
06/08/2014	1259	Inaccessible reed bed	No
06/08/2014	1299	Inaccessible reed bed	No
06/08/2014	588	Inaccessible, double hedged, adjacent fields have been cut and rolled into sileage	Yes
06/08/2014	564	Dry ditch	Yes
06/08/2014	1077	Inaccessible in most parts	Yes
06/08/2014	1079	Heavily vegetated and encroached by hedgerow	
06/08/2014	1080	Heavily vegetated by reeds, encroached by hedgerow	
06/08/2014	1172	Inaccessible due to dense hedgerow and dense vegetation.	Yes
06/08/2014	579	Moderate water quality.	Yes
07/08/2014	537	Dry ditch.	Yes
07/08/2014	544	Dry ditch.	Yes
07/08/2014	1060	Reen has been recently managed by IDB	Yes

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
07/08/2014	601	Double hedge ditch.	Yes
07/08/2014	1050	Inaccessible due to dense vegetation.	Yes
07/08/2014	1146	Unmanaged field ditch, inaccessible.	Yes
07/08/2014	596	Inaccessible, overgrown	No
07/08/2014	600	Inaccessible, overgrown	No
07/08/2014	598	Dry, inaccessible.	Yes
07/08/2014	595	Inaccessible because of brambles and vegetation. Overgrown, dry ditch.	Yes
07/08/2014	605	Inaccessible, overgrown.	Yes
07/08/2014	594	Intermittent hedge	Yes
07/08/2014	608	Dry, unsuitable	Yes
07/08/2014	1066	Overgrown, inaccessible.	Yes
07/08/2014	759	Mainly double hedged.	Yes
07/08/2014	1155	Unmanaged, dry ditch.	Yes
07/08/2014	678	Poor water quality, high nutrients / eutrophic.	Yes
07/08/2014	853	Dry	Yes
07/08/2014	611	Reen has recently been managed by the IDB and is dry.	Yes
07/08/2014	614	Double hedged.	Yes
07/08/2014	1343	Moderate water quality. Recently managed.	Yes
07/08/2014	1344	Dry	Yes
07/08/2014	853	Dry	Yes

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
07/08/2014	676	Poor water quality, north side managed / cut. On southern side the bank is covered by scrub.	Yes
07/08/2014	583	Overgrown, difficult to access.	Yes
07/08/2014	1148	Section of water body is being managed by the IDB at time of survey.	Yes
12/08/2014	825	Double hedge, makes ditch inaccessible to assess.	Yes
12/08/2014	901	Only 10 metres of bankside was able to be surveyed due to dense hedgerow limiting access.	Yes
12/08/2014	625	Recently cut bankside vegetation. Poor water quality.	Yes
12/08/2014	623	Unsuitable, bad water quality, almost dry, overgrown ditch.	Yes
12/08/2014	621	Possible mink spraint. Heavy duckweed cover. Rat burrow. Mink rafts previously seen in this ditch network.	Yes
12/08/2014	631	Bank could not be checked due to cattle in field.	Yes
12/08/2014	898	Inaccessible, unable to carry out assessment of the water body.	Yes
12/08/2014	976	Unsuitable. Densely vegetated. Heavily shaded. Low water quality. Heavy duckweed cover.	Yes
12/08/2014	744	Unsuitable. Densely vegetated. Heavily shaded. Low water quality. Heavy duckweed cover	Yes
12/08/2014	961	Unsuitable. Densely vegetated. Heavily shaded. Low water quality. Heavy duckweed cover	Yes
12/08/2014	953	Unsuitable. Densely vegetated. Heavily shaded. Low water quality. Heavy duckweed cover	Yes
12/08/2014	895	Unsuitable. Densely vegetated. Heavily shaded. Low water quality. Heavy duckweed cover	Yes
12/08/2014	962	Quite recent mink spraint. No small mammal bones found in spraint.	Yes
12/08/2014	873	Unsuitable. Dense vegetation. High Lemna sp. cover. Shaded.	Yes
12/08/2014	830	Unsuitable. Dense vegetation. High duckweed cover. Shaded.	Yes
12/08/2014	968	Unsuitable. Dense vegetation. High duckweed cover. Shaded.	Yes
12/08/2014	787	Bankside vegetation has recently been managed.	Yes

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
12/08/2014	628	Dense vegetation.	Yes
12/08/2014	903	Unsuitable. Overgrown. Shaded.	Yes
12/08/2014	985	Unsuitable. Overgrown. Shaded.	Yes
12/08/2014	897	Unsuitable. Overgrown. Dry.	Yes
13/08/2014	896	Inaccessible to be able to carry out a proper assessment of the water body.	Yes
13/08/2014	982	Difficult to assess ditch due to dense hedgerow.	Yes
13/08/2014	900	Difficult to access ditch due to dense hedgerow.	Yes
13/08/2014	904	Difficult to assess ditch due to dense hedgerow.	Yes
13/08/2014	980	Double hedged with copse woodland.	Yes
13/08/2014	952	Dense vegetation hinders survey effort, spot checks made along full length where possible.	Yes
13/08/2014	897	Dry ditch	Yes
13/08/2014	984	Double hedged, inaccessible, low water quality	Yes
13/08/2014	743	Inaccessible due to dense vegetation obstructing access. Dry ditch, it is more like a copse than ditch.	Yes
13/08/2014	913	Very low suitability, overgrown by hedge and low water depth and quality at time of survey, heavily over shaded	Yes
13/08/2014	911	Very low suitability, overgrown by hedge and low water depth and quality at time of survey, heavily over shaded. Heavy duckweed cover	Yes
13/08/2014	958	Very low suitability, overgrown by hedge and low water depth and quality at time of survey, heavily over shaded. Heavy duckweed cover	Yes
13/08/2014	1351	Inaccessible in sections.	Yes
13/08/2014	981	Double hedged making inaccessible to survey	Yes

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
14/08/2014	1201	Didn't survey entire length because of health and safety concern regarding contaminated water.	Yes
14/08/2014	1226	Poor water quality. Trees and shrubs growing in centre of reed bed - these areas are inaccessible. Banks predominantly stone with earth banks.	Yes
14/08/2014	1208	Banks mainly man made stone with earth. Poor water quality.	Yes
14/08/2014	1184	Bad water quality. Channel inaccessible. Rest of reed bed overgrown.	Yes
14/08/2014	1200	Bad water quality-polluted.	Yes
14/08/2014	1200	Contaminated water.	Yes
14/08/2014	1072	Moderate water quality	Yes
15/08/2014	1125	Unsuitable, poor water quality.	Yes
15/08/2014	786	Inaccessible due to dense vegetation and woodland.	Yes
15/08/2014	1063	Inaccessible, due to dense vegetation.	Yes
15/08/2014	1127	Poor water quality.	Yes
15/08/2014	1211	Recently managed eastern bank.	Yes
15/08/2014	1062	Overgrown with dense vegetation - inaccessible.	Yes
15/08/2014	757	Inaccessible. Overgrown with dense bramble, nettles, hawthorn, ivy, white willow.	Yes
15/08/2014	1240	Moderate water quality.	Yes
15/08/2014	1133	Inaccessible due to dense vegetation	Yes
15/08/2014	1212	Poor water quality.	Yes
19/08/2014	1130	Poor water quality. Surface covered entirely by duckweed. Overgrown. Difficult to access	Yes
19/08/2014	1137	Dry ditch, unsuitable	Yes

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
19/08/2014	1140	Woody debris/ branches lying across ditch. Low -moderate water quality. 10m has water, looks like other parts are dry.	Yes
19/08/2014	1138	Reed bed only 10m surveyed due to dense vegetation, difficulty in accessing whole pond	Yes
19/08/2014	1139	Reed bed inaccessible, dense vegetation a barrier. Attempted from north, east and south.	Yes
19/08/2014	603	Boat survey recommended, western bank difficult to access. Eastern bank appears recently managed and poached.	Yes
19/08/2014	761	Inaccessible in most places. Spot checks made where possible.	Yes
19/08/2014	1142	Banks poached by cattle. Overgrown ditch. Inaccessible for most parts, spot check where possible	Yes
19/08/2014	673	Fence present on West Bank, difficult to access due to brambles, boat survey recommended. Only 20m surveyed due to fence/brambles	Yes
19/08/2014	675	Moderate water quality	Yes
20/08/2014	555	Old Feeding station found, hedge on other side with hawthorn and blackthorn. Poached on field side of reen in the southern.	Yes
20/08/2014	672	Difficult to access the reen from either side as dense vegetation.	Yes
21/08/2014	955	Inaccessible to carry out assessment, too overgrown.	Yes
21/08/2014	973	Ditch largely inaccessible to survey due to dense bankside vegetation.	Yes
21/08/2014	874	No access permission from South. Inaccessible to walk into the ditch as the sediment is a thin layer over water, too boggy.	Yes
21/08/2014	845	Low water (below 0.5metres) and overgrown with mature trees.	Yes
21/08/2014	843	On the northern side of the ditch there is a barbed wire fence which makes the bank inaccessible. Other bank sides are densely overgrown which makes survey near impossible.	Yes
21/08/2014	678	Maybe best surveyed from Southern side of reen due to dense vegetation.	Yes

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
26/08/2014	849	Inaccessible. Potential use by otters as corridor.	Yes
26/08/2014	850	Old water vole feeding remains, soggy droppings (because of heavy rain difficult to tell if water vole). Inaccessbile in places due to dense vegetation.	Yes
26/08/2014	666	Low water quality, fly tipping in and adjacent to ditch.	Yes
26/08/2014	669	Ditch mainly inaccessible due to dense vegetation.	Yes
26/08/2014	915	Inaccessible to survey some areas of ditch due to dense vegan.	Yes
27/08/2014	636	Western end of reen- vegetation recently cut on south bank. No access to north bank. Mink trap in reen. Reen on SDR and extending to north east to be surveyed by kayak as vegetation and bank slope too difficult to access.	Yes
27/08/2014	633	Largely inaccessible due to steep bank covered with vegetation. West side surveyed, east no access. Adjacent road on west side.	Yes
27/08/2014	845	Field cut very close to reen, including reeds. Western end fenced.	Yes
27/08/2014	873	50% inaccessible. Full length surveyed, inaccessible areas of low suitability.	Yes
27/08/2014	882	Adjacent field grazed right up to reen edge. Southern 50m section inaccessible due to dense vegetation. Water flooding out onto field.	Yes
27/08/2014	874	Dense vegetation hinders survey effort, spot checks made along full length where possible.	Yes
27/08/2014	603	Bank submerged due to recent flooding. Full length of reen walked and surveyed where possible. Further survey recommended when water level has dropped.	Yes
27/08/2014	1181	Dense vegetation on either side of ditch making it unsuitable for otters and water voles.	Yes
27/08/2014	1353	Largely inaccessible due to vegetation.	Yes
27/08/2014	758	Largely inaccessible due to vegetation.	Yes
27/08/2014	1147	Flooding over field. Dry ditch in places completely unsuitable.	Yes

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
27/08/2014	779	Completely inaccessible.	Yes
28/08/2014	944	Reen is heavily poached on both sides. Access to the reen near the M4 side constrained in parts by dense vegetation.	Yes
28/08/2014	705	Unsuitable for water vole as has concrete banks.	Yes
28/08/2014	988	Largely inaccessible	Yes
28/08/2014	709	Hard to access due to fence and nettles adjacent to bank.	Yes
27/08/2014	1145	Inaccessible due to dense vegetation dominating the ditch	Yes
29/08/2014	1060	Heavily grazed banks.	Yes
29/08/2014	928	Recently dredged and cut grass bankside	Yes
29/08/2014	641	Recently dredged and north bank strimmed. Rest of the reen is inaccessible.	Yes
29/08/2014	632	Hedge on east side cut for half section of reen	Yes
29/08/2014	640	Bank cut on one side.	Yes
29/08/2014	643	Overgrown	Yes
29/08/2014	1039	Largley inaccessible due to dense vegetation.	Yes
29/08/2014	1039	Over grown with dense vegetation.	Yes
29/08/2014	1040	Largely inaccessible	Yes
29/08/2014	753	Largely inaccessible	Yes
02/09/2014	861	Ditch dried out after 10m	Yes
02/09/2014	56	Mainly inaccessible	Yes
08/09/2014	59	No water at time of survey, fly tipping evident. Concrete banks.	Yes
08/09/2014	862	Ditch dries up as it travels east. Very little water. Trash in ditch.	Yes

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
08/09/2014	1382	Mainly inaccessible due to steep banks.	Yes
08/09/2014	55	Deeper water depth in parts.	Yes
08/09/2014	42	Water body difficult to access due to dense vegetation.	Yes
08/09/2014	43	Reen to south of Percoed Lane. Largely inaccessible due to dense vegetation.	Yes
08/09/2014	43	Very little water	Yes
09/09/2014	101	Water body is mainly inaccessible due to dense bankside vegetation. Ditch could be used by an otter as a corridor.	Yes
09/09/2014	98	Most of bank disturbed due to farming operations. Ditch dries up in places.	Yes
09/09/2014	103	Dry ditch.	Yes
09/09/2014	109	Dry ditch.	Yes
09/09/2014	105	Dry ditch.	Yes
09/09/2014	9956	Inaccessible, dry difficult to access. Potential use by Otters as a corridor.	Yes
09/09/2014	49	Dry ditch northwards.	Yes
09/09/2014	47	Mainly inaccessible	Yes
09/09/2014	41	Dry ditch.	Yes
09/09/2014	48	Very little water, very difficult to access water body due to dense vegetation. Access permission only granted on one side of the ditch.	Yes
09/09/2014	37	Field vole latrine.	Yes
10/09/2014	94	Very overgrown.	Yes
10/09/2014	9960	Inaccessible due to thick vegetation	Yes
10/09/2014	94	Limited access due to dense vegetation.	Yes

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
10/09/2014	95	Largely inaccessible due to vegetation	Yes
10/09/2014	812	Areas of bank disturbed due to track widening.	Yes
10/09/2014	291	Largely inaccessible due to dense vegetation. Accessible sections have been poached by cattle.	Yes
10/09/2014	292	Largely inaccessible due to dense vegetation	Yes
10/09/2014	294	Largely inaccessible due to vegetation.	Yes
10/09/2014	283	Dry ditch	Yes
10/09/2014	281	Mostly inaccessible due to dense vegetation	Yes
10/09/2014	277	Largely inaccessible due to dense vegetation	Yes
10/09/2014	376	Limited access due to dense vegetation	Yes
10/09/2014	276	Very shallow water, dries in places	Yes
10/09/2014	273	Very little water	Yes
10/09/2014	273	Barely any water	Yes
10/09/2014	272	Limited accessibility due to dense vegetation	Yes
11/09/2014	87	Limited access due to dense vegetation.	Yes
11/09/2014	233	Access limited and heavily poached where possible	Yes
11/09/2014	232	Heavily poached and dries up in sections	Yes
11/09/2014	235	Ditch covered by hedge, access limited, ditch dries up in places	Yes
11/09/2014	230	Hedge covering ditch.	Yes
11/09/2014	253	No access due to fencing and thick shrub. Dry ditch.	Yes
11/09/2014	249	Access very limited due to fence and thick scrub	Yes

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
11/09/2014	250	Poached in places access limited due to bramble	Yes
11/09/2014	1370	Limited access	Yes
11/09/2014	91	Sheltered completely by trees	Yes
11/09/2014	90	Has trees lining south bank	Yes
15/09/2014	27	Entire reen was not surveyed because the bank was too narrow and steep (H&S concerns). The bankside vegetation has very recently been managed. Suggest resurveying when vegetation has recovered.	Yes
15/09/2014	17	One side of bank (eastern edge is heavily vegetated with sycamore and crack willow, brambles). Recently cut, so suggest returning when bankside has recovered. Both sides of bank surveyed.	Yes
15/09/2014	14	Recently cut, suggest returning when vegetation has recovered.	Yes
15/09/2014	22	Only surveyed edge of pond adjacent to golf course, as didn't have access permission to other bankside.	Yes
15/09/2014	1383	Boat survey would be useful due to open water and limited access to bankside.	Yes
15/09/2014	25	Reen has been recently managed, hardly any bankside vegetation present.	Yes
15/09/2014	14	Northern side of bank recently managed.	Yes
15/09/2014	30	Bankside vegetation recently cut.	Yes
16/09/2014	15	Access difficult due to dense vegetation	Yes
16/09/2014	12	East bank recently managed	Yes
16/09/2014	13	Golf course on south side. North bank recently managed	Yes
16/09/2014	28	Inaccessible due to bramble hedge. No land access on west bank. Recently managed on west bank.	Yes
16/09/2014	147	Fly tipping in the water channel. Low water quality.	Yes
16/09/2014	20	Banks recently managed.	Yes
16/09/2014	19	Banks recently managed	Yes

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
16/09/2014	146	Poor water quality (bad odour).	Yes
16/09/2014	44	Difficult access, fenced right up to reen edge, spot checks where possible	Yes
16/09/2014	45	Fenced up to reen, difficult to access.	Yes
16/09/2014	47	Difficult to access. Fenced up to reen edge.	Yes
16/09/2014	49	Dense hedgerow, limited access	Yes
16/09/2014	50	Fenced up to edge of reen	Yes
16/09/2014	141	Poor water quality.	Yes
16/09/2014	48	Fenced up to ditch edge	Yes
16/09/2014	37	Limited accessibility due to fencing and dense vegetation	Yes
16/09/2014	46	Limited accessibility	Yes
16/09/2014	997	Poor water quality, fly tipping, ditch directly adjacent to railway line.	Yes
16/09/2014	254	A wall of nettles makes water body inaccessible	Yes
16/09/2014	255	Drainage ditch for railway, very little water	Yes
16/09/2014	256	Overgrown railway drainage ditch.	Yes
16/09/2014	123	Inaccessible to properly survey due to dense vegetation.	Yes
17/09/2014	459	Dry ditch	Yes
17/09/2014	1167	Mostly inaccessible.	Yes
17/09/2014	1108	Water level low, ditch is inaccessible in most parts.	Yes
17/09/2014	1046	Ditch is mostly inaccessible.	Yes
17/09/2014	764	Cannot access reen over fence.	Yes

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Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
17/09/2014	456	Part of the ditch is dry	Yes
17/09/2014	455	Inaccessible due to dense vegetation	Yes
17/09/2014	1179	Dry ditch in places.	Yes
17/09/2014	415	Inaccessible in places - too overgrown or no entry point. Dried up in parts.	Yes
17/09/2014	684	Hard clay banks. Poor water quality. Southern bank cut, northern bank	Yes
17/09/2014	770	Dry ditch, lack of food, poached by livestock	Yes
17/09/2014	795	Bank of ditch poached by livestock.	Yes
17/09/2014	426	Densely overgrown on both banks. Inaccessible predominantly	Yes
17/09/2014	408	Inaccessible. Reen not in view	Yes
17/09/2014	407	Inaccessible due to dense hawthorn on bankside.	Yes
17/09/2014	797	Moderate water quality.	Yes
17/09/2014	441	Fence down one side. Predominantly inaccessible due to dense bramble scrub.	Yes
17/09/2014	443	Predominantly inaccessible. Spot checks made where accessible.	Yes
17/09/2014	1310	Poor water quality. Poached.	Yes
17/09/2014	1161	Poor water quality	Yes
17/09/2014	1168	Dry ditch	Yes
17/09/2014	1100	Access limited due to dense vegetation (bramble).	Yes
22/09/2014	176	Dry ditch	Yes
22/09/2014	99	Inaccessible due to overgrown vegetation both sides.	Yes
22/09/2014	175	Dry ditch	Yes

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
22/09/2014	318	Access limited due to fence and hedge	Yes
22/09/2014	98	Inaccessible due to dense undergrowth.	Yes
22/09/2014	686	Dry ditch	Yes
22/09/2014	101	Dense undergrowth along length makes water body inaccessible.	Yes
22/09/2014	100	Densely overgrown each side, mostly inaccessible.	Yes
22/09/2014	687	Dry ditch	Yes
22/09/2014	102	Dense undergrowth each side of ditch, mostly innaccessible.	Yes
22/09/2014	103	Dry ditch	Yes
22/09/2014	109	Low water quality near railway line	Yes
22/09/2014	179	Access limited due to hedge	Yes
22/09/2014	108	Inaccessible. Heavily overgrown.	Yes
22/09/2014	105	Dry at time of survey.	Yes
24/09/2014	96	Some areas inaccessible. Would be good to have another look from opposite bank if land access possible.	Yes
24/09/2014	295	Inaccessible due to dense vegetation	Yes
24/09/2014	296	Inaccessible due to dense vegetation	Yes
24/09/2014	306	Becomes deeper, steeper on one bank so difficult to survey.	Yes
24/09/2014	314	Dry at time of survey	Yes
24/09/2014	313	Shaded, no food items suitable for water vole	Yes
24/09/2014	286	Inaccessible due to dense vegetation	Yes
24/09/2014	94	Steep bank mostly inaccessible, dog walkers	Yes

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
24/09/2014	1387	Fenced on one side, and dense vegetation inhibits complete survey of water body.	Yes
25/09/2014	244	Access permission to other side of ditch not permitted, possibly need to survey from other side. But ditch is mainly double hedged both sides. Poached in places - cows grazing opposite side of ditch (Southern side of ditch).	Yes
25/09/2014	242	Sections of water body inaccessible due to dense vegetation.	Yes
25/09/2014	241	Hedged section (blackthorn / bramble).	Yes
25/09/2014	236	The ditch turns into a small section of woodland which could provide a corridor / refuge for otters. Mainly the ditch is inaccesible due to dense vegetation.	Yes
25/09/2014	235	Poor water quality poor.	Yes
25/09/2014	136	Quite inaccessible due to dense vegetation on bankside.	Yes
25/09/2014	134	Quite inaccessible due to dense bramble on bankside.	Yes
25/09/2014	144	Reen has recently been cleared by IDB.	Yes
25/09/2014	42	Section of ditch is very shaded, shallow ditch with not a lot of vegetation	Yes
25/09/2014	48	Dry in some places	Yes
25/09/2014	46	Inaccessible in some areas, poaching on bankside.	Yes
25/09/2014	1388	Inaccessible in some areas	Yes
25/09/2014	126	Inaccessible in areas	Yes
25/09/2014	137	Inaccessible in some areas.	Yes
26/09/2014	181	Poaching on banks.	Yes
26/09/2014	182	Scrubbed over	Yes
26/09/2014	237	Poor water quality, bank on farm field side heavily poached and silted.	Yes

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
26/09/2014	238	Field side heavily poached, with poor water quality and fewer aquatic plants. Large building to other side between which is a dense but narrow margin of vegetation.	Yes
26/09/2014	185	Dry	Yes
26/09/2014	227	Shallow banks of no opportunities for borrowing could be used as corridor.	Yes
26/09/2014	195	No bank	Yes
26/09/2014	198	Decent bank on one side, but with scrub which makes inaccessible.	Yes
26/09/2014	197	Open - no banks for burrowing, good foraging.	Yes
26/09/2014	205	Dry ditch, overgrown with grass	Yes
26/09/2014	275	Inaccessible, dry.	Yes
26/09/2014	274	Largely inaccessible, dry.	Yes
26/09/2014	215	Inaccessible due to dense vegetation	Yes
29/09/2014	400	Overgrown difficult to access in places, dries up in places	Yes
29/09/2014	404	Considerable amount of rubbish. Secluded areas of shelter, dense scrub.	Yes
29/09/2014	395	Limited access, dry ditch	Yes
29/09/2014	394	Dry ditch	Yes
29/09/2014	441	Inaccessible from east field which is the route we have access from.	Yes
29/09/2014	801	Dry ditch	Yes
29/09/2014	378	Dry ditch	Yes
29/09/2014	379	Dry	Yes
29/09/2014	430	Inaccessible from north side	Yes
29/09/2014	393	Limited access, ditch dry in places	Yes

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
29/09/2014	388	Dry ditch, limited access	Yes
29/09/2014	833	Dry ditch	Yes
29/09/2014	832	Dry ditch	Yes
29/09/2014	426	Very poor water quality at western end	Yes
29/09/2014	386	Dry ditch	Yes
29/09/2014	840	Inaccessible from west side, east side has no access permission	Yes
29/09/2014	415	Water dries in places	Yes
29/09/2014	408	Very limited accessibility due to dense vegetation	Yes
29/09/2014	375	Inaccessible. Brambles and hawthorn	No
29/09/2014	376	Inaccessible. Bramble and hawthorn	No
29/09/2014	377	Inaccessible -brambles, hawthorn	No
29/09/2014	429	Limited accessibility due to dense vegetation. Dry in several locations	Yes
29/09/2014	841	Low water quality	Yes
29/09/2014	427	Limited accessibility due to dense vegetation	Yes
29/09/2014	478	Mostly dry	Yes
29/09/2014	480	Dry ditch	Yes
29/09/2014	1008	Dry ditch	Yes
29/09/2014	1012	Not accessible -bramble, hawthorn, willow, dry ditch	Yes
30/09/2014	1116	Limited accessibility due to dense vegetation	Yes
30/09/2014	1110	Limited accessibility due to dense vegetation. Ditch dry in places. Bank poached in areas.	Yes

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
30/09/2014	509	Poaching, dry ditch, damp in places, getting wetter to north. Debris in ditch, limited accessibility due to dense vegetation.	Yes
30/09/2014	1093	Limited accessibility due to dense hedgerow.	Yes
30/09/2014	454	Limited accessibility due to hedgerow. Becomes very shallow water depth to east.	Yes
30/09/2014	457	Limited accessibility due to hedgerow	Yes
30/09/2014	1339	Inaccessible due to dense scrub and hedgerow	No
30/09/2014	335	Inaccessible. Directly adjacent to industrial site and main road.	Yes
30/09/2014	1331	Pathways through duckweed. Difficult to acces bank - West bank over 45 degree angle, east side less than 45 degree angle in steepness.	Yes
30/09/2014	333	Water body was surveyed from the banks adjacent to footpath on Southern edge, this was due to security fencing & deep water limiting access to water body.	Yes
30/09/2014	332	Poor water quality in ditch, there is fly tipping in ditch. Water body was surveyed from the banks adjacent to footpath on Southern edge,	Yes
01/10/2014	1374	Bankside vegetation has recently been managed.	Yes
01/10/2014	1385	One side of bank has recently been managed.	Yes
01/10/2014	19	Pond dry with marginal vegetation gone over and covering pond base. Note length of 20m specified, but really a pond 20x20m.	Yes
01/10/2014	20	Recently dug out with spoil mounded against edge of pond 19 this open area is moderate.	Yes
01/10/2014	392	Only first 2m with water. Ditch is poached.	Yes
01/10/2014	749	Dry at time of survey but wet in winter as reported by golf club staff.	Yes
01/10/2014	479	Rubbish laden	Yes

M4 Corridor Around Newport Otter and Water Vole Survey 2014

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
01/10/2014	40	Half of ditch unsuitable with trees and scrub.	Yes
01/10/2014	860	Recently flailed. Poor water quality, evidence of oil pollution	Yes
01/10/2014	1029	No access due to dense vegetation.	Yes
01/10/2014	1029	No access due to dense vegetation.	Yes
01/10/2014	1029	No access due to dense vegetation.	Yes
06/10/2014	439	Access difficult due to dense vegetation. Ditch mostly dry with some ponded areas.	Yes
06/10/2014	392	Ditch dries up in places access limited by vegetation	Yes
06/10/2014	390	Access limited by vegetation	Yes
06/10/2014	474	Access limited	Yes
06/10/2014	765	No access due to dense bramble and vegetation. Ditch set back from fence a fair way	No
06/10/2014	442	Limited accessibility due to dense hedgerow	Yes
06/10/2014	486	Overgrown vegetation with some areas of open banks adjacent to inaccessible areas.	Yes
06/10/2014	418	Dry ditch	Yes
06/10/2014	433	Limited access due to dense vegetation	Yes
06/10/2014	472	Dry ditch	Yes
06/10/2014	411	Limited access due to dense vegetation, dry ditch	Yes
06/10/2014	487	Dry ditch	Yes
06/10/2014	6105	Access limited due to vegetation	Yes
06/10/2014	6113	Access very limited due to vegetation, bank vole runs found	Yes
06/10/2014	425	Poached, probably managed on east bank	Yes

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
06/10/2014	403	Totally overgrown with dense scrub. Inaccessible for survey apart from one small gap. Should be viewed from adjacent sheep pasture but unlikely to yield field signs due to dense scrub for potential otter lying up.	Yes
06/10/2014	395	Totally inaccessible due to dense bramble scrub with shading by white willow and other willow sp.	Yes
06/10/2014	402	Inaccessible for survey.	Yes
06/10/2014	507	Ditch dries up adjacent to house, doesn't connect with other ditch.	Yes
06/10/2014	398	Vegetation too dense and impenetrable to survey other than one small access point, where photos taken.	Yes
06/10/2014	399	Vegetation too dense and impenetrable to survey for most of its length.	Yes
06/10/2014	406	Vegetation too dense and shaded to survey for parts of its length. Recent pipe works undertaken with channel and bank disturbance.	Yes
06/10/2014	1010	Vegetation too dense and impenetrable to survey.	Yes
06/10/2014	401	Vegetation too dense and impenetrable to survey. Heavily shaded.	Yes
06/10/2014	402	Vegetation too dense to survey.	Yes
06/10/2014	405	Very densely shaded but surveyed intermittently along length where access permitted.	Yes
06/10/2014	414	No longer functioning as a ditch just a boggy area of ground with mounds of spoil in places.	Yes
07/10/2014	1031	Inaccessible in the majority of the stretch, bramble hawthorn. Dry ditch in area where access was possible.	Yes
07/10/2014	1102	Access limited due to double hedgerow	Yes
07/10/2014	6104	Inaccessible ditch Heavily dense vegetation hinders access	Yes
07/10/2014	6106	Inaccessible due to dense vegetation.	Yes
07/10/2014	6107	Inaccessible due to dense vegetation.	Yes
07/10/2014	6108	Inaccessible due to dense vegetation.	Yes
07/10/2014	465	Water depth varies, access to ditch limited because of dense vegetation.	Yes

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
07/10/2014	468	Inaccessible due to dense hedgerow at south end. North end opens up and has been poached.	Yes
07/10/2014	467	Very overgrown	Yes
07/10/2014	1016	Dry ditch. Poached in places. Inaccessible in places	Yes
07/10/2014	471	Barely any water at present	Yes
07/10/2014	492	Heavy rain last night. Poached bank on field side. Only 50m visible, the rest is overgrown with bramble.	Yes
07/10/2014	1019	Accessibility limited due to dense vegetation.	Yes
07/10/2014	497	Overshaded ditch with no emergent vegetation.	Yes
07/10/2014	1017	Completely inaccessible due to dense vegetation.	Yes
07/10/2014	799	Traveller site adjacent to water body. Survey abandoned due to health and safety concerns.	Yes
07/10/2014	1005	Dense vegetation, inaccessible	Yes
07/10/2014	6112	Double hedged with mature trees and Phragmites, difficult to access due to dense vegetation in and adjacent to water body.	Yes
07/10/2014	1023	No access due to dense vegetation	No
07/10/2014	1105	No access due to dense vegetation	Yes
07/10/2014	499	Poached banks on one side, hawthorn hedge on west bank.	Yes
07/10/2014	839	Dry ditch, mostly inaccessible	Yes
07/10/2014	741	Dry in places	Yes
07/10/2014	461	Limited access due to dense vegetation. Poached in places	Yes
07/10/2014	463	Poached in places	Yes
07/10/2014	834	Limited access due to vegetation	Yes
07/10/2014	464	Limited accessibility due to dense vegetation.	Yes

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Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
07/10/2014	498	Mostly overgrown, small open section with soft rush and hard rush.	Yes
07/10/2014	389	Grassland banks cut and managed, ditch has very low water in parts, 10cm.	Yes
07/10/2014	387	Dry in parts very low water level.	Yes
07/10/2014	1106	Heavy shading by dense hedge cover.	Yes
07/10/2014	1166	Inaccessible and dry, dense scrub. Poached no food plants in open areas.	Yes
07/10/2014	1112	Poached in open areas. Dense inaccessible hedge.	Yes
07/10/2014	1006	Inaccessible but unsuitable.	Yes
08/10/2014	432	Road on south bank. Grass verge recently cut but banks not managed.	Yes
08/10/2014	420	Dry ditch	Yes
08/10/2014	420	Ditch opens up to pond filled with duckweed - no access to pond area	Yes
08/10/2014	512	Shaded, cattle poached	Yes
08/10/2014	1117	Shaded, by hedgerow each time	Yes
08/10/2014	410	Dry ditch.	Yes
08/10/2014	4001	Shaded by dense blackthorn	Yes
08/10/2014	423	Adjacent to road. Very overgrown, limited access due to verge hedgerow, grassland on west side.	Yes
08/10/2014	1328	Little water, very shaded	Yes
08/10/2014	422	Adjacent road. Very overgrown, verge managed but not bank	Yes
08/10/2014	449	Adjacent to road. Livestock grazing and Poached on east side.	Yes
08/10/2014	511	Shaded, little water	Yes
08/10/2014	1114	Overgrown with willow saplings, overshaded.	Yes

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Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
08/10/2014	1115	Almost no water, very overgrown	Yes
08/10/2014	446	Very little water, dry in places, overgrown, verge cut, unmanaged ditch	Yes
08/10/2014	1163	Overgrown, very shaded. Difficult to access.	Yes
08/10/2014	1113	Overgrown, shaded. Difficult to access.	Yes
08/10/2014	556	Access was only granted from Northern side, which was hedged. Southern side open and poached with livestock in field. Spot checks made at gaps in hedge.	Yes
08/10/2014	560	Recently managed on north bank. South side adjacent to road. Water level previously approx 50cm higher (duckweed level on bank)	Yes
08/10/2014	558	Dense vegetation with Phragmites completely covering ditch and bank, dry in places, low water level. Access through Phragmites limited due to some areas interweaves with thick bramble.	Yes
08/10/2014	516	Cows in field (quick survey due to H&S concerns)	Yes
09/10/2014	1107	Latrines found and feeding station, some washed away by heavy rain	Yes
09/10/2014	447	Recently managed within last week. Boat survey possible. Old water vole burrow plugged with vegetation. Part of reen has dense scrub on one side.	Yes
09/10/2014	551	Banks recently managed and cut. A small section (5m) poached by cattle. Water level lower, duckweed line 20cm lower than high watermark.	Yes
09/10/2014	837	Animal poached recently managed, part of field side been reprofiled	Yes
09/10/2014	449	Reen has been recently managed, with grass cut and re-profiling in areas. Signs of cattle poaching on bankside.	Yes
09/10/2014	547	Lots of tree branches fallen into ditch. Cattle grazed field, poached banks.	Yes
09/10/2014	554	Adjacent to road and overgrown with trees. Where there is water, level very low <15cm. Dry in parts, inaccessible.	Yes
09/10/2014	446	Dry ditch on roadside verge	Yes

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
09/10/2014	545	Dry ditch, inaccessible, overgrown. Patches where water is present, <10cm	Yes
09/10/2014	451	Recently managed so field signs might be destroyed. Section of ditch inaccessible because of dense scrub including bramble, this could be used by otters for refuge.	Yes
10/10/2014	492	Inaccessible due to dense vegetation	Yes
10/10/2014	6114	Sections of ditch are double hedged, so inaccessible.	Yes
10/10/2014	497	Woody areas could provide cover / refuge for otters. Bankside heavily vegetated. Poached in areas.	Yes
10/10/2014	503	Bankside recently been managed, poached edges. One side of ditch is hedged.	Yes
10/10/2014	498	Inaccessible in places due to dense vegetation / hedge. Heavily poached in the open sections.	Yes
10/10/2014	505	Wide hedge (small copse) could be refuge for otters. Heavily poached bank adjacent to field.	Yes
10/10/2014	610	No vegetation present as ditch has recently been dredged and banks re profiled.	Yes
13/10/2014	1311	Good water quality, woodland margin along western bank, likely location of burrows if present. Eastern bank poached.	Yes
13/10/2014	1321	Hard clay banks. Poor water quality. Southern bank cut.	Yes
13/10/2014	1320	Dry ditch, lack of food, poached by livestock.	Yes
13/10/2014	516	Moderate water quality.	No
13/10/2014	1249	No access due to thick scrub	Yes
13/10/2014	1326	Inaccessible due to dense vegetation	No
13/10/2014	6110	Bank of ditch poached by livestock.	Yes
13/10/2014	6111	Poor water quality. Poached.	Yes
13/10/2014	1064	Inaccessible due to dense vegetation	No
13/10/2014	1083	Access limited due to thick vegetation	Yes

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
13/10/2014	1081	Limited access due to hawthorn	Yes
13/10/2014	1293	Access limited	Yes
13/10/2014	1254	Dry ditch even following rain	Yes
13/10/2014	4000	Very low water quality access limited	Yes
13/10/2014	568	Limited access dry in places	Yes
13/10/2014	1153	Mainly dry, access limited due to dense vegetation.	Yes
14/10/2014	1143	Inaccessible due to dense vegetation.	Yes
14/10/2014	540	Road side ditch, hedged northern side, fenced on southern banks of which are poached.	Yes
14/10/2014	1055	Inaccessible, locked, managed man made reen.	Yes
14/10/2014	585	Overgrown in parts, dry in parts, litter, roadside grass verge recently mown.	Yes
14/10/2014	1075	Hedged and fenced. Rain might have affected banks, poached by cattle in places, not much bank profile.	Yes
14/10/2014	1338	Northern bank managed during survey - tractor cut vegetation to the ground, no cover left.	Yes
14/10/2014	591	Fenced, scrub and overgrown bramble hindering access, not much bank profile, poached by cattle in places	Yes
14/10/2014	590	Hedged and fenced, not much bank profile, low water level, poached by cattle.	Yes
14/10/2014	589	Difficult to access road side, road ditch, poor quality water. Water level appears lower (at least 30cm). Litter and fly tipping evidence. Recently managed/cut verge.	Yes
14/10/2014	592	Overgrown in sections, difficult to access, roadside verge	Yes
14/10/2014	597	Litter bags in ditch, inaccessible and overgrown with bramble and scrub	Yes
14/10/2014	1303	Ditch/reen location difficult to find/inaccessible	Yes
14/10/2014	1297	Adjacent to reed beds. Banks appear made of waste material. Lack of suitable burrowing material. Completely shaded. Occasional bridge over ditch with concrete channel	Yes

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
14/10/2014	599	Cattle poached north, poor water quality, litter in ditch, roadside verge on south side.	Yes
14/10/2014	1266	Adjacent to reed beds. Banks appear made of waste material. Lack of suitable burrowing material. Completely shaded. Occasional bridge over ditch with concrete channel	Yes
14/10/2014	1268	Adjacent to reed beds. Banks appear made of waste material. Lack of suitable burrowing material. Completely shaded. Occasional bridge over ditch with concrete channel	Yes
14/10/2014	769	Adjacent to reed beds. Banks appear made of waste material. Lack of suitable burrowing material. Completely shaded. Occasional bridge over ditch with concrete channel	Yes
14/10/2014	1308	Adjacent to reed beds. Banks appear made of waste material. Lack of suitable burrowing material. Completely shaded. Occasional bridge over ditch with concrete channel	Yes
14/10/2014	767	Section of ditch is canalised in concrete channel, sluice and bridge.	Yes
14/10/2014	1264	Redundant pond, dry, open, no food plants, banks of pond slag/earth mix	Yes
15/10/2014	1271	Ditch is part of reed/sedge bed. Very low water depth throughout.	Yes
15/10/2014	1317	Dry ditch.	Yes
15/10/2014	1295	Ditch runs round the perimeter of the cement works. Poor water quality, very cloudy. Fenced on cement works perimeter.	Yes
15/10/2014	303	Inaccessible mostly	Yes
15/10/2014	1265	Incorporated into reed bed. Inaccessible.	Yes
15/10/2014	300	Mostly inaccessible	Yes
15/10/2014	1064	Inaccessible reed bed	No
15/10/2014	299	Inaccessible due to dense vegetation	Yes
15/10/2014	297	Very dry ditch	Yes
15/10/2014	1284	Man-made hard banks to south, earth to north. Water very cloudy and turbid, poor quality.	Yes

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
15/10/2014	1267	Man-made hard banks to south, earth to north. Water very cloudy and turbid, poor quality.	Yes
15/10/2014	1285	Man-made hard banks to south, earth to north. Water very cloudy and turbid, poor quality.	Yes
15/10/2014	301	Completely inaccessible	No
15/10/2014	1276	Man-made hard banks to south, earth to north. Water very cloudy and turbid, poor quality.	No
15/10/2014	1280	Concrete channel taking watercourse through St Modwens Glan Llyn site.	Yes
15/10/2014	1281	Concrete channel taking watercourse through St Modwens Glan Llyn site.	Yes
15/10/2014	1279	Concrete channel taking watercourse through steelworks and lagoon area.	Yes
15/10/2014	1275	Holding pond for adjacent works	Yes
15/10/2014	1298	Dry ditch located between natural water course and pollution ditch around perimeter of concrete works.	Yes
15/10/2014	1193	Inaccessible - appears to be dry pond with overgrown banks from aerial	Yes
15/10/2014	1232	Bad water quality	Yes
15/10/2014	1214	Inaccessible but appears to be dry	Yes
15/10/2014	1073	Inaccessible but appears dry	Yes
15/10/2014	677	Dry	Yes
15/10/2014	1230	Overgrown and dry.	Yes
15/10/2014	212	Mostly inaccessible, thick bramble	Yes
15/10/2014	1224	Incorporated as part of reed bed	Yes
15/10/2014	1213	Poor water quality. Trees and shrubs growing in centre of reed bed. These areas are inaccessible. Banks predominantly stone with earth banks.	Yes
15/10/2014	1192	Bad water quality. Channel accessible. Rest or reed bed overgrown.	Yes

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
15/10/2014	1223	Banks mainly man made stone with earth. Poor water quality. Now engulfed by reed beds, so not a distinguishable ditch	Yes
15/10/2014	1233	Dry reed end pond with damp ditch leading to/from it. Reed beds and scrubby woodland adjacent	Yes
15/10/2014	855	No water.	Yes
16/10/2014	931	Very inaccessible and overgrown by dense vegetation.	Yes
16/10/2014	972	Completely inaccessible	No
16/10/2014	1355	Over shaded and no suitable food plants for water voles.	Yes
16/10/2014	1358	Over shaded, dense duck weed in wet sections, dry sections at ends	Yes
16/10/2014	1349	Dry. Dense impenetrable vegetation along majority of ditch. Visible from end. Over shaded. Unsuitable.	Yes
16/10/2014	1360	Dry over shaded unsuitable	Yes
16/10/2014	1149	Low water level.	Yes
16/10/2014	1356	Low water level.	Yes
16/10/2014	785	Dry but woodland has holt potential.	Yes
16/10/2014	970	Very overgrown, dry.	Yes
16/10/2014	773	Inaccessible and no land access.	No
16/10/2014	772	Steep drop to reen, bank side overgrown with nettles and brambles makes access in reen difficult.	Yes
16/10/2014	1209	Inaccessible due to dense vegetation	No
16/10/2014	1067	Inaccessible due to dense vegetation	No
16/10/2014	756	Inaccessible due to dense vegetation	No
16/10/2014	1353	Inaccessible due to dense vegetation	No
16/10/2014	758	Inaccessible due to dense vegetation	No

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
16/10/2014	1222	Dry ditch, it is a woodland but has potential to be used by otters for refuge.	Yes
16/10/2014	1131	Mainly dry but woodland has holt potential.	Yes
16/10/2014	965	Hawthorn hedgerow makes access difficult	Yes
16/10/2014	1357	Most of ditch is over shaded and inaccessible.	Yes
16/10/2014	644	Dry ditch. Nothing there	Yes
16/10/2014	1074	Semi dry and over grown and shaded.	Yes
16/10/2014	1065	Dry and over shaded	Yes
16/10/2014	713	Field ditch / no water. Field recently managed. Short section of bull rush but overgrown.	Yes
16/10/2014	1187	Inaccessible overshaded	No
16/10/2014	1144	Inaccessible due to dense vegetation	No
16/10/2014	1199	Polluted throughout entire length.	Yes
17/10/2014	752	Dry ditch cattle grazing arable field recently managed.	Yes
17/10/2014	711	Inaccessible due to double fencing and hedge. cattle grazed.	Yes
17/10/2014	714	Double fenced, overgrown and inaccessible. No access allowed from north (motorway verge) and steep banks.	Yes
17/10/2014	662	Dry ditch, road on north, tall ruderal/scrub south. No access permission from south. A small stretch 10m has water.	Yes
17/10/2014	661	Sheep grazed. Survey aborted after 10m due to presence of aggressive sheep.	Yes
17/10/2014	657	Overgrown with bramble. Very low water level but adjacent to a deeper more open reen.	Yes
17/10/2014	654	No access from east field. West fenced, overgrown banks with nettles, bramble. Difficult to access. Hand search on west side of fence. Horse grazed.	Yes
20/10/2014	63	Limited access due to scrub	Yes

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
20/10/2014	64	Limited access due to dense scrub	Yes
20/10/2014	62	Dry ditch limited access	Yes
20/10/2014	9999	Limited access due to bramble.	Yes
20/10/2014	863	Ditch inaccessible	No
21/10/2014	1391	Water body surrounded by scrub.	Yes
21/10/2014	51	Recently managed on east bank. Scrubby woodland to east, fields to west. Reen flowing, water turbid and brown. Water quality unknown due to high sediment load.	Yes
21/10/2014	53	Inaccessible due to thick vegetation on both banks. Adjacent to scrubby woodland	Yes
21/10/2014	78	Recently managed, all potential evidence destroyed by the bank management. Works to the north.	Yes
21/10/2014	494	Heavily poached by livestock. Ditch running through livestock field.	Yes
21/10/2014	493	Dense vegetation limits survey. Where there are gaps in the vegetation, the bankside has been poached. Livestock grazing on both sides	Yes
21/10/2014	1094	Largely inaccessible due to dense vegetation. Where open, highly poached by cattle	Yes
21/10/2014	1165	Adjacent and through to farm and run down sheds. Ditch virtually dry. Shaded.	Yes
21/10/2014	321	High banks, sometimes vertical. Following storms water level has risen.	Yes
21/10/2014	1104	Poached in areas. Livestock on both sides.	Yes
21/10/2014	1162	Unfenced on north side, poached by livestock and managed.	Yes
21/10/2014	1001	Recently managed reen.	Yes
21/10/2014	639	Bank not very accessible, steep and well vegetated, platform on southern bank too steep to inspect	Yes
21/10/2014	650	Bank not very accessible, steep and well vegetated.	Yes
21/10/2014	842	Bank not very accessible, steep and well vegetated.	Yes

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
21/10/2014	954	Bank not very accessible, steep and well vegetated, bridge checked for signs	Yes
21/10/2014	971	Bank not very accessible, steep and well vegetated.	Yes
21/10/2014	686	Dry ditch, inaccessible in places due to double hedge.	Yes
21/10/2014	319	Steep almost vertical banks make areas of ditch inaccessible. Heavily poached, steep bank and raised water level limited survey.	Yes
22/10/2014	6487	Fenced, full access not gained, survey done from other side of fence.	Yes
22/10/2014	615	Dry ditch. Low potential for commuting otters. Shetland ponies grazing field	Yes
22/10/2014	634	No water present/overgrown.	Yes
22/10/2014	644	No water present/overgrown	Yes
22/10/2014	951	No water present/overgrown	Yes
22/10/2014	613	Managed reen. Field recently cut. Aquatic plants not present.	Yes
22/10/2014	647	Steep banks but little food. Recently managed reen.	Yes
22/10/2014	648	Dry offshoot to 647, then becomes shallow and covered in duckweed.	Yes
22/10/2014	1150	Mainly dry	Yes
22/10/2014	908	Overgrown, little water, not very accessible due to bramble.	Yes
22/10/2014	937	Recently managed on west bank. Mostly dry. Where water present it is less then 15cm deep	Yes
22/10/2014	892	Inaccessible due to barb wire/bramble	Yes
22/10/2014	963	Largely inaccessible - bramble	Yes
22/10/2014	778	Manmade banks not suitable for burrows.	Yes

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
22/10/2014	777	Overgrown by trees and scrub - inaccessible. Neighbouring banks manmade not suitable for burrows	Yes
22/10/2014	1128	Approached from the east and surveyed for 10m until dense vegetation hindered access.	Yes
22/10/2014	1126	Inaccessible due to dense vegetation	No
22/10/2014	638	Dense scrub limits access. Ditch managed, common reed has been cut back recently.	Yes
22/10/2014	990	Recently managed ditch. Does not appear to hold as much water as the section further South. Phragmites	Yes
22/10/2014	1132	Tops of banks man-made - rubble	Yes
23/10/2014	661	Only short section surveyed due to presence of aggressive sheep.	Yes
23/10/2014	846	Stone banks present in sections of the water body	Yes
23/10/2014	1316	South bank has a layer of manmade rubble/tarmac - potential constraint to burrowing.	Yes
23/10/2014	465	Heavily overgrown double hedged in places.	Yes
23/10/2014	768	Inaccessible from north due to overgrown brambles. Manmade structures present.	No
23/10/2014	1174	Inaccessible banks. Spot check on bridge. Concrete banks present to support bridge.	Yes
23/10/2014	766	Inaccessible due to dense vegetation	No
23/10/2014	1309	Inaccessible due to dense vegetation	No
23/10/2014	1304	Inaccessible due to dense vegetation	No
23/10/2014	1305	Inaccessible due to dense vegetation	No
23/10/2014	1332	Inaccessible due to dense vegetation	No
23/10/2014	1318	Inaccessible, no access	No
23/10/2014	1319	Inaccessible, no access	No

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
23/10/2014	831	Inaccessible due to land access. Spot check from north vantage point carried out. Sheep present in field.	No
23/10/2014	1340	Flooded ditch, sheep present, poached bank	Yes
24/10/2014	987	Inaccessible and overgrown. Horses in field, bulrush present in damp field.	No
24/10/2014	986	Dry field ditch. Horse grazed field.	Yes
24/10/2014	789	Surveyed from road verge - no access to field. Litter in reen. Road verge managed. Phragmites cut.	Yes
24/10/2014	1132	Unidentified droppings due to water/rain washing away. East of the pond dense with bramble scrub. Water vole feeding station.	Yes
24/10/2014	1225	Shaded habitat. Scrub hindering access to whole length of reen.	Yes
24/10/2014	1242	No access, thick bramble and scrub	No
27/10/2014	1217	Inaccessible due to dense vegetation	No
27/10/2014	1217	Inaccessible due to dense vegetation	No
27/10/2014	1216	Inaccessible due to dense vegetation	No
27/10/2014	1218	Inaccessible due to dense vegetation	No
27/10/2014	1235	Inaccessible due to dense vegetation	No
27/10/2014	779	Inaccessible (traveller site close by). Managed recently on west bank.	Yes
27/10/2014	576	Inaccessible, fence on west and thick scrub on east. Spot checks done where possible. Some stretches overgrown with Phragmites.	Yes
27/10/2014	577	Sheep grazed, access difficult from east due to dense scrub cover from brambles. Spot checks done where possible.	Yes
27/10/2014	574	Reen has been recently managed on the side close to the road, litter in reen, potential corridor for otter.	Yes
28/10/2014	1251	Cows present in field with signs of poaching present. Roadside verge recently managed.	Yes

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
28/10/2014	570	Cattle grazing. Overgrown difficult to access due to fencing.	Yes
28/10/2014	570	Cattle grazing. Overgrown difficult to access due to fencing.	Yes
28/10/2014	572	Inaccessible due to hedges and fence and no land access on south side.	No
28/10/2014	557	Boat survey. Both banks managed. Poached.	Yes
28/10/2014	580	Livestock grazing though none currently present. Banks recently managed.	Yes
28/10/2014	565	No boat survey carried out due to low water level and poor water quality. Adjacent to road.	Yes
28/10/2014	566	Boat survey not carried out due to low water level and access (bull in field). Moderate water quality. Adjacent to road.	Yes
28/10/2014	578	Boat survey. At time of survey bankside management was being carried out.	Yes
28/10/2014	1095	Inaccessible due to scrub. Treeline and hedge. Spot checks undertaken where possible.	Yes
28/10/2014	1177	Poached banks. Stretches of ditch covered on both side by scrub (bramble and young trees).	Yes
28/10/2014	1178	Bank has been recently managed.	Yes
29/10/2014	470	Inaccessible due to dense vegetation.	Yes
29/10/2014	683	Boat survey not carried out due to lowered water level in reen and dense Macrophyte cover.	No
29/10/2014	1170	Boat survey not carried out due to lowered water level in reen and dense. Macrophyte cover.	No
29/10/2014	786	Boat survey not carried out due to lowered water level in reen and dense Macrophyte cover.	No
29/10/2014	652	Boat survey not conducted. Lowered water level. Dense aquatic vegetation.	No
29/10/2014	639	Boat survey not carried out. Lowered water level in a stretch, dense aquatic vegetation. No suitable entry location.	No
29/10/2014	421	Dry ditch in and adjacent to woodland.	Yes
29/10/2014	957	Cattle poached in some crossing points, little water - more damp/marshy.	Yes

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
29/10/2014	850	Boat survey not conducted due to poor tracks leading to site - hindering transportation to reen.	No
29/10/2014	6140	Difficult to survey due to dense vegetation. Potential use of water body as corridor / foraging site.	Yes
29/10/2014	1132	Boat survey not carried out due to suspected water contamination. (Sulphur)	Yes
29/10/2014	808	Little water, very shaded	Yes
29/10/2014	909	Only accessible in small gaps	Yes
29/10/2014	959	Only accessible in small gaps	Yes
29/10/2014	910	Only accessible at end because bramble covers 90% of it	Yes
29/10/2014	910	Only accessible at end because bramble covers 90% of it	Yes
29/10/2014	490	Dry ditch. Could be used by Otters as a corridor / refuge. Ditch is located between two residential houses so thorough survey was not possible.	Yes
30/10/2014	936	Continuation of 935. Inaccessible on parts due to concrete banks and fast flow of water	Yes
30/10/2014	944	Spot checks done where possible. Overgrown by nettle and trees in stretches. Land access not granted. Done from PRoW.Poached banks. Natural dam from log piles	Yes
30/10/2014	917	No land access. Horses in field.	No
30/10/2014	849	Mostly inaccessible	Yes
30/10/2014	1382	Boat survey undertaken. Difficult to get to northern bank due to dense sweet reed grass cover.	Yes
30/10/2014	692	Dry ditch. Fencing with hedgerow.	Yes
30/10/2014	689	Hedge on south west/road side. No access from north West Bank (private land). Inaccessible but spot checks carried out where possible.	Yes
30/10/2014	691	Difficult to assess banks due to no land access away from PRoW.	No
30/10/2014	639	Boat surveys undertaken. Water quality very anoxic sediments.	Yes

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
30/10/2014	815	Mostly inaccessible, dry	Yes
30/10/2014	885	Dry ditch	Yes
30/10/2014	7	Low water levels, damp and dry in places. Near woodland, next to motorway. Cow pats in field indicate that the land is used for grazing. Litter dumped in field.	Yes
30/10/2014	932	Very overgrown, mostly inaccessible	Yes
31/10/2014	1141	Inaccessible due to scrub. Very shallow banks so less suitable for water vole	Yes
31/10/2014	1210	Inaccessible. Surveyed for GCN 2010. Very shallow banks.	Yes
31/10/2014	1070	Inaccessible due to scrub	No
31/10/2014	1221	Inaccessible due to dense vegetation	No
31/10/2014	1227	Inaccessible due to scrub	No
31/10/2014	881	Barb wire fence and bramble prevented searching bank, evidence found 1-2m from Ditch. Little water in ditch itself. Survey constrained by limited access to ditch / dense vegetation	Yes
31/10/2014	1218	Inaccessible due to scrub	No
31/10/2014	1217	Inaccessible due to scrub	No
31/10/2014	1235	Inaccessible due to scrub	No
31/10/2014	1295	Poor water quality. Water is a creamy-grey colour. Potential use of marginal vegetation by otters but due to poor water quality, the water body has negligible use by Otter & Water Vole in its current state.	Yes
31/10/2014	922	Recently dredged limited the survey effort.	Yes
31/10/2014	451	No boat survey undertaken as too low water and clogged up	No
31/10/2014	322	Pond surrounded by security fencing, so water body was surveyed from PRoW.	Yes
31/10/2014	447	No boat survey undertaken as too low water and clogged up	No

Date	Waterbody number	Limitation to survey	Was a complete assessment carried out?
31/10/2014	485	No boat survey undertaken as too low water and clogged up.	No
31/10/2014	330	Pond is inaccessible due to security fencing and dense scrub bordering water body.	Yes
31/10/2014	685	Poached bankside.	Yes
31/10/2014	317	Poached on one side of bank, hedgerow on other bank. Sea Wall Reen.	Yes

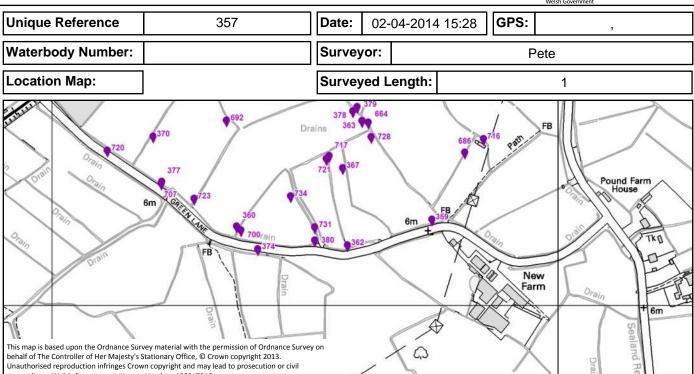
Appendix D

Recording sheets from the Riparian Mammal surveys 2014

D1 Recording sheets from the Riparian Mammal surveys 2014

| Rev A | 19 January 2015





Habitat	Reen
Bank Profile	Steep >45deg
Depth of Water	>2m
Channel Width	5 - 10m
Flow Speed	Slow
Shore Banks	Earth

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Neighboring Land Use	Livestock grazing; Scrub;
Bank Management	Unfenced
Suitability for Otters	High
Otter Signs	
Suitability for Watervoles	High
Watervole Signs	Burrows;

Vegetation Description	Comments:
Grass recently cut	Poss water vole burrow on far bank seen during ex phase survey



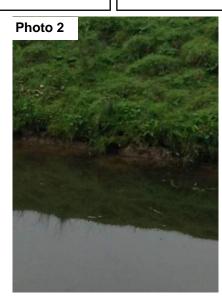


Photo 3



 Unique Reference
 358

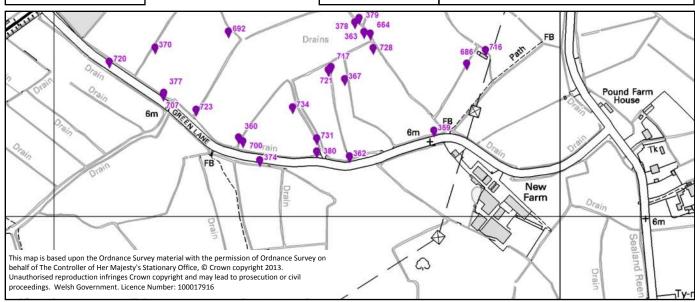
 Date:
 30-05-2014 13:05

 GPS:
 ,

 Surveyor:
 Tom Shelley and Debbie Brown

 Location Map:
 Surveyed Length:

 500



Habitat	River
Bank Profile	Shallow <45deg
Depth of Water	0.5 - 1m
Channel Width	10 - 20m
Flow Speed	Fast
Shore Banks	Boulders

Neighboring Land Use	Urban;
Bank Management	Fenced
Suitability for Otters	High
Otter Signs	Spraints;
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Japanese knotweed! Alder

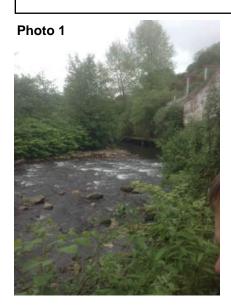
Buddleja Willow

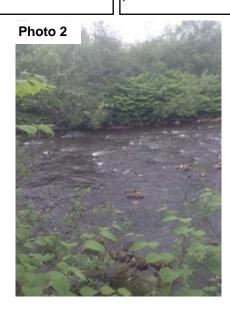
Poplar

Comments:

Pipe runs along right bank and then attached to wall, overhanging river and collapsed in places. Japanese knotweed abundant on both banks.

Old spraint on concrete ledge in centre pier in river. Possible footprints on right bank. No lay ups or holts. WCC potential?









w House Farm

						Welsh Government		
Unique Reference	359	Date:	02-07-2014	16:27	GPS:	51.543029	9, -3.01438	;
Waterbody Number:	276	Survey	Surveyor:		Pip			
Location Map:		Survey	Surveyed Length:			40		
720 377 377	692 378 664 Drains 363 7,17 367	670	716	FB	Cottage	d Farm		Drain

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Habitat	Ditch			
Bank Profile	Flat <10 degrees			
Depth of Water	<0.5m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description	Comments:
Reed choked	





					Welsh Government	
Unique Reference	360	Date:	02-07-2014 13:3	GPS :	51.542863,	-3.019935
Waterbody Number:	282	Survey	or:	Pip		
Location Map:		Survey	red Length:	ngth: 70		
This map is based upon the Ordnance Survey m behalf of The Controller of Her Majesty's Statio Unauthorised reproduction infringes Crown coproceedings. Welsh Government. Licence Num	nary Office, © Crown copyright 2013. byright and may lead to prosecution or c	FB Survey on		379 664 728 6m	359	Pearl FB New Farm

Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	0.5 - 1m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

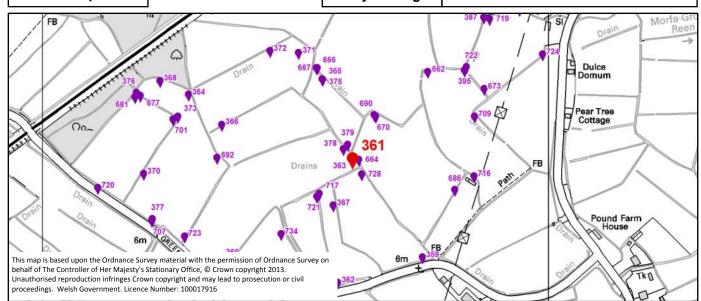
Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:





Unique Reference	361	Date: 02-07-2014 13:31		Date: 02-07-2014 13:31		GPS:	51.544757, -3.016413
Waterbody Number:	277	Surveyor:		F	Pip		
Location Map:		Surveyed Length:					



Habitat	Ditch			
Bank Profile	Flat <10 degrees			
Depth of Water	<0.5m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description	Comments:





						Welsh Government	
Unique Reference	362	Date:	02-	07-2014 15:54	GPS:	51.542557, -3.016778	
Waterbody Number:	279	Survey	Surveyor:		I	Pip	
Location Map:		Survey	Surveyed Length:				
Tall Tall Tall Tall Tall Tall Tall Tall	377 723 734 6m 360 700 Di374 FB Drain	378 363 363 361 747 721	128	686 00 359,	716 Part		

Habitat	Ditch			
Bank Profile	Flat <10 degrees			
Depth of Water	<0.5m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

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Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

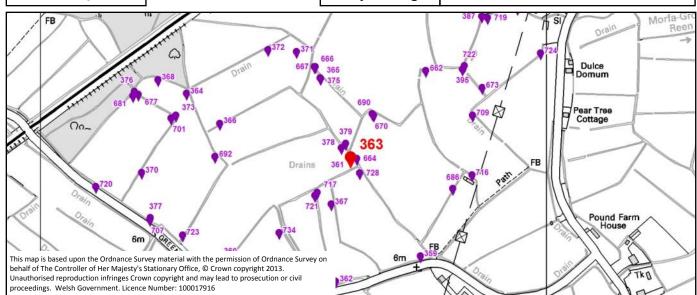
Vegetation Description	Comments:
Hedge ditch	



Photo 2 Photo 3



Unique Reference	363	Date:	02-	07-2014 13:55	GPS:	51.544757, -3.016413
Waterbody Number:	866	Survey	or:		F	Pip
Location Map:		Surveyed Length: 60		60		



Habitat	
Bank Profile	Flat <10 degrees
Depth of Water	<0.5m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description	Comments:





						Llywodraeth Cymru Welsh Government	
Unique Reference	364	Date:	02-	07-2014 11:51	GPS:	51.545839, -3.021106	
Waterbody Number:	284	Surveyor:			Pip		
Location Map:		Surveyed Length:		ength: 60			
erdv This map is based upon the Ordnance Survey behalf of The Controller of Her Majesty's S	rey material with the permission of Ordnance Surve tationary Office, © Crown copyright 2013. In copyright and may lead to prosecution or civil	368 77 373 701	364	7433 703 384 372 371 667 667 6 Drains	392 390 366 365 375 379 664 363 363 72	382 393 663 383 722 395 673 690 670 8 686 8 716 8	

Habitat	Ditch			
Bank Profile	Flat <10 degrees			
Depth of Water	<0.5m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

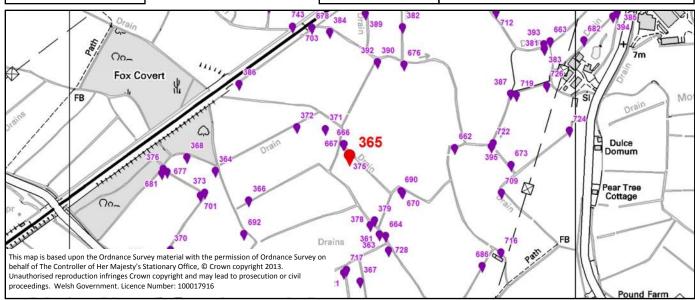
Vegetation Description	Comments:
Reed choked	



Photo 2 Photo 3



Unique Reference	365	Date:	02-	07-2014 14:12	GPS:	51.546146, -3.017298
Waterbody Number:	272	Surveyor:		F	Pip	
Location Map:		Surveyed Length:				



Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	<0.5m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

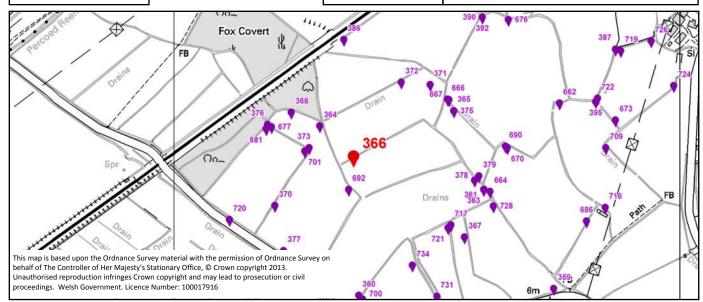
Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description	Comments:





Unique Reference	366	Date:	02-	07-2014 14:45	GPS:	51.54532, -3.020144
Waterbody Number:	269	Survey	or:		F	Pip
Location Map:		Surveyed Length:				



Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	<0.5m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description	Comments:



Photo 2 Photo 3



						Llywodraeth Cymru Welsh Government
Unique Reference	367	Date:	02-0	07-2014 16:05	GPS:	51.54392, -3.016938
Waterbody Number:	278	Survey	Surveyor:		ſ	Pip
Location Map:		Surveyed Length:		ength:		30
behalf of The Controller of Her Majesty's S	as a second of the permission of Ordnance Surve tationary Office, © Crown copyright 2013.	721	379 664	395	N N	Pear Tree Cottage Pound Farm House

Habitat	Ditch
Bank Profile	Flat <10 degrees
Depth of Water	<0.5m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description	Comments:
Hedge	





Photo 3



					Welsh Government	
Unique Reference	368	Date:	02-07-2014	11:40 GPS	51.5460	75, -3.021922
Waterbody Number:	285	Survey	or:		Pip	
Location Map:		Survey	ed Length:		40	
behalf of The Controller of Her Majesty's St	ey material with the permission of Ordnance Surve	370 370	386 Orain 366 701 692	372 371 667 666 363 378 Drains	690 670	712 Dr 387 719 662 722 396 673 709
Unauthorised reproduction infringes Crown proceedings. Welsh Government. Licence	n copyright and may lead to prosecution or civil Number: 100017916	377		721	1	

Habitat	Ditch
Bank Profile	Flat <10 degrees
Depth of Water	<0.5m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Farth

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:

Photo 1

Photo 3 Photo 2



<u>-</u>					Llywodraeth Cymru Welsh Government	`	
Unique Reference	369	Date:	02-07-2014 11	GPS :		,	
Waterbody Number:	283	Survey	or:		Pip		
Location Map:		Survey	ved Length:		70		
Pont-estyll	Spr On-	vert	364	372 371 667 365 378	389 389 382 389 676 690 670 664	662	712 387 719 722 395 673 709

377

Habitat	Ditch				
Bank Profile	Flat <10 degrees				
Depth of Water	<0.5m				
Channel Width	1 - 2m				
Flow Speed	Still				
Shore Banks	Earth				

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Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

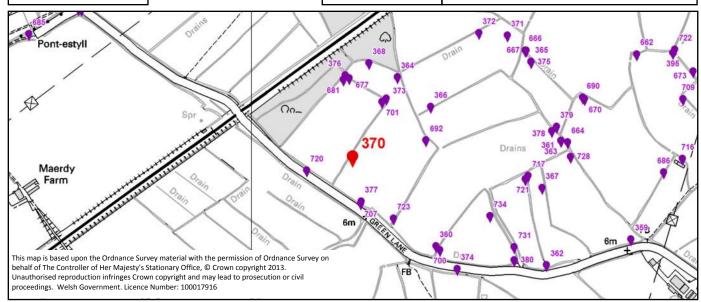
Vegetation Description	Comments:
Virtually dry	



Photo 2 Photo 3



Unique Reference	370	Date:	02-	07-2014 11:16	GPS:	51.544429, -3.022356
Waterbody Number:	293	Surveyor:		I	Pip	
Location Map:		Surveyed Length:			100	



Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	<0.5m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
Hedged	

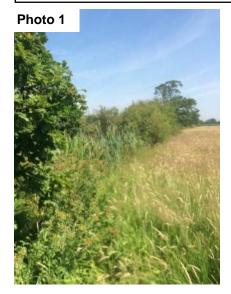
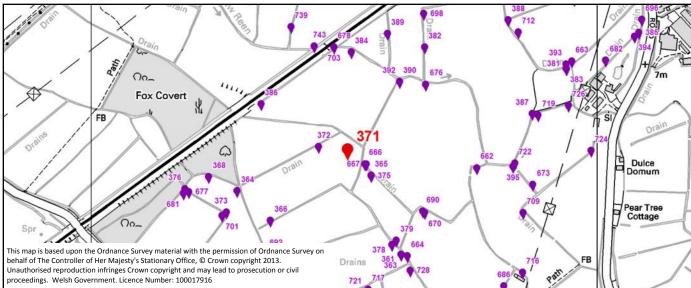




Photo 3



Unique Reference	371	Date:	02-	07-2014 14:50	GPS:	51.546601, -3.017985
Waterbody Number:	267	Surveyor:			Joe	
Location Map:		Surveyed Length:			100	



Habitat	Ditch
Bank Profile	Shallow <45deg
Depth of Water	0.5 - 1m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

