

Public Document Pack

Penallta House,
Tredomen Park,
Ystrad Mynach,
Hengoed CF82 7PG

Ty Penallta,
Parc Tredomen,
Ystrad Mynach,
Hengoed CF82 7PG



www.caerphilly.gov.uk
www.caerffili.gov.uk

For all enquiries relating to this agenda please contact Jo Thomas
(Tel: 07714600912 Email: thomaj8@caerphilly.gov.uk)

Date: 15th February 2024

To Whom It May Concern,

A multi-locational meeting of the **Cabinet** will be held in Penallta House, and via Microsoft Teams on **Wednesday, 21st February, 2024 at 1.00 pm** to consider the matters contained in the following agenda. You are welcome to use Welsh at the meeting, a minimum notice period of 3 working days is required should you wish to do so. A simultaneous translation will be provided on request.

Members of the public or Press may attend in person at Penallta House or may view the meeting live via the following link: <https://civico.net/caerphilly>

This meeting will be live-streamed and a recording made available to view via the Council's website, except for discussions involving confidential or exempt items. Therefore, the images/audio of those individuals present and/or speaking will be publicly available to all via the recording on the Council website at www.caerphilly.gov.uk

Yours faithfully,

A handwritten signature in black ink, appearing to read 'Chrissy', enclosed in a large, loopy oval shape.

Christina Harrhy
CHIEF EXECUTIVE

AGENDA

Pages

1 To receive apologies for absence.

A greener place Man gwyrdach



2 Declarations of Interest.

Councillors and Officers are reminded of their personal responsibility to declare any personal and/or prejudicial interest(s) in respect of any item of business on the agenda in accordance with the Local Government Act 2000, the Council's Constitution and the Code of Conduct for both Councillors and Officers.

To approve and sign the following minutes: -

- | | | |
|---|--|--------|
| 3 | Cabinet held on 17th January 2024. | 1 - 8 |
| 4 | Cabinet as Trustees of Blackwood Miners Institute held on 17th January 2024. | 9 - 12 |

To note the Cabinet Forward Work Programme.

- 5 Cabinet Forward Work Programme.

To receive and consider the following reports on which executive decisions are required: -

- | | | |
|----|--|-----------|
| 6 | Support for pupils unable to attend school (formerly known as Home Tuition). | 13 - 46 |
| 7 | Community Benefit Contributions Guidance- For Projects and Developments With The Potential For Significant Community Impact. | 47 - 66 |
| 8 | Nant Cylla Watercourse Erosion Control Works. | 67 - 144 |
| 9 | Caerphilly Station Footbridge Review. | 145 - 152 |
| 10 | Decarbonisation Annual Report November 2023. | 153 - 216 |
| 11 | Demolition of the Former Pontllanfraith Comprehensive School. | 217 - 220 |
| 12 | Public Interest Test. | 221 - 222 |
| 13 | Private Wire Arrangement Between Bryn Group And Caerphilly County Borough Council. | 223 - 254 |

Circulation:

Councillors C. Andrews, S. Cook, E. Forehead, N. George, P. Leonard, S. Morgan, C. Morgan, J. Pritchard and E. Stenner

And Appropriate Officers

HOW WE WILL USE YOUR INFORMATION

Those individuals that attend committee meetings to speak/give evidence will be named in the minutes of that meeting, sometimes this will include their place of employment or business and opinions expressed. Minutes of Meetings including details

of speakers will be publicly available to all via the Council website at www.caerphilly.gov.uk. except for discussions involving confidential or exempt items.

You have a number of rights in relation to your information, including the rights of access to information we hold about you and the right of complaint if you are unhappy with the way your information is being processed.

For further information on how we process your information and your rights please view the [Full Committee Meetings Privacy Notice](#) on our website or contact Legal Services by email griffd2@caerphilly.gov.uk or telephone 01443 863028.

This page is intentionally left blank

Agenda Item 3



CABINET

MINUTES OF THE MULTI-LOCATIONAL MEETING HELD AT PENALLTA HOUSE AND VIA MICROSOFT TEAMS ON WEDNESDAY 17TH JANUARY 2024 AT 1PM

PRESENT:

Councillor S. Morgan – Chair

Councillors:

J. Pritchard (Cabinet Member for Prosperity, Regeneration and Climate Change), N. George (Cabinet Member for Corporate Services, Property and Highways), P. Leonard (Cabinet Member for Planning and Public Protection), C. Morgan (Cabinet Member for Waste, Leisure and Green Spaces), E. Stenner (Cabinet Member for Finance and Performance), C. Andrews (Cabinet Member for Education and Communities), S. Cook (Cabinet Member for Housing) and E. Forehead (Cabinet Member for Social Care).

Together with:

D. Street (Deputy Chief Executive), R. Edmunds (Corporate Director of Education and Corporate Services), M.S. Williams (Corporate Director of Economy and Environment) and G. Jenkins (Interim Director of Social Services).

Also in Attendance:

R. Tranter (Head of Legal Services and Monitoring Officer), A. Dallimore (Regeneration Services Manager), S. Harris (Head of Financial Services and S151 Officer), L. Sykes (Deputy Head of Financial Services and S151 Officer), L. Lane (Head of Democratic Services and Deputy Monitoring Officer), M. Williams (Management Surveyor), R. Roberts (Business Improvement Manager), K. Peters (Service Manager – Service Improvement and Partnerships), J. Morgan (Trading Standards, Licensing and Registrars Manager), R. Hartshorn (Head of Public Protection, Community and Leisure Services), H. Jones (Waste Strategy and Operations Manager), M. Lloyd (Head of Infrastructure), T. McMahon (Caerphilly Cares Manager), H. Lancaster (Transformation Manager – Engagement) and J. Thomas (Committee Services Officer).

Also in Attendance:

I. Phillips (Audit Wales)

RECORDING AND VOTING ARRANGEMENTS

The Leader reminded those present that the meeting was being live streamed, and a recording would be made available to view via the Council's website, except for discussions involving confidential or exempt items. [Click Here To View](#).

1. APOLOGIES FOR ABSENCE

Apologies for absence were received from C. Harrhy (Chief Executive).

2. DECLARATIONS OF INTEREST

There were no declarations of interest received.

3. MINUTES – WEDNESDAY 13TH DECEMBER 2024

RESOLVED that the minutes of the meeting held on the 13th December 2023 be approved as a correct record.

4. CABINET FORWARD WORK PROGRAMME – TO NOTE

Cabinet was provided with the Cabinet Forward Work Programme, which detailed the scheduled reports until 3rd April 2024.

Following consideration and discussion, it was moved and seconded that the Forward Work Programme be noted. By a show of hands this was unanimously agreed.

5. AUDIT WALES OUTPUT REPORT ON SETTING OF WELL-BEING OBJECTIVES FOR CAERPHILLY COUNTY BOROUGH COUNCIL 22-23

Cabinet welcomed Mr Ian Philips from Audit Wales to introduce his report which presented Cabinet with Audit Wales examination on whether the Council set its new Well-Being Objectives (Corporate Plan 2023-2028) within the sustainable development principle of the well-being duty.

Cabinet noted that the well-being duty under the Well-Being of Future Generations (Wales) Act 2015 requires all public bodies to set well-being objectives that improve the economic, social, environmental and cultural well-being of their area and that the Council has a statutory duty to use the sustainable development (SD) principle, when setting its well-being objectives.

Cabinet thanked Audit Wales for the report and their recommendations.

Responding to a query raised, the Director for Education and Corporate Services advised Cabinet that in response to Audit Wales reference within the report regarding reviewing and refining the approach to performance management, the Performance Management Team are developing a set of dashboards to allow Members to review the delivery of the WBOs and the MTFP on an ongoing basis.

Cabinet queried the financial impact of delivering the wellbeing objectives. The Head of Finance advised Cabinet that the Corporate Plan includes the current resources that are allocated to the well-being objectives which are core services. There are also several grants that are supporting the delivery. Over the next three years there is the requirement to make £66 million in savings. There will also be a host of change programmes through the Mobilising Team Caerphilly transformation programme.

Following consideration and discussion, it was moved and seconded that the recommendations in the report be approved and by way of Microsoft Forms this was unanimously agreed.

RESOLVED for reasons contained within the Officers report:

1. The contents for the report provided by Audit Wales and made comment on the Management Response within the report be noted.

6. CAERPHILLY CARES SUPPORT PACKAGE FOR FAMILIES ELIGIBLE FOR FREE SCHOOL MEALS

Consideration was given to the report which provided Cabinet with information on the support available for families eligible for Free School Meals from Caerphilly Cares.

Cabinet noted that on June 28th, 2023, Welsh Government informed the Council that they would no longer be able to support the payment of Free School Meal Holiday payments, with immediate effect. The announcement generated a lot of feedback from families who were relying on the payment. Consequently, on the 12th July 2023 Cabinet agreed to provide a one-off payment of £19.50 per week, per child, to eligible families for the school holiday period commencing Friday 21 July 2023 and ending on Thursday 31 August 2023.

This decision was taken to cushion the impact of late withdrawal of funding by Welsh Government and required the allocation of one-off funding of £900,000.

Cabinet was pleased to note that the Caerphilly Cares Team (and associated partners) are currently providing a wide range of support to vulnerable individuals and families as part of the Cost-of-Living support package.

Following a query raised the Caerphilly Cares Manager confirmed that the services currently provided to the public at Rhymney Library will be rolled out to other areas but will be bespoke to each areas needs.

Following consideration and discussion, it was moved and seconded that the recommendations in the report be approved and by way of Microsoft Forms this was unanimously agreed.

RESOLVED for reasons contained within the Officers report the content of the report be noted.

7. GRASS CUTTING REGIMES

Consideration was given to the report sought Cabinet approval to amend grass cutting regimes across the county borough to enhance and promote biodiversity.

Responding to a query raised the Parks and Countryside Operations Manager, assured Cabinet that following concerns raised from residents last year regarding the time taken to cut overgrown grass. This year the Parks Department will be carrying out a different approach, particularly in relation to housing estates, which will be cut in their entirety from the start. There will also be a pre-cut in March. Cabinet was also informed that there were added pressures last year due to unfilled vacancies. However, these vacancies have now been filled. There has also been an upgrade on a number of machines used.

Cabinet recognised the pressures the Parks Team had been under and thanked the team for their hard work.

Following consideration and discussion, it was moved and seconded that the recommendations in the report be approved and by way of Microsoft Forms this was unanimously agreed.

RESOLVED for reasons contained within the Officers report:

1. The approach adopted since the 2021/22 cutting season continue to be the adopted grass cutting standard in relation to our highway verges and by-pass routes where mowing is kept to a minimum, in accordance with Traffic Wales guidance be approved.
2. The Council continues its commitment to the Nature isn't Neat project, which is part of the Gwent Green Grid Partnership, establishing joined-up green space management to create wildflower-rich pollinator habitats across the Gwent local authority areas, which includes Blaenau Gwent, Caerphilly, Monmouthshire, Newport, and Torfaen be approved
3. Visibility splays and sight lines on highways; margins and access on footways/cycle routes; sports grounds; urban areas such as housing estates, municipal parks, older person accommodation, cemeteries; play/recreational public open spaces, will be maintained at the current cutting frequencies be approved.
4. The list of areas as set out in Appendix 1 of the report which are to be allowed to flourish during the summer period be endorsed.
5. The Authority continues to develop and enhance areas using bought in wildflower seed as set out in Paragraph 5.11 of the report be approved.

8. APPOINTMENT OF PUBLIC AND AGRICULTURAL ANALYSTS

Consideration was given to the report which sought Cabinet approval for amendments to the appointment of Public and Agricultural Analysts.

Cabinet noted that the Council have a statutory duty to enforce the Food Safety Act 1990, which requires the authority to appoint a Public Analyst to analyse food for foreign bodies and compositional and labelling purposes. There are similar provisions in the Agriculture Act 1970 relating to the need to appoint an Agricultural Analyst.

Following consideration, it was moved and seconded that the recommendations in the report be approved and by way of Microsoft Forms this was unanimously agreed.

RESOLVED for reasons contained within the Officers report the appointment of a Public and Agricultural Analysts as detailed in paragraph 5.3 of the report be approved.

9. AMENDMENTS TO AUTHORISATION OF OFFICERS WITHIN THE PUBLIC PROTECTION DIVISION

Consideration was given to the report which informed Cabinet of new legislation for regulatory services and sought authorisation for officers of the Public Protection Division.

Cabinet approval was sought for the Council's Monitoring Officer to make the necessary changes to the Constitution to reflect the implementation / need for authorisation under the legislation detailed in this report.

The Head of Public Protection advised Cabinet that prior to the report being produced advice had been received that the Animals (Low Welfare Activities Abroad) Act 23 need to be added to the authorisations. However, it has since been learnt that the Act does not apply in Scotland and Wales. Therefore, the Officer proposed an amendment to the recommendation within the report.

