

A4119 Ely Valley Road
Dualling
Environmental Impact Assessment
Screening Report
February 2018

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Drawings

GC2895-RED-61-XX-DR-C-0101 Site Location

GC2895-RED-61-XX-DR-C-0102_GA General Arrangement

GC2895-RED-61-XX-DR-C-0103_GA General Arrangement

GC2895-RED-61-XX-DR-C-0104_GA General Arrangement

1. Introduction

This screening report has been prepared to support a request for an Environmental Impact Assessment (EIA) Screening Opinion from Rhondda Cynon Taf County Borough Council (RCT) for the proposed construction of the A4119 Ely Valley Road Dualling between the Fire Service roundabout and the Coedely roundabout (proposed scheme) (Drawing GC2895-RED-61-XX-DR-C-0101 Site Location).

It is proposed that the scheme is undertaken under Permitted Development rights, although it is anticipated that all required studies and documentation that would be required for planning will be produced.

This EIA Screening Opinion has therefore been undertaken in accordance with the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017.

The EIA Screening Report contains:

- A plan identifying the extent of the land required for the proposed scheme.
- A description of the project – including the physical characteristics of the whole project and where relevant, of demolition works.
- A description of the location of the project – with particular regard to the environmental sensitivity of the geographical areas likely to be affected.
- A description of the aspect of the environment likely to be significantly affected by the project.
- A description of the measures and/or features which are proposed to avoid or prevent significant adverse effects.
- A description of any likely significant effects, to the extent of the information available on such effects, of the project on the environment resulting from:
 - The expected residues and emissions and the production of waste where relevant.
 - The use of natural resources, in particular soil, land, water and biodiversity.

The aim of the proposed scheme is to support RCT's proposal to open up a 14.32ha Strategic Area for Employment site that has been identified in RCT's Local Development Plan. To understand the feasibility of the proposed scheme, RCT commissioned Capita to undertake a feasibility study in terms of capital cost, highways alignment, traffic and transportation and ecology.

1.1 Proposed scheme description

The proposed scheme is located between Coedely and Ynysmaerdy, running in a north-westerly to south-easterly direction (Grid Reference ST 025 850). The proposed scheme is located in the Ely Valley, with the River Ely running parallel to the west of the proposed scheme. The A4119 is currently a single carriageway road in the Coedely area. As well as giving access to Coedely, the Coedely roundabout will also give access to the Strategic Area of Employment site. The roundabout currently suffers from a degree of traffic congestion during peak periods, which impact on the A4119 to the south. Even without the Strategic Area development, traffic in 2033 will mean

that the northern A4119 will be over capacity in the morning peak period and the southern arm well over capacity in the afternoon peak period.

The proposed dualling would take place between the Fire Service roundabout and the Coedely roundabout over a 1.3km section. The approximate footprint of the scheme will be 6.45ha. Also included in the proposed scheme will be alterations at the two roundabouts to improve traffic capacity. The proposed scheme is shown in Drawings GC2895-RED-61-XX-DR-C-0102_GA, GC2895-RED-61-XX-DR-C-0103_GA and GC2895-RED-61-XX-DR-C-0104_GA.

The proposed scheme objectives are detailed below:

- To improve highway journey times on the north/south A4119 corridor and improve access to the M4.
- To improve the economic and employment opportunities in the Ely Valley and provide employment and social benefits.
- To improve Active Travel routes along the north/south A4119 corridor with the aim of improving the health and well-being of the local community.
- To improve environmental conditions, including air quality and noise and to minimise the overall impact on the environment within the north/south A4119 corridor.
- To improve the patronage of public transport and improve public transport reliability within the north/south A4119 corridor.
- To improve safety and reduce the number of collision and KSIs on the A4119 between Talbot Green and Coedely.

1.2 Description of the local environment

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

2. Environmental Impact Assessment

2.1 Background to EIA

2.1.1 *EU Directives*

In the UK the EIA regime is governed by European Council Directive No 85/337/EEC, as amended by Council Directives 97/11/*EC and 2009/31/EC which have been codified by 2011/92/EU. This has subsequently been amended by 2014/52/EU and has been recently transposed into UK law.

Under the EU Directive, certain major projects such as the construction of motorways, major chemical installations etc. are listed as Annex I projects where EIA is mandatory. Projects listed in Annex II of the directive may or may not require EIA dependent on their predicted environmental effects. Annex II lists the construction of new roads under Section 10 Infrastructure Projects, item (e) "construction of roads, harbours and port installations, including fishing harbours (projects not included in Annex I)". Member states then set relevant threshold criteria. Where a project is Annex II, criteria contained within Annex III should be taken into account, under the following:

- Characteristics of projects.
- Location of projects.
- Type and characteristics of the potential impact.

2.1.2 *Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 (SI 2017 No. 576 (W.136))*

Under the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 (hereinafter referred to as "the EIA Regulations"), certain major projects such as the construction of motorways, major chemical installations etc. are listed as Schedule 1 projects where EIA is mandatory. Projects listed in Schedule 2 of the Regulations may or may not require EIA dependent upon their predicted environmental effects. Schedule 2 of the Regulations list the construction of new roads under "Infrastructure", section 10 (f). The relevant threshold criteria state that EIA may be required where the area of works exceeds 1 hectare or where works are proposed within a 'sensitive area' as defined by the Regulations.

Under Section 3 (10) of the Town and Country Planning (General Permitted Development) Order 1995, subject to paragraph (12),

'...development is not permitted by this Order if an application for planning permission for that development would be a Schedule 1 or a Schedule 2 application within the meaning of the Town and Country Planning (Assessment of Environmental Effects) Regulations 1988 (as amended).

Town and Country Planning (General Permitted Development) Order 1995:

Schedule 2, Part 13 – *'The carrying out by a local highway authority on land outside but adjoining the boundary of an existing highway of works required for or incidental to the maintenance or improvement of the highway. These activities however, are not listed under Section 3 (12) of the Town and Country Planning (General Permitted Development) Order 1995.'*

It is therefore concluded that as the proposed scheme satisfies the criteria for EIA Schedule 2 development (i.e. construction of a road with total area in excess of 1 ha), then Permitted Development Rights cannot be exercised until an EIA Screening Opinion has been obtained from the local planning authority.