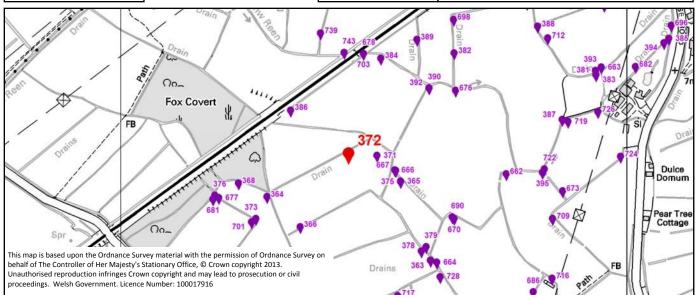
Vegetation Description	Comments:		

Photo 1 Photo 2 Photo 3





Unique Reference	372	Date: 02-07-2014 14		07-2014 14:51	GPS:	51.546633, -3.018803
Waterbody Number:	268	Surveyor:			Joe	
Location Map:		Surveyed Length:			70	



Habitat	Ditch
Bank Profile	Shallow <45deg
Depth of Water	0.5 - 1m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

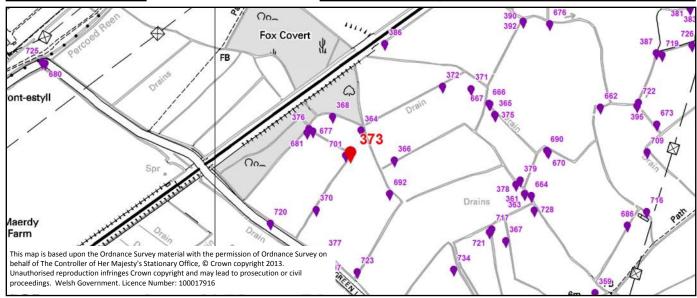
Vegetation Description	Comments:
	Reed choked







Unique Reference	373	Date: 02-07-2014 11:24		GPS:	51.545453, -3.021404	
Waterbody Number:	294	Surveyor:			Pip	
Location Map:		Surveyed Length:			40	



Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	<0.5m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
Reeds and intact hedgerow	





						Welsh Government		
Unique Reference	374	Date:	02-07-20	14 15:37	GPS:	51.54246	3, -3.01	9323
Waterbody Number:	1366	Survey	or:		J	oe		
Location Map:		Survey	ed Length	:		60		
SI Si This map is based upon the Ordnance Sun	6m 7707 723 6m FB		721 734 731 731 374	78 379 363 664 361 728 367 367	6m 359		New Farm	Drain Drain
behalf of The Controller of Her Majesty's S	tationary Office, © Crown copyright 2013. In copyright and may lead to prosecution or civil	FB	\rightarrow	/	0,3	j	$/ \setminus$	Drain

Habitat	Ditch
Bank Profile	Shallow <45deg
Depth of Water	0.5 - 1m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

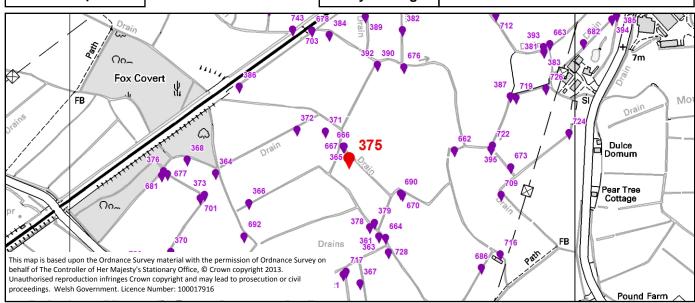
Vegetation Description Comments:







Unique Reference	375	Date:	Date: 02-07-2014 14:13		02-07-2014 14:13 GPS: 51.5461		
Waterbody Number:	271	Surveyor:		Pip			
Location Map:		Surveyed Length:					



Habitat	Ditch
Bank Profile	Shallow <45deg
Depth of Water	<0.5m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

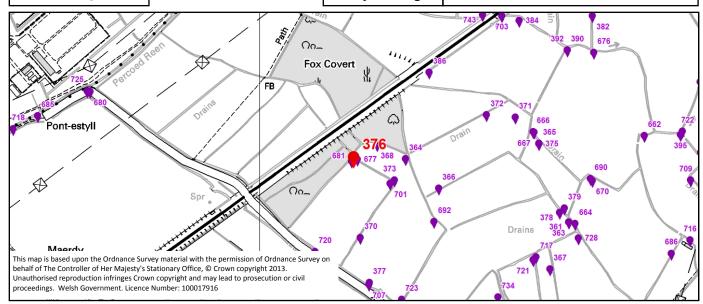
Vegetation Description	Comments:

Photo 1 Photo 2 Photo 3





Unique Reference	376	Date:	Date: 02-07-2014 11:33		GPS:	51.545857, -3.022593
Waterbody Number:	287	Surveyor:		Pip		
Location Map:		Surve	Surveyed Length:		ength: 20	



Habitat	Ditch				
Bank Profile	Flat <10 degrees				
Depth of Water	<0.5m				
Channel Width	1 - 2m				
Flow Speed	Still				
Shore Banks	Earth				

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
Hedged	





Photo 3



					Llywodraeth Cymru Welsh Government	
Unique Reference	377	Date:	02-07-2014 10:5	GPS :	51.543635, -3.022086	
Waterbody Number:	292	Survey	or:	Pippa		
Location Map:		Survey	red Length:	h: 70		
Maerdy Farm	Spr On-	681 677 720 370	368 364 373 366 701 692	7.17	690 379 664 51 363 728 686 716 367	
THE THE PARTY OF T	Orain Spini		700 Di374	380	362	
This map is based upon the Ordnance Survey m behalf of The Controller of Her Majesty's Statior Unauthorised reproduction infringes Crown cop proceedings. Welsh Government. Licence Numl	nary Office, © Crown copyright 2013. yright and may lead to prosecution or c	/	Drai	Prairi		

Habitat	Ditch
Bank Profile	Shallow <45deg
Depth of Water	<0.5m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Earth

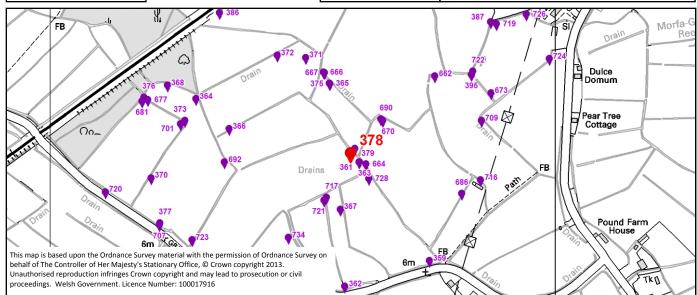
Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description	Comments:
Reeds covered	

Photo 1



Unique Reference	378	Date: 02-07-2014 14:00		GPS:	51.544921, -3.016677		
Waterbody Number:	270	Surveyor:			Pip		
Location Map:		Surveyed Length:		80			



Habitat	Ditch
Bank Profile	Flat <10 degrees
Depth of Water	
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Earth

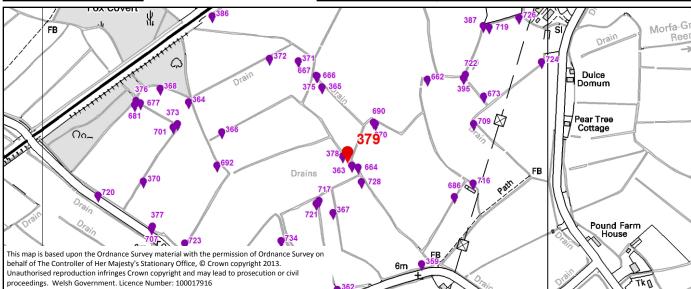
Neighboring Land Use	Livestock grazing;
Neighborning Land OSE	Livestock grazing,
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description	Comments:

Photo 1



Unique Reference	379	Date: 02-07-2014 14		07-2014 14:05	5 GPS: 51.545, -3.016552		
Waterbody Number:	273	Surveyor:			Pip		
Location Map:		Surveyed Length:		20			



Habitat	Ditch
Bank Profile	Shallow <45deg
Depth of Water	<0.5m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description	Comments:





							Welsh Governmen	ru nt	
Unique Reference	380	Date:	02-	07-2014 15:4	47 G	PS:	51.542	2632, -3.0	01771
Waterbody Number:	280	Surveyor:				Pip			
Location Map:		Survey	ed L	ength:		40			
This map is based upon the Ordnance Survibehalf of The Controller of Her Majesty's S	n copyright and may lead to prosecution or civil	Drain	717 367	728 6m	359	7/6	New Farm	Prain Drain	Sealand Reel

Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	0.5 - 1m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

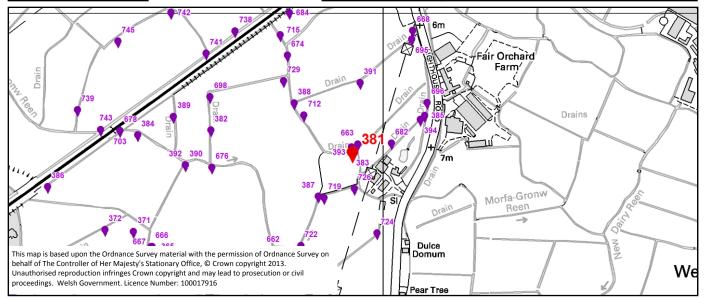
Vegetation Description	Comments:

Photo 1 Photo 2 Photo 3





Unique Reference	381	Date: 04-07-2014 12:00		GPS:	51.548071, -3.011774
Waterbody Number:	232	Surveyor:		TS	
Location Map:		Surveyed Length:			100



Habitat	Reen		
Bank Profile			
Depth of Water			
Channel Width	<1m		
Flow Speed	Still		
Shore Banks	Earth		

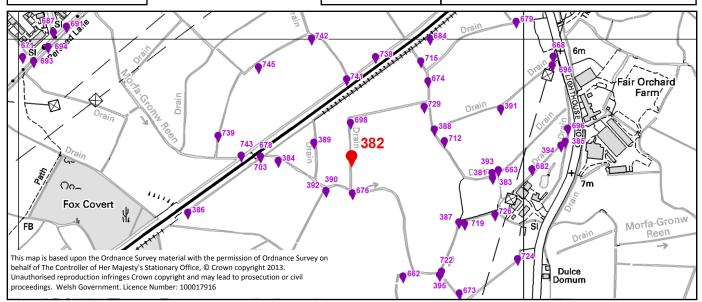
Neighboring Land Use	Arable;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description	Comments:
Reeds turning into rushes	





Unique Reference	382	Date:	Date: 04-07-2014 14:49		GPS:	51.548422, -3.015823
Waterbody Number:	257	Surveyor:		TS		
Location Map:		Surve	Surveyed Length:		h: 100	



Habitat	Reen			
Bank Profile	Flat <10 degrees			
Depth of Water	<0.5m			
Channel Width	<1m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Arable;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Comments:

Phragmites

Densely vegetated and overgrown by hedge

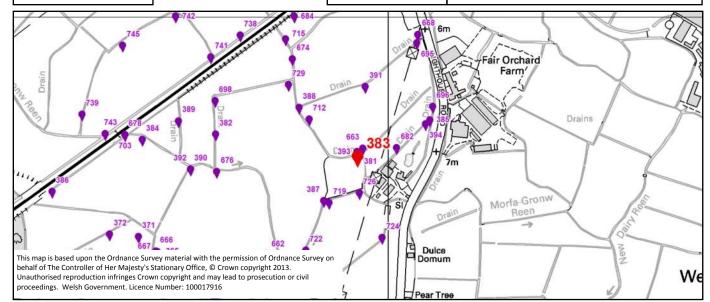








Unique Reference	383	Date: 04-07-2014 11:59		GPS:	51.548074, -3.011779	
Waterbody Number:	248	Surveyor:		TS		
Location Map:		Survey	Surveyed Length:			100



Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	0.5 - 1m			
Channel Width	<1m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Arable; Scrub;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
Overgrown by reeds	

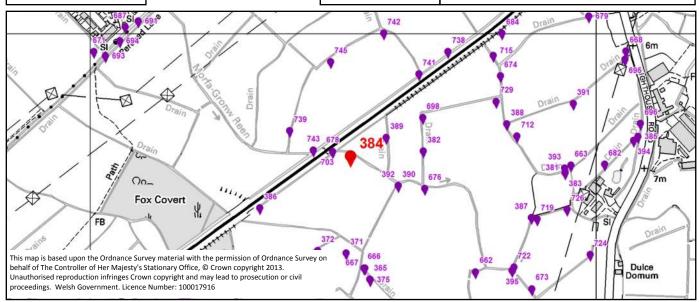




 Unique Reference
 384
 Date:
 04-07-2014 09:57
 GPS:
 51.548316, -3.017908

 Waterbody Number:
 Surveyor:
 TS

 Location Map:
 Surveyed Length:
 100



Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	1 - 2m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Arable;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

Comments:

Phragmites, sedges,Frogbit

Potential WV trails through duckweed

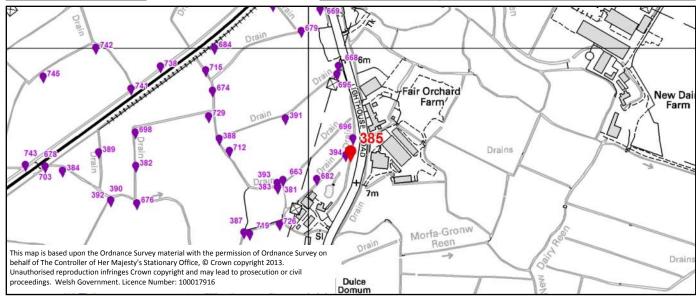








Unique Reference	385	Date:	Date: 04-07-2014 12		GPS:	51.54873, -3.009719
Waterbody Number:	218	Surve	or:	TS		
Location Map:		Survey	Surveyed Length:			500



Habitat	Reen			
Bank Profile	Flat <10 degrees			
Depth of Water	<0.5m			
Channel Width	<1m			
Flow Speed				
Shore Banks				

Neighboring Land Use	
Bank Management	
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description	Comments:
	Dry ditch

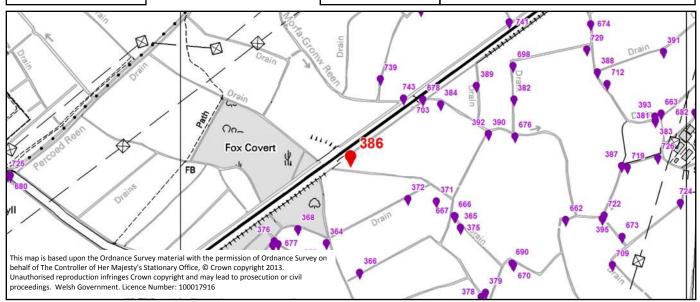




Photo 3



Unique Reference	386	Date:	04-	07-2014 09:25	GPS:	51.547376, -3.02046
Waterbody Number:	112	Survey	Surveyor:		-	TS
Location Map:		Surve	Surveyed Length:			100



Habitat	Reen
Bank Profile	
Depth of Water	
Channel Width	
Flow Speed	
Shore Banks	

Neighboring Land Use	Scrub;
Bank Management	
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

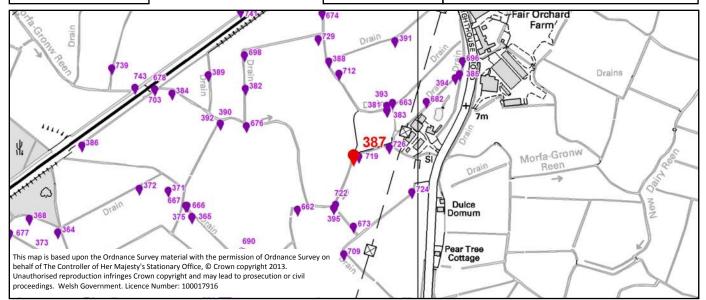
Vegetation Description	Comments:
Enclosed by dense scrub and hedge	Unsuitable







Unique Reference	387	Date:	te: 04-07-2014 11:33		GPS:	51.547274, -3.012723
Waterbody Number:	246	Survey	Surveyor:		TS	
Location Map:		Survey	Surveyed Length:		100	



Habitat	Reen
Bank Profile	Shallow <45deg
Depth of Water	1 - 2m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Arable;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
Phragmites and full duck weed cover	

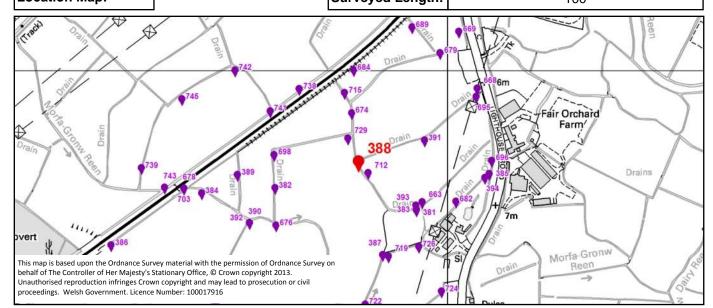




 Unique Reference
 388
 Date:
 04-07-2014 13:52
 GPS:
 51.548918, -3.013456

 Waterbody Number:
 249
 Surveyor:
 TS

 Location Map:
 Surveyed Length:
 100



Habitat	Reen		
Bank Profile	Shallow <45deg		
Depth of Water	0.5 - 1m		
Channel Width	1 - 2m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Arable;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Reed, rushes, sedges, iris

Comments:

Wet ditch enclosed by hedge

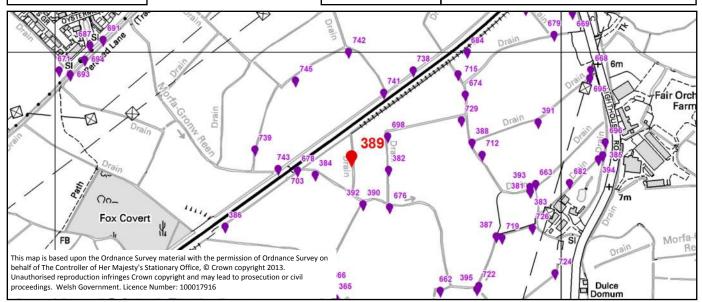








Unique Reference	389	Date:	Date: 04-07-2014 10:22		GPS:	51.548651, -3.016888
Waterbody Number:	259	Surveyor:		TS		
Location Map:		Surve	Surveyed Length:		100	



Habitat	Reen		
Bank Profile	Shallow <45deg		
Depth of Water	0.5 - 1m		
Channel Width	1 - 2m		
Flow Speed	Sluggish		
Shore Banks	Silt		

Neighboring Land Use	Arable;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

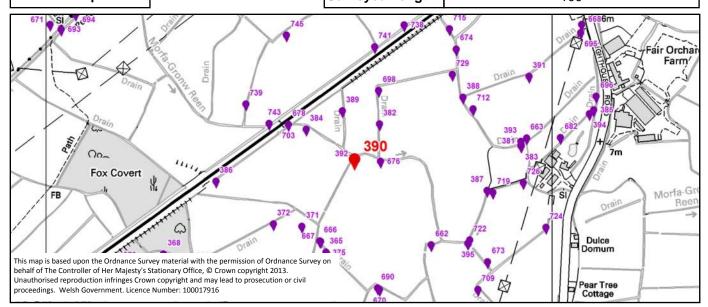
Vegetation Description	Comments:
Hedge and reeds	D







Unique Reference	390	Date:	Date: 04-07-2014 10:50		GPS:	51.547802, -3.016526	
Waterbody Number:	258	Surveyor:			TS		
Location Map:		Survey	Surveyed Length:		100		



Habitat	Reen		
Bank Profile	Flat <10 degrees		
Depth of Water	1 - 2m		
Channel Width	1 - 2m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Arable;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	High
Watervole Signs	Pathways; Feeding Stations;

Vegetation Description	Comments:
Sedges, iris, reeds	We'll connected

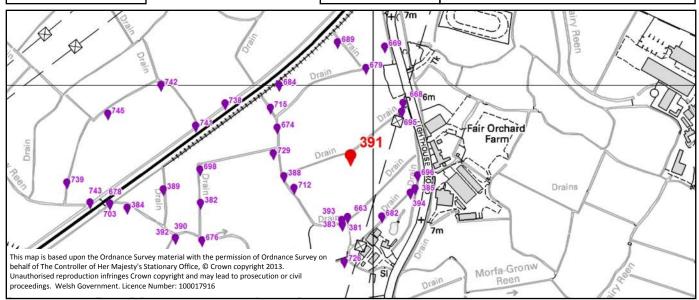








Unique Reference	391	Date:	Date: 04-07-2014 13:14		GPS:	51.549299, -3.011576
Waterbody Number:	231	Surveyor:		TS		
Location Map:		Surve	Surveyed Length:			100



Habitat	Ditch				
Bank Profile	Flat <10 degrees				
Depth of Water	<0.5m				
Channel Width	<1m				
Flow Speed	Still				
Shore Banks					

Neighboring Land Use	
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

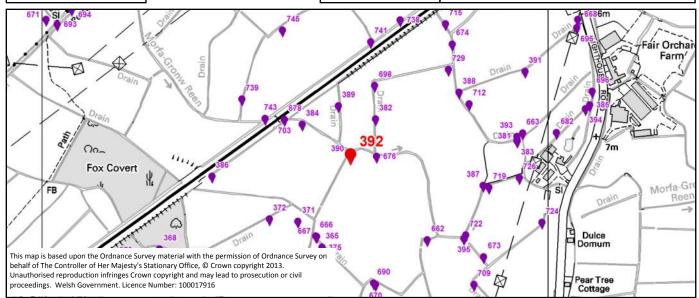
Vegetation Description	Comments:				
	Dry ditch				







Unique Reference	392	Date: 04-07-2014 10:48		GPS:	51.547802, -3.016526	
Waterbody Number:	266	Surveyor:			TS	
Location Map:		Survey	Surveyed Length:		100	



Habitat	Reen			
Bank Profile	Flat <10 degrees			
Depth of Water	<0.5m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Arable;				
Bank Management	Unfenced				
Suitability for Otters	Negligible				
Otter Signs					
Suitability for Watervoles	Low				
Watervole Signs					

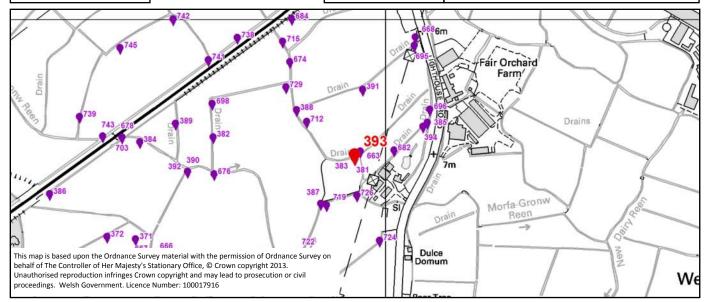
Vegetation Description	Comments:			
Phragmites	Overgrown ditch but adjacent to good ditch			







Unique Reference	393	Date: 04-07-2014 11:42		GPS:	51.548153, -3.01179	
Waterbody Number:	247	Surveyor:			TS	
Location Map:		Survey	Surveyed Length:			100



Habitat	Reen		
Bank Profile	Flat <10 degrees		
Depth of Water	0.5 - 1m		
Channel Width	1 - 2m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Arable; Scrub;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description Comments:

Phragmites

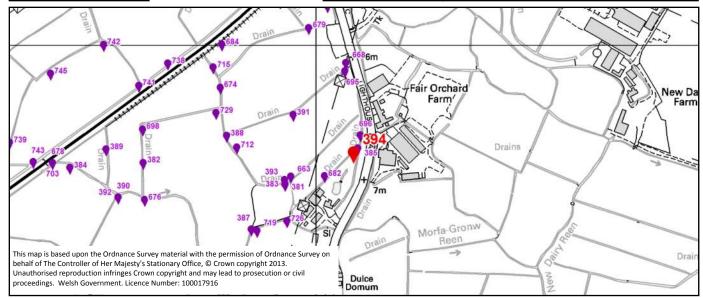








Unique Reference	394	Date:	04-0	7-2014 12:53	GPS:	51.548658, -3.009846
Waterbody Number:	235	Survey	or:		-	TS
Location Map:		Surveyed Length:		enath:		100



Habitat	Reen
Bank Profile	Flat <10 degrees
Depth of Water	<0.5m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Arable;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description	Comments:
Duckweed	

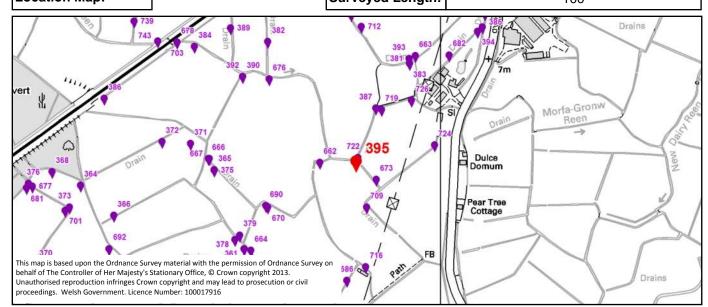




Photo 3



Unique Reference	395	Date:	04-	07-2014 11:18	GPS:	51.546336, -3.013258	
Waterbody Number:	261	Surveyor:			TS		
Location Map:		Surveyed Length:		enath:		100	



Habitat	Reen			
Bank Profile	Flat <10 degrees			
Depth of Water	1 - 2m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Arable;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	High
Watervole Signs	

Vegetation	Description	

Phragmites, sweet reed grass, yellow loosestrife, rush, iris

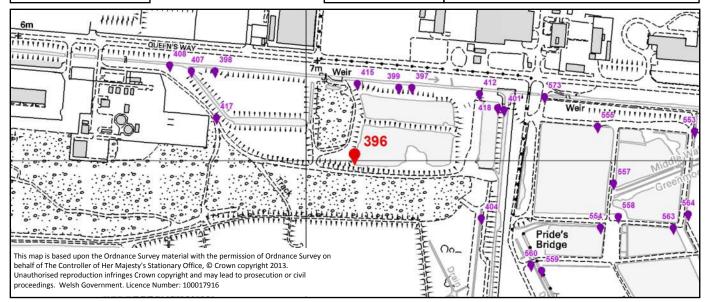
Comments:







Unique Reference	396	Date:	05-	08-2014 14:22	GPS:	51.569576, -2.89457
Waterbody Number:	1220	Survey	or:		TS MN	A AO TR
Location Map:		Surveyed Length:			100	



Habitat	Pond
Bank Profile	Steep >45deg
Depth of Water	<0.5m
Channel Width	>20m
Flow Speed	
Shore Banks	Stones

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation	Description
10901411011	_ 000p

Comments:

Budlea and willow herb growing in dry pond

Dry pond

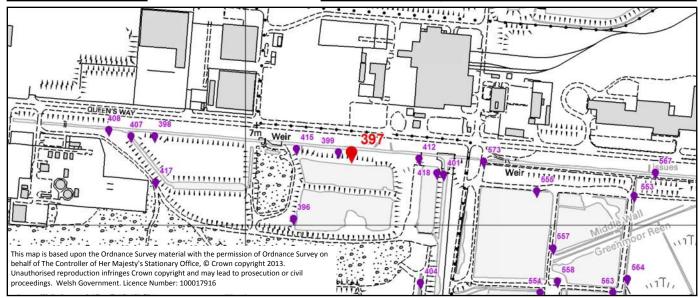








Unique Reference	397	Date:	05-0	08-2014 12:22	GPS:	51.570764, -2.892951
Waterbody Number:	1185	Survey	or:		TS MN	AO TR
Location Map:		Surveyed Length:		enath:		50



Habitat	Reen			
Bank Profile	Steep >45deg			
Depth of Water	1 - 2m			
Channel Width	2 - 5m			
Flow Speed	Sluggish			
Shore Banks	Earth			

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Feeding Stations;

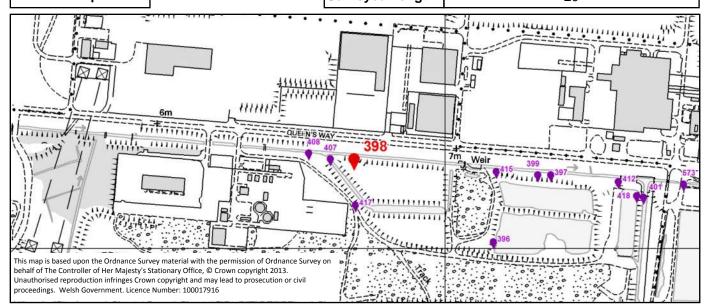
Vegetation Description	Comments:
Phragmites dominated	







Unique Reference	398	Date:	05-	08-2014 11:31	GPS:	51.571008, -2.89856
Waterbody Number:	1243	Survey	or:		TS MN	AO TR
Location Map:		Surveyed Length:		enath:		20



Habitat	Reen			
Bank Profile	Steep >45deg			
Depth of Water	1 - 2m			
Channel Width	5 - 10m			
Flow Speed	Sluggish			
Shore Banks	Earth			

Neighboring Land Use	Scrub;			
Bank Management	Unfenced			
Suitability for Otters	Low			
Otter Signs				
Suitability for Watervoles	Medium			
Watervole Signs	Latrines; Pathways; Feeding Stations;			

Vegetation Description	Comments:
Phragmites dominated	

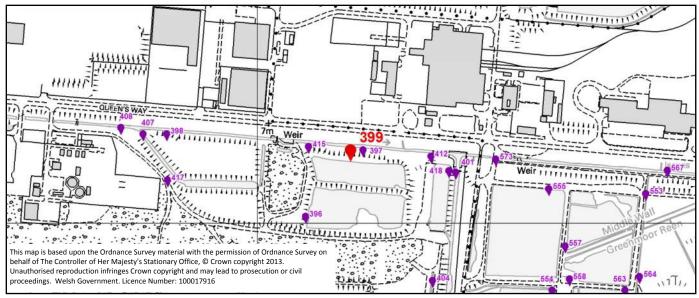








Unique Reference	399	Date:	05-	08-2014 12:17	GPS:	51.570762, -2.893319
Waterbody Number:	1204	Survey	or:		TS MN	// AO TR
Location Map:		Surveyed Length:		enath:		50



Habitat	Reen
Bank Profile	Steep >45deg
Depth of Water	1 - 2m
Channel Width	
Flow Speed	Sluggish
Shore Banks	

Neighboring Land Use	
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Feeding Stations;

Vegetation Description	Comments:

Phragmites dominated

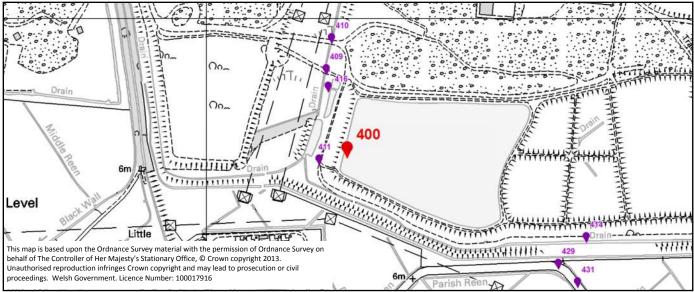








Unique Reference	400	Date:	05-	08-2014 15:26	GPS:	51.567098, -2.90631
Waterbody Number:	790	Surveyor:		TS MN	/I AO TR	
Location Map:		Surveyed Length:				



Habitat	Pond
Bank Profile	Steep >45deg
Depth of Water	<0.5m
Channel Width	>20m
Flow Speed	
Shore Banks	Stones

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Comments:

Vegetation Description

Camomile, willow herb in predominantly dry pond. Fringed with scrub eg goat willow, crack willow, bramble

Dry

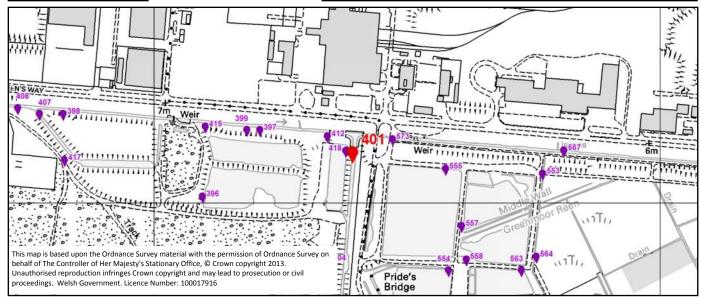








Unique Reference	401	Date: 05-08-2014 12:4		08-2014 12:47	GPS:	51.570391, -2.890309
Waterbody Number:	536	Surveyor:			TS MM AO TR	
Location Map:		Surveyed Length:			50	



Habitat	Reen
Bank Profile	Steep >45deg
Depth of Water	1 - 2m
Channel Width	2 - 5m
Flow Speed	Sluggish
Shore Banks	

Neighboring Land Use	
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
Reeds	Poor water quality

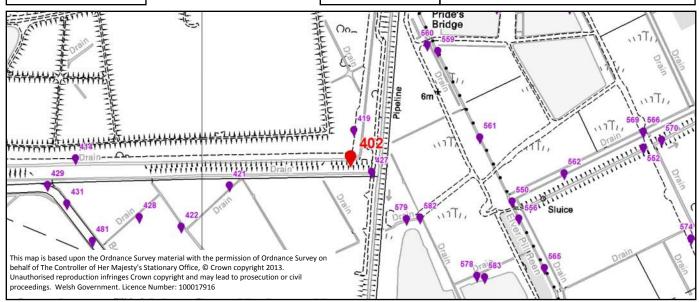
Photo 1



 Unique Reference
 402
 Date:
 05-08-2014 14:52
 GPS:
 51.565675, -2.891638

 Waterbody Number:
 1257
 Surveyor:
 TS MM AO TR

 Location Map:
 Surveyed Length:
 200



Habitat	Reen
Bank Profile	Steep >45deg
Depth of Water	0.5 - 1m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Stones

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description

Comments:

Phragmites dominated in reen and banks, budlea, bind weed,

Overgrown by Phragmites. Bad water quality.









Unique Reference	403	Date	: 05-	08-2014 14:57 GPS: ,	
Waterbody Number:	1241	Surv	eyor:	TS MM AO TR	
Location Map:		Surveyed Length:			
This map is based upon the Ordnance Survive behalf of The Controller of Her Majesty's S	rey material with the permission of Ordnance Survey tationary Office, © Crown copyright 2013.	Drain	419 402 7 127	Fride's Bridge 6m 561 562 574 578 578 578 578 578 578 578	
Habitat			Neig	phboring Land Use	
Bank Profile			Ban	k Management	
Depth of Water			Suit	Suitability for Otters	
Channel Width			Otte	r Signs	
Flow Speed			Suit	ability for Watervoles	
Shore Banks			Wat	ervole Signs	
Vegetat	ion Description			Comments:	
		<u> </u>	lo acce	SS	

Photo 1 Photo 2 Photo 3



 Unique Reference
 404
 Date:
 05-08-2014 14:38
 GPS:
 51.568473, -2.890928

 Waterbody Number:
 1250
 Surveyor:
 TS MM AO TR

 Location Map:
 Surveyed Length:
 100

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Habitat	Reen
Bank Profile	Steep >45deg
Depth of Water	<0.5m
Channel Width	5 - 10m
Flow Speed	Still
Shore Banks	Stones

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

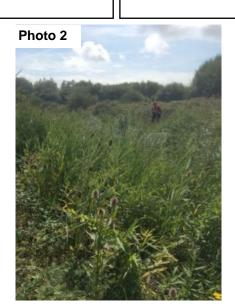
Vegetation Description

Phragmites dominated in reed and banks. Willow herb, budlea

Comments:

Overgrown. Bad water quality.







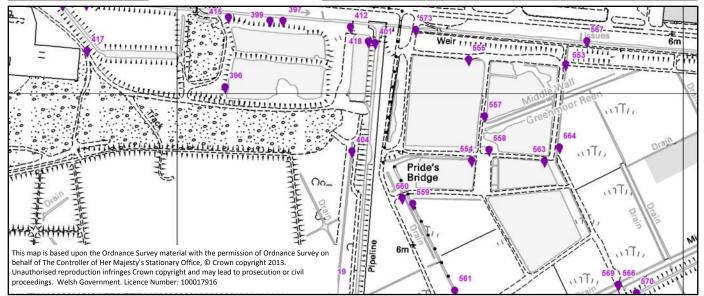


Unique Reference	405	Date:	05-08-2014 16:49	GPS: ,
Waterbody Number:	1258	Surveyor: TS M		TS MM AO TR
Location Map:		Surveyed Length:		
behalf of The Controller of Her Majesty's St	ey material with the permission of Ordnance Survey ationary Office, © Crown copyright 2013.		Weir 111 668 111	563 (17) 563 (17) 564 563 (17) 569 566 570 (17)
Habitat			Neighboring Land Use	е
Bank Profile			Bank Management	
Depth of Water			Suitability for Otters	
Channel Width			Otter Signs	
Flow Speed			Suitability for Watervo	oles
Shore Banks			Watervole Signs	
Vegetation Description		Comments:		
		Inac	ccessible	

Photo 1 Photo 2 Photo 3



Unique Reference	406	Date:	05-0	08-2014 11:23	GPS:	,
Waterbody Number:	1243	Surveyor:		TS MM AO TR		
Location Map:		Survey	ed Le	enath:		20



Habitat	Reen			
Bank Profile	Steep >45deg			
Depth of Water	1 - 2m			
Channel Width	5 - 10m			
Flow Speed	Sluggish			
Shore Banks	Earth			

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Feeding Stations;

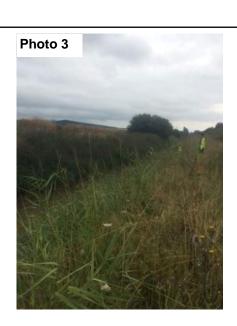
Comments:

Vegetation Description	
------------------------	--

Phragmites dominated, teasel, umbels, bramble, cats ear

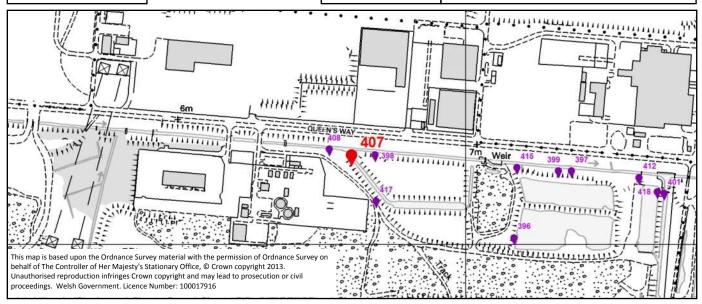








Unique Reference	407	Date:	05-	08-2014 11:11	GPS:	51.571002, -2.899234
Waterbody Number:	1244	Survey	or:		TS	MM
Location Map:		Surve	Surveyed Length:			20



Habitat	Reen
Bank Profile	Steep >45deg
Depth of Water	1 - 2m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Feeding Stations;

Vegetation Description

Phragmites dominated, teasel, budlea, bramble, umbels

Comments:

Bumble bee burrow sighted. 2 feeding stations adjacent to water body not by banks.

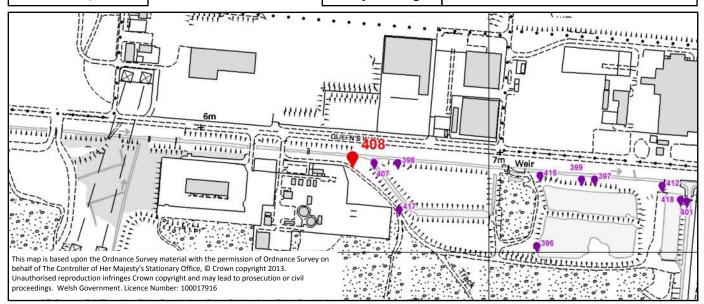








Unique Reference	408	Date:	05-0	08-2014 10:11	GPS:	51.571102, -2.899867
Waterbody Number:	1238	Survey	or:		TS	MM
Location Map:		Surveyed Length:		ength:		50



Habitat	Reen		
Bank Profile	Steep >45deg		
Depth of Water	1 - 2m		
Channel Width	5 - 10m		
Flow Speed	Sluggish		
Shore Banks	Earth		

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Feeding Stations;

Vead	etation	Descri	ption

Phragmites, redshank, willow herb, teasel, sedge sp., umbels

Comments:

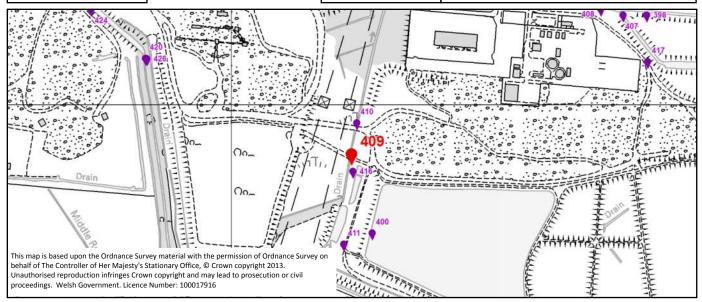








Unique Reference	409	Date:	05-	08-2014 15:51	GPS:	51.568493, -2.906935
Waterbody Number:	1248	Survey	or:		TS MN	A AO TR
Location Map:		Surveyed Length:				



Habitat	Reen
Bank Profile	Steep >45deg
Depth of Water	0.5 - 1m
Channel Width	5 - 10m
Flow Speed	Still
Shore Banks	Stones

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description

Phragmites dominated, overgrown, scrub

Comments:

Overgrown, inaccessible, bad water quality

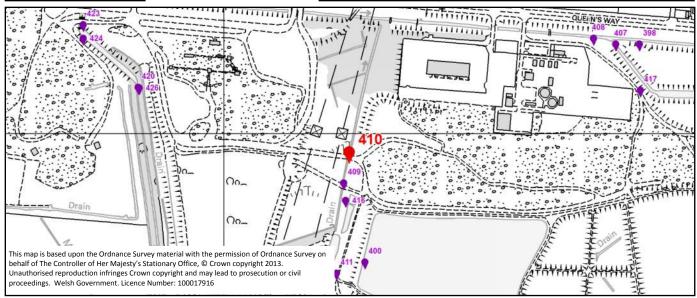








Unique Reference	410	Date:	05-0	08-2014 15:59	GPS:	51.569041, -2.906789
Waterbody Number:	1259	Survey	or:		TS MN	/I AO TR
Location Map:		Surve	Surveyed Length:			100



Habitat	Reen				
Bank Profile	Steep >45deg				
Depth of Water	0.5 - 1m				
Channel Width	2 - 5m				
Flow Speed	Still				
Shore Banks					

Neighboring Land Use	
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description

Scrub with budlea, goat willow

Comments:

Polluted/bad water quality, open reen





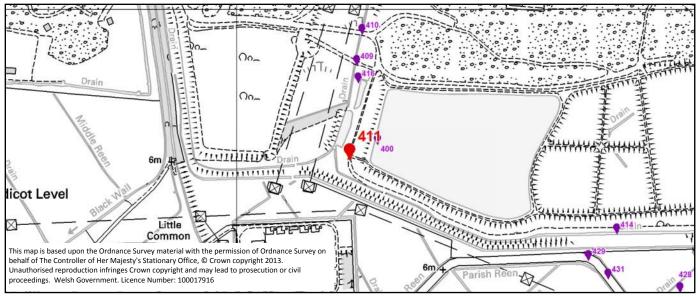




 Unique Reference
 411
 Date:
 05-08-2014 15:43
 GPS:
 51.566898, -2.90711

 Waterbody Number:
 1121
 Surveyor:
 TS MM AO TR

 Location Map:
 Surveyed Length:



Habitat	Reen	Neighboring Land Use	
Bank Profile		Bank Management	
Depth of Water		Suitability for Otters	Negligible
Channel Width		Otter Signs	
Flow Speed		Suitability for Watervoles	Negligible
Shore Banks		Watervole Signs	

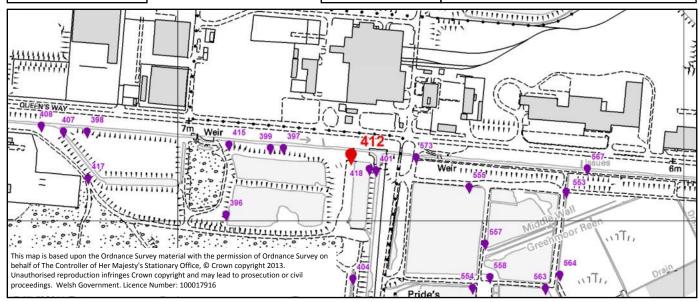
Vegetation Description	Comments:
Phragmites dominated and overgrown	Overgrown, bad water quality, no access

Photo 1 Photo 2 Photo 3





Unique Reference	412	Date:	05-	08-2014 12:38	GPS:	51.570666, -2.891017
Waterbody Number:	1194	Survey	urveyor: TS MM AO TR		M AO TR	
Location Map:		Surve	ed L	ength:		



Habitat	Reen
Bank Profile	Steep >45deg
Depth of Water	1 - 2m
Channel Width	2 - 5m
Flow Speed	Sluggish
Shore Banks	Earth

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Feeding Stations;

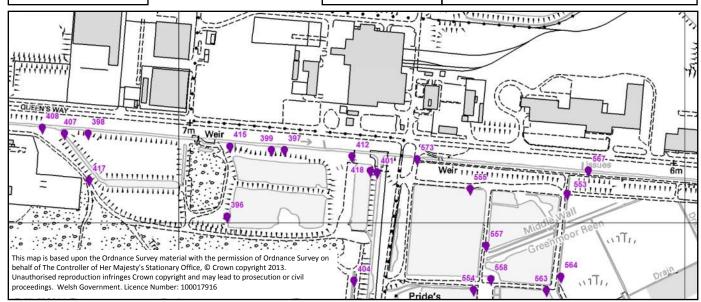
Vegetation Description	Comments:
Fragamites	







Unique Reference	413	Date: 05-08-2014 14:26		GPS:	,	
Waterbody Number:	1206	Survey	Surveyor:		TS MM AO TR	
Location Map:		Survey	ed L	ength:		



Habitat	Pond
Bank Profile	Steep >45deg
Depth of Water	<0.5m
Channel Width	>20m
Flow Speed	
Shore Banks	Stones

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	
Watervole Signs	

Comments:
Dry pond with overgrown banks



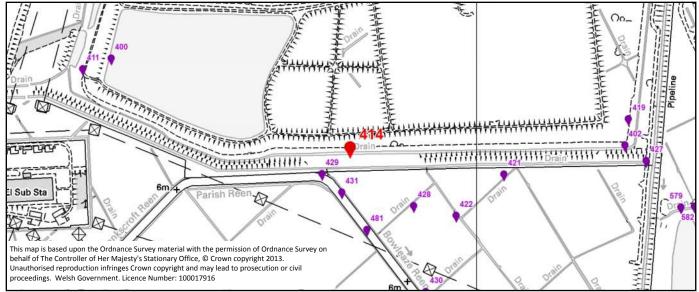
Photo 2 Photo 3



 Unique Reference
 414
 Date:
 05-08-2014 15:15
 GPS:
 51.565579, -2.899465

 Waterbody Number:
 1260
 Surveyor:
 TS MM AO TR

 Location Map:
 Surveyed Length:



Habitat	Pond	Neighborin
Bank Profile		Bank Mana
Depth of Water		Suitability f
Channel Width		Otter Signs
Flow Speed		Suitability f
Shore Banks		Watervole S

Neighboring Land Use

Bank Management

Suitability for Otters

Otter Signs

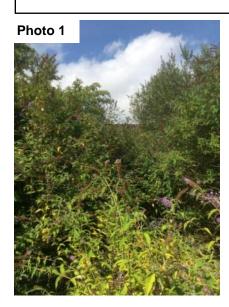
Suitability for Watervoles

Watervole Signs

Vegetation Description

Comments:

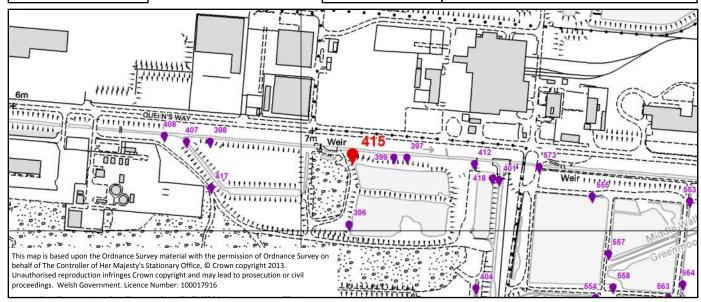
No access







Unique Reference	415	Date:	05-0	08-2014 12:02	GPS:	51.570815, -2.894507
Waterbody Number:	1205	Survey	or:		TS MN	AO TR
Location Map:		Surveyed Length:		enath:		50



Habitat	Reen		
Bank Profile	Steep >45deg		
Depth of Water	1 - 2m		
Channel Width	5 - 10m		
Flow Speed	Sluggish		
Shore Banks	Earth		

Neighboring Land Use	Scrub;
Bank Management	
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Feeding Stations;

Vegetation Description	Comments:
------------------------	-----------

Phragmites dominated









						Welsh Government
Unique Reference	416	Date:	05-	08-2014 15:49	GPS:	51.568185, -2.906881
Waterbody Number:	1120	Surveyor:		TS MM AO TR		
Location Map:		Survey	Surveyed Length:			
	420		10	67 1 PT		

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Habitat	Reen
Bank Profile	
Depth of Water	
Channel Width	
Flow Speed	
Shore Banks	

11.65	
Neighboring Land Use	
Bank Management	
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description	Comments:		
	Inaccessible, overgrown		

Photo 1 Photo 2 Photo 3





						Welsh Government
Unique Reference	417	Date:	05-	08-2014 14:14	GPS:	51.57019, -2.898513
Waterbody Number:	1207	Surveyor:			TS MM	1 AO TR
Location Map:		Surveyed Length:				
	6m	407 396	117 Sec.	7m Weir	396	397 412 401 673

Habitat	Reen
Bank Profile	
Depth of Water	
Channel Width	
Flow Speed	
Shore Banks	

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Neighboring Land Use	
Bank Management	
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

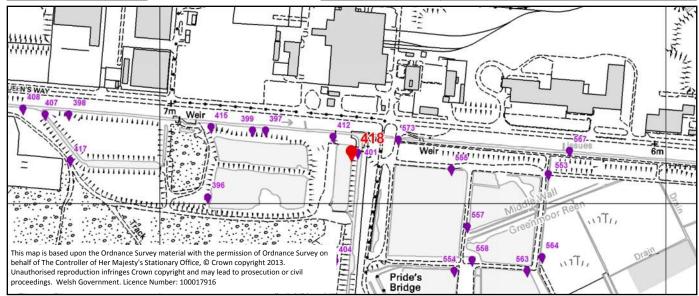
Vegetation Description	Comments:		
	Bad water quality, polluted, not suitable		



Photo 2 Photo 3



Unique Reference	418	Date:	05-0	08-2014 12:45	GPS:	51.570417, -2.890501
Waterbody Number:	1234	Survey	or:		TS MN	A AO TR
Location Map:		Surveyed Length: 100		100		



Habitat	Pond
Bank Profile	Shallow <45deg
Depth of Water	>2m
Channel Width	10 - 20m
Flow Speed	Sluggish
Shore Banks	

Neighboring Land Use	
Bank Management	Fenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Comments:
Bad water quality

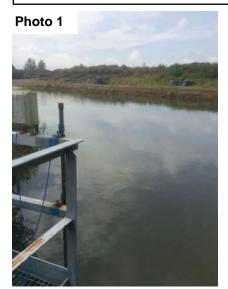
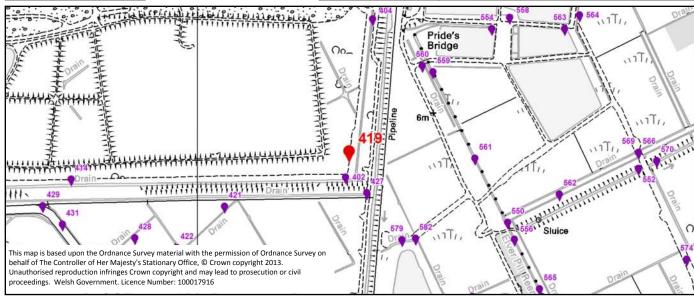


Photo 2 Photo 3



Unique Reference	419	Date:	05-0	08-2014 14:48	GPS:	51.566139, -2.891545
Waterbody Number:	1071	Surveyor:		TS MM AO TR		
Location Map:		Surveyed Length: 10		10		



Habitat	Reen
Bank Profile	Shallow <45deg
Depth of Water	<0.5m
Channel Width	5 - 10m
Flow Speed	
Shore Banks	Stones

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
Phragmites	Dry



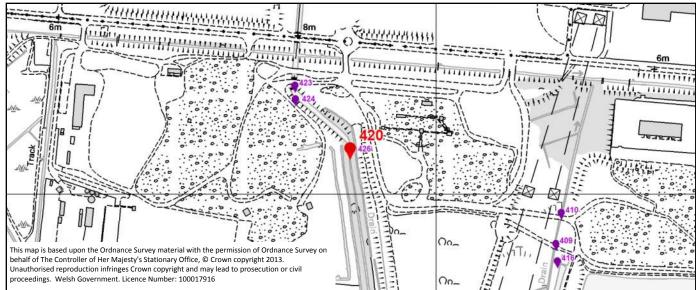




 Unique Reference
 420
 Date:
 06-08-2014 12:15
 GPS:
 51.570132, -2.91283

 Waterbody Number:
 578
 Surveyor:
 AO MM

 Location Map:
 Surveyed Length:
 200



Habitat	
Bank Profile	
Depth of Water	
Channel Width	2 - 5m
Flow Speed	Slow
Shore Banks	Earth

	2012 111
Neighboring Land Use	Scrub;
Bank Management	
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

Phragmites and rush sp., in waterbody. Bindweed, urtica, bramble

Comments:

5 mallards sighted, managed banks on east, overgrown on west with bramble, bindweed and Urtica sp., moderate water quality. Water flowing south. Phragmites in waterbody but kayak survey may be more suitable fir accessing banks on overgrown side.



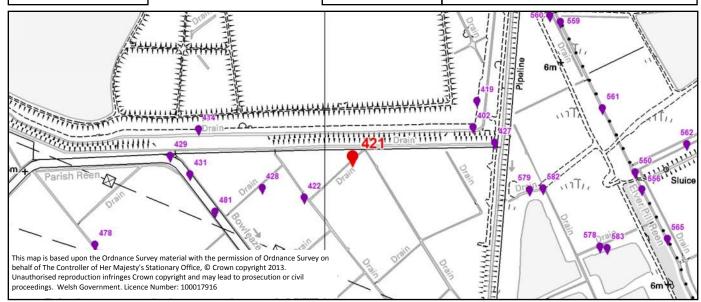
Photo 2 Photo 3



 Unique Reference
 421
 Date:
 06-08-2014 15:08
 GPS:
 51.565134, -2.895075

 Waterbody Number:
 1082
 Surveyor:
 AO MM

 Location Map:
 Surveyed Length:
 100



Habitat	Ditch
Bank Profile	Shallow <45deg
Depth of Water	<0.5m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Poached

Neighboring Land Use	
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description

Double sided hedge. Hawthorn, blackthorn, goat willow, crack willow, bramble, phragmites, bull rush

Comments:

Field ditch, double sided hedge. May be ideal for bats/bat potential for foraging corridor. Chicks heard within long tussocky grassland. Moderate water quality.

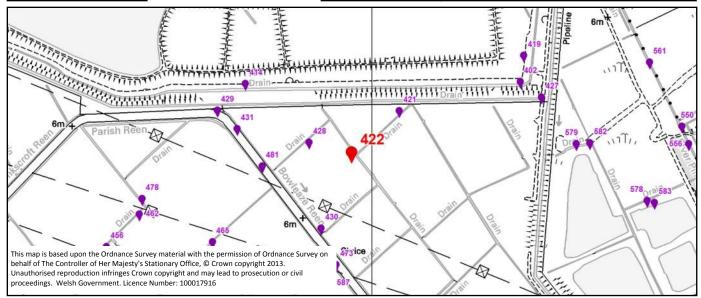








Unique Reference	422	Date:	06-	08-2014 15:21	GPS:	51.564393, -2.89643
Waterbody Number:	1124	Survey	or:		AC	MM
Location Map:		Surveyed Length:				



Habitat	Ditch
Bank Profile	
Depth of Water	<0.5m
Channel Width	
Flow Speed	
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description

Crack willow, hawthorn, bramble, bind weed, Phragmites sp.

Comments:

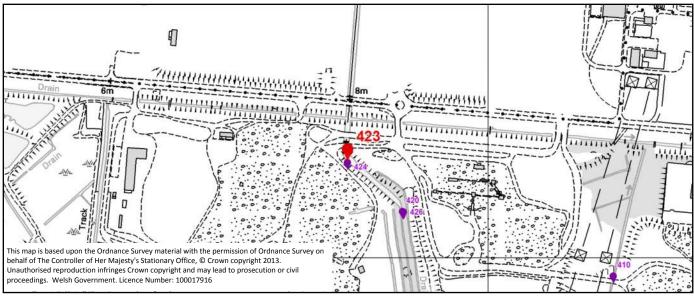
Inaccessible, double hedged, overgrown field ditch.







Unique Reference	423	Date:	06-	08-2014 11:45	GPS:	51.571226, -2.91442
Waterbody Number:	1286	Survey	or:		AC) MM
Location Map:		Surveyed Length:			10	



Habitat	Reen		
Bank Profile	Steep >45deg		
Depth of Water	>2m		
Channel Width	5 - 10m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

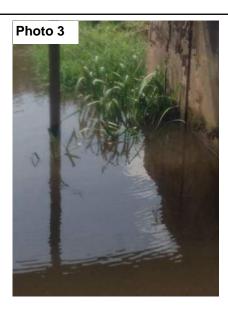
Fringed with scrub, budlea, rush species emerging from water body,

Comments:

Moderate water quality

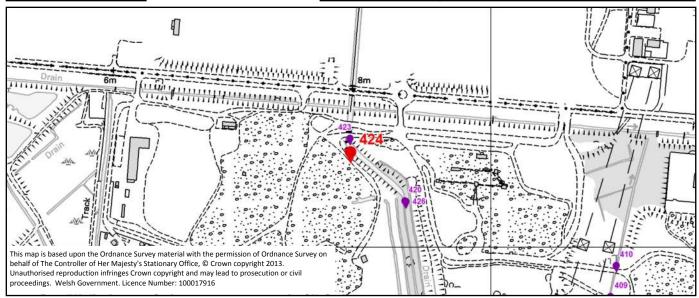








Unique Reference	424	Date:	Date: 06-08-2014 11:48		GPS:	51.570987, -2.914408
Waterbody Number:	1296	Survey	or:		AC) MM
Location Map:		Surveyed Length:		enath:		50



Habitat	Reen		
Bank Profile	Steep >45deg		
Depth of Water	>2m		
Channel Width	5 - 10m		
Flow Speed	Sluggish		
Shore Banks	Earth		

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

Amphibious water bistort in reen. Urtica sp., phragmites, willow herb, bind weed, rush sp., umbels, thistle sp., on banks

Comments:

Kayak survey recommended. Moderate water quality. Waterfowl unidentified sp., seen further along reen. On the unmanaged side of reen (west) difficult to access but surveyed 50m. Surveying along managed/cut side (east) no evidence due to management but cannot discount presence.





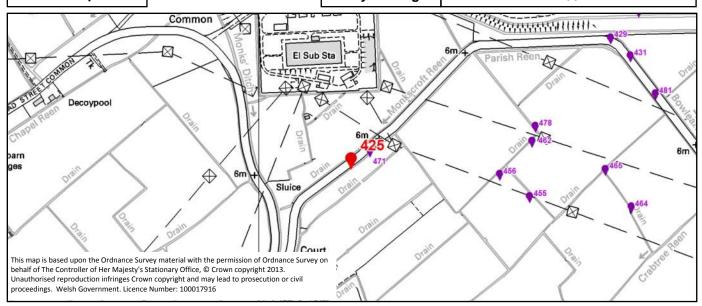




 Unique Reference
 425
 Date:
 06-08-2014 14:23
 GPS:
 51.562908, -2.907605

 Waterbody Number:
 565
 Surveyor:
 AO MM

 Location Map:
 Surveyed Length:
 100



Habitat	Reen		
Bank Profile	Steep >45deg		
Depth of Water	1 - 2m		
Channel Width	1 - 2m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

Grass sp., Urtica, bull rush, bind weed on banks. Water surface covered by duckweed, and horsetail emerging from reen. Moderate water quality.

Comments:

Kayak survey recommended. Feeding station and burrows/holes show evidence for bank vole.





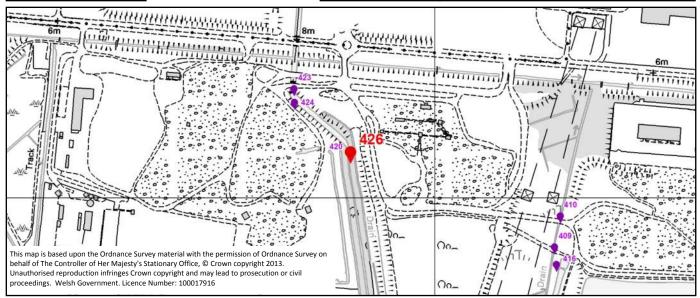




 Unique Reference
 426
 Date:
 06-08-2014 12:19
 GPS:
 51.570127, -2.912798

 Waterbody Number:
 1299
 Surveyor:
 AO MM

 Location Map:
 Surveyed Length:
 100



Habitat	Reen
Bank Profile	Steep >45deg
Depth of Water	
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description

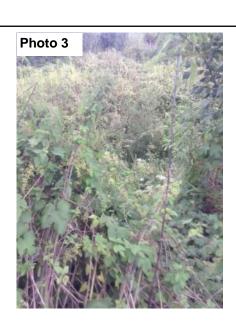
Phragmites dominated in and around ditch, urtica, bind weed, budlea, willow herb. Tree species include hazel, goat willow, hawthorn,

Comments:

Inaccessible. Overgrown reen.

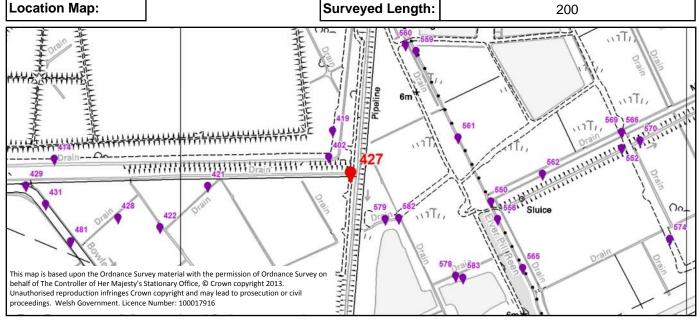








Unique Reference	427	Date:	06-	08-2014 10:21	GPS:	51.565402, -2.891022
Waterbody Number:	1152	Surveyor:		AO MM		



Habitat	Reen			
Bank Profile	Steep >45deg			
Depth of Water	1 - 2m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Scrub;
Bank Management	
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Pathways; Feeding Stations;

Vegetation Description

Phragmites dominated, scrub with bramble, crack willow and hawthorn on banks. Willow herb, teasel, umbels, bindweed, water parsnip

Comments:

Moderate water quality. Aquatic surface vegetation eg duckweed b

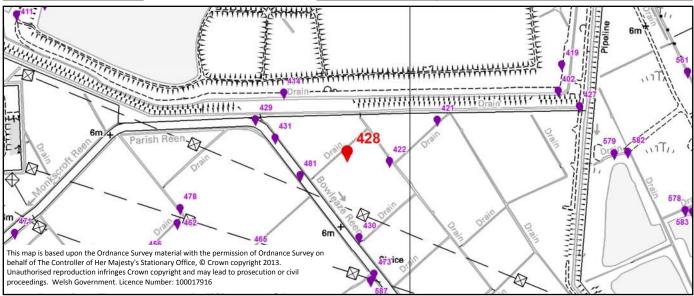








Unique Reference	428	Date:	06-0	08-2014 15:26	GPS:	51.564557, -2.897631	
Waterbody Number:	562	Survey	Surveyor:		AO MM		
Location Map:		Surveyed Length:		ength:		100	



Habitat	Ditch
Bank Profile	
Depth of Water	<0.5m
Channel Width	
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description

Double hedged, goat willow, bramble, hawthorn, crack willow, blackthorn, phragmites, goat willow,

Comments:

Inaccessible, double hedged, field ditch

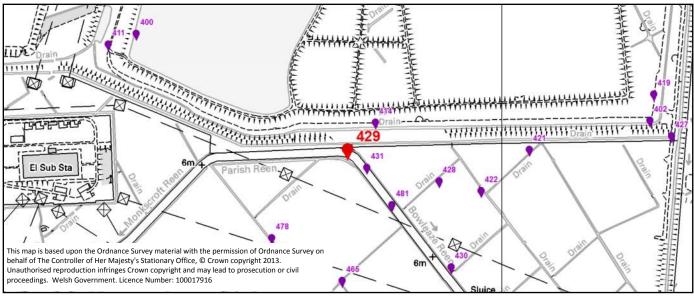








Unique Reference	429	Date: 06-08-2014 14:48		08-2014 14:48	GPS:	51.565102, -2.900259	
Waterbody Number:	1152	Survey	Surveyor:		AO MM		
Location Map:		Surveyed Length:		ength:		250	



Habitat	Reen			
Bank Profile				
Depth of Water	1 - 2m			
Channel Width	5 - 10m			
Flow Speed	Still			
Shore Banks	Earth			

National Control of the Control of t	I Control and Con
Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description

Bramble, hawthorn, goat willow, crack willow, bind weed, nightshade, grass species (cocks foot, yorkshire fog, rye, false oat. Phragmites dominated reen from gaps in trees.

Comments:

Inaccessible, overgrown. This is on Southern side of ditch approaching from west.

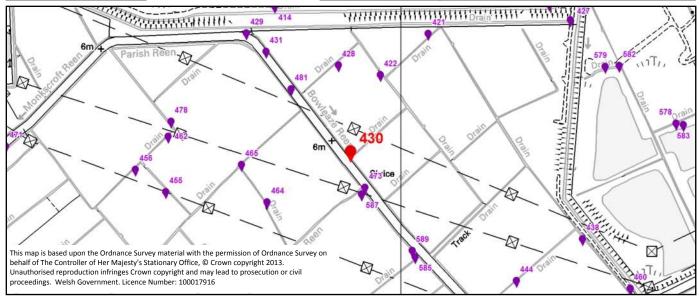








Unique Reference	430	Date:	Date: 06-08-2014 16:09		GPS:	51.56304, -2.897258
Waterbody Number:	588	Survey	Surveyor:		AO MM	
Location Map:		Surveyed Length:			20	



Habitat	Ditch
Bank Profile	
Depth of Water	
Channel Width	
Flow Speed	
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description

Hedge with hawthorn, blackthorn, crack willow, goat willow, phragmites linear patch, willow herb

Comments:

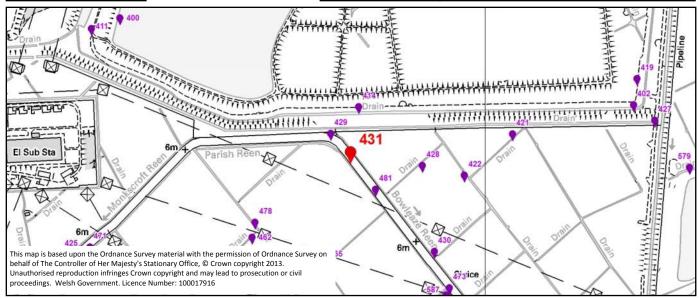
Inaccessible, double hedged, adjacent fields have been cut and rolled into silage







Unique Reference	431	Date:	Date: 06-08-2014 15:37		GPS:	51.564782, -2.899693
Waterbody Number:	560	Surveyor:		AO MM		
Location Map:		Surve	Surveyed Length:			200



Habitat	Reen		
Bank Profile	Steep >45deg		
Depth of Water	1 - 2m		
Channel Width	2 - 5m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

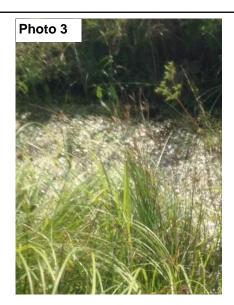
Duckweed dominated, lilly sp., water plantain, bull rush, hard rush, sedge sp. Bankside veg: phragmites, umbels, birds foot trefoil, redshank/amphibious bistort, willow herb, Mentha aquatica, meadow sweet, common fleabane, grasses. Tree species: crack willow young and covered in ivy, hawthorn, oak

Comments:

Eastside of road. Plop heard on 15.41. Adjacent field dominated by red clover and amphibious bistort? Potential bat foraging potential.