It was moved and seconded that subject to an amendment to recommendation 3.1 to read that the 'Head of Public Protection, Community and Leisure Services be authorised under The Environmental Protection (Single-use Plastic Products) (Wales) Act 2023 so that relevant officers within the division can utilise delegated powers to carry out their duties', the recommendations contained within the Officers report be approved and by way of Microsoft Forms this was unanimously agreed.

RESOLVED that: -

1. The Head of Public Protection, Community and Leisure Services be authorised under The Environmental Protection (Single-use Plastic Products) (Wales) Act 2023 so that relevant officers within the division can utilise delegated powers to carry out their duties.
2. The Council's Monitoring Officer makes the necessary amendments to the Constitution.

10. DRAFT WASTE STRATEGY

Considered by Joint Scrutiny Committee on the 15th January 2024.

Consideration was given to the report which provided Cabinet with the views of the Joint Scrutiny on the Draft Waste Strategy and associated consultation methods. The report also sought Cabinet approval to undertake public consultation on the Council's Draft Waste Strategy.

Cabinet approval was also sought for the Draft Engagement Strategy and Consultation Questionnaire along with proposed timescales.

Cabinet was provided with the financial implications associated with the delivery of the strategy.

Cabinet noted that following consideration at Joint Scrutiny, an amendment to the strategy that the booking system for household recycling sites be removed from the public consultation was agreed.

Responding to a query raised, the Waste Strategy and Operations Manager advised Cabinet that around 50% of other Welsh Authorities do operate a booking system. and while there is no legal requirement to do so, the use of a booking system provides an additional means of controlling inputs to the sites while also offering Health & Safety benefits for staff placed in conflict situations.

Following consideration and discussion, it was moved and seconded that the recommendations in the report be approved and by way of Microsoft Forms this was unanimously agreed.

RESOLVED for reasons contained within the Officers report:

1. Consideration was given to the views of the Joint Scrutiny Committee and the draft Waste Strategy to allow public consultation to commence be approved.
2. The draft Engagement Strategy and accompanying draft consultation questionnaire be approved subject to the removal of any reference to Household Recycling Centre booking systems.
3. The financial implications associated with the implementation of the strategy be noted and the officers progress further discussions with Welsh Government in

relation to the level of capital support available from WG and required for delivery of the strategy be agreed.

11. DEVELOPMENT OF A NEW CHILDREN'S HOME

Consideration was given to the report which advised Cabinet of the plans to purchase a property to develop supported accommodation for young people leaving care who are aged 16-18 years and to confirm the purchase price which is above the independent market valuation. In line with WG funding criteria, the grant can only cover the market value of the property which is not necessarily the estate agents or vendors valuation. In this instance there is a difference of £50,000. Cabinet was asked to approve the additional funds be used from the Social Services reserves.

Cabinet was extremely pleased to note that the respective Ward Members had given their full support to this development and wished to thank, Councillors Johnston, Hussey and Jeremiah for their excellent demonstration of the Corporate Parenting in supporting Caerphilly's vulnerable children and young people.

Responding to comments made by Cabinet regarding Corporate Parenting, the Interim Director for Social Services advised that along with Safeguarding, Corporate Parenting is one of the most important roles of any Member and confirmed that Corporate Parenting training is included within the mandatory induction training for all new Members. Seminars have also been held which Members have been invited to attend.

Cabinet was especially pleased to note that Caerphilly has a further expansion plan to include more Childrens Residential Homes and that we will have sufficient residential provision for Children within Caerphilly.

Following consideration and discussion, it was moved and seconded that the recommendations in the report be approved and by way of Microsoft Forms this was unanimously agreed.

RESOLVED for reasons contained within the Officers report:

1. The content of the report be noted, and both the purchase price and the intended future use of the property be supported.

12. DRAFT BUDGET PROPOSALS FOR 2024/25

Consideration was given to the report which provided Cabinet with details of the draft budget proposals for the 2024/25 financial year based on the Welsh Government (WG) Provisional Local Government Financial Settlement for 2024/25.

Cabinet noted details of a range of cost and service pressures that require funding, details of proposed savings and the use of reserves, along with a proposed increase of 6.9% in Council Tax to enable the Council to set a balanced budget for the 2024/25 financial year.

Cabinet was also provided with an updated indicative Medium-Term Financial Plan (MTFP) showing a potential savings requirement of £46.700m for the two-year period 2025/26 to 2026/27.

Cabinet queried if the temporary saving relating to the Home Assistance and Reablement budget (due to difficulties in recruitment and securing independent sector care packages) would be reviewed if there were an improvement in being able to recruit staff in the future. The Head of Financial Services assured Cabinet that this is a temporary adjustment and there should be no impact on service users. Cabinet was further assured that this will be kept under review.

Responding to a query raised regarding what impact does the reduction in Welsh Government specific grants have on the Council's finances, the Head of Financial Services advised Cabinet that the grants support a range of services, and it is inevitable that there will be an impact on the Council. He also explained that the working assumption is that the reductions would be absorbed by service areas.

Cabinet enquired if there is any pressure put on the Welsh Government to fund the budget pressures on schools, with many of them facing deficit budgets that will not be able to sustain the cuts. The Head of Financial Services explained that we do lobby the Welsh Government through the Welsh Local Government Association and various other networks to highlight the financial pressures facing Local Authorities, including schools.

Clarification was sought regarding what the inescapable services pressures of £10.448m for Social Services related to. Officers explained that it is due to increases in demand from service users and from fee increases for independent sector providers.

Following consideration and discussion, it was moved and seconded that the recommendations in the report be approved and by way of Microsoft Forms this was unanimously agreed.

RESOLVED for reasons contained within the Officers report:

1. The 2024/25 draft budget proposals, including the proposed permanent and temporary savings totalling £30.984m and the proposed one-off use of reserves of £11.394m be endorsed.
2. The proposed increases in charges for school meals in secondary schools, Meals Direct, and the Hive Restaurant along with the proposed increase in the fee for MOT testing as detailed in paragraph 5.4.5 of the report be endorsed.
3. 100% of the net projected underspend on the Council's 2023/24 revenue budget will be transferred into General Fund balances as outlined in paragraph 5.5.2 of the report be agreed.
4. The proposal to increase Council Tax by 6.9% for the 2024/25 financial year to ensure that a balanced budget is achieved (Council Tax Band D being set at £1,446.37) be supported.
5. The draft budget proposals should now be subject to consultation prior to final 2024/25 budget proposals being presented to Cabinet and Council on 27 February 2024 be agreed.
6. The indicative potential savings requirement of £46.700m for the two-year period 2025/26 to 2026/27 be noted.

13. PUBLIC INTEREST TEST

Members considered the Public Interest Test and concluded that on balance the public interest in maintaining the exemption outweighed the public interests in disclosing the information and it was: -

RESOLVED that in accordance with Section 100(4) of the Local Government Act 1972 the public be excluded from the remainder of the meeting because of the likely disclosure to them of exempt information as defined in paragraph 14 of Schedule 12A of the Local Government Act 1972.

14. SURRENDER AND RELET PROPOSAL - UNITS 3 AND 4 BRYN BRITHDIR, OAKDALE BUSINESS PARK, BLACKWOOD.

Following consideration and discussion, it was moved and seconded that the recommendations in the report be approved and by way of Microsoft Forms and verbal confirmation this was unanimously agreed.

RESOLVED that for reasons contained within the Officers report the recommendations at 3.1 i) to vi) be approved.

The meeting closed at 14.14 p.m.

Approved and signed as a correct record subject to any corrections made at the meeting held on 21st February 2024.

CHAIR



CABINET AS TRUSTEES OF BLACKWOOD MINERS' INSTITUTE

MINUTES OF THE MULTI-LOCATIONAL MEETING HELD AT PENALLTA HOUSE AND VIA MICROSOFT TEAMS ON WEDNESDAY, 17TH JANUARY 2024 AT 2.30PM

PRESENT:

Councillor S. Morgan – Chair

Councillors:

C. Andrews (Cabinet Member for Education and Communities), N. George (Cabinet Member for Corporate Services and Property, Highways), J. Pritchard (Cabinet Member for Prosperity, Regeneration and Climate Change), S. Cook (Cabinet Member for Housing), E. Forehead (Cabinet Member for Social Care), C. Morgan (Cabinet Member for Waste, Leisure and Green Spaces), P. Leonard (Cabinet Member for Planning and Public Protection).and E. Stenner (Cabinet Member for Finance and Performance).

Together with:

R. Edmunds (Corporate Director Education and Corporate Services), D. Street (Corporate Director Social Services and Housing) and M.S. Williams (Corporate Director Economy and Environment).

Also in Attendance:

R. Tranter (Head of Legal Services and Monitoring Officer), L. Lane (Head of Democratic Services and Deputy Monitoring Officer), E. Tong (Theatre and Arts Services Manager) S. Harris (Head of Financial Services and Section 115 Officer), L. Sykes (Deputy Head of Financial Services and Section 115 Officer), A. Dallimore (Regeneration Services Manager), A. Bolter (Visitor Economy and Destinations Manager) and J. Thomas (Committee Services Officer)

RECORDING AND VOTING ARRANGEMENTS

The Leader reminded those present that the meeting was being live streamed, and a recording would be made available to view via the Council's website, except for discussions involving confidential or exempt items. [Click Here To View](#).

1. APOLOGIES FOR ABSENCE

An apology for absence was received from C. Harry (Chief Executive).

2. DECLARATIONS OF INTEREST

There were no declarations of interest received.

3. CABINET AS TRUSTEES OF BLACKWOOD MINERS' INSTITUTE HELD ON 28TH JUNE 2023.

RESOLVED that the minutes of the meeting held on 28th June 2023 be approved as a correct record.

4. BLACKWOOD MINERS' INSTITUTE ANNUAL REPORT AND STATEMENT OF ACCOUNTS – YEAR ENDING 31 MARCH 2023.

Consideration was given to the report which advised Cabinet as Trustees of the operational activities and financial position of Blackwood Miners' Institute for the financial year ending 31st March 2023.

Cabinet noted that the local authority, acting as the sole corporate trustee has a legal duty to operate the charity in accordance with the governing document and has a legal obligation to account for the charity's finances in accordance with the Charity Act 2011.

Cabinet was reminded that a report was presented to the Cabinet as Trustees of Blackwood Miners' Institute on the 27th July 2016 which advised Members of the statutory requirements relating to the charitable status of Blackwood Miners' Institute. Subsequently the recommendations set out within that report to ensure compliance with charity law in relation to the submission of annual reports and financial statements, the ongoing management of the Blackwood Miners' Institute and the Council's and Cabinet's responsibilities as Trustees were approved.

Cabinet was provided with the annual report and audited statement of accounts for 2022/23.

Clarification was sought on why the independent auditor has raised a matter of concern in respect of the treatment of cash and cash equivalent balances within the accounts for 2020/21, 2021/22 and 2022/23. The Head of Financial Services and Section 151 Officer reassured Cabinet that this is an accounting disclosure adjustment and does not impact the cash position of either the Arts Centre or the Council. The Officer further explained that the Arts Centre accounts are hosted by Caerphilly County Borough Council and that the Centre uses the Authority's bank account to manage its daily cashflows. Caerphilly CBC fully subsidises the Arts Centre by funding any cash deficit arising from its annual operating activities. As the Arts Centre uses the Council's bank account to manage the daily cash flows, it is not currently possible to separate the cash position. However, the concerns raised by Audit Wales have been considered and the necessary changes will be implemented in the current financial year to avoid these concerns being raised in the future.

Cabinet formally placed on record their thanks to the BMI Team, the higher than expected ticket sales, and the hard work involved.

RESOLVED that subject to the reasons contained in the Officer's Report:

The content of the report be noted, considered and endorsed.

The meeting closed at 14:41.

Approved and signed as a correct record subject to any corrections made at the next meeting.

CHAIR

This page is intentionally left blank



CABINET - 21ST FEBRUARY 2024

**SUBJECT: SUPPORT FOR PUPILS UNABLE TO ATTEND SCHOOL
(FORMERLY KNOWN AS HOME TUITION)**

**REPORT BY: CORPORATE DIRECTOR EDUCATION AND CORPORATE
SERVICES**

1. PURPOSE OF REPORT

1.1 This report provides information to Members regarding the current model of 'home tuition' and seeks support for proposals for changes to existing delivery.

2. SUMMARY

2.1 Current provision for tuition in Caerphilly lies within the education other than at school (EOTAS) portfolio. Where children experience health factors that impact upon their attendance at any setting, the current model facilitates access to a tutor for a time limited period each day facilitated by the LA. Presently this involves LA employed staff and agency staff. This model can also facilitate support being provided to pupils excluded for 15 days or more in line with Welsh Government Guidance.