2.2 Screening for EIA

The scheme does not fall within Schedule 1 of the EIA Regulations. Schedule 2 of the EIA Regulations identifies the project as an Infrastructure Project under Section 10(f).

Under Schedule 2 10(f), where the construction of a road exceeds 1 hectare in area (including any area occupied by apparatus, plant/equipment, materials, spoil heaps etc.), then it is considered potential EIA development and requires a Screening Opinion from the local planning authority.

The footprint of the proposed construction at Coedely is over 1ha and therefore must be considered for the EIA screening process at this stage, referring to the criteria listed in Schedule 3 of the Regulations.

The selection criteria to be considered when screening a Schedule 2 development are:

Characteristics of projects

The characteristics of projects must be considered, with particular regard to:

- a) The size and design of the project;
- b) Cumulation with other existing and/or approved projects;
- c) The use of natural resources, in particular land, soil, water and biodiversity;
- d) The production of waste;
- e) Pollution and nuisances;
- f) The risk of major accidents and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge;
- g) The risks to human health (for example due to water contamination or air pollution).

Location of projects

The environmental sensitivity of geographical areas likely to be affected by projects must be considered, with particular regard to:

- a) The existing and approved land use;
- b) The relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground;
- c) The absorption capacity of the natural environment, paying particular attention to the following areas:
 - i. Wetlands, riparian areas, river mouths;
 - ii. Coastal zones and the marine environment;
 - iii. Mountain and forest areas;

- iv. Nature reserves and parks;
- v. European sites and other areas classified or protected under national legislation;
- vi. Areas in which there has already been a failure to meet environmental quality standards, laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure;
- vii. Densely populated areas;
- viii. Landscapes and sites of historical, cultural or archaeological significance.

Type and characteristics of the potential impact

The likely significant effects of the development on the environment must be considered in relation to criteria set out under paragraphs 1 and 2, of this Schedule, with regard to the impact of the project of the factors specified in regulation 4(2), taking into account:

- a) The magnitude and spatial extent of the impact (for example geographical area and size of the population likely to be affected);
- b) The nature of the impact;
- c) The transboundary nature of the impact;
- d) The intensity and complexity of the impact;
- e) The probability of the impact;
- f) The expected onset, duration, frequency and reversibility of the impact;
- g) The cumulation of the impact with the impact of other existing and/or approved projects;
- h) The possibility of effectively reducing the impact.

If significant adverse effects from the proposed scheme, which cannot be sufficiently mitigated, are identified from application of the Schedule 3 criteria then an EIA will be required.

3. Baseline information and potential impacts

3.1 Air Quality

There are a number of Air Quality Management Areas (AQMA) in Rhondda Cynon Taf, however there are no AQMAs within the vicinity of the proposed scheme. The closest is 3.1km to the south-west, in Llanharan.

The proposed scheme is located in an area where air quality is mainly driven by emissions from road traffic, particularly by vehicles using the A4119. There are no known significant industrial pollution sources in the immediate vicinity of the Application Site that are likely to influence local air quality.

There are congestion and capacity issues along this section of the A4119, however the road does not pass close to existing large scale residential areas and there is no real requirement of a transport intervention to reduce noise and air quality impacts. Therefore, it is not anticipated that the operation of the proposed scheme will have significant impacts on air quality from operation of the scheme.

During construction localised dust impacts could occur from earthworks and materials storage or movements. There are less than 10 residential receptors within 20m of the proposed scheme and 10 to 100 residential receptors within 50m of the roads likely to be used by construction vehicles up to 500m from the site boundary. There are no dust sensitive receptors in close proximity to the proposed scheme area, and therefore effects are not expected to be significant.

Standard accepted practice to minimise dust levels and nuisance will be employed as part of a Construction Environmental Management Plan (CEMP), therefore reducing impacts on air quality from construction. There will also be temporary effects to air due to emissions generated from construction vehicles, however these will be addressed with mitigation measures detailed in the Construction Environmental Management Plan (CEMP) and are therefore not expected to be significant. Additionally, an air quality assessment in line with DMRB and/or as agreed with the County Environmental Health Officer (EHO) will be undertaken.

3.2 Cultural heritage

The proposed scheme does not have any cultural heritage assets within its immediate vicinity. The closest Scheduled Monument is 1.3km south-west of the proposed scheme, this is The Beacons Round Barrows. This is located on Mynydd Garthmaetwg, and therefore elevated some way from the proposed scheme. The intervening Llantrisant Forest will also mean that it is unlikely that the proposed scheme will have adverse effects on the Scheduled Monument or its setting.

There are two Listed Buildings within 500m of the proposed scheme. These are the Grade II listed explosives store of former Llantrisant Colliery, located approximately 32 m south of the proposed scheme and the Grade II Cow shed at Ynysmaerdy Farm (formerly stores of Llantrisant Colliery, located approximately 420m south of the proposed scheme. Listed Buildings associated with Llantrisant Colliery are also approximately 500m to 700m south of the proposed scheme. The nearest conservation area is 1.4km to the south-east in Llantrisant. Due to intervening vegetation and woodland between the buildings and the proposed scheme, adverse effects on the setting of heritage assets is not anticipated.

3.3 Landscape/light

The proposed scheme is located within a steep river valley, with the River Ely flowing parallel to the west of the A4119. Surrounding the scheme, there is woodland to the south-west and arable land to the north-east. The river corridor is well-vegetated along its banks. There are a few residences within the valley, set back from the existing road alignment. An industrial area lies adjacent to the north-east of the Fire Service roundabout, with residential area (Ynysmaerdy) and Royal Glamorgan Hospital to the south-east of the Fire service roundabout. A caravan dealership lies adjacent to the north of the Coedely roundabout, with the residential area of Coedely further north along Ely Valley road.

Direct landscape impacts will include the loss of vegetation within the footprint of the proposed scheme as well as the imposition of a wider road.

The existing road is currently lit by street lighting. The specification and layout of any new lighting that may be included within the design should be agreed with a landscape architect and an experienced ecologist at the design stage.