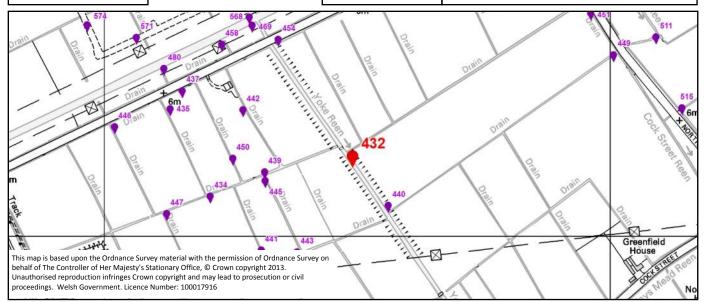








Unique Reference	432	Date: 07-08-2014 16:15		GPS:	51.562037, -2.874296
Waterbody Number:	1148	Surveyor:		TR and AO	
Location Map:		Surveyed Length:			700



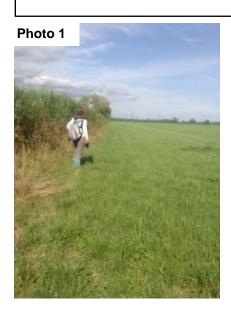
Habitat	Reen		
Bank Profile	Flat <10 degrees		
Depth of Water	<0.5m		
Channel Width	2 - 5m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Arable; Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	Feeding Stations;

Vegetation Description

Comments:

Been managed Fresh feeding station...two feeding stations

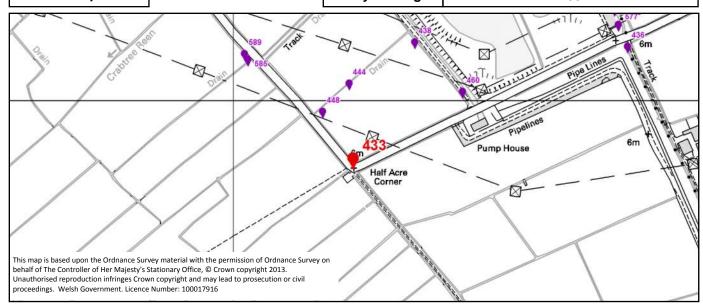








Unique Reference	433	Date: 07-08-2014 10:20		GPS:	51.559473, -2.892327
Waterbody Number:	539	Surveyor:		TR and AO	
Location Map:		Surveyed Length:			100



Habitat	Ditch			
Bank Profile	Flat <10 degrees			
Depth of Water	0.5 - 1m			
Channel Width	5 - 10m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Arable; Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Phragmites, hawthorn

Comments:

Found rodent trails

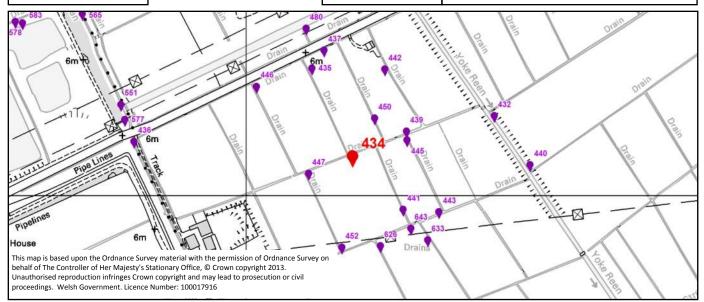








Unique Reference	434	Date: 07-08-2014 14:29		GPS:	51.561292, -2.878327
Waterbody Number:	759	Surveyor:		TR and AO	
Location Map:		Surveyed Length:			60



Habitat	Ditch			
Bank Profile	Flat <10 degrees			
Depth of Water	<0.5m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Arable; Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation	Description
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Nettles,phragmites,hawthorn,bullrush,brambles

Comments:

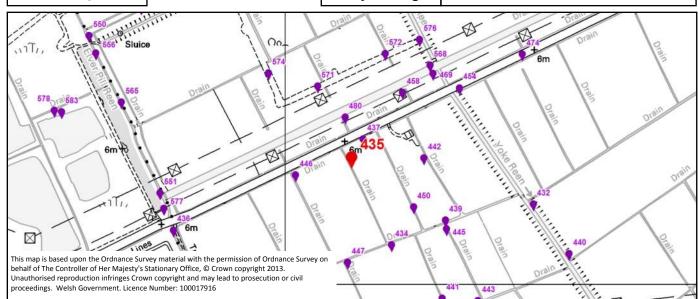
Mainly double hedged, potential bat corridor







Unique Reference	435	Date: 07-08-2014 14:09		GPS:	51.562833, -2.879499	
Waterbody Number:	594	Survey	Surveyor:		TR and AO	
Location Map:		Surveyed Length:		ength:		150



Habitat	Ditch		
Bank Profile	Flat <10 degrees		
Depth of Water	<0.5m		
Channel Width	<1m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Arable; Livestock grazing;
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Bull rush, juncus affusf, star sedge, hawthorn, goat willow, nettles,phragmites

Comments:

Intermittent hedge

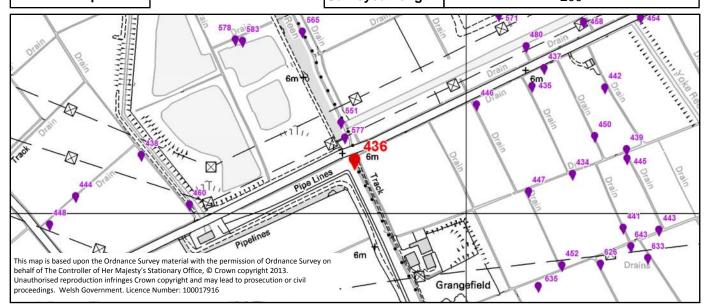








Unique Reference	436	Date: 07-08-2014 10:50		GPS:	51.561505, -2.884547		
Waterbody Number:	1060	Surveyor:			TR and AO		
Location Map:		Surveyed Length:			200		



Habitat	Reen		
Bank Profile	Steep >45deg		
Depth of Water	>2m		
Channel Width	2 - 5m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Arable; Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

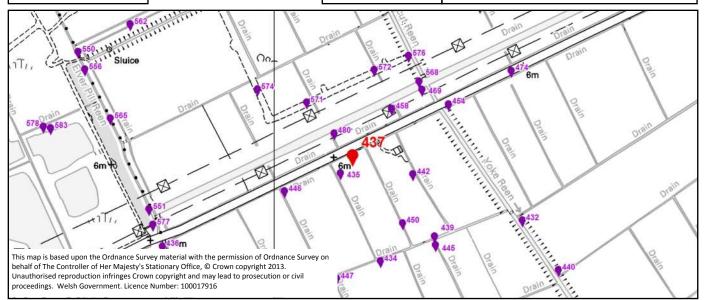
managed by IDB







Unique Reference	437	Date: 07-08-2014 14:04		GPS:	51.563153, -2.879163	
Waterbody Number:	595	Survey	or:		TR a	ind AO
Location Map:		Surveyed Length:			60	



Habitat	Ditch			
Bank Profile	Flat <10 degrees			
Depth of Water	<0.5m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Arable; Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Phragmites, ash, goat willow, bramble, crack willow, bramble

Comments:

Unaccessible because of brambles and veg. Overgrown, dry ditch,overgrown, duck weed, juncus,

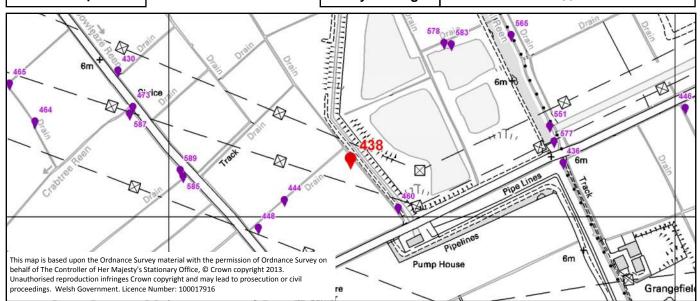








Unique Reference	438	Date:	Date: 07-08-2014 09:53		GPS:	51.561537, -2.890614
Waterbody Number:	537	Surveyor:			TR a	nd AO
Location Map:		Surveyed Length:		ength:		60



Habitat	Ditch
Bank Profile	Shallow <45deg
Depth of Water	<0.5m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Arable; Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Comments:

Vegetation Des	scription
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Crack willow, blackthorn,hawthorn,bramble,rosebay willow herb,phragmites

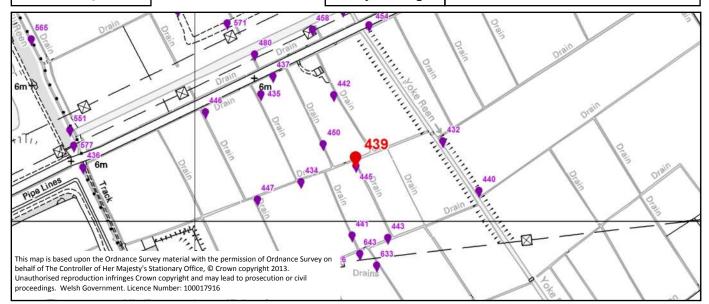
Dry ditch







Unique Reference	439	Date: 07-08-2014 11:40		GPS:	51.561739, -2.876791	
Waterbody Number:	1134	Survey	Surveyor:		TR a	ind AO
Location Map:		Surveyed Length:		ength:		60



Habitat	Reen
Bank Profile	Shallow <45deg
Depth of Water	<0.5m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Arable; Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Phragmites,nettle,marsh thistle, hawthorn,rosebay willow herb

Comments:

Rodent trails, parts dry and parts wet, lamena

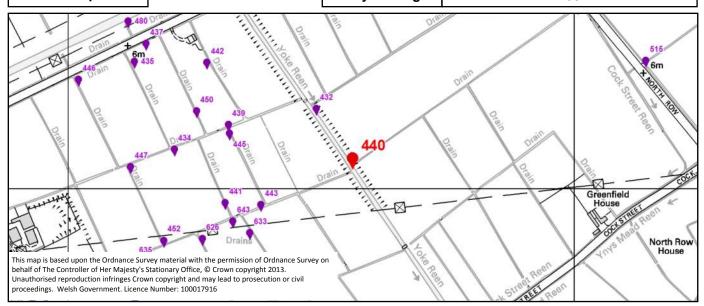








Unique Reference	440	Date:	Date: 07-08-2014 16:02		GPS:	51.561172, -2.873253
Waterbody Number:	1186	Survey	Surveyor:		TR a	ind AO
Location Map:		Surveyed Length:		ngth:		200



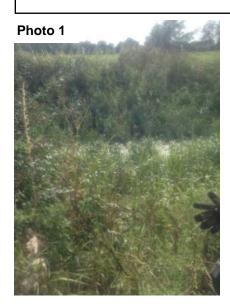
Habitat	Reen
Bank Profile	Steep >45deg
Depth of Water	1 - 2m
Channel Width	5 - 10m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Arable; Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation	Description
rogotation	Docompaion

Reed grass, bullrushes,brambles,nettles, mentha aquatica, frog bit, lamena, goat willow

Comments:

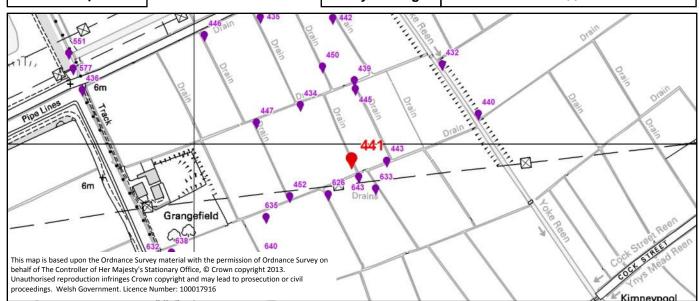








Unique Reference	441	Date:	Date: 07-08-2014 12:03		GPS:	51.560357, -2.876855	
Waterbody Number:	1156	Survey	Surveyor:		TR and AO		
Location Map:		Survey	Surveyed Length:			100	



Habitat	Ditch				
Bank Profile	Flat <10 degrees				
Depth of Water	<0.5m				
Channel Width	1 - 2m				
Flow Speed	Still				
Shore Banks	Earth				

Neighboring Land Use	Arable; Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

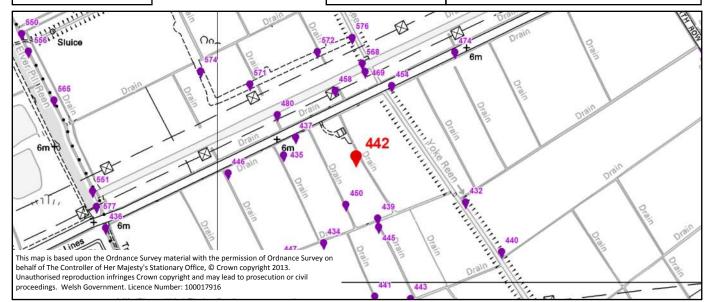
Vegetation Description	Comments:
Nettles,phragmites,hawthorn,purple night shade,bramble,	







Unique Reference	442	Date:	Date: 07-08-2014 11:27		GPS:	51.56283, -2.877428	
Waterbody Number:	601	Surveyor:			TR and AO		
Location Map:		Surveyed Length:			100		



Habitat	Ditch
Bank Profile	Flat <10 degrees
Depth of Water	1 - 2m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	

Neighboring Land Use	
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Comments:

,hawthorn,Phragmites adjacent, white willow, bramble, bullrush

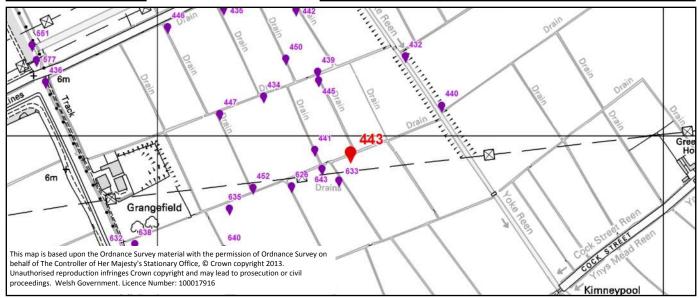
Double hedge ditch, hedge used for foraging corridor by bats







Unique Reference	443	Date:	Date: 07-08-2014 11:58		GPS:	51.560326, -2.875837
Waterbody Number:	1146	Survey	Surveyor:		TR and AO	
Location Map:		Surve	Surveyed Length:			20



Habitat	Ditch					
Bank Profile	Flat <10 degrees					
Depth of Water	<0.5m					
Channel Width	1 - 2m					
Flow Speed	Still					
Shore Banks	Earth					

Neighboring Land Use	Arable; Livestock grazing;
Neighborning Land OSE	Alabie, Livestock grazing,
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Hawthorn,phragmites,bramble,nettle,purple night shade

Comments:

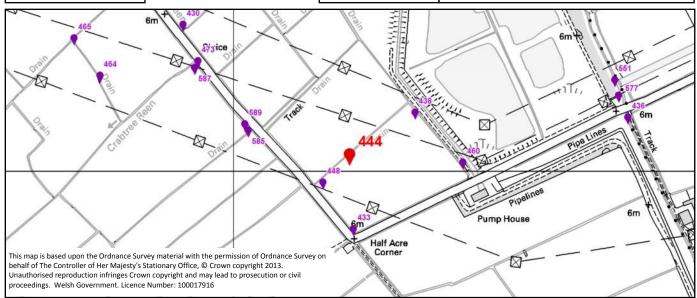
Unmanaged field ditch, inaccessible







Unique Reference	444	Date: 07-08-2014 10:02		GPS:	51.56079, -2.892476	
Waterbody Number:	548	Survey	Surveyor:		TR and AO	
Location Map:		Surveyed Length:			100	



Habitat	Ditch					
Bank Profile	Flat <10 degrees					
Depth of Water	<0.5m					
Channel Width	1 - 2m					
Flow Speed	Still					
Shore Banks	Earth					

Neighboring Land Use	Arable; Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Comments:

Bramble, ash, hawthorn, wildrose, blackthorn, willow,

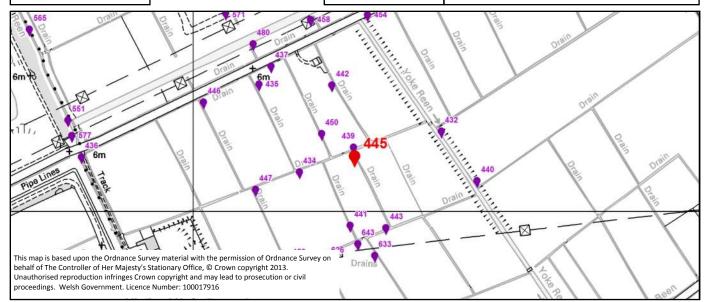








Unique Reference	445	Date: 07-08-2014 11:47		GPS:	51.561584, -2.876766	
Waterbody Number:	1050	Survey	Surveyor:		TR and AO	
Location Map:		Surveyed Length:			100	



Habitat	Ditch					
Bank Profile	Flat <10 degrees					
Depth of Water	<0.5m					
Channel Width	2 - 5m					
Flow Speed	Still					
Shore Banks	Earth					

Neighboring Land Use	Arable; Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Hawthorn,phragmites,bramble, blackthorn,crack willow,oak

Comments:

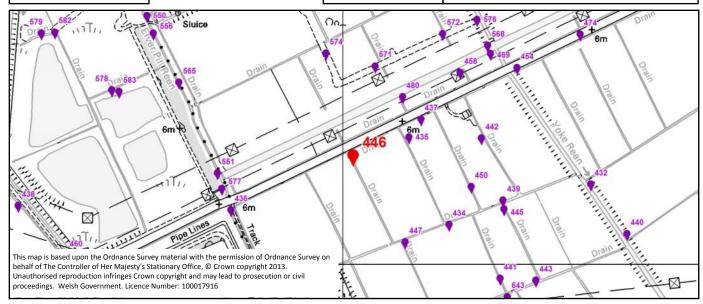
Inaccessible, good bat potential for foraging







Unique Reference	446	Date: 07-08-2014 15:12		GPS:	51.562501, -2.881077	
Waterbody Number:	593	Survey	Surveyor:		TR and AO	
Location Map:		Surveyed Length:			150	



Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	0.5 - 1m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks				

Neighboring Land Use	
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Lamena , bull rush,brambles,mature oak tree, wild rose,goat willow, crack willow,phragmites

Comments:

Good bat foraging corridor

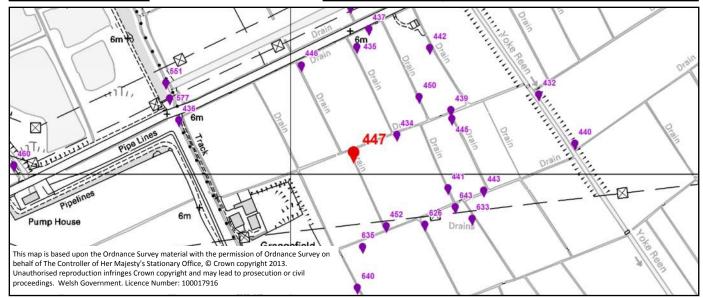








Unique Reference	447	Date:	07-0	08-2014 14:38	GPS:	51.560974, -2.879565
Waterbody Number:	1155	Survey	or:		TR a	ind AO
Location Map:		Surveyed Length:		ength:		150



Habitat	Ditch
Bank Profile	Flat <10 degrees
Depth of Water	<0.5m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Arable; Livestock grazing;
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

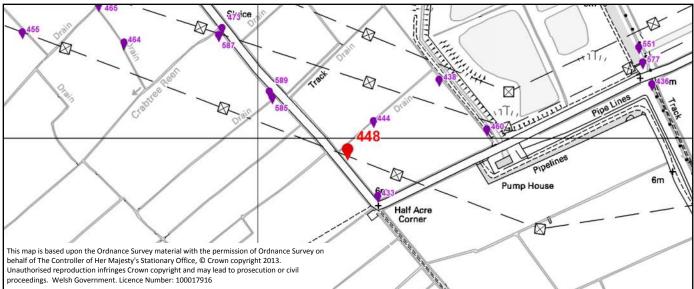
Vegetation Description	Comments:
Brambles,nettles,phragmites,rose bay willow herb, goats willow,alder	Unmanaged dry



Photo 2 Photo 3



Unique Reference	448	Date:	07-	08-2014 10:10	GPS:	51.560289, -2.893212
Waterbody Number:	544	Survey	or:		TR a	nd AO
Location Map:		Surveyed Length:		ength:		100



Habitat	Ditch			
Bank Profile	Flat <10 degrees			
Depth of Water	<0.5m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Arable; Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

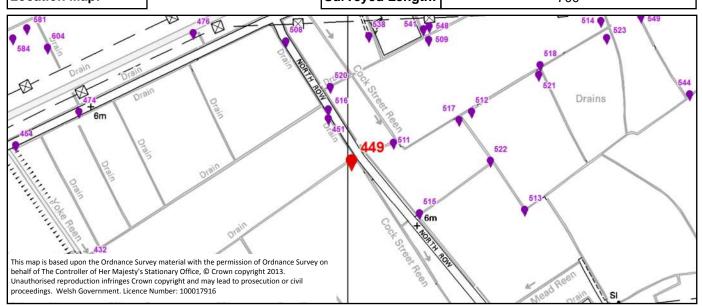
Vegetation Description	Comments:
Crack willow, hawthorn, wild rose, bramble, Phragmites, ash	Dry ditch,



Photo 2 Photo 3



Unique Reference	449	Date:	Date: 07-08-2014 15:47		GPS:	51.563879, -2.866879
Waterbody Number:	614	Surve	Surveyor:		TR a	and AO
Location Man		Surveyed Length:		ength:		700



Habitat	Ditch		
Bank Profile	Flat <10 degrees		
Depth of Water	<0.5m		
Channel Width	2 - 5m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Arable; Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Hawthorn, blackthorn, nettle, dock, phragmites, lamena, bramble, crack willow, hazel

Comments:

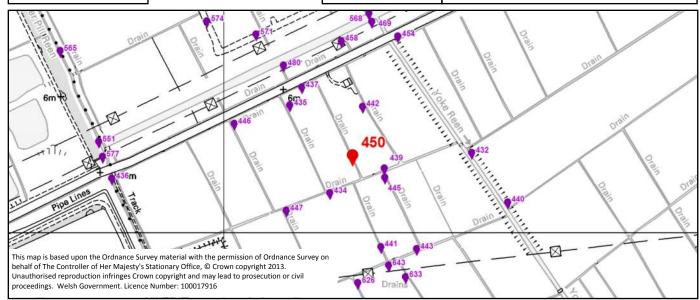
Double hedged







Unique Reference	450	Date:	Date: 07-08-2014 12:17		GPS:	51.561967, -2.877704
Waterbody Number:	598	Survey	ırveyor:		TR a	and AO
Location Map:		Surveyed Length:			100	



Habitat	Ditch			
Bank Profile	Flat <10 degrees			
Depth of Water	<0.5m			
Channel Width	<1m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Arable; Livestock grazing;
Neighborning Land OSE	Alabie, Livestock grazing,
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Bramble, hawthorn, phragmites, nettles, goat willow

Comments:

Dry, inaccessible

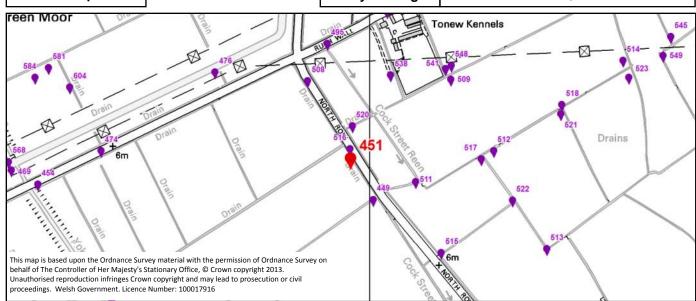








Unique Reference	451	Date:	Date: 07-08-2014 15:42		GPS:	51.564607, -2.867547
Waterbody Number:	611	Survey	Surveyor:		TR and AO	
Location Map:		Surveyed Length:		ength:		70



Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	<0.5m			
Channel Width	2 - 5m			
Flow Speed				
Shore Banks	Earth			

Neighboring Land Use	Arable; Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

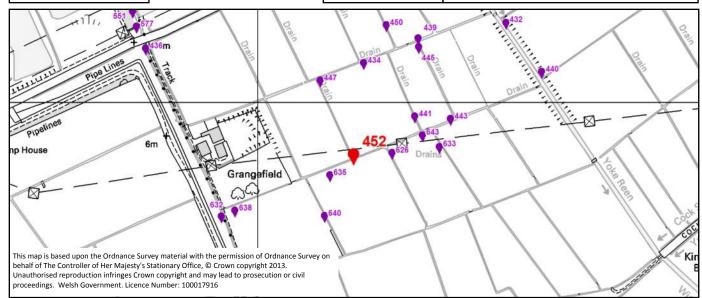
Vegetation Description	Comments:
Recently been managed, phragmites	







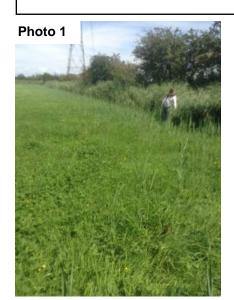
Unique Reference	452	Date:	Date: 07-08-2014 14:47		GPS:	51.559679, -2.878598
Waterbody Number:	1051	Survey	Surveyor:		TR and AO	
Location Map:		Surveyed Length:			60	



Habitat	Ditch			
Bank Profile	Flat <10 degrees			
Depth of Water	0.5 - 1m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Arable; Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
Hawthorn, phragmites,nettles,goat willow,	Lemena in ditch





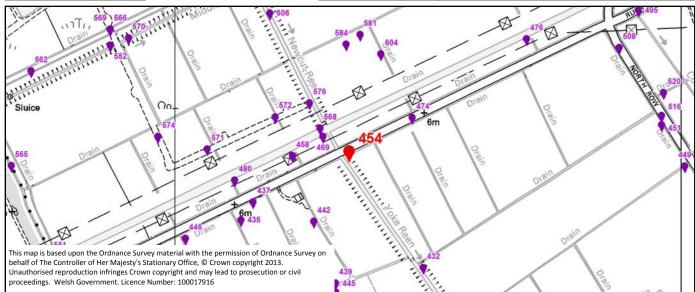


Unique Reference	453	Date:	06-08-2	014 15:28 GPS:	,
Waterbody Number:	1246	Survey	or:		TS
Location Map:		Surveyed Length:			
behalf of The Controller of Her Majesty's St	Grangafield 632 638 ey material with the permission of Ordnance Survey lationary Office, © Crown copyright 2013. n copyright and may lead to prosecution or civil	457	ain 434 Da	439 445 441 441 443 643 633 rains	440 Additional Cooks Kings Kings
Habitat			Neighbo	oring Land Use	
Bank Profile			Bank Ma	anagement	
Depth of Water			Suitabili	ty for Otters	
Channel Width			Otter Sig	gns	
Flow Speed			Suitabili	ty for Watervoles	
Shore Banks			Watervo	le Signs	
Vegetati	ion Description			Comme	nts:
		Inad	cessible	reed bed	

Photo 1 Photo 2 Photo 3



Unique Reference	454	Date:	07-	08-2014 14:05	GPS:	51.564077, -2.87644
Waterbody Number:	605	Survey	or:		TS	MM
Location Map:		Surveyed Length:				
	606				1 -	au 1495



Habitat	N
Bank Profile	В
Depth of Water	s
Channel Width	C
Flow Speed	s
Shore Banks	l v

Neighboring Land Use

Bank Management

Suitability for Otters

Otter Signs

Suitability for Watervoles

Watervole Signs

Vegetation Description

Comments:

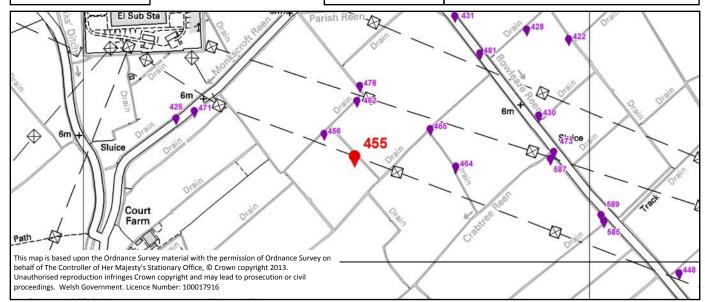
Inaccessible, Overgrown, unsuitable







Unique Reference	455	Date:	06-	08-2014 16:05	GPS:	51.56228, -2.902507
Waterbody Number:	1080	Survey	or:		-	TS
Location Map:		Surveyed Length:				



Habitat	Reen				
Bank Profile	Flat <10 degrees				
Depth of Water	<0.5m				
Channel Width	1 - 2m				
Flow Speed	Still				
Shore Banks	Earth				

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

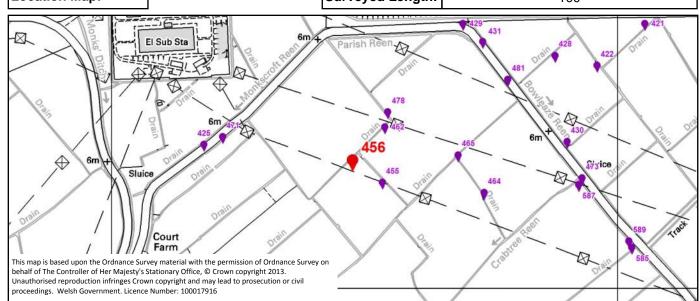
Vegetation Description	Comments:
Heavily vegetated by reeds,encroached by hedgerow	







Unique Reference	456	Date:	06-	08-2014 16:10	GPS:	51.562666, -2.903373
Waterbody Number:	1078	Survey	or:	TS		
Location Map:		Survey	Surveyed Length:			100

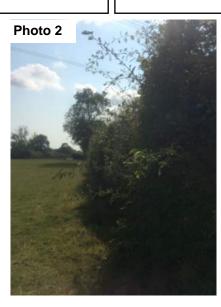


Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	0.5 - 1m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

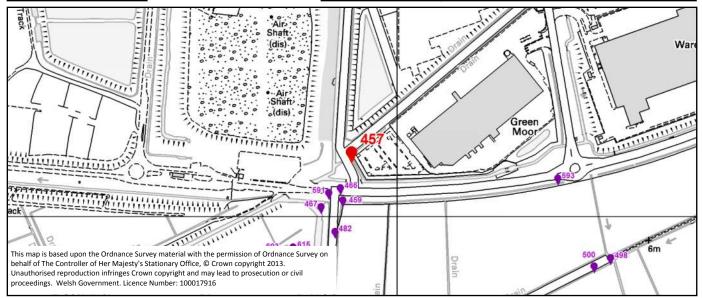
Vegetation Description	Comments:
Dense sedge bank	







Unique Reference	457	Date:	07-	08-2014 16:36	GPS:	51.570796, -2.868419
Waterbody Number:	651	Survey	or:		TS	MM
Location Map:		Surveyed Length:				



Habitat	Reen
Bank Profile	Shallow <45deg
Depth of Water	1 - 2m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Urban;
Bank Management	
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Comments:

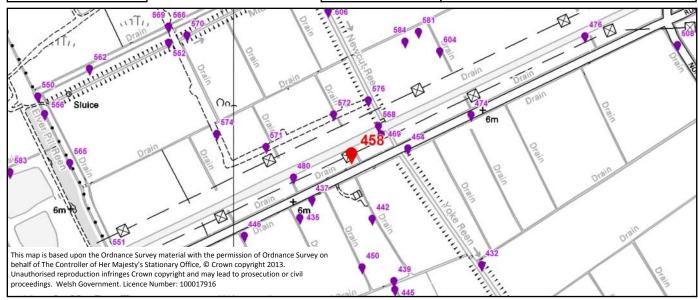
Heavy duckweed cover







Unique Reference	458	Date:	07-	08-2014 12:14	GPS:	51.563982, -2.878054
Waterbody Number:	600	Survey	or:		TS	MM
Location Map:		Surveyed Length:				



Habitat	
Bank Profile	
Depth of Water	
Channel Width	
Flow Speed	
Shore Banks	

Neighboring Land Use

Bank Management

Suitability for Otters

Otter Signs

Suitability for Watervoles

Watervole Signs

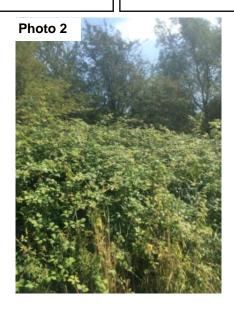
Vegetation Description

Comments:

Bramble, Urtica, hawthorn, crack willow

Inaccessible, overgrown

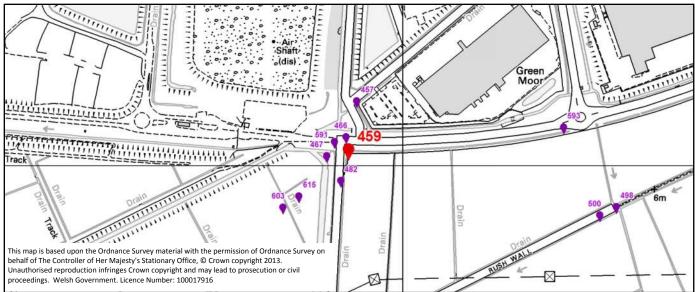








Unique Reference	459	Date:	07-	08-2014 16:44	GPS:	51.569947, -2.86865
Waterbody Number:	676	Survey	or:	TS		
Location Map:		Surveyed Length:		enath:		100



Habitat	Reen		
Bank Profile	Steep >45deg		
Depth of Water	1 - 2m		
Channel Width	2 - 5m		
Flow Speed			
Shore Banks	Earth		

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description

Duckweed covers surface of reen. Bull rush, great willow herb on banks with hawthorn and bramble.

Comments:

Poor water quality, north side managed/cut. South side scrub

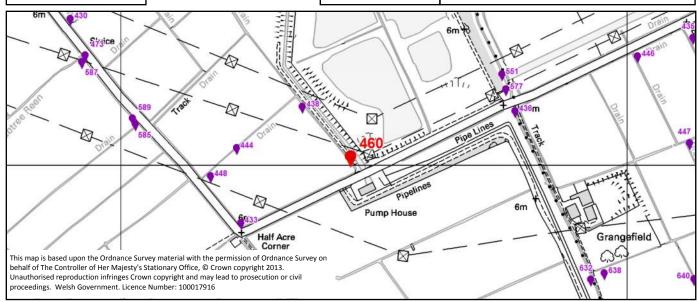








Unique Reference	460	Date:	06-	08-2014 10:58	GPS:	51.560672, -2.889232	
Waterbody Number:	536	Survey	Surveyor:		TS		
Location Map:		Surveyed Length:				1000	



Habitat	Dyke
Bank Profile	Steep >45deg
Depth of Water	>2m
Channel Width	2 - 5m
Flow Speed	Sluggish
Shore Banks	Stones

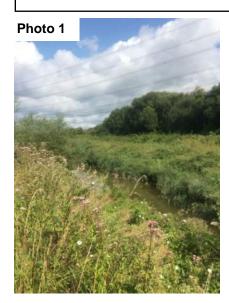
Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Comments:

Reeds

Poor water quality







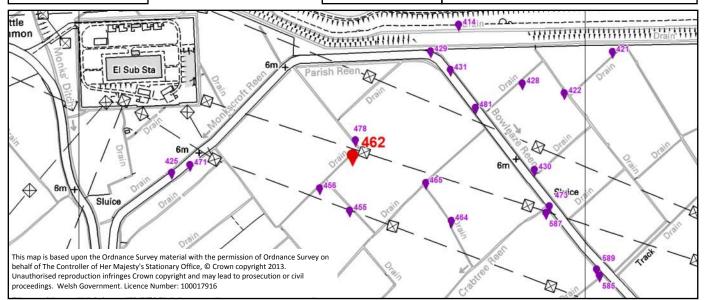


Unique Reference	461	Date:	07-08-2014 16:28 GP :	S : ,
Waterbody Number:	1344	Surveyor: TS MM		
Location Map:		Surveyed Length:		
behalf of The Controller of Her Majesty's S	n copyright and may lead to prosecution or civil	` \ ,	6m b 6551 Pipe lines Pump House 6	447 446 447 447 Grangefield 632, 638 640
Habitat			Neighboring Land Use	
Bank Profile			Bank Management	
Depth of Water			Suitability for Otters	
Channel Width			Otter Signs	
Flow Speed			Suitability for Watervole	s
Shore Banks			Watervole Signs	
Vegetat	ion Description		Comm	ents:
		Dry		

Photo 1 Photo 2 Photo 3



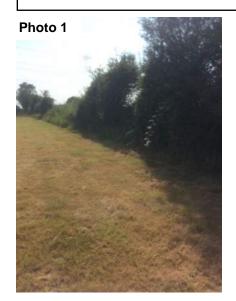
Unique Reference	462	Date:	Date: 06-08-2014 16:30		GPS:	51.563254, -2.902456
Waterbody Number:	1077	Surveyor:		TS		
Location Map:		Survey	Surveyed Length: 50		50	



Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	0.5 - 1m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description	Comments:
Dense sedge bank and hedge	Inaccessible in most parts







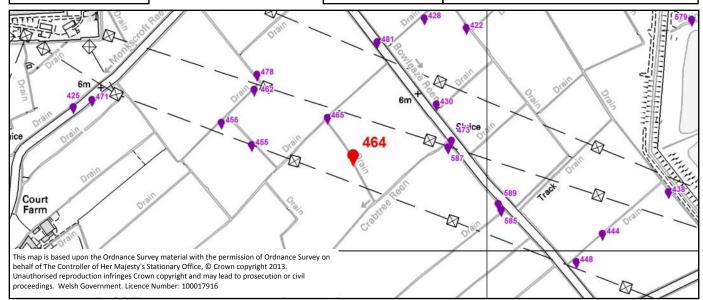
						Welsh Government	
Unique Reference	463	Date:	07-	08-2014 16:28	GPS:	,	
Waterbody Number:	853	Surve	Surveyor: TS MM				
Location Map:		Surveyed Length:					
behalf of The Controller of Her Majesty's S	ey material with the permission of Ordnance Survey tationary Office, © Crown copyright 2013.	rish Reen	Prairi 78	481 481 485 466 466 467 468 468	6m	422 421 430 589 Track	
Habitat			Neig	jhboring Land l	Jse		
Bank Profile			Ban	k Management			
Depth of Water			Suit	ability for Otter	s		
Channel Width			Otte	r Signs			
Flow Speed			Suit	ability for Wate	rvoles		
Shore Banks			Wat	ervole Signs			
Vegetat	ion Description			С	ommer	nts:	
		Dry	/				

Photo 1

Photo 2 Photo 3



Unique Reference	464	Date:	Date: 06-08-2014 15:41		GPS:	51.562123, -2.899608
Waterbody Number:		Surveyor:		-	ΓS	
Location Map:		Survey	Surveyed Length:		50	

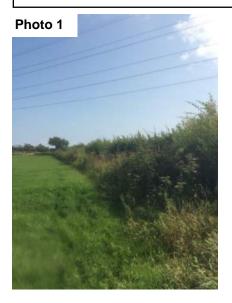


Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	<0.5m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

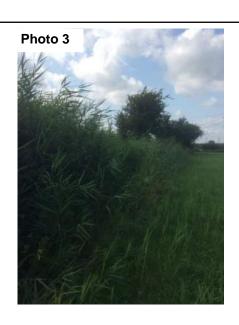
Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description Comments:

Heavily vegetated and encroached by hedgerow

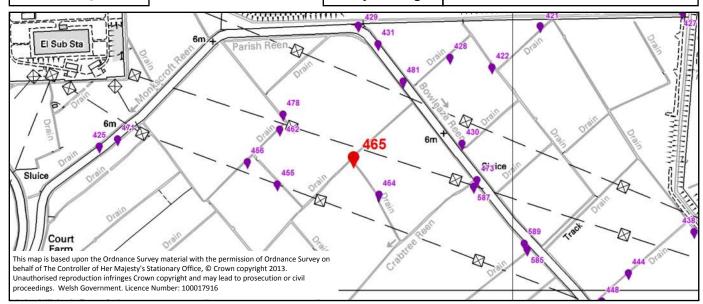








Unique Reference	465	Date:	Date: 06-08-2014 15:51		GPS:	51.562779, -2.900356
Waterbody Number:	561	Surveyor:		TS		
Location Map:		Surve	ed L	enath:	100	



Habitat	Reen				
Bank Profile	Shallow <45deg				
Depth of Water	0.5 - 1m				
Channel Width	1 - 2m				
Flow Speed					
Shore Banks	Earth				

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Heavily vegetated by duck weed, encroached by scrub and sedges. Some purple loosestrife and sweet reed grass present

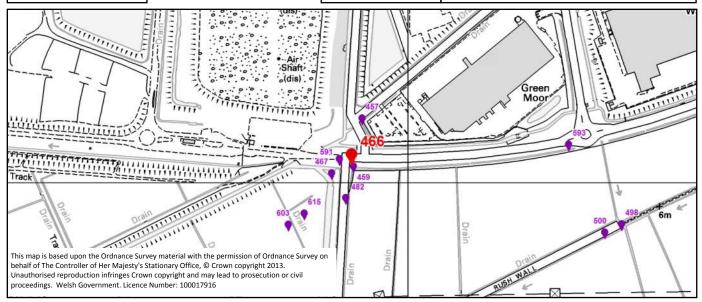
Comments:







Unique Reference	466	Date:	07-	08-2014 16:00	GPS:	51.570161, -2.868715
Waterbody Number:	1343	Surve	yor: TS MM			
Location Map:		Surveyed Length:				



Habitat	Reen		
Bank Profile	Steep >45deg		
Depth of Water	1 - 2m		
Channel Width	2 - 5m		
Flow Speed	Sluggish		
Shore Banks	Earth		

Neighboring Land Use	Urban;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Comments:

Moderate water quality. Recently managed.





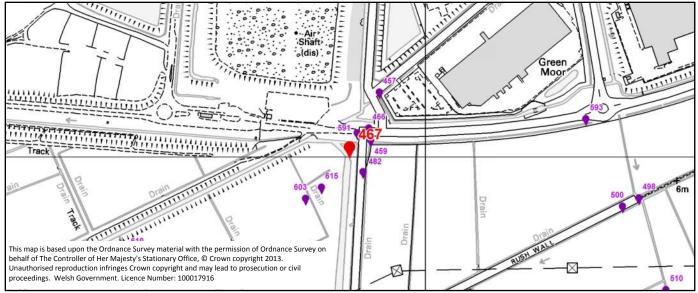




 Unique Reference
 467
 Date:
 07-08-2014 15:30
 GPS:
 51.569825, -2.869261

 Waterbody Number:
 678
 Surveyor:
 TS MM

 Location Map:
 Surveyed Length:
 10



Habitat	Reen		
Bank Profile	Steep >45deg		
Depth of Water	1 - 2m		
Channel Width	2 - 5m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Livestock grazing; Scrub;
Bank Management	
Suitability for Otters	
Otter Signs	
Suitability for Watervoles	
Watervole Signs	

Vegetation Description

Duckweed dominated, some Phragmites emerging in water body and on fringes. Bank side veg: bull rush, nUrtica, marsh thistle an bramble scrub. Trees: goat willow, crack willow, hawthorn

Comments:

Poor water quality, high nutrients/eutrophic

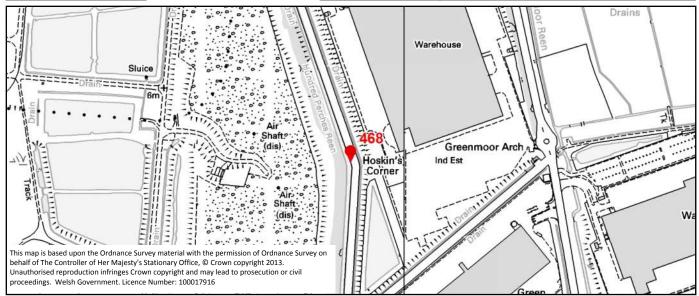








Unique Reference	468	Date:	07-	08-2014 16:17	GPS:	51.573828, -2.868702
Waterbody Number:	1348	Survey	or:		TS	MM
Location Map:		Surveyed Length:				



Habitat	Reen		
Bank Profile	Steep >45deg		
Depth of Water	0.5 - 1m		
Channel Width	2 - 5m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

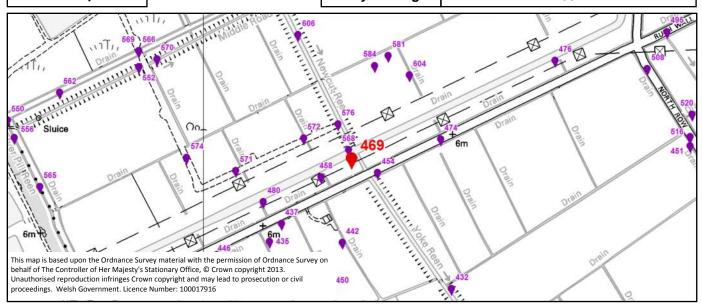
 Vegetation Description
 Comments:







Unique Reference	469	Date:	Date: 07-08-2014 12:23		GPS:	51.564325, -2.877198
Waterbody Number:	1350	Survey	Surveyor:		TS	SMM
Location Map:		Surveyed Length:			50	



Habitat	Reen		
Bank Profile	Shallow <45deg		
Depth of Water	>2m		
Channel Width	2 - 5m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Livestock grazing; Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Feeding Stations;

Vegetation Description

Duck weed, Frogbit, bull rush in reen. Bank veg: bull rush, soft rush, umbels

Comments:







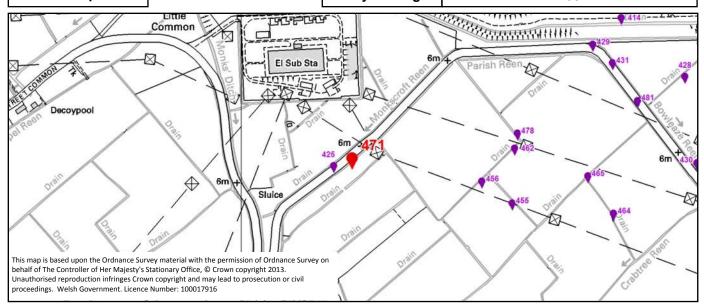


Unique Reference	470	Date:	06-08-2014 15:29 GPS	· ,		
Waterbody Number:	1299	Surveyor: TS				
Location Map:		Survey	Surveyed Length:			
behalf of The Controller of Her Majesty's S	vey material with the permission of Ordnance Survey stationary Office, © Crown copyright 2013. In copyright and may lead to prosecution or civil Number: 100017916	568 458 458 450	84 581 604 074 078 078 078 078 078 078 078 078	476 D 608 516 451 D 101		
Habitat			Neighboring Land Use			
Bank Profile			Bank Management			
Depth of Water			Suitability for Otters			
Channel Width			Otter Signs			
Flow Speed			Suitability for Watervoles	3		
Shore Banks			Watervole Signs			
Vegetat	ion Description		Comm	ents:		
		Inad	ccessible reed bed			

Photo 1 Photo 2 Photo 3



Unique Reference	471	Date: 06-08-2014 14:24		GPS:	51.563046, -2.907077	
Waterbody Number:	566	Surveyor:			TS	
Location Map:		Surveyed Length:		enath:		100



Habitat	Reen			
Bank Profile	Steep >45deg			
Depth of Water	1 - 2m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	Feeding Stations;

Comments:

Vegetation Description

Feeding station

Heavy duck weed cover.sedges on the edges





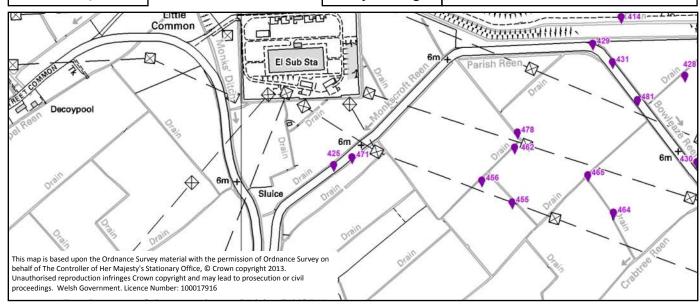




 Unique Reference
 472
 Date:
 07-08-2014 14:50
 GPS:
 ,

 Waterbody Number:
 1068
 Surveyor:
 TS MM

 Location Map:
 Surveyed Length:



Habitat	Reen		
Bank Profile	Shallow <45deg		
Depth of Water	>2m		
Channel Width	5 - 10m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Livestock grazing; Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Latrines;

Vegetation Description

Duckweed, Frogbit in water body. Phragmites along bank, Mentha aquatica, hard rush, birds foot trefoil, marsh thistle, umbels, sedge sp.,

Comments:

Wide habitat. Latrine on rotting wood branch

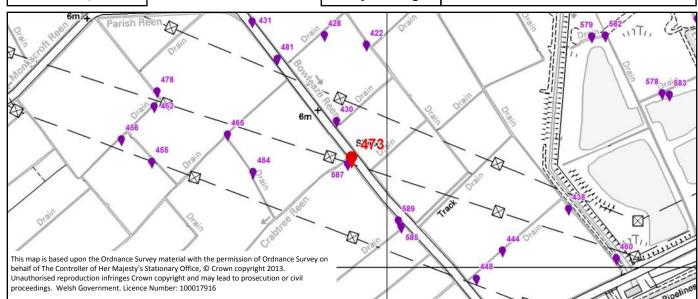








Unique Reference	473	Date: 06-08-2014 15:25		GPS:	51.5624, -2.89682
Waterbody Number:	555	Surveyor:		•	TS
Location Map:		Surveyed Length:			0



Habitat	Reen		
Bank Profile	Steep >45deg		
Depth of Water	1 - 2m		
Channel Width	2 - 5m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Arable;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

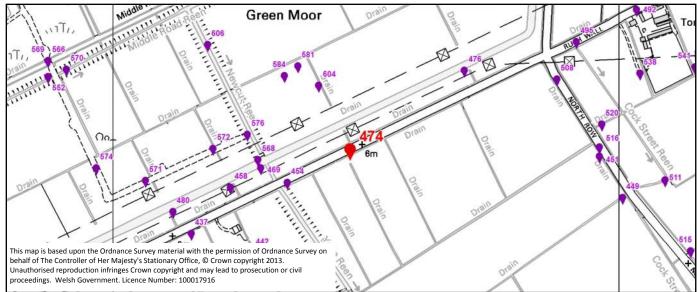
Comments:
Poor water quality



Photo 2 Photo 3



Unique Reference	474	Date:	07-	08-2014 14:09	GPS:	51.564682, -2.874655
Waterbody Number:	608	Surveyor:		TS MM		
Location Map:		Surveyed Length:				



Habitat	
Bank Profile	
Depth of Water	
Channel Width	
Flow Speed	
Shore Banks	

Neighboring Land Use

Bank Management

Suitability for Otters

Otter Signs

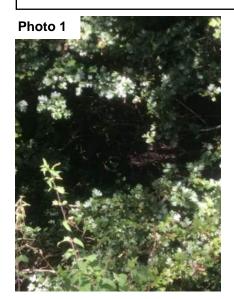
Suitability for Watervoles

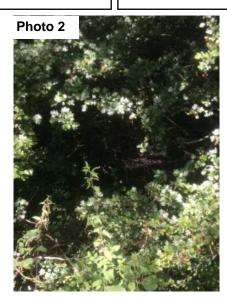
Watervole Signs

Comments:

Vegetation Description

Dry, unsuitable





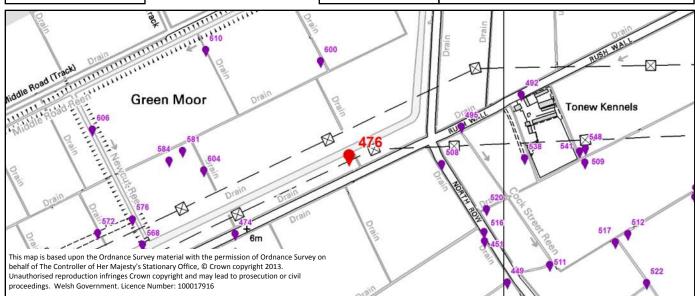


Unique Reference	475	Date:	06-08-2014	16:26 GPS :	,	
Waterbody Number:	564	Surveyor:		TS		
Location Map:		Surveyed Length:				
This map is based upon the Ordnance Survey material with the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationary Office, © Crown copyright 2013. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Welsh Government. Licence Number: 100017916					149 511 449 511	
Habitat			Neighboring	Land Use		
Bank Profile			Bank Manag	ement		
Depth of Water			Suitability fo	r Otters		
Channel Width			Otter Signs			
Flow Speed			Suitability fo	r Watervoles		
Shore Banks			Watervole Si	igns		
Vegetati	ion Description			Commer	nts:	
		Dry				

Photo 1 Photo 2 Photo 3



Unique Reference	476	Date:	07-	08-2014 14:22	GPS:	51.566093, -2.871426
Waterbody Number:	1066	Surveyor:		TS MM		MM
Location Map:		Surveyed Length:				



Habitat	
Bank Profile	Vertical/undercut
Depth of Water	
Channel Width	
Flow Speed	
Shore Banks	

Neighboring Land Use
Bank Management
Suitability for Otters
Otter Signs
Suitability for Watervoles
Watervole Signs

Vegetation Description

Comments:

Overgrown, inaccessible, unsuitable





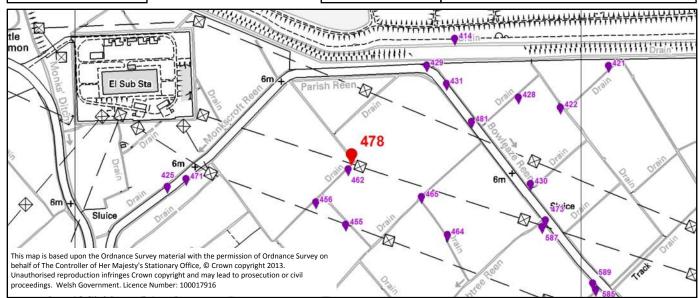


Unique Reference	477	Date:	06-08-2014	15:28 GPS :	,	
Waterbody Number:	1259	Surveyor: TS				
Location Map:		Surveyed Length:				
572 This map is based upon the Ordnance Surbehalf of The Controller of Her Majesty's S	668 Wey material with the permission of Ordnance Survey stationary Office, © Crown copyright 2013. In copyright and may lead to prosecution or civil	476 on		495.11 (1) P. 10	Tonew Kennels 548 509	522
Habitat			Neighboring	Land Use		
Bank Profile			Bank Manag	ement		
Depth of Water			Suitability fo	r Otters		
Channel Width			Otter Signs			
Flow Speed			Suitability fo	r Watervoles		
Shore Banks			Watervole Si	igns		
Vegetat	ion Description			Commer	nts:	
		Inac	ccessible reed	bed		

Photo 1 Photo 2 Photo 3



Unique Reference	478	Date: 06-08-2014 16:24		GPS:	51.563521, -2.902378
Waterbody Number:	567	Surveyor:		TS	
Location Map:		Surveyed Length:			50



Habitat	Reen
Bank Profile	Shallow <45deg
Depth of Water	0.5 - 1m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	

Neighboring Land Use	
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description	Comments:
Densely vegetated by reeds	







Unique Reference	479	Date:	06-08	3-2014 15:27	GPS:	,	
Waterbody Number:	1188	Surveyor:			TS		
Location Map:		Surveyed Length:					
behalf of The Controller of Her Majesty's St	ey material with the permission of Ordnance Survey tationary Office, © Crown copyright 2013.	478 4456 456		466 466 466	428 6m	422 587 589 7.86	
Habitat			Neigh	boring Land	Use		
Bank Profile			Bank	Management			
Depth of Water			Suital	oility for Otter	s		
Channel Width			Otter	Signs			
Flow Speed			Suital	oility for Wate	rvoles		
Shore Banks			Water	vole Signs			
Vegetation Description			Comments:				
		Inad	ccessib	ole reed bed			

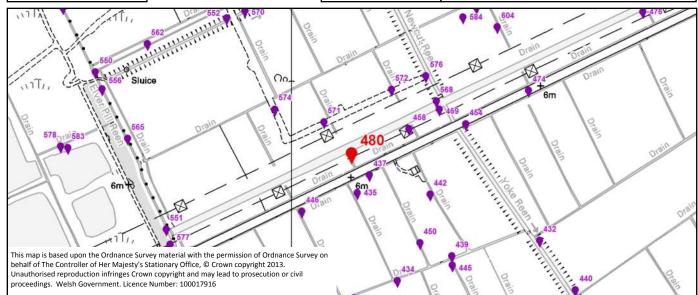
Photo 1 Photo 2 Photo 3



 Unique Reference
 480
 Date:
 07-08-2014 12:01
 GPS:
 51.563538, -2.87969

 Waterbody Number:
 596
 Surveyor:
 TS MM

 Location Map:
 Surveyed Length:



Habitat	
Bank Profile	
Depth of Water	
Channel Width	
Flow Speed	
Shore Banks	

Neighboring Land Use

Bank Management

Suitability for Otters

Otter Signs

Suitability for Watervoles

Watervole Signs

Comments:

Vegetation Description

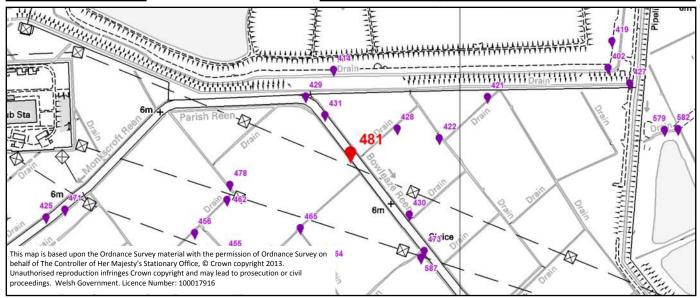
Inaccessible, overgrown







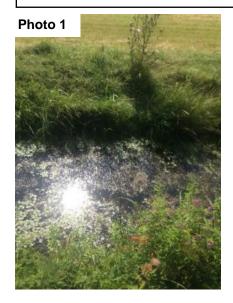
Unique Reference	481	Date:	Date: 06-08-2014 15:06		GPS:	51.564124, -2.898964
Waterbody Number:	559	Survey	Surveyor:		TS	
Location Map:		Survey	Surveyed Length:		50	



Habitat	Reen					
Bank Profile	Shallow <45deg					
Depth of Water	0.5 - 1m					
Channel Width	1 - 2m					
Flow Speed	Still					
Shore Banks	Earth					

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Feeding Stations;

Vegetation Description	Comments:
Sedges, Frogbit, willow herb, trees	Reeds

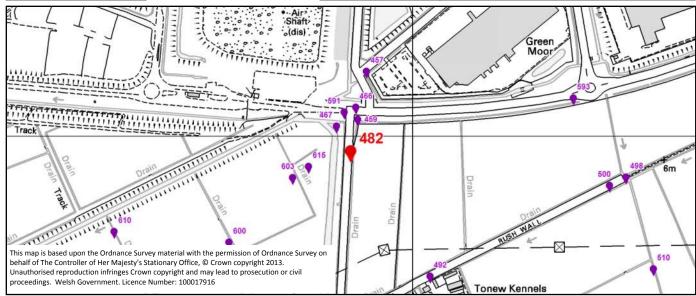








Unique Reference	482	Date:	ate: 07-08-2014 16:52		GPS:	51.569391, -2.868859	
Waterbody Number:	583	Surveyor:			TS		
Location Map:		Survey	Surveyed Length:		100		



Habitat	Ditch				
Bank Profile	Steep >45deg				
Depth of Water	1 - 2m				
Channel Width	2 - 5m				
Flow Speed	Still				
Shore Banks	Earth				

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description

Duckweed dominates surface of water body. Overgrown surrounding vegetation: hawthorn, crack willow, bramble, great willow herb, hedge bind weed, bittersweet nightshade.

Comments:

Overgrown, difficult to access.









Unique Reference 483 Date: 07-08-2014 15:38 GPS: ,

Waterbody Number: 853 Surveyor: TS MM

Location Map: Surveyed Length: Green Moor Moor Management of the Majesty's Stationary Office, 6 Crown copyright 2013. In Surveyor or the Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office, 6 Crown copyright 2013. In Junauthorised reproduction in fringes Crown copyright and may lead to prosecution or civil

Habitat	
Bank Profile	
Depth of Water	
Channel Width	
Flow Speed	
Shore Banks	

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Neighboring Land Use
Bank Management
Suitability for Otters
Otter Signs
Suitability for Watervoles
Watervole Signs

 Vegetation Description
 Comments:





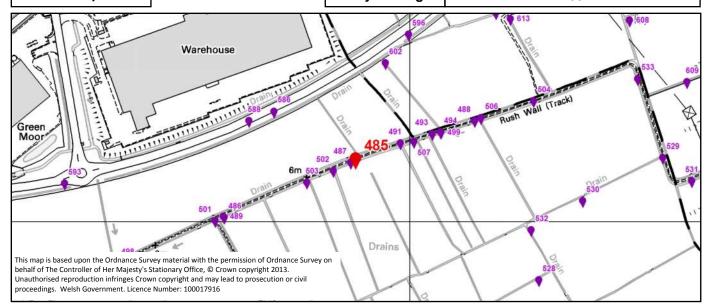


Unique Reference	484	Date	e : 06	-08-2014 15:28 GPS:	,		
Waterbody Number:	1252	Sur	Surveyor: TS				
Location Map:		Sur	Surveyed Length:				
This map is based upon the Ordnance Surv behalf of The Controller of Her Majesty's S	ey material with the permission of Ordnance Survey tationary Office, © Crown copyright 2013.	591 467	4570 469 482		reen Moor 593 593 6m		
Habitat			\dashv	ghboring Land Use			
Bank Profile			-	nk Management			
Depth of Water			Sui	tability for Otters			
Channel Width			Ott	er Signs			
Flow Speed			Sui	tability for Watervoles			
Shore Banks			Wa	tervole Signs			
Vegetation Description			Comments:				
			Does n	ot exist			

Photo 1 Photo 2 Photo 3



Unique Reference	485	Date:	12-08-2014 16:01		GPS:	51.570883, -2.854241	
Waterbody Number:	787	Surveyor:			TS/FG		
Location Map:		Survey	Surveyed Length:		100		



Habitat	Reen				
Bank Profile	Steep >45deg				
Depth of Water	1 - 2m				
Channel Width	2 - 5m				
Flow Speed	Still				
Shore Banks	Earth				

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Ruderal on north side. Managed on South side.

Comments:

Possible feeding station on south side but difficult to tell due to managed bank. Grass chomped at 45 degrees.

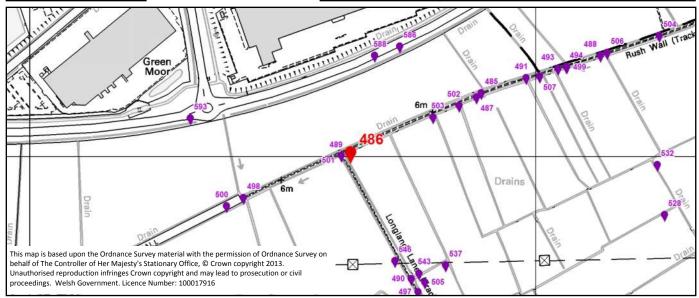








Unique Reference	486	Date:	Date: 12-08-2014 14:04		GPS:	51.569811, -2.857953	
Waterbody Number:	631	Surveyor:			TS/FG		
Location Map:		Survey	Surveyed Length:		Surveyed Length: 100		100



Habitat	Reen
Bank Profile	Steep >45deg
Depth of Water	1 - 2m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	Lawns;

Vegetation Description

_

Long grass and ruderal

Comments:

Potential mink tar spots. Mink/rat presence. possible water vole burrow. animal heard. (likely brown rat as no feeding station found on bank). Bank could not be checked due to cattle in field.









- Tarparian Fia						Llywodraeth Cymru Welsh Government	
Unique Reference	487	Date:	12-08-20°	14 15:58	GPS:	51.570803, -2.854372	
Waterbody Number:	968	Surveyor: TS/FG					
Location Map:		Survey	ed Length	:			
behalf of The Controller of Her Majesty's S	n copyright and may lead to prosecution or civil		596 502 491 493 497 507	488 5 494 499	613 Rush Wal	504 Trackl 533 609 529 531	
Habitat			Neighbori	_			
Bank Profile			Bank Man				
Depth of Water			Suitability	for Otter	'S		
Channel Width			Otter Sign	ıs			
Flow Speed			Suitability	for Wate	rvoles		
Shore Banks			Watervole	Signs			
Vegetation Description			Comments:				
		nsu Sha	uitable. Den aded.	se vegeta	tion. Higl	n dog weed cover.	





						Llywodraeth Cymru Welsh Government		
Unique Reference	488	Date:	12-	08-2014 15:13	GPS:	51.571566, -2.850853		
Waterbody Number:	895	Surveyor: TS/FG						
Location Map:		Surveyed Length:						
Warehouse	592 595 110 614 606 13 608 617 117, 608 606 13 609 609 609 609 609 609 609 609 609 609							
behalf of The Controller of Her Majesty's St	n copyright and may lead to prosecution or civil	on Jan		530		,,TT,,		
Habitat			Nei	ghboring Land l	Jse			
Bank Profile			Ban	k Management				
Depth of Water			Suit	ability for Otter	S			
Channel Width			Otte	er Signs				
Flow Speed			Suit	ability for Wate	rvoles			
Shore Banks			Wat	ervole Signs				
Vegetati	on Description			С	ommen	its:		
		Uns qua	suital ality.	ole. Densely vege Heavy duckweed	etated. F	Heavily shaded. Low water		





Unique Reference	489	Date:	12-	08-2014 14:09	GPS:	51.569823, -2.857983
Waterbody Number:	810	Survey	or:		TS	S/FG
Location Map:		Survey	ed L	ength:		
behalf of The Controller of Her Majesty's S	Green Moor 500 498 6m 500 400 400 400 400 400 400 400 400 400	501 48	11.588	6m 503 48 483 483 484 544 543 505	491 Drains	493 494 FRUSTI Wall (Track) 493 499 507
Habitat			Neig	ghboring Land l	Jse	
Bank Profile			Ban	k Management		
Depth of Water			Suit	ability for Otters	s	
Channel Width			Otte	r Signs		
Flow Speed			Suit	ability for Wate	rvoles	
Shore Banks			Wat	ervole Signs		
Vegetat	ion Description			С	ommen	ts:
Photo 1	Photo 2	Uns	suitak		oto 3	





Unique Reference Date: GPS: 490 12-08-2014 16:28 51.56759, -2.856173 Waterbody Number: 985 Surveyor: TS/FG **Location Map:** Surveyed Length: Drains 510 Tonew Kennels This map is based upon the Ordnance Survey material with the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationary Office, © Crown copyright 2013. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Welsh Government. Licence Number: 100017916 **Neighboring Land Use** Habitat **Bank Profile Bank Management Depth of Water Suitability for Otters Channel Width** Otter Signs **Suitability for Watervoles** Flow Speed **Shore Banks** Watervole Signs **Vegetation Description Comments:** Unsuitable. Overgrown. Shaded.



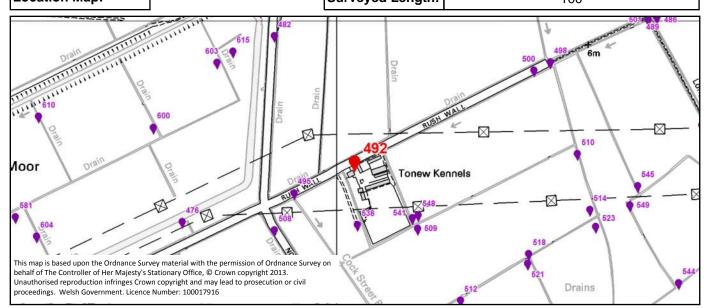


Date: GPS: **Unique Reference** 491 12-08-2014 14:52 51.571155, -2.85296 Waterbody Number: 961 Surveyor: TS/FG Surveyed Length: **Location Map:** Warehouse This map is based upon the Ordnance Survey material with the permission of Ordnance Survey on ins behalf of The Controller of Her Majesty's Stationary Office, © Crown copyright 2013. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Welsh Government. Licence Number: 100017916 **Neighboring Land Use** Habitat **Bank Profile Bank Management Depth of Water Suitability for Otters Channel Width** Otter Signs **Suitability for Watervoles** Flow Speed Watervole Signs **Shore Banks Vegetation Description Comments:** Unsuitable. Densely vegetated. Heavily shaded. Low water quality. Heavy duckweed cover





Unique Reference	492	Date:	Date: 12-08-2014 10:41		GPS:	51.567198, -2.866541	
Waterbody Number:	625	Surveyor:			TS/FG		
Location Man		Surveyed Length:		ength:		100	



Habitat	Reen				
Bank Profile	Steep >45deg				
Depth of Water	0.5 - 1m				
Channel Width	2 - 5m				
Flow Speed	Slow				
Shore Banks	Earth				

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Willow herb, nettle, sedges, rush, dense duckweed cver.

Comments:

Recently cut bank









						Welsh Government		
Unique Reference	493	Date:	12-	08-2014 14:57	GPS:	51.571326, -2.852062		
Waterbody Number:	953	Surve	Surveyor: TS/FG					
Location Map:		Surveyed Length:						
behalf of The Controller of Her Majesty's Sta	copyright and may lead to prosecution or civil	596 02 499 507	193 494	605 II 614 506 Rush Wall (Track) 488	Signal Si	608 (17) 617 (17) 629 531 631 (17) (17)		
Habitat			Neig	hboring Land l	Jse			
Bank Profile			Ban	k Management				
Depth of Water			Suit	ability for Otter	s			
Channel Width			Otte	r Signs				
Flow Speed			Suit	ability for Wate	rvoles			
Shore Banks			Wat	ervole Signs				
Vegetation	on Description			C	ommen	nts:		
		Un: qua	suitak ality. I	ole. Densely vego Heavy duckweed	etated. I cover	Heavily shaded. Low water		

Photo 1

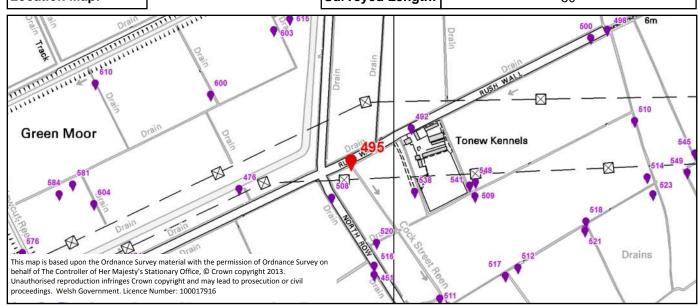


Unique Reference	494	Date:	12-0	08-2014 15:37	GPS:	51.571366, -2.851829
Waterbody Number:	873	Survey	Surveyor: TS/FG		/FG	
Location Map:		Survey	ed Le	ength:		
behalf of The Controller of Her Majesty's S	n copyright and may lead to prosecution or civil	493 49 507	594 48	506 Rush Wall (Track)	630 630	608 11, 617 11, 529 531 531 531 531 531 531 531 531
Habitat			Neig	hboring Land	Use	
Bank Profile			Bank	k Management		
Depth of Water			Suita	ability for Otter	s	
Channel Width			Otte	r Signs		
Flow Speed			Suita	ability for Wate	rvoles	
Shore Banks			Wate	ervole Signs		
Vegetat	ion Description			C	omment	ts:
		Uns Sha	suitab aded.	le. Dense veget	tation. Hi	gh dig weed cover.





Unique Reference	495	Date:	12-	08-2014 12:28	GPS:	51.566624, -2.868245
Waterbody Number:	605	Survey	or:		TS	S/FG
Location Map:		Survey	Surveyed Length:			50



Habitat	Reen
Bank Profile	Steep >45deg
Depth of Water	1 - 2m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Comments:

Better quality, mainly sedges. Surrounding hedgerows of hawthorn.







Unique Reference Date: GPS: 496 12-08-2014 15:40 Waterbody Number: 830 Surveyor: TS/FG **Location Map:** Surveyed Length: Green Moor Tonew Kennels Drains This map is based upon the Ordnance Survey material with the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationary Office, © Crown copyright 2013. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Welsh Government. Licence Number: 100017916 **Neighboring Land Use** Habitat **Bank Profile Bank Management Depth of Water Suitability for Otters Channel Width** Otter Signs **Suitability for Watervoles** Flow Speed **Shore Banks** Watervole Signs **Vegetation Description** Comments: Unsuitable. Dense vegetation. High dog weed cover. Shaded.



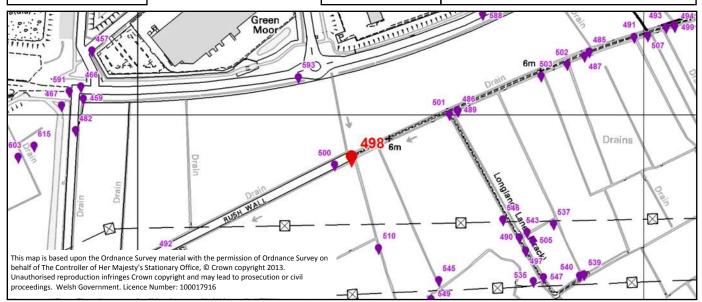


•						Llywodraeth Cymru Welsh Government
Unique Reference	497	Date:	12-	08-2014 16:29	GPS:	51.567358, -2.855981
Waterbody Number:	897	Survey	or:	TS/FG		
Location Map:		Survey	Surveyed Length:			
behalf of The Controller of Her Majesty's S	510 510 545 518 vey material with the permission of Ordnance Survey Stationary Office, © Crown copyright 2013. vn copyright and may lead to prosecution or civil	545 490 535	537 19,7 547 64			528 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Habitat			Neig	hboring Land	Jse	
Bank Profile				k Management		
Depth of Water			Suit	ability for Otter	s	
Channel Width			Otte	r Signs		
Flow Speed			Suit	ability for Wate	rvoles	
Shore Banks			Wat	ervole Signs		
Vegetat	tion Description			C	commen	ts:
		Uns	suitab	ole. Overgrown.	Dry.	