2.2 The proposed changes would support schools to retain direct control over decision making, provision and funding for pupils on role in their school and therefore ensure a consistent approach to meeting needs. Pupils who need support for identified medical / emotional mental health needs / barriers to accessing mainstream education will not be identified as EOTAS.

2.3 Each school will either receive funding to support this model or an element of funding and existing contracted staff who would transfer to the school as outlined in sections 8 and 9 below.

2.4 This model of schools supported by a designated tutor or with direct funding has been trialled in a number of schools and therefore the changes will be minimal for some schools and learners.

2.5 Initial consultation with existing tutors indicated some concerns regarding change to working arrangements and expectations of the role, transition arrangements for pupils, criteria used by schools, and individual capacity of tutors. The period of consultation was extended beyond the summer term to allow further engagement with the staff and

Trade Unions to support a collective response to this proposal.

- 2.6 Consultation with the agency sourcing the tutors for the LA resulted in a positive understanding about the proposed changes, potential opportunities to work with schools and an understanding about the need to continue with a very few of the existing arrangements as they are currently delivered given the specific nature of individual needs.
- 2.7 All families of children receiving home tuition were contacted and few requested more detailed information which addressed queries. Follow up discussions resulted in a very few more individualised discussions and consideration of current arrangements remaining in place for those completing formal education in 2023 / 2024 or for exceptional reasons.
- 2.8 Further discussions will be held with families for whom this is relevant in the academic year 2024/2025
- 2.9 Proposals align with responsibilities linked to The Education Act, The ALN Act, the EOTAS Framework for Action, and Exclusions from Schools and Pupil Referral Units guidance.

3. RECOMMENDATIONS

- 3.1 Members are asked to note the contents of the report and endorse the proposal to implement a revised model of supporting pupils who receive tuition directed by the school in order that they can be supported via the school.

4. REASONS FOR THE RECOMMENDATIONS

- 4.1 Members are asked to endorse the approach of the LA in order that the duties of schools / education provisions and the LA are effectively met, and all children will have their needs identified and met with appropriate provision.

5. THE REPORT

- 5.1 Whilst mainstream education will fulfil the needs of almost all pupils there are exceptions or specific sets of circumstances when mainstream education is not accessible at a given time. The aim is to identify accurately the presenting needs and appropriate interventions, enable access to the curriculum and facilitate the young person to make progress thus enabling them to return to mainstream / fulltime education.
- 5.2 The current model of home tuition provides support for pupils who:
 - experience an acute or chronic medical condition.
 - are unable to safely access school or any other provision despite appropriate and reasonable adjustments to the school curriculum or environment.
 - are experiencing significant emotional, psychological, or mental health needs that are proving to be a barrier to attendance and engagement in education / an education setting.

- 5.3 Presently schools are required to refer to the local authority panel, providing supporting evidence to enable the panel to make a decision regarding any request. If a request is agreed the age weighted pupil unit funding (AWPU) is clawed back from the school.
- 5.4 The LA employs seven tutors who provide a specific function of supporting individual pupils at their homes and to reintegrate into school. Given the current model of individual support and the number of requests for support the LA also accesses agency support.
- 5.5 The net cost to the LA of the current tuition model is estimated at £1,021k in 2023-24. Within this figure 27% of tuition is provided by LA employed staff and 73% by Agency staff. The LA has a responsibility to ensure effective use of resources to support pupils of which EOTAS provision is part (see section 8 for further detail).
- 5.6 Tutors follow the curriculum set by individual schools as closely as possible. However, tutor feedback has indicated a variance in the availability of suitable resources from schools. This has resulted in some students following a path quite different from their contemporaries in school.
- 5.7 There is currently extensive variation in presenting needs and therefore no uniform measure of effectiveness or impact of tuition in terms of engagement, standards, and progress. Anecdotal evidence suggests increased engagement of students and positive feedback from parents / carers, as well as a few specific examples of successful progression for learners post 16 from the tutors themselves. Analysis of reintegration rates suggests that students remain at home for prolonged periods. The range of subjects accessed for learners in tuition is less than range of subjects accessed across mainstream schools. Results for 2023 / 2024 show that the average number of qualifications for learners in tuition is less than that for learners across EOTAS as a whole.
- 5.8 As at January 2024 there are 105 students who access home tuition linked to all secondary schools although the numbers vary across schools.
- 5.9 Since the pandemic when schools developed an approach to supporting learners remotely, there are opportunities to support pupils differently should access to the school environment be impacted for the reasons outlined above.
- 5.10 The proposal for the new model of tuition, that has been subject of consultation with all secondary Head Teachers, is that the provision remains directly under control of the school, allowing for consistent approach to meeting the needs of the pupils linked to the school, a wider coverage of the curriculum than presently offered, and effective monitoring of provision, standards and progress aligned with the approach taken within and across school. Pupils will remain on role and will not fall within the remit of EOTAS.
- 5.11 All secondary head teachers agree with the proposals. There will be no change in delivery for around 40% of the pupils who currently access tuition where this new model has already been trialled. It is recognised that where pupils will complete their formal education in 2024 / 2025 the existing arrangement may remain in place.
- 5.12 All parents of secondary aged pupils accessing tuition have been informed in writing of the proposals and offered opportunities to discuss. A few parents contacted the LA and more detailed discussions were able to facilitate an understanding of the way forward. In a very few cases existing arrangements may remain in place for those

completing formal education at the end of the academic year or in specific individual circumstances. Should the model of delivery change schools will liaise with each family / child to explain the approach for their child.

- 5.13 The views of secondary aged pupils have been gathered through feedback from parents / carers.
- 5.14 Benefits of the proposed model are perceived to be:
- enabling pupils to maintain a sense of belonging to their school.
 - effective collaboration with school staff, and potential to join lessons remotely.
 - broader curriculum coverage.
 - more effective planning.
 - maintaining consistency.
 - accessibility to school based and linked services.
 - development of bespoke packages of support to meet need.
 - effective sharing of curriculum and assessment information.
 - effective marking and feedback to inform next steps of learning.
 - improved outcomes.
 - accountability remaining within schools.
 - staff become part of a school team with access to school based professional learning, networking, and resources.
 - transfer of funding to schools and more effective use of resource (section 8).
- 5.15 Potential identified risks:
- change in the way support is provided and perception of effectiveness.
 - variable approaches across individual schools.
 - access to technology.
 - demand on schools managing a blended approach.
- 5.16 The approach can also contribute to ensuring that when a pupil is excluded from school, the school is able to ensure that appropriate learning is in place in line with the guidance for schools and LA.
- 5.17 Rather than clawing back AWPU schools will be provided with funding to support this more consistent approach thus making better use of resource.
- 5.18 Under this proposal currently contracted LA staff will transfer to schools and any HR issues supported as outlined in section 9.
- 5.19 The model of support for primary pupils will remain as it is presently since there are currently very few pupils. This will be reconsidered by the LA and schools following a review of the implementation of the model in secondary schools.
- 5.20 Further relevant information is identified in the integrated impact assessment (IAA), Appendix 2
- 5.21 The LA will draw up guidance outlining how this approach aligns with LA and schools' responsibilities in legislation, outlining financial responsibilities, expectations regarding a review of the process and end of year monitoring and evaluation reports to the LA.
- 5.22 Following the initial consultations and feedback received by the tutors and schools it

was agreed that the consultation period would be extended into the Autumn term 2023 thus enabling further consultation with tutors and a longer transition period for schools.

- 5.23 A number of meetings were held with and offered to the tutors during the extended consultation period that covered four months. This was both in groups and individually with the support of their Trade Unions to assist them to offer an informed and collective response to this proposal. These meetings offered opportunities to explore the role with the same function but managed by and located in a school with the support arrangements that a school can offer.
- 5.24 The initial consultation with existing tutors referred to in paragraph 2.5 indicated some concerns regarding change to working arrangements and expectations of the role, transition arrangements for pupils, criteria used by schools, and individual capacity of tutors. In this extended consultation, the perceived concerns remain for the tutors and alternative proposal(s) which include a 'middle ground' and a 'secondment arrangement' were raised.
- 5.25 The Trade Unions proposed a middle ground on behalf of their members as below:
- For the tutor team to continue to be employed by the Local Authority
 - For the tutor team to work from a designated base (Ty Penallta for example).
- 5.26 The view of the Chief Education Officer is that the middle ground position reflects the 'as is' position and the tutors and the pupils do not benefit from anything additional and in fact, being based at the LA base would exclude tutors from feeling part of a school team and from any development opportunities.
- 5.27 The Education Service did however give agreement to give further consideration to supporting a secondment arrangement for the staff to give the tutor team time to engage with the proposal.

Trade Union Feedback

- 5.28 To assist Members, Officers have offered comment on Trade Union feedback below. The full consultation response to the proposal as submitted by the NEU and the NASUWT on behalf of the tutors is outlined in Appendix 1.
- 5.29 The Trade Unions believe that the 'decision by the Council to move these pupils and therefore the staff back into a school setting makes no sense' They 'fear that it will fail those pupils who cannot or will not attend'. They feel that they have 'not received an adequate response to questions raised about the support these pupils will receive, other than to be told that they will be in the school setting'.
- 5.30 Officers have clarified that they do not share this view. The proposal for provision to remain directly under control of the school will allow for a consistent approach to meeting the needs of the pupils linked to the school, a wider coverage of the curriculum than presently offered, and effective monitoring of provision, standards and progress aligned with the approach taken within and across school. Pupils will remain on role and will not fall within the remit of EOTAS.
- 5.31 Officers have further clarified that, in the meetings held to discuss this proposal, both in a group and individually, it has never been suggested that pupils who are unable to attend school will have to attend school to be taught. The main job purpose of the tutor remains to work with the learners identified by the school as requiring specific

support, such as those with ongoing medical needs, those with emotional based school avoidance, those who are persistent absentees, or those with long fixed term exclusions.

- 5.32 The Trade Unions have expressed concern about balance of workload, with the spread of pupils requiring support within the schools being uneven.
- 5.33 Officers have clarified that with the funding that underpins this proposal, the headteacher would take over the responsibility for the continuing education of the pupils as outlined in the proposal and this will mean engaging the tutor productively and appropriately to meet the needs of the pupil. The clarity of how the tutor would work with the School under the direction of the headteacher and the potential to allay any concern could have been discussed in a meeting between the tutor and their respective headteacher if the tutors had taken up this opportunity as part of the consultation. This offer still stands.
- 5.34 Officers have however listened to the concerns of the tutors in terms of potential workload and believe that a secondment arrangement could give the tutor confidence to engage with the proposal, which will hopefully allay any concerns they may have.
- 5.35 Officers have clarified that, under a secondment arrangement, if the tutor is being asked to work outside of the remit of the prescribed funding stream that is presented to meet the needs of these pupils, then they can report this to Officers in the Council in the same way that they would now. The Council would remain the sole employer under the secondment arrangement and thus responsible to undertake a workload impact assessment and liaise with the school as appropriate where concerns are raised.
- 5.36 Officers would support further consideration being given to a secondment arrangement and are of the view that a secondment arrangement would not undermine the progression of this proposal. This working arrangement could be considered further if it gives the tutor the confidence to proceed.
- 5.37 The Trade Unions have expressed concern in reference to the secondment arrangement suggestion that the tutors 'will no longer be employed by EOTAS, but rather by the Council direct, with the line management sitting with the Headteacher'.
- 5.38 Officers have clarified that operational line management would sit with the Headteacher under this proposal. This would also be the case under a secondment arrangement but there would be support from LA officers as outlined in paragraph 5.35.
- 5.39 The Trade Unions have expressed concern that the 'tutors would be subsumed into the school and utilised as cover staff as and when required, regardless of their own workload'. The officer's clarification as outlined in paragraph 5.35 would also apply to this concern.
- 5.40 The Trade Unions have offered an alternative solution which is for the tutors to be based in any other Council offices such as Ty Penallta or Cross Keys and to still be employed by EOTAS. The Trade Unions are clear that their members do not want to work in a school setting.
- 5.41 As previously stated, Officers are concerned that this middle ground position reflects the 'as is' position and the tutors and the pupils do not benefit anything additional from

attending a Council building. Being based at the Council would exclude tutors from being part of a school team and development opportunities.