The proposed scheme falls within two LANDMAP Visual and Sensory Areas, with the majority being in area VS 589 Nant Muchudd. This is described as “valley sides with rural feel evoked by grazed fields and woodland blocks and riparian vegetation and common land. Main road through western part.” It is evaluated as moderate overall value. The proposed scheme is unlikely to alter the visual and landscape aspects of the area significantly, and therefore significant impacts on the characteristics of this area are not anticipated.

The southern section of the proposed scheme, including the Fire Service roundabout, is within VS 006 Llantrisant Business Park. This is described as “established industrial estate with recent extensions including major hospital and business park. Set in valley so pleasant views out to hillsides. Seen from main road and from a distance where large sheds and roofs are discordant in wider landscape. Generally well maintained landscape surrounding buildings.” The area is evaluated as low overall value. The proposed scheme is unlikely to be visible and significant impacts on the characteristics of this landscape are not anticipated.

To the west of the River Ely is VS 436 Mynydd Gaer. This is described as “undulating ridge-like landform with distinct upland character...extensive views to uplands and over adjacent lower farmland to coast.” The area is evaluated as high overall, however the proposed scheme is unlikely to be visible from much of the areas due to intervening vegetation and within the context of the existing road, the proposed scheme is unlikely to be seen as a major change and impacts on the characteristics of this area are unlikely to be significant.

To the east of the proposed scheme is VS 966 Bettws. This is described as “undulating landscape of generally southerly facing agricultural land with pronounced field pattern (some hedges) and feeling of a more controlled/managed/settled landscape”. The area is evaluated as moderate overall value. The proposed scheme is likely to be visible from some parts of the landscape however within the context of the existing road, the proposed scheme is unlikely to be seen as a major change and impacts on the characteristics of this area are unlikely to be significant.

The proposed scheme does not pass directly through residential areas and views from residential areas will be sensitive to changes to the surrounding landscape, however there are very few residential areas from which the proposed scheme will be visible. There may be some visual

impact from the proposed scheme on the nearest residences, however these are likely to be minimised by intervening vegetation and therefore not considered significant.

There is a cycle route in close proximity to the proposed scheme, albeit in a more remote location. This can also be used by pedestrians, however it is not adjacent to the proposed scheme. Therefore visual impacts to this amenity are not considered significant.

Landscape designations within the study area reflect the increased sensitivity and value of the landscape aspects and include the following:

- **Mynydd Y Glyn and Nant Muchudd Basin Special Landscape Area (SLA).** This lies to over the proposed scheme area from the upper Ely valley in the west. The designation is designed to protect the landscape character from large-scale developments, and to conserve primary habitats of unimproved grassland and old patterns of farmland. Policy SSA 23 – Special Landscape Areas in the Local Development Plan provides for SLAs, and states that “particular consideration has been given to the protection of the unspoilt low lying farmland, common land and gentle valley slopes which form a visual backdrop to the settlements of the area.” The proposed scheme is not anticipated to have a significant effect on this SLA as the proposed scheme will retain many of the SLA’s features.
- **Llantrisant Surrounds SLA.** This lies to the south of the proposed scheme, from the edge of Llantrisant Business Park and Llantrisant Common in the north, stretching southwards. The designation is designed to protect the landscape character by retaining a buffer/separation zone for Llantrisant, with no additional developments and to preserve/conservate the hillfort. This SLA is also provided for by Policy SSA 23. The proposed scheme is not expected to have a direct effect on this SLA as it is outside the boundary. Visibility of the proposed scheme will extend into the Special Landscape Areas with some indirect effects likely although it will be seen within a developed context and effects are unlikely to be significant.
- **Mynedd Hugh and Llantrisant Forest SLA.** This lies to the south-west of the proposed scheme, covering the lower slopes of the Ely Valley over Llantrisant Forest. The designation is designed to protect its prominent ridge of hills and historic features. This SLA is also provided for by Policy SSA 23. The proposed scheme is not expected to have a direct effect on this SLA as it is outside the boundary. Visibility of the proposed scheme will extend into the Special Landscape Areas with some indirect effects likely although it will be seen within a developed context and effects are unlikely to be significant.

A landscape and visual impact (LVIA) assessment will be undertaken. The methodology will be based on the following documents:

- Guidelines for Landscape and Visual Impact Assessment, 3rd Edition. Produced jointly by The Landscape Institute and The Institute of Environmental Management and Assessment.
- DMRB, Volume 11, Section 3, (May 2007) including IAN125/09 and 15.

Criteria to establish sensitivity, magnitude and significance evaluations will be gauged and itemised within the assessment. It is considered that the LVIA is sufficient to assess the landscape and visual impacts of the scheme, and propose recommendations to minimise impact. Therefore, an EIA is not required for landscape effects.

3.4 Biodiversity

There are two SSSIs within 2 km of the proposed scheme. These are:

- **Rhos Tonyrefail SSSI**, covering an area of 224.7 ha and consists of a network of seven groups of fields around Tonyrefail, the nearest of which is located approximately 310 m east of the proposed scheme. The site is a large lowland site of special interest for its marshy grassland, acid flush, species-rich neutral grassland, acid grassland, wet heath and blanket mire which are associated with areas of woodland. The site is also of special interest for its population of marsh fritillary butterfly *Euphydryas aurinia*.
- **Llantrisant Common and Pastures SSSI**, is 113.2 ha and is located approximately 900 m south-east of the proposed scheme. The site is designated for its extensive area of predominantly acidic marshy grassland in a lowland setting and for smaller areas of species-rich neutral and acidic grassland and soligenous fish. It is also of special interest for its populations of the nationally rare liverwort *Scapania paludicola* and the nationally scarce Cornish moneywort *Sibthorpia europaea* plant species.