Photo 1



Unique Reference	498	Date:	12-08-2014 12:06		GPS:	51.568984, -2.86099
Waterbody Number:	629	Survey	or:		TS/FG	
Location Map:		Survey	Surveyed Length:			50



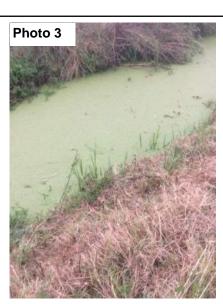
Habitat	Reen
Bank Profile	Steep >45deg
Depth of Water	1 - 2m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Comments:
Dense duckweed cover

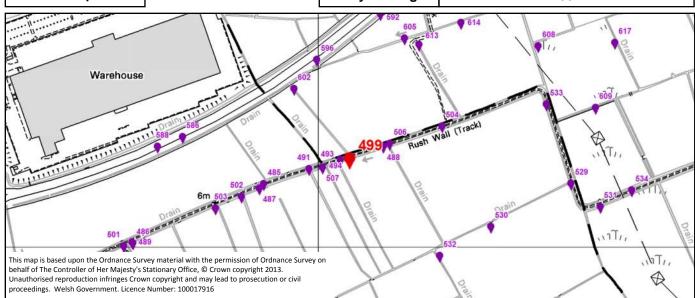








Unique Reference	499	Date:	12-	08-2014 15:01	GPS:	51.571352, -2.851813
Waterbody Number:	890	Survey	or:		TS	S/FG
Location Map:		Survey	Surveyed Length:			50



Habitat	Reen
Bank Profile	Steep >45deg
Depth of Water	1 - 2m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Comments:

Recently managed bank, thistles.





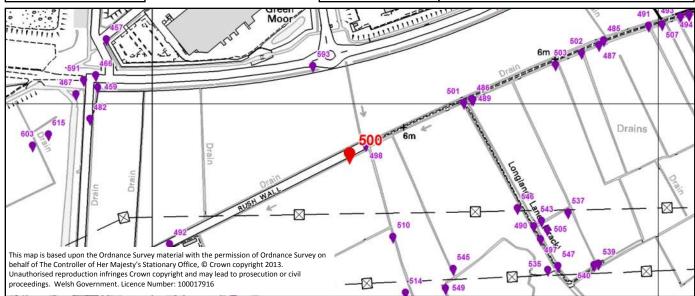




 Unique Reference
 500
 Date:
 12-08-2014 11:15
 GPS:
 51.568837, -2.861456

 Waterbody Number:
 623
 Surveyor:
 TS/FG

 Location Map:
 Surveyed Length:



Habitat

Bank Profile

Depth of Water

Channel Width

Flow Speed

Shore Banks

Neighboring Land Use
Bank Management
Suitability for Otters
Otter Signs
Suitability for Watervoles
Watervole Signs

Vegetation Description

Comments:

UNsuitable, bad water quality, almost dry, overgrown

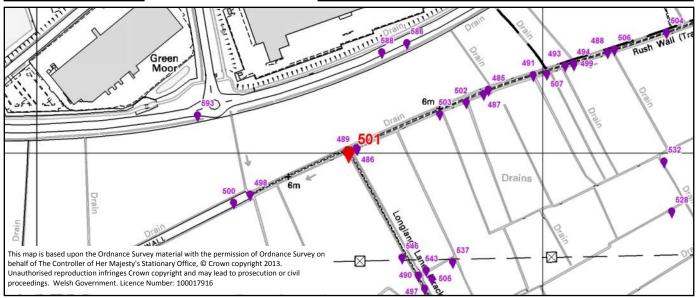








Unique Reference	501	Date:	Date: 12-08-2014 11:38		GPS:	51.56975, -2.858212
Waterbody Number:	621	Survey	Surveyor:		TS/FG	
Location Map:		Survey	Surveyed Length:			50



Habitat	Reen
Bank Profile	Steep >45deg
Depth of Water	1 - 2m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Arable;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Ruderal vegetation, few reeds and rushes

Comments:

Possible mink spraint. Heavy duckweed cover. Rat burrow. Mink raffs previously seen in this ditch network.

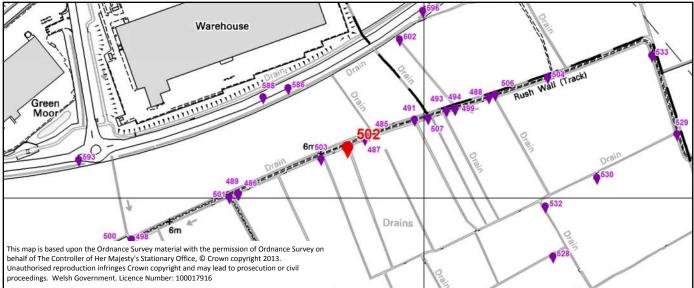








Unique Reference	502	Date:	12-	08-2014 14:29	GPS:	51.570656, -2.854869	
Waterbody Number:	976	Surveyor:		TS/FG			
Location Map:		Surveyed Length:					



Habitat	Neighboring Land Use
Bank Profile	Bank Management
Depth of Water	Suitability for Otters
Channel Width	Otter Signs
Flow Speed	Suitability for Watervoles
Shore Banks	Watervole Signs

Vegetation Description	Comments:					
	Unsuitable. Densely vegetated. Heavily shaded. Low water quality. Heavy duckweed cover.					



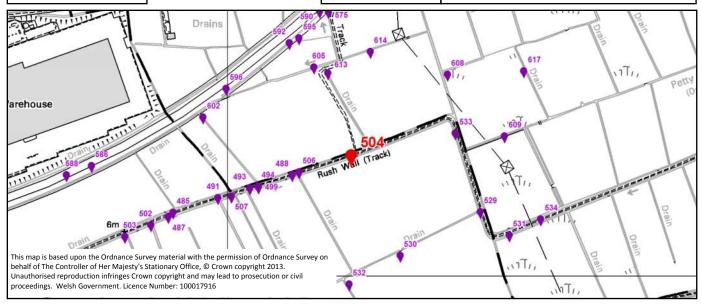


<u>-</u>						Llywodraeth Cymru Welsh Government	
Unique Reference	503	Date:	12-	08-2014 14:31	GPS:	51.570445, -2.855612	
Waterbody Number:	744	Surveyor: TS/FG					
Location Map:		Survey	/ed L	ength:			
behalf of The Controller of Her Majesty's S	his map is based upon the Ordnance Survey material with the permission of Ordnance Survey on sehalf of The Controller of Her Majesty's Stationary Office, © Crown copyright 2013. Inauthorised reproduction infringes Crown copyright and may lead to prosecution or civil						
Habitat			Neig	hboring Land	Use		
Bank Profile			Ban	k Management			
Depth of Water			Suit	ability for Otte	rs		
Channel Width			Otte	r Signs			
Flow Speed			Suit	ability for Wate	ervoles		
Shore Banks			Wat	ervole Signs			
Vegetation Description				Comments:			
				ole. Densely veg Heavy duckweed		leavily shaded. Low water	





Unique Reference	504	Date:	Date: 12-08-2014 15:24		GPS:	51.571933, -2.849177	
Waterbody Number:	962	Surveyor:		TS/FG			
Location Map:		Survey	Surveyed Length:		Surveyed Length: 50		50



Habitat	Reen
Bank Profile	Steep >45deg
Depth of Water	1 - 2m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	

Neighboring Land Use	
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

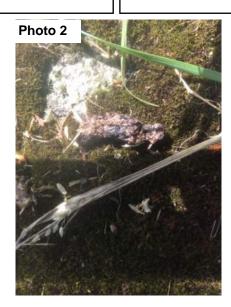
Vegetation Description

Comments:

Managed on soured side. Ruderal on Northern side.

Quite recent mink spraint. No small mammal bones found in spraint.









						Llywodraeth Cymru Welsh Government		
Unique Reference	505	Date:	12-	08-2014 16:27	GPS:	51.567532, -2.855787		
Waterbody Number:	903	Survey	Surveyor: TS/FG					
Location Map:		Surveyed Length:						
	501 486					532		
behalf of The Controller of Her Majesty's S	rey material with the permission of Ordnance Survatationary Office, © Crown copyright 2013. In copyright and may lead to prosecution or civil	548 549 535 542 Vey on	537 500 5 547	Drains Drains		528 ¹² / ₂		
Habitat			Neig	hboring Land l	Jse			
Bank Profile			Ban	k Management				
Depth of Water			Suit	ability for Otter	s			
Channel Width			Otte	er Signs				
Flow Speed			Suit	ability for Wate	rvoles			
Shore Banks		Watervole Signs						

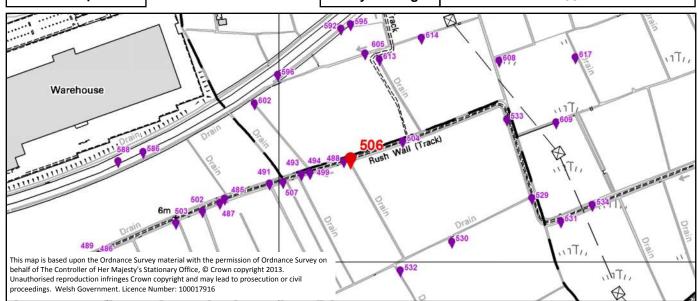
 Vegetation Description
 Comments:

 Unsuitable. Overgrown. Shaded.





Unique Reference	506	Date:	Date: 12-08-2014 15:14		GPS:	51.571621, -2.850666	
Waterbody Number:	875	Survey	Surveyor:		TS/FG		
Location Map:		Survey	Surveyed Length:		Surveyed Length: 100		100



Habitat	Reen			
Bank Profile	Steep >45deg			
Depth of Water	1 - 2m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Arable; Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description Comments:

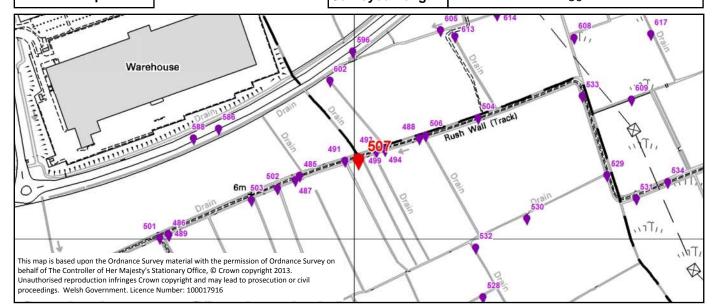
Recently managed on Northern side. Ruderal on the southern side.







Unique Reference	507	Date:	Date: 12-08-2014 15:42		GPS:	51.571183, -2.85258
Waterbody Number:	888	Survey	Surveyor:		TS/FG	
Location Map:		Surve	Surveyed Length:		th: 50	



Habitat	Reen			
Bank Profile	Steep >45deg			
Depth of Water	1 - 2m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

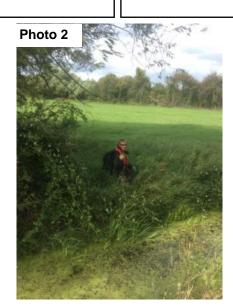
Vegetation Description

Managed on the southern side. Ruderal on the northern side.

Comments:

Feeding stations found in 2 separate locations. Bank vole droppings found.

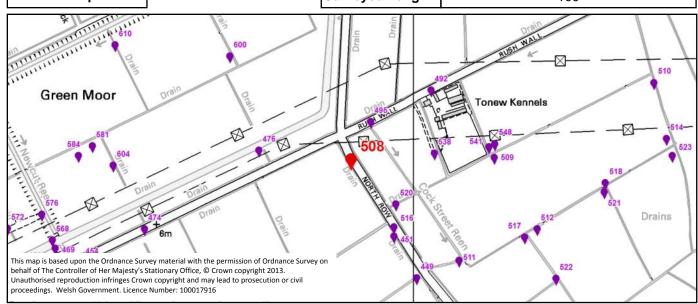








Unique Reference	508	Date:	Date: 12-08-2014 10:42		GPS:	51.565961, -2.868788
Waterbody Number:	612	Survey	Surveyor:		Ao SC	
Location Map:		Surve	Surveyed Length:		h: 100	



Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	<0.5m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	Pathways; Feeding Stations;

Vegetation Description

Bramble hedge, bullrush in ditch, nettles and Umbellifores in ditch. Roadside verge recently cut.

Comments:

Feeding station on bank of field ditch adjacent to road.

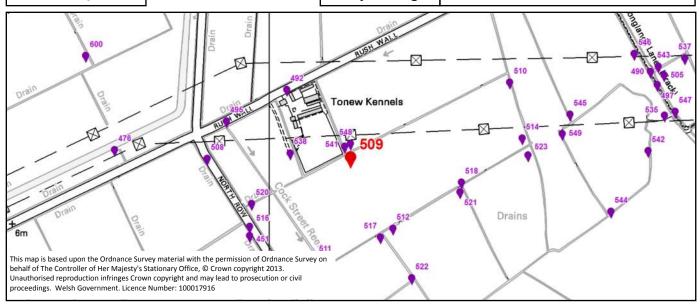








Unique Reference	509	Date:	Date: 12-08-2014 16:34		GPS:	51.566018, -2.864706
Waterbody Number:	898	Survey	Surveyor:		AO & SC	
Location Map:		Surve	Surveyed Length:		200	



Habitat	Ditch			
Bank Profile	Steep >45deg			
Depth of Water	1 - 2m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Arable;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Comments:

Blackthorn, crack willow, goat willow. Phragmites.

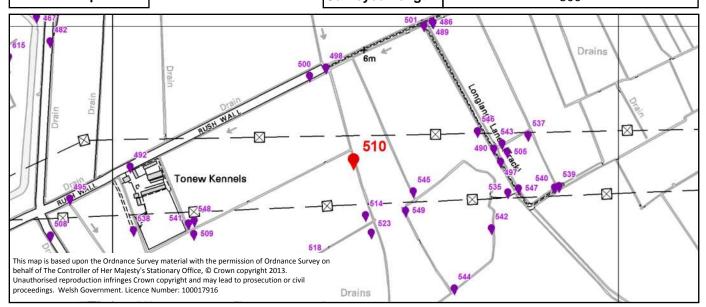








Unique Reference	510	Date:	12-08-2014 16:14		GPS:	51.567374, -2.860181	
Waterbody Number:	981	Surveyor:			AO & SC		
Location Map:		Survey	Surveyed Length:		300		



Habitat	Ditch				
Bank Profile	Shallow <45deg				
Depth of Water	1 - 2m				
Channel Width	5 - 10m				
Flow Speed	Still				
Shore Banks	Earth				

Neighboring Land Use	Arable;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	Pathways; Feeding Stations;

Vegetation Description

Double sided hedge with horthorn, crack willow, wild rose, grasses, nettles.a section of the water surface covered in duckweed in the ditch

Comments:

Bat foraging potential with hedgerow & mature crack willow.

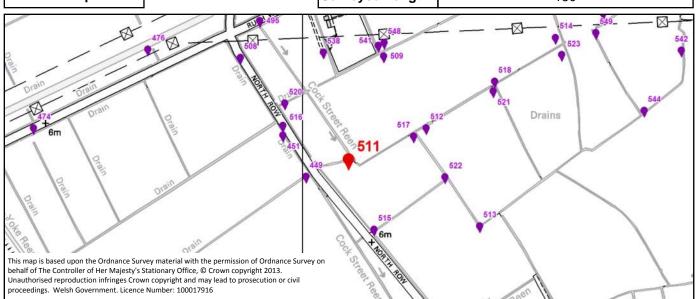








Unique Reference	511	Date:	12-0	08-2014 12:15	GPS:	51.564197, -2.865679
Waterbody Number:	618	Survey	Surveyor:		AO	& SC
Location Map:		Surve	ed Le	enath:		150



Habitat	Reen				
Bank Profile	Steep >45deg				
Depth of Water	>2m				
Channel Width	2 - 5m				
Flow Speed	Still				
Shore Banks	Earth				

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

Short section to the south - Bullrush,duck weed, section of hedge with crack willow & horthorn. Main section - duckweed, hogweed, bullrush.

Comments:

Bank vole feeding remains

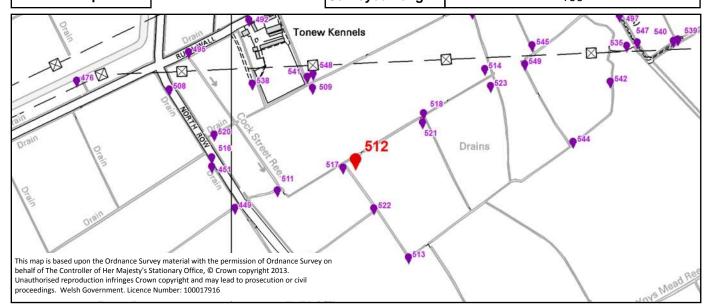








Unique Reference	512	Date:	Date: 12-08-2014 1		GPS:	51.564763, -2.863465
Waterbody Number:	978	Survey	Surveyor:		AO	& SC
Location Map:		Surveyed Length:		enath:		100



Habitat	Ditch				
Bank Profile	Steep >45deg				
Depth of Water	1 - 2m				
Channel Width	2 - 5m				
Flow Speed	Still				
Shore Banks	Earth				

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	Burrows; Feeding Stations;

Vegetation Description

Southern edge - Crack willow, blackthorn, bramble, lemna, nettles, hawthorn. Northern edge - Phragmites,duckweed

Comments:

Water vole feeding remains, bank vole feeding remains.

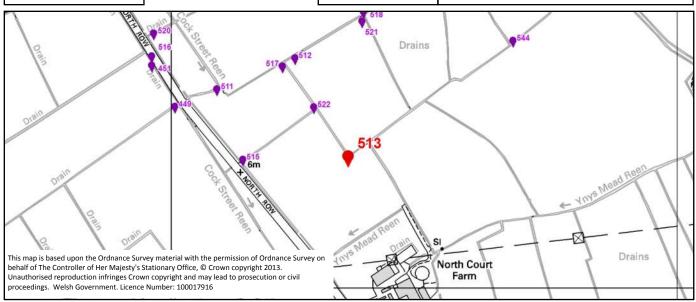








Unique Reference	513	Date:	Date: 12-08-2014 1		2-08-2014 14:28 GPS: 51.563043,	
Waterbody Number:	983	Survey	Surveyor:		AO & SC	
Location Map:		Surveyed Length:		enath:		100



Habitat	Ditch				
Bank Profile					
Depth of Water	0.5 - 1m				
Channel Width	2 - 5m				
Flow Speed	Still				
Shore Banks	Earth				

Noighboring Land Use	Arable: Livesteck grazing:
Neighboring Land Use	Arable; Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

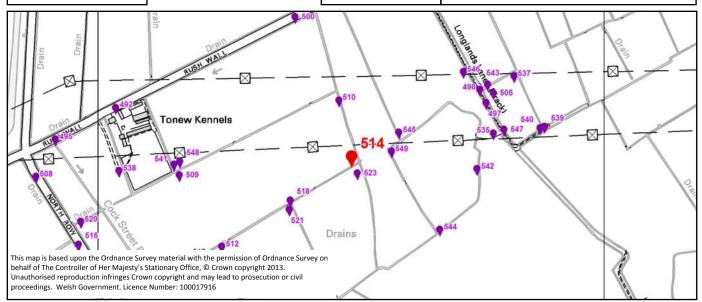
Vegetation Description	Comments:
Enchanted nightshade, hawthorn, nettles, blackthorn, bullrush, crAck willow. Phragmites, horsetail.	







Unique Reference	514	Date:	Date: 12-08-2014 16:05		GPS:	51.566387, -2.85981
Waterbody Number:	628	Survey	Surveyor:		AO & SC	
Location Map:		Survey	ed L	ength:		50



Habitat	Ditch		
Bank Profile	Steep >45deg		
Depth of Water	1 - 2m		
Channel Width	5 - 10m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Arable; Livestock grazing;		
Bank Management			
Suitability for Otters	Negligible		
Otter Signs			
Suitability for Watervoles	Low		
Watervole Signs			

Vegetation	Description

Double sided hawthorn hedge; blackthorn and bramble, goat wilow, phragmites.

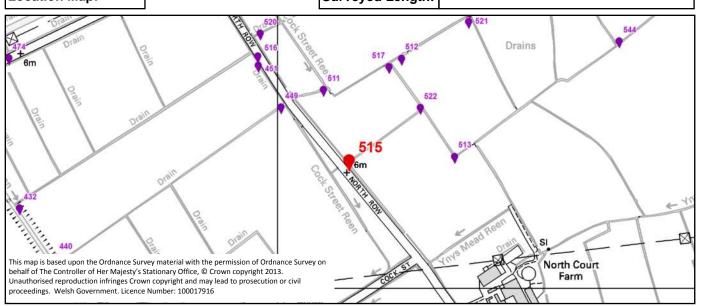
Comments:







Unique Reference	515	Date:	e: 12-08-2014 11:29		GPS:	51.562957, -2.864918
Waterbody Number:	901	Survey	or:	or: Ao SC		
Location Map:		Surveyed Length:				



Habitat	Reen
Bank Profile	Steep >45deg
Depth of Water	1 - 2m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	
Otter Signs	
Suitability for Watervoles	
Watervole Signs	Feeding Stations;

Vegetation Description

10metres open ditch (next to gate) the rest is hedged with hawthorn, bramble, crack willow, hazel.

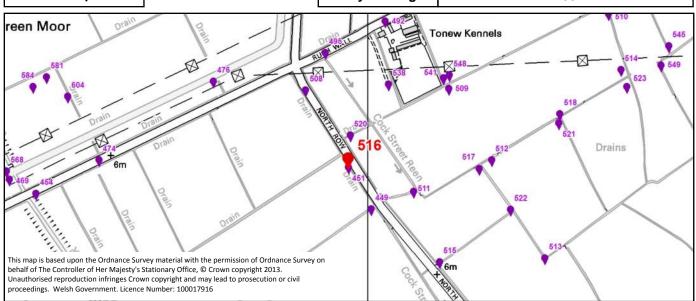








Unique Reference	516	Date:	Date: 12-08-2014 11:02		GPS:	51.564771, -2.867552	
Waterbody Number:	616	Surveyor:			Ao SC		
Location Map:		Survey	Surveyed Length:			200	



Habitat	Reen
Bank Profile	Shallow <45deg
Depth of Water	0.5 - 1m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Horthorn and bramble hedge on one side; roadside verge recently cut. Mentha aquatica, nettles, umbellifores, rosebay willowherb.



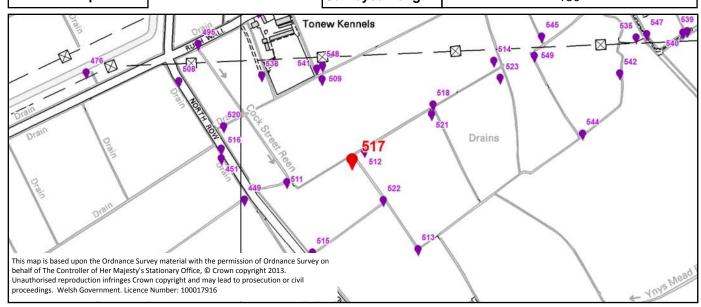




Photo 3



Unique Reference	517	Date:	12-08-2014 12:02		GPS:	51.564614, -2.863817	
Waterbody Number:	975	Survey	Surveyor:		AO & SC		
Location Map:		Surve	Surveyed Length:			150	



Habitat	Reen
Bank Profile	Steep >45deg
Depth of Water	1 - 2m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	
Suitability for Otters	
Otter Signs	
Suitability for Watervoles	
Watervole Signs	

Vegetation Description

Southern side of ditch is hedged with bramble, hawthorn, Phragmites. Enchanted nightshade. HaZel. Crack willow

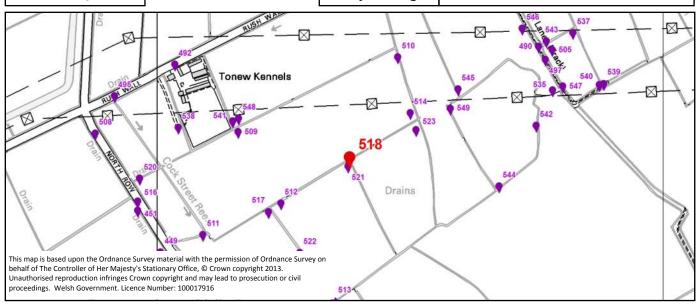








Unique Reference	518	Date:	: 12-08-2014 15:17		GPS:	51.565595, -2.861534
Waterbody Number:	899	Survey	Surveyor:		AO & SC	
Location Map:		Survey	Surveyed Length:			100



Habitat	Ditch			
Bank Profile	Steep >45deg			
Depth of Water	0.5 - 1m			
Channel Width	5 - 10m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	Feeding Stations;

Vegetation Description

Phragmites on northern edge, hedge on southern edge. Southern edge - Elder, hawthorn, goat willow, wild rose. Bat potential - old ivy stand, goat willow.





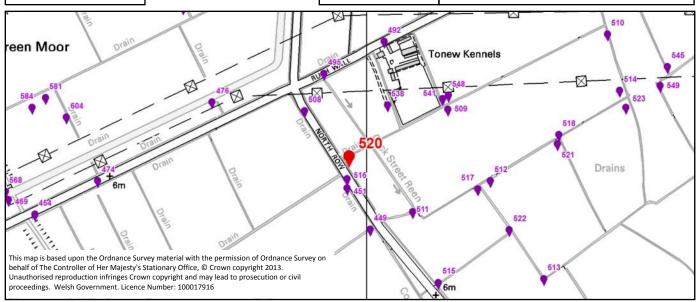




Unique Reference	519	Date:	12-0	8-2014 15:42 GPS :	,
Waterbody Number:	628	Survey	or:	AC) & SC
Location Map:		Surveyed Length:			
behalf of The Controller of Her Majesty's St	copyright and may lead to prosecution or civil		Dra	510 490 545 514 549 523	543 537 X 540 539 535 547 X 542
Habitat			Neigh	boring Land Use	
Bank Profile			Bank	Management	
Depth of Water			Suita	bility for Otters	
Channel Width			Otter	Signs	
Flow Speed			Suital	bility for Watervoles	
Shore Banks			Wate	rvole Signs	
Vegetati	on Description			Commer	nts:



Unique Reference	520	Date:	Date: 12-08-2014 1		GPS:	51.565171, -2.867499	
Waterbody Number:	898	Survey	Surveyor:		AO & SC		
Location Map:		Surveyed Length:		ength:		50	



Habitat	Ditch
Bank Profile	Shallow <45deg
Depth of Water	0.5 - 1m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	

Neighboring Land Use	
Bank Management	Fenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

vegetation	Description

Doublesided hedge. Hawthorn, ivy, bramble, blackthorn

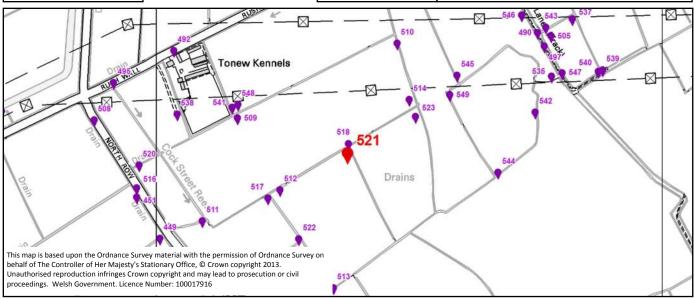








Unique Reference	521	Date:	Date: 12-08-2014 14		GPS:	51.565428, -2.861564	
Waterbody Number:	979	Survey	Surveyor:		AO & SC		
Location Map:		Surveyed Length:		ength:		200	



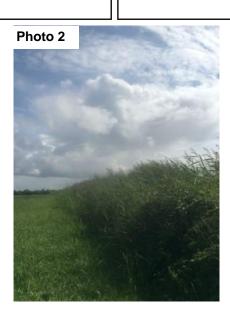
Habitat	Ditch
Bank Profile	
Depth of Water	<0.5m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Blackthorn, bramble, phragmites. Hedge on western side, phragmites / bramble/ hawthorn eastern side.

Comments:

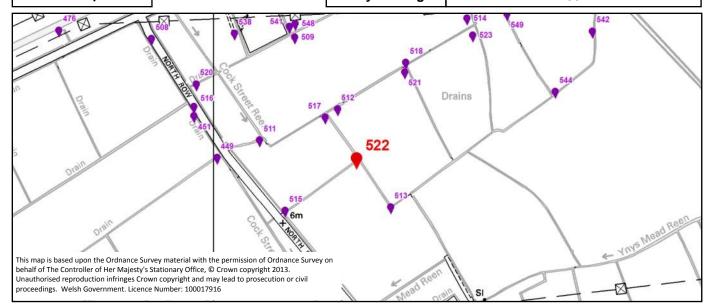








Unique Reference	522	Date:	12-0	8-2014 11:48	GPS:	51.563898, -2.862913
Waterbody Number:	905	Survey	or:	Ao SC		
Location Map:		Surve	Surveyed Length:			50



Habitat	Reen					
Bank Profile	Shallow <45deg					
Depth of Water	0.5 - 1m					
Channel Width	2 - 5m					
Flow Speed	Still					
Shore Banks	Earth					

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

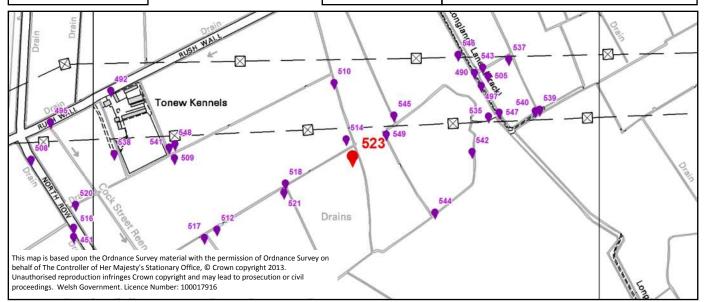
Vegetation Description	Comments:
Bullrush, Phragmites, bramble, hawthorn, blackthorn	Bank vole feeding remains. Slides into ditch (medium-sized animal).



Photo 2 Photo 3



Unique Reference	523	Date:	12-08-2014 15:44		GPS:	51.566088, -2.859635	
Waterbody Number:	825	Survey	Surveyor:		AO & SC		
Location Map:		Survey	ed L	enath:	150		



Habitat	Ditch					
Bank Profile	Steep >45deg					
Depth of Water	0.5 - 1m					
Channel Width	2 - 5m					
Flow Speed	Still					
Shore Banks	Earth					

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description	Comments:
Horthorn blackthorn, bramble hedge - double sided. Eastern edge is arable cornfield.	









Unique Reference	524	Date:	13-	08-2014 15:23	3	GPS:	51.450281, -2.587998			
Waterbody Number:		Surveyor: Joe								
Location Map:		Surveyed Length:								
		525 5	324							
behalf of The Controller of Her Majesty's S	n copyright and may lead to prosecution or civil	on on								

Habitat	Pond
Bank Profile	Steep >45deg
Depth of Water	0.5 - 1m
Channel Width	5 - 10m
Flow Speed	Fast
Shore Banks	Silt

Neighboring Land Use	Broadleaf woodland; Conifer plantation; Bog; Salt marsh;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	
Watervole Signs	

Comments:



						Liywodraeth Cymru Welsh Government		
Unique Reference	525	Date:	13-	08-2014	15:34 GPS :	51.450254, -2.58814		
Waterbody Number:		Surveyor:		or: Joe				
Location Map:]	Surveyed Length:						
behalf of The Controller of Her Majesty's	vey material with the permission of Ordnance Survey Stationary Office, © Crown copyright 2013. wn copyright and may lead to prosecution or civil e Number: 100017916	• 6	225					
Habitat	Pond		Neiç	hborin	g Land Use	Broadleaf woodland; Conifer plantation; Bog;		
Bank Profile			Ban	k Mana	gement	Cormor plantation, 20g,		
Depth of Water			Suit	ability f	or Otters			
Channel Width	5 - 10m		Otte	r Signs				
Flow Speed	Sluggish		Suit	ability f	or Watervoles			
Shore Banks			Wat	ervole S	Signs			
Vegetation Description			Comments:					



							Welsh Government		
Unique Reference	526	Date:	13-	08-2014	15:49	GPS:	7		
Waterbody Number:		Surveyor:			Joe				
Location Map:		Surve							
behalf of The Controller of Her Majesty's	vey material with the permission of Ordnance Survey Stationary Office, © Crown copyright 2013. vn copyright and may lead to prosecution or civil e Number: 100017916	525	524						
Habitat	Pond		Nei	ghboring	J Land L	lse			
Bank Profile	Steep >45deg		Ban	k Manag	gement				
Depth of Water			Suit	ability fo	or Otters	3			
Channel Width	2 - 5m		Otte	r Signs					
Flow Speed			Suit	ability fo	or Water	voles			
Shore Banks			Wat	ervole S	igns				
Vegetation Description					C	ommen	nts:		



Unique Reference	527	Date: 13-08-2014 11:47		2014 11:47	GPS:		,
Waterbody Number:	952	Survey	Surveyor:		TS		
Location Map:		Survey	ed Leng	jth:		50	

525

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Habitat	Reen			
Bank Profile	Steep >45deg			
Depth of Water	0.5 - 1m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

Fence reeds and rushes surrounded by encroaching hedgerow and scrub. Lots of sweet reed grass present

Comments:

Adjacent to ditch with feeding station. Better quality towards Northern end but still heavily vegetated.

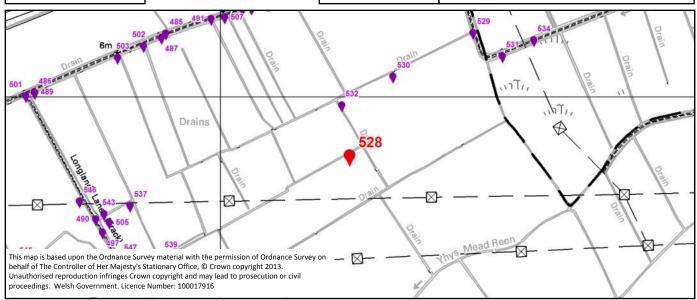








Unique Reference	528	Date:	13-	08-2014 15:04	GPS:	51.568772, -2.848973
Waterbody Number:	958	Survey	or:		T	S
Location Map:		Surve	Surveyed Length:			50



Habitat	Reen				
Bank Profile	Shallow <45deg				
Depth of Water	<0.5m				
Channel Width	2 - 5m				
Flow Speed	Still				
Shore Banks	Earth				

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

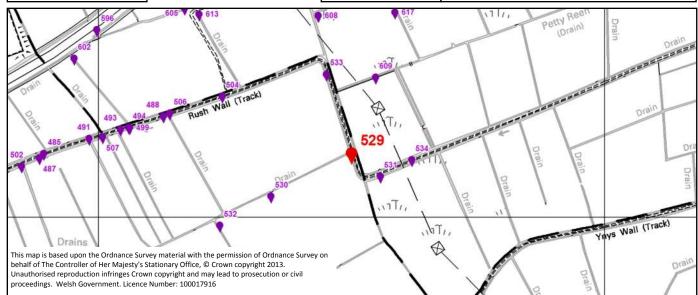
Vegetation Description	Comments:
Hedgerow	Very low suitability, overgrown by hedge and low water depth and quality at time of survey, heavily over shaded. Heavy duckweed cover







Unique Reference	529	Date:	13-	08-2014 12:09	GPS:	51.570955, -2.84548
Waterbody Number:	877	Survey	or:		-	rs
Location Map:		Survey	ed L	enath:		50



Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	0.5 - 1m			
Channel Width	2 - 5m			
Flow Speed	Sluggish			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

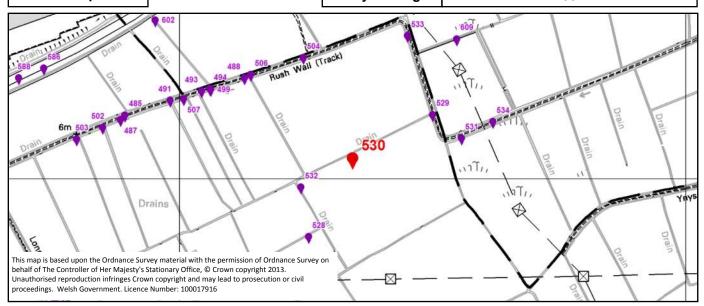
Vegetation Description	Comments:
Sweet reed grass, dense reed bed, common reed	Medium suitability for water vole but likely small to extinct due to mink population as little signs were found



Photo 2 Photo 3



Unique Reference	530	Date:	13-0	8-2014 14:41	GPS:	51.570172, -2.847749
Waterbody Number:	913	Survey	or:		7	rs
Location Map:		Survey	ed Le	ength:		50



Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	<0.5m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description

Comments:

Hedgerow

Very low suitability, overgrown by hedge and low water depth and quality at time of survey, heavily over shaded

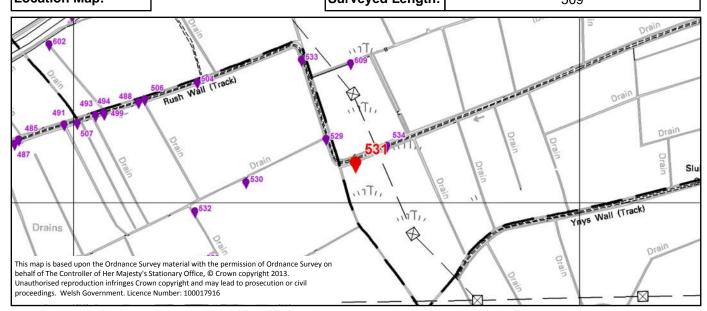








Unique Reference	531	Date:	te: 13-08-2014 11:40		GPS:	51.570548, -2.844646
Waterbody Number:	880	Survey	Surveyor:		TS	
Location Map:		Survey	Surveyed Length:		509	



Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	1 - 2m			
Channel Width	2 - 5m			
Flow Speed	Sluggish			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;				
Bank Management	Mixture				
Suitability for Otters	Negligible				
Otter Signs					
Suitability for Watervoles	Low				
Watervole Signs	Feeding Stations;				

Vegetation Description

Reeds and sedges, managed bank, mixed fence

Comments:

Ma made feeding platform with half eaten platform. No latrine found. Mink raft

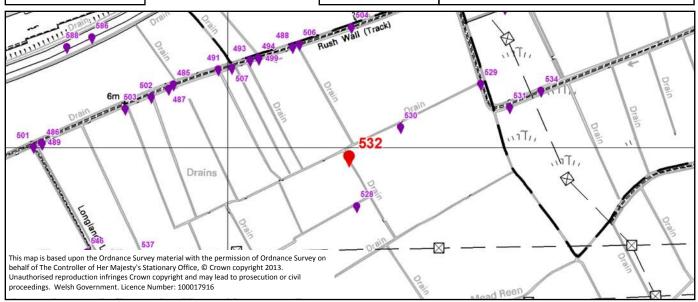








Unique Reference	532	Date:	Date: 13-08-2014 14:53		GPS:	51.569649, -2.849202	
Waterbody Number:	911	Survey	Surveyor:		TS		
Location Map:		Surve	Surveyed Length:		50		



Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	<0.5m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

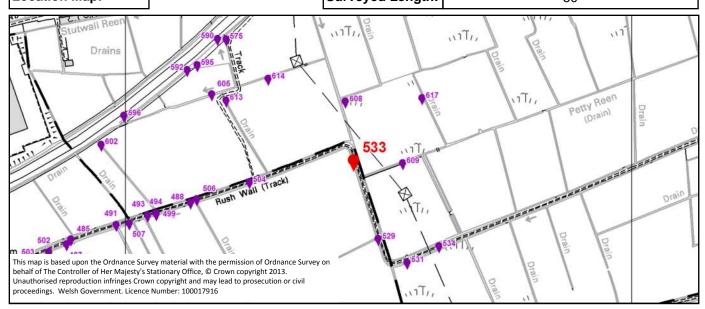
Vegetation Description	Comments:
Hedgerow	Very low suitability, overgrown by hedge and low water depth and quality at time of survey, heavily over shaded. Heavy duckweed cover



Photo 2 Photo 3



Unique Reference	533	Date:	13-08-2014 10:50		GPS:	51.572342, -2.846219	
Waterbody Number:	950	Survey	Surveyor:		TS		
Location Map:	_	Survey	Surveyed Length:		50		



Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	1 - 2m			
Channel Width	2 - 5m			
Flow Speed	Sluggish			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Feeding Stations;

Vegetation Description

Rushes and grass, ruderal vegetation in places and mature willow trees. Sweet reed grass present

Comments:

Possible feeding stations but no latrines found. Man made feeding raft found, no evidence on top. Numerous trails through duckweed

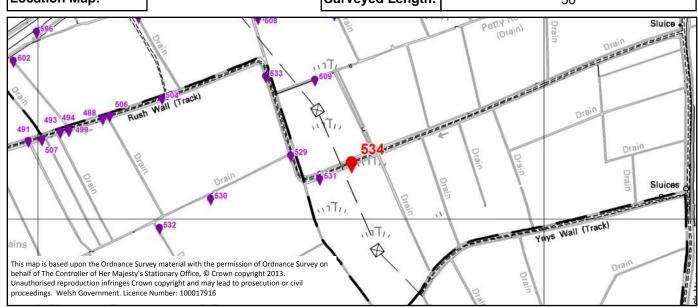








Unique Reference	534	Date:	Date: 13-08-2014 12:32		GPS:	51.570844, -2.843752
Waterbody Number:	866	Survey	Surveyor:		TS	
Location Map:		Survey	Surveyed Length:		50	



Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	1 - 2m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation	Description

Sedge banks and managed. Sweet reed grass clumps on southern edge

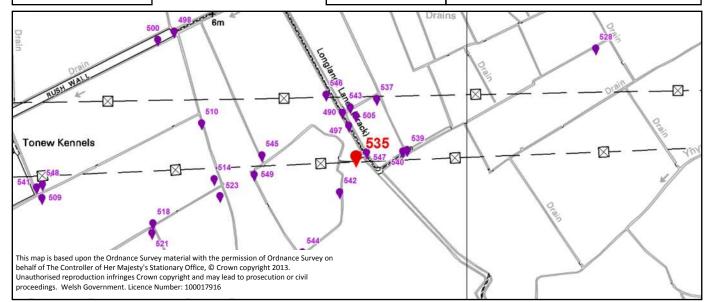
Comments:







Unique Reference	535	Date: 13-08-2014 11:42		GPS:	51.566823, -2.855763	
Waterbody Number:	980	Surveyor:		: AO & SC		
Location Map:		Surveyed Length:				



Habitat	Ditch				
Bank Profile	Steep >45deg				
Depth of Water	<0.5m				
Channel Width	2 - 5m				
Flow Speed	Still				
Shore Banks	Man-made				

Neighboring Land Use	Arable;
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Ash copse, blackthorn,crack willow,goat willow, bramble,hawthorn

Comments:

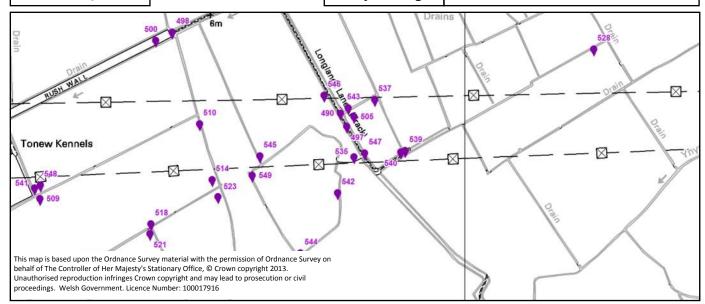
Double hedged with cox woodedland, bat potential for roosting and foraging







Unique Reference	536	Date: 13-08-2014 11:38		GPS:	,	
Waterbody Number:	980	Surveyor:		AO	& SC	
Location Map:		Surveyed Length:				200



Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	1 - 2m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Man-made			

Neighboring Land Use	Arable;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:







new Kennels



						Welsh Government
Unique Reference	537	Date:	13-08-20	14 12:11	GPS:	51.567837, -2.8552
Waterbody Number:	984	Survey	Surveyor:		AO & SC	
Location Map:		Surveyed Length:		100		
	501 486 Draw		11		133	532
500 Orain	498 6m		Drains	Date:		528

Habitat	Ditch		
Bank Profile	Shallow <45deg		
Depth of Water	1 - 2m		
Channel Width			
Flow Speed	Still		
Shore Banks	Man-made		

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Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Blackthorn, hawthorn, bramble, enchanted nightshade, alder, ivy, mature crack willow

Comments:

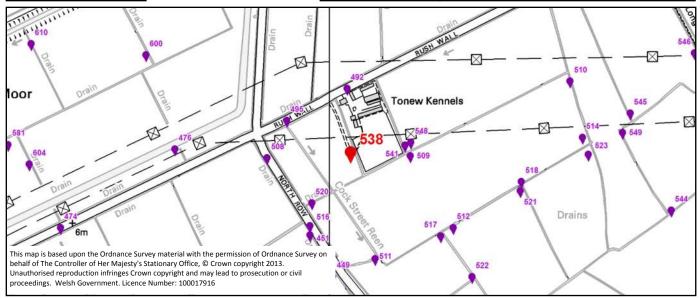
Double hedged,inaccessible, low water quality







Unique Reference	538	Date:	Date: 13-08-2014 09:54		GPS:	51.566078, -2.866424
Waterbody Number:	1351	Surveyor:		AO & SC		
Location Map:		Survey	Surveyed Length:			50



Habitat	Ditch
Bank Profile	Steep >45deg
Depth of Water	0.5 - 1m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	

Neighboring Land Use	
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description Comments:

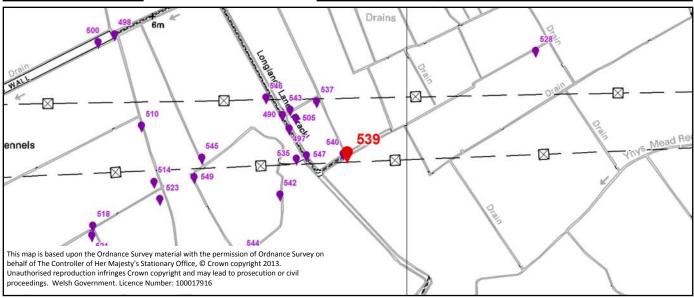
Bullrushes in ditch, double hedged with hawthorn, crack willow, bramble, inaccessible in places.







Unique Reference	539	Date:	ate: 13-08-2014 14:34		GPS:	51.566946, -2.854312
Waterbody Number:	743	Survey	Surveyor:		AO & TR	
Location Map:		Surve	Surveyed Length:		50	



Habitat	Ditch				
Bank Profile	Flat <10 degrees				
Depth of Water	<0.5m				
Channel Width	1 - 2m				
Flow Speed	Still				
Shore Banks	Man-made				

Neighboring Land Use	Arable;
Bank Management	Fenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Blackthorn,hawthorn,crack willow,ivy,bramble, mature ash tree

Comments:

Inaccessible, dry ditch, more like a copse than ditch.got two dried ditches in

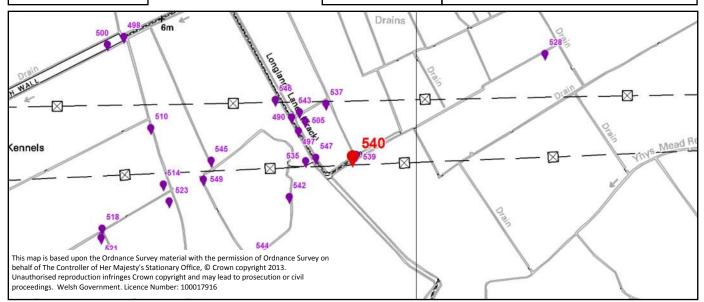








Unique Reference	540	Date: 13-08-2014 12:21		GPS:	51.566921, -2.854435	
Waterbody Number:	809	Surveyor:			AO & SC	
Location Map:		Survey	Surveyed Length:			50



Habitat	Ditch				
Bank Profile	Steep >45deg				
Depth of Water	<0.5m				
Channel Width	<1m				
Flow Speed	Still				
Shore Banks	Man-made				

Neighboring Land Use	Livestock grazing;
Bank Management	Fenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Comments:

Vegetation	Description
------------	-------------

Crack willow, hawthorn, blackthorn, ivy

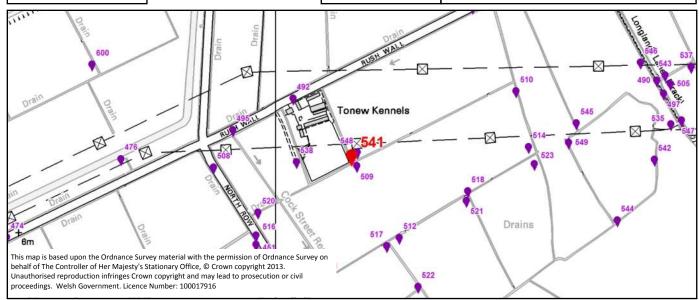
Double ditch either side of makeshift track







Unique Reference	541	Date:	Date: 13-08-2014 10:26		GPS:	51.566206, -2.864862	
Waterbody Number:	626	Survey	Surveyor:		AO & SC		
Location Map:		Surve	ed L	enath:	100		



Habitat	Ditch
Bank Profile	Steep >45deg
Depth of Water	1 - 2m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	

Neighboring Land Use	
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Double sided hedge, hawthorn, cultivated juniper, bramble, goat willow. In ditch Lemna sp.

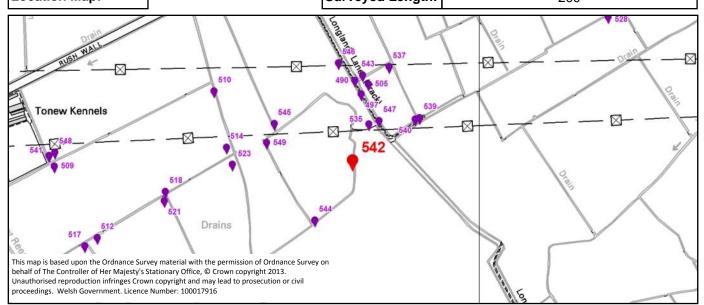
Comments:







Unique Reference	542	Date:	Date: 13-08-2014		2014 11:33 GPS : 51.566188, -2.85622	
Waterbody Number:	904	Surveyor:			AO & SC	
Location Map:		Surveyed Length:		enath:		200



Habitat	Ditch			
Bank Profile	Steep >45deg			
Depth of Water	1 - 2m			
Channel Width	5 - 10m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Arable;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

	Vegetation Description	Comments:
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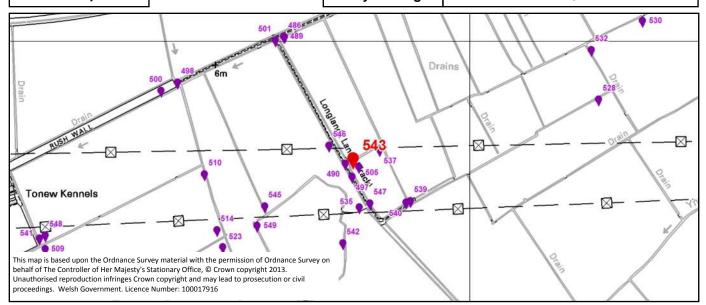
Hawthorn, bramble, blackthorn, wild rose, crack willow.







Unique Reference	543	Date:	13-	08-2014 12:05	GPS:	51.567687, -2.85595
Waterbody Number:	903	Surveyor:			AO	& SC
Location Map:		Surveyed Length:				20



Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	>2m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Man-made			

Neighboring Land Use	Livestock grazing;
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation	Description	on
rogotation	Doco. pt.	•••

Bull rush and duck weed in ditch, poached edge on northern side,hawthorn,bramble,goat willow,blackthorn,phragmites,ivy

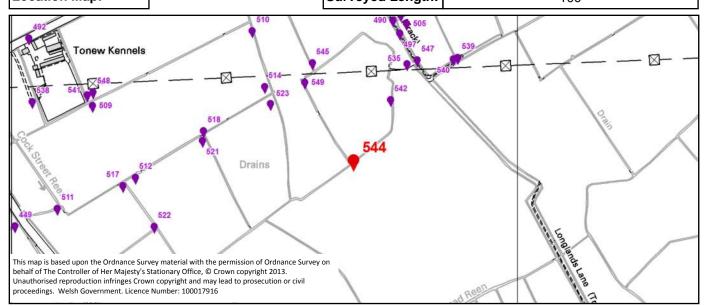
Comments:







Unique Reference	544	Date:	Date: 13-08-20		GPS:	51.565114, -2.857259
Waterbody Number:	900	Surveyor:			AO	& SC
Location Map:		Surveyed Length:		enath:		100



Habitat	Ditch		
Bank Profile	Steep >45deg		
Depth of Water	1 - 2m		
Channel Width	2 - 5m		
Flow Speed	Still		
Shore Banks	Man-made		

Neighboring Land Use	Arable;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

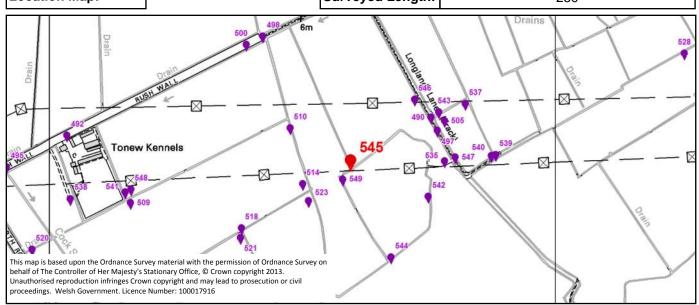
Vegetation Description	Comments:
Hawthorn,blackthorn,wild rose	







Unique Reference	545	Date:	13-	08-2014 10:54	GPS:	51.566818, -2.858457
Waterbody Number:	896	Surveyor:		AO & SC		
Location Map:		Surve	ed L	enath:	250	



Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	>2m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Man-made			

Neighboring Land Use	Arable;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vea	etation	Descri	ption

Hawthorn, crack willow, bramble. Overgrown inaccessible.









						Llywodraeth Cymru Welsh Government
Unique Reference	546	Date:	13-08-2014	11:49	GPS:	51.567901, -2.856646
Waterbody Number:	985	985 Surveyor: AO 8			& SC	
Location Map:		Survey	ed Length:			100
Tonew Kennels 500 498 6m Drains 508 509 548 548 548 549 540 540 540 540 540 540 540						
Habitat	Ditch		Neighboring	Land U	lse	
Bank Profile			Bank Manag	jement		
Depth of Water			Suitability fo	or Otters	3	
Channel Width	Otter Signs					
Flow Speed	Suitability for Watervoles					
Shore Banks			Watervole S	igns		
Vegetat	ion Description		Comments:			
	Done by TS on 12/08/2014					

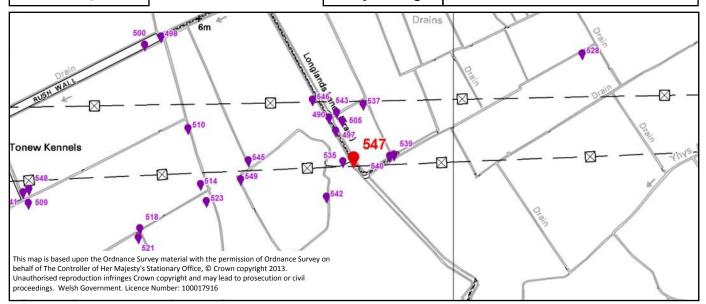
Done by TS on 12/08/2014



Photo 2 Photo 3



Unique Reference	547	Date: 13-08-2014 11:58		GPS:	51.56689, -2.855467	
Waterbody Number:	897	Surveyor:		AO & SC		
Location Map:		Survey	Surveyed Length:			100



Habitat	Ditch			
Bank Profile	Flat <10 degrees			
Depth of Water	<0.5m			
Channel Width	<1m			
Flow Speed	Still			
Shore Banks	Man-made			

Neighboring Land Use	Arable; Livestock grazing;
Bank Management	Fenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation	Doscri	ntion
vegetation	Descri	puon

Hedge, mature ash trees, crack willow, hogweed,bramble

Comments:

Dry ditch

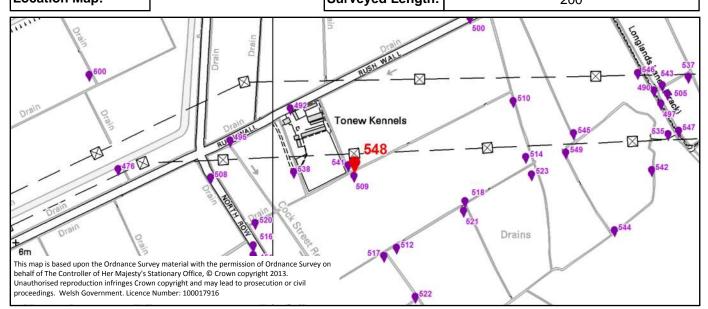








Unique Reference	548	Date:	13-0	08-2014 10:30	GPS:	51.566261, -2.864698
Waterbody Number:	981	Surveyor:			AO & SC	
Location Man:		Survey	Surveyed Length:		200	



Habitat	Ditch				
Bank Profile	Shallow <45deg				
Depth of Water	1 - 2m				
Channel Width	5 - 10m				
Flow Speed	Still				
Shore Banks	Man-made				

Neighboring Land Use	Arable;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
Double hedged	Surveyed on the 12th from southern edge - detailed survey sheet.

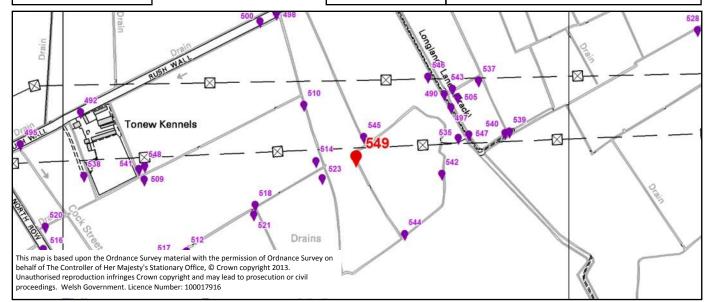








Unique Reference	549	Date:	13-0	08-2014 11:17	GPS:	51.566477, -2.858666	
Waterbody Number:	982	Survey	Surveyor:		AO & SC		
Location Map:		Survey	Surveyed Length:			150	



Habitat	
Bank Profile	Shallow <45deg
Depth of Water	>2m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Man-made

Neighboring Land Use	Arable;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

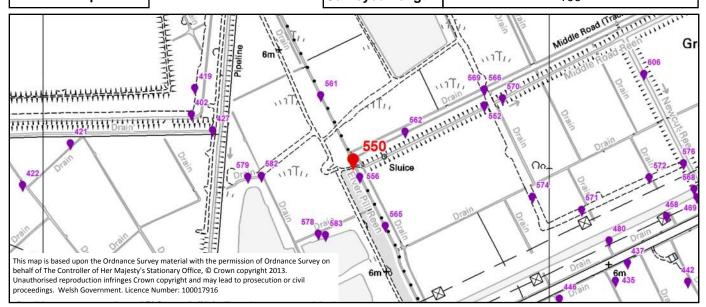
Vegetation Description	Comments:
Hawthorn,bramble,rose,goat willow,	



Photo 2 Photo 3



Unique Reference	550	Date:	15-0	08-2014 10:39	GPS:	51.564916, -2.887009
Waterbody Number:	1211	Survey	or:		TS	5 MM
Location Map:		Surve	ed Le	enath:		100



Habitat	Reen				
Bank Profile	Steep >45deg				
Depth of Water	1 - 2m				
Channel Width	2 - 5m				
Flow Speed	Still				
Shore Banks	Earth				

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Latrines;

Vegetation Description

Phragmites dominated, duckweed, ivy leaved Frogbit, hemp agrimony, meadow sweet,

Comments:

Recently managed eastern bank, good water quality,

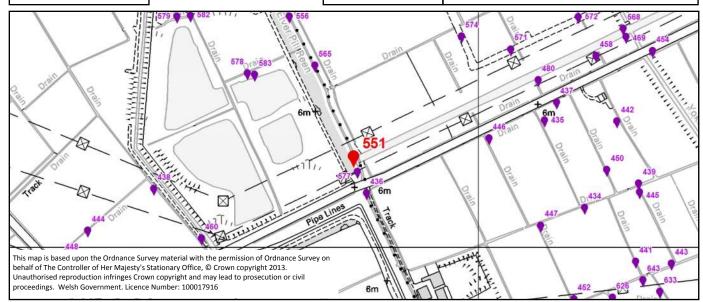








Unique Reference	551	Date:	Date: 15-08-2014 13:00		GPS:	51.562155, -2.884936
Waterbody Number:	586	Survey	Surveyor:		TS /MM	
Location Map:		Surveyed Length:		ength:		50



Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	1 - 2m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Scrub;
Bank Management	
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

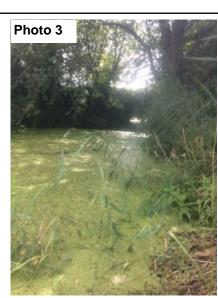
Comments:

Reeds

Now accessible and being surveyed. Connected to good quality ditches with otter and water vole signs. Potential connectivity through culvert under road to wider Gwent levels population. Difficult to find burrows and signs as these are likely in dense unmanaged and inaccessible areas on opposite banks.





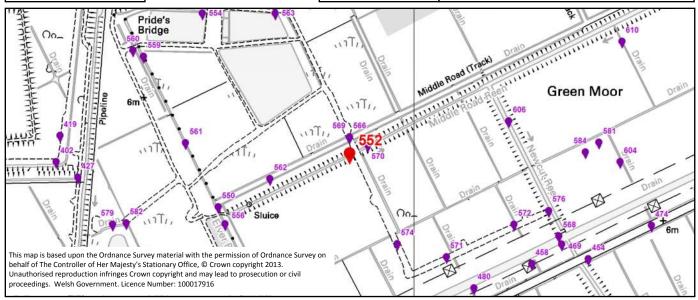




 Unique Reference
 552
 Date:
 15-08-2014 09:19
 GPS:
 51.565893, -2.88329

 Waterbody Number:
 1129
 Surveyor:
 TS MM

 Location Map:
 Surveyed Length:
 50



Habitat	Reen			
Bank Profile	Steep >45deg			
Depth of Water	>2m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Medium
Otter Signs	Spraints;
Suitability for Watervoles	Medium
Watervole Signs	Latrines; Burrows;

Vegetation Description

Duckweed, Frogbit, bramble, thistle, meadow sweet, willow herb, umbels, bindweed, sweet reed grass,

Comments:

Boat survey recommended. Potential burrow, no latrines on north and south. Northern bank recently managed. Watervole burrow with latrine found on South bank. Four Otter spraints, two recent found at sluice gate. Evidence of fish ones and moorhen chick feathers. Good water quality with fish fry

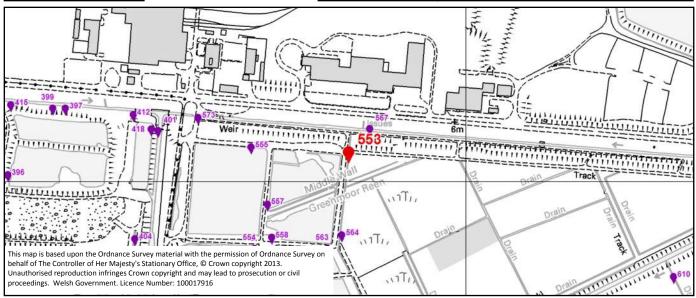








Unique Reference	553	Date:	Date: 14-08-2014 11:34		GPS:	51.570054, -2.884875
Waterbody Number:	1200	Survey	Surveyor:		TS MM	
Location Map:		Surveyed Length:		ength:		50



Habitat	Reen
Bank Profile	
Depth of Water	1 - 2m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Stones

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Descrip	tion
--------------------	------

Comments:

Phragmites dominated

Bad water quality-polluted.

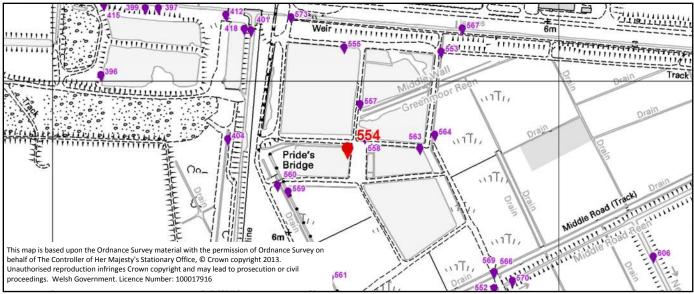








Unique Reference	554	Date:	Date: 14-08-2014 12:02		GPS:	51.568332, -2.887519
Waterbody Number:	1072	Survey	or:	TS MM		
Location Map:		Surve	Surveyed Length:			25



Habitat	Reen
Bank Profile	Shallow <45deg
Depth of Water	0.5 - 1m
Channel Width	5 - 10m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Phragmites dominated, goat willow, Urtica,

Comments:

Moderate water quality

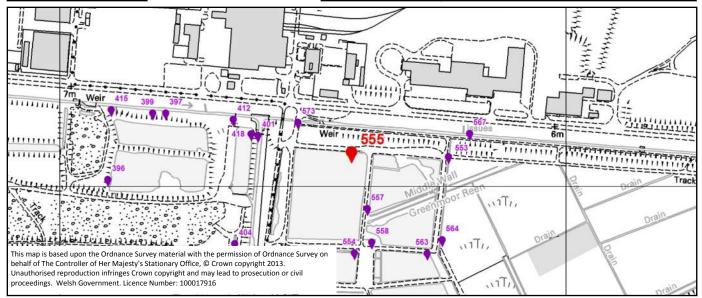








Unique Reference	555	Date:	14-	08-2014 10:17	GPS:	51.570118, -2.887645
Waterbody Number:	1226	Surveyor:			TS MM	
Location Map:		Surveyed Length:		enath:	_	100



Habitat	Pond		
Bank Profile	Shallow <45deg		
Depth of Water	>2m		
Channel Width	2 - 5m		
Flow Speed	Sluggish		
Shore Banks	Earth		

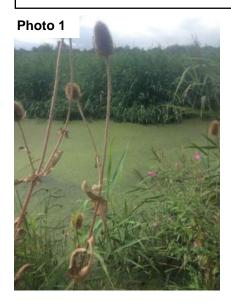
Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Pondweed dominated. Phragmites dominated banks, chamomile, teasel, nightshade, Urtica, burdock, hemp agronomy, great willow herb

Comments:

Poor water quality, bank vole feeding stations. Tress and shrubs growing in centre of reed bed, potential burrowing locations if present. These areas are inaccessible. Banks predominantly stone with earth banks.

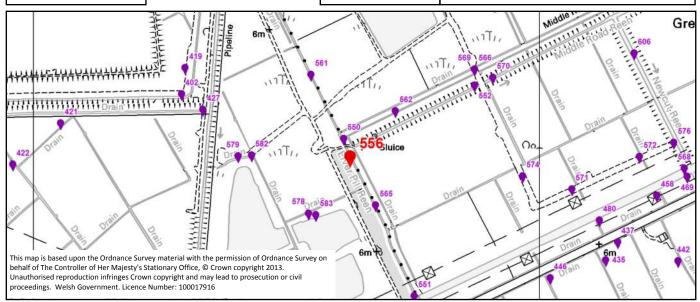








Unique Reference	556	Date:	Date: 15-08-2014 12:3		GPS : 51.564612, -2.886811	
Waterbody Number:	1241	Surveyor:			TS /MM	
Location Map:		Surveyed Length:		enath:		100



Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	1 - 2m			
Channel Width	2 - 5m			
Flow Speed	Sluggish			
Shore Banks	Earth			

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Comments:

Reeds and ruderal

Good water quality. Same characteristics as nearby reens with otter and WV signs

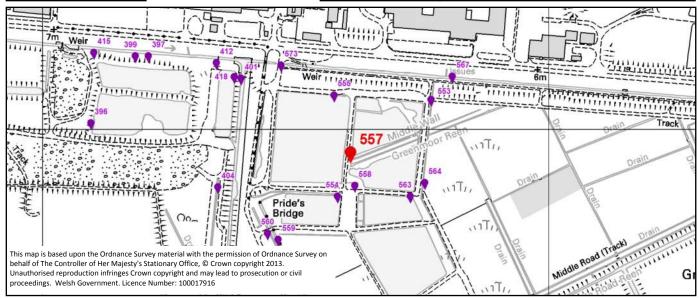








Unique Reference	557	Date:	Date: 14-08-20		-2014 10:30 GPS: 51.569115, -2.887	
Waterbody Number:	1208	Surveyor:			TS MM	
Location Map:		Surveyed Length:			100	



Habitat	Pond				
Bank Profile	Shallow <45deg				
Depth of Water					
Channel Width					
Flow Speed					
Shore Banks	Earth				

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Phragmites dominated reed bed. Goat willow.

Comments:

Banks mainly man made stone with earth. Poor water quality. 1223 is now engulfed by reed beds, so not a distinguishable ditch.





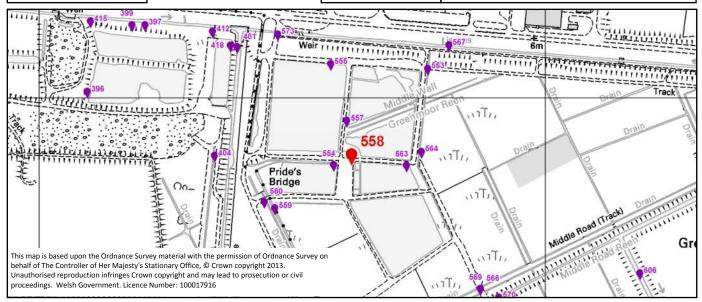




 Unique Reference
 558
 Date:
 14-08-2014 10:53
 GPS:
 51.568526, -2.887024

 Waterbody Number:
 1184
 Surveyor:
 TS MM

 Location Map:
 Surveyed Length:
 100



Habitat	Pond
Bank Profile	Shallow <45deg
Depth of Water	
Channel Width	1 - 2m
Flow Speed	
Shore Banks	Earth

Neighboring Land Use	Scrub;				
Bank Management	Unfenced				
Suitability for Otters	Negligible				
Otter Signs					
Suitability for Watervoles	Low				
Watervole Signs					

Vegetation Description

Phragmites dominated bank. Hemp agrimony, budlea, goat willow, common fleabane, chamomile, thistle

Comments:

Bad water quality. Channel accessible. Rest of reed bed overgrown. Bank vole droppings found.





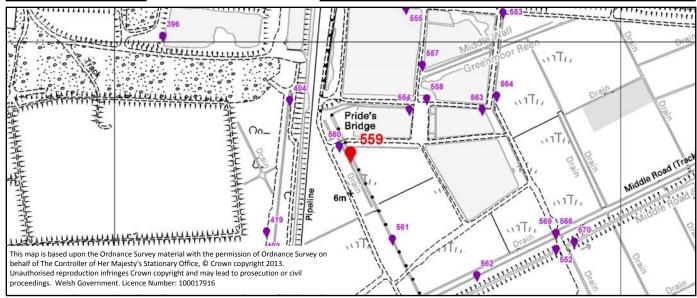




 Unique Reference
 559
 Date:
 15-08-2014 11:37
 GPS:
 51.567557, -2.889183

 Waterbody Number:
 1240
 Surveyor:
 TS MM

 Location Map:
 Surveyed Length:
 100



Habitat	Reen		
Bank Profile			
Depth of Water	1 - 2m		
Channel Width	1 - 2m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

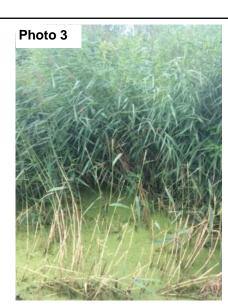
Duckweed and Phragmites do instead. Eastern bank managed, potential parrots feather

Comments:

Moderate water quality, spraints present, not 100% otter. Camera recommended.