- 5.42 The Trade Unions have expressed concern that they 'have yet to receive justification for moving the EOTAS Home Tutors into schools. The current system is working, with staff and pupils being supported and knowing their roles and responsibilities. Workload is high but is being managed. This change will serve only to increase workload, stress and lack of support for the vulnerable pupils'.
- 5.43 Officers have clarified the perceived benefits of this proposal as outlined in paragraphs 5.10 and 5.14. Also as outlined in paragraph 5.17, Schools will be provided with funding to support a more consistent approach and make better use of resource under this proposal.
- 5.44 The Trade Unions have conveyed that they 'have yet to receive an explanation as to how the proposals to fundamentally change the role and contract of the home tutors will be carried out unless there is agreement from the home tutors to do so. They advise that this is only adding to the anxiety of their members'.
- 5.45 Officers have clarified that they do not share the view of the Trade Unions that the proposal fundamentally changes the role or the contract of the tutor. The tutors are qualified teachers paid on the teachers' pay scale and in receipt of teachers' terms and conditions of employment. The pupils that the tutors teach now are the pupils that they would continue to teach under this proposal. These are the pupils requiring specific support, such as those with ongoing medical needs, those with emotional based school avoidance, those who are persistent absentees, or those with long fixed term exclusions. The operational direction and support will come from the School. The need however will remain to teach those pupils who for whatever reason cannot attend school. This way of working is already being trialled in two schools.
- 5.46 Officers acknowledge that if the proposal is approved and implemented, there is no collective agreement reached amongst the tutors to implement the proposal from an agreed date. Following legal advice, the Officers' view remains that this is not a redundancy situation for the reasons stated in paragraph 5.45. Individual consultation will follow. It is the Officers' understanding that some tutors may welcome moving forward with the proposal under a secondment arrangement whilst others may not. If following the exhaustion of the consultation process, the tutor chooses to refuse the new terms (if deemed reasonable), then a likely outcome would be termination of the contract of employment with an offer to re-engage on the new terms.

5. 47 CONCLUSIONS

- 5.47.1 The proposal consulted on is that pupils who require support outside of school for the reasons outlined are supported by their school thus ensuring they remain connected with their school and support is contingent with the curriculum offer of their school.

6. ASSUMPTIONS

- 6.1 In considering the recommendations assumptions have been made in relation to ensuring that the responsibilities of LAs and schools are met, kept under review, and in ensuring that needs of all pupils are met.

7. SUMMARY OF INTEGRATED IMPACT ASSESSMENT

- 7.1 The integrated impact assessment (Appendix 2) helps support the Council in making informed and effective decisions whilst ensuring compliance with a range of relevant legislation. This highlights that the proposal seeks to focus on most efficient and effective use of resource to meet the needs of pupils who cannot attend school for health reasons at a given point in time, or where they have been excluded and according to guidance require access to work. The proposal does not identify any negative impacts in relation to the Equality Act and socio-economic duty. The proposal aligns with the Corporate Plan, the Well-being of Future Generations Act, and the Welsh Language Measure. Should any issues arise mitigations will be put in through ongoing engagement between schools, LA, parents, and pupils.

8. FINANCIAL IMPLICATIONS

- 8.1 In 2023-24 it is estimated that the net cost to the Authority of supporting the current model is circa £1,021k. It is proposed that an allocation of £880k (across 12 secondary and 1 special) to schools will support the new model.
- 8.2 In the short-term it is proposed that the potential “saving” estimated at £141k, is retained within the EOTAS budget (Education Other Than at School). This provision is currently under review with the development of provision at the old Pontllanfraith Comprehensive site, as part of the Authority’s Sustainable Communities for Learning Strategy.

9. PERSONNEL IMPLICATIONS

- 9.1 The Personnel implications are included in this report.
- 9.2 The structure of teaching under this proposal is changed so that those staff who are now employed by the Council will be employed by the School (each tutor is already allocated to a school as part of their current employment). The Council would remain the overarching employer.
- 9.3 A secondment arrangement for the seven tutors may alleviate the tutors’ continuing concerns which are outlined in paragraphs 2.5 and 5.24 and in the ‘Trade Union Feedback’ encompassing paragraphs 5.28 – 5.46. The tutor contract would remain with the Council for the period of the secondment.
- 9.4 If following the exhaustion of the consultation process, the tutor chooses to refuse the new terms (if deemed reasonable), then a likely outcome would be termination of the contract of employment with an offer to re-engage on the new terms.
- 9.5 The Council has relied on agency workers to support the EOTAS provision and the funding that will be allocated to schools reflects this.
- 9.6 Under regulation 13 of the Agency Worker Regulations (AWR), an agency worker has, during an assignment, the right to be given the same opportunity as a comparable contracted worker to find permanent employment with the hirer. No new employments are being created by the Council in relevance to this proposal, but the funding arrangement that is offered under this proposal could mean that schools seek to hire

additional support. Agencies have been alerted to the change of potential hirer if this proposal is supported.

10. CONSULTATIONS

- 10.1 The consultation responses have been taken into consideration within this report. The written feedback from NEU and NASUWT is attached at Appendix 1.

11. STATUTORY POWERS

- 11.1 Additional Learning Needs and Tribunal Act (Wales) 2018
Well-being of Future Generations (Wales) Act 2015
Education Act 1996
Equality Act 2010
Social Services and Wellbeing Act (2014)

Author: Sarah Ellis, Lead for Inclusion and ALN

Consultees:

Dave Street, Deputy Chief Executive
Richard Edmunds, Corporate Director, Education and Corporate Services
Rob Tranter, Head of Legal Services and Monitoring Officer
Steve Harris, Head of Corporate Finance and Section 151 Officer
Councillor Teresa Parry, Chair Education and Social Services Scrutiny Committee
Councillor Brenda Miles, Vice Chair Education and Social Services Scrutiny Committee
Councillor Carol Andrews, Cabinet Member for Education and Communities
Keri Cole, Chief Education Officer
Sue Richards, Head of Transformation and Education Planning and Strategy
Jane Southcombe, Finance Manager
Nicola Hooper, Finance Officer
Paul Warren, Strategic Lead for School Improvement
Sarah Mutch, Early Years Manager
Ros Roberts, Business Improvement Manager
Lynne Donovan, Head of People Services
Lisa Downey, HR Service Manager
Anwen Cullinane Senior Policy Officer
Rhys Evans, Head of Provision for Vulnerable Learners
Trade Unions – NEU and NASUWT
Secondary Head Teachers

Appendix 1: . The written feedback from NEU and NASUWT

Appendix 2: Integrated Impact Assessment.

This page is intentionally left blank

Appendix 1

Sarah,

In response to the consultation, we wish to make the following points:

1. Our members decision to work for the Home Tuition Service rests primarily on two reasons – they have no desire to work in a school-based setting and they wish to support those pupils who, for various reasons, are unable or unwilling to attend school. The decision by the Council to move these pupils – and therefore the staff – back into a school setting makes no sense and we fear that it will fail those pupils who cannot or will not attend. We have not received an adequate response to questions raised about the support these pupils will receive, other than to be told that they will be in the school setting.
2. We have asked about balance of workload, with the spread of pupils requiring support within the schools being uneven. We were advised that this would be up to each individual school to balance. This is not an adequate response for what is a genuine concern for our members.
3. A further concern is that our members will no longer be employed by EOTAS, but rather by the Council direct, with the line management sitting with the Headteacher. Another concern raised is that the tutors would be subsumed into the school and utilised as cover staff as and when required, regardless of their own workload. Again, this was raised during consultation and we did not receive adequate reassurance. We were only told that the Heads were aware of what the roles entailed for each member of staff. However, in discussion with our members, it seems that this not the case.
4. We have offered an alternative solution which is for our members to be based in any other council offices – such as Ty Penallta or Cross Keys – and to still be employed by EOTAS. As stated above, our members do not want to work in a school setting and this is a huge issue for them. We hope that serious consideration is given to this.
5. We have yet to receive justification for moving the EOTAS Home Tutors into schools. The current system is working, with staff and pupils being supported and knowing their roles and responsibilities. Workload is high but is being managed. This change will serve only to increase workload, stress and lack of support for the vulnerable pupils.
6. We have yet to receive an explanation as to how the proposals to fundamentally change the role and contract of the home tutors will be carried out unless there is agreement from the home tutors to do so. This is only adding to the anxiety of the members.

Yours sincerely,

Glesni Jones
Senior Officer
NEU Cymru

Mark Morris
National Executive Member (D31)
NASUWT Cymru



Caerphilly County Borough Council - Integrated Impact Assessment

This integrated impact assessment (IIA) has been designed to help support the Council in making informed and effective decisions whilst ensuring compliance with a range of relevant legislation, including:

- Equality Act 2010 (Statutory Duties) (Wales) Regulations 2011
- Socio-economic Duty – Sections 1 to 3 of the Equality Act 2010
- Welsh Language (Wales) Measure 2011
- Well-being of Future Generations (Wales) Act 2015
- Statutory Consultation v Doctrine of Legitimate Expectation and Gunning Principles

PLEASE NOTE: Section 3 Socio-economic Duty only needs to be completed if proposals are of a strategic nature or when reviewing previous strategic decisions.

See page 6 of the Preparing for the Commencement of the Socio-economic Duty Welsh Government Guidance.

1. Proposal Details

Lead Officer:- Sarah Ellis

Head of Service:- Keri Cole

Service Area and Department:-Education

Date:-25.1.24

What is the proposal to be assessed? *Provide brief details of the proposal and provide a link to any relevant report or documents.*

Change to the current model of home tuition, such that children who require this type of support will receive this via their school rather than through external Education other than at School provision.

2. Equality Act 2010 (Statutory Duties) (Wales) Regulations 2011

*(The Public Sector Equality Duty requires the Council to have “due regard” to the need to eliminate unlawful discrimination, harassment and victimisation; advance equality of opportunity between different groups; and foster good relations between different groups). Please note that an individual may have more than one **protected characteristics**.*

2a Age (people of all ages)

(i) Does the proposal have any positive, negative or neutral impacts on the protected characteristics and how?

The proposal seeks to focus on the most efficient and effective use of resource to meet the needs of pupils who cannot attend school for health reasons at a given point in time, or where they have been excluded and according to guidance and require access to work. The proposal does not have any impact on age as a protected characteristic.

(ii) If there are negative impacts how will these be mitigated?

Should the proposals have any negative impacts mitigations will be addressed by the school to ensure that pupils needs are at the centre and appropriate provision is identified. Where appropriate this may involve support from the LA to enable the school to best support the pupil.

(iii) What evidence has been used to support this view?

In line with the ALN Act and the Equality Act, schools and the Local Authority (LA) have a statutory responsibility to identify and meet needs.

2b Disability (*people with disabilities/long term conditions*)

(i) Does the proposal have any positive, negative or neutral impacts on the protected characteristics and how?

As above

(ii) If there are negative impacts how will these be mitigated?

Should there be any negative impact based on individual disability these will be mitigated through individual discussions regarding the identification of provision to meet need.

(iii) What evidence has been used to support this view?

There is evidence of a very few individual cases that may require specific and ongoing conversations to ensure needs are identified and met. In line with the ALN Act and the Equality Act, schools and the Local Authority (LA) have a statutory responsibility to identify and meet needs.

2c Gender Reassignment (*anybody whose gender identity or gender expression is different to the sex they were assigned at birth*)

- (i) **Does the proposal have any positive, negative or neutral impacts on the protected characteristics and how?**

As above, if these characteristics are relevant.

- (ii) **If there are negative impacts how will these be mitigated?**

As above

- (iii) **What evidence has been used to support this view?**

As above

2d Marriage or Civil Partnership (*people who are married or in a civil partnership*)

- (i) **Does the proposal have any positive, negative or neutral impacts on the protected characteristics and how?**

N/A

- (ii) **If there are negative impacts how will these be mitigated?**

- (iii) **What evidence has been used to support this view?**

2e Pregnancy and Maternity (*women who are pregnant and/or on maternity leave*)

- (i) **Does the proposal have any positive, negative or neutral impacts on the protected characteristics and how?**

The young mum's intervention will continue linked to the EOTAS provision as appropriate and falls outside of the scope of this proposal.

- (ii) **If there are negative impacts how will these be mitigated?**

NA

- (iii) **What evidence has been used to support this view?**

NA

2f Race (*people from black, Asian and minority ethnic communities and different racial backgrounds*)

- (i) **Does the proposal have any positive, negative or neutral impacts on the protected characteristics and how?**

As above if these characteristics apply.

- (ii) **If there are negative impacts how will these be mitigated?**

As above

- (iii) **What evidence has been used to support this view?**

As above

2g Religion or Belief (*people with different religions and beliefs including people with no beliefs*)

- (i) **Does the proposal have any positive, negative or neutral impacts on the protected characteristics and how?**

As above

- (ii) **If there are negative impacts how will these be mitigated?**

As above

- (iii) **What evidence has been used to support this view?**

As above

2h Sex (*women and men, girls and boys and those who self-identify their gender*)

- (i) **Does the proposal have any positive, negative or neutral impacts on the protected characteristics and how?**

As above

- (ii) **If there are negative impacts how will these be mitigated?**

As Above

- (iii) **What evidence has been used to support this view?**

As above



2i Sexual Orientation (*lesbian, gay, bisexual, heterosexual, other*)

- (i) **Does the proposal have any positive, negative or neutral impacts on the protected characteristics and how?**

As above if these characteristics apply.