There are four non-statutory sites within 500 m of the proposed scheme. These are designated as Sites of Importance to Nature Conservation (SINC):

- **The River Ely SINC** (50.3 ha) runs parallel to the west of the A4119. The River Ely is a prime wildlife corridor and the SINC includes the river, and associated bank side habitats, between Tonyrefail and Talbot Green. The Ely, although previously polluted, has not recovered to generally good water quality. It is a key river for otter *Lutra lutra*, and it supports kingfisher *Alcedo atthis*, dipper *Cinclus cinclus* and grey wagtail *Motacilla cinerea*. Brown trout *Salmo trutta* and salmon *Salmo salar* both breed within its length. The river supports wooded banks, with alder *Alnus glutinosa* the primary tree and associates areas of wet alder woodland. Monkshood *Aconitum napellus* is a speciality of the wooded banks of the River Ely.
- **Llantrisant Forestry and Craig Melyn SINC** (306.9 ha) is located approximately 50 m south-west of the Fire Service roundabout. Llantrisant Forest is the older Forestry Commission conifer forest in Wales. It is an extensive mixed conifer plantation, which includes areas of replanted ancient woodland at Coed Melyn and Coedynysmaerdy. Both woods retain areas of semi-natural woodland including oak *Quercus robur*, alder and hazel *Corylus avellana* woodland with elements of ancient woodland ground floras (bluebell *Hyacinthoides non-scripta* and wood anemone *Anemone nemorosa*).
- **Rhiwfelin Fawr SINC** (6.9 ha) is located approximately 160 m west of the proposed scheme. It is a mosaic of marshy grassland and woodland habitat, which lies within the wider complex of the Rhos Tonyrefail SSSI. Although much of the grassland has been modified by agricultural improvement, the site represents an important wet grassland resource. The SINC supports a mosaic of soft rush *Juncus effusus* and purple moor-grass *Molinia caerulea* dominated marshy grassland (National Vegetation Classifications M23 and M25) with sharp-flowered rush *Juncus acutiflorus*, marsh bedstraw *Galium palustre*, greater bird's-foot trefoil *Lotus pedunculatus*, tomentil *Potentilla erecta*, cross-leaved heath *Erica tetralix*, yellow sedge *Carex demissa* and carnation sedge *Carex panicea*. The SINC supports marsh fritillary habitat and devil's-bit scabious *Succisa pratensis* is locally common.
- **Nant Muchudd SINC** (28.8 ha) is located approximately 500 m east of the Fire Service roundabout. The Nant Muchudd is a clean, fast flowing, shallow stream, with gravel shoals, undercut banks and variously braided channels. The stream supports salmon, brown trout, otter, dipper and grey wagtail. The stream banks are predominantly wooded. Much of the

wooded valley is ancient woodland, including Rhiwfelen-fach Woodland. Typical composition includes alder woodland along the riverbank and valley bottom, and more mixed oak, ash *Fragaria excelsior*, beech *Fagus sylvatica*, wych elm *Ulmus glabra* and sycamore *Acer pseudoplatanus* on drier valley sides. The woodlands have generally good structure, and represent important woodland bird habitat.

A Preliminary Ecological Appraisal (PEA) comprising desk study and walkover survey of the proposed scheme and its immediate surroundings was undertaken in August 2016. The PEA identified a number of habitats within the proposed scheme, including semi-natural broad-leaved woodland, broad-leaved plantation woodland, mixed plantation woodland, scattered trees, dense scrub, poor semi-improved grassland and improved grassland. Bat roosting potential was noted in trees on site and in nearby buildings. Otter potential was identified within the River Ely and other watercourses adjacent to the site. The surrounding habitats have the potential to support low numbers of dormice, along with reptile potential along the road verges. Breeding bird potential existed in woodland, trees and scrub habitats. Japanese knotweed *Fallopia japonica*, Himalayan balsam *Impatiens glandulifera* and cotoneaster were identified on site.

In the absence of mitigation, impacts including the following could result from the proposed scheme:

- Pollution and/or damage or disturbance to sensitive ecological habitats, namely the River Ely watercourse;
- Loss/disturbance/fragmentation of priority habitats (namely the semi-natural broad-leaved woodland and ancient woodland), and to a lesser extent, minor impacts to the poor semi-improved grassland and scrub could result through damage, disturbance or removal;
- Loss/disturbance/fragmentation of important ecological connectivity features (woodland/watercourses/grasslands);
- Killing/injury/disturbance/habitat loss for bats, breeding birds, otters and/or reptiles;
- Potential to spread invasive pant species during construction works.

The PEA report provided further survey recommendations, mitigation measures and enhancement measures in respect of habitats and species, these include timings of operations, lighting, minimising of clearance of particular habitats and working in accordance with ecological method statements and Natural Resources Wales (NRW) Pollution Prevention Guidelines. Although these guidelines are now withdrawn, they represent best practice and construction works will be following the guidelines unless new guidance is published. Further surveys currently underway are hedgerow, bat, dormouse, reptile and invasive species, as well as habitat surveys to update the PEA.

Significant effects to statutory sites (SSSI) are not anticipated following the implementation of mitigation measures and due to distance from the proposed scheme.

Significant impacts to the River Ely SINC will be avoided through the preparation and execution of the CEMP.

There is potential for significant effects to faunal species including bats due to impedance in crossing a wider road, decreased canopy and additional light. This has potential to sever commuting routes and prevent bats reaching favoured foraging areas, different roosting sites etc.

Detailed ecology surveys are ongoing and results will inform the ecological impact assessment (EclA) and the mitigation required to minimise ecological impact.

3.5 Soils

The geological extracts contained within the Envirocheck Report indicate no Made Ground deposits are contained within the site. However, it is possible that some Made Ground materials are present within the proposed development site. These are anticipated to relate to the current highway construction and development in the area.

The superficial deposits presented on the geological map are indicated to be predominantly glaciofluvial deposits.

The solid geology within the proposed site boundary is indicated to be the Brithdir Member, Pennant Sandstone Formation (Formally Upper Coal Measures).

The geological plan indicates the route does not cross any subcrops of coal seams.

The site history suggests the site to be of low contamination potential, however the more recent land uses such as the waste water treatment works and automotive businesses have a higher potential for contamination.

It is not anticipated that there will be any significant effects arising from the proposed scheme in relation to soils.

3.6 Material assets

Material assets consider the land use and land take, transport and use of materials of the proposed scheme and its area. The current land use is a major highway (A4119), which is surrounded mainly by agricultural land, with some commercial and residential land. The proposed scheme will not significantly encroach on this land.

Transport is expected to improve as a result of the proposed scheme, therefore no significant effects are anticipated.

The dualling scheme is essentially road widening and major earthworks or importation of large quantities of fill material is not anticipated. The proposed scheme is not considered to have a significant impact on materials used. Therefore, this aspect is not considered required to go through the EIA process.