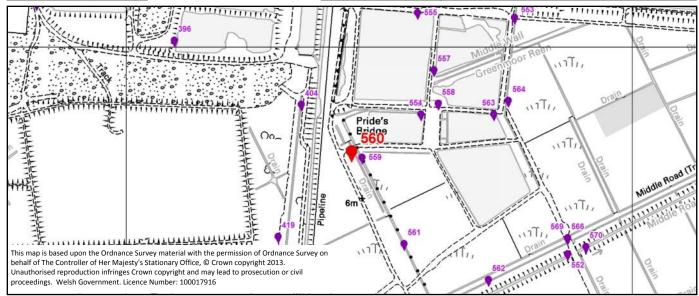




 Unique Reference
 560
 Date:
 15-08-2014 11:54
 GPS:
 51.567664, -2.889489

 Waterbody Number:
 1133
 Surveyor:
 TS MM

 Location Map:
 Surveyed Length:



Habitat

Bank Profile

Depth of Water

Channel Width

Flow Speed

Shore Banks

Neighboring Land Use
Bank Management
Suitability for Otters
Otter Signs
Suitability for Watervoles
Watervole Signs

Vegetation Description

Comments:

Inaccessible





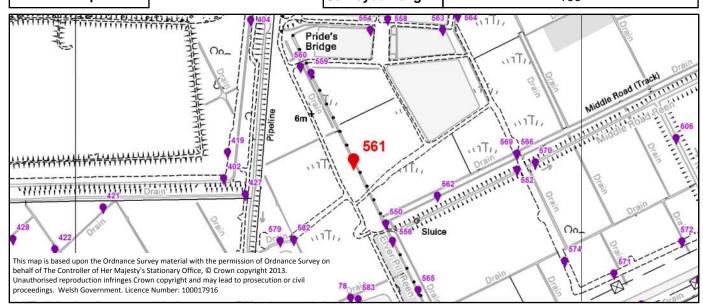




 Unique Reference
 561
 Date:
 15-08-2014 11:04
 GPS:
 51.56604, -2.887956

 Waterbody Number:
 1229
 Surveyor:
 TS MM

 Location Map:
 Surveyed Length:
 100



Habitat	Reen			
Bank Profile	Steep >45deg			
Depth of Water				
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Latrines;

Vegetation Description

Phragmites dominated. Similar to 1211 reen.

Comments:

Good water quality, eastern bank managed

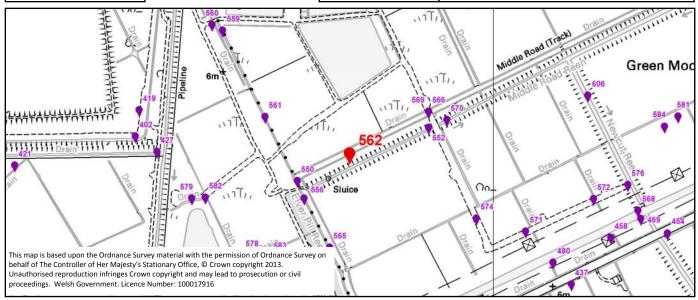








Unique Reference	562	Date: 15-08-2014 10:02		GPS:	51.565419, -2.885538
Waterbody Number:	1125	Surveyor:		TS MM	
Location Map:		Surveyed Length:			10



Habitat	Ditch		
Bank Profile			
Depth of Water			
Channel Width	<1m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Broadleaf woodland; Scrub;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description

Duckweed covering entire surface, hart's tongue fern, fern, garlic mustard, Urtica, hawthorn, blackthorn, crack willow, sycamore

Comments:

Unsuitable, poor water quality. Surrounding woodland with potential/suitable otter holt.

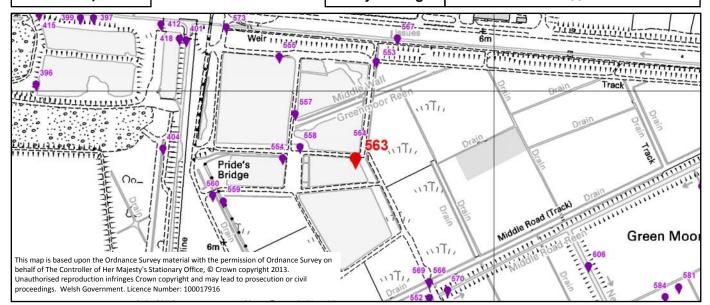








Unique Reference	563	Date: 14-08-2014 11:43		GPS:	51.568344, -2.885443	
Waterbody Number:	1228	Surveyor:			TS MM	
Location Map:		Surveyed Length:			100	



Habitat	Pond				
Bank Profile	Shallow <45deg				
Depth of Water					
Channel Width					
Flow Speed	Still				
Shore Banks	Earth				

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Phragmites dominated, sedge, common fleabane, hemp agrimony, great willow herb, budlea, goat and white willow

Comments:

Reed bed



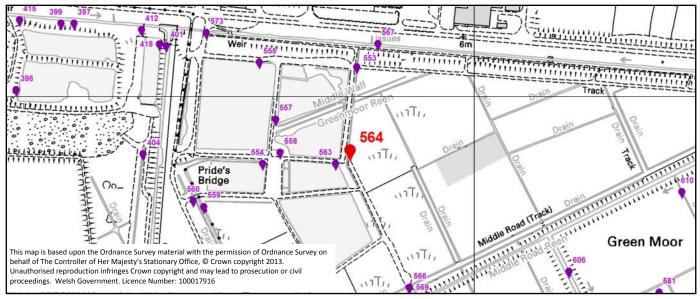


Photo 2





Unique Reference	564	Date:	Date: 14-08-2014 11:13		GPS:	51.568587, -2.885029
Waterbody Number:	1135	Surveyor:			TS MM	
Location Man		Surveyed Length:		ength:		100



Habitat	Reen		
Bank Profile	Steep >45deg		
Depth of Water	0.5 - 1m		
Channel Width	2 - 5m		
Flow Speed	Still		
Shore Banks	Stones		

Neighboring Land Use	Scrub;		
Bank Management	Unfenced		
Suitability for Otters	Negligible		
Otter Signs			
Suitability for Watervoles	Medium		
Watervole Signs	Latrines; Feeding Stations;		

Vegetation Description

Phragmites dominated, teasel, ox tongue, thistle, great willow herb, budlea, sedge, silver weed, goat willow, bramble

Comments:

Reed warbler sighted, plop heard. One side of bank earth and other stones, moderate water quality at Northern end

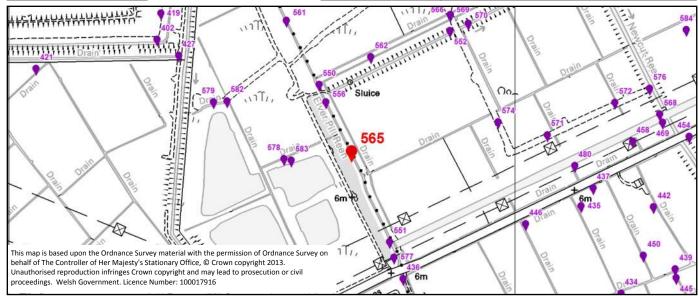








Unique Reference	565	Date:	15-0	08-2014 12:38	GPS:	51.563749, -2.886067
Waterbody Number:	1212	Survey	or:	TS /MM		
Location Map:		Surveyed Length:		enath:		10



Habitat	Ditch
Bank Profile	Shallow <45deg
Depth of Water	<0.5m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Scrub;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description

Woodland ferns and scrub

Comments:

Unsuitable: poor water quality, lack of habitat features

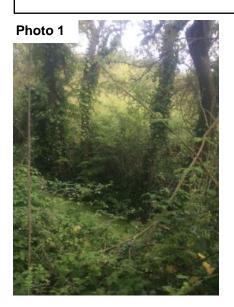




Photo 3



						Welsh Government
Unique Reference	566	Date:	15-	08-2014 10:05	GPS:	51.566176, -2.883295
Waterbody Number:	786	Survey	or:		AO a	and TR
Location Map:		Survey	ed L	ength:		
	ride's ridge	(17)	Dr. Drain	Middle Road Track	Drain TITITITI	Green Moor

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Habitat	Ditch		
Bank Profile	Shallow <45deg		
Depth of Water	0.5 - 1m		
Channel Width	2 - 5m		
Flow Speed	Still		
Shore Banks	Man-made		

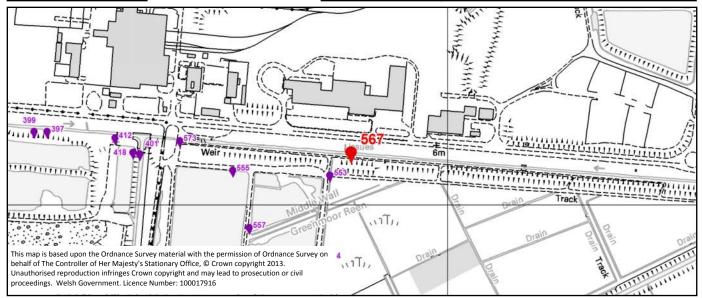
Neighboring Land Use	Scrub;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
	Come back another day to survey with cutters, inaccessible

Photo 1 Photo 2 Photo 3



Location Map:		Surveyed Length:				
Waterbody Number:	1200	Survey	or:		AC	D/JE
Unique Reference	567	Date:	14-	08-2014 11:57	GPS:	51.570471, -2.884276



Habitat	Reen		
Bank Profile	Steep >45deg		
Depth of Water	>2m		
Channel Width	5 - 10m		
Flow Speed	Slow		
Shore Banks	Sand		

Neighboring Land Use	Urban; Scrub;
Bank Management	Mixture
Suitability for Otters	
Otter Signs	
Suitability for Watervoles	
Watervole Signs	Feeding Stations;

Vegetation Description

Phragmites dominated, hawthorn, bramble, thistle and poplar adjacent. Areas of sweet reed grass

Comments:

Contaminated water



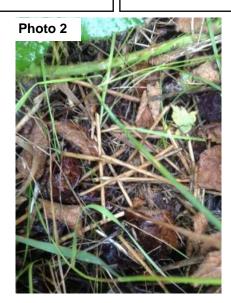
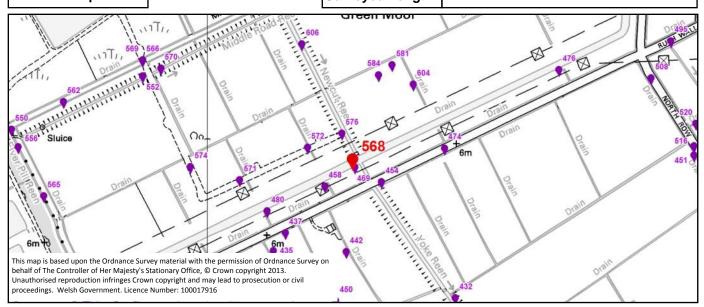


Photo 3



Unique Reference	568	Date:	15-	08-2014 11:12	GPS:	51.56447, -2.877283
Waterbody Number:	1350	Surveyor:		r: AO and TR		
Location Map:		Surveyed Length:				



Habitat	Reen				
Bank Profile	Shallow <45deg				
Depth of Water	>2m				
Channel Width	10 - 20m				
Flow Speed	Still				
Shore Banks	Man-made				

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	
Otter Signs	
Suitability for Watervoles	
Watervole Signs	Pathways; Feeding Stations;

Vegetation Description

Comments:

Frog bit, sweet reed grass, Mentha aquatica,

Lots of bank vole evidence...tunnels and faeces.









						Llywodraeth Cymru Welsh Government
Unique Reference	569	Date:	15-	08-2014 10:06	GPS:	51.566176, -2.883295
Waterbody Number:	1063	Surveyor:		AO and TR		and TR
Location Map:		Survey	Surveyed Length:			
This map is based upon the Ordnance Surv behalf of The Controller of Her Majesty's S	ide's ridge 559 560 Sluice ey material with the permission of Ordnance Survey tationary Office, © Crown copyright 2013. In copyright and may lead to prosecution or civil			Middle Road Track	606	Green Moor 584 581 568 584 568 604 604 604 604 606

Habitat	Ditch
Bank Profile	Shallow <45deg
Depth of Water	<0.5m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Man-made

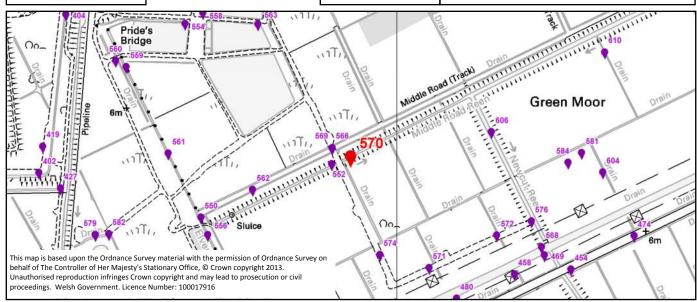
Neighboring Land Use	Scrub;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
	Inaccessible, Come back another day with cutters

Photo 1 Photo 2 Photo 3



Unique Reference	570	Date: 15-08-2014 09:22		GPS:	51.56603, -2.88277
Waterbody Number:	1170	Surveyor:		AO a	and TR
Location Map:		Surveyed Length:			



Habitat	Reen				
Bank Profile	Steep >45deg				
Depth of Water	>2m				
Channel Width	2 - 5m				
Flow Speed	Still				
Shore Banks	Man-made				

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description	Comments:
Frog bit, sweet reed grass	

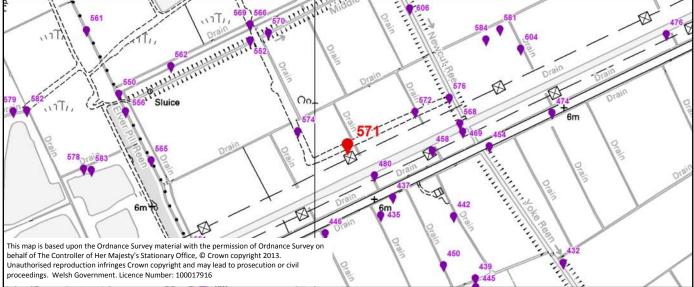




Photo 3



Unique Reference	571	Date:	ate: 15-08-2014 10:45		GPS:	GPS: 51.564078, -2.8804	
Waterbody Number:	1062	Survey	Surveyor:		AO and TR		
Location Map:		Surveyed Length:			100		
550	569 566 JUL	Midaio	10	606	501	A.	



Habitat	Ditch
Bank Profile	
Depth of Water	
Channel Width	
Flow Speed	Still
Shore Banks	Man-made

Neighboring Land Use	Scrub;
Bank Management	
Suitability for Otters	
Otter Signs	
Suitability for Watervoles	
Watervole Signs	

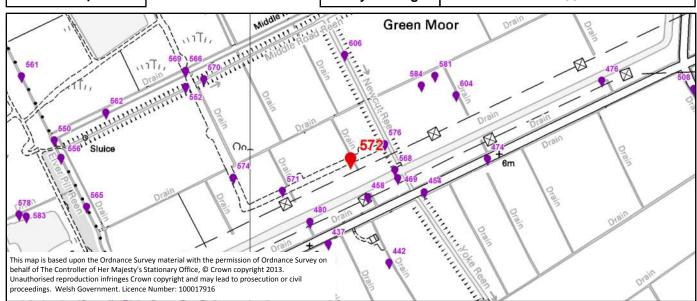
Vegetation Description	Comments:
Bramble,hedged,hawthorn,crack willow,ivy,appears dry from pAth,inaccessible	



Photo 2 Photo 3



Unique Reference	572	Date:	Date: 15-08-2014 10:51		GPS:	51.564665, -2.878564
Waterbody Number:	757	Survey	Surveyor:		AO and TR	
Location Map:		Survey	Surveyed Length:		n: 100	



Habitat	Ditch					
Bank Profile	Shallow <45deg					
Depth of Water	<0.5m					
Channel Width	1 - 2m					
Flow Speed	Still					
Shore Banks	Man-made					

Neighboring Land Use	Scrub;			
Bank Management	Unfenced			
Suitability for Otters	Negligible			
Otter Signs				
Suitability for Watervoles	Negligible			
Watervole Signs				

Bramble, hawthorn, white willow, wild rose,

Comments:

Inaccessible. Overgrown with dense bramble, nettles, hawthorn, ivy, white willow

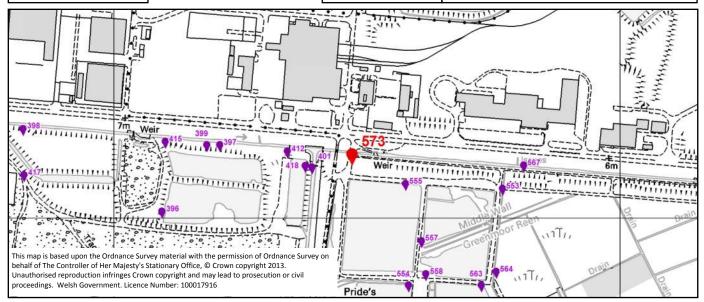




Photo 3



Unique Reference	573	Date:	14-08-2014 10:07		GPS:	51.57063, -2.889168	
Waterbody Number:	1201	Survey	Surveyor:		AO/JE		
Location Map:		Survey	Surveyed Length:		150		



Habitat	Reen					
Bank Profile	Steep >45deg					
Depth of Water	>2m					
Channel Width	5 - 10m					
Flow Speed	Slow					
Shore Banks	Earth					

Neighboring Land Use	Urban; Scrub;				
Bank Management	Mixture				
Suitability for Otters	Low				
Otter Signs					
Suitability for Watervoles	Low				
Watervole Signs	Latrines; Pathways; Feeding Stations;				

Vegetation Description

Phragmites, hawthorn, bramble, thistle and poplar adjacent. Areas of sweet reed grass

Comments:

Possible water vole latrine photos taken. Didn't survey entire length because of health and safety concern

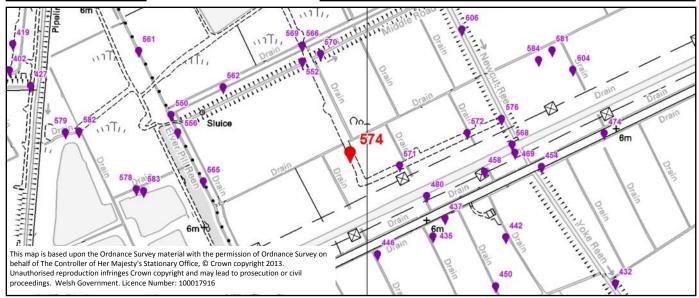








Unique Reference	574	Date:	: 15-08-2014 10:27		GPS:	51.564297, -2.881891
Waterbody Number:	1127	Survey	or:		AO and TR	
Location Map:		Survey	Surveyed Length:		Length: 50	



Habitat	Ditch
Bank Profile	Shallow <45deg
Depth of Water	<0.5m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Man-made

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description

Comments:

Rosebay willow herb, juncos, cedge,



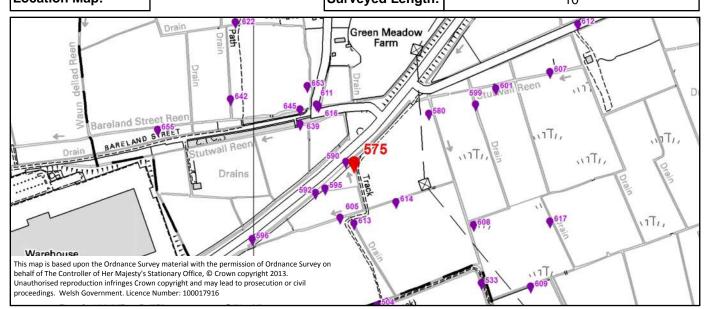
Photo 2







Unique Reference	575	Date:	Date: 19-08-2014 1		GPS:	51.574453, -2.849882
Waterbody Number:	675	Survey	Surveyor:		Mr	m/am
Location Man		Survey	Surveyed Length:			10



Habitat	Reen				
Bank Profile					
Depth of Water	1 - 2m				
Channel Width	2 - 5m				
Flow Speed	Still				
Shore Banks	Earth				

Neighboring Land Use	Livestock grazing; Scrub;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Bulrushes, reed sweet grass, goat willow, great willow herb, covered with duck weed, flag yellow iris, hard rush, nettles, rose species, meadow sweet, bur reed

Comments:

Moderate water quality

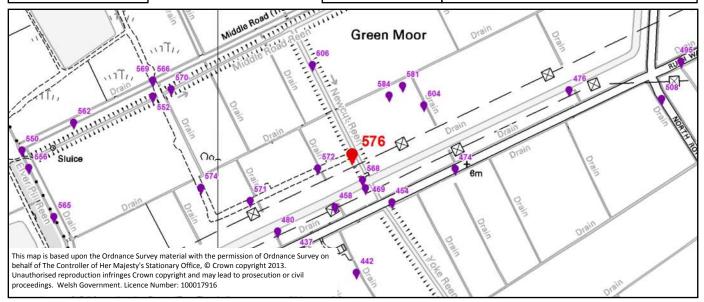








Unique Reference	576	Date:	19-	08-2014 13:48	GPS:	51.56492, -2.87759
Waterbody Number:	603	Survey	Surveyor:		Mn	n/am
Location Map:		Surveyed Length:				



Habitat	Reen				
Bank Profile	Shallow <45deg				
Depth of Water	>2m				
Channel Width	2 - 5m				
Flow Speed	Still				
Shore Banks	Earth				

Neighboring Land Use	Livestock grazing; Scrub;
Bank Management	Unfenced
Suitability for Otters	Medium
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

Water mint, weed. sweet grass, bur reed, duck weed and frogbit covering surface, great willow herb, goat willow, bramble. Arrow head.

Comments:

Good water quality. Boat survey recommended, western bank difficult to access. Eastern bank appears recently managed. Fish, snails. Eastern bank poached. Bank vole burrow and feeding stations found.



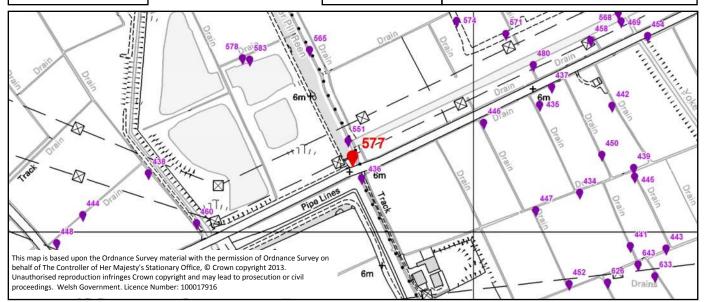
Photo 1







Unique Reference	577	Date:	19-	08-2014 12:13	GPS:	51.561885, -2.884818
Waterbody Number:	1139	Survey	or:		J	oe
Location Map:		Surveyed Length:				



Habitat	Pond
Bank Profile	
Depth of Water	
Channel Width	
Flow Speed	
Shore Banks	

Neighboring Land Use

Bank Management

Suitability for Otters

Otter Signs

Suitability for Watervoles

Watervole Signs

Vegetation Description

Phragmites dominated, heavy scrub with bramble, goat and crack willow.

Comments:

Reed bed inaccessible, dense vegetation a barrier. Attempted from north, east and south.





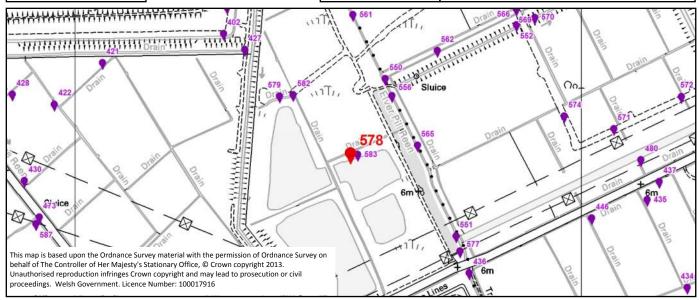




 Unique Reference
 578
 Date:
 19-08-2014 11:14
 GPS:
 51.563596, -2.887982

 Waterbody Number:
 1140
 Surveyor:
 Mm/am

 Location Map:
 Surveyed Length:



Habitat	Ditch
Bank Profile	Shallow <45deg
Depth of Water	<0.5m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	

Neighboring Land Use	
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description

Goat willow, sedge species, hart tongue, bramble, ivy, fern, nettle, blackthorn

Comments:

Woody debris/ branches lying across ditch. Low -moderate water quality. 10m has water, looks like other parts are dry.

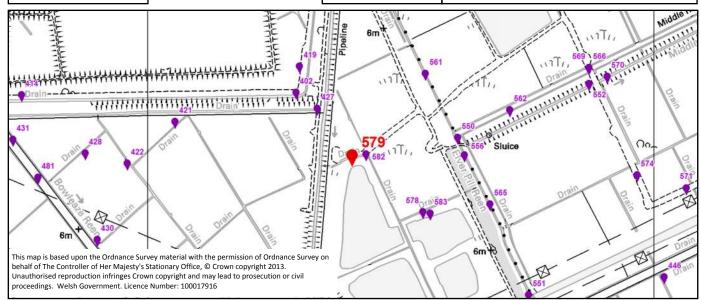








Unique Reference	579	Date:	Date: 19-08-2014 10		GPS:	51.564585, -2.890014
Waterbody Number:	1137	Survey	or:	Mm/am		n/am
Location Map:		Surveyed Length:		enath:		10



Habitat	Ditch				
Bank Profile	Steep >45deg				
Depth of Water	<0.5m				
Channel Width	1 - 2m				
Flow Speed					
Shore Banks					

Neighboring Land Use	
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description

Hawthorn, goat willow, bramble, umbels, nettle, hemp agrimony

Comments:

Dry ditch, unsuitable





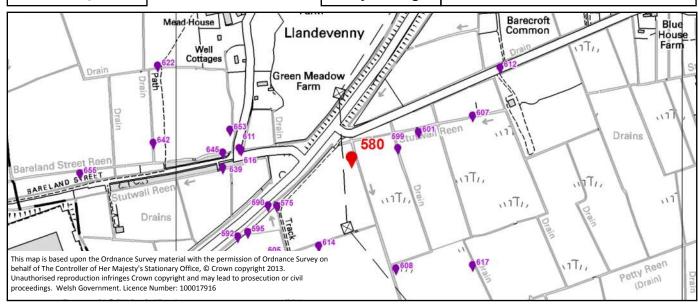




 Unique Reference
 580
 Date:
 19-08-2014 15:34
 GPS:
 51.575325, -2.847773

 Waterbody Number:
 673
 Surveyor:
 Mm/am

 Location Map:
 Surveyed Length:
 20



Habitat	Reen
Bank Profile	Shallow <45deg
Depth of Water	>2m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing; Scrub;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Latrines;

Vegetation Description

Covered in duckweed, reed sweet grass, goat willow, willow herb, bramble, nettles, crack willow

Comments:

Fence present on West Bank, difficult to access due to brambles, boat survey recommended, potential latrine. 20m surveyed due to fence/brambles

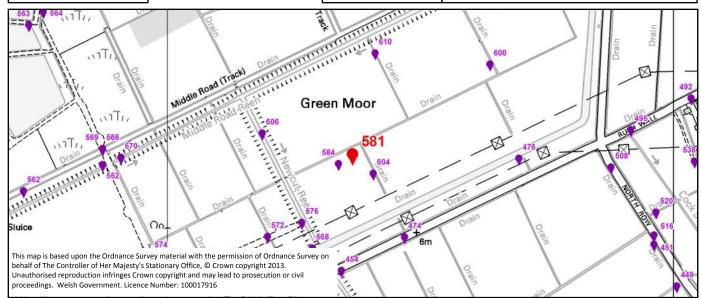








Unique Reference	581	Date:	Date: 19-08-2014 14:35		GPS:	51.566138, -2.876176
Waterbody Number:	1142	Survey	ırveyor:		Mm/am	
Location Map:		Surveyed Length:			5	



Habitat	Ditch
Bank Profile	Shallow <45deg
Depth of Water	<0.5m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing; Scrub;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation	Description
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Bramble, hawthorn,

Comments:

Banks poached by cattle. Overgrown ditch. In accessible for most parts, spot check where possible

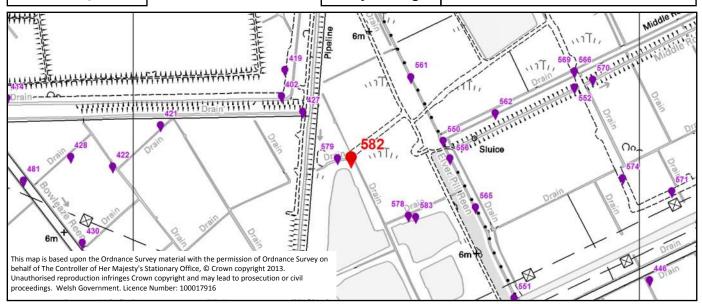




Photo 3



Location Map:		Surveyed Length:				
Waterbody Number:	1130	Surveyor:		or: Mm/am		
Unique Reference	582	Date:	Date: 19-08-2014 10:34		GPS:	51.564609, -2.889629



Habitat	Reen				
Bank Profile	Steep >45deg				
Depth of Water	1 - 2m				
Channel Width	2 - 5m				
Flow Speed	Still				
Shore Banks	Earth				

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description

Duckweed, crack willow, nettles, brambles, Phragmites. Harts tongue, rush species

Comments:

Poor water quality. Surface covered entirely by duckweed. Overgrown. Difficult to access





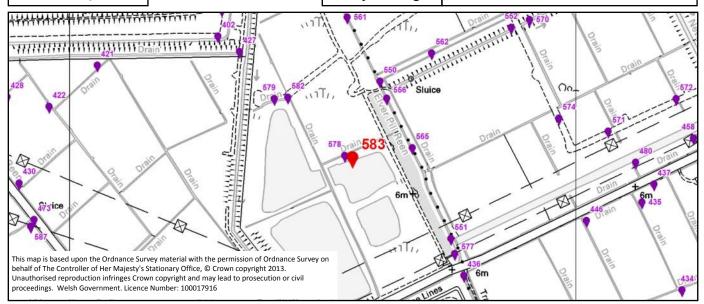




 Unique Reference
 583
 Date:
 19-08-2014 11:24
 GPS:
 51.563571, -2.88777

 Waterbody Number:
 1138
 Surveyor:
 Mm/am

 Location Map:
 Surveyed Length:
 10



Habitat	Pond			
Bank Profile	Flat <10 degrees			
Depth of Water	<0.5m			
Channel Width	>20m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Phragmites dominated reed bed, great willow herb, nettle, bramble

Comments:

Reed bed only 10m surveyed due to dense vegetation, difficulty in accessing whole pond

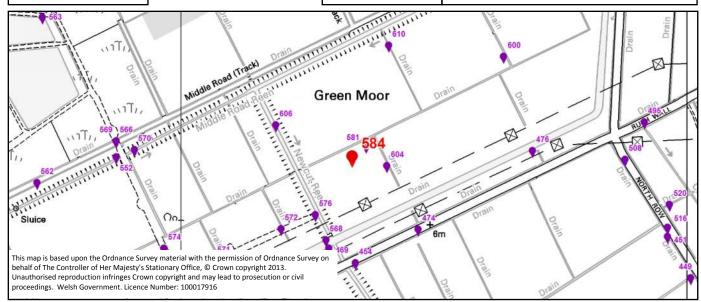








Unique Reference	584	Date:	Date: 19-08-2014 14		GPS:	51.565962, -2.876559
Waterbody Number:	761	Survey	or:	Mm/am		
Location Map:		Surveyed Length: 5		5		



Habitat	Ditch			
Bank Profile	Steep >45deg			
Depth of Water	0.5 - 1m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing; Scrub;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description

Overgrown with brambles. Nettle, goat willow, creeping thistle, hawthorn

Comments:

Inaccessible in most places. Spot checks made where possible.

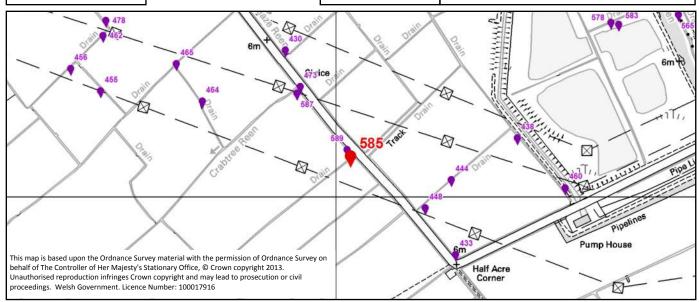








Unique Reference	585	Date:	Date: 20-08-2014 11:15		GPS:	51.561187, -2.895371
Waterbody Number:	549	Survey	Surveyor:		Tar, AO,MM	
Location Map:		Survey	Surveyed Length:			100



Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	1 - 2m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Man-made			

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

Duckweed,frog bit covering ditch,bramble,bullrush, sweet reed grass, great willow herb, goat willow, hawthorn, umbels

Comments:

Latrine and separate feeding station found possibly bank

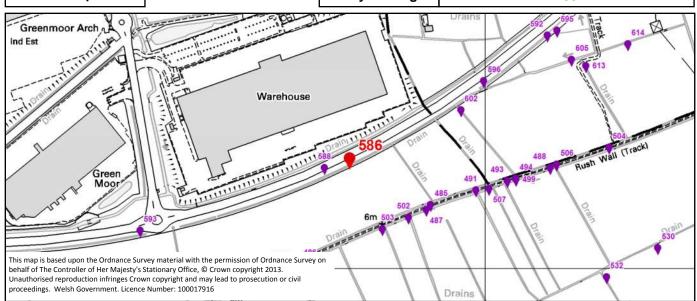




Photo 3



Unique Reference	586	Date:	Date: 21-08-2014 13:58		GPS:	51.571693, -2.856578
Waterbody Number:	955	Survey	Surveyor:		AO & RE	
Location Map:		Surveyed Length:		ength:		100



Habitat	Ditch
Bank Profile	Steep >45deg
Depth of Water	
Channel Width	
Flow Speed	
Shore Banks	

Neighboring Land Use	
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description

Dense bramble, nettle, hawthorn, goat willow. Inaccessible to carry out assessment, too overgrown.

Comments:

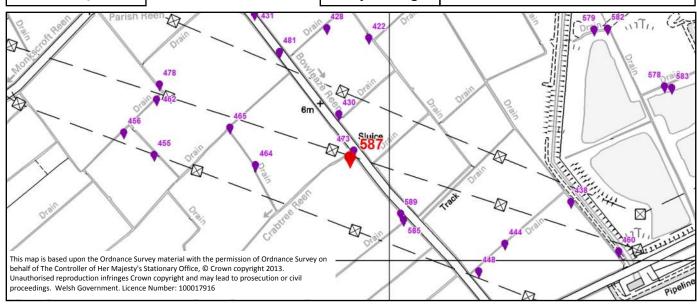








Unique Reference	587	Date: 20-08-2014 11:45		GPS:	51.562279, -2.896914	
Waterbody Number:	557	Survey	Surveyor:		Tar, AO,MM	
Location Map:		Surveyed Length:		ength:		150



Habitat	Reen			
Bank Profile	Steep >45deg			
Depth of Water	>2m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Man-made			

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Pathways; Feeding Stations;

Vegetation Description	
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Comments:

Phragmites, hogweed, sweet field grass and meadow grasses.

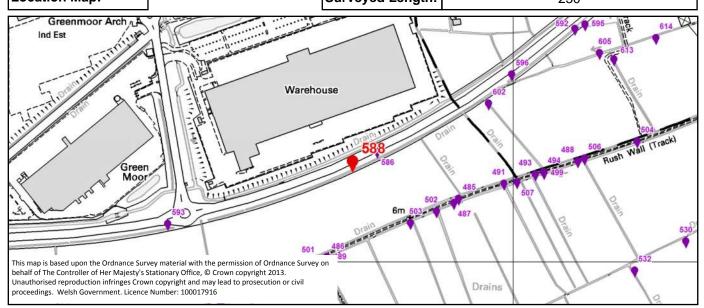








Unique Reference	588	Date:	Date: 21-08-2014 14:0		14:04 GPS : 51.571519, -2.857287		
Waterbody Number:	973	Surveyor:			AO & RE		
Location Man		Surveyed Length		ength:		250	



Habitat	Ditch			
Bank Profile	Steep >45deg			
Depth of Water	1 - 2m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Man-made			

Neighboring Land Use	Arable; Broadleaf woodland; Urban; Scrub;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Bullrush within ditch, but ditch inaccessible to survey. Dense vegetation on bank, bramble, hawthorn, rosebay willow herb, hemp agrimony, burr. Feeding remains on verge, but only 6cm long. Hart's tongue fern on bank in section that is woodland.

Comments:

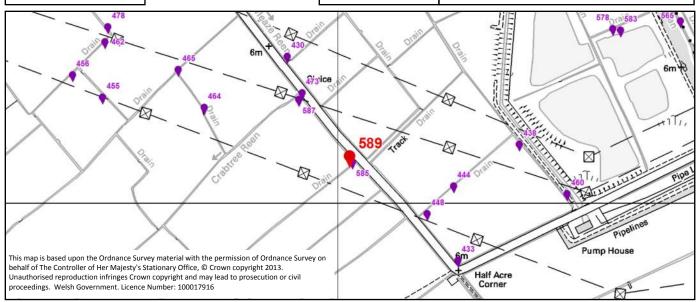








Unique Reference	589	Date:	Date: 20-08-2014 11:18		GPS:	51.561295, -2.895458
Waterbody Number:	555	Survey	or:	Tar, AO,MM		
Location Map:		Survey	Surveyed Length:			100



Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	>2m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Man-made			

Noighboring Land Hoo	Livesteek grazing
Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

Hogweed, grasses meadow species adjacent to field.

Comments:

Old Feeding station found, hedge on other side with hawthorn and blackthorn

Poached on field side of reen in the southern (555b)

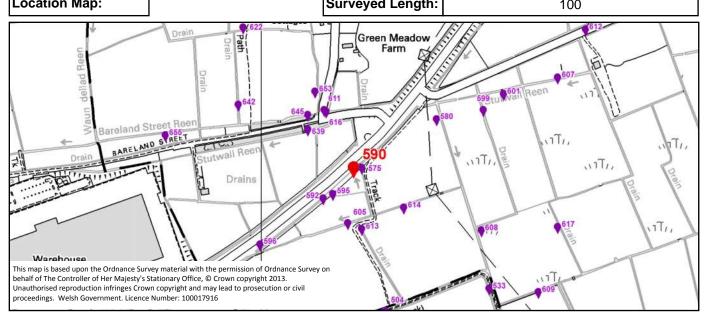








Unique Reference	590	Date:	21-	08-2014 10:15	GPS:	51.57446, -2.850129
Waterbody Number:		Surveyor:			AO, RE	
Location Map:		Surveyed Length:		100		



Habitat	Ditch
Bank Profile	Steep >45deg
Depth of Water	<0.5m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Man-made

Neighboring Land Use	Livestock grazing; Urban;
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Pathways; Feeding Stations;

Vegetation Description

Bull rush, sweet reed grass, brambles, horsetail, hemp agrimony, rosebay willow herb. Dense Scrub vegetation both sides of bank. Accessibility difficult.

Comments:

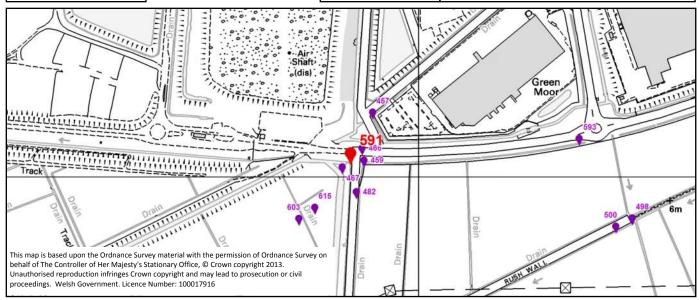
Feeding remains found on bank.







Unique Reference	591	Date:	Date: 21-08-2014 16:08		GPS:	51.570073, -2.869044	
Waterbody Number:	678	Survey	Surveyor:		AO & RE		
Location Map:		Surve	Surveyed Length:		·	100	



Habitat	Reen			
Bank Profile	Steep >45deg			
Depth of Water	>2m			
Channel Width	10 - 20m			
Flow Speed	Still			
Shore Banks	Man-made			

Neighboring Land Use	Livestock grazing; Broadleaf woodland;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Lemna, sweet reed grass in ditch. Vegetation on bank is overgrown, hawthorn, bramble, crack willow, ivy blanketing the ground flora, ash. Phragmites on reen edge. Buddleja.

Comments:

Maybe best surveyed from Southern side of reen.



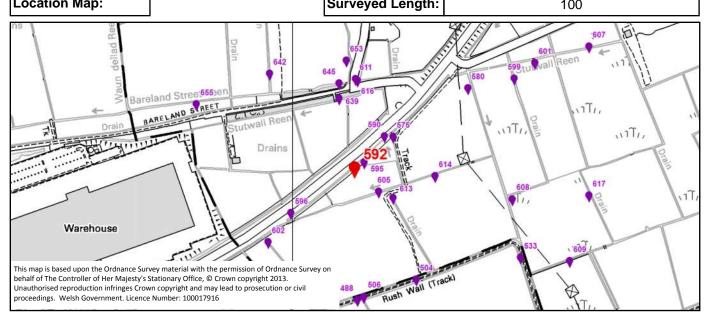


Photo 3





Unique Reference	592	Date:	21-08	3-2014 11:36	GPS:	51.573903, -2.85098	
Waterbody Number:		Survey	Surveyor:		AO, RE		
Location Man:		Surveyed Length:		ogth:		100	



Habitat	
Bank Profile	Steep >45deg
Depth of Water	0.5 - 1m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Man-made

Neighboring Land Use	Broadleaf woodland; Urban;
Bank Management	Fenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Oak, hawthorn, goat willow, alder, crack willow. Ivy smothering the bank, nettles, bramble. Hart's tongue fern.

Comments:

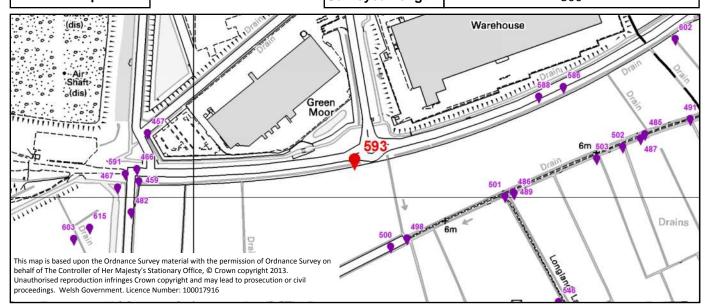
Small length 10 metres of flush with bullrush and sweet reed grass. Otherwise ditch has little vegetation, low water (below 0.5metres) and overgrown with mature trees.







Unique Reference	593	Date:	Date: 21-08-2014 14:40		GPS:	51.570374, -2.862522	
Waterbody Number:	976	Survey	Surveyor:		AO & RE		
Location Map:		Surveyed Length:			300		



Habitat	Ditch				
Bank Profile	Steep >45deg				
Depth of Water	>2m				
Channel Width	2 - 5m				
Flow Speed	Still				
Shore Banks	Man-made				

Neighboring Land Use	Arable; Urban;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Latrines; Burrows; Pathways; Feeding Stations; Lawns;

Vegetation Description

Section of ditch (approx 150 metres) has been recently cut. Lemna species smothering ditch, sweet reed grass.

Comments:









Unique Reference	594	Date:	20-	08-2014 15:00	GPS:	51.465731, -3.159676
Waterbody Number:	672	Surveyor:		Tar, AO,MM		
Location Map:		Surveyed Length:				

594

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Habitat	Reen				
Bank Profile	Shallow <45deg				
Depth of Water	<0.5m				
Channel Width	2 - 5m				
Flow Speed	Still				
Shore Banks	Man-made				

Neighboring Land Use	Arable; Livestock grazing;
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

Difficult to access the reen from either side as dense vegetation (brambles, nettles, hawthorn). There are mature cracked willows adjacent to the area where we parked car. Ditch has bullrush, sweet reed grass, sedge, horsetail.

Comments:

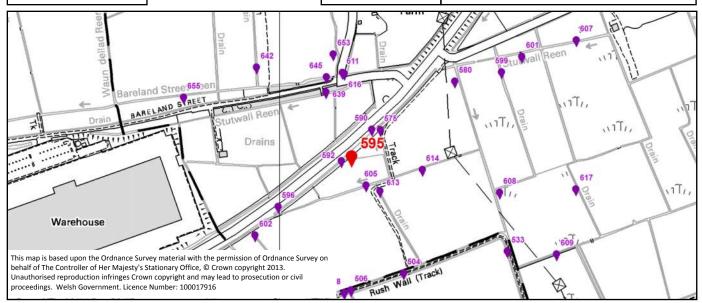
Feeding station by road. Difficult to access the reen from either side as dense vegetation. There are mature cracked willows adjacent to the area where we parked car. Ditch has bullrush, sweet reed grass, sedge, horsetail.







Unique Reference	595	Date:	Date: 21-08-2014 11:19		GPS:	51.573988, -2.850701
Waterbody Number:	874	Survey	or:		AO & RE	
Location Map:		Surveyed Length:		enath:		40



Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	<0.5m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Broadleaf woodland;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Horsetail, sweet reed grass within ditch. Brambles, hawthorn, oak, nettles on banks.

Comments:

Inaccessible to walk into the ditch as the sediment is a thin layer over water. Too boggy. When walking it feels like the mud is floating. Appears inaccessible from northern edge but possibly from southern (but currently no access permission).

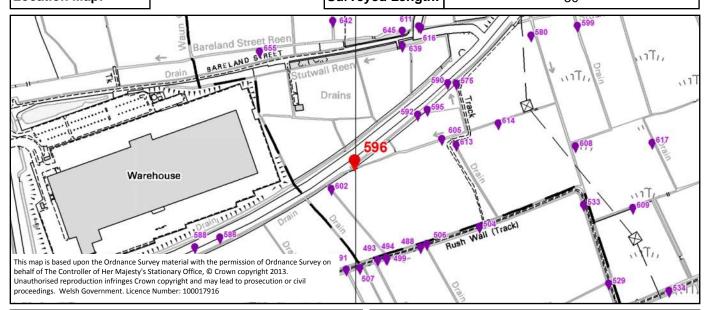








Unique Reference	596	Date:	Date: 21-08-2014 12:12		GPS:	51.573082, -2.852768
Waterbody Number:	843	Survey	urveyor:		AO & RE	
Location Man		Surveyed Length:		nath:		50



Habitat	Ditch			
Bank Profile	Steep >45deg			
Depth of Water	>2m			
Channel Width	5 - 10m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Arable; Broadleaf woodland; Urban;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Goat willow, crack willow, hawthorn, ash. Lemna (duckweed) smothering the ditch in some areas. Nettles and bramble on bank. Some areas of the ditch are shallow (less than 5 metres) other lengths are over 2metres deep.

Comments:

On the northern side of the ditch there is a barbed wire fence which makes the bank inaccessible (marked with a line on map). Other bank sides are densely overgrown which makes survey near impossible.





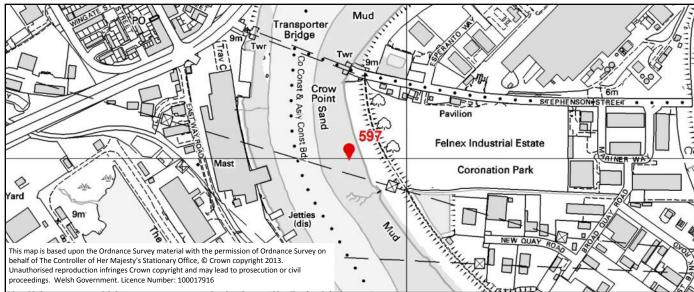




 Unique Reference
 597
 Date:
 28-08-2014 15:21
 GPS:
 51.56891, -2.984138

 Waterbody Number:
 Surveyor:
 IB & RE

 Location Map:
 Surveyed Length:



Habitat	River			
Bank Profile	Steep >45deg			
Depth of Water	>2m			
Channel Width	>20m			
Flow Speed	Rapid			
Shore Banks	Earth			

Neighboring Land Use	Urban;
Bank Management	Unfenced
Suitability for Otters	High
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Comments:

Photo 1

Photo 2 Photo 3



						Llywodraeth Cymru Welsh Government
Unique Reference	598	Date:	28-	08-2014 11:19	GPS:	51.587898, -2.83245
Waterbody Number:		Surveyo		r: IB & RE		
Location Map:		Survey	ed L	ength:		
behalf of The Controller of Her Majesty's S	service Area ey material with the permission of Ordnance Surve tationary Office, © Crown copyright 2013. n copyright and may lead to prosecution or civil	yon	-	Beec	thes Farmivan Park	The Beeches The Cedars

Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	>2m			
Channel Width	2 - 5m			
Flow Speed	Slow			
Shore Banks	Earth			

proceedings. Welsh Government. Licence Number: 100017916

Neighboring Land Use	Livestock grazing;
Bank Management	Fenced
Suitability for Otters	Medium
Otter Signs	Spraints; Slides; Laying up;
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description			

Comments:

Reen is heavily poached on both sides. Access to the reen near the M4 side constrained in parts by dense vegetation. Walking up the channel is constrained in parts by deep areas of muddy/silty substrates. Further north up stream of the M4 right hand bank is heavily vegetated with bramble. Left hand bank is managed with improved grassland/grazed grassland up to the reen edge. Reen hea

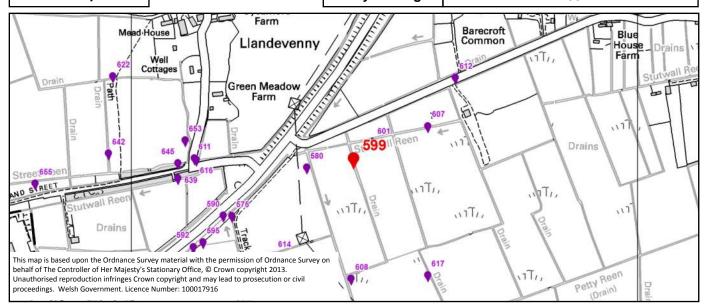




Photo 3



Unique Reference	599	Date:	26-0	8-2014 11:50	GPS:	51.5755, -2.846445
Waterbody Number:	670	Survey	or:		IB, R	P & AO
Location Map:		Surveyed Length:			200	



Habitat	Ditch		
Bank Profile	Shallow <45deg		
Depth of Water	1 - 2m		
Channel Width	>20m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Livestock grazing; Broadleaf woodland;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Sweet reed grass, bullrush in the ditch. Vegetation on bank side mainly inaccessible due to brambles, crack willow, grey willow, oak tree, goat willow.

Comments:

Sweet reed grass, bullrush in ditch.





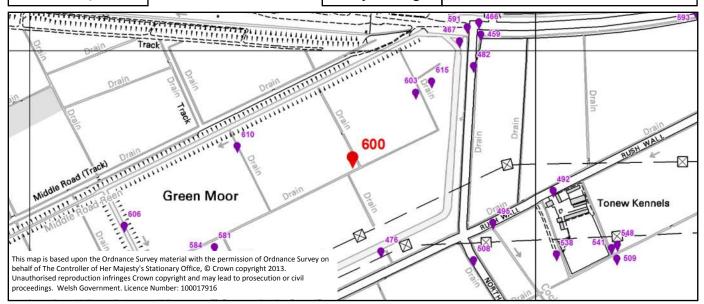




 Unique Reference
 600
 Date:
 27-08-2014 15:00
 GPS:
 51.567751, -2.87228

 Waterbody Number:
 Surveyor:
 In/am

 Location Map:
 Surveyed Length:



Habitat	Ditch		
Bank Profile	Flat <10 degrees		
Depth of Water	0.5 - 1m		
Channel Width	2 - 5m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Comments:

Vegetation Description

Bramble, willow, hawthorn

Largely inaccessible due to vegetation.

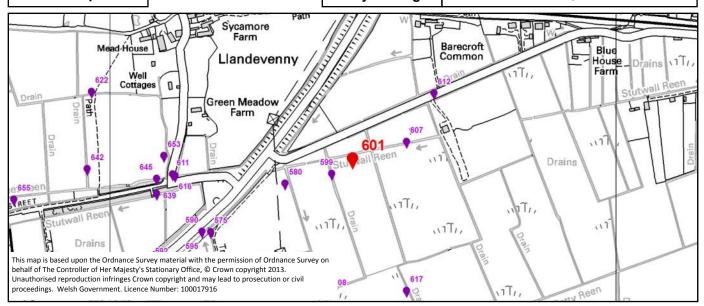








Unique Reference	601	Date:	26-0	08-2014 10:35	GPS:	51.575782, -2.845868
Waterbody Number:	876	Survey	or:		IB, R	P & AO
Location Map:		Surveyed Length:			40	



Habitat	Reen
Bank Profile	Steep >45deg
Depth of Water	>2m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	

Neighboring Land Use	
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Latrines; Pathways; Feeding Stations;

Vegetation Description

Bullrush, sweet reed grass, Mentha aquatica, bramble. Lemonade bramble.

Comments:

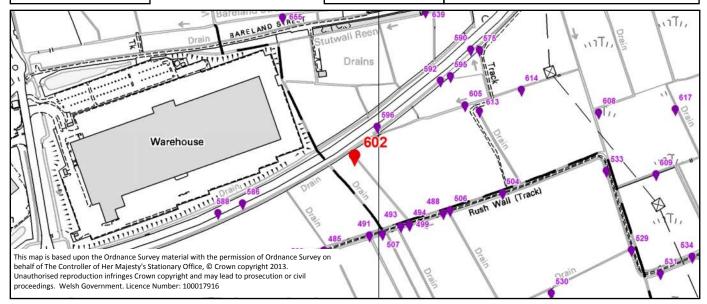








Unique Reference	602	Date:	27-0	08-2014 11:49	GPS:	51.572568, -2.853416
Waterbody Number:	873	Survey	or:		IB	/am
Location Map:		Surveyed Length:			100	



Habitat	Ditch		
Bank Profile	Steep >45deg		
Depth of Water	1 - 2m		
Channel Width	1 - 2m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Livestock grazing;			
Bank Management	Mixture			
Suitability for Otters	Low			
Otter Signs				
Suitability for Watervoles	Low			
Watervole Signs				

Vegetation Description

Hawthorn, bramble, nettle, reed sweet grass, rose bay willow herb, rose hip, elder

Comments:

50% inaccessible. Full length surveyed, inaccessible areas of low suitability.





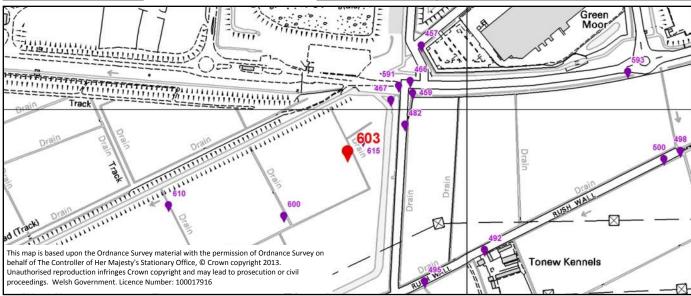




 Unique Reference
 603
 Date:
 27-08-2014 15:07
 GPS:
 51.568908, -2.870489

 Waterbody Number:
 1147
 Surveyor:
 In/am

 Location Map:
 Surveyed Length:



Habitat	Ditch			
Bank Profile	Flat <10 degrees			
Depth of Water	<0.5m			
Channel Width	<1m			
Flow Speed	Still			
Shore Banks	Earth			

Noighboring Land Use	Livesteek grazing:
Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Desc	cription
-----------------	----------

Willow, hawthorn, bramble

Comments:

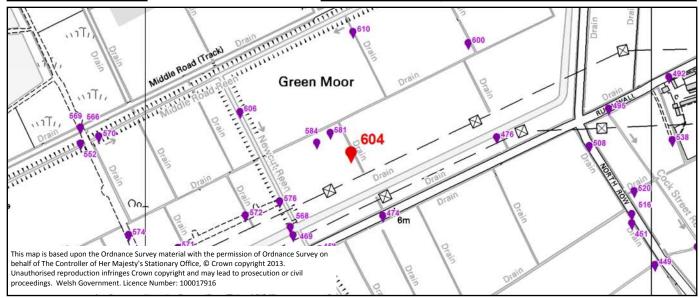
Flooding over field. Dry ditch in places completely unsuitable.







Unique Reference	604	Date: 27-08-2014 15:23		GPS:	51.565799, -2.875571	
Waterbody Number:	1145	Surveyor:		In	/am	
Location Map:		Survey	ed L	ength:		0



Habitat	Ditch			
Bank Profile	Flat <10 degrees			
Depth of Water				
Channel Width				
Flow Speed				
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

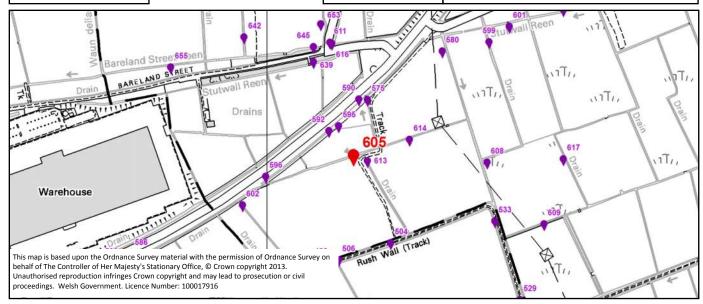
Vegetation Description	Comments:
Bramble, hawthorn, willow	Inaccessible due to dense vegetation dominating the ditch



Photo 2 Photo 3



Unique Reference	605	Date: 27-08-2014 11:08		GPS:	51.573477, -2.850275	
Waterbody Number:	845	Surveyor:		IB	/am	
Location Map:		Surveyed Length:				



Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	>2m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Feeding Stations;

Vegetation Description

Reed sweet grass dominates majority of reen banks. Surface of reen covered with duckweed

Comments:

Potential Watervole feeding remains. Bank vole seen. Field cut very close to reen, including reeds. Western end fenced.

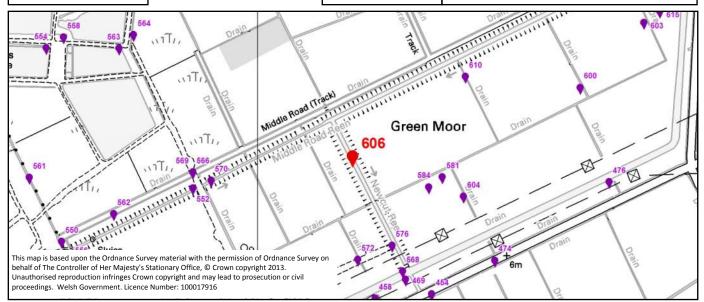








Unique Reference	606	Date: 27-08-2014 14:37		GPS:	51.56649, -2.878754	
Waterbody Number:	603	Surveyor:			In/am	
Location Map:		Surveyed Length:			100	



Habitat	Reen			
Bank Profile	Steep >45deg			
Depth of Water	>2m			
Channel Width	5 - 10m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing; Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation	Description	
rogotation	Docompaion	

Bullrush, reed canary grass

Comments:

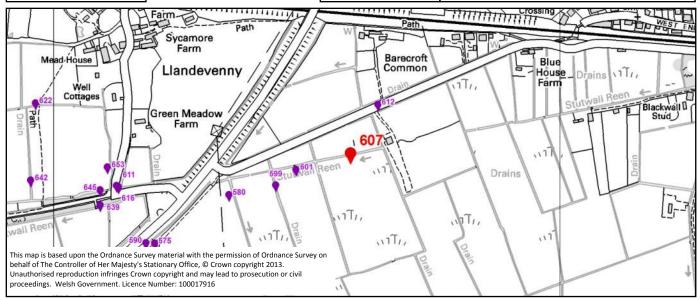
Bank submerged due to recent flooding. Full length of reen walked and surveyed where possible. Further survey recommended when water level has dropped.







Unique Reference	607	Date: 26-08-2014 12:37		GPS:	51.576085, -2.844328	
Waterbody Number:	649	Survey	or:		AO,	IB, RP
Location Map:		Surveyed Length:		ength:		50



Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	0.5 - 1m			
Channel Width	5 - 10m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing; Broadleaf woodland; Bog;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Comments:

Sweet reed grass and bullrush in ditch. Bank vegcrack willow, bramble, nettles. Inaccessible.

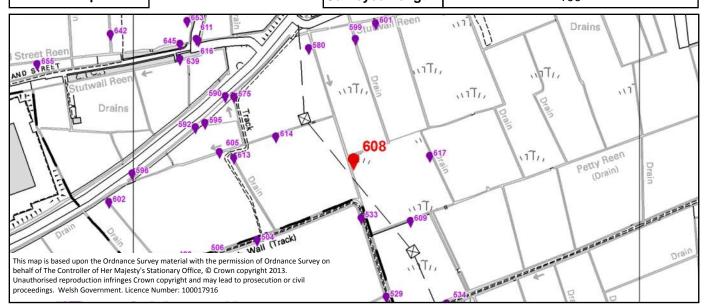








Unique Reference	608	Date:	Date: 26-08-2014 12:5		GPS: 51.573374, -2.84	
Waterbody Number:	850	Survey	Surveyor:		AO, IB, RP	
Location Map:		Surve	Surveyed Length:			100



Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	>2m			
Channel Width	5 - 10m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing; Bog;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Feeding Stations;

Vegetation Description

Bramble and nettles hedge the ditch making inaccessible in places. Bullrush and sweet reed grass, Mentha aquatica.

Comments:

Bank vole latrine (see rate photo taken), faeces smaller, lighter coloured and feeding remains only up to 5cm long. Old water vole feeding remains, soggy faeces (because of heavy rain difficult to tell if water vole).

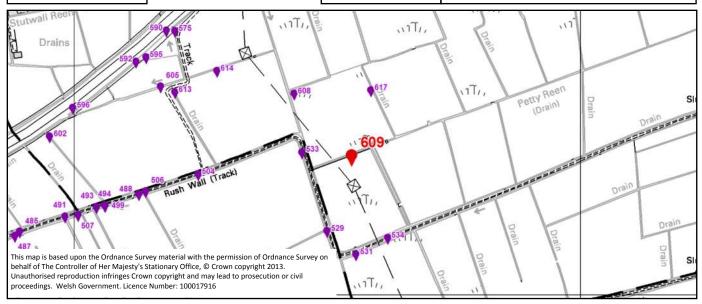








Unique Reference	609	Date:	Date: 26-08-2014 13:17		GPS:	51.572297, -2.844813
Waterbody Number:	915	Survey	Surveyor:		AO, IB, RP	
Location Map:		Surveyed Length:		ength:		100



Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	>2m			
Channel Width	5 - 10m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;			
Bank Management	Unfenced			
Suitability for Otters	Low			
Otter Signs				
Suitability for Watervoles	Medium			
Watervole Signs	Latrines; Pathways; Feeding Stations;			

Vegetation Description

Lemons, sweet reed grass in the reen. Bank side vegetation grey willow, crack willow, goat willow, hawthorn, bramble. Marginal veg - good foraging habitat for bats. Inaccessible to survey some areas of ditch due to dense vegan.

Comments:



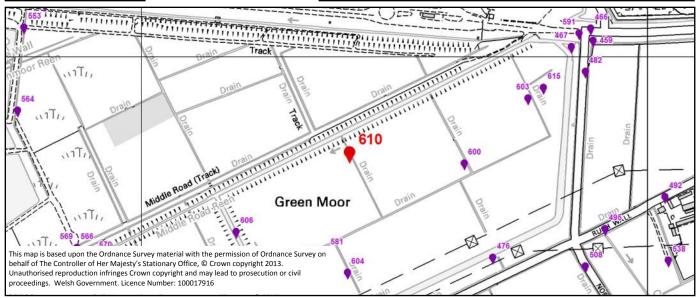




 Unique Reference
 610
 Date:
 27-08-2014 14:49
 GPS:
 51.567922, -2.875559

 Waterbody Number:
 1181
 Surveyor:
 In/am

 Location Map:
 Surveyed Length:



Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	0.5 - 1m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
	Liveoteen grazing,
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description

Hawthorn, bramble, nettle, rose hip, goats willow, ash

Comments:

Dense vegetation on either side of ditch making it unsuitable for otters and water voles.

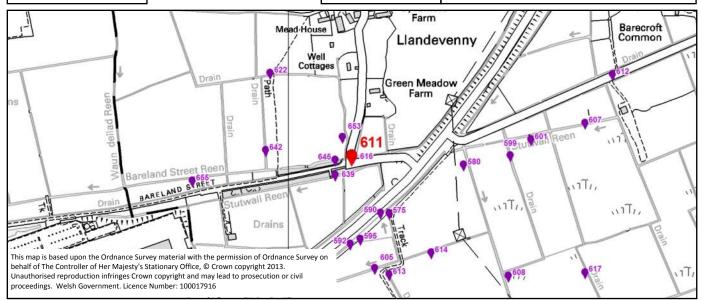








Unique Reference	611	Date: 27-08-2014 10:24		GPS:	51.575463, -2.85098		
Waterbody Number:	636	Surveyor:		IB	IB/am		
Location Map:		Surveyed Length:					



Habitat	Reen			
Bank Profile	Steep >45deg			
Depth of Water	>2m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

Bramble, nettle, hawthorn

Comments:

Western end of reen- vegetation recently cut on south bank. No access to north bank. Mink trap in reen. Reen on SDR and extending to north east to be surveyed by kayak as vegetation and bank slope too difficult to access.

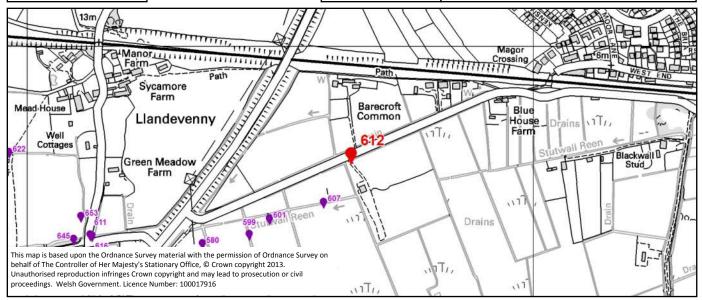








Unique Reference	612	Date: 26-08-2014 15:05		GPS:	51.576944, -2.843559	
Waterbody Number:	666	Surveyor:		AO, IB, RP		
Location Map:		Survey	Surveyed Length:		100	



Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	1 - 2m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

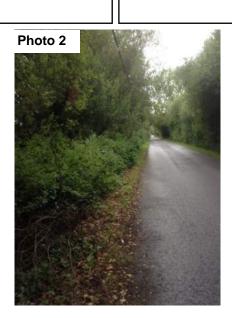
Neighboring Land Use	Urban; Park/garden;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Nettle, bramble, nightshade understory. Goat willow, popular, hawthorn, crack willow, bulrush. Water quality low, fly tipping in and adjacent to ditch.

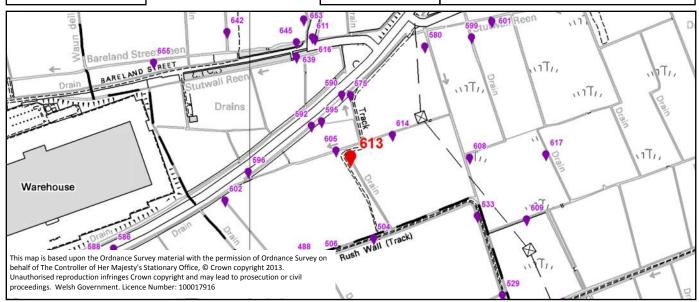
Comments:







Unique Reference	613	Date:	Date: 27-08-2014 12:11		GPS:	51.573374, -2.849866
Waterbody Number:	882	Surveyor:		IB	IB/am	
Location Map:		Surveyed Length:				



Habitat	Reen				
Bank Profile	Flat <10 degrees				
Depth of Water	>2m				
Channel Width	2 - 5m				
Flow Speed	Still				
Shore Banks	Earth				

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

Bull rush, duck weed, nettle, bramble, thistle, reed sweet grass, rushes

Comments:

Adjacent field grazed right up to reen edge. Southern 50m section inaccessible due to dense vegetation. Water flooding out onto field.

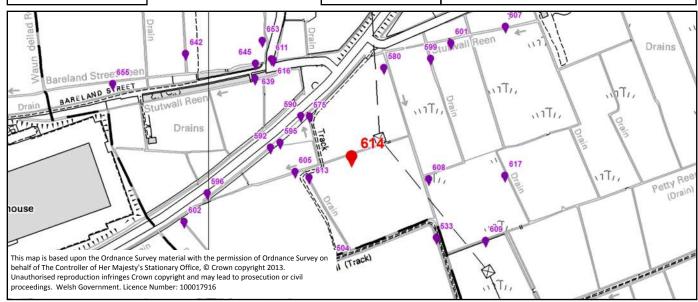








Location Map:		Surveyed Length:					
Waterbody Number:	874	Surveyor:		IB/am			
Unique Reference	614	Date:	Date: 27-08-2014 12:47		GPS:	51.573762, -2.848674	



Habitat	Reen					
Bank Profile	Flat <10 degrees					
Depth of Water	>2m					
Channel Width	2 - 5m					
Flow Speed	Still					
Shore Banks	Earth					

Neighboring Land Use	Livestock grazing;
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

Bull rush, reed greass, nettle.

Comments:

Spot checks made along full length. Marginally accessible. Bank vole signs seen.





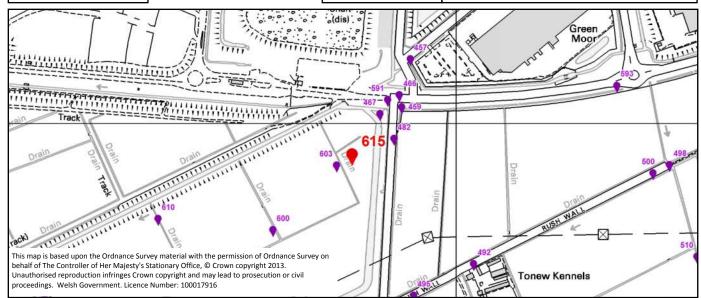




 Unique Reference
 615
 Date:
 27-08-2014 15:20
 GPS:
 51.569106, -2.870041

 Waterbody Number:
 779
 Surveyor:
 In/am

 Location Map:
 Surveyed Length:
 0



Habitat	Ditch			
Bank Profile				
Depth of Water				
Channel Width				
Flow Speed				
Shore Banks	Earth			

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	
Otter Signs	
Suitability for Watervoles	
Watervole Signs	

Vegetation Description

Comments:

Bramble, hawthorn, willow

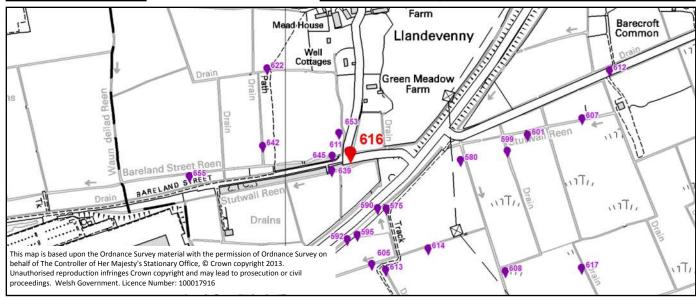
Completely inaccessible.