- (ii) **If there are negative impacts how will these be mitigated?**

As above

- (iii) **What evidence has been used to support this view?**

As above

3. Socio-economic Duty (*Strategic Decisions Only*)

*(The Socio-economic Duty gives us an opportunity to do things differently and put tackling inequality genuinely at the heart of key decision making. **Socio-economic disadvantage** means living on a low income compared to others in Wales, with little or no accumulated wealth, leading to greater material deprivation, restricting the ability to access basic goods and services)*

Please consider these additional vulnerable group and the impact your proposal may or may not have on them:

- Single parents and vulnerable families
- People with low literacy/numeracy
- Pensioners
- Looked after children
- Homeless people
- Carers
- Armed Forces Community
- Students
- Single adult households
- People misusing substances
- People who have experienced the asylum system
- People of all ages leaving a care setting
- People living in the most deprived areas in Wales (WIMD)
- People involved in the criminal justice system

3a Low Income / Income Poverty (*cannot afford to maintain regular payments such as bills, food, clothing, transport etc.*)

(i) Does the proposal have any positive, negative or neutral impacts on the following and how?

Neutral

(ii) If there are negative impacts how will these be mitigated?

As above

What evidence has been used to support this view?

As above

3b Low and/or No Wealth (*enough money to meet basic living costs and pay bills but have no savings to deal with any unexpected spends and no provisions for the future*)

(i) Does the proposal have any positive, negative or neutral impacts on the following and how?

As above

(ii) If there are negative impacts how will these be mitigated?

As above

(iii) What evidence has been used to support this view?

3c Material Deprivation (*unable to access basic goods and services i.e. financial products like life insurance, repair/replace broken electrical goods, warm home, hobbies etc.*)

(i) Does the proposal have any positive, negative or neutral impacts on the following and how?

As above

(ii) If there are negative impacts how will these be mitigated?

As above

(iii) What evidence has been used to support this view?

As above

3d Area Deprivation (*where you live (rural areas), where you work (accessibility of public transport) Impact on the environment?*)

(i) Does the proposal have any positive, negative or neutral impacts on the following and how?

As above

(ii) If there are negative impacts how will these be mitigated?

As above

(iii) What evidence has been used to support this view?

As above

3e Socio-economic Background (*social class i.e. parents education, employment and income*)

- (i) Does the proposal have any positive, negative or neutral impacts on the following and how?

As Above

- (ii) If there are negative impacts how will these be mitigated?

As above

- (iii) What evidence has been used to support this view?

As above

3f Socio-economic Disadvantage (*What cumulative impact will the proposal have on people or groups because of their protected characteristic(s) or vulnerability or because they are already disadvantaged*)

- (i) Does the proposal have any positive, negative or neutral impacts on the following and how?

As above.

- (ii) If there are negative impacts how will these be mitigated?

As above

- (iii) What evidence has been used to support this view?

As above

4. Corporate Plan – Council’s Well-being Objectives

(How does your proposal deliver against any/all of the Council’s Well-being Objectives? Which in turn support the national well-being goals for Wales as outlined in the Well-being of Future Generations (Wales) Act 2015. Are there any impacts (positive, negative or neutral? If there are negative impacts how have these been mitigated?) Well-being Objectives

Objective 1 - Improve education opportunities for all

The LA works in partnership with all schools and education providers to ensure that the needs of pupils are appropriately identified, and provision is in place. The proposals seek to ensure that pupils maintain a sense of belonging to their school and are provided with continuity and breadth of support if they cannot attend for identified medical reasons or as a result of long fixed term exclusions.

Objective 2 - Enabling employment

Improved educational outcomes are linked to improved employment prospects and these proposals aim to ensure continuity of educational offer.

Objective 3 - Address the availability, condition and sustainability of homes throughout the county borough and provide advice, assistance or support to help improve people’s well-being

NA

Objective 4 - Promote a modern, integrated and sustainable transport system that increases opportunity, promotes prosperity and minimises the adverse impact on the environment

NA

Objective 5 - Creating a county borough that supports healthy lifestyle in accordance with the Sustainable Development principle with in the Well-being of Future Generations (Wales) Act 2015

NA

Objective 6 - Support citizens to remain independent and improve their well-being

This proposal ensures that children with medical needs continue to receive support via their school and where appropriate the school is supported by the LA to ensure appropriate provision is developed by the school and is in place.



4a. Links to any other relevant Council Policy (*How does your proposal deliver against any other relevant Council Policy*)

Strategic Equality Plan 2020-2024

Education Strategy

EOTAS Strategy

Corporate Plan 2018 - 2023

Welsh In Education Strategic Plan 2022 - 2032

Welsh Language Strategy 2022 - 2027

5. Well-being of Future Generations (Wales) Act 2015 – The Five Ways of Working (*Also known as the sustainable development principles. The Act requires the Council to consider how any proposal improves the economic, social, environmental and cultural well-being of Wales using the five ways of working as a baseline*)

How have you used the Sustainable Development Principles in forming the proposal?

Long Term

Supporting partnerships working to identify needs and promote wellbeing of children at the centre of everything we do.

Prevention

Working collaboratively to implement effective intervention strategies is essential in meeting needs.

Collaboration

Working collaboratively with schools and other education settings, parents / carers provides a more cohesive approach to identification of need and ensures appropriate intervention.

Involvement

All LA tutors, the relevant agency, and secondary head teachers, have been involved in consultation. Parents / carers have been advised of proposed changes and have been invited to discuss individual issues and share their child's views. Tutors have been offered opportunities to discuss with their unions and this discussion is ongoing. Information has been shared with trade unions.



6. Well-being of Future Generations (Wales) Act 2015

Does the proposal maximise our contribution to the Well-being Goals and how?

A Prosperous Wales

An innovative, productive and low carbon society which recognises the limits of the global environment and therefore uses resources efficiently and proportionately (including acting on climate change); and which develops a skilled and well-educated population in an economy which generates wealth and provides employment opportunities, allowing people to take advantage of the wealth generated through securing decent work.

The proposal ensures that children who cannot attend school for a period of time for specific medical reasons (or where they are excluded for a period of time in accordance with guidance) continue to receive continuity of support for their learning from their school.



A Resilient Wales

A nation which maintains and enhances a biodiverse natural environment healthy functioning ecosystems that support social, economic and ecological resilience and the capacity to adapt to change (for climate change)

NA

A Healthier Wales

A society in which people's physical and mental well-being is maximised and in which choices and behaviours that benefit future health are understood

As above

A More Equal Wales

A society that enables people to fulfil their potential no matter what their background or circumstances (including their socio-economic background and circumstances)

The proposal ensures that the needs of learners continue to be met, thus mitigating any risk linked to longer term implications for educational outcomes and for young people fulfilling their potential.

A Wales of Cohesive Communities

Attractive, viable, safe and well-connected communities

As above

A Wales of Vibrant Culture and Thriving Welsh Language

A society that promotes and protects culture, heritage and the Welsh language, and which encourages people to participate in the arts, and sports and recreation

All schools are required to promote Welsh culture and heritage through the Cwricwlwm Cymraeg. The approach aligns with the Welsh in Education Strategic Plan and The Welsh Language Strategy.

A Globally Responsible Wales

A nation which, when doing anything to improve the economic, social, environmental and cultural well-being of Wales, takes account of whether doing such a thing may make a positive contribution to global well-being.

As above



7. Welsh Language (Wales) Measure 2011 and Welsh Language Standards

(The Welsh Language Measure 2011 and the Welsh Language Standards require the Council to have 'due regard' for the positive or negative impact a proposal may have on opportunities to use the Welsh language and ensuring the Welsh language is treated no less favourably than the English language) Policy Making Standards - Good Practice Advice Document

7a. Links with Welsh Government's Cymraeg 2050 Strategy and CCBC's Five Year Welsh Language Strategy 2022-2027 and the Language Profile

(i) Does the proposal have any positive, negative or neutral impacts on the following and how?

Neutral

(ii) If there are negative impacts how will these be mitigated?

Where any negative impacts are identified these will be addressed through the school with support from the LA where required.

(iii) What evidence has been used to support this view?

Pupil level data regarding those accessing support through the medium of Welsh.

7b. Compliance with the Welsh Language Standards. *Specifically Standards 88–93*

(i) Does the proposal have any positive, negative or neutral impacts on the following and how?

Neutral

(ii) If there are negative impacts how will these be mitigated?

(iii) What evidence has been used to support this view? *e.g. the WESP, TAN20, LDP, Pupil Level Annual School Census*

7c. Opportunities to promote the Welsh language *e.g. status, use of Welsh language services, use of Welsh in everyday life in work / community*

(i) Does the proposal have any positive, negative or neutral impacts on the following and how?

Neutral

(ii) If there are negative impacts how will these be mitigated?

(iii) What evidence has been used to support this view? *e.g. the WESP, TAN20, LDP, Pupil Level Annual School Census*

7d. Opportunities for persons to use the Welsh language *e.g. staff, residents and visitors*

(i) Does the proposal have any positive, negative or neutral impacts on the following and how?

Neutral

(ii) If there are negative impacts how will these be mitigated?

(iii) What evidence has been used to support this view? *e.g. the WESP, TAN20, LDP, Pupil Level Annual School Census*

7e. Treating the Welsh language no less favourably than the English language

(i) Does the proposal have any positive, negative or neutral impacts on the following and how?

Neutral

(ii) If there are negative impacts how will these be mitigated?

(iii) What evidence has been used to support this view? *e.g. the WESP, TAN20, LDP, Pupil Level Annual School Census*

7f. Having considered the impacts above, how has the proposal been developed so that there are positive effects, or increased positive effects on (a) opportunities for persons to use the Welsh language, and (b) treating the Welsh language no less favourably than the English language.

8. Data and Information

(What data or other evidence has been used to inform the development of the proposal? Evidence may include the outcome of previous consultations, existing databases, pilot projects, review of customer complaints and compliments and or other service user feedback, national and regional data, academic publications and consultants' reports etc.)

Data/evidence *(Please provide link to report if appropriate)*

See Education Scrutiny report 20th June 2023

Key relevant findings

How has the data/evidence informed this proposal?

Were there any gaps identified in the evidence and data used to develop this proposal and how will these gaps be filled? *Details of further consultation can be included in Section 9.*

9. Consultation

*(In some instances, there is a legal requirement to consult. In others, even where there is no legal obligation, there may be a legitimate expectation from people that a consultation will take place. Where it has been determined that consultation is required, **The Gunning Principles** must be adhered to. Consider the **Consultation and Engagement Framework**. Please note that this may need to be updated as the proposal develops and to strengthen the assessment.*

Briefly describe any recent or planned consultations paying particular attention to evidencing the Gunning Principles.

Who was consulted?

Consultation has been undertaken with secondary head teachers who are in agreement with the proposals. Parents have been advised of the proposed changes and follow up discussions held where there have been queries. There are a very few specific circumstances where current arrangements will continue.

Tutors have been engaged in group and individual discussions with their Trade Unions and HR. Collective concerns are identified in the Cabinet report. Should the proposals progress collective or individual concerns will be addressed through further individual discussions with trade unions and HR.

When they were consulted did the consultation take place at the formative stage and was adequate time given for consultees to consider and respond?

Consultation has been undertaken throughout the process and has been extended as a result of feedback.

Was sufficient information provided to consultees to allow them to make an informed decision on the proposal?

Face to face discussion were held with secondary head teachers. Parents / cares were written to and follow up discussions held where requested. Information has been shared with tutors and their views sought. Discussions have been held with the group of tutors and individually, with unions and HR.

What were the key findings?

All secondary head teachers are in agreement with the proposals. A few parents / carers raised queries, and it is recognised that in a very few case it may be appropriate to continue the existing intervention until the final year of formal education in or for very specific medical reasons. Tutors have raised concerns as outlined in the report.

How have the consultation findings been taken into account?

As above.

10. Monitoring and Review

How will the implementation and the impact of the proposal be monitored, including implementation of any amendments?

The LA will provide guidance in terms of how the approach should be developed and the focus of the funding as outlined in the Cabinet report.

Termly meetings with the lead Local Authority officer and Head Teacher and / or nominated lead in each school will be held to review the development and implementation of the approach, and impact for young people. Good practice will be shared at the Pastoral Leaders forum. Monitoring and review reports will be provided as part of ongoing self-evaluation annually in the Local Authority including how the funding is spent.

What are the practical arrangements for monitoring?

As above.

How will the results of the monitoring be used to develop future proposals?

The information will be used to shape the process going forward and to consider a second phase of implementation for primary aged pupils.