3.7 Noise and vibration

The proposed scheme is unlikely to cause a significant increase in noise and vibration, as there will be no anticipated significant increase in traffic volume due to the dualling of the road. In addition, there are few residential properties or other noise sensitive land uses in close proximity to the proposed scheme.

Noise and vibration effects during construction of the proposed scheme will be managed in accordance with standard noise management and mitigation measures as part of the CEMP, and therefore is not expected to cause significant effects.

3.8 Population and human health

The proposed scheme does not lie within a significantly populated area and therefore significant effects on population and human health are not anticipated. The proposed scheme will be developed in accordance with the objective 'To improve Active Travel routes along the north/south A4119 corridor with the aim of improving the health and well-being of the local community'.

The proposed scheme is also likely to improve many commuters journey to and from work, therefore improving journey times and subsequently, people's wellbeing. This however, is not anticipated to be a significant effect.

3.9 Water

3.9.1 *Hydrology and flood risk*

The River Ely is a primary river the runs parallel to the proposed scheme, flowing in a north-west to south-east direction. There are also other drainage channels and small watercourses that flow under the existing A4119 into the River Ely.

Natural Resources Wales (NRW) flood maps show that the proposed scheme is generally not at risk of flooding, with the exception being within the southern area where the existing road is at low risk of surface water flooding. The small watercourse at the northern end of the proposed scheme is at medium risk of surface water flooding. The southern end of the proposed scheme is close to the flood zone from the River Ely. Other areas where flooding may occur include the River Ely and adjacent riverbanks. However, this is unlikely to affect the proposed scheme as the river is elevated above the flood plain.

No significant impacts on the hydrology and flood risk are anticipated. Most of the proposed scheme is outside of flood zones and there will not be any structures within the River Ely channel. There are also opportunities for enhancement of the culverts for otters and bats that currently pass under the A4119.

3.9.2 *Water quality*

The River Ely is the main water feature and runs parallel to the proposed scheme, and is defined as a primary river. The River Ely (Ely River – source to confluence Nany Clun) is categorised under the Water Framework Directive (WFD) as having a moderate overall status, with a moderate ecological status and good chemical status.

The proposed scheme is not expected to deteriorate the WFD status of the waterbody as there will be no in channel construction. Best construction practice will be used to prevent the release of construction related pollutants into the waterbody.

3.9.3 *Hydrogeology*

Groundwater within the proposed scheme is classified as South East Valleys Carboniferous Coal Measures, which has a poor overall status, with a good quantitative status and poor chemical status. The proposed scheme is not within a nitrate vulnerable zone (NVZ).

The proposed scheme is not anticipated to significantly affect the groundwater, and appropriate mitigation will be undertaken to prevent adverse impacts to the groundwater body during construction.

3.10 Climate – effects on climate

The proposed scheme is not anticipated to significantly impact on climate change, as it is unlikely that the scheme itself will increase the amount of traffic emitting greenhouse gas (GHG) emissions. Materials used on the proposed scheme will also aim to be sustainable, thus reducing GHG emissions from materials. All construction will be undertaken in accordance with best practice, such as no vehicle idling, and therefore reducing GHG emissions from plant and equipment.

3.11 Climate – vulnerability to the project to climate change

The proposed scheme is not currently within a flood risk zone, and it is unlikely to become significantly impacted by climate change.

3.12 Major accidents and/or disasters

Major accidents and/or disasters are those that incur community losses, encompassing assets, life, health and livelihoods. Disasters are events that are natural occurrences, whereas accidents refer to human made events. It is anticipated that there are no disasters likely to apply to the proposed scheme. The most likely disaster that could potentially apply to the proposed scheme is flooding. The proposed scheme however is not likely to be vulnerable to significant flooding (refer to Section 3.9.1), and any flooding that may happen will be managed in accordance with existing flood protection practice, and therefore will not be a significant effect on the vulnerability of the project to risk or risk to the environment.

Major accidents that could potentially occur on the proposed scheme include a road traffic collision or a pollution incident. Likelihood of these are managed in accordance with road safety rules (such as appropriate speed limits) and established pollution management and response. Therefore it is unlikely that the project is vulnerable to this risk or risk to the environment. Therefore, there are no significant effects anticipated.

3.13 Heat and radiation

The proposed scheme is not anticipated to have significant effects on heat and radiation and therefore has not been considered further.

3.14 Cumulative effects

A search of RCT's planning applications was undertaken on 26 February 2018 to assess the potential for cumulative impacts arising from the proposed scheme in combination with other proposed schemes. A search was undertaken on applications registered from 26 February 2017 to 26 February 2018. No applications were found that would provide cumulative effects with the proposed scheme.

4. EIA screening conclusion

The above discussion shows that with sensitive design and appropriate mitigation measures employed, no overall significant environmental impacts are anticipated either due to the proposed scheme itself or as cumulative impacts with other projects.

A number of discrete environmental studies relating to noise, ecology, landscape and contaminated land are to be undertaken as part of the design development.

The site is not located within a 'sensitive area' defined by the Regulations. Significant environmental impacts are not anticipated, therefore it is considered that the proposed scheme does not require a statutory EIA under the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 and we invite the Rhondda Cynon Taf planning authority to endorse this opinion.

Drawings



Site Plan
Scale 1:2,500



Location Plan
Scale 1:12,500

Key:

- Application site
- Land owned by developer
- Proposed location for site compound