Unique Reference	616	Date:	Date: 27-08-2014 10		GPS:	51.575441, -2.850922
Waterbody Number:	633	Survey	or:	IB/am		
Location Map:		Surveyed Length:		enath:		70



Habitat	Reen					
Bank Profile	Steep >45deg					
Depth of Water	>2m					
Channel Width	1 - 2m					
Flow Speed	Still					
Shore Banks	Earth					

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Nettle dominant, hog weed, enchanted nightshade

Comments:

Largely inaccessible due to steep bank covered with vegetation. West side surveyed, east no access. Adjacent road on west side.

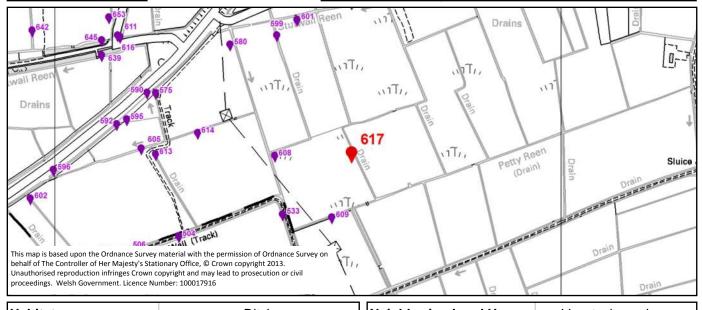








Unique Reference	617	Date:	Date: 26-08-2014 11:50		GPS:	51.57345, -2.844284
Waterbody Number:	669	Survey	ırveyor:		AO, RP, IB	
Location Map:		Surveyed Length:			300	



Habitat	Ditch
Bank Profile	Steep >45deg
Depth of Water	1 - 2m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description	Comments:
Sweet mainly inaccessible due to bramble nettle etc.	Lots of feeding material, assume to be bank vole as no sign of wv droppings

Photo 1

Photo 2 Photo 3



					Welsh Government	
Unique Reference	618	Date: 28-08-2014 14		46 GPS :	51.579202,	-2.798435
Waterbody Number:	724	Surveyor:		Rp nd		
Location Map:		Surveyed Length:		gth: 200		
Brook House	Great House	641 1786	Caldicot Moor	624 63	1 Moor Ditch	
behalf of The Controller of Her Majesty's Sta	copyright and may lead to prosecution or civil	ey on		··		Cal
proceedings. Weish dovernment, Literice N		-	11		1	A

Habitat	Reen
Bank Profile	Steep >45deg
Depth of Water	0.5 - 1m
Channel Width	1 - 2m
Flow Speed	Sluggish
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

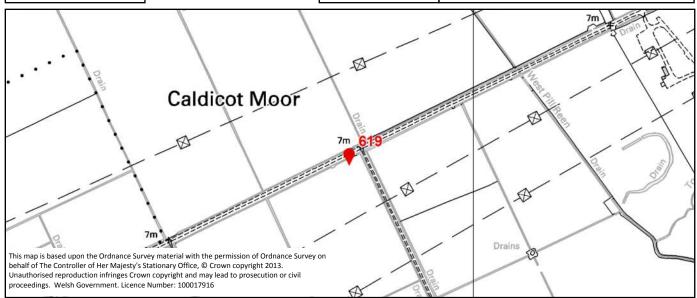
Comments:
Bank vole signs



Photo 2 Photo 3



Unique Reference	619	Date: 29-08-2014 14:57		GPS:	51.576558, -2.784178
Waterbody Number:	753	Surveyor:		R	p sc
Location Map:		Surveyed Length:			100



Habitat	Ditch
Bank Profile	Shallow <45deg
Depth of Water	0.5 - 1m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Earth

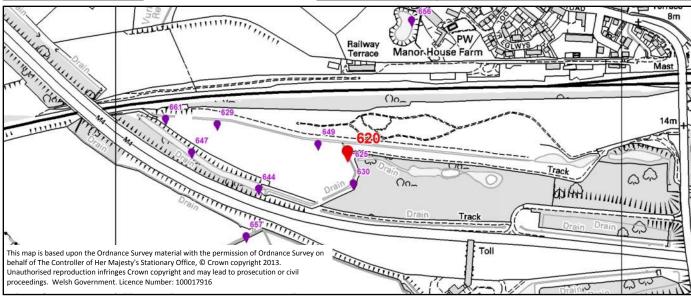
Neighboring Land Use	Arable;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:	
Over grown brambles	Largely inaccessible	

Photo 1 Photo 2 Photo 3



Unique Reference	620	Date: 28-08-2014 11:58		GPS:	51.582855, -2.788572
Waterbody Number:	703	Surveyor:		R	o nd
Location Map:		Surveyed Length:			50



Habitat	Reen
Bank Profile	
Depth of Water	<0.5m
Channel Width	1 - 2m
Flow Speed	Sluggish
Shore Banks	

Neighboring Land Use	Scrub;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description	Comments:		
Sweet reed	Bank vole signs		

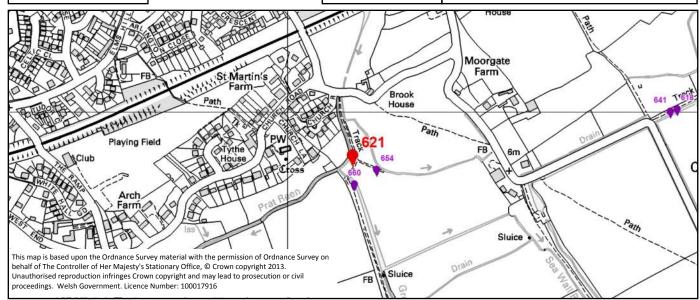








Unique Reference	621	Date:	29-0	08-2014 09:37	GPS:	51.578325, -2.807685
Waterbody Number:	726	Surveyor:		Rhodri		
Location Map:		Surveyed Length:			50	

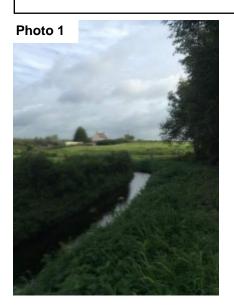


Habitat	Reen
Bank Profile	Shallow <45deg
Depth of Water	<0.5m
Channel Width	2 - 5m
Flow Speed	Sluggish
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Medium
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description Comments:

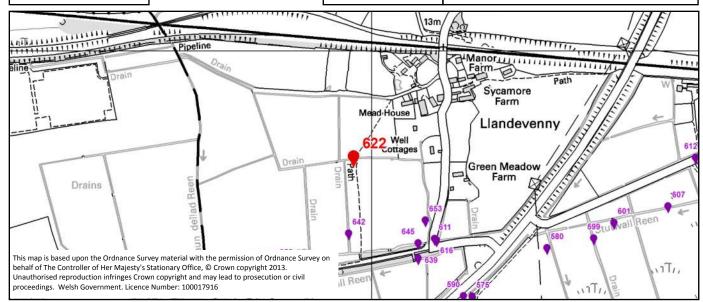
Grass and nettles. Some reeds in reen







Unique Reference	622	Date:	29-08-2014 11:45		GPS:	51.576902, -2.853323	
Waterbody Number:	966	Survey	Surveyor:		Rhodri		
Location Map:		Surve	ed Le	enath:		200	



Habitat	Ditch				
Bank Profile	Steep >45deg				
Depth of Water	0.5 - 1m				
Channel Width	<1m				
Flow Speed	Still				
Shore Banks	Earth				

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Comments:

Brambles and trees





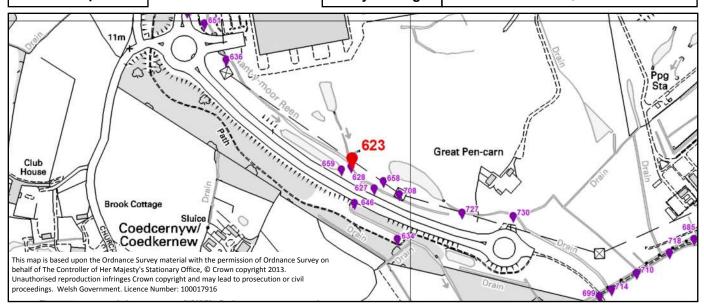




 Unique Reference
 623
 Date:
 02-09-2014 11:55
 GPS:
 51.547847, -3.041391

 Waterbody Number:
 Surveyor:
 rp sc

 Location Map:
 Surveyed Length:
 10



Habitat	Ditch		
Bank Profile	Shallow <45deg		
Depth of Water	<0.5m		
Channel Width	1 - 2m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Scrub;			
Bank Management	Unfenced			
Suitability for Otters	Negligible			
Otter Signs				
Suitability for Watervoles	Low			
Watervole Signs	Latrines; Pathways; Feeding Stations;			

Vegetation Description	Comments:		
Brambles and reeds in ditch	Bank vole droppings Ditch dried out after 10m		





						Welsh Government	
Unique Reference	624	Date:	28-	08-2014 15:39	GPS:	51.580638, -2.793849	
Waterbody Number:	709	Surveyor:			Rp nd		
Location Map:		Survey	ed L	ength:	50		
eat use		MA TOTAL TOT	777 64	TUTTING 644 TOTAL	Orain Drain	620 Drain Track	
This map is based upon the Ordnance Surv	ey material with the permission of Ordnance Surve			\	Dialin	Drain	

Habitat	Reen
Bank Profile	Steep >45deg
Depth of Water	0.5 - 1m
Channel Width	1 - 2m
Flow Speed	Sluggish
Shore Banks	Earth

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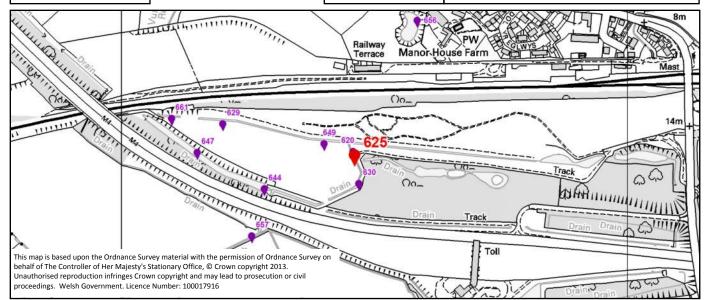
Neighboring Land Use	Livestock grazing;
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description	Comments:			
Nettle grass	Hard to access			





Unique Reference	625	Date: 28-08-2014 10:30		GPS : 51.582792, -2.788537	
Waterbody Number:	699	Surveyor:		RP ND	
Location Map:		Surveyed Length:		30	



Habitat	Reen
Bank Profile	Steep >45deg
Depth of Water	0.5 - 1m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	

Neighboring Land Use	
Bank Management	Mixture
Suitability for Otters	Medium
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description	Comments:
Nettle sweet reed grass	Evidence of bank voles

Photo 1



Kimneypoo Bridge

					Welsh Government	
Unique Reference	626	Date:	Date: 29-08-2014 13:41		GPS: 51.559715, -2.8	
Waterbody Number:	1040	Survey	or:	R	Rp sc	
Location Map:		Survey	Surveyed Length:		150	
551 577 436m	THE REPORT OF THE PARTY.	450 Drain 434	445	432 Orain		Trail Trail
nes 6m		452	643 633 Drains	4-4		/ /

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Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	0.5 - 1m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

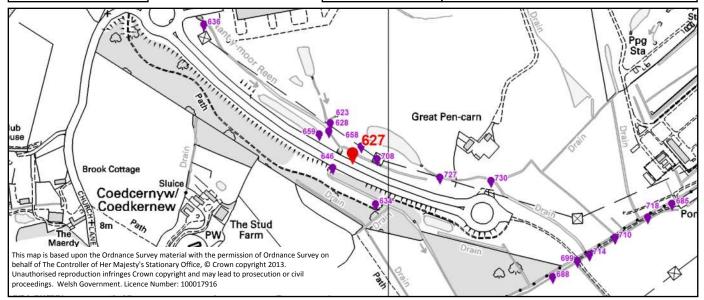
Vegetation Description	Comments:
Overgrown reeds	Largely inaccessible







Unique Reference	627	Date: 02-09-2014 12:05		GPS:	51.547323, -3.040751	
Waterbody Number:	862	Surveyor:			rp sc	
Location Map:		Survey	Surveyed Length:			150



Habitat	Ditch			
Bank Profile	Steep >45deg			
Depth of Water	<0.5m			
Channel Width	1 - 2m			
Flow Speed	Sluggish			
Shore Banks	Earth			

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Latrines; Feeding Stations;

Vegetation Description	Comments:
Over grown with grass, nettles, reeds	

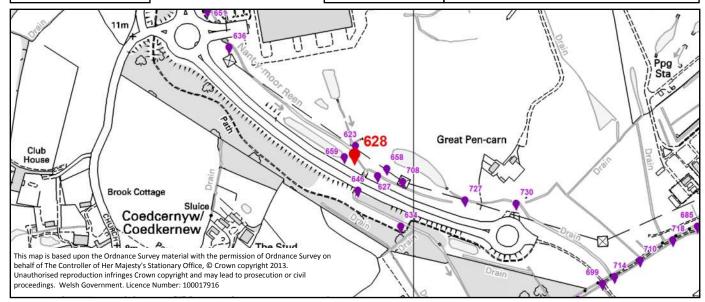




Photo 3



Location Map:		Surveyed Length:				
Waterbody Number:	861	Surveyor:		rp sc		
Unique Reference	628	Date: 02-09-2014 11:21		GPS:	51.547702, -3.041422	



Habitat	Stream			
Bank Profile	Shallow <45deg			
Depth of Water	0.5 - 1m			
Channel Width	1 - 2m			
Flow Speed	Slow			
Shore Banks	Earth			

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Latrines; Pathways; Feeding Stations;

Comments:

Grass banks with brambles
Part section has grass/reeds in stream

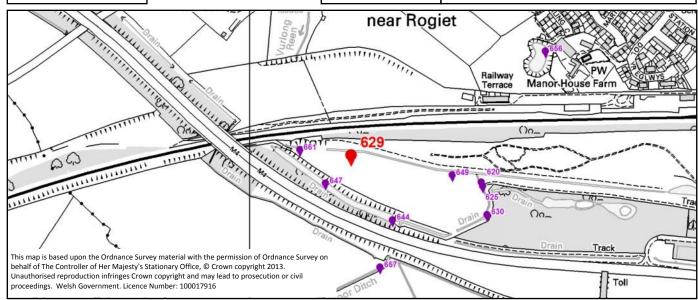
Bank vole signs wV droppings







Unique Reference	629	Date: 28-08-2014 11:45		GPS:	51.583313, -2.792288
Waterbody Number:	700	Surveyor:		RP ND	
Location Map:		Surveyed Length:			50



Habitat	Reen		
Bank Profile	Steep >45deg		
Depth of Water	0.5 - 1m		
Channel Width	2 - 5m		
Flow Speed	Sluggish		
Shore Banks			

Neighboring Land Use	
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	Sightings; Latrines; Lawns;

Comments:				

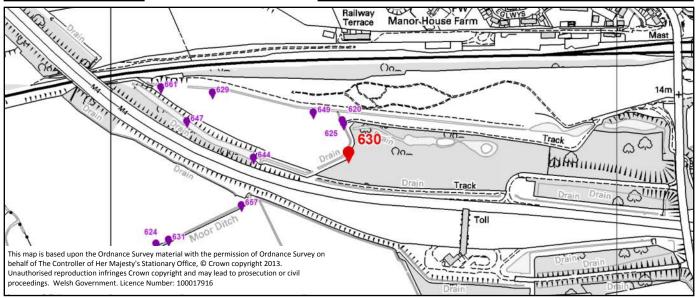




Photo 3



Unique Reference	630	Date:	Date: 28-08-2014 10:53		GPS:	51.582289, -2.788394
Waterbody Number:	701	Surveyor:		RP ND		
Location Map:		Surveyed Length:			100	



Habitat	Reen
Bank Profile	Steep >45deg
Depth of Water	0.5 - 1m
Channel Width	2 - 5m
Flow Speed	Sluggish
Shore Banks	

Neighboring Land Use	
Bank Management	Mixture
Suitability for Otters	Medium
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Pathways;

Vegetation Description

Comments:

Sweet reed grass

Evidence of bank vole

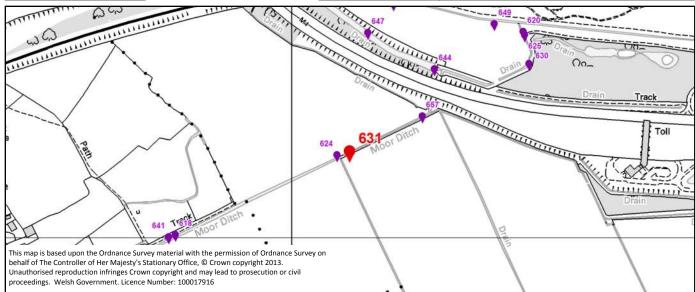








Unique Reference	631	Date:	Date: 28-08-2014 15:05		GPS:	51.58071, -2.793497
Waterbody Number:	710	Survey	Surveyor:		Rp nd	
Location Map:		Surveyed Length:		200		
		- V			210	\



Habitat	Reen		
Bank Profile	Steep >45deg		
Depth of Water	0.5 - 1m		
Channel Width	1 - 2m		
Flow Speed	Sluggish		
Shore Banks			

Neighboring Land Use	
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

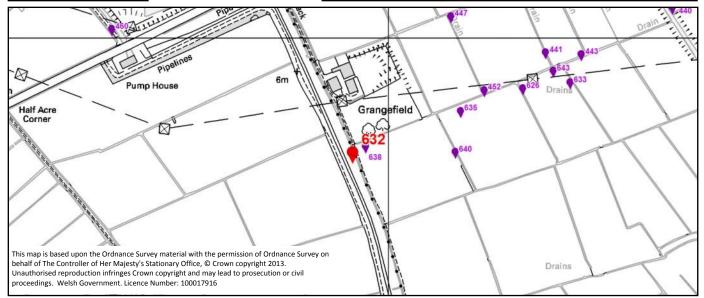
Vegetation Description	Comments:
Grass nettle	Evidence of bank voles







Unique Reference	632	Date: 29-08-2014 14:01		GPS:	51.55855, -2.88233
Waterbody Number:	1060	Surveyor:		Rp sc	
Location Map:		Surveyed Length:			100



Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	0.5 - 1m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
	Heavily grazed banks. Bank vole evidence

Photo 1



						Welsh Government	
Unique Reference	633	Date:	29-	08-2014 13:30	GPS:	51.559829, -2.876147	7
Waterbody Number:	1039	Survey	or:		R	p sc	
Location Map:		Survey	ed L	ength:		150	
551 5677 436 6m	D1434	439	\oddsymbol{g}	432		E Drain	

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Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	<0.5m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

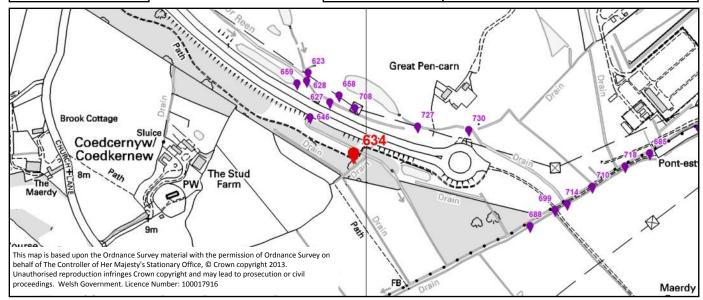
Neighboring Land Use	Livestock grazing;
Bank Management	Fenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
Overgrown with brambles	Largley inaccessible





Unique Reference	634	Date:	Date: 02-09-2014 14:21		GPS:	51.546433, -3.040067
Waterbody Number:	823	Surveyor:		Rp sc		
Location Map:		Surve	Surveyed Length:			100



Habitat	Ditch		
Bank Profile	Steep >45deg		
Depth of Water	1 - 2m		
Channel Width	1 - 2m		
Flow Speed	Sluggish		
Shore Banks	Earth		

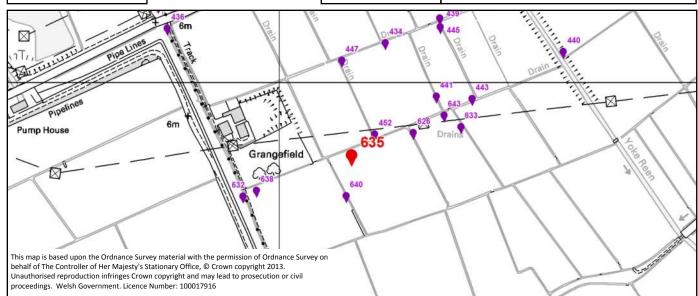
Neighboring Land Use	Broadleaf woodland; Scrub;			
Bank Management	Unfenced			
Suitability for Otters	Low			
Otter Signs				
Suitability for Watervoles	Medium			
Watervole Signs				

Vegetation Description	Comments:
Brambles Broad leaf plantation surrounding ditch	Bank vole droppings





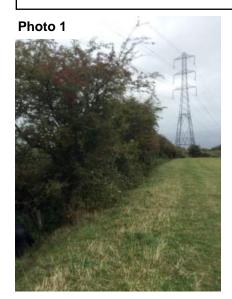
Unique Reference	635	Date:	29-0	8-2014 14:15	GPS:	51.559305, -2.879262
Waterbody Number:	1051	Survey	Surveyor:		Rp sc	
Location Map:		Survey	Surveyed Length:		100	
X	436	-	1	439	://	



Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	0.5 - 1m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

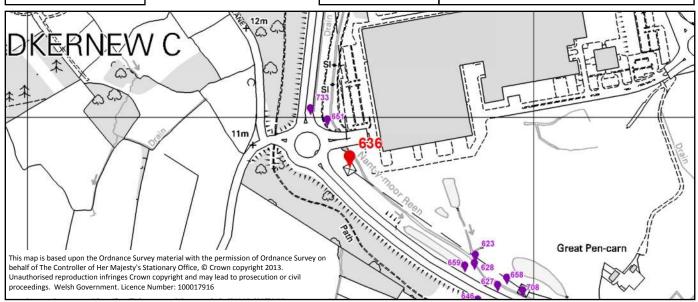
Vegetation Description	Comments:
Over grown with brambles	







Unique Reference	636	Date:	Date: 02-09-2014 10:48		GPS:	51.549552, -3.045029
Waterbody Number:	1389	Survey	Surveyor:		rp sc	
Location Map:		Surve	ed L	enath:	300	



Habitat	Stream			
Bank Profile	Steep >45deg			
Depth of Water	0.5 - 1m			
Channel Width	1 - 2m			
Flow Speed	Slow			
Shore Banks	Earth			

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

Grass bank west side Brambles and trees on east side bank Reeds down stream section

Comments:

Bank vole feeding signs and droppings





Photo 3

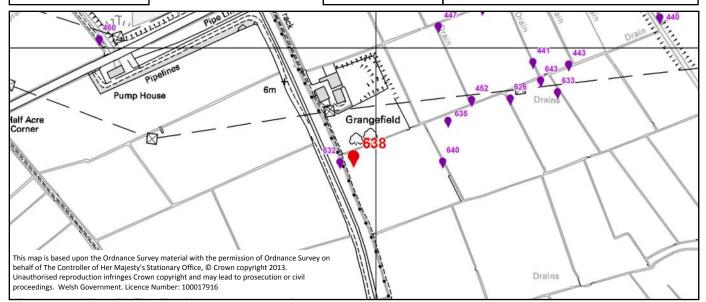


						Liywodraeth Cymru Welsh Government	
Unique Reference	637	Date:	28-08-20	14 12:08	GPS:	,	
Waterbody Number:	Number:		Surveyor:			Rp nd	
Location Map:		Survey	eyed Length:			50	
behalf of The Controller of Her Majesty's S	n copyright and may lead to prosecution or civil	SI 551		659 659 659 659 659 659 659 659 659 659	3 28 658 70	Great Pen-carn	
Habitat	Reen		Neighbor	ing Land	Use	Scrub;	
Bank Profile	Steep >45deg		Bank Management			Mixture	
Depth of Water	<0.5m		Suitability	for Otter	s	Low	
Channel Width	<1m		Otter Sig	าร			
Flow Speed	Sluggish		Suitability	for Wate	rvoles	Medium	
Shore Banks			Watervol	Signs			
Vegetation Description			Comments:				
Sweet reed			nk vole sigr	ns			

Photo 1 Photo 2 Photo 3



Unique Reference	638	Date:	Date : 29-08-2014 14:08		GPS:	51.558658, -2.881949	
Waterbody Number:	1061	Surveyor:		R	Rp sc		
Location Map:		Surveyed Length:					



Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	0.5 - 1m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

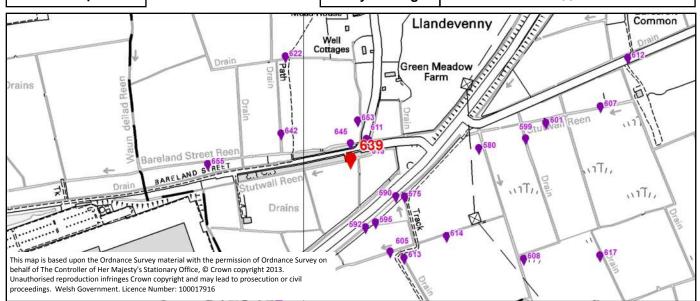
Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
	Evidence of bank voles





Unique Reference	639	Date:	Date: 29-08-2014 11:06		GPS:	51.575116, -2.851439
Waterbody Number:	641	Survey	Surveyor:		Rhodri	
Location Map:		Survey	Surveyed Length:		30	



Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	1 - 2m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

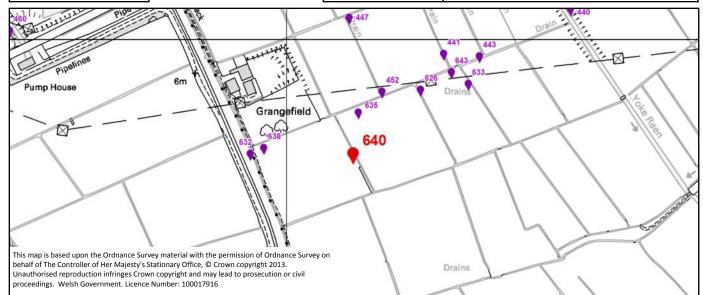
Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description	Comments:			
, and the second	Recently dredged and north bank streamed.rest reen inaccessible Benk vole evidence			





Unique Reference	640	Date: 29-08-2014 14:24		GPS:	51.558582, -2.879399
Waterbody Number:	1041	Surveyor:		Rp sc	
Location Map:		Surveyed Length:		100	



Habitat	Ditch			
Bank Profile	Steep >45deg			
Depth of Water	0.5 - 1m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

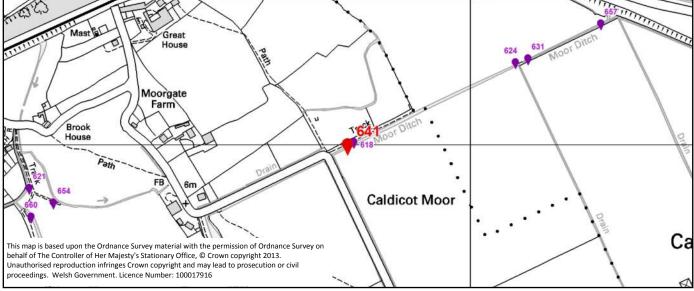
Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Comments:





Unique Reference	641	Date:	28-	08-2014 14:14	GPS:	51.579157, -2.798621
Waterbody Number:	774	Survey	Surveyor:		Rp nd	
Location Map:		Survey	Surveyed Length:		200	
TO THE		1	88			657 1177



Habitat	
Bank Profile	Steep >45deg
Depth of Water	<0.5m
Channel Width	1 - 2m
Flow Speed	Sluggish
Shore Banks	

Neighboring Land Use	
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

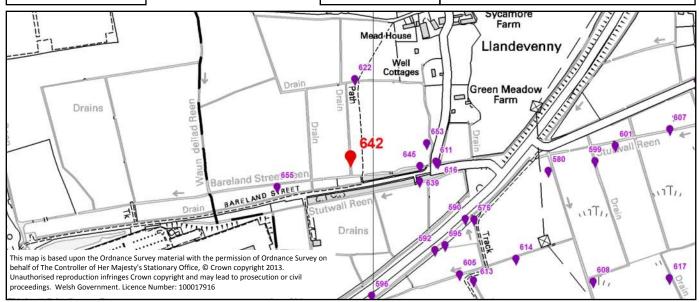
Vegetation Description	Comments:			
Grass nettles	Bank vole signs			







Unique Reference	642	Date:	29-	08-2014 11:34	GPS:	51.575538, -2.853427
Waterbody Number:	643	Surveyor:		Rhodri		
Location Map:		Surveyed Length:		100		



Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	0.5 - 1m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks				

Neighboring Land Use	
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

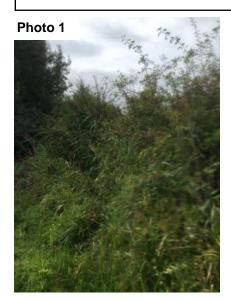
Comments:

Vegetation Description

Over grown with brambles, dog rose and reeds

Bank vole evidence

Overgrown

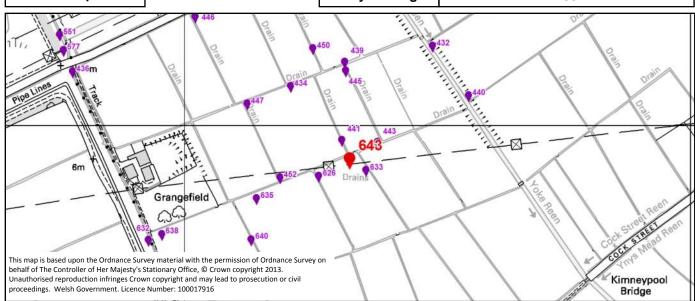








Unique Reference	643	Date: 29-08-2014 13:36		GPS:	51.560031, -2.876632
Waterbody Number:		Surveyor:		Rp sc	
Location Map:		Surveyed Length:		100	



Habitat	Ditch		
Bank Profile	Shallow <45deg		
Depth of Water	0.5 - 1m		
Channel Width	1 - 2m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

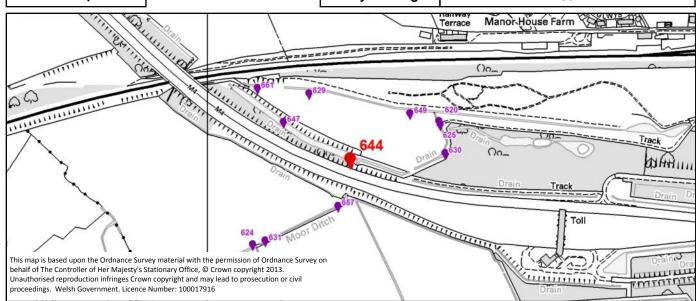
Vegetation Description	Comments:
Over grown with reeds	Over grown Bank vole evidence







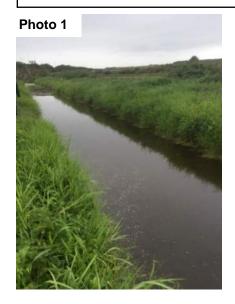
Unique Reference	644	Date: 28-08-2014 11:12		GPS:	51.582176, -2.79109	
Waterbody Number:	704	Surveyor:		RP ND		
Location Map:		Surveyed Length:				50



Habitat	Reen			
Bank Profile	Steep >45deg			
Depth of Water	0.5 - 1m			
Channel Width	1 - 2m			
Flow Speed	Sluggish			
Shore Banks				

Neighboring Land Use	
Bank Management	Fenced
Suitability for Otters	Medium
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Pathways;

Vegetation Description	Comments:		
Sweet reed	Evidence of bank voles		

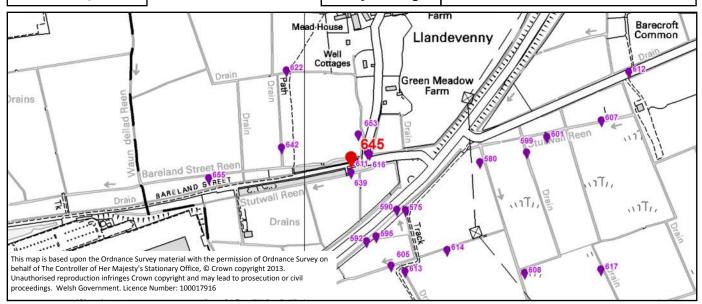








Unique Reference	645	Date:	Date: 29-08-2014 11:25		GPS:	51.57538, -2.851441
Waterbody Number:	640	Surveyor:		Rh	nodri	
Location Map:		Surveyed Length:			200	



Habitat	Reen
Bank Profile	Shallow <45deg
Depth of Water	1 - 2m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;				
Bank Management	Mixture				
Suitability for Otters	Low				
Otter Signs					
Suitability for Watervoles	Medium				
Watervole Signs					

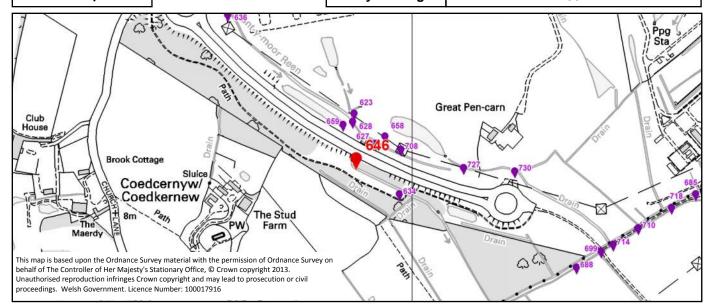
Vegetation Description	Comments:			
Nettles,grass, bull rush	Evidence of bank vole, bank cut on 1 side			







Unique Reference	646	Date:	Date: 02-09-2014 14:21		GPS:	51.54706, -3.041307
Waterbody Number:	56	Surveyor:		Rp sc		
Location Map:		Surveyed Length:		50		



Habitat	Ditch				
Bank Profile	Steep >45deg				
Depth of Water	0.5 - 1m				
Channel Width	2 - 5m				
Flow Speed	Still				
Shore Banks	Earth				

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

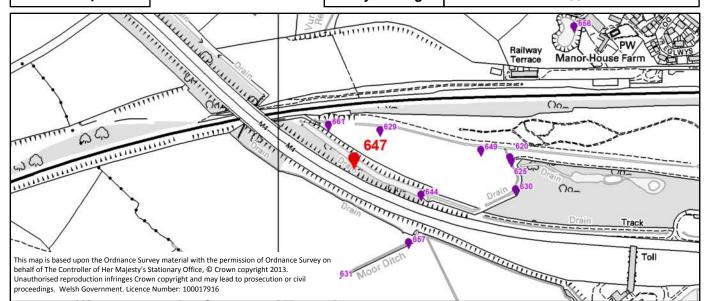
Vegetation Description	Comments:			
Willow herb and bramble	Mainly inaccessible			







Unique Reference	647	Date:	Date: 28-08-2014 11:25		GPS:	51.582808, -2.793009	
Waterbody Number:	705	Surveyor:			RP ND		
Location Map:		Survey	Surveyed Length:		: 200		



Habitat	Reen			
Bank Profile	Steep >45deg			
Depth of Water	>2m			
Channel Width	10 - 20m			
Flow Speed	Sluggish			
Shore Banks				

Neighboring Land Use	
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

ater vole concrete banks
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						Llywodraeth Cymru Welsh Government	
Unique Reference	648	Date:	28-	08-2014 15:25	GPS:	,	
Waterbody Number:	751	Survey	Surveyor: Rp nd			p nd	
Location Map:		Survey	Surveyed Length:				
Railway Terrace Manor House Farm							
This map is based upon the Ordnance Surv behalf of The Controller of Her Majesty's Si	ey material with the permission of Ordnance Surv	MARIA	THE THE PARTY OF T	644	9 - 620 625 630	Drain Track	
	n copyright and may lead to prosecution or civil	W			30		

Habitat	Reen			
Bank Profile	Steep >45deg			
Depth of Water	0.5 - 1m			
Channel Width	1 - 2m			
Flow Speed	Sluggish			
Shore Banks	Earth cliffs			

Neighboring Land Use	Livestock grazing;
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description	Comments:
Grass brambles nettles	Bank vole evidence

Photo 1 Photo 2 Photo 3



						Welsh Government	
Unique Reference	649	Date:	28-	08-2014 11:53	GPS:	51.582982, -	2.7894
Waterbody Number:	698	Surveyor:		RF	RP ND		
Location Map:		Surveyed Length:		200			
THE THE PARTY OF T	10101 hilling 11/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1		Rail	ace Manor House	PW Farm		Te
This map is based upon the Ordnance Sunbehalf of The Controller of Her Majesty's S	rey material with the permission of Ordnance Survey stationary Office, © Crown copyright 2013.	77	ain	30 On	Track	(/	
behalf of The Controller of Her Majesty's S	stationary Office, © Crown copyright 2013. In copyright and may lead to prosecution or civil		THILL			11	753

Habitat	Reen
Bank Profile	Steep >45deg
Depth of Water	<0.5m
Channel Width	<1m
Flow Speed	Sluggish
Shore Banks	

Neighboring Land Use	Livestock grazing;
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:				

Photo 1



					Welsh Government	
Unique Reference	650	Date:	02-09-2014 15:02	GPS:	51.542207, -3.045291	
Waterbody Number:		Surveyo	Surveyor: Rp sc			
Location Map:		Surveye	ed Length:		50	
behalf of The Controller of Her Majesty's S	vey material with the permission of Ordnance Surve tationary Office, © Crown copyright 2013.	rains	Drains 705- 500 Percoded La	704 Page Page Page Page Page Page Page Page	Drains Drain	
Unauthorised reproduction infringes Crow proceedings. Welsh Government. Licence	n copyright and may lead to prosecution or civil Number: 100017916			a grain	Juliu	

Habitat	Ditch			
Bank Profile	Vertical/undercut			
Depth of Water	>2m			
Channel Width	1 - 2m			
Flow Speed	Sluggish			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Latrines; Pathways;

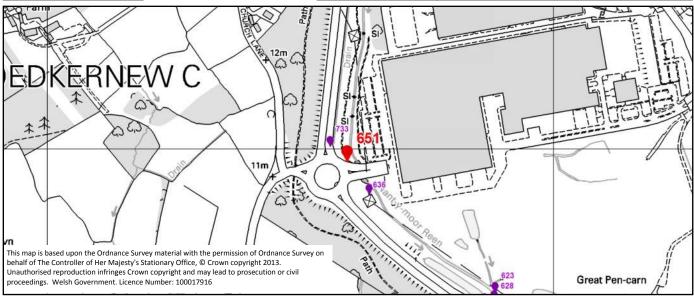
Vegetation Description	Comments:			
Nettles Reeds Grass	Bank vole feeding material			







Unique Reference	651	Date: 02-09-2014 09:49		GPS:	51.550194, -3.045664		
Waterbody Number:	60	Surveyor:			rp sc		
Location Map:		Survey	Surveyed Length:			300	



Habitat	Stream				
Bank Profile	Shallow <45deg				
Depth of Water	<0.5m				
Channel Width	1 - 2m				
Flow Speed	Slow				
Shore Banks	Earth				

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Medium
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Latrines; Feeding Stations;

Vegetation Description

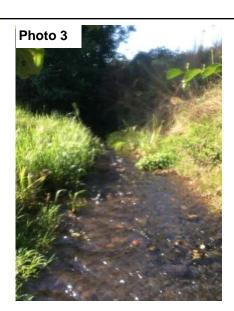
Grass banks some trees on banks More vegetation and grass in water as walk up stream

Comments:

Droppings WV and feeding station Bank vole feeding signs and droppings







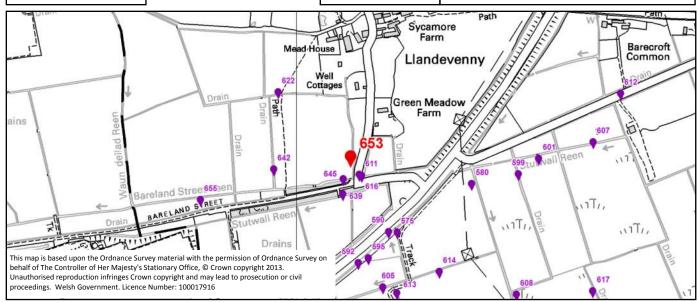


Unique Reference	652	Date:	28-0	08-2014 09:37 GPS:	,	
Waterbody Number:		Survey	Surveyor: Joe			
Location Map:		Survey	Surveyed Length:			
behalf of The Controller of Her Majesty's S	n copyright and may lead to prosecution or civil	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	636 10 17 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	77700 Poes September 1977 1977 1977 1977 1977 1977 1977 197	Great Pen-carn	
Habitat			Neig	hboring Land Use		
Bank Profile			Banl	k Management		
Depth of Water			Suita	ability for Otters		
Channel Width			Otte	r Signs		
Flow Speed			Suita	ability for Watervoles		
Shore Banks			Wate	ervole Signs		
Vegetat	ion Description			Comme	nts:	

Photo 1 Photo 2 Photo 3



Unique Reference	653	Date:	ate: 29-08-2014 11:22		GPS:	51.575785, -2.851245	
Waterbody Number:	632	Survey	Surveyor:		Rhodri		
Location Map:		Surve	Surveyed Length:		50		



Habitat	Ditch				
Bank Profile	Steep >45deg				
Depth of Water	0.5 - 1m				
Channel Width	1 - 2m				
Flow Speed	Still				
Shore Banks	Earth				

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Comments:

Vegetation Description	
------------------------	--

Nettles and grass

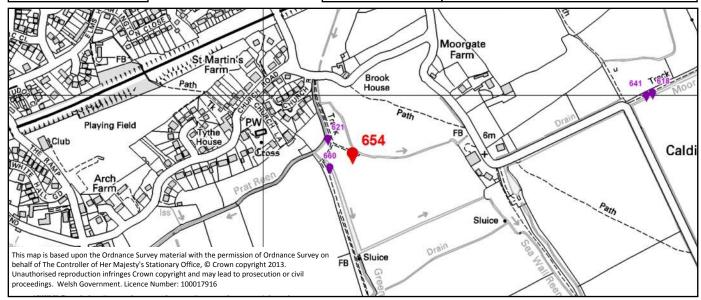
Hedge on east side cut for half section of reen







Unique Reference	654	Date:	Date: 29-08-2014 10:11		GPS:	51.578069, -2.806982	
Waterbody Number:	718	Survey	Surveyor:		Rhodri		
Location Map:		Survey	Surveyed Length:		50		



Habitat	Reen
Bank Profile	Shallow <45deg
Depth of Water	0.5 - 1m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation	Description
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Comments:

Grass and nettles.

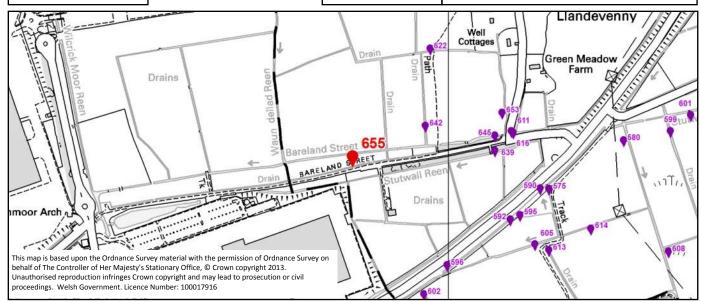
Evidence of bank voles







Unique Reference	655	Date:	e: 29-08-2014 10:46		10:46 GPS : 51.574986, -2.855503		
Waterbody Number:	928	Surve	Surveyor:		Rhodri		
Location Man		Survey	Surveyed Length:		. 100		



Habitat	Reen		
Bank Profile	Steep >45deg		
Depth of Water	1 - 2m		
Channel Width	2 - 5m		
Flow Speed	Still		
Shore Banks	Earth		

Noighboring Land Hoo	Livesteek grazing
Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

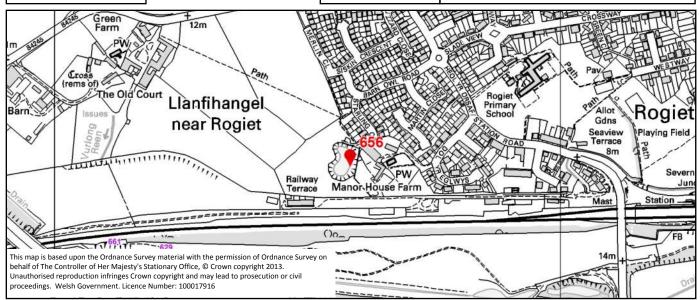
Vegetation Description	Comments:
Cut grass	Recently dredged and cut grass banks

hoto 1 Photo 2 Photo 3





Unique Reference	656	Date: 28-08-2014 12:32		GPS:	51.585181, -2.786781
Waterbody Number:	697	Surveyor:		Rp nd	
Location Map:		Surveyed Length:			50



Habitat	River		
Bank Profile	Shallow <45deg		
Depth of Water	<0.5m		
Channel Width	>20m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Urban;
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

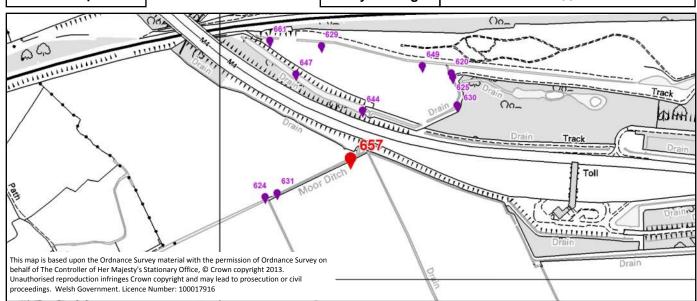
Vegetation Description	Comments:		
Sweet reed	Bank vole signs		







Unique Reference	657	Date:	Date: 28-08-2014 15:22		GPS:	51.581337, -2.79143
Waterbody Number:	712	Surveyor:		Rp nd		
Location Map:		Survey	Surveyed Length:			30



Habitat	Reen			
Bank Profile	Steep >45deg			
Depth of Water	0.5 - 1m			
Channel Width	1 - 2m			
Flow Speed	Sluggish			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

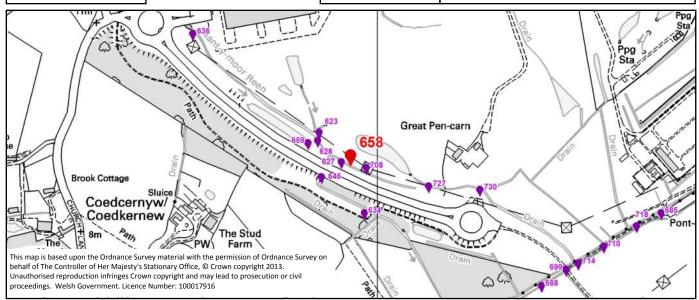
Vegetation Description	Comments:
Grass nettle	Bank vole signsz







Unique Reference	658	Date: 02-09-2014 14:01		GPS:	51.547449, -3.040495
Waterbody Number:	1390	Surveyor:		R	p sc
Location Map:		Surveyed Length:		50	



Habitat	Pond
Bank Profile	Flat <10 degrees
Depth of Water	0.5 - 1m
Channel Width	10 - 20m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Scrub;	
Bank Management	Unfenced	
Suitability for Otters	Low	
Otter Signs		
Suitability for Watervoles	Medium	
Watervole Signs	Latrines; Pathways; Feeding Stations;	

Comments:

Vegetation De	scription
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Benk vole droppings

Reeds Trees on banks Bull rush Willow

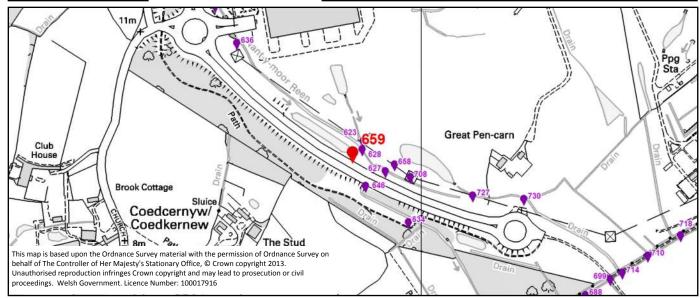








Unique Reference	659	Date:	Date: 02-09-2014 12:13		GPS:	51.547651, -3.041696
Waterbody Number:	820	Survey	Surveyor:		rp sc	
Location Map:		Surveyed Length:		enath:		100



Habitat	Pond				
Bank Profile	Shallow <45deg				
Depth of Water	<0.5m				
Channel Width	10 - 20m				
Flow Speed	Still				
Shore Banks	Earth				

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

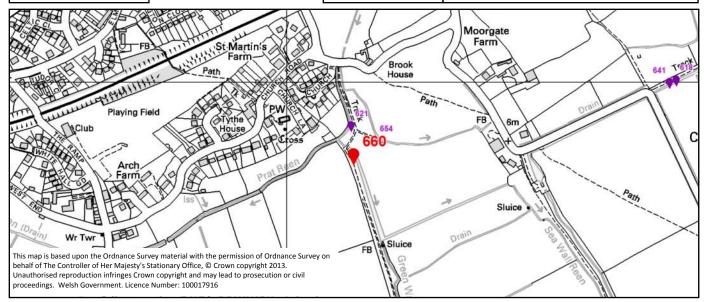
Vegetation Description	Comments:
Pond overgrown with reeds in water	Bank vole droppings







Unique Reference	660	Date:	Date: 29-08-2014 09:43		GPS:	51.577815, -2.80762
Waterbody Number:	722	Survey	Surveyor:		Rhodri	
Location Map:		Surveyed Length:		ength:		100



Habitat	Reen				
Bank Profile	Shallow <45deg				
Depth of Water	0.5 - 1m				
Channel Width	2 - 5m				
Flow Speed	Sluggish				
Shore Banks	Earth				

Neighboring Land Use	Livestock grazing;			
Bank Management	Mixture			
Suitability for Otters	Medium			
Otter Signs				
Suitability for Watervoles	Medium			
Watervole Signs	Latrines; Burrows;			

-

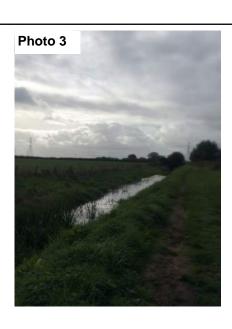
Grass and nettles

Comments:

Water vole Droppings and bank vole evidence









						Welsh Government	
Unique Reference	661	Date:	28-	28-08-2014 11:41 GPS: 51.5833		51.583398, -2.793761	
Waterbody Number:	988	Survey	Surveyor:		RP ND		
Location Map:		Survey	Surveyed Length:		50		
	Hed Barn	Issues Buoyan	1111111	near Rog	R	ailway errace Manor House Farm	
mmmmm QQ		THE	647	- 629	6496	()o	
behalf of The Controller of Her Majesty's Sta Unauthorised reproduction infringes Crown proceedings. Welsh Government. Licence N	copyright and may lead to prosecution or civil umber: 100017916			B57 IIIIIIII	The second	Drain Track	
Habitat	Reen		Neig	hboring Land I	Jse		

Habitat	Reen				
Bank Profile	Steep >45deg				
Depth of Water	<0.5m				
Channel Width	<1m				
Flow Speed	Sluggish				
Shore Banks					

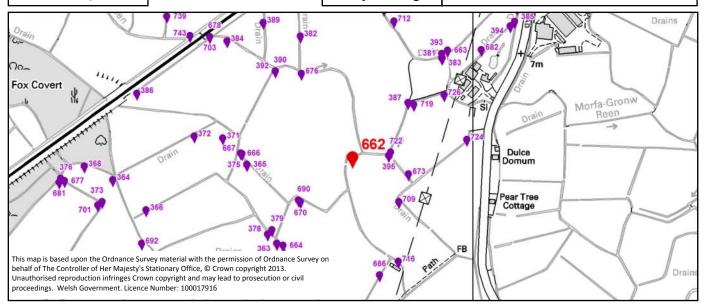
Neighboring Land Use	
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:			
Over grown bramble bullrush	Largely inaccessible			

Photo 1 Photo 2 Photo 3



Unique Reference	662	Date:	Date: 10-09-2014 15:41		GPS:	51.546303, -3.014294	
Waterbody Number:	262	Surveyor:			Rp/am		
Location Map:		Surveyed Length:		100			



Habitat	Ditch
Bank Profile	Shallow <45deg
Depth of Water	1 - 2m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Reed sweet grass, willow, thistle, nettle, willow herb.

Comments:

Bank vole feeding and droppings found

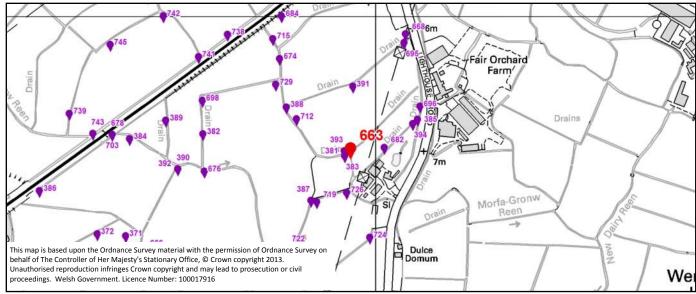








Unique Reference	663	Date:	Date: 11-09-2014 09:43		GPS:	51.54821, -3.011622	
Waterbody Number:	232	Surveyor:			Rp/se		
Location Map:		Surve	Surveyed Length:			100	



Habitat					
Bank Profile	Shallow <45deg				
Depth of Water	<0.5m				
Channel Width	2 - 5m				
Flow Speed	Still				
Shore Banks	Earth				

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Reed sweetgrass other reeds bramble willow

Comments:

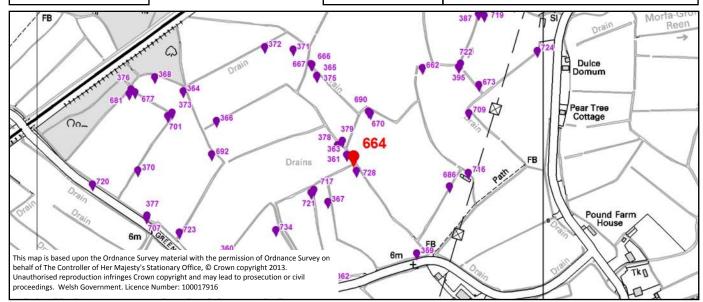
Hevily poached and dries up in sections







Unique Reference	664	Date:	Date: 10-09-2014 14:46		GPS:	51.54473, -3.016232
Waterbody Number:	273	Surveyor:		Rp/am		
Location Map:		Survey	Surveyed Length:			50



Habitat	Ditch				
Bank Profile	Shallow <45deg				
Depth of Water	<0.5m				
Channel Width	1 - 2m				
Flow Speed	Still				
Shore Banks	Earth				

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

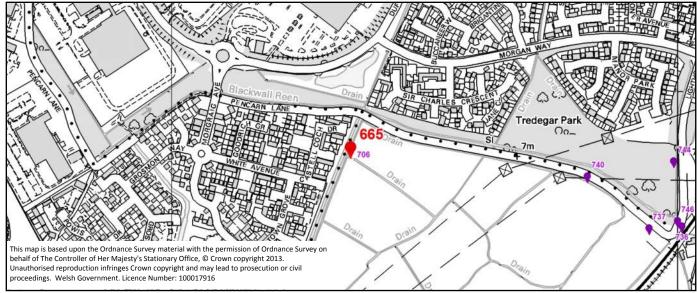
Vegetation Description	Comments:				
Hawthorn, blackthorn, reef sweet grass	Very little water				







Unique Reference	665	Date: 11-09-2014 14:09		GPS:	51.554084, -3.020358
Waterbody Number:	93	Surveyor:		Rp/se	
Location Map:		Surveyed Length:		50	



Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	1 - 2m			
Channel Width	1 - 2m			
Flow Speed	Sluggish			
Shore Banks	Earth			

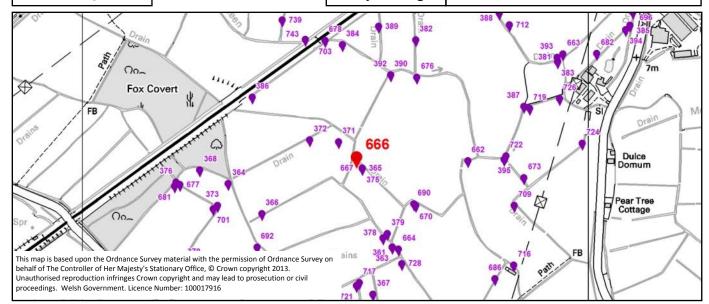
Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
Sycamore hawthorn dogrose oak	





Location Map:		Surveyed Length:					
Waterbody Number:	266	Surveyor:		Rp/am			
Unique Reference	666	Date: 10-09-2014 14:58		GPS:	51.546344, -3.017473		



Habitat	
Bank Profile	Shallow <45deg
Depth of Water	0.5 - 1m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Earth

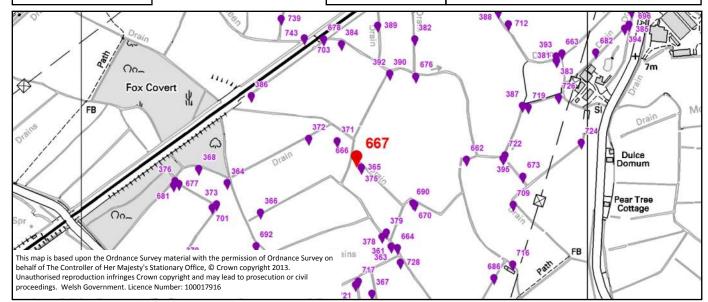
Neighboring Land Use	Livestock grazing;
Bank Management	
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
Reed sweet grass, hawthorn	





Unique Reference	667	Date: 10-09-2014 15:02		GPS:	51.54634, -3.017442		
Waterbody Number:	267	Surveyor:		Rp/am			
Location Map:		Surveyed Length:					



Habitat	Ditch		
Bank Profile			
Depth of Water	1 - 2m		
Channel Width	2 - 5m		
Flow Speed	Still		
Shore Banks	Earth		

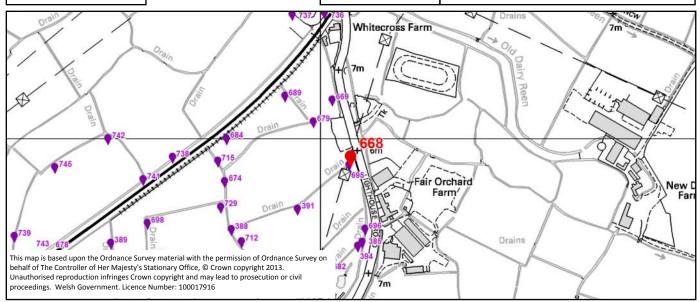
Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
Reed sweet grass, bramble, hawthorn, oak	





Unique Reference	668	Date: 11-09-2014 10:06		GPS:	51.550235, -3.010095
Waterbody Number:	1000	Surveyor:		Rp/se	
Location Map:		Surveyed Length:			20



Habitat	Ditch				
Bank Profile	Shallow <45deg				
Depth of Water	<0.5m				
Channel Width	2 - 5m				
Flow Speed					
Shore Banks	Earth				

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

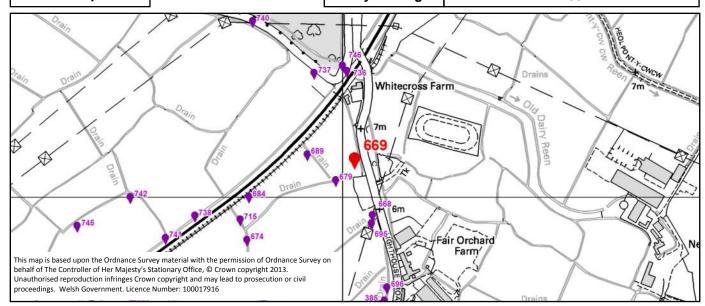
Vegetation Description	Comments:
Hawthorn and willow	







Unique Reference	669	Date:	11-	09-2014 10:10	GPS:	51.551231, -3.010636
Waterbody Number:	228	Surveyor:			R	o/se
Location Map:		Surveyed Length:		enath:		100



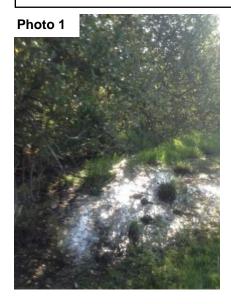
Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	<0.5m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

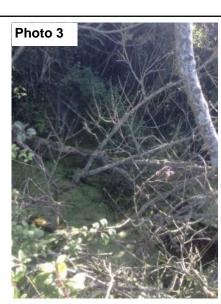
Vegetation Description

Comments:

Willow hawthorn hazel reeds sweetgrass bramble

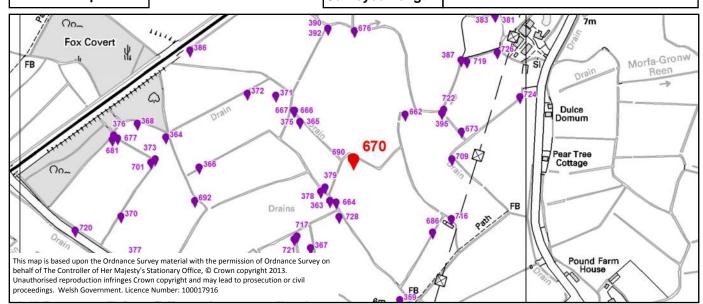








Waterbody Number:	272	Survey	or:		Rr	o/am
Location Map:		Survey	Surveyed Length:			



Habitat	
Bank Profile	Shallow <45deg
Depth of Water	<0.5m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Earth

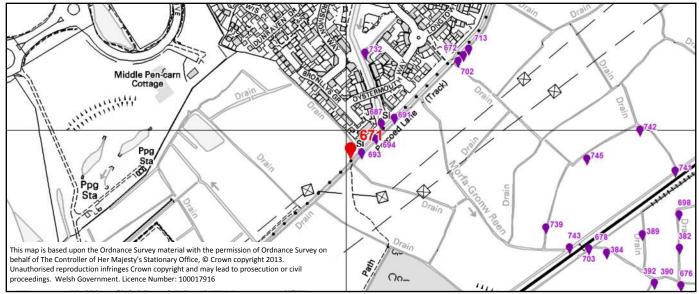
Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
Bramble, willow, hawthorn	Limited accessibility due to dense vegetation





Unique Reference	671	Date:	11-0	09-2014 13:32	GPS:	51.550097, -3.025248
Waterbody Number:	87	Survey	Surveyor:		Rp/se	
Location Map:		Surveyed Length:		ength:		50



Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	0.5 - 1m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

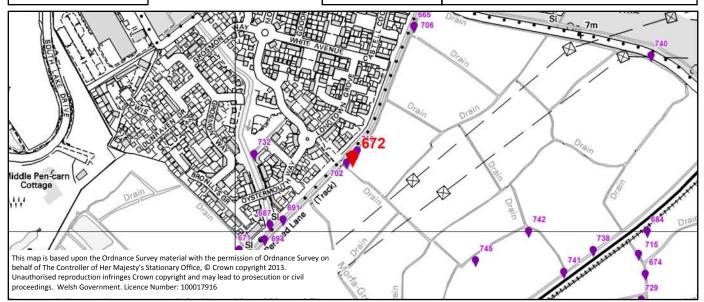
Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
Hawthorn oak overgrown blackthorn limited access bramble	





Unique Reference	672	Date:	11-	09-2014 13:53	GPS:	51.551773, -3.022061
Waterbody Number:		Survey	or:		R	o/se
Location Map:		Surveyed Length:		enath:		100



Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	0.5 - 1m			
Channel Width	2 - 5m			
Flow Speed	Sluggish			
Shore Banks	Earth			

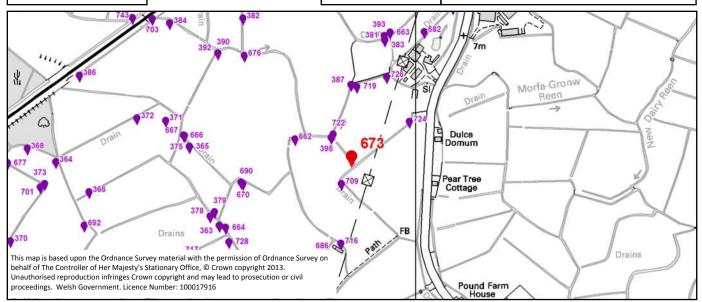
Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
Hawthorn oak dogrose bramble hazel	Sheltered completely by trees





Unique Reference	673	Date:	11-	09-2014 11:31	GPS:	51.546017, -3.012684
Waterbody Number:	264	Survey	or:		Rį	o/se
Location Map:		Surveyed Length:				



Habitat	Ditch
Bank Profile	Shallow <45deg
Depth of Water	1 - 2m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

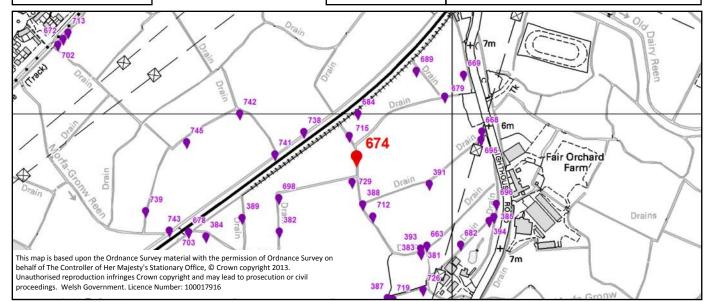
Vegetation Description	Comments:
Thistle bramble dogrose sweetgrass nettle	







Unique Reference	674	Date:	11-(09-2014 10:39	GPS:	51.549768, -3.013664
Waterbody Number:	249	Survey	or:		R	o/se
Location Map:		Surve	ed L	enath:		100



Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	0.5 - 1m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Poached			

Neighboring Land Use	Livestock grazing;
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Willow bramble hawthorn nettle dogrose elder blackthorn reed sweetgrass

Comments:

Access very limited due to fence and thick scrub

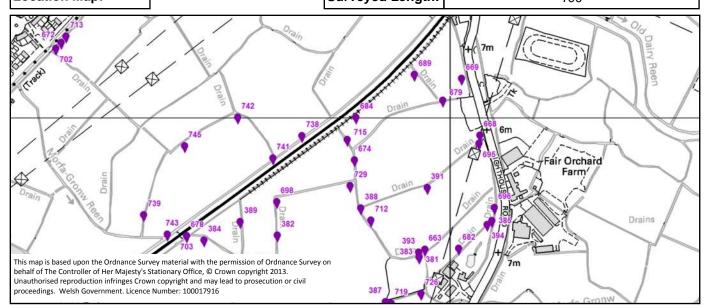




Photo 3



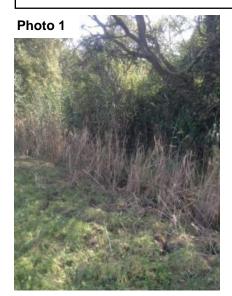
Unique Reference	675	Date:	Date: 10-09-2014 13:57		GPS:	,	
Waterbody Number:	1366	Surveyor:		R	o/am		
Location Map:		Surveyed Length:		Surveyed Length:			100



Habitat	Ditch		
Bank Profile	Shallow <45deg		
Depth of Water	0.5 - 1m		
Channel Width	1 - 2m		
Flow Speed	Still		
Shore Banks	Poached		

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

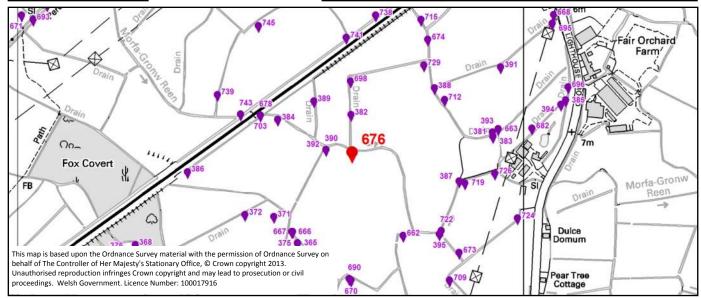
Vegetation Description Comments:







Unique Reference	676	Date: 10-09-2014 15:32		GPS:	51.547764, -3.015774	
Waterbody Number:	258	Surveyor:			Rp/am	
Location Map:		Surveyed Length:		surveyed Length: 250		250



Habitat	Reen
Bank Profile	Shallow <45deg
Depth of Water	>2m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

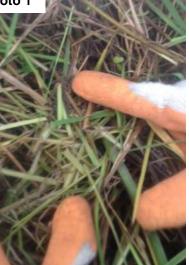
Comments:

Vegetation Description

Reed sweet grass, duckweed, reed, lily

Bank vole latrine



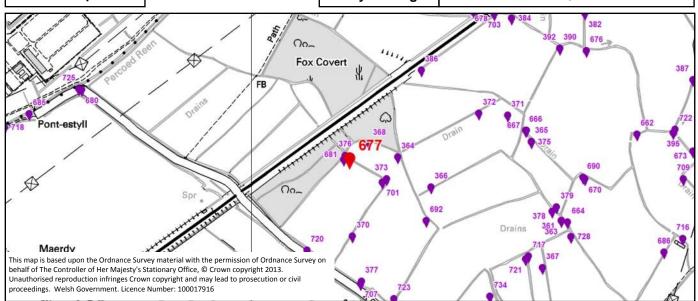








Unique Reference	677	Date: 10-09-2014 12:49		GPS:	51.545811, -3.02248
Waterbody Number:	290	Surveyor:		Rp/am	
Location Map:		Surveyed Length:			20



Habitat	
Bank Profile	Shallow <45deg
Depth of Water	<0.5m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description Comments:

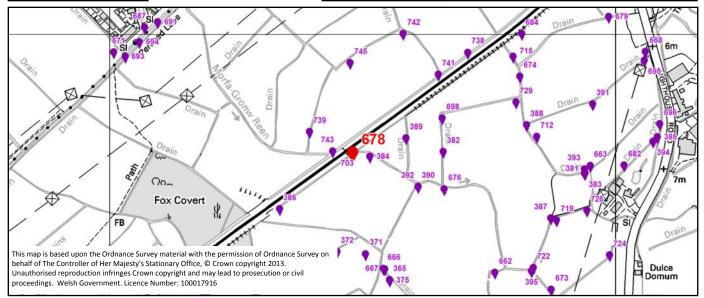
Oak, willow, reed, reed sweet grass, hawthorn,







Unique Reference	678	Date: 10-09-2014 15:17		GPS:	51.548393, -3.018409	
Waterbody Number:	252	Surveyor:		Rp/am		
Location Map:		Surveyed Length:		Surveved Length: 200		200



Habitat	Ditch		
Bank Profile	Steep >45deg		
Depth of Water	0.5 - 1m		
Channel Width	1 - 2m		
Flow Speed	Still		
Shore Banks	Earth		

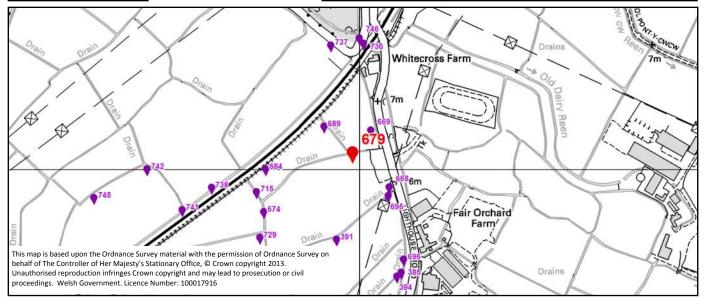
Neighboring Land Use	Livestock grazing;
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
Brambles, hawthorn, reeds, reed sweet grass	Railway ditch





Unique Reference	679	Date:	11-0	9-2014 10:21	GPS:	51.550845, -3.011163
Waterbody Number:	230	Survey	or:		R	o/se
Location Map:		Survey	Surveyed Length:			200



Habitat	Ditch		
Bank Profile	Shallow <45deg		
Depth of Water	0.5 - 1m		
Channel Width	2 - 5m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
blackthorn oak bramble ash hawthorn	Hedge civering ditch fei D vole latrine



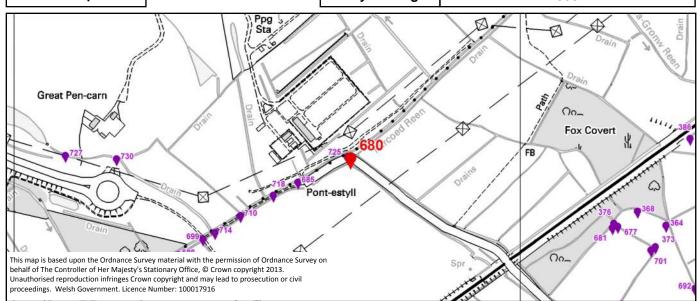




 Unique Reference
 680
 Date:
 10-09-2014 10:42
 GPS:
 51.546949, -3.030133

 Waterbody Number:
 812
 Surveyor:
 Rp/am

 Location Map:
 Surveyed Length:
 500



Habitat	Reen
Bank Profile	Steep >45deg
Depth of Water	>2m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

Comments:

Reed sweet grass, bramble, nettle, duckweed,

Bank vole feeding remains. Areas of bank disturbed due to track widening.