When is the proposal due to be reviewed?

July 2025

Who is responsible for ensuring this happens?

Lead LA Officer, Chief Education Officer, Lead for Inclusion.

11. Recommendation and Reasoning

- Implement proposal taking account of the mitigating actions outlined.

Have you contacted relevant officers for advice and guidance?

- Yes
-



12. Reason(s) for Recommendations

(Provide below a summary of the Integrated Impact Assessment. This summary should be included in the "Summary of Integrated Impact Assessment" section of the Corporate Report Template. The Integrated Impact Assessment should be published alongside the Report proposal).

The proposal focuses on ensuring continuity and effective input is provided to learners. This will be kept under review to ensure any impacts are considered and mitigations put in place.

13. Version Control

(The IIA should be used in the early stages of the proposal development process. The IIA can be strengthened as time progresses to help shape the proposal. The Version Control section will act as an audit trail to evidence how the IIA has been developed over time) (Add or delete versions as applicable)

➤ Version 1

Author:- Sarah Ellis

Brief description of the amendments/update:-
Explanations and mitigations expanded.

Revision Date:-19.5.23

➤ Version 2

Author:- Sarah Ellis

Brief description of the amendments/update:-
Additions regarding consultation.

Revision Date: 6.6.23

➤ Version 3

Author:- Sarah Ellis

Brief description of the amendments/update:-
Additions regarding consultation.

Revision date: 25.1.24



Integrated Impact Assessment Author

Name:- Sarah Ellis

Job Title:- Lead for Inclusion and ALN

Date:-25.1.24

Head of Service Approval

Name:- Keri Cole

Job Title:- Chief Education Officer

Signature:-

Date:-25.1.24



CABINET – 21ST FEBRUARY 2024

SUBJECT: COMMUNITY BENEFIT CONTRIBUTIONS GUIDANCE- FOR PROJECTS AND DEVELOPMENTS WITH THE POTENTIAL FOR SIGNIFICANT COMMUNITY IMPACT

REPORT BY: CORPORATE DIRECTOR FOR ECONOMY AND ENVIRONMENT



1. PURPOSE OF REPORT

- 1.1 To seek Cabinet approval for the Community Benefit Contributions Guidance for projects and developments with the potential for significant community impact.
- 1.2 To highlight the role of Caerphilly County Borough Council in working with private sector partners, in partnership with our local communities, to secure meaningful and sustainable benefits.

2. SUMMARY

- 2.1 There are numerous opportunities for renewable energy developments across Caerphilly County Borough. In addition, other projects such as tip restoration can have a prolonged and adverse effect on communities. Developments can help to support local and national net zero and decarbonisation objectives and improve the natural amenity of the county borough. However, the adverse burden on the host communities should be recognised by developers and should be compensated by long-term and sustainable CBCs.
- 2.2 The report explains the role of the Council in promoting community benefits in collaboration with private sector partners.
- 2.3 It outlines the process of developing this Community Benefit Contributions Guidance for projects and developments with the potential for significant community impact.

3. RECOMMENDATIONS

- 3.1 That Cabinet notes the comments made at the Scrutiny Committee meeting.

4. REASONS FOR THE RECOMMENDATIONS

- 4.1 To establish the Council's stance on standards for developers when delivering Community Benefit Contributions (CBCs) to local communities within the County Borough.

5. THE REPORT

- 5.1 This report outlines the Community Benefit Contributions Guidance for projects and developments with the potential for significant community impact. It recognises the need for such guidance given the numerous potential opportunities for major projects and developments including low carbon energy developments- wind, solar, hydro-electric and hydrogen and potentially, decommissioning and remedial projects. This guidance is intended for developers seeking to work with, harness and utilise the resources of the county borough and to ensure that communities derive the maximum benefit from hosting such developments in their locality through the provision of direct voluntary community benefits.
- 5.2 The provision of Community Benefit Contributions is a developing area. During the drafting of the proposed guidance it has become clear that policy research around Community Benefit Contributions is taking place in other organisations. This document will therefore be kept under review and updated if new evidence or guidance becomes available.

Community Benefit Contributions Definitions

- 5.3 Community Benefit Contributions is the term used for 'goodwill' financial contributions voluntarily donated by a developer for the benefit of communities hosting a development.
- 5.4 Community Benefit Contributions can be monetary, or the delivery of projects and activities to improve the social, environmental, economic and cultural well-being of the area. CBCs can contribute to a range of national and local objectives.
- 5.5 CBCs are often made by the developers of projects where the adverse burden is recognised in communities, but suitable mitigation measures would be difficult to invoke. CBCs are an arrangement between the developer and the community, and entirely outside the statutory planning role of the Council. Such contributions are unconnected to the procurement of contracts by the Council and are best described as a relationship between the developer and the community in which the development is located.
- 5.6 CBCs are a mechanism to deliver social capital to projects. However, CBCs should not be considered as the only way to deliver these benefits. Developers are encouraged to consider all elements of their project, including, for example, designing in environmental improvements such as habitat provision, or landscaping provision beyond screening out potential nuisance.

Role of Caerphilly County Borough Council

- 5.7 CBCs are NOT a mechanism to make a development more acceptable in planning terms and they cannot, and are not, taken into account when determining any application for planning consent.

- 5.8 Teams within the Council will work regularly and closely with local community groups, and the formalised third sector, to provide insight and community intelligence that will be available to support the development of CBCs.
- 5.9 The Council has a well-being power under local government legislation (Local Government Act 2000) to do anything it considers will improve the well-being of the area and for this reason it will take an active role in the development of CBCs in its area.
- 5.10 The Council will encourage developers to use this guidance and communicate directly with us at the earliest opportunity to secure the greatest level of benefits possible for local communities.

Establishing CBC Schemes

- 5.11 A number of mechanisms are readily available to support the establishment of the Community Benefit Scheme.
- 5.12 Data and assessment of local communities is readily available from the Council. CBCs should set out how their contributions have been developed to meet the particular needs of the local community by referencing its unique position and building on the existing assets of the community.
- 5.13 Community engagement and effectively involving the full breath of a local community in developing a CBC is crucial. The Council has a key role in ensuring that as wide as possible representation is heard, especially from groups in the community whose voices are less well heard. Insights, intelligence and the community voice are key aspects of the Council's delivery and again, the Council has a broad base of contacts and local community groups which should be used in developing CBCs. Advice should be sought at the earliest opportunity to ensure effective engagement and involvement.
- 5.14 Proximity should be considered in the context of benefits and should be directed to geographic areas with regards to the level of impact they experience, the level of any impact expected in a community should be reflected in the proportion of benefits provided to that community. The Council believes that the most affected communities should receive a proportional benefit and the CBC should not be averaged over a wider area.
- 5.15 Community Benefit schemes should cover the whole of the lifecycle of a project or development and recognise the stages in its lifecycle. Decommissioning of a project and the restoration of the land involved has the potential to have as adverse an effect on communities as commissioning and build. Recognition of this phase of a project should be built into the amount, type and scheduling of the CBCs offered.

Use and Purpose

- 5.16 The purpose of the guidance is to achieve the best CBC outcome for local communities and to ensure that local data and community engagement is used in determining the use, and purpose, of CBCs. The guidance recognises the burden that may be placed on communities that host renewable energy and other developments.
- 5.17 This guidance will seek to serve social, environmental, economic, and cultural purposes. Each community is different and CBC funded projects will also be different.

However, projects should support the long-term well-being of those communities and projects developed using these contributions. They should support, thriving, prosperous and resilient communities, with good infrastructure, facilities and local nature amenity. The guidance sets out the Council's preferred uses.

5.18 The partners in a CBC are the developer and the affected community, or communities. CBCs are not an agreement between the Council and the developer and the Council's role is to guide the development of CBCs and advocate on behalf of communities. However, for the reasons set out above the Council has a key role to play in ensuring the maximum possible monetary and well-being benefit. The Council will work with developers to support any proposed mechanism for delivery but will seek to ensure that key principles are followed and that openness, transparency and accountability are embedded in the CBC.

5.19 The support for the delivery of this Guidance and negotiation with developers will be provided by the Council's Regeneration Team.

5.20 **Conclusion**

It is anticipated that this guidance will support our communities impacted by major developments to maximise the monetary and social potential provided by CRCs. It will also provide developers with a consistent understanding of the expectations of communities in the county borough.

6. **ASSUMPTIONS**

6.1 There are no assumptions.

7. **SUMMARY OF INTEGRATED IMPACT ASSESSMENT**

7.1 The Guidance is intended to support communities in their CBC negotiations with developers. While the guidance aims to support significant additional resources available to community projects, how any funds are ultimately used cannot be assessed. The guidance itself does not adversely impact on any groups.

Link to Integrated Impact Assessment

8. **FINANCIAL IMPLICATIONS**

8.1 As this is a voluntary agreement between developers and communities there are no direct financial implications for the council. There may some costs associated with existing Regeneration staff assisting communities in the negotiations, this will be absorbed within staffing costs.

9. **PERSONNEL IMPLICATIONS**

9.1 There are no personnel implications.

10. **CONSULTATIONS**

- 10.1 During the development of this guidance the views of the Council's Planning and Regeneration teams and GAVO have been included. Town and Community Councils have been given the opportunity to comment, as have developers. Their comments have informed the guidance.
- 10.2 The "Community Benefit Guidance – For Projects and Developments with the Potential for Significant Community Impact" Report was considered by the Corporate and Regeneration Scrutiny Committee on Tuesday 9th January 2024.
- 10.3 A Member suggested some of the guidance was vague and highlighted the description of Community Benefit Contributions as "goodwill financial contributions" made voluntarily and which could be monetary. The Senior Policy Officer provided clarity to Members and outlined that contributions were mainly monetary, such as per kWh generated at renewable energy sites, but could also be the offer of an apprenticeship scheme by the developer for example.
- 10.4 One Member highlighted that the voluntary nature of contributions should be stressed so that the expectations of communities are not falsely raised.
- 10.5 The Chair asked how the criteria for contributions was set. The Senior Policy Officer advised that negotiations were a matter for communities and the developer but highlighted that key principles such as proximity to the development were included in the guidance. Also, any groups receiving funding had to be properly constituted. Assurance was given that Community Councils were regarded as being properly constituted.
- 10.6 In terms of the negotiations with developers a Member asked about the help available to communities without constituted bodies such as Community Councils. The Corporate Policy Manager clarified that Council teams such as the Regeneration Team and Caerphilly Cares would be able to use the guidance and offer assistance to such communities, and she also highlighted the collaborative regeneration work with colleagues from the Gwent Association of Voluntary Organisations.
- 10.7 One Member asked about the protection of the right for communities to object to proposed renewable energy developments. The Senior Policy Officer advised that this right existed within the planning framework rather than the Community Benefit Guidance. The Corporate Director for Economy and the Environment added that as proposed renewable energy sites were classed as developments of national significance the planning authority was Planning and Environment Decisions Wales (PEDW) and the associated Local Authority was purely a consultee in the process. During the ensuing discussion it was also highlighted that PEDW received a Local Impact Report prior to its planning meeting and that this was followed by a 6-week consultation period.
- 10.8 A Member asked about future responsibility for infrastructure if a developer ceased trading. The Corporate Director for Economy and the Environment advised that such considerations would be included in the planning conditions imposed by PEDW.
- 10.9 The draft report and guidance were distributed as detailed below. All comments received have been reflected within the report.

11. STATUTORY POWER

- 11.1 Local Government Act 1972 and 2003 and the Council's Financial Regulations.

Author: Heather Delonnette, Senior Policy Officer
delonh@caerphilly.gov.uk

Consultees: Cllr Sean Morgan, Leader of the Council
Cllr Jamie Pritchard, Cabinet Member for Prosperity, Regeneration and
Climate Change
Corporate and Regeneration Scrutiny Committee
Dave Street, Deputy Chief Executive
Mark S. Williams, Corporate Director for Economy and Environment
Richard Edmunds, Corporate Director Education and Corporate Services
Rhian Kyte, Head of Regeneration and Planning
Sue Richards, Head of Transformation and Education Planning and Strategy
Robert Tranter, Head of Legal Services/Monitoring Officer
Stephen Harris, Head of Financial Services and Section 151 Officer
Kath Peters, Service Manager, Service Improvement and Partnerships
Ryan Thomas, Planning Services Manager
Tina McMahon, Caerphilly Cares Manager
Ian Evans, Procurement and Information Governance Service Manager
Jane Roberts-Waite, Head of Development and Strategy
Paul Cooke, Transformation Manager - Decarbonisation

GAVO
Bute Energy
Coalfields Regeneration Trust
Renewables UK

Appendices:
Appendix 1 Community Benefit Contributions Guidance – for Projects and Developments
with the Potential for Significant Community Impact

Caerphilly County Borough Council

**Community Benefit Contributions Guidance- for projects and developments
with the potential for significant community impact**

Contents:

AIMS

INTRODUCTION

WHAT ARE COMMUNITY BENEFIT CONTRIBUTIONS?