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

Purpose of Issue
S2 - Suitable for information

Classification
Commercial in Confidence

Client
**Rhondda Cynon Taf
County Borough Council**

Project
A419 Coed Ely Dualling

Drawing
**Planning Application
Site Location Plan**

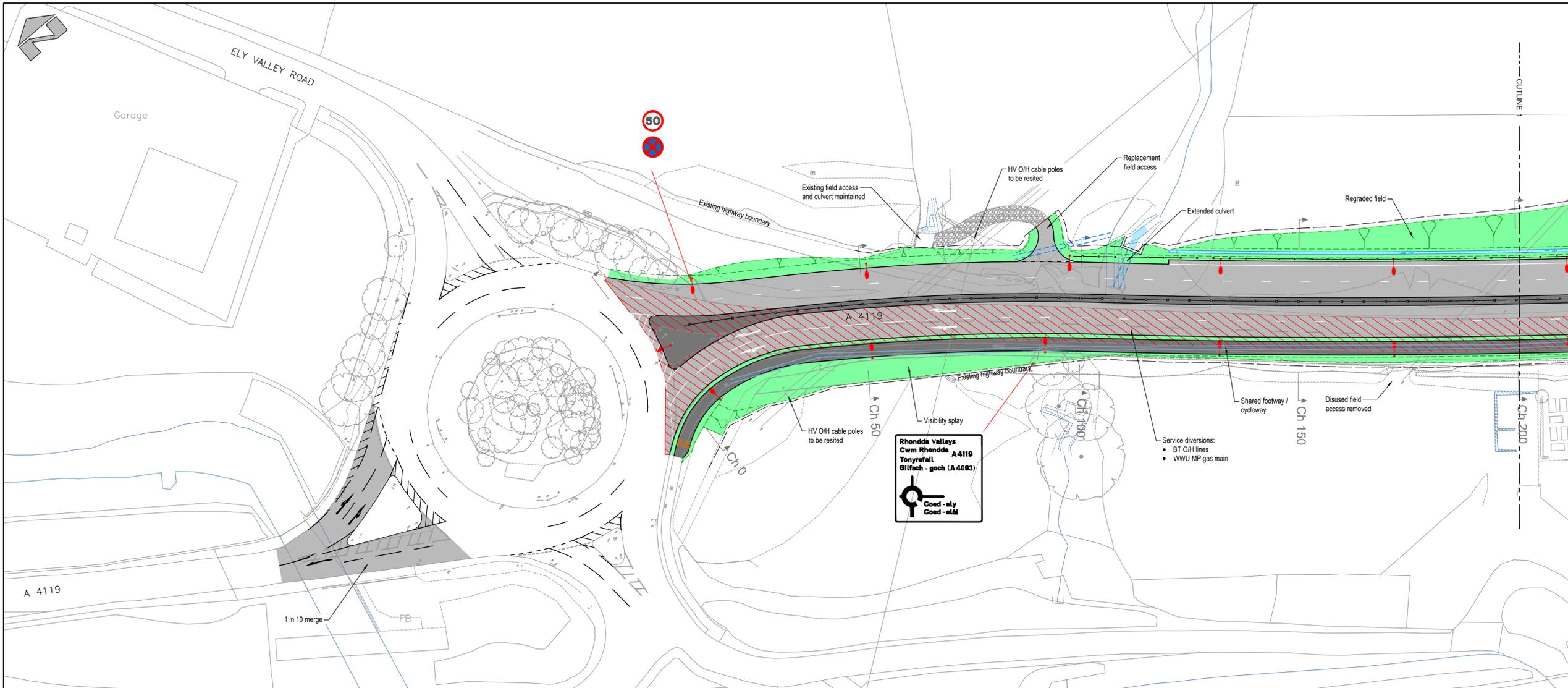
| Scale @ A1 | Drawn | Checked | Approved |
|------------|-------|---------|----------|
| As shown | JS | LM | LS |

Project No. **GC/002895** Date **June 2018**

Drawing Identifier **GC2895-RED-61-XX-DR-C-0101** BS1192 Compliant
Project - Originator - Zone - Level - File Type - Role - Number revision
100023458 **P01**

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Print Date: 08/06/2018 09:17:23



Key

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

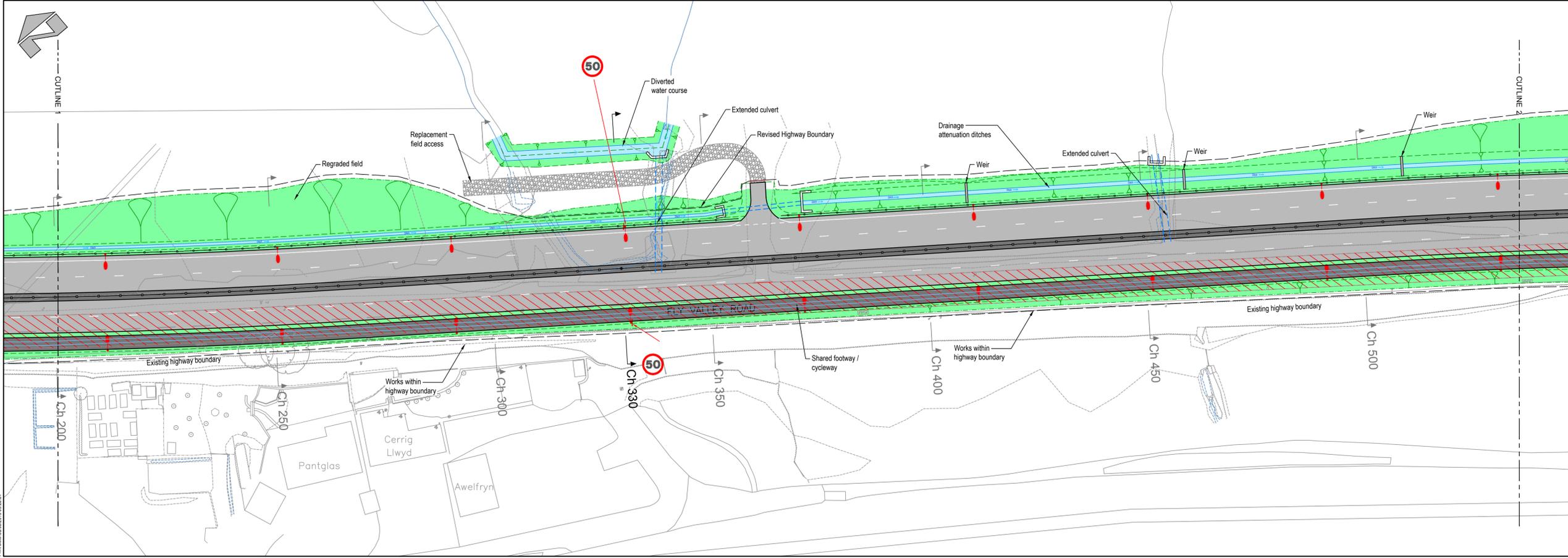
Highway Features

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

Scale 1:500

10m 0m 10m 20m 30m

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Ordnance Survey Licence 100023458