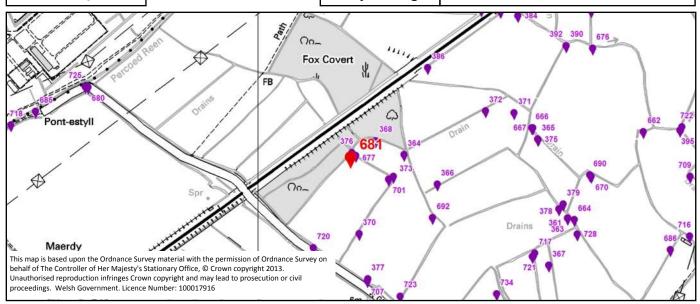
Photo 3



 Unique Reference
 681
 Date:
 10-09-2014 12:06
 GPS:
 51.545782, -3.022635

 Waterbody Number:
 294
 Surveyor:
 Rp/am

 Location Map:
 Surveyed Length:
 100



Habitat	Ditch		
Bank Profile	Shallow <45deg		
Depth of Water	0.5 - 1m		
Channel Width	1 - 2m		
Flow Speed	Still		
Shore Banks	Earth		

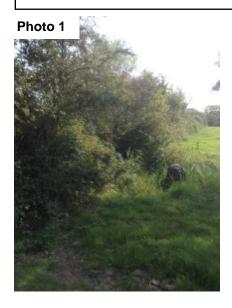
Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetetien	Description
vegetation	Description

Hawthorn, oak, willow, bramble

Comments:

Largely inaccessible due to vegetation. Bank vile feeding station and latrine



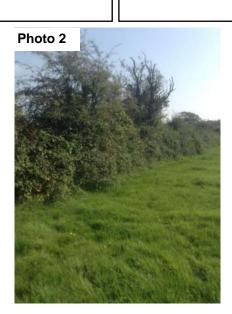
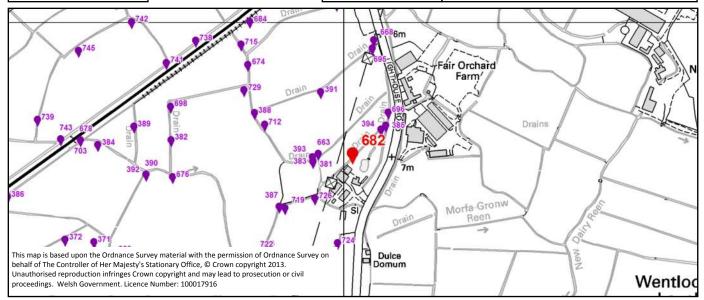


Photo 3



Unique Reference	682	Date:	Date: 11-09-2014 09:38		GPS:	51.548231, -3.010657	
Waterbody Number:	233	Surveyor:			Rp/se		
Location Map:		Surve	Surveyed Length:		200		



Habitat	Ditch
Bank Profile	Shallow <45deg
Depth of Water	1 - 2m
Channel Width	2 - 5m
Flow Speed	
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Bramble reed sweetgrass hawthorn willow nettles ash

Comments:

Access limited and heavily poached where possible



blackthorn



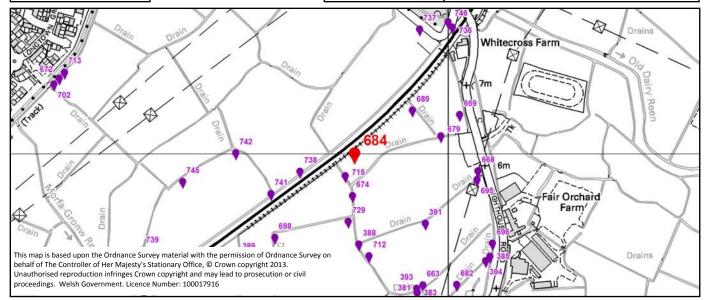


Unique Reference	683	Date	: 11	-09-2014 09:48	GPS:	,	
Waterbody Number:		Surv	eyor:		R	tp/se	
Location Map:		Surv	eyed L	ength:			
behalf of The Controller of Her Majesty's Sta	material with the permission of Ordnance Survey tionary Office, © Crown copyright 2013.	391 663 381 726	682 39	Fair Orchard Farm	Dra	ins Look Wall Wall Wall Wall Wall Wall Wall Wal	Wentloo
Habitat				ghboring Land I	Use		
Bank Profile			-	k Management			
Depth of Water			Suit	tability for Otter	S		
Channel Width			Otte	er Signs			
Flow Speed			Suit	tability for Wate	rvoles		
Shore Banks			Wat	ervole Signs			
Vegetatio	on Description			C	ommer	nts:	

Photo 1 Photo 2 Photo 3



Unique Reference	684	Date: 11-09-2014 10:29		GPS:	51.550525, -3.013627		
Waterbody Number:	253	Surveyor:		Rp/se			
Location Map:		Surveyed Length:					



Habitat	Ditch	Neighboring Lar
Bank Profile		Bank Manageme
Depth of Water		Suitability for Ot
Channel Width		Otter Signs
Flow Speed		Suitability for W
Shore Banks		Watervole Signs

Neighboring Land Use	
Bank Management	Fenced
Suitability for Otters	
Otter Signs	
Suitability for Watervoles	
Watervole Signs	

Vegetation Description	Comments:
Dry ditch	No access due fencing and thick shrub

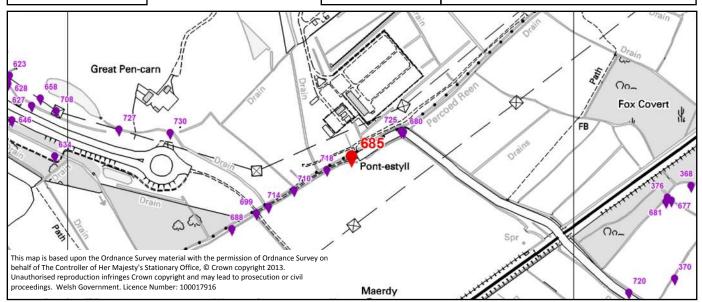




 Unique Reference
 685
 Date:
 10-09-2014 09:38
 GPS:
 51.546509, -3.031619

 Waterbody Number:
 Surveyor:
 Rp/am

 Location Map:
 Surveyed Length:
 100



Habitat	Reen			
Bank Profile	Steep >45deg			
Depth of Water	>2m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

Reed sweet grass, bramble, nettle, bindweed, arrowhead lily

Comments:

North of track. Very overgrown. Bank vole droppings and feeding stations.









		Llywodraeth Cymru Welsh Government						
Unique Reference	686	Date:	11-09-	2014 11:46	GPS:	51.54422	26, -3.013474	1
Waterbody Number:	1370	Surveyor:			Rp/se			
Location Map:		Surveyed Length:		jth:	200			
This map is based upon the Ordnance Surv behalf of The Controller of Her Majesty's S	378 664 Drains 361 363 728 731 367 731 367 731 367 731 367 731 367 731 367 731 367 731 367 731 367 731 367 731 367 731 367 731 367 731 367 731 367 731 367	359	09 09 09 09 09 09 09 09 09 09 09 09 09 0	Pear Cot	Pound Farm	kn de la	Drains New House	N X III

Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	0.5 - 1m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Poached			

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

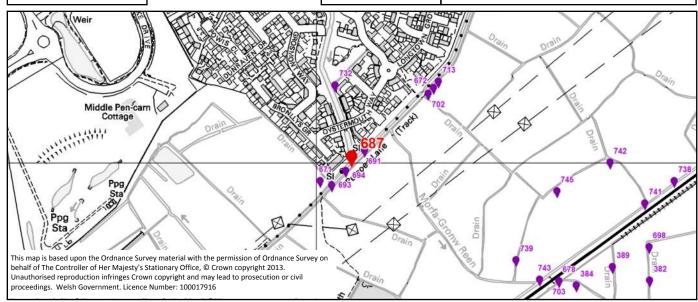
Vegetation Description	Comments:
Oak hawthorn bramble reed sweetgrass willow	Limited access



Photo 3 Photo 2



Unique Reference	687	Date:	Date: 11-09-2014 13:17		GPS:	51.550541, -3.024376
Waterbody Number:	88	Surveyor:		Rp/se		
Location Map:		Survey	Surveyed Length:			50



Habitat	Reen			
Bank Profile	Steep >45deg			
Depth of Water	>2m			
Channel Width	5 - 10m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Park/garden;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
Reed sweetgrass nettle willow	Bank vole runs and droppings

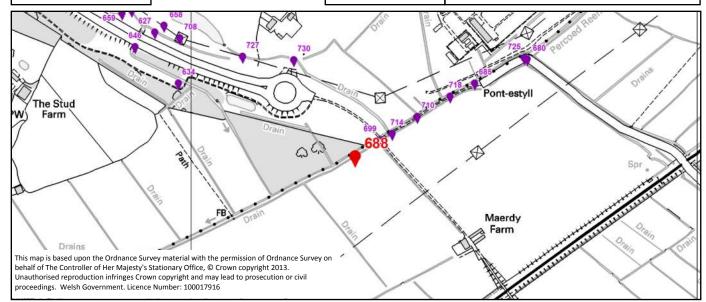




Photo 3



Unique Reference	688	Date: 08-09-2014 15:24		GPS:	51.54519, -3.034995		
Waterbody Number:		Surveyor:		RP AM			
Location Map:		Surveyed Length:					



Habitat	Reen			
Bank Profile	Steep >45deg			
Depth of Water	0.5 - 1m			
Channel Width	1 - 2m			
Flow Speed	Sluggish			
Shore Banks	Earth			

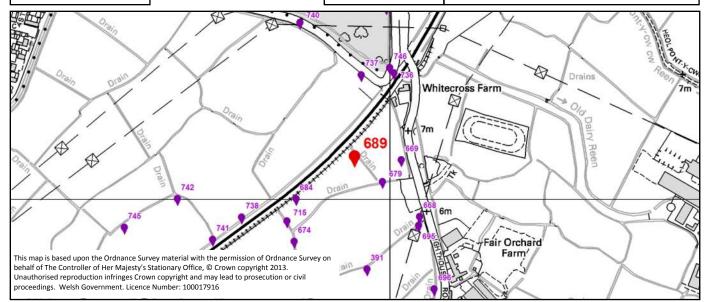
Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
Oak, hawthorn, reed sweet grass, bind weed, nettle, bramble	Reen to south of percoed lane. Largely inaccessible due to dense vegetation. Bank vole droppings.





Location Map:		Surveyed Length:					
Waterbody Number:	229	Surveyor:		R	o/se		
Unique Reference	689	Date: 11-09-2014 10:15		GPS:	51.551292, -3.011982		



Habitat	Ditch			
Bank Profile	Flat <10 degrees			
Depth of Water	<0.5m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:			
Junvus sp.	Drain			

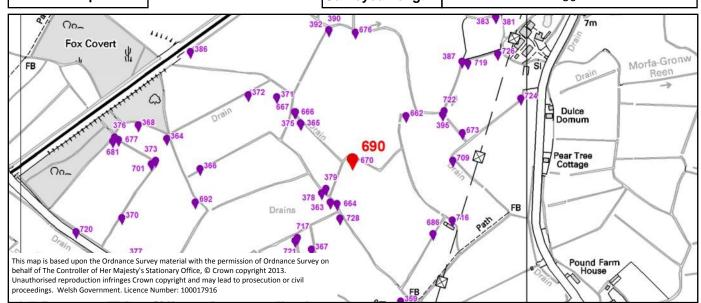
Photo 1



 Unique Reference
 690
 Date:
 10-09-2014 14:50
 GPS:
 51.545526, -3.015811

 Waterbody Number:
 273
 Surveyor:
 Rp/am

 Location Map:
 Surveyed Length:
 50



Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	<0.5m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

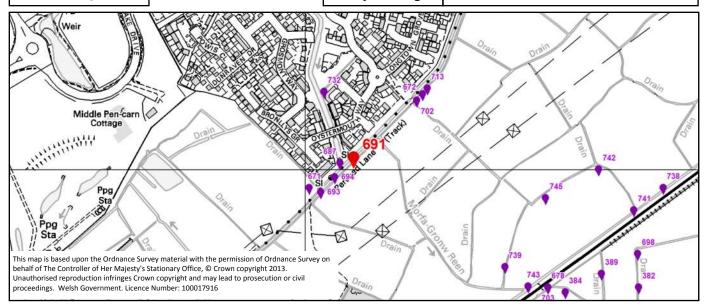
Vegetation Description	Comments:
Reed sweet grass, oak, hawthorn	Barely any water







Unique Reference	691	Date:	Date: 11-09-2014 13		GPS:	51.550645, -3.024002
Waterbody Number:	813	Survey	Surveyor:		Rp/se	
Location Map:		Surve	Surveyed Length:			200



Habitat	Reen			
Bank Profile	Steep >45deg			
Depth of Water	>2m			
Channel Width	5 - 10m			
Flow Speed	Sluggish			
Shore Banks	Earth			

Neighboring Land Use	Park/garden;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
Reed sweetgrass oak lilies	bank vole latrine

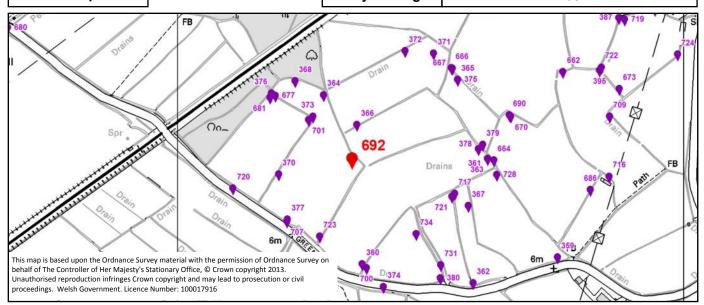




Photo 3



Unique Reference	692	Date:	Date: 10-09-2014		GPS:	51.544728, -3.020263
Waterbody Number:	285	Survey	Surveyor:		Rp/am	
Location Map:		Surve	Surveyed Length:			200



Habitat	Ditch		
Bank Profile	Shallow <45deg		
Depth of Water	1 - 2m		
Channel Width	1 - 2m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation	Description
------------	-------------

Bulrush, oak, reed sweet grass, hawthorn

Comments:





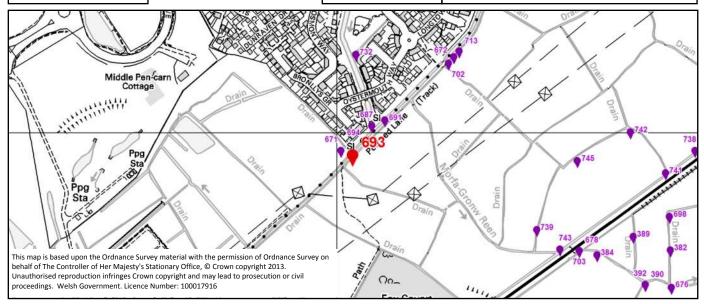


Bank vole





Location Map:		Surveyed Length:				
Waterbody Number:	813	Surveyor:		Rp/am		
Unique Reference	693	Date:	10-09-2014 11:21		GPS:	51.550021, -3.02492



Habitat	Reen
Bank Profile	Steep >45deg
Depth of Water	1 - 2m
Channel Width	1 - 2m
Flow Speed	Sluggish
Shore Banks	Earth

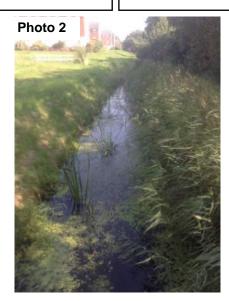
Neighboring Land Use	Urban; Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Comments:

Reed sweet grass, bramble, lily, duckweed

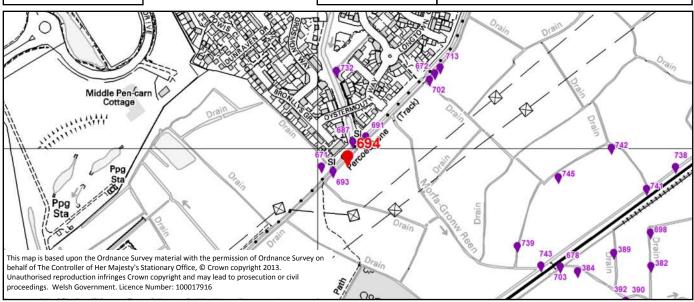








Unique Reference	694	Date:	11-(09-2014 13:36	GPS:	51.550286, -3.024523	
Waterbody Number:	91	Survey	Surveyor:		Rp/se		
Location Map:		Surve	Surveyed Length:		·	200	



Habitat	Ditch			
Bank Profile	Steep >45deg			
Depth of Water	0.5 - 1m			
Channel Width	1 - 2m			
Flow Speed	Sluggish			
Shore Banks	Earth			

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Comments:

South of track. Oak hawthorn willow blackthorn dogrose bramble

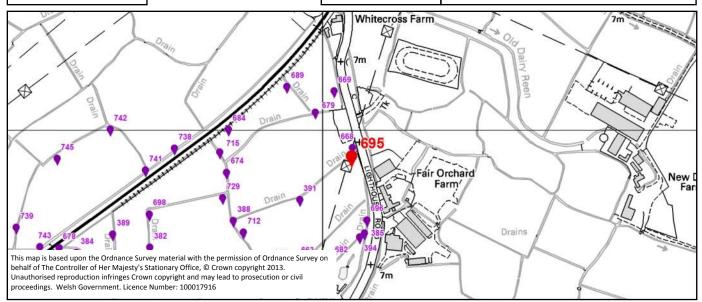








Unique Reference	695	Date:	Date: 11-09-2014 10:01		GPS:	51.550086, -3.010124
Waterbody Number:	231	Survey	Surveyor:		Rp/se	
Location Map:		Surve	Surveyed Length:			100



Habitat	Ditch
Bank Profile	Shallow <45deg
Depth of Water	<0.5m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

|--|

Bhawthirm hazel bramble reed sweetgrass hawthorn nettle

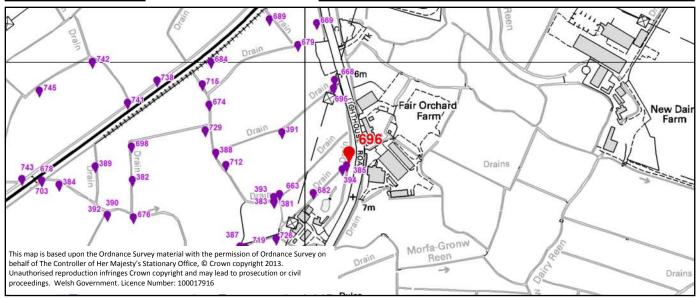








Unique Reference	696	Date:	Date: 11-09-2014 09:53		GPS:	51.548963, -3.009652
Waterbody Number:	235	Surveyor:			Rp/se	
Location Map:		Survey	Surveyed Length:			150



Habitat	Ditch
Bank Profile	Shallow <45deg
Depth of Water	<0.5m
Channel Width	1 - 2m
Flow Speed	
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Hawthorn bramble dog-rose sweetgrass reeds willow blackthorn

Comments:

Ditch covered by hedge access limited ditch dries up in places





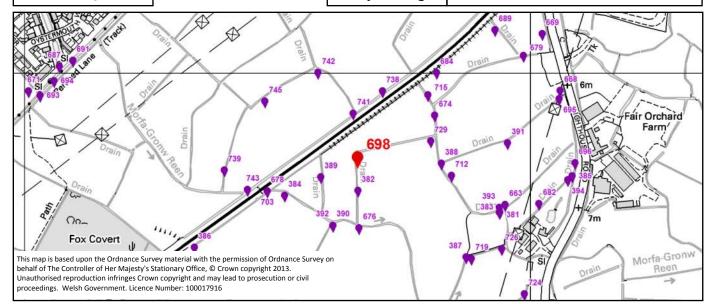


Unique Reference	697	Date:	10-09-2014 15	:25 GPS :	,	
Waterbody Number:		Surveyor: Rp/am				
Location Map:		Surveyed Length:				
behalf of The Controller of Her Majesty's S	rey material with the permission of Ordnance Survey itationary Office, © Crown copyright 2013.	Y Sugar	Fair Orchard Farm	Drains		New Dairr Farm
Habitat			Neighboring La	and Use		
Bank Profile			Bank Managen	nent		
Depth of Water			Suitability for (Otters		
Channel Width			Otter Signs			
Flow Speed			Suitability for \	Watervoles		
Shore Banks			Watervole Sigr	าร		
Vegetat	ion Description			Commer	nts:	

Photo 1 Photo 2 Photo 3



Unique Reference	698	Date:	Date: 11-09-2014 11:08		GPS:	51.549012, -3.015855
Waterbody Number:	257	Surveyor:			Rp/se	
Location Map:		Survey	Surveyed Length:			100



Habitat	Ditch
Bank Profile	Shallow <45deg
Depth of Water	<0.5m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Poached

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
Hawthorn blackthorn reed sweetgrass bramble nettles willow oak	

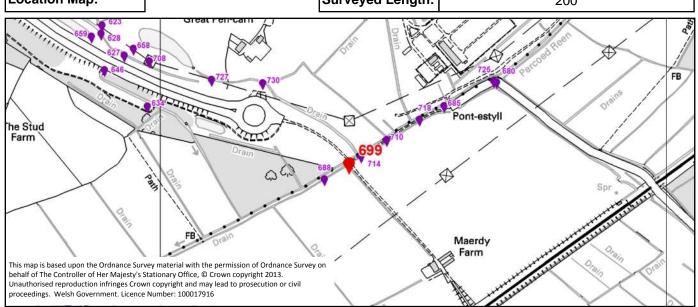




 Unique Reference
 699
 Date:
 08-09-2014 12:33
 GPS:
 51.545477, -3.034294

 Waterbody Number:
 Surveyor:
 RP AM

 Location Map:
 Surveyed Length:
 200



Habitat	Ditch
Bank Profile	Steep >45deg
Depth of Water	1 - 2m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	Spraints;
Suitability for Watervoles	Medium
Watervole Signs	

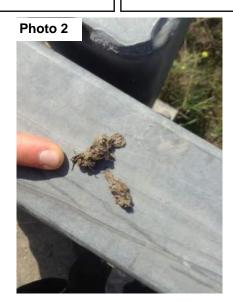
Vegetation Description

Bramble, rosehip, reed sweet grass, ash

Comments:

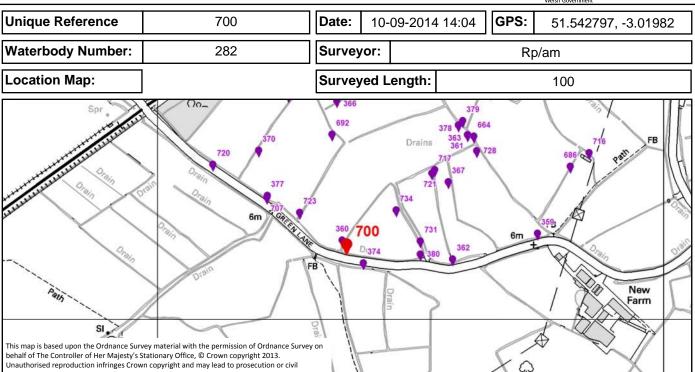
Old otter spraint found under bridge. Bank vole. Difficult to access.











Habitat	Ditch
Bank Profile	Flat <10 degrees
Depth of Water	0.5 - 1m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Poached

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Comments:

Vegetation	Description

proceedings. Welsh Government. Licence Number: 100017916

Oak, willow, reed sweet grass, hawthorn, blackthorn, bramble

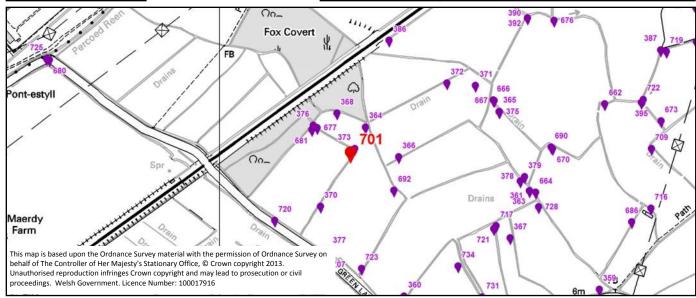
Cattle in field







Unique Reference	701	Date:	10-	09-2014 12:12	GPS:	51.545394, -3.021527
Waterbody Number:	293	Surveyor:			Rp/am	
Location Map:		Surveyed Length:		ength:		100



Habitat	Ditch
Bank Profile	Flat <10 degrees
Depth of Water	0.5 - 1m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Willow, bramble, hawthorn, reed sweet grass, reeds

Comments:

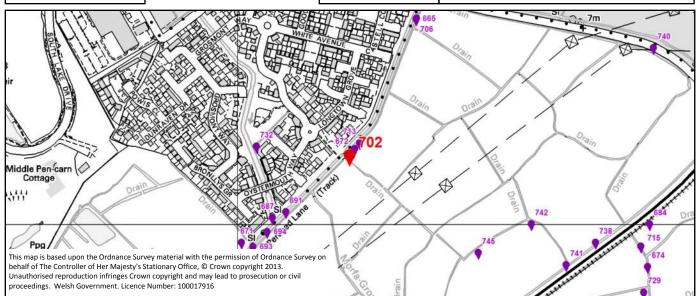
Bank vole feeding station and droppings







Unique Reference	702	Date:	11-	09-2014 13:51	GPS:	51.551664, -3.022213
Waterbody Number:	90	Surveyor:		Rp/se		
Location Map:		Surveyed Length:			200	



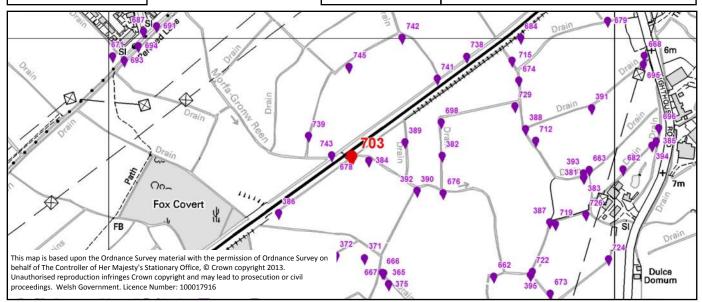
Habitat	Reen
Bank Profile	Steep >45deg
Depth of Water	>2m
Channel Width	5 - 10m
Flow Speed	Sluggish
Shore Banks	Earth

Neighboring Land Use	Park/garden;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	





Unique Reference	703	Date:	10-0	09-2014 15:18	GPS:	51.548393, -3.018409
Waterbody Number:	260	Surveyor:			Rp/am	
Location Map:		Survey	Surveyed Length:			150



Habitat	Ditch
Bank Profile	Shallow <45deg
Depth of Water	>2m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
Reed sweet grass, duck weed	Bank vole droppings



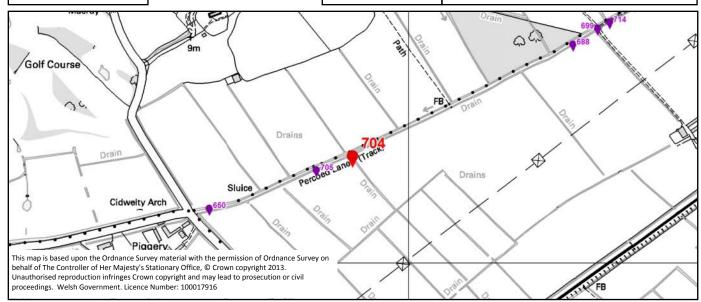




 Unique Reference
 704
 Date:
 08-09-2014 15:55
 GPS:
 51.543165, -3.041231

 Waterbody Number:
 Surveyor:
 RP AM

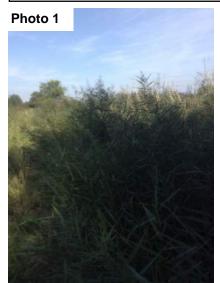
 Location Map:
 Surveyed Length:
 100



Habitat	Ditch			
Bank Profile	Steep >45deg			
Depth of Water	0.5 - 1m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks				

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
Reed sweet grass, bramble, oak	Very little water

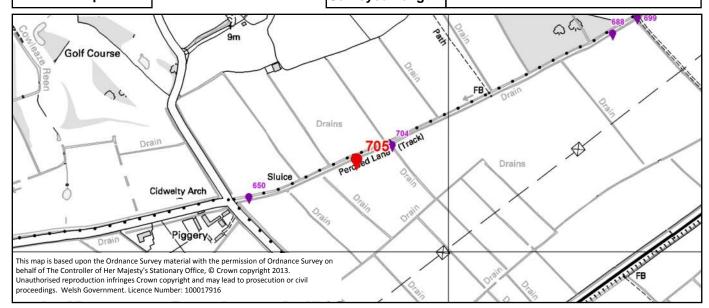




 Unique Reference
 705
 Date:
 08-09-2014 14:26
 GPS:
 51.542906, -3.042247

 Waterbody Number:
 Surveyor:
 RP AM

 Location Map:
 Surveyed Length:



Habitat	Reen
Bank Profile	Vertical/undercut
Depth of Water	>2m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Latrines; Burrows; Feeding Stations;

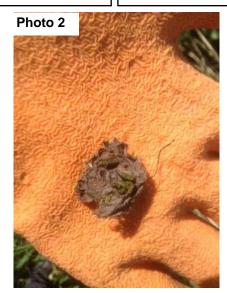
Vegetation Description

Comments:

Reed sweet grass, bramble, spearhead lily.

Bank vole. Watervole latrine. Wv Feeding stations in several places. Wv burrows.

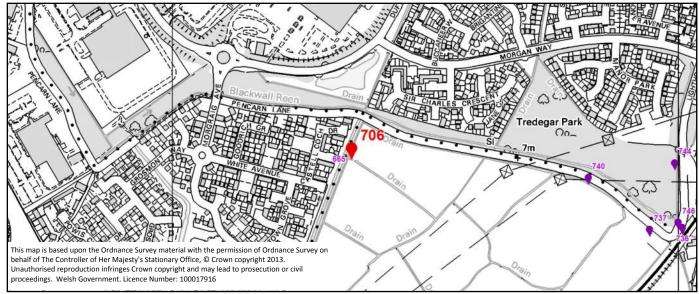








Unique Reference	706	Date:	11-(09-2014 14:07	GPS:	51.554096, -3.02035
Waterbody Number:	92	Surveyor:		R	o/se	
Location Map:		Surveyed Length:			50	



Habitat	Reen
Bank Profile	Steep >45deg
Depth of Water	1 - 2m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Earth

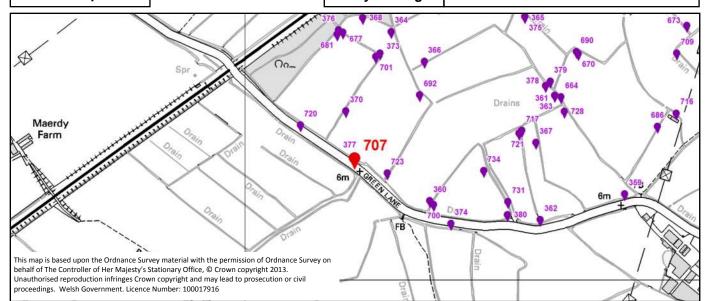
Neighboring Land Use	Park/garden; Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
Reed sweetgrass oak golden delicious apple tree	





Waterbody Number:	292	Survey	Surveyor: Rp/am Surveyed Length:			o/am
Waterbody Number:	292	Surveyor:		Rp/am		
Unique Reference	707	Date:	10-09-2014 11:47		GPS:	51.543598, -3.022102



Habitat	Ditch		
Bank Profile	Steep >45deg		
Depth of Water	<0.5m		
Channel Width	1 - 2m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation	Description
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Hogweed, reed sweet grass, willow, hawthord, willow herb

Comments:

Largely inaccessible due to vegetation



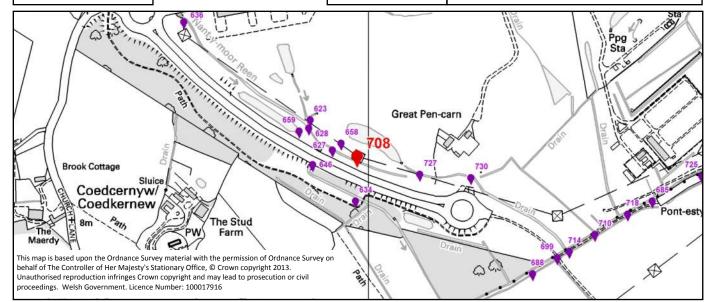




 Unique Reference
 708
 Date:
 08-09-2014 11:32
 GPS:
 51.547229, -3.040035

 Waterbody Number:
 Surveyor:
 RP AM

 Location Map:
 Surveyed Length:



Habitat	Ditch		
Bank Profile	Shallow <45deg		
Depth of Water	<0.5m		
Channel Width	1 - 2m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Scrub;				
Bank Management	Mixture				
Suitability for Otters	Negligible				
Otter Signs					
Suitability for Watervoles	Low				
Watervole Signs					

Vegetation Description

Comments:

Willow, nettles

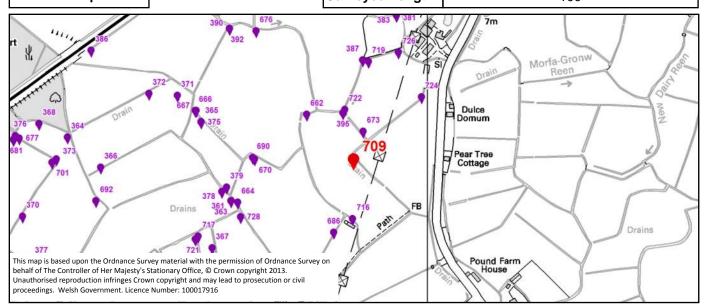
Ditch dries up as is goes east. Very little water. Rubbish.







Unique Reference	709	Date:	Date: 11-09-2014 11:37		GPS:	51.545525, -3.012951
Waterbody Number:	265	Surveyor:		Rp/se		
Location Map:		Surve	Surveyed Length:			100



Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	0.5 - 1m			
Channel Width	2 - 5m			
Flow Speed				
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;			
Bank Management	Unfenced			
Suitability for Otters	Low			
Otter Signs				
Suitability for Watervoles	Low			
Watervole Signs				

Vegetation Description	Comments:

Sweetgrass thistle bramble willow hawthorn

Field vole run and latrine





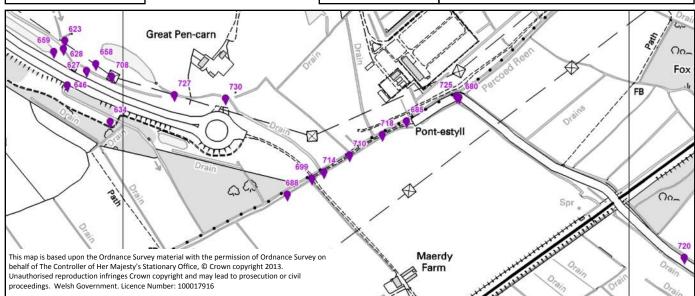


Llywodraeth Cymru Welsh Government							
Unique Reference	710	Date:	10-0	9-2014 10:00	GPS:	51.545898, -3.03324	
Waterbody Number:	9960	Surveyor:			Rp/am		
Location Map:		Surveyed Length:		0			
This map is based upon the Ordnance Surve behalf of The Controller of Her Majesty's Sta	y material with the permission of Ordnance Survey ationary Office, © Crown copyright 2013. copyright and may lead to prosecution or civil	714 y on	7.10	Pont-estyll Maerdy Farm	A CONTRACTOR OF THE PARTY OF TH	Spr On Sp	
Habitat	Ditch		Neigh	boring Land	Use	Scrub;	
Bank Profile			Bank	Management			
Depth of Water			Suita	bility for Otte	rs		
Channel Width			Otter	Signs			
Flow Speed			Suita	bility for Wate	ervoles		
Shore Banks	Earth		Wate	rvole Signs			
Vegetati	Vegetation Description Comments:			ts:			
		Ina	ccessil	ole due to thick	c vegetati	ion	

Photo 1



Unique Reference	711	Date: 10-09-2014 14:28		GPS:	,	
Waterbody Number:	277	Surveyor:		Rp	p/am	
Location Map:		Survey	Surveyed Length:		250	



Habitat	Ditch		
Bank Profile	Shallow <45deg		
Depth of Water	1 - 2m		
Channel Width	2 - 5m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Livestock grazing;
Bank Management	
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Comments:

Oak, willow, bramble,

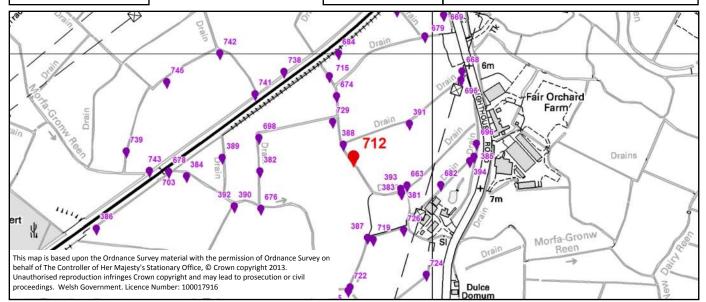
Largely inaccessible due to dense vegetatiin







Unique Reference	712	Date:	Date: 11-09-2014 10:48		GPS:	51.548712, -3.013163
Waterbody Number:	248	Surveyor:		Rp/se		
Location Map:		Survey	Surveyed Length:		75	



Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	<0.5m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Poached			

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

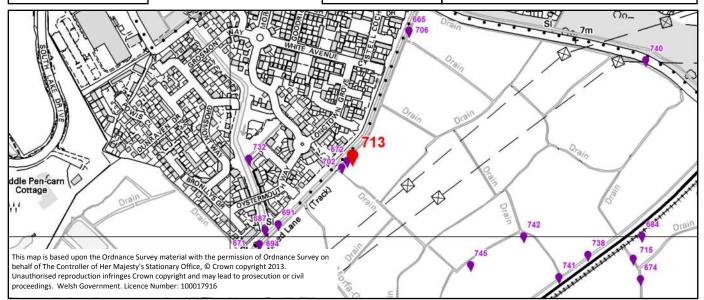
Vegetation Description	Comments:				
Bramble reed sweetgrass hawthorn willow	Bank voles feeding material				

Photo 1 Photo 2 Photo 3





Unique Reference	713	Date:	Date: 11-09-2014 13:56		GPS:	51.55188, -3.021919
Waterbody Number:		Survey	Surveyor: Rp/		o/se	
Location Map:		Surve	Surveyed Length: 100			100



Habitat	Reen			
Bank Profile	Steep >45deg			
Depth of Water	>2m			
Channel Width	2 - 5m			
Flow Speed	Sluggish			
Shore Banks	Earth			

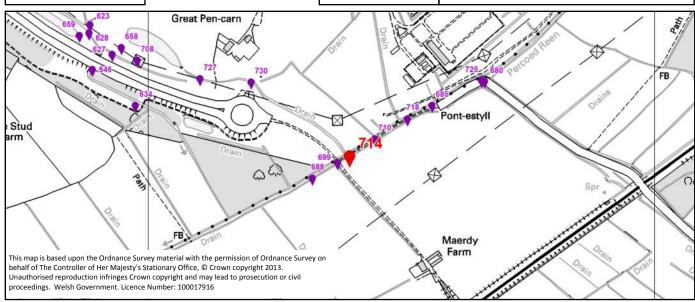
Neighboring Land Use	Park/garden;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:			
Oak ash bramble reeds sweetgrass hawthorn	Has trees lining south bank			





Unique Reference	714	Date:	Date: 10-09-2014 10:11		GPS:	51.545596, -3.033956
Waterbody Number:		Surveyor:		Rp/am		
Location Map:		Surve	Surveyed Length:		100	



Habitat	Ditch			
Bank Profile	Steep >45deg			
Depth of Water	1 - 2m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Arable;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Oak, ivy, reed sweet grass, bramble, hawthorn, ash

Comments:

Limited access due to dense vegetation. Bank/field vole latrines, runs and feeding stations.

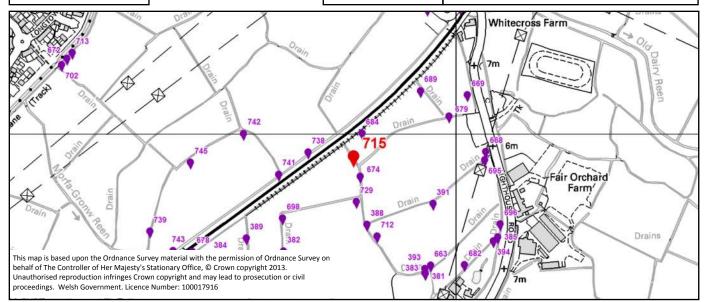








Unique Reference	715	Date:	11-(09-2014 10:33	GPS:	51.550123, -3.013869
Waterbody Number:	251	Survey	or:		R	p/se
Location Map:		Surveyed Length:		ength:		40



Habitat	Ditch				
Bank Profile	Shallow <45deg				
Depth of Water	<0.5m				
Channel Width	1 - 2m				
Flow Speed	Still				
Shore Banks	Poached				

Neighboring Land Use	Livestock grazing;
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

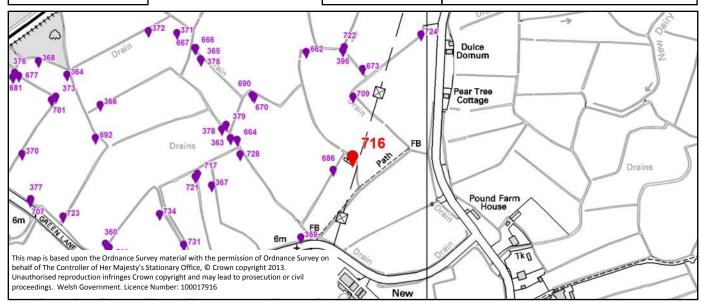
Vegetation Description	Comments:
Blackthorn dog rose reed sweet grass	







Unique Reference	716	Date:	11-	09-2014 11:42	GPS:	51.54447, -3.012942
Waterbody Number:	1368	Survey	or:		R	o/se
Location Map:		Survey	/ed L	enath:		50



Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	0.5 - 1m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

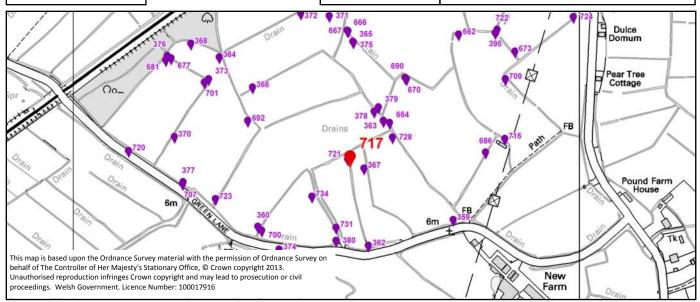
Neighboring Land Use	Livestock grazing;
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
Reed sweetgrass hawthorn oak bramble willow	





Unique Reference	717	Date:	10-0	09-2014 14:36	GPS:	51.544127, -3.017334
Waterbody Number:	376	Survey	or:		Rp	o/am
Location Map:		Surveyed Length:		ength:		150



Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	<0.5m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Bramble, reed sweet grass, ivy, oak

Comments:

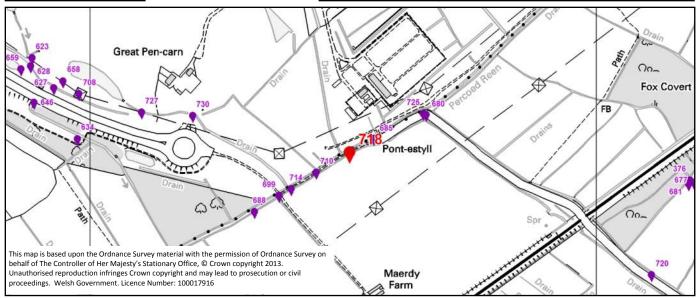
Limited access due to dense vegetation







Unique Reference	718	Date:	Date: 10-09-2014 10:25		GPS:	51.546266, -3.032312
Waterbody Number:	95	Survey	Surveyor:		Rp/am	
Location Map:		Surveyed Length:				100



Habitat	Ditch		
Bank Profile	Steep >45deg		
Depth of Water	1 - 2m		
Channel Width	1 - 2m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Arable;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

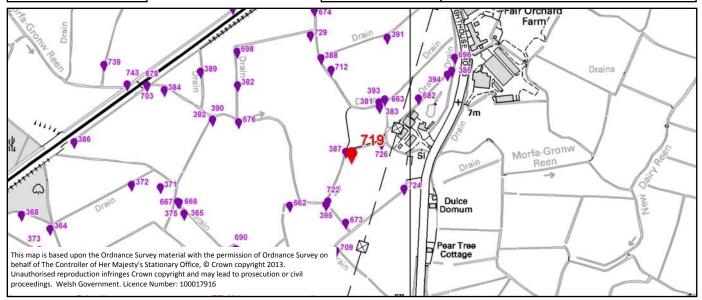
Vegetation Description	Comments:
Hawthorn, bramble, reed sweet grass, willow, ivy	Largely inaccessible due to vegetation







Unique Reference	719	Date:	Date: 11-09-2014 09:2		GPS: 51.547247, -3.0125	
Waterbody Number:	246	Surveyor:			Rp/se	
Location Map:		Surveyed Length:		enath:		50



Habitat	Reen		
Bank Profile	Shallow <45deg		
Depth of Water	0.5 - 1m		
Channel Width	1 - 2m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation	Description
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Reed sweet grass thistle hawthorn and bramble dog

Comments:

Bank vole feeding material

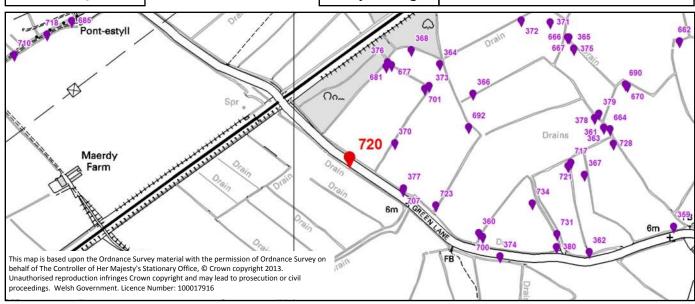


rose





Unique Reference	720	Date:	Date: 10-09-2014 11:		4 11:44 GPS: 51.54417, -3.02365	
Waterbody Number:	291	Surveyor:			Rp/am	
Location Map:		Survey	ed L	enath:		50



Habitat	Ditch			
Bank Profile	Steep >45deg			
Depth of Water	0.5 - 1m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

V	Danasistias
Vegetation	Description

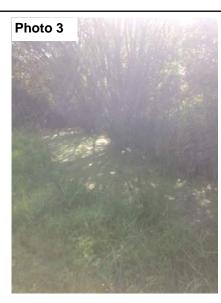
Hawthorn, bramble, willow, ivy

Comments:

Largely inaccessible due to vegetation. Accessible sections poached.

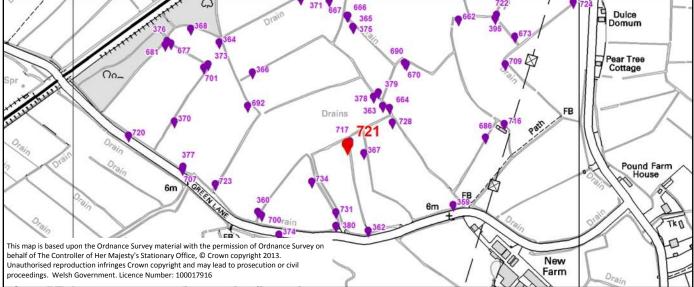








Unique Peference	721	Date:	40	00 2044 44:24	GPS:	54 544070 0 0474		
Unique Reference	721	Date:	10-	09-2014 14:31	GPS:	51.544073, -3.0174	14	
Waterbody Number:	279	Survey	or:		Rp/am			
Location Map:		Survey	ed L	ength:	50			
	Drain Drain	371 667 66	66 365 375	662	722	Dulce Domum	-	



Habitat	Ditch			
Bank Profile	Flat <10 degrees			
Depth of Water	<0.5m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation	Description
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Oak, willow, bramble, hawthorn, blackthorn, thistle

Comments:

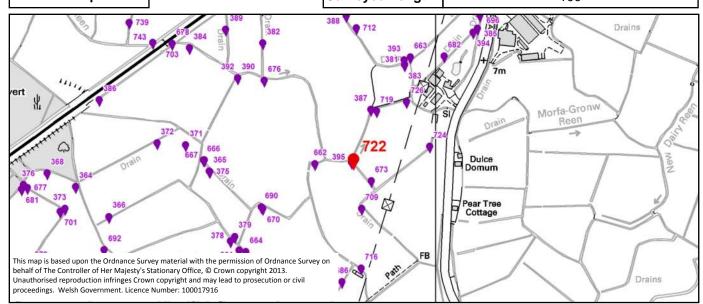
Bank vole feeding station







Unique Reference	722	Date:	11-(09-2014 09:15	GPS:	51.546396, -3.013205
Waterbody Number:	261	Survey	or:		Rp	o/am
Location Map:		Surve	ed Le	enath:		100



Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	0.5 - 1m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Reed sweet grass thistles nettles poached

Comments:

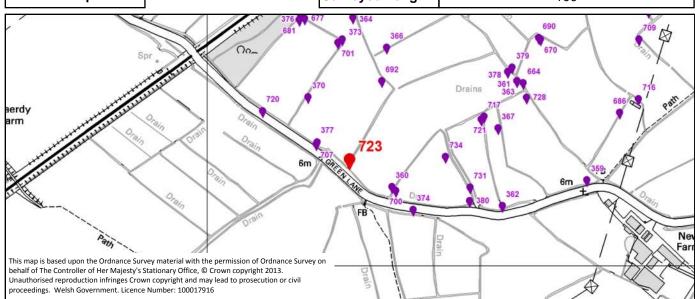
Bank vole runs feedings and remains







Unique Reference	723	Date:	10-	09-2014 12:29	GPS:	51.543339, -3.021159
Waterbody Number:	283	Survey	or:		Rp	o/am
Location Map:		Surveyed Length:				100



Habitat	Ditch
Bank Profile	Shallow <45deg
Depth of Water	<0.5m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	

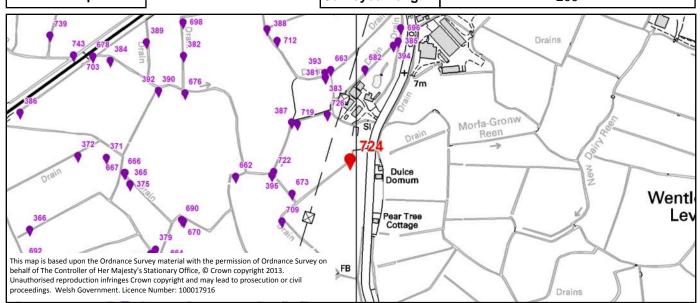
Neighboring Land Use	
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
Bulrush, reed sweet grass, willow, bramble	Bank vole. Dry ditch





Unique Reference	724	Date: 11-09-2014		09-2014 11:19	GPS:	51.546638, -3.011037
Waterbody Number:	245	Surveyor:			Rp/se	
Location Map:		Surveyed Length:		enath:		200



Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	<0.5m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Bullrush reed sweetgrass bramble

Comments:

Field vole droppings

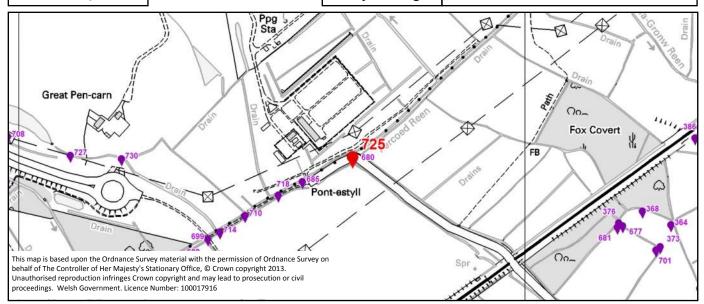








Unique Reference	725	Date: 10-09-2014 09:27		GPS:	51.54696, -3.030211	
Waterbody Number:	315	Surveyor:			Rp/am	
Location Map:		Surveyed Length:		ength:		50



Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	>2m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

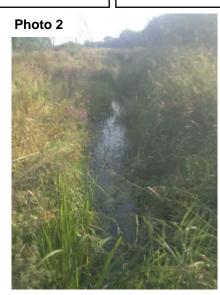
Vegetation D	escription
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Reed sweet grass nettle, bramble, duck weed, arrowhead lily.

Comments:

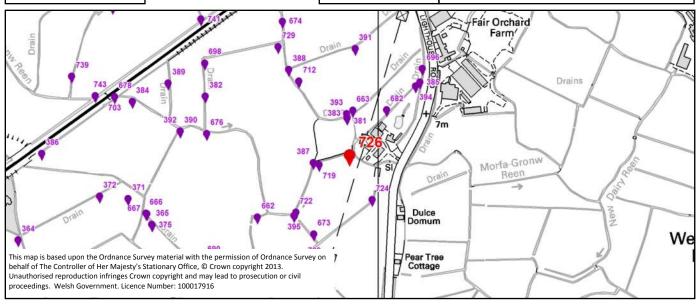
Reen to north of track. Bank vole droppings







Unique Reference	726	Date: 11-09-2014		09-2014 09:28	GPS:	51.547424, -3.011703
Waterbody Number:	247	Survey	or:	Rp/se		
Location Map:		Surveyed Length:		enath:		50



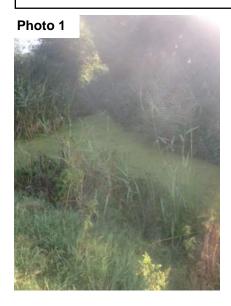
Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	1 - 2m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

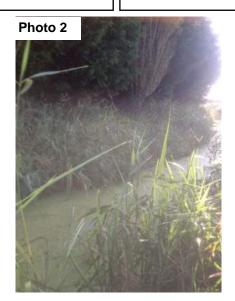
Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Bramble reed sweet grass hogweed thistle nettles

Comments:

Bank vole feeding material

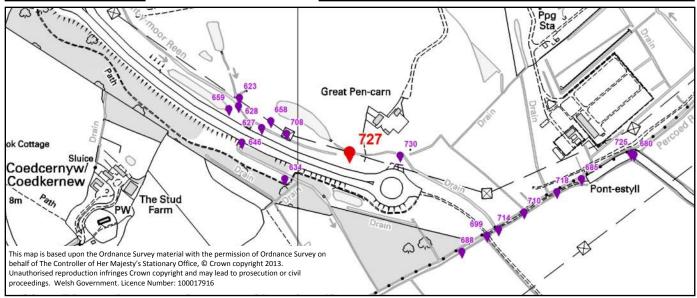








Location Map:		Surveyed Length:				
Waterbody Number:	1382	Surveyor:		RP AM		
Unique Reference	727	Date: 08-09-2014 11:44		GPS:	51.546919, -3.038245	



Habitat	Ditch		
Bank Profile	Vertical/undercut		
Depth of Water	0.5 - 1m		
Channel Width	1 - 2m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Willow, reed sweet grass, bramble

Comments:

Mainly Inaccessible due to steep banks. Bank vole evidence.





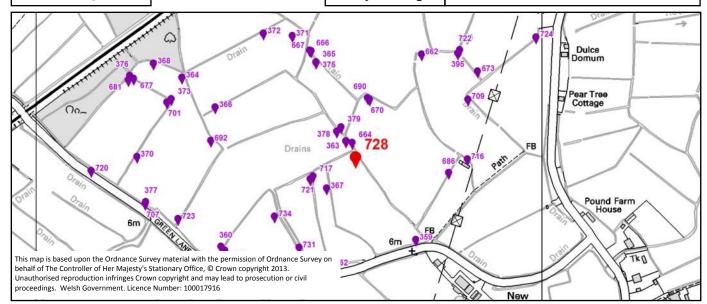




 Unique Reference
 728
 Date:
 10-09-2014 14:40
 GPS:
 51.544474, -3.016138

 Waterbody Number:
 276
 Surveyor:
 Rp/am

 Location Map:
 Surveyed Length:



Habitat	Ditch		
Bank Profile	Shallow <45deg		
Depth of Water	<0.5m		
Channel Width	1 - 2m		
Flow Speed	Still		
Shore Banks	Earth		

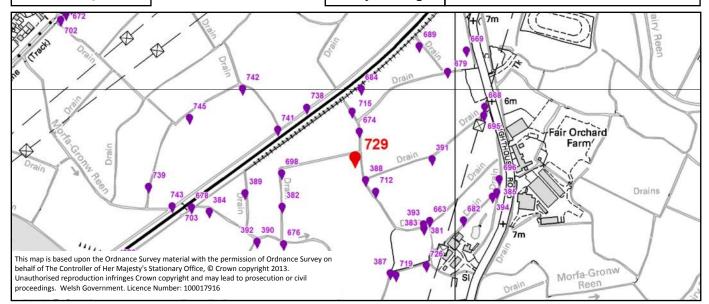
Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Comments:
Very shallow water, dries in places





Unique Reference	729	Date: 11-09-2014 1		09-2014 11:02	-2014 11:02 GPS: 51.549316, -3.01	
Waterbody Number:	250	Surveyor:			Rp/se	
Location Map:		Survey	Surveyed Length:		150	



Habitat	Ditch		
Bank Profile	Shallow <45deg		
Depth of Water	<0.5m		
Channel Width	2 - 5m		
Flow Speed	Still		
Shore Banks	Poached		

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Bramble hawthorn dogrose sweetgrass blackthorn willow

Comments:

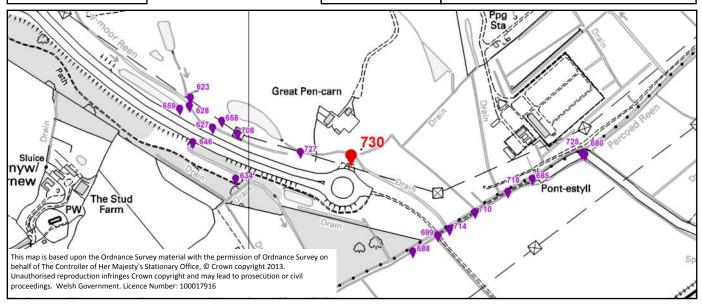
Poached in places access limited due to bramble







Unique Reference	730	Date: 08-09-2014 11:58		GPS:	51.546872, -3.036788		
Waterbody Number:	55	Surveyor:			RP AM		
Location Map:		Survey	Surveyed Length:		200		



Habitat	Ditch
Bank Profile	Steep >45deg
Depth of Water	1 - 2m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

Sweet reed grass, willow herb, bramble, nettle

Comments:

Bank vole. Deeper water depth in parts.





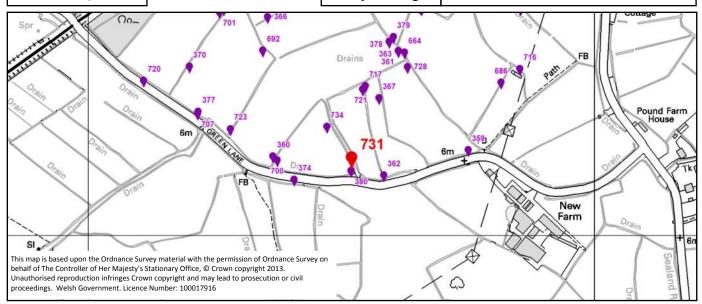




 Unique Reference
 731
 Date:
 10-09-2014 14:24
 GPS:
 51.542868, -3.017706

 Waterbody Number:
 281
 Surveyor:
 Rp/am

 Location Map:
 Surveyed Length:
 100



Habitat	Ditch		
Bank Profile	Shallow <45deg		
Depth of Water	<0.5m		
Channel Width	1 - 2m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Oak, hawthorn, bramble, willow

Comments:

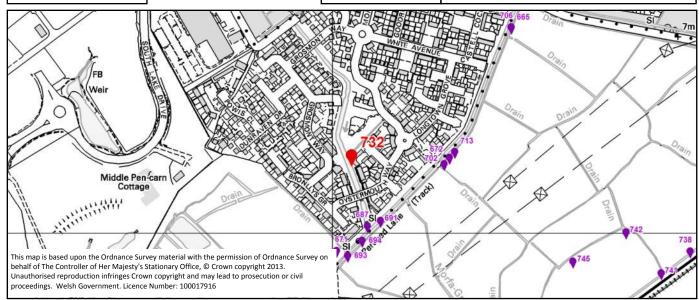
Mostly inaccessible due to dense vegetation







Unique Reference	732	Date:	11-	09-2014 13:23	GPS:	51.551792, -3.024862
Waterbody Number:	89	Survey	rveyor:		R	o/se
Location Map:		Surveyed Length:			50	



Habitat	Reen		
Bank Profile	Steep >45deg		
Depth of Water	1 - 2m		
Channel Width	2 - 5m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Park/garden;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

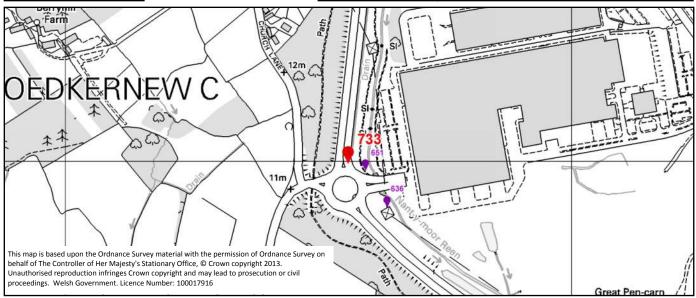
Vegetation Description	Comments:
Reeds sweetgrass and willow	

Photo 1

Photo 2 Photo 3



Unique Reference	733	Date:	Date: 08-09-2014 10:40		GPS:	51.55039, -3.046155
Waterbody Number:	59	Survey	Surveyor:		RP AM	
Location Map:		Surveyed Length:		ength:		200



Habitat	Ditch		
Bank Profile	Steep >45deg		
Depth of Water	<0.5m		
Channel Width	1 - 2m		
Flow Speed			
Shore Banks	Man-made		

Neighboring Land Use	Urban; Scrub;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

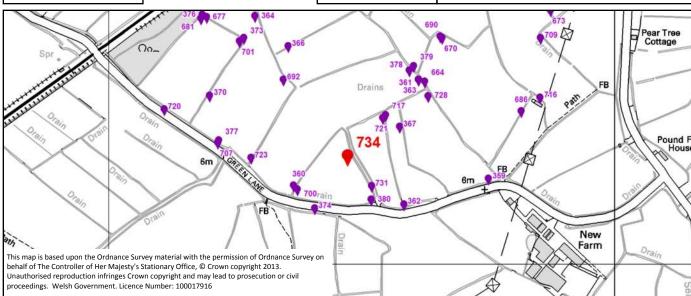
Vegetation Description	Comments:
Concrete banks no water	No water at time of survey



Photo 2 Photo 3



Unique Reference	734	Date:	10-	09-2014 14:08	GPS:	51.543405, -3.018413
Waterbody Number:	280	Survey	reyor:		Rp	o/am
Location Map:		Surveyed Length:			100	



Habitat	Ditch		
Bank Profile	Shallow <45deg		
Depth of Water	<0.5m		
Channel Width	1 - 2m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	
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Oak, hawthorn, willow, reed sweet grass

Comments:

Bank vole feeding remains and latrine

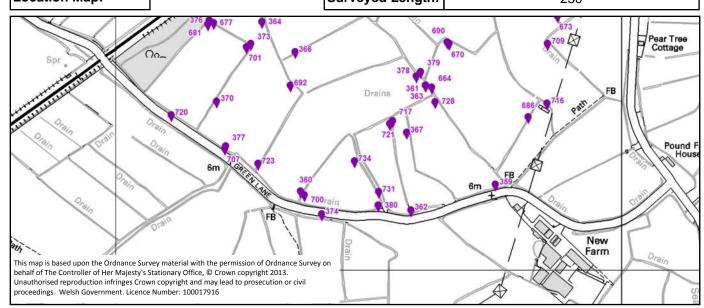




Photo 3



Unique Reference	735	Date:	Date: 16-09-2014 14		GPS:	,
Waterbody Number:	254	Surveyor:			DB	& AO
Location Man		Surveyed Length:		nath:		250



Habitat	Ditch				
Bank Profile	Shallow <45deg				
Depth of Water	<0.5m				
Channel Width	2 - 5m				
Flow Speed	Still				
Shore Banks	Man-made				

Neighboring Land Use	Livestock grazing; Urban;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Comments:

Vegetation Description

Nettles overgrown and inaccessible. Dried out ditch with Phragmites. Scrub adjacent blackthorn and brambles. Adj to railway line.

A wall of nettles

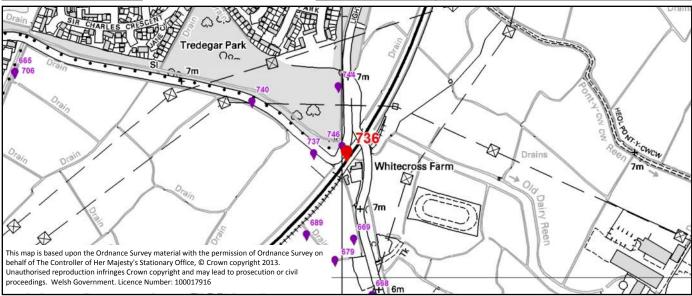








Unique Reference	736	Date:	ate: 16-09-2014 14:28		GPS:	51.552769, -3.010881
Waterbody Number:	997	Survey	or:		DB & AO	
Location Map:		Surveyed Length:		ength:		5



Habitat	Ditch					
Bank Profile	Vertical/undercut					
Depth of Water	>2m					
Channel Width	2 - 5m					
Flow Speed	Still					
Shore Banks	Man-made					

Neighboring Land Use	Urban; Scrub;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description

Lemna species, scrub of bramble.

Comments:

Poor water quality, fly tipping, ditch directly adjacent to railway line.

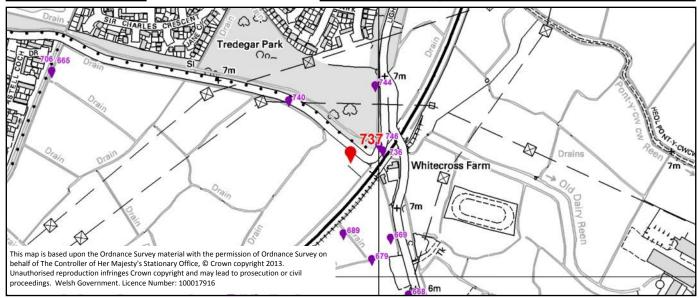








Unique Reference	737	Date:	Date: 16-09-2014 12:35		GPS:	51.552729, -3.011812
Waterbody Number:	1363	Survey	Surveyor:		DB & AO	
Location Map:		Surveyed Length:		ength:		70



Habitat	Ditch				
Bank Profile	Shallow <45deg				
Depth of Water	<0.5m				
Channel Width	1 - 2m				
Flow Speed	Still				
Shore Banks	Earth				

Neighboring Land Use	Livestock grazing; Urban; Scrub;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Lemna covering surface of water, bramble scrub overgrowth on both sides. Young sycamore trees growing along banks.

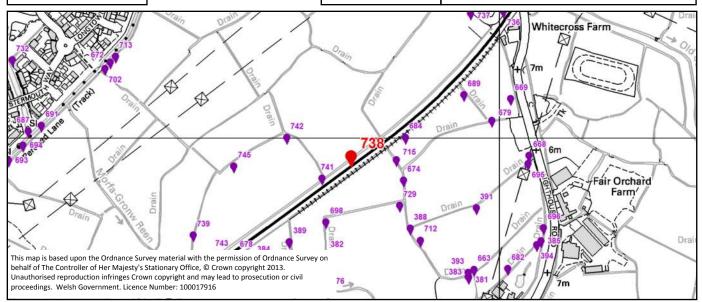
Comments:







Unique Reference	738	Date:	16-09-2014 14:57		GPS:	51.550182, -3.015162
Waterbody Number:	255	Survey	urveyor:		DB & AO	
Location Map:		Survey	Surveyed Length:			150



Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	<0.5m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Man-made			

Neighboring Land Use	Livestock grazing; Urban;
Bank Management	Fenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description

Phragmites in dry ditch overgrown with bramble, blackthorn, hawthorn, dog rose and goat willow

Comments:

Drainage ditch for railway, very little water

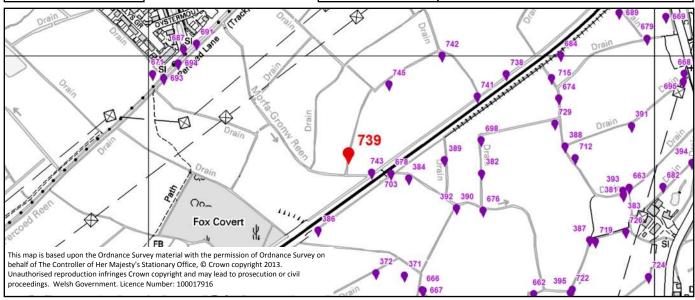








Unique Reference	739	Date:	Date: 16-09-2014 15:40		GPS:	51.548745, -3.019638
Waterbody Number:	123	Survey	Surveyor:		DB & AO	
Location Map:		Survey	Surveyed Length:			80



Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	0.5 - 1m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description

Blackthorn double hedgerow, Phragmites in sections, scattered hawthorn, bramble

Comments:

Survey from other side.