Social capital

Local Ownership

Role of Caerphilly County Borough Council

ESTABLISHING THE CBC SCHEME

Data and Assessment

Community Engagement

The Third Sector

Local Representatives

Proximity Principle

Amount and Timing of Contributions

Decommissioning

USE AND PURPOSE OF THE CBC SCHEME

Social, Economic, Environmental and Cultural purposes

DELIVERY MECHANISMS

Key principles

Delivery considerations

CONTACT

Contact Details

CASE STUDIES

Oakdale Community Benefit Fund

Brechfa Forest Wind Farm Fund

AIMS

Caerphilly County Borough Council welcomes major projects and developments that have the potential to deliver positive economic, societal, and environmental change.

The Council is committed to supporting and enabling Community Benefit Contributions (CBCs) for the county borough from all major developments to improve the well-being of local communities, improve quality of life and provide long term, sustainable community investment.

CBCs are not taken into account when determining any application for planning consent and the Council has no power to compel developers to provide voluntary CBCs, however, we will be proactive, consistent, and transparent in our approach to working with private and public sector partners, in partnership with our local communities, to encourage and secure meaningful and sustainable benefits.

This guidance is aimed at developers and communities and sets out the Council's expectations in relation to CBCs. It serves as a source of advice to both sides of the CBC equation, the developer, and the local community in which the development is situated.

INTRODUCTION

The county borough area provides numerous opportunities for major projects and developments, including, **but not limited to**, low carbon energy developments; wind, solar, hydro-electric and hydrogen projects. Other non-renewable energy projects have provided community benefit contributions to local communities; for example the development of waste sites could provide community funding, or remediation of contaminated land where the community are inconvenienced for the period of the remediation works. This guidance is intended for use by developers seeking to harness and utilise the resources of the county borough, to ensure that communities derive the maximum benefit from hosting such developments in their locality through the provision of direct voluntary community benefits.

The scale and significance of projects has a direct impact on communities. The Council will seek to ensure that social capital can be derived from these developments to the benefit of those most impacted by them and to provide a lasting and sustainable legacy for future generations.

Community Benefit Contributions have the potential to support and contribute to the wellbeing of communities and the people living within them. They can be used to improve quality of life, alleviate poor socio-economic situations, improve multiple deprivation factors, improve local biodiversity, empower resilient communities and support community participation and engagement. This could be via direct support for projects in the community, or monetary contributions to recognised and constituted community groups. Statutory land use and the planning system seeks to ensure that adverse impacts on communities are avoided, minimised or mitigated wherever possible.

Under S106 of the Town and Country Planning Act 1990, as amended, contributions can be sought from developers towards the costs of providing community and social infrastructure, the need for which has arisen as a result of a new development taking place. This funding is commonly known as 'Section 106'. Community Benefit Contributions are separate, different and unrelated to the Town and Country Planning Act; however they are increasingly voluntarily offered by developers to recognise that the location of some projects has the potential for adverse impact on communities, and by way of mitigation they provide benefits direct to the community concerned. As CBCs are unrelated to the Town and Country Planning Act, they may be associated

with developments that sit outside the Council's remit as a planning authority – like Developments of National Significance (DNS), for which applications are made to Planning and Environment Decisions Wales (PEDW).

It is important to emphasise that CBCs cannot and are not taken into account when determining any application for planning consent. The impacts a community may experience could include; accommodating disruption from construction, changes in the landscape, changes in the way land is used and accessed, and intangible but important aspects such as changes in the sense of place and qualities such as tranquillity and nature amenity.

The Council is committed to enabling this process and will offer its data, assessments, and its linkages into local communities to facilitate it.

The Council recognises that renewable energy developments can contribute towards both the UK and Welsh Governments' targets that have been set for the generation of energy, which are a key part of their commitment to decarbonisation and tackling the climate emergency. Community Benefit Contributions are widely adopted in the renewable energy sector. Building a more resilient and equitable low-carbon economy and helping to meet carbon reduction targets are equally important to the Council, are part of its **Corporate Plan (2023-2028)** commitments and contribute to our own well-being objectives for the area and the national well-being goals for Wales. Our well-being objective- **Enabling Our Environment to be Greener** includes an outcome to promote and explore green energy opportunities for the council, communities and local businesses.

However, this guidance is intended to be equally applicable to other projects and developments that have the potential to impact on the community in which they are located.

WHAT ARE COMMUNITY BENEFIT CONTRIBUTIONS?

Community Benefit Contributions (CBCs) is the term used for 'goodwill' voluntary financial contributions provided by a developer for the benefit of communities hosting a development. They can be monetary, with a payment made to a Community Interest Company, a Charitable Trust, or existing governance structures like Community and Town Councils, and administered appropriately. Alternatively they can support the direct delivery of projects and activities to improve the social, environmental, economic and cultural well-being of the area. CBCs can contribute to a range of national and local objectives. They are often offered by developers of projects where the potential adverse impacts to communities are recognised, but suitable mitigation is not always possible, or national or local policy outweighs the potential effects on local communities. For example, green energy infrastructure can have landscape and visual impacts – but the need for increasing the amount of green energy generated in Wales is clearly set out in Welsh Government Policy.

For developers, CBCs offer the potential to make targeted and impactful investments in communities closest to their proposals, making sure both direct and broader

benefits are delivered. In the past, green energy developments in the south Wales area have seen a Community Fund, which local charities can bid for funding from, to support their services; and broader investment, for example apprenticeships, green skills, and local businesses.

CBCs provide an opportunity to recognise the objectives in the Well-being of Future Generations Act and the socio-economic aims of public bodies, including the Council. The Council's role is to support CBCs recognising that they are an arrangement between the developer and the community. These agreements sit entirely outside the statutory planning role of the Council as the Local Planning Authority and should not be confused with social value and community benefit clauses which form part of procurement of contracts by the Council.

Social Capital

Social capital is any value added to the activities and economic outputs of an organisation by human relationships, partnerships and co-operation. Social capital concerns the institutions that help us maintain and develop relationships and a sense of place e.g., communities, businesses, trade unions, schools, voluntary organisations and constituted community groups. Features to ensure that social capital exists include;

- Communities and society at large share key positive values and a sense of purpose.
- The structures and institutions of society promote stewardship of natural resources and development of people.

CBCs should not be considered as the only way to deliver social capital and developers are encouraged to consider this in all elements of their project, including, for example, designing in environmental improvements such as habitat provision, or landscaping provision beyond screening out potential nuisance. The Council will seek to ensure that CBCs reflect social capital objectives by:

- Asking that they align with Welsh Government social value objectives.
- Engaging effectively with the affected communities.
- Asking that they seek to alleviate any particular socio-economic context of the community in question.
- Measuring and reporting on social capital outcomes as part of CBC monitoring.

Local Ownership

There are several examples of local ownership offerings that developers could explore, including the opportunity to buy shares or make an investment in developments. This opportunity can be for individuals or communities. By taking a share in projects, local communities can directly benefit from the profits of a project.

If local ownership forms part of a CBC proposal, the Council's view is that this would be more equitably offered to the community, rather than individuals living within the area, as the most socio-economically disadvantaged will likely lack the purchasing power to avail themselves of the offer.

Industry Standard

As of December 2023 Welsh Government's current Community Benefit Fund assumptions for wind (£5k/MW) matches the level suggested by Scottish Government and RenewableUK. A lower level for solar (£2.5k/MW) is suggested due to the lower yield per MW associated with solar, as a starting point for discussions between developers and communities.

Role of Caerphilly County Borough Council

CBCs are NOT a mechanism to make a development more acceptable in planning terms and they are not taken into account when determining any application for planning consent. No Councillor or Officer will be permitted to be involved in any discussions or negotiations in respect of a CBC, and then also participate in a land use planning (decision-making) process that corresponds to the development.

The Council holds a wealth of data and information about its communities including the current local assessment of well-being that divides the county borough into five geographical areas for community planning processes.

[Gwent Well-being Assessment \(gwentpsb.org\)](http://gwentpsb.org)

Teams within the Council work regularly and closely with local community groups and the formalised third sector and have a wealth of insight and community intelligence that will be available to support the development of CBCs.

The Council has a well-being power under local government legislation (Local Government Act 2000) to do anything it considers will improve the well-being of the area and for this reason it will take an active role in the development of CBCs in its area.

The Council will encourage developers to use this guidance and communicate directly with us at the earliest opportunity to secure the greatest level of benefits possible for local communities. The Council has a longstanding and supportive relationship with the community and voluntary sector through the Third Sector Partnership Agreement. Its partners include the Gwent Association of Voluntary Organisations, Gwent Police and Aneurin Bevan University Health Board, Natural Resources Wales, Public Health Wales and South Wales Fire and Rescue Service.

Council officers that facilitate or assist in the data, assessments and community engagement to support CBCs will hold roles entirely outside of the statutory planning process.

ESTABLISHING THE COMMUNITY BENEFIT SCHEME

Community Benefit Contributions should seek to support place-shaping initiatives which improve and increase access to community assets, including public spaces and anything that collectively improves community well-being. (CBCs) should be informed by the socio-economic context of the communities nearest to projects and by community engagement. They should also have reference to broader Welsh Government Policy – for example, the Well-being of Future Generations Act.

CBCs could support place-shaping initiatives which improve and increase access to community assets, including public spaces and anything that collectively improves community well-being, while being aligned to local needs. For example, in an area with high levels of youth unemployment, or a lack of suitable skills for employment opportunities that are available, it may be appropriate to explore how CBCs could fill that gap alongside existing provision.

Data and Assessment

The Council and its public sector partners hold a wealth of data, both quantitative and qualitative around local communities. Developers will find this data on the Gwent Public Services Board's website as hyperlinked above and further insight can be obtained from teamcaerphilly@caerphilly.gov.uk.

CBCs should set out how their contributions have been developed to meet the particular needs of the local community, by referencing its unique position and building on the existing assets of the community.

Community Engagement

Effectively involving the full breadth of a local community in developing a CBC is vitally important in ensuring that a few groups, or voices, do not hold undue influence over the decisions that will be taken as part of the CBC process.

The Council has a key role in ensuring that as wide as possible representation is heard, especially from groups in the community whose voices are less well heard. Insights, intelligence and the community voice are key aspects of the Council's delivery and again, the Council has a broad base of contacts and local community groups which should be used in developing CBCs. Advice should be sought at the earliest opportunity to ensure effective engagement and involvement. An engagement plan should be developed at the outset of a CBC and shared with the Council for comment and advice.

The Third Sector

The community and voluntary sector in the county borough are vibrant, effective and hard-working. Local voluntary groups are key to ensuring the resilience of local communities and offer a representative voice for the people living in the area.

The formalised local Community Voluntary Council - the Gwent Association of Voluntary Organisations (GAVO) works well with the Council and its other partners through the local Third Sector Partnership Agreement. CBCs should seek to support the sector and these arrangements in the county borough.

Local Representatives

Many areas of the county borough are served by Town and Community Councils. As the tier of democracy closest to communities they will have a vested interest in the development of CBCs where any are proposed in their areas. Noting that not all of the county borough area has this tier of democracy.

The Council's own 69 elected members cover 30 wards across the county borough and these members are the democratically elected representatives of the residents in the area. Their role means they have a range of insight and views on the development of their local communities that should be factored into the development of CBCs. However, like the separation role of officers of the Council, they are unconnected to planning decisions in their local areas.

Proximity Principle

The proximity principle simply provides that benefits should be directed to geographic areas with regards to the level of impact they experience; the level of any impact expected in a community should be reflected in the proportion of benefits provided to that community. The cumulative impact and concentration of other projects should be considered when developing the CBC. The most affected communities should receive a proportional benefit and the CBC should not be averaged over a wider area.

The Council advises a transparent, equitable and well-publicised approach to decisions around proximity and acknowledges that developers will seek to ensure that the distribution of CBCs reflects localised impacts. Openness and the ability to influence proximity decisions should be part of the engagement process when developing CBCs.

Amount and Timing of Contributions

The amount of benefit provided by the CBC will vary with each project or development. The time at which benefits become available may also depend on the nature of the project. However, the Council will seek to ensure that benefits become available to communities at the earliest point possible in the project lifecycle. CBCs are expected to be provided for the whole of the operational life of the project. The amount, type and scheduling of CBCs should be set out at the beginning of their development and be part of engagement with communities.

The approach to community benefits has been widely adopted for renewable energy projects. The Council will expect developers to commit to provide

community benefits equivalent to the current industry standard per MW of installed capacity, or equivalent benefits-in-kind, directly to host communities.