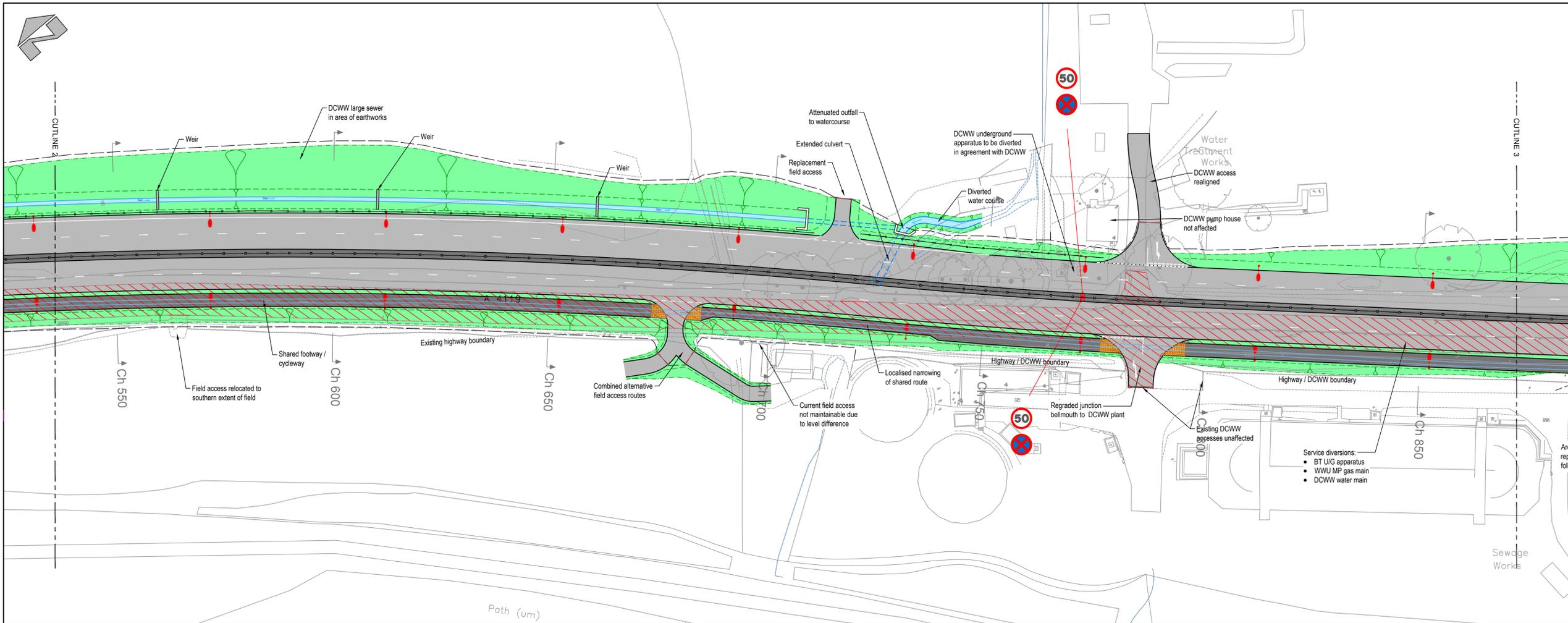


| Rev | Drawn | Chkd | Appd | Description | Date |
|-----|-------|------|------|--|------|
| | | | | Purpose of Issue | |
| | | | | S2 - Suitable for information | |
| | | | | Classification | |
| | | | | Commercial in Confidence | |
| | | | | Client | |
| | | | | Rhondda Cynon Taf County Borough Council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

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Key

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- Existing Road
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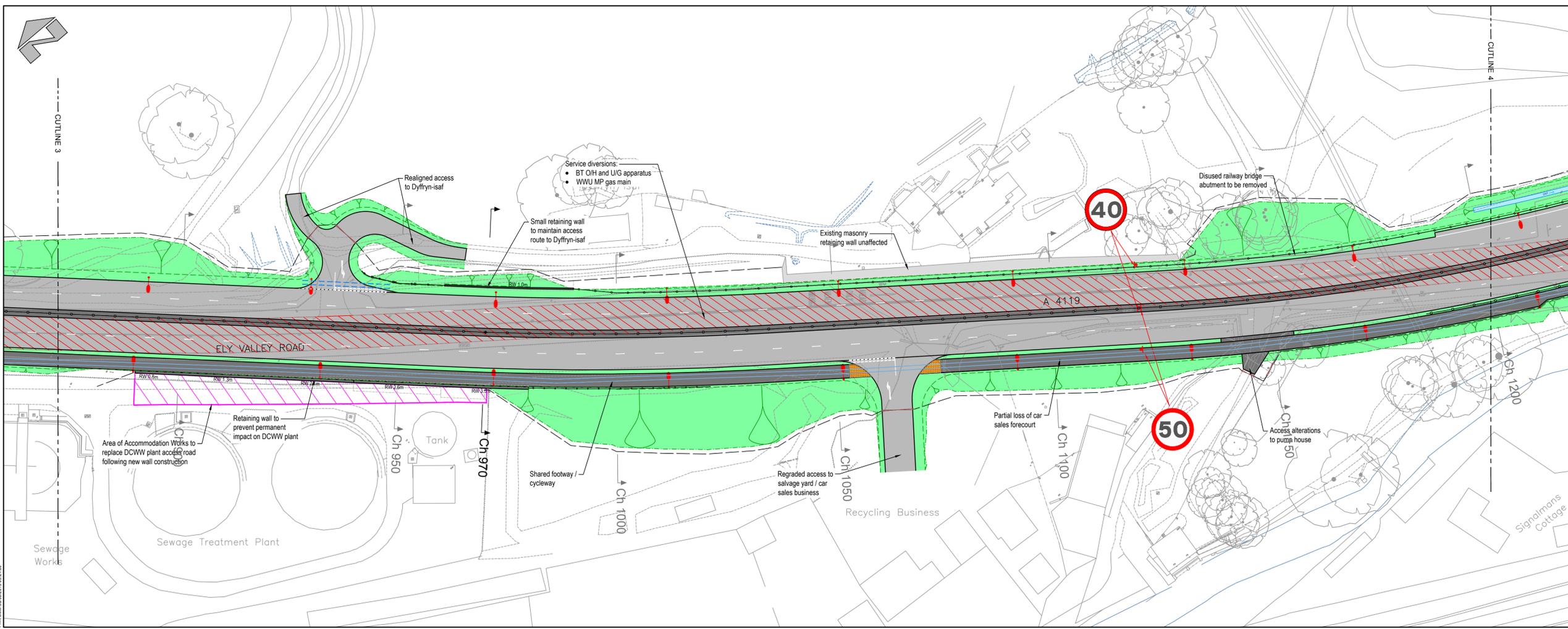
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Scale 1:500