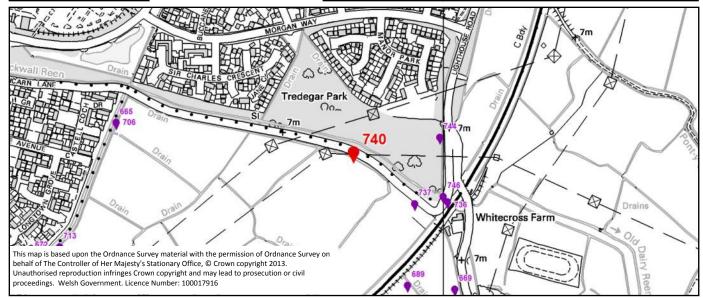








Unique Reference	740	Date:	te: 16-09-2014 12:28		GPS:	51.553632, -3.013586
Waterbody Number:	141	Survey	Surveyor:		DB & AO	
Location Map:		Survey	Surveyed Length:			100



Habitat	Ditch
Bank Profile	Shallow <45deg
Depth of Water	0.5 - 1m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing; Urban;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Double hedged, ivy on bank side. Bramble, hawthorn, goat willow, oak.

Comments:

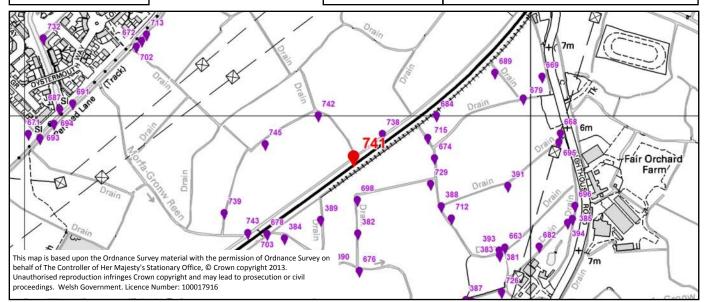
Poor water quality.







Unique Reference	741	Date:	Date: 16-09-2014 15:08		GPS:	51.549783, -3.015987
Waterbody Number:	256	Survey	Surveyor:		DB & AO	
Location Map:		Survey	Surveyed Length:			200



Habitat	Ditch		
Bank Profile	Shallow <45deg		
Depth of Water	<0.5m		
Channel Width	1 - 2m		
Flow Speed	Still		
Shore Banks	Man-made		

Noighboring Land Usa	Livestock grazing: Urban
Neighboring Land Use	Livestock grazing; Urban;
Bank Management	Fenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description

Phragmites, overgrown with hawthorn, bramble, dog rose, sweet reed grass, blackthorn, crack willow

Comments:

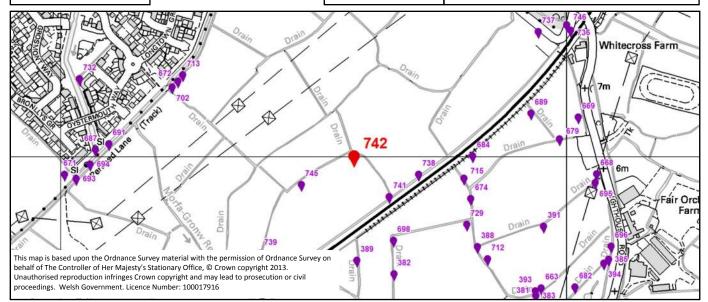
Overgrown railway drainage ditch







Unique Reference	742	Date:	Date: 16-09-2014 16:05		GPS:	51.550494, -3.017003	
Waterbody Number:	127	Survey	Surveyor:		DB & AO		
Location Map:		Survey	Surveyed Length:		urveyed Length: 100		100



Habitat	Ditch
Bank Profile	Shallow <45deg
Depth of Water	1 - 2m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Medium
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

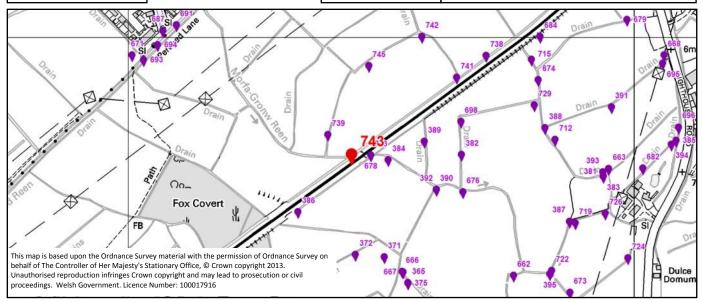
Vegetation Description	Comments:
Phragmites, bulrush, juncus effusus, defunct hawthorn hedge on east bank	



Photo 2 Photo 3



Unique Reference	743	Date:	e: 16-09-2014 15:22		GPS:	51.548407, -3.018966
Waterbody Number:	9120	Survey	Surveyor:		DB & AO	
Location Map:		Surve	Surveyed Length:			30



Habitat	Ditch
Bank Profile	Steep >45deg
Depth of Water	1 - 2m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Man-made

Neighboring Land Use	Livestock grazing; Urban;
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Lemna over water surface, Phragmites, bulrush

Comments:

Next to railway, 'plop' heard

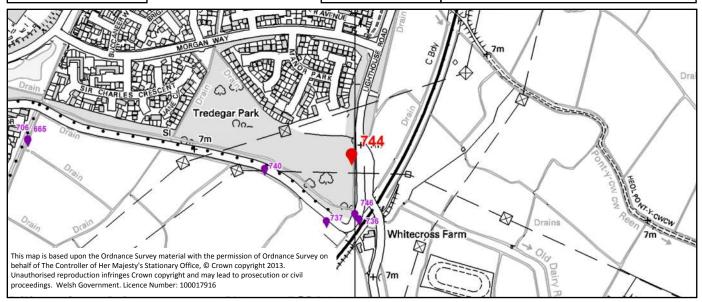








Unique Reference	744	Date:	16-09-2014 10:54		GPS:	51.553914, -3.01113
Waterbody Number:	147	Survey	Surveyor:		DB & AO	
Location Map:		Surve	Surveyed Length:		150	



Habitat	Reen				
Bank Profile	Steep >45deg				
Depth of Water	1 - 2m				
Channel Width	2 - 5m				
Flow Speed	Still				
Shore Banks	Earth				

Neighboring Land Use	Broadleaf woodland; Urban; Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Lemna in channel. Scrub adjacent (bramble, nettles). Bullrush. Phragmites.

Comments:

Fly tipping in the water channel. Otter - commuting route. Low Water quality.

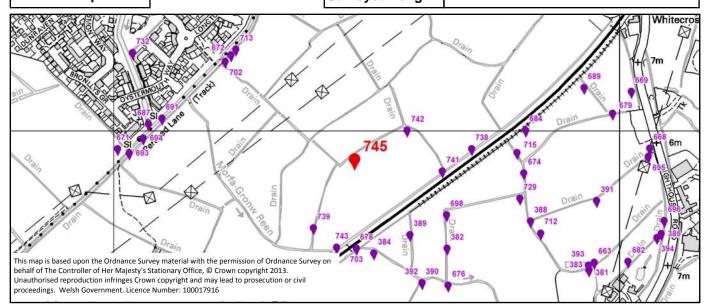








Location Map:		Surveyed Length:				
Waterbody Number:	125	Surveyor:		DB	DB & AO	
Unique Reference	745	Date:	e: 16-09-2014 15:53		GPS:	51.549973, -3.018503



Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	<0.5m			
Channel Width	5 - 10m			
Flow Speed				
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;		
Bank Management	Fenced		
Suitability for Otters	Low		
Otter Signs			
Suitability for Watervoles	Medium		
Watervole Signs	Pathways; Feeding Stations;		

Comments:

Vegetation Description

ole in Fresh fe

Phragmites, overgrown with blackthorn and bramble in places

Fresh feeding station in phragmites





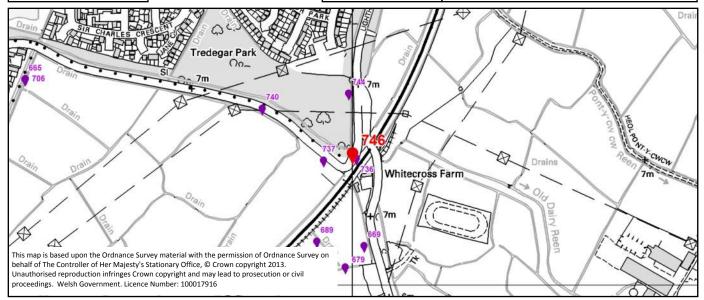




 Unique Reference
 746
 Date:
 16-09-2014 11:16
 GPS:
 51.552864, -3.011003

 Waterbody Number:
 146
 Surveyor:
 DB & AO

 Location Map:
 Surveyed Length:



Habitat	Reen			
Bank Profile	Steep >45deg			
Depth of Water	1 - 2m			
Channel Width	5 - 10m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Broadleaf woodland; Urban; Scrub;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	Feeding Stations;

Vegetation Description

Phragmites in channel, Lemna in channel, nettles on bank side. Sweet reed grass on channel edges.

Comments:

Poor water quality (smells bad). Corridor for otters adjacent to reen.





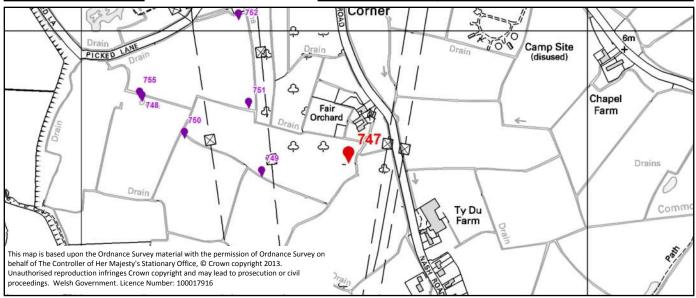




 Unique Reference
 747
 Date:
 17-09-2014 11:28
 GPS:
 51.557929, -2.945806

 Waterbody Number:
 415
 Surveyor:
 IB/FG

 Location Map:
 Surveyed Length:



Habitat	Reen			
Bank Profile	Flat <10 degrees			
Depth of Water	0.5 - 1m			
Channel Width	<1m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Broadleaf woodland;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

No long or short grasses on either bank

Comments:

Inaccessible in places - too overgrown or no entry point. Dried up in parts. Bank vole feeding remind and droppings found.

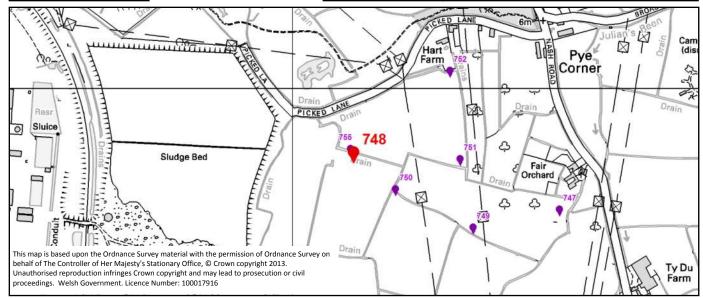








Unique Reference	748	Date:	17-	09-2014 14:05	GPS:	51.558896, -2.951705
Waterbody Number:	441	Survey	Surveyor:		IB/FG	
Location Map:		Surveyed Length: 15			15	



Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	0.5 - 1m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Arable;
Bank Management	Fenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

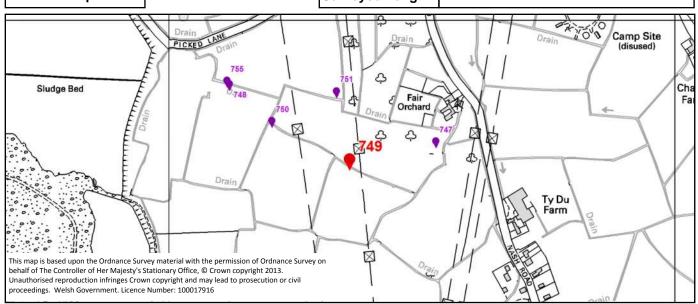
Vegetation Description	Comments:
	Fence down one side. Predominantly inaccessible due to dense bramble scrub.



Photo 2 Photo 3



Unique Reference	749	Date:	17-	09-2014 13:22	GPS:	51.557596, -2.948265
Waterbody Number:	426	Survey	Surveyor:		IB/FG	
Location Map: Surveyed Length:						



Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	0.5 - 1m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Arable;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

Comments:

Densely overgrown on both banks. Inaccessible predominantly

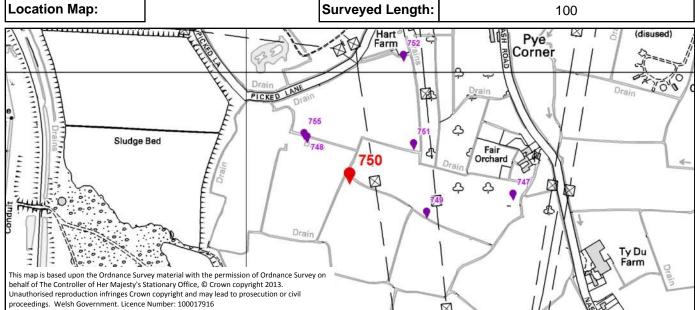








Unique Reference	750	Date:	17-	09-2014 12:34	GPS:	51.558252, -2.950482
Waterbody Number:	428	Survey	or:	IB/FG		
					•	



Habitat	Reen			
Bank Profile	Steep >45deg			
Depth of Water	0.5 - 1m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Arable;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

Comments:

Pragmites. Limited long grasses on bank side edge.

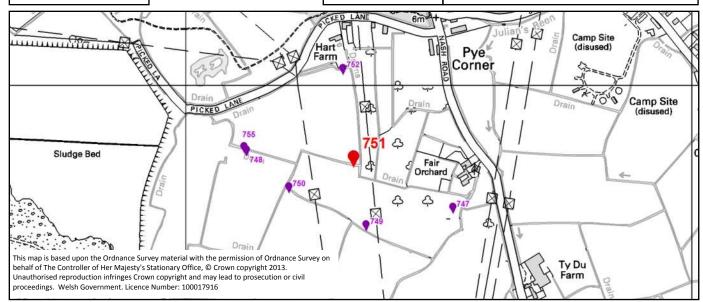








Unique Reference	751	Date:	Date: 17-09-2014		2014 13:38 GPS: 51.558797, -2.94		
Waterbody Number:	408	Survey	Surveyor:		IB/FG		
Location Map:		Surveyed Length:		enath:		50	



Habitat	Reen				
Bank Profile	Shallow <45deg				
Depth of Water	0.5 - 1m				
Channel Width	1 - 2m				
Flow Speed	Still				
Shore Banks	Earth				

Neighboring Land Use	Arable;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Comments:

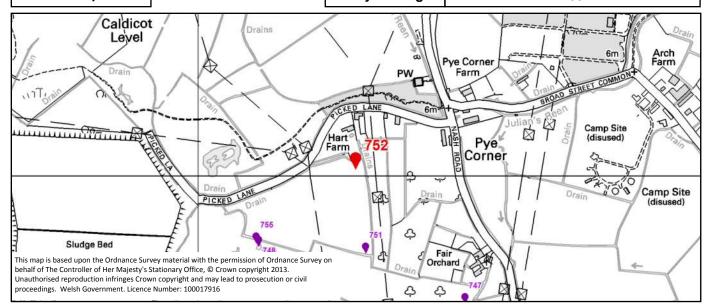
Predominantly inaccessible. Reen not in view







Unique Reference	752	Date:	te: 17-09-2014		GPS:	51.560358, -2.948985	
Waterbody Number:	407	Surveyor:			IB/FG		
Location Map:		Surveyed Length:		enath:		100	



Habitat	Reen				
Bank Profile	Steep >45deg				
Depth of Water	0.5 - 1m				
Channel Width	2 - 5m				
Flow Speed	Still				
Shore Banks	Earth				

Neighboring Land Use	Arable; Broadleaf woodland;
Bank Management	Fenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

Comments:

Long grasses and hawthorn on both banks.

Predominantly inaccessible

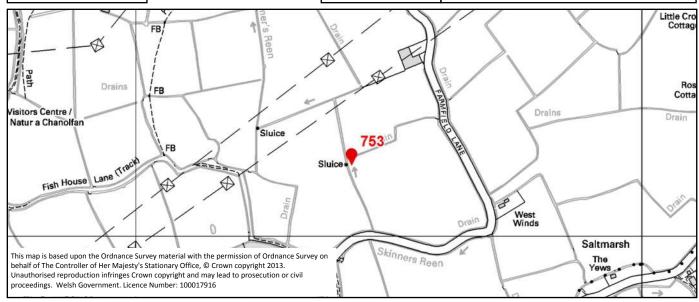








Unique Reference	753	Date:	Date: 17-09-201		GPS:	51.543526, -2.946975	
Waterbody Number:	444	Survey	or:		IB/FG		
Location Map:		Surveyed Length:		enath:		50	



Habitat	Reen		
Bank Profile			
Depth of Water			
Channel Width			
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Arable; Broadleaf woodland;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Comments:

Banks predominantly tree lined with willow and hawthorn. Limited areas of long and short grasses.

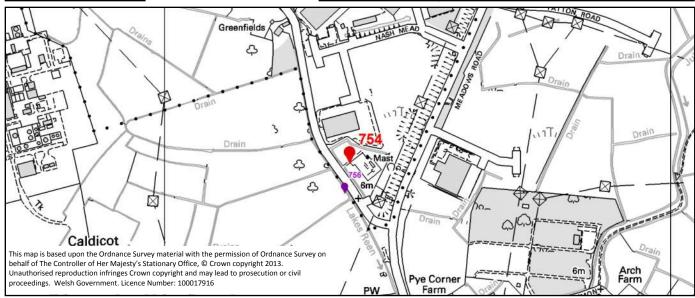








Unique Reference	754	Date:	17-09-2014 14:54		GPS:	51.564307, -2.948281
Waterbody Number:	476	Survey	/eyor:		IB/FG	
Location Map:		Survey	Surveyed Length:		20	



Habitat	Reen
Bank Profile	Shallow <45deg
Depth of Water	1 - 2m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Poached

Neighboring Land Use	Livestock grazing; Urban;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description	Comments:

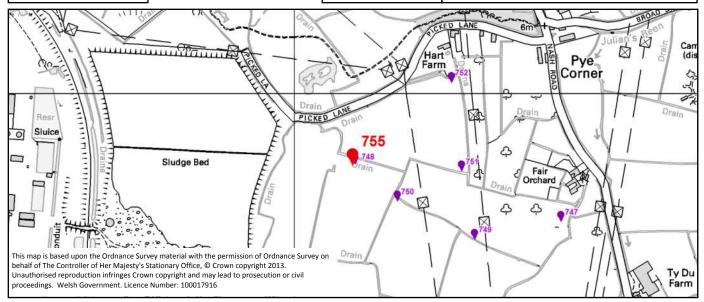
Low grass on one bank, tall grass on other bank.







Unique Reference	755	Date:	17-09-2014 14:08		GPS:	51.558952, -2.95178
Waterbody Number:	443	Survey	yor:		IB/FG	
Location Map:		Surve	Surveyed Length:		50	



Habitat	Reen
Bank Profile	Steep >45deg
Depth of Water	
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Arable;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

Comments:

Bank dominated by bramble scrub.

Predominantly inaccessible. Spot checks made where accessible.

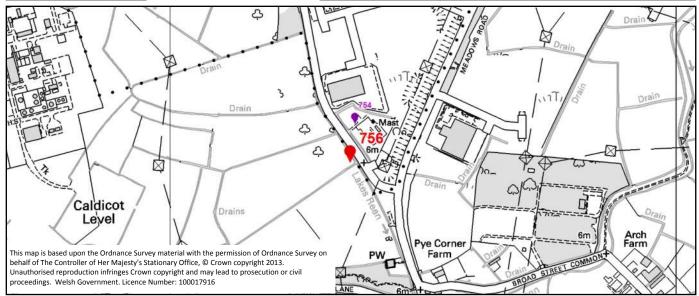








Unique Reference	756	Date:	: 17-09-2014 14:32		GPS:	51.563695, -2.948398
Waterbody Number:	473	Survey	urveyor:		IB/FG	
Location Map:		Survey	Surveyed Length:		50	

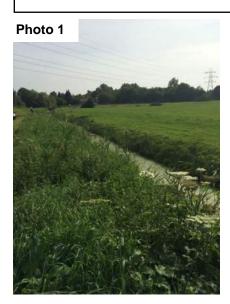


Habitat	Reen
Bank Profile	Shallow <45deg
Depth of Water	1 - 2m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing; Urban;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

 Vegetation Description
 Comments:

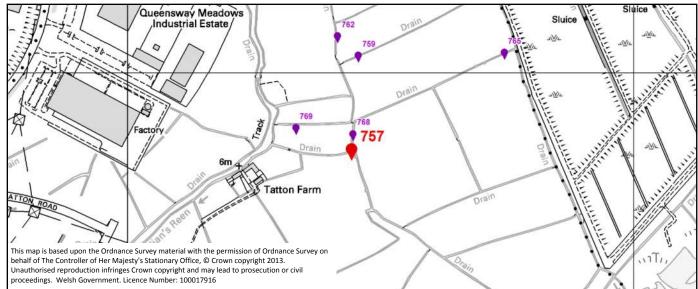
 Grasses on either side of bank.







Unique Reference	757	Date:	17-09-2014 15:48		GPS:	GPS: 51.567816, -2.932	
Waterbody Number:		Survey	eyor: TS/am				
Location Map:		Surveyed Length: 100					
1-9-1 11 / 1/2	/ /	31			1/2	3115	Sluice N



Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	1 - 2m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
Blackthorn, hawthorn, Phragmites, rose hip, nettle, reeds	Poor water quality

Photo 1 Photo 2 Photo 3

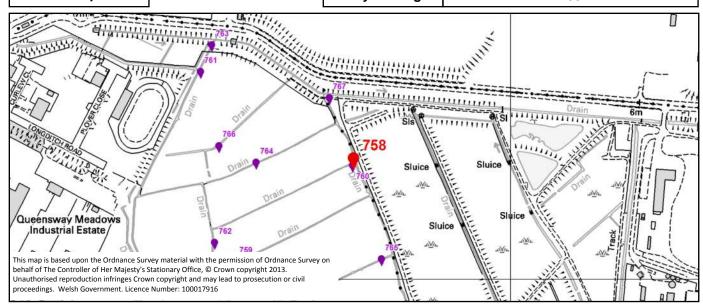




 Unique Reference
 758
 Date:
 17-09-2014 13:47
 GPS:
 51.571329, -2.929327

 Waterbody Number:
 Surveyor:
 TS/am

 Location Map:
 Surveyed Length:
 100



Habitat	Reen			
Bank Profile	Flat <10 degrees			
Depth of Water	<0.5m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Feeding Stations;

Vegetation Description

Sweet reed grass (absent at southern end), hawthorn, blackthorn, Phragmites,

Comments:

Moderate water quality. WV feeding station





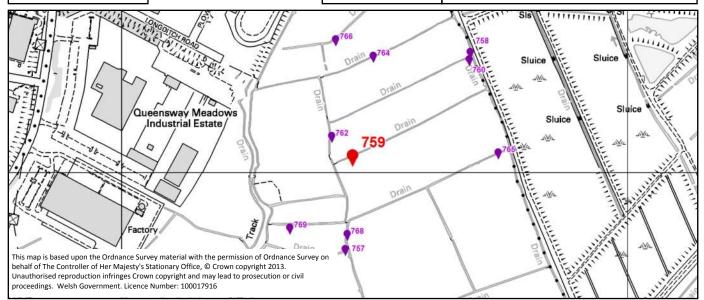
Photo 3



 Unique Reference
 759
 Date:
 17-09-2014 14:43
 GPS:
 51.569474, -2.93265

 Waterbody Number:
 Surveyor:
 TS/am

 Location Map:
 Surveyed Length:
 200



Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	0.5 - 1m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	Feeding Stations;

Vegetation Description

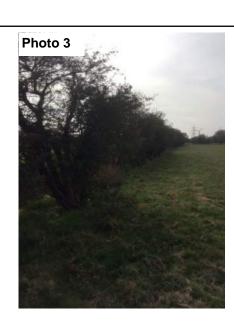
Hawthorn, reed sweet grass, nettle

Comments:

water vole feeding remains. Bank vole latrine





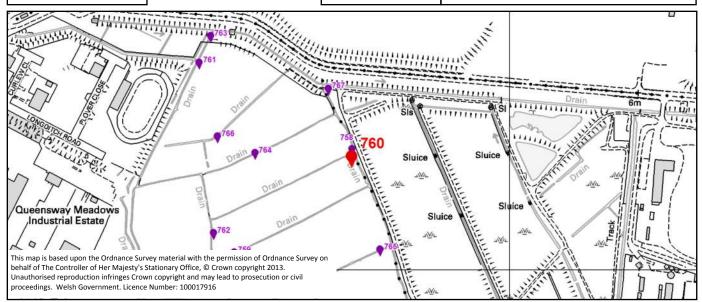




 Unique Reference
 760
 Date:
 17-09-2014 13:51
 GPS:
 51.571197, -2.929345

 Waterbody Number:
 Surveyor:
 TS/am

 Location Map:
 Surveyed Length:
 200



Habitat	Reen			
Bank Profile				
Depth of Water	<0.5m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Sightings; Feeding Stations;

Vegetation Description

Comments:

Reed sweet grass, hawthorn, blackthorn. Rose hip.

Bank vole feeding station. Run through duckweed, bank vole burrow.

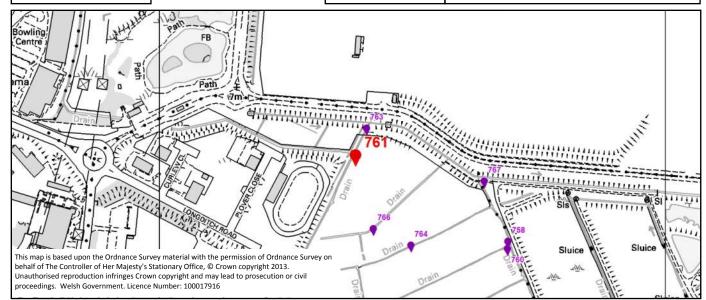








Unique Reference	761	Date:	17-	09-2014 12:26	GPS:	51.572817, -2.933712
Waterbody Number:		Survey	or:		TS	S/am
Location Map:		Surveyed Length:			50	



Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	1 - 2m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

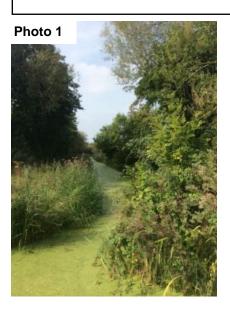
Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Medium
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Comments:

Vegetation	Description

Good water quality

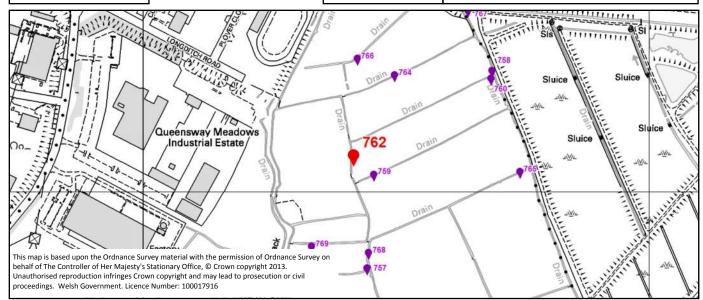
Reed sweet grass, Phragmites, willow, hawthorn, bramble







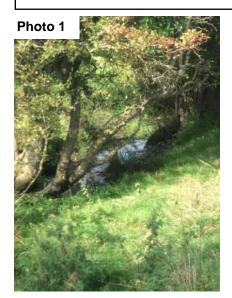
Unique Reference	762	Date:	17-	09-2014 14:31	GPS:	51.569808, -2.933245
Waterbody Number:		Surveyor:		TS/am		
Location Map:		Surveyed Length:			100	



Habitat	Ditch			
Bank Profile	Flat <10 degrees			
Depth of Water	<0.5m			
Channel Width	<1m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description	Comments:
Hawthorn, ivy,willow, rush, blackthorn, nettle,	Poor water quality. Poached.



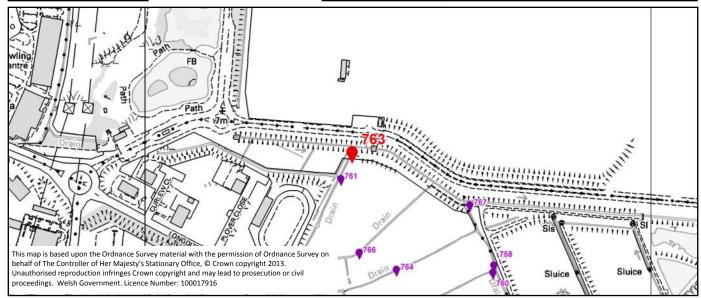




 Unique Reference
 763
 Date:
 17-09-2014 12:16
 GPS:
 51.573293, -2.933398

 Waterbody Number:
 Surveyor:
 TS/am

 Location Map:
 Surveyed Length:
 100



Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	1 - 2m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Medium
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Latrines;

Vegetation Description

Sweet Reed grass, bramble, rush, willow, ash, Phragmites, hawthorn

Comments:

Good water quality, woodland margin along western bank, likely location of burrows if present. Eastern bank poached. Bank vole latrine. Potential water vole feeding station. Runs through duckweed. Water vole latrine. Moderate to high suitability for water vole, fencing of bank recommended as mitigation.





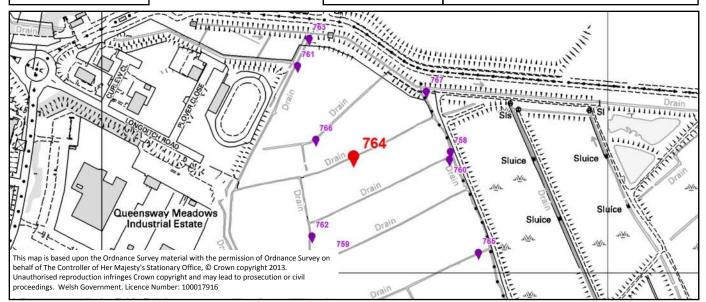
Photo 3



 Unique Reference
 764
 Date:
 17-09-2014 12:53
 GPS:
 51.571232, -2.932093

 Waterbody Number:
 Surveyor:
 TS/am

 Location Map:
 Surveyed Length:
 100



Habitat	Reen			
Bank Profile	Flat <10 degrees			
Depth of Water	<0.5m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

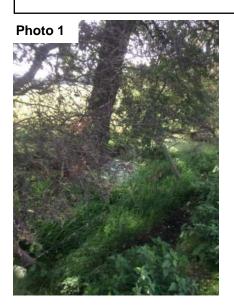
Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Blackthorn, reeds, nettle, oak, willow, bramble, sweet reed grass

Comments:

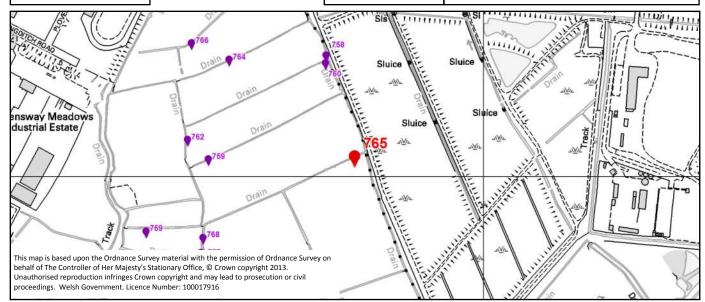
bank vole latrine and feeding station. Poached







Unique Reference	765	Date:	17-	09-2014 15:26	GPS:	51.569556, -2.928487
Waterbody Number:		Surveyor:		TS/am		
Location Map:		Surveyed Length: 200		200		



Habitat	Reen			
Bank Profile	Flat <10 degrees			
Depth of Water	0.5 - 1m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

Hawthorn, reed sweet grass, bramble, reed, thistle.

Comments:

Bank vole burrow. Runs in duck weed



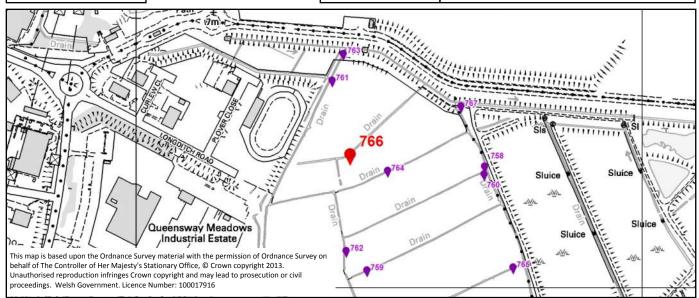




 Unique Reference
 766
 Date:
 17-09-2014 12:50
 GPS:
 51.571517, -2.933165

 Waterbody Number:
 Surveyor:
 TS/am

 Location Map:
 Surveyed Length:
 100



Habitat	Ditch
Bank Profile	Flat <10 degrees
Depth of Water	<0.5m
Channel Width	1 - 2m
Flow Speed	
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation Description	Comments:
Hawthorn, rushes	Dry ditch, lack of food, poached by livestock



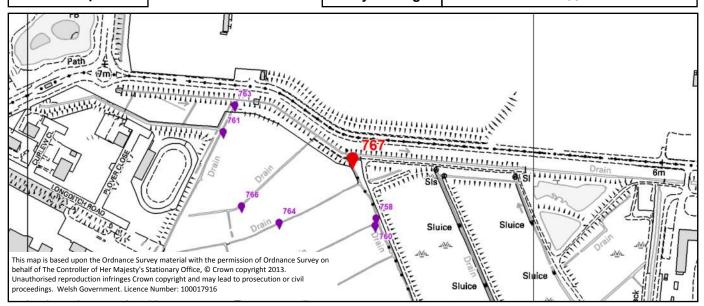




 Unique Reference
 767
 Date:
 17-09-2014 11:52
 GPS:
 51.572387, -2.930029

 Waterbody Number:
 Surveyor:
 TS/am

 Location Map:
 Surveyed Length:
 100



Habitat	Reen			
Bank Profile	Steep >45deg			
Depth of Water	0.5 - 1m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Scrub;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Willow' bramble, Phragmites, dog rose, dog wood, hawthorn

Comments:

Hard clay banks. Poor water quality. Southern bank cut, northern bank

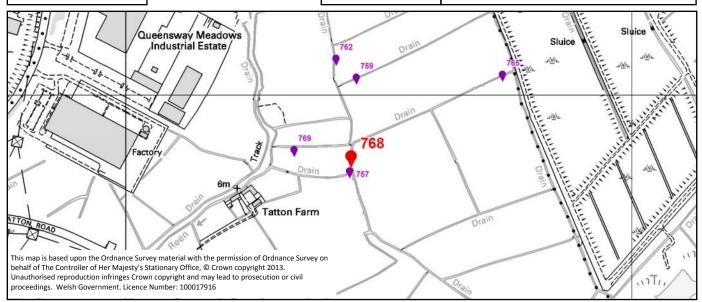








Unique Reference	768	Date:	Date: 17-09-2014 15:43		GPS: 51.568086, -2.93	
Waterbody Number:		Surveyor:		TS/am		
Location Map:		Surveyed Length:		enath:		50



Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	<0.5m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description							

Comments:

Hawthorn, blackthorn, Phragmites, rush, bramble, reed sweet grass, nettle



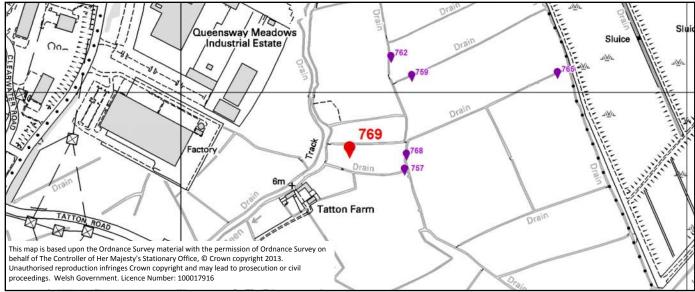




 Unique Reference
 769
 Date:
 17-09-2014 15:56
 GPS:
 51.568184, -2.934399

 Waterbody Number:
 Surveyor:
 TS/am

 Location Map:
 Surveyed Length:
 100



Habitat	Ditch			
Bank Profile	Flat <10 degrees			
Depth of Water	<0.5m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Negligible
Otter Signs	
Suitability for Watervoles	Negligible
Watervole Signs	

Vegetation	Description
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Oak, hawthorn, ivy, rose hip, nettle, rushes

Comments:

Dry ditch

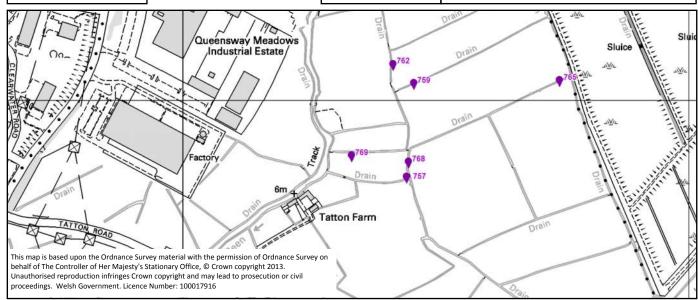








Unique Reference	770	Date:	Date: 15-09-2014 16:20		GPS:	,
Waterbody Number:		Survey	or:		AO	& ZW
Location Map:		Surveyed Length:			100	



Habitat	Pond			
Bank Profile	Steep >45deg			
Depth of Water	>2m			
Channel Width	>20m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Park/garden;
Bank Management	Unfenced
Suitability for Otters	Medium
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

Comments:

Phragmites, sweet reed grass.

Phragmites filled pond. Walked the circumference. Plop sound.





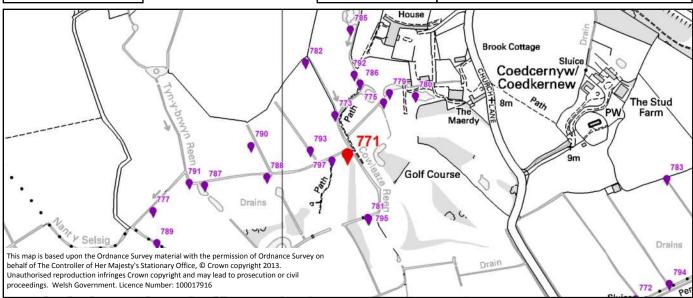




 Unique Reference
 771
 Date:
 15-09-2014 12:42
 GPS:
 51.545041, -3.05224

 Waterbody Number:
 Surveyor:
 AO & ZW

 Location Map:
 Surveyed Length:



Habitat	Reen			
Bank Profile	Vertical/undercut			
Depth of Water	>2m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Park/garden;
Bank Management	Unfenced
Suitability for Otters	Medium
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

Lemna, sweet reed grass, cut on north side, south of reen is heavily vegetated grey willow, elder, phragmites.

Comments:

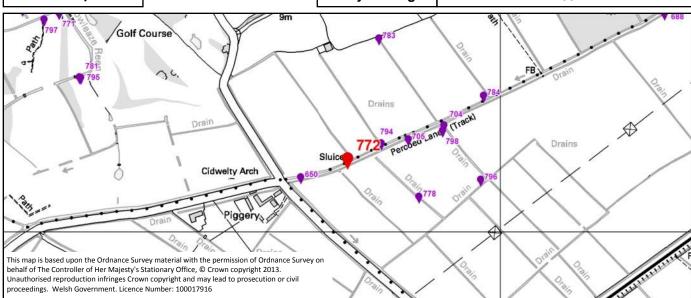
Recently cut, suggest returning when vegetation has recovered.







Unique Reference	772	Date: 16-09-2014 11:37		GPS:	51.542556, -3.043974
Waterbody Number:		Surveyor:		Zw/am	
Location Map:		Surveyed Length:		·	100



Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	0.5 - 1m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description	Comments:		
Reed sweet grass	Difficult access, fenced right up to reen edge, spot checks where possible		



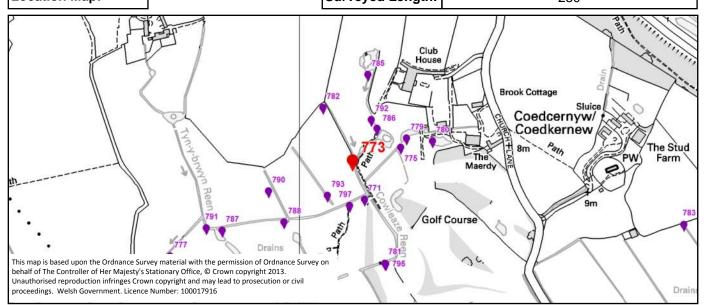




 Unique Reference
 773
 Date:
 15-09-2014 12:24
 GPS:
 51.545733, -3.052603

 Waterbody Number:
 Surveyor:
 AO & ZW

 Location Map:
 Surveyed Length:
 250



Habitat	Reen			
Bank Profile	Vertical/undercut			
Depth of Water	>2m			
Channel Width	5 - 10m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Park/garden;
Bank Management	Unfenced
Suitability for Otters	Medium
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

One side of bank (eastern edge) is heavily vegetated with sycamore, bramble, crack willow. Otherside is golf parkland managed with only a metre left of bankside vegetation. Sweetreed grass both sides of bank. Lemna in ditch.

Comments:

One side of bank (eastern edge is heavily vegetated with sycamore and crack willow, brambles). Recently cut suggest returning when bankside has recovered. Both sides of bank surveyed.





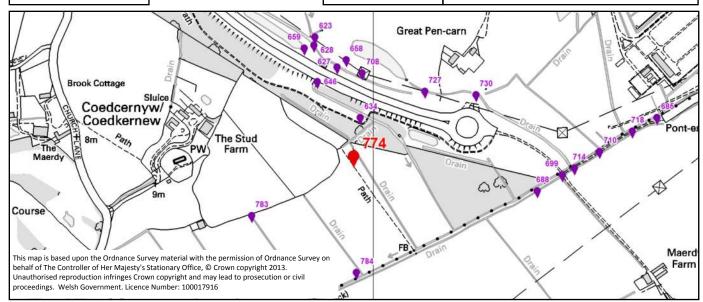




 Unique Reference
 774
 Date:
 16-09-2014 12:23
 GPS:
 51.545758, -3.040257

 Waterbody Number:
 Surveyor:
 Zw/am

 Location Map:
 Surveyed Length:
 200



Habitat	Ditch		
Bank Profile			
Depth of Water	<0.5m		
Channel Width	1 - 2m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Livestock grazing;
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation	Description

Comments:

Reed sweet grass bramble, hawthorn, blackthorn, nettle

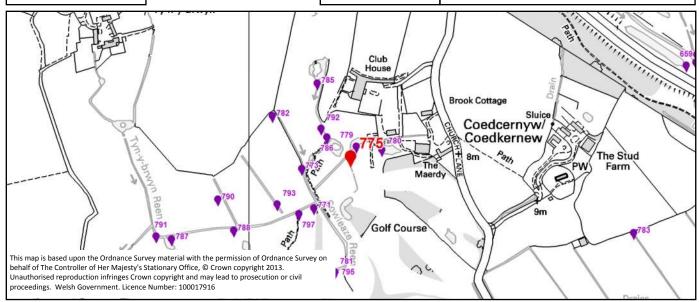
Fenced up to edge of reen







Unique Reference	775	Date:	Date: 15-09-2014 15:00		GPS:	51.545964, -3.051227
Waterbody Number:		Surveyor:		AO & ZW		
Location Map:		Surveyed Length: 200			200	



Habitat	Reen
Bank Profile	Vertical/undercut
Depth of Water	>2m
Channel Width	5 - 10m
Flow Speed	Still
Shore Banks	

Neighboring Land Use	
Bank Management	Unfenced
Suitability for Otters	Medium
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Pathways;

Vegetation Description

Phragmites, sweet reed grass. Island adjacent has weeping willow and hawthorn, juniper, bramble. Lemna in channel.

Comments:

Boat survey would be useful.

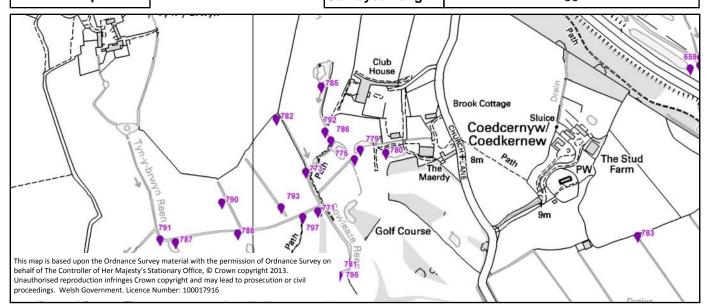








Unique Reference	776	Date:	Date: 15-09-2014 16:48		GPS:	,
Waterbody Number:		Survey	Surveyor:		AO	& ZW
Location Map:		Surve	Surveyed Length:			50



Habitat	Pond		
Bank Profile	Shallow <45deg		
Depth of Water	1 - 2m		
Channel Width	10 - 20m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Park/garden;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Comments:

Horsetail, sweet reedgrass on margins.



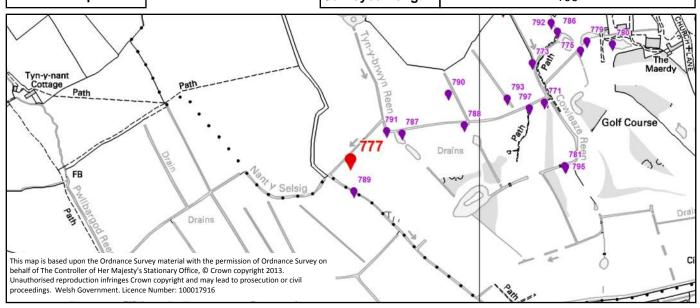




 Unique Reference
 777
 Date:
 16-09-2014 10:44
 GPS:
 51.543988, -3.05775

 Waterbody Number:
 Surveyor:
 Zw/am

 Location Map:
 Surveyed Length:
 100



Habitat	Reen			
Bank Profile	Steep >45deg			
Depth of Water	1 - 2m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Medium
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

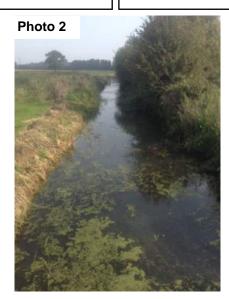
Vegetation Description

Reed sweet grass hawthorn, sycamore, willow, bramble.

Comments:

Golf course on south side. North bank recently managed

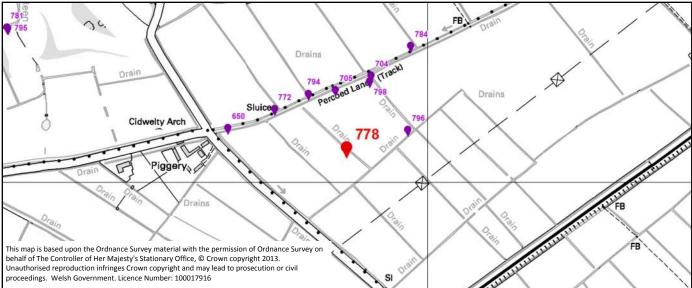








Unique Reference	778	Date:	Date: 16-09-2014 12:47		GPS:	GPS: 51.541894, -3.041916		
Waterbody Number:		Surveyor:			Zw/am			
Location Map:		Survey	ed Le	ength:		200		
7819			1	FB	ain			



Habitat	Reen		
Bank Profile	Shallow <45deg		
Depth of Water	0.5 - 1m		
Channel Width	1 - 2m		
Flow Speed	Still		
Shore Banks	Earth		

Neighboring Land Use	Livestock grazing;
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

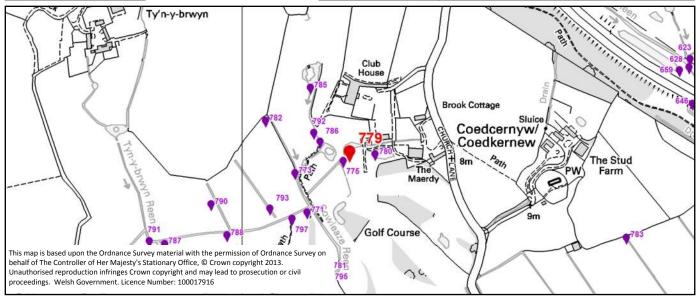
Vegetation Description	Comments:
Bramble, blackthorn, hawthorn, willow, thistle	Limited accessibility







Unique Reference	779	Date:	Date: 15-09-2014 14:43		GPS:	51.546133, -3.051064
Waterbody Number:		Surveyor:		AO & ZW		
Location Map:		Surveyed Length:		200		



Habitat	Lake
Bank Profile	Vertical/undercut
Depth of Water	>2m
Channel Width	>20m
Flow Speed	Still
Shore Banks	

Neighboring Land Use	
Bank Management	
Suitability for Otters	Medium
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

Pond in middle of golf course. With phragmites, sweet reed grass. Lemna, arrowhead.

Comments:

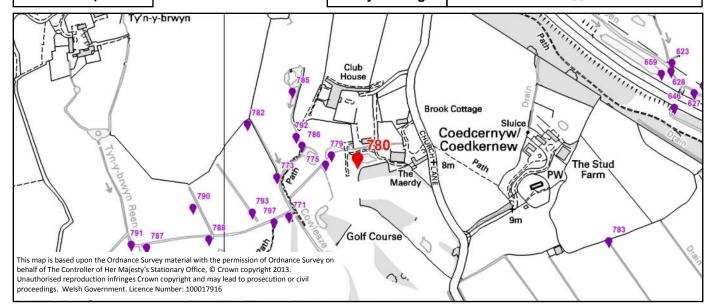








Unique Reference	780	Date:	15-	09-2014 14:53	GPS:	51.546085, -3.050325
Waterbody Number:		Survey	or:		AO	& ZW
Location Map:		Surveyed Length: 100		100		



Habitat	Lake
Bank Profile	Shallow <45deg
Depth of Water	>2m
Channel Width	>20m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Park/garden;
Bank Management	Unfenced
Suitability for Otters	Medium
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

Bullrush, sweetreed grass.

Comments:

An abundance of dragonflies. Only surveyed edge of pond adjacent to golf course, as didn't have access permission to other bankside.





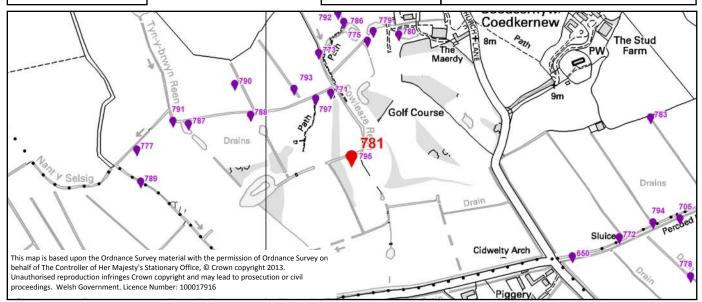




 Unique Reference
 781
 Date:
 15-09-2014 15:35
 GPS:
 51.54392, -3.051635

 Waterbody Number:
 Surveyor:
 AO & ZW

 Location Map:
 Surveyed Length:
 100



Habitat	Ditch
Bank Profile	
Depth of Water	>2m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Park/garden;
Bank Management	Unfenced
Suitability for Otters	Medium
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Pathways; Feeding Stations;

Vegetation Description

Comments:

Bullrush, sweet reed grass. Adjacent to copse of crack willow. Lemna covers water body.

Both sides of bank surveyed. Fresh sweet reed grass feeding remains.





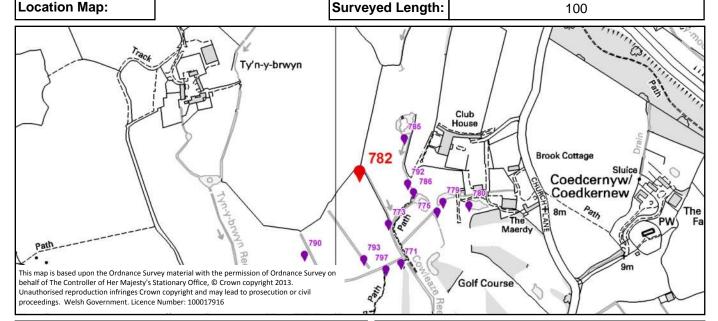




 Unique Reference
 782
 Date:
 15-09-2014 11:44
 GPS:
 51.546653, -3.05346

 Waterbody Number:
 Surveyor:
 AO & ZW

 Location Map:
 Surveyed Length:
 100



Habitat	Reen
Bank Profile	Steep >45deg
Depth of Water	1 - 2m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing; Park/garden;
Bank Management	Mixture
Suitability for Otters	Medium
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	Burrows;

Vegetation Description

Lemna, Sweet reed grass on edge and eastern side of ditch bank has a vegetated corridor of woodland with ash crack willow, bramble, ivy.

Comments:

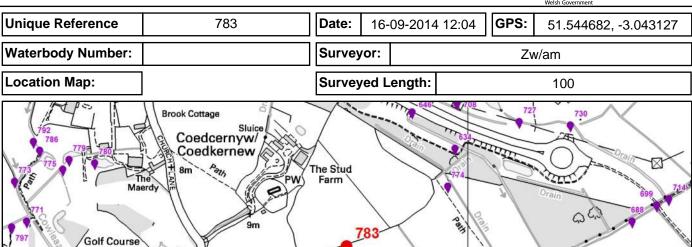
Burrow, with 45 degree angle veg inside. The bank has very recently been managed. Inaccesible to survey entire reen as bank is too narrow on a stretch, or cut. Suggest resurveying when vegetation has recovered.m











Drains

Habitat	Reen
Bank Profile	Shallow <45deg
Depth of Water	0.5 - 1m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Earth

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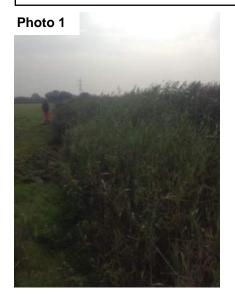
proceedings. Welsh Government. Licence Number: 100017916

Neighboring Land Use	Livestock grazing;
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Photo 3

Drains

Vegetation Description	Comments:
Reed sweet grass, bramble, nettle	, difficult to accessFenced up to reen edge







					Welsh Governm	ent	
Unique Reference	784	Date:	16-09-2014 1	2:12 GP	S: 51.54	137, -3.0401	116
Waterbody Number:		Surveyor:			Zw/am		
Location Map:		Survey	ed Length:		100		
Cidwelty Arch This map is based upon the Ordnance Surv behalf of The Controller of Her Majesty's S	Sluice 772 Percoed Lane 778 rey material with the permission of Ordnance Survetationary Office, © Crown copyright 2013. n copyright and may lead to prosecution or civil	704 (Track) 798	84 FB Drain		714 699 688	7,100 7/18	Maerdy Farm

Habitat	Ditch
Bank Profile	Shallow <45deg
Depth of Water	<0.5m
Channel Width	<1m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

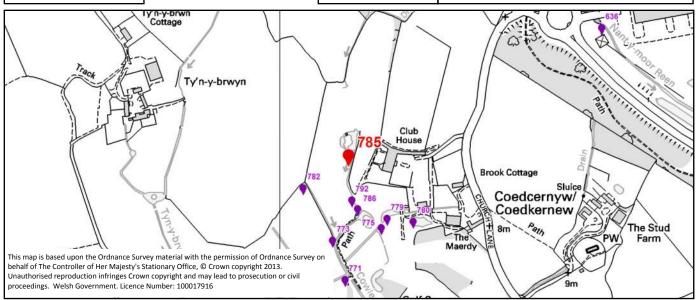
Vegetation Description	Comments:
Dense bramble, blackthorn, hawthorn	Dense hedgerow, limited access



Photo 2 Photo 3



Unique Reference	785	Date:	Date: 16-09-2014 11:14		GPS : 51.547244, -3.05219	
Waterbody Number:		Surveyor:		Zv	ı/am	
Location Map:		Surveyed Length:		_	50	



Habitat	Reen
Bank Profile	Shallow <45deg
Depth of Water	<0.5m
Channel Width	2 - 5m
Flow Speed	Still
Shore Banks	

Neighboring Land Use	
Bank Management	Unfenced
Suitability for Otters	Medium
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

Willow, bramble, nettle, reed, bulrush,

Comments:

Banks recently managed





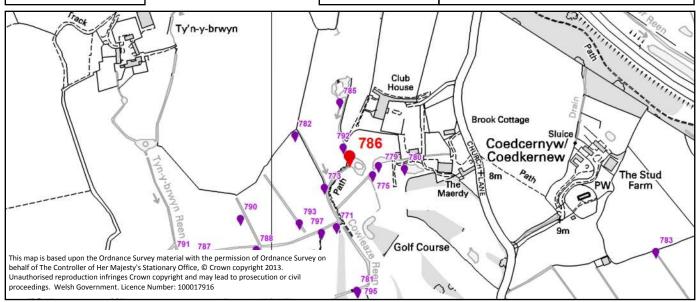




 Unique Reference
 786
 Date:
 15-09-2014 14:29
 GPS:
 51.546295, -3.051906

 Waterbody Number:
 Surveyor:
 AO & ZW

 Location Map:
 Surveyed Length:



Habitat	Pond
Bank Profile	Steep >45deg
Depth of Water	>2m
Channel Width	5 - 10m
Flow Speed	Still
Shore Banks	Earth

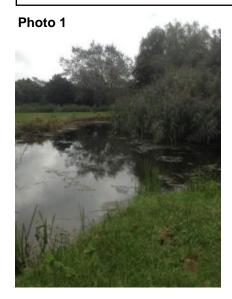
Neighboring Land Use	Park/garden;
Bank Management	Unfenced
Suitability for Otters	Medium
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

Pond with phragmites, island with scrub. Boat survey could be done. Sweet reed grass.

Comments:

Potential for amphibians.

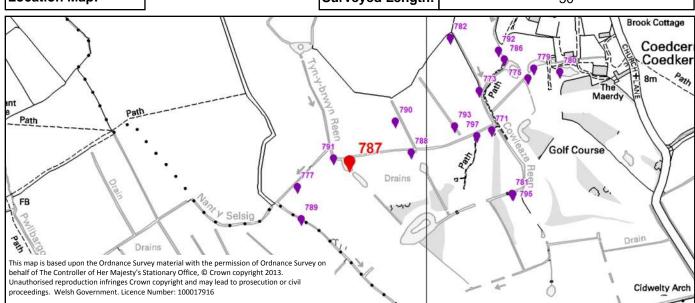








Unique Reference	787	Date: 15-09-2014 16:44		GPS:	51.544453, -3.056282
Waterbody Number:		Surveyor:		AO & ZW	
Location Map:		Surveyed Length:			50



Habitat	Pond
Bank Profile	Steep >45deg
Depth of Water	>2m
Channel Width	10 - 20m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Park/garden;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Comments:

Bankside vegetation recently cut.

Sweet reed grass, horsetail, goat willow adjacent to pond.



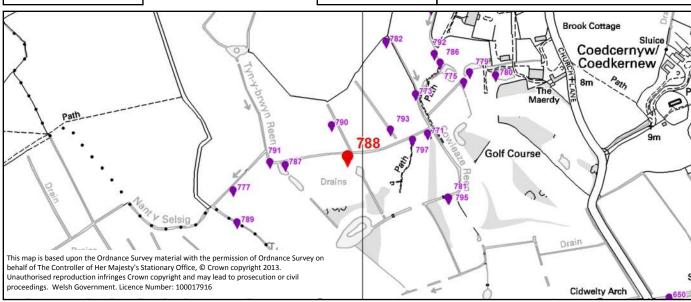




 Unique Reference
 788
 Date:
 15-09-2014 16:32
 GPS:
 51.544619, -3.05452

 Waterbody Number:
 Surveyor:
 AO & ZW

 Location Map:
 Surveyed Length:



Habitat	Reen				
Bank Profile	Steep >45deg				
Depth of Water	>2m				
Channel Width	2 - 5m				
Flow Speed	Still				
Shore Banks	Earth				

Neighboring Land Use	Park/garden;
Bank Management	Mixture
Suitability for Otters	Medium
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description Comments:

Phragmites, nettles on riverbank.







Unique Reference Date: GPS: 789 16-09-2014 10:53 51.543423, -3.05763 Waterbody Number: Surveyor: Zw/am **Location Map:** Surveyed Length: Tyn-y-nant Cottage Golf Course Drains Selsig Drains

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Habitat	Reen			
Bank Profile	Steep >45deg			
Depth of Water	1 - 2m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Mixture
Suitability for Otters	Medium
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description	Comments:
Bramble, reed	Inaccessible due to bramble hedge. No land access on west bank. Recently managed on west bank. Golf course on east side.

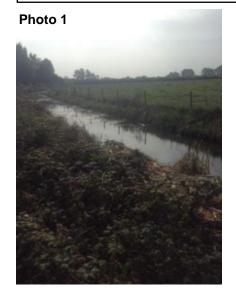
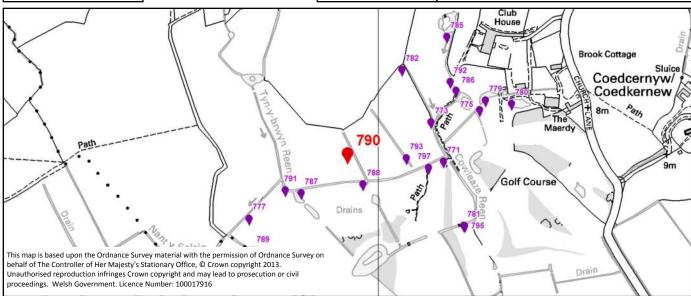


Photo 2 Photo 3



Unique Reference	790	Date:	16-0	09-2014 10:09	GPS:	51.545166, -3.054981	
Waterbody Number:		Surveyor:			Zw/am		
Location Map:		Surveyed Length:		ength:	h : 50		



Habitat	
Bank Profile	Shallow <45deg
Depth of Water	0.5 - 1m
Channel Width	1 - 2m
Flow Speed	Still
Shore Banks	Earth

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

Reed sweet grass, bulrushes,

Comments:

Access difficult due to dense vegetation











						Llywodraeth Cymru Welsh Government
Unique Reference	791	Date:	16-09-201	14 10:17	GPS:	51.544498, -3.05673
Waterbody Number:		Survey	or:		Zw	ı/am
Location Map:		Survey	ed Length	ngth: 100		100
This map is based upon the Ordnance Surbehalf of The Controller of Her Majesty's S	Drains Wey material with the permission of Ordnance Survestationary Office, © Crown copyright 2013. In copyright and may lead to prosecution or civil	7777	790 787 Drains	782	792 786 775 777 777 777	Golf Course
proceedings. Welsh Government. Licence	Number: 100017916			-0		Cidwelty A

Habitat	Reen				
Bank Profile	Shallow <45deg				
Depth of Water	1 - 2m				
Channel Width	2 - 5m				
Flow Speed	Still				
Shore Banks	Earth				

Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Medium
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

Comments:

Brambles, reeds, reed sweet grass

East bank recently managed





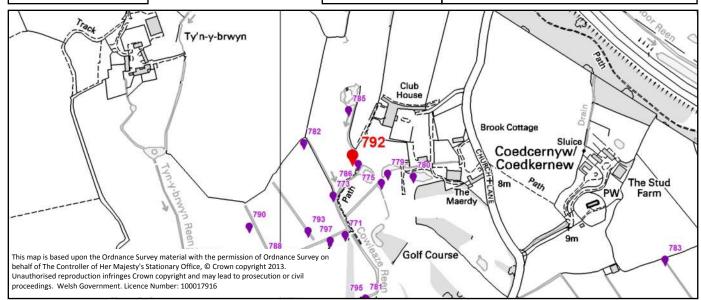




 Unique Reference
 792
 Date:
 16-09-2014 11:12
 GPS:
 51.546448, -3.052075

 Waterbody Number:
 Surveyor:
 Zw/am

 Location Map:
 Surveyed Length:
 50



Habitat	Reen				
Bank Profile	Steep >45deg				
Depth of Water	<0.5m				
Channel Width	<1m				
Flow Speed	Still				
Shore Banks	Earth				

Neighboring Land Use	Park/garden;				
Bank Management	Unfenced				
Suitability for Otters	Medium				
Otter Signs					
Suitability for Watervoles	Low				
Watervole Signs					

Vegetation Des	cription
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Willow, nettle, bramble, oak, reed,

Comments:

Banks recently managed. On golf course







						Welsh Government
Unique Reference	793	Date:	16-	09-2014 09:57	GPS:	51.545099, -3.053295
Waterbody Number:		Surveyor: Zw/am			v/am	
Location Map:		Survey	ed L	ength:		
Poth.	791 787 Drains	788	793	Golf Cour	The	Coedcernyw/Coedkernew 8m PW Far

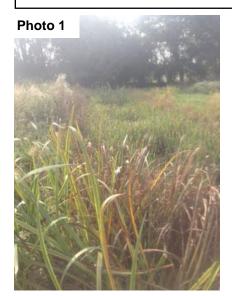
Habitat	Reen					
Bank Profile	Shallow <45deg					
Depth of Water	1 - 2m					
Channel Width	1 - 2m					
Flow Speed	Still					
Shore Banks	Earth					

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Neighboring Land Use	Livestock grazing;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

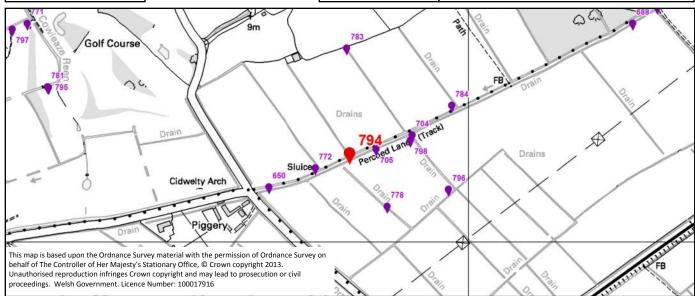
Vegetation Description	Comments:
Nettles, bulrushes, reeds	







Unique Reference	794	Date: 16-09-2014 11:56		GPS:	51.542831, -3.043011		
Waterbody Number:		Surveyor:			Zw/am		
Location Map:		Surveyed Length:		ength:	100		



Habitat	Reen				
Bank Profile	Shallow <45deg				
Depth of Water	0.5 - 1m				
Channel Width	1 - 2m				
Flow Speed	Still				
Shore Banks	Earth				

Neighboring Land Use	Livestock grazing;
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description	Comments:				
Reed sweet grass, nettle, bramble	Fenced up to reen, difficult to access.				



Photo 2 Photo 3



Drains

						Welsh Government		
Unique Reference	795	Date:	Date: 15-09-2014 15:34		GPS:	GPS: 51.543908, -3.051606		
Waterbody Number:		Survey	Surveyor:			AO & ZW		
Location Map:		Survey	Surveyed Length:			100		
	790 790 791	792 786 775	Golf Course	The Hanning	pedkern	PW Farm		

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Habitat	Reen			
Bank Profile	Vertical/undercut			
Depth of Water	>2m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Park/garden;
Bank Management	Unfenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Drain

Cidwelty Arch

Vegetation Description	Comments:
Sweet reed grass adjacent to reen.	Overly managed hardly any bankside vegetation.



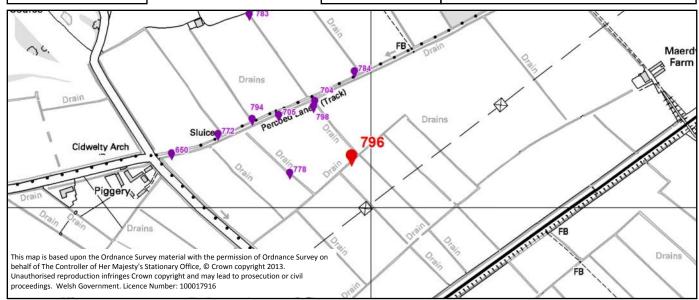
Photo 2 Photo 3



 Unique Reference
 796
 Date:
 16-09-2014 12:44
 GPS:
 51.542214, -3.040166

 Waterbody Number:
 Surveyor:
 Zw/am

 Location Map:
 Surveyed Length:
 100



Habitat	Reen			
Bank Profile	Shallow <45deg			
Depth of Water	<0.5m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Low
Watervole Signs	

Vegetation Description

Comments:

Dense. Bramble, hawthorn, blackthorn, reed sweet grass

Limited accessibility due to fencing and dense vegetation



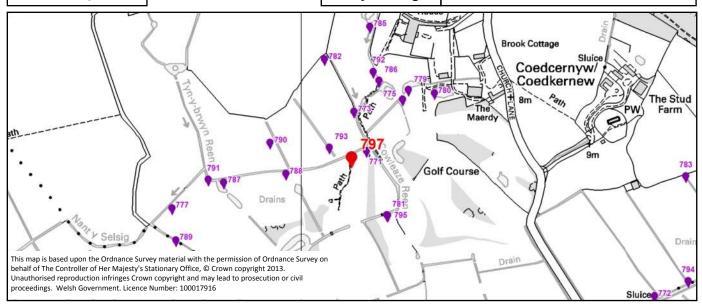




 Unique Reference
 797
 Date:
 15-09-2014 16:08
 GPS:
 51.54493, -3.052664

 Waterbody Number:
 Surveyor:
 Joe

 Location Map:
 Surveyed Length:
 200



Habitat	Reen			
Bank Profile	Steep >45deg			
Depth of Water	>2m			
Channel Width	2 - 5m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing; Park/garden;
Bank Management	Mixture
Suitability for Otters	Medium
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description

Comments:

Phragmites, sweet reed grass, nettles. Lemna in channel.

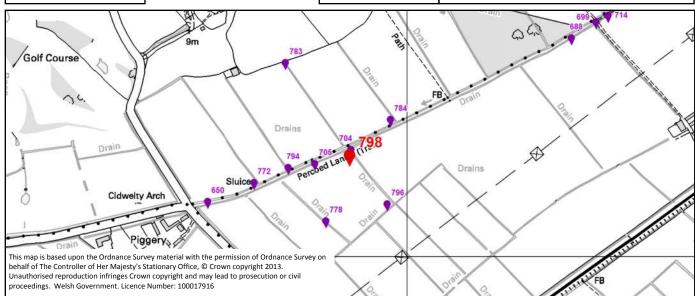
Bank recently managed on northern side of bank.







Unique Reference	798	Date:	16-0	9-2014 12:40	GPS:	51.543068, -3.041271
Waterbody Number:		Surveyor:			Zw/am	
Location Map:		Surveyed Length:		ength:		100



Habitat	Ditch			
Bank Profile	Shallow <45deg			
Depth of Water	<0.5m			
Channel Width	1 - 2m			
Flow Speed	Still			
Shore Banks	Earth			

Neighboring Land Use	Livestock grazing;
Bank Management	Fenced
Suitability for Otters	Low
Otter Signs	
Suitability for Watervoles	Medium
Watervole Signs	

Vegetation Description	Comments:
Reed sweet grass, bramble, hawthorn, blackthorn	Fenced up to ditch edge