10m 0m 10m 20m 30m

Trwydded yr Arolwg Ordnans 100023458
Ordnance Survey Licence 100023458

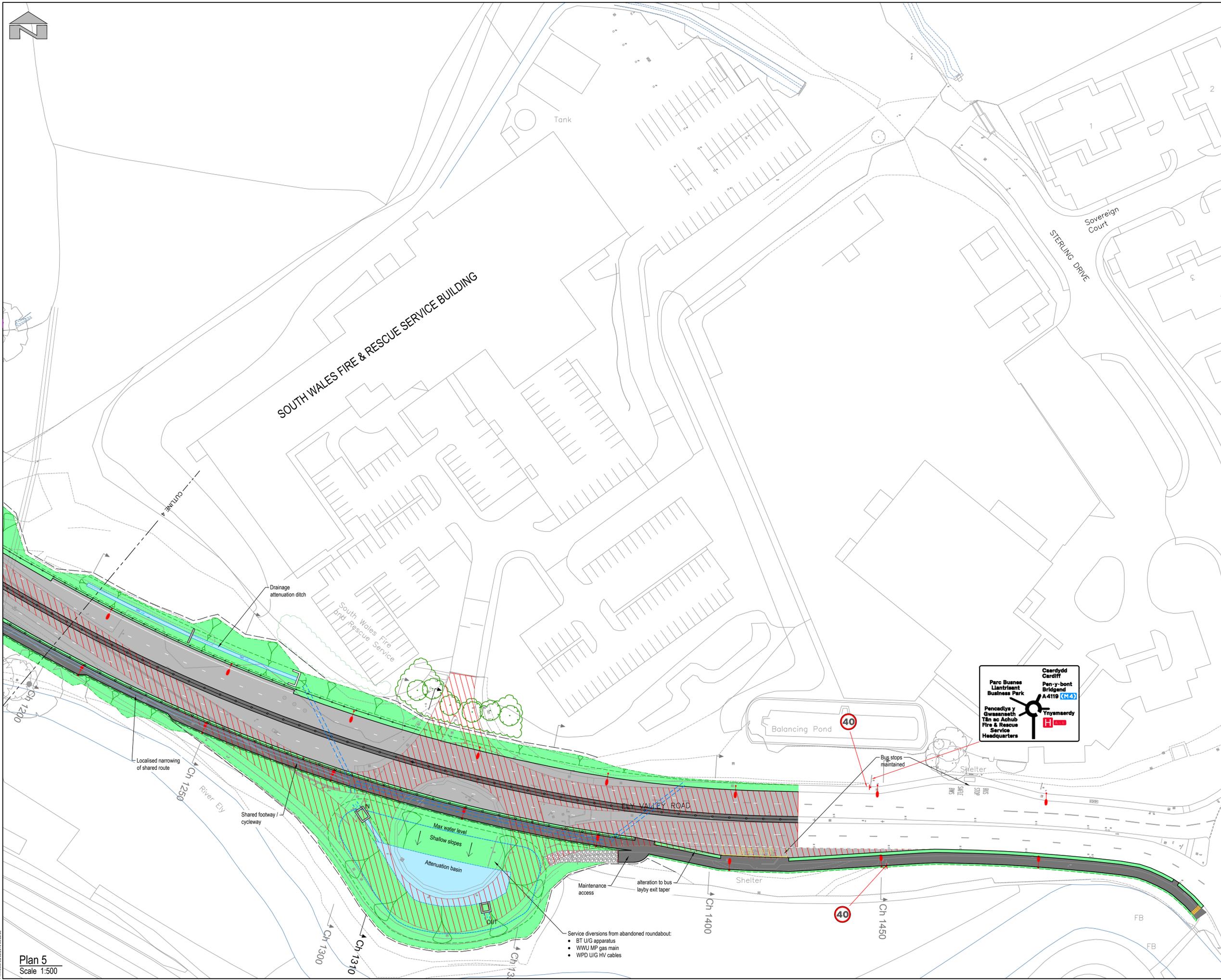


| Rev | Drawn | Chkd | Appd | Description | Date |
|--|------------------|---------|----------|-------------|------|
| Purpose of Issue | | | | | |
| S2 - Suitable for information | | | | | |
| Classification | | | | | |
| Commercial in Confidence | | | | | |
| Client | | | | | |
| Rhondda Cynon Taf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

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Key

- New Road
- Existing Road
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Scale 1:500

10m 0m 10m 20m 30m

Trwydded yr Arolwg Ordnans 100023458
Ordnance Survey Licence 100023458

Location Plan

| Rev | Drawn | Chkd | Appd | Description | Date |
|--|------------------|---------|----------|-------------|------|
| Purpose of Issue | | | | | |
| S2 - Suitable for information | | | | | |
| Classification | | | | | |
| Commercial in Confidence | | | | | |
| Client | | | | | |
| Rhondda Cynon Taf County Borough Council | | | | | |
| Project | | | | | |
| A4119 Coed Ely Dualling | | | | | |
| Drawing | | | | | |
| Planning Application General Arrangement (Sheet 3 of 3) | | | | | |
| Scale @ A1 | Drawn | Checked | Approved | | |
| 1:500 | JS | LM | LS | | |
| Project No. | Date | | | | |
| GC/002895 | November 2018 | | | | |
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| Project - Originator - Zone - Level - File Type - Role - Number | revision | | | | |
| GC2895-RED-61-XX-DR-C-0104 | P01.1 | | | | |

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