For other projects and developments, the industry standards are less well developed and understood, although they are evolving. The Council will, again, seek to ensure that a fair and representative amount is offered to local affected communities with an equitable proximity calculation built in.

Decommissioning

Community Benefit schemes should cover the whole of the lifecycle of a project or development and recognise the stages in its lifecycle.

Some projects, in particular but not only renewable energy projects, include a decommissioning phase. Decommissioning of a project and the restoration of the land involved has the potential to have as adverse effect on communities as commissioning and build. Recognition of this phase of a project should be built into the amount, type and scheduling of the CBCs offered.

However, for the avoidance of doubt, CBCs that cover the decommissioning or deconstruction phase of a development is not in lieu, or in place, of the appropriate decommissioning plan and planning conditions related to the decommissioning of the site.

USE AND PURPOSE OF THE COMMUNITY BENEFIT SCHEME

The Council's role is to achieve the best CBC outcome for local communities and to ensure that local data and community engagement is used in determining the use and purpose of CBCs. It may be appropriate for the Council to administer the funds allocated to the CBC, which has happened for renewable energy schemes in the past. GAVO also administers CBC schemes on behalf of communities. However, this is not intended to be the standard approach and the best administration mechanism will be determined as part of the CBC development. This could include the use of a Community Interest Company (CIC) or a Charitable Trust. Charitable Incorporated Organisations (CIOs) are structured to represent the interests of the community. They typically have local members and a governance structure that ensures decisions about fund allocation are made with community input.

Social, Economic, Environmental and Cultural purposes

The unique data, intelligence and engagement with communities will determine the most appropriate criteria for each CBC. However, the long-term sustainability of communities will be the focus of development and the Council will seek agreement that long-term projects will be developed using contributions. Projects that support the long-term well-being of future generations, thriving, prosperous and resilient communities, with good infrastructure, facilities and local nature amenity will be preferred. Indicative areas would be:

- Investing in young people by promoting skills development and apprenticeship opportunities.
- Supporting the local economy through targeted training and recruitment of local labour, sourcing materials, contractors and services locally etc. reducing the need to travel and improving sustainability.
- Providing means of alleviating disadvantageous circumstances and raising aspirations amongst individuals and groups, for example, through scholarships to local universities and colleges, work placements and visits to operational facilities.
- Supporting services which improve community cohesion and quality of life for example, youth engagement and participation projects.
- Making investments which contribute to sustainable long-term projects in communities.
- Supporting the sustainability of community owned/managed assets i.e. community buildings, allotments.
- Promoting and enhancing local identity, distinctiveness and culture recognising the desire to support the Welsh language.
- Providing enhanced support and recognition of the needs of residents with protected characteristics.
- Making contributions to electric vehicle charging infrastructure and the collective imperative of targeting net zero.
- Providing resources for citizens to pursue the low carbon agenda through community-based energy efficiency measures, or community-based energy clubs.
- Providing open space improvements, biodiversity net gain projects, providing or supporting landscape reinstatement or enhancement schemes.
- Providing communities with the opportunities to invest in the proposed development and with the tools to enable them to make better use of their local energy assets; and
- Adding value to existing community projects.

DELIVERY MECHANISMS

The partners in a CBC are the developer and the affected community, or communities. CBCs are not an agreement between the Council and the developer and the Council's role is to guide the development of CBCs and advocate on behalf of communities. However, for the reasons set out above, the Council has a key role to play in ensuring the maximum possible monetary and well-being benefit. The Council will work with developers to support any proposed mechanism for delivery but will seek to ensure that key principles are followed, and that openness, transparency and accountability are embedded in the CBC.

Key principles

1. The proposal must deliver a defined benefit to local communities, taking into account the proximity principle and with clear objectives around the outcomes to be achieved.
2. The administration of the fund must involve local people in decision making; while the developer can set the parameters of what the CBC can be used for, they should involve local people in this decision and involve local people in decisions on precise projects and schemes.
3. Funding should be provided to properly constituted community groups rather than individuals, unless an element of the scheme is devoted to educational purposes such as bursaries, or apprenticeships. Funding bodies should ensure due diligence when determining which groups and projects to support.
4. All processes should be publicised and transparent, the existence of funding and how it will be used and has been used must be easily publicly available. Dedicated websites and social media platforms should be used. However, recognised digital exclusion should be an important part of openness and transparency, options for face-to-face events in communities should be taken to ensure that people with protected characteristics are equally able to contribute.
5. The use of funds should be reported on. An annual report setting out how funds have been used, what projects or schemes have been supported and what outcomes this has resulted in, should be produced and made available to local communities.
6. The holding of CBC funds should be properly managed and audited. Accounts showing the application of funds, including deductions for administrative costs, should be made publicly available at the end of each year of operation to assist the understanding of communities, partners and their representative.

Delivery support

- **Caerphilly Cares** The 'Caerphilly Cares' team, a team of established Caerphilly County Borough Council staff, offers a centralised coordination and response triage service for those county borough residents in need of support for issues such as food poverty, debt or rent arrears, isolation or loneliness. 'Caerphilly Cares' aims to offer the individual a single point of contact with the team, who will assist that individual in getting to the root cause of their issue, meaning they will only need to explain their situation once. The team links up with existing services, both within Caerphilly County Borough Council and with partners, including the voluntary sector and local community groups, supporting that individual through their journey with those various services, from end to end. The team plays a key role in community development and works with local community groups to maximise community and individual well-being.

- **GAVO** Gwent Association of Voluntary Organisations (GAVO) is the county voluntary council in Caerphilly. GAVO is one of 19 intermediary bodies in Wales and is an umbrella organisation providing support, advice and information to the voluntary and community sector, with over 800 members in the county borough. GAVO is an invited member representing the voice of the voluntary sector at the Caerphilly Public Services Board, and at a strategic level across the county borough. GAVO supports joint working through the Caerphilly Well-being Plan, the Voluntary Sector Liaison Committee and forums and networks.
- **GAVO Community Development and Volunteering Officers** provide governance, sustainable funding and volunteering, support and advice to the Third Sector in Gwent, including community and voluntary groups as well as individuals who are interested in helping and supporting their community.

CONTACT

To discuss the development of CBCs with the Council please contact:

Allan Dallimore
Regeneration Service Manager
dallia@caerphilly.gov.uk
01443 866441

CASE STUDIES

Oakdale Community Benefit Fund

Community Benefit Contributions have already made an impact on local communities across Caerphilly County Borough. Several constituted groups have accessed grants from the Oakdale Community Benefit Fund. Oakdale Business Park Wind Energy Project is a 4MW project located on a brownfield site that was formerly a coal mine. Partnerships for Renewables will pay rent to the council for use of the site, which will provide additional income for the benefit of the local community. In addition, a community benefit package of £10,000 per year, index linked for the lifetime of the wind farm, will be provided as part of the development, to be spent on projects that will have positive impacts locally. Recipients include Markham Miners Welfare Club in Blackwood. The club accessed £3000 of funding which was used towards replacing the existing boiler which supplies heating to the building, replacing this helped with efficiency decreasing running costs for the building. The centre houses a local playgroup, Senedd Surgeries, health visiting clinics and a Food bank and Warm Hub over the winter months. The funding targeted projects that contribute to local and national goals including the well-being goals of the Well-being of Future Generations (Wales) Act 2015 and the aims of the Corporate Plan. Other recipients of grants in 2023 include:

- Mynyddislwyn Choir
- Heartwise groups in Argoed and Crumlin

Brechfa Forest Wind Farm Fund

Further afield community benefit contributions have made an impact on communities across Wales. Brechfa Forest Wind Farm is a 57.4MW project in Carmarthenshire and was commissioned in 2018. The RWE Brechfa Forest Wind Farm Fund was launched in 2018 by RWE and is worth £11 million over the lifetime of the wind farm. The fund aims to support the communities that neighbour the wind farm for the duration of the 25-year lifetime of the site. Over the past three years, as well as generating match funding, the fund panel has:

- Helped to create a new lunch club, cinema club and IT hub.
- Engaged community development specialists to help projects develop, build capacity, and come up with new solutions to challenge.
- Given grants to much-needed community facilities, including community centres, church halls, provide long term funding for public toilets.
- Reduced carbon emissions and running by funding for electric vehicles for community transport schemes as well as solar panels and charging points on community buildings.
- Led the delivery of a strategic approach to supporting all the schools in their area.
- Responded to emergencies such as floods and the pandemic.

- Funded innovative projects like the purchase of a bunk house by their local hospice, which is creating a long-term income stream for the hospice as well as boosting tourism opportunities in the area.

Octopus

Octopus Energy Group is a British renewable energy group specialising in sustainable energy. Octopus own the singular 400kW wind turbine in Cefn Bach Farm, Deri. Octopus customers in this area (CF81 & NP24) can benefit from up to 50% off their electric energy bill when their 'Fan' is spinning and therefore providing renewable energy to local homes. Octopus refer to this scheme as their 'Fan Club'.

The Fan Club also invests in local community groups and schools. For example, Octopus held a community event in celebration of the men's Welsh International football team reaching the football world cup.

Bute Energy

Cardiff-based developer Bute Energy's Community Benefits Vision is informed and underpinned by detailed mapping work. The company uses primary and secondary research to map the needs of communities close to their proposed Energy Parks to allow them to identify hyper-local investment priorities for each community. The mapping work undertaken by Bute helps to identify key strategic themes for positive impact including social mobility and education; which help target Bute Energy's Community Investment.

Mapping of communities and detailed engagement with local people and stakeholder groups has helped identify five key strategic themes for positive impact:

- Social Mobility: maximising local employment and training opportunities, inspiring future generations.
- Education: encouraging an interest in STEM subjects and climate change
- Recreation and Health: Enhancing access to recreational and health activities.
- Environment and Culture: Promoting local Welsh culture, heritage, and environmental enhancement.
- Cost of Living: Collaborating to address the cost-of-living crisis, with a focus on energy efficiency.

The five themes now form the basis for the Bute Energy Community Investment strategy, and alongside ongoing research and community engagement, will help target local Community Benefit Contributions.

This page is intentionally left blank



CABINET 21ST FEBRUARY 2024

SUBJECT: NANT CYLLA WATERCOURSE EROSION CONTROL WORKS

REPORT BY: CORPORATE DIRECTOR ECONOMY AND ENVIRONMENT

--

1. PURPOSE OF REPORT

- 1.1 To provide Cabinet with an update in relation to erosion of the Nant Cylla watercourse, Ystrad Mynach and to request authorisation for a spend of £270k for detailed design of a stabilisation scheme and a £100k contingency fund for temporary stabilisation works should these be required whilst the full scheme is being developed and procured.

2. SUMMARY

- 2.1 The Nant Cylla is a heavily modified watercourse that flows rapidly through the centre of Ystrad Mynach to the River Rhymney.
- 2.2 The watercourse banks have previously been subject to scour and erosion, with gabion baskets installed in July / August 2018 as a temporary measure to reduce the impact of the scour. Partial failure of these was observed in December 2021, resulting in the installation of rock mattresses in March / April 2022 as a further temporary measure and selective stone fill at various times in various locations.
- 2.3 Progressive failure due to scour and erosion is still ongoing. Monthly monitoring checks are carried out to assess the rate of failure, with further temporary measures installed when required.
- 2.4 A fully designed, long-term solution is needed to reduce flow velocities and lessen the likelihood and impact of scour. An outline design using Green Infrastructure approaches has been developed by CCBC's Engineering Projects Group and an external consultancy, WSP.
- 2.5 CCBC has a legal responsibility for some of the affected areas of the watercourse. Whilst legal responsibility for other areas rests with the property owners / landowners, it is considered that a single scheme that addresses the entire stretch of the watercourse would result in better and more sustainable outcomes.
- 2.6 Some of the property owners have built outbuildings, bridges or other structures at the top of the banks and across the watercourse without planning permission or other

consents. These structures are further weakening the banks, are liable to collapse and will need to be removed to facilitate repair and restoration of the watercourse.

- 2.7 This report identifies the need for capital funding requirement of circa £270k to be made available in order for detailed design of the preferred engineering solution to be carried out and construction costs for the implementation of the scheme to be confirmed.
- 2.8 This report further identifies a need for a £100k contingency fund to be made available to for use in the provision of further temporary stabilisation works should these be required prior to the full scheme being implemented.
- 2.9 An indicative capital cost for the full scheme is currently estimated at £2.9M, including detailed design costs, which will be confirmed as part of the detailed design stage of the project.
- 2.10 The preferred engineering solution has an anticipated design life of 100-years and an anticipated whole life cost of £3.5M, which will be confirmed during the detailed design stage of the project.

3. RECOMMENDATIONS

- 3.1 Cabinet is asked to agree for capital funding of circa £270k to be made available to the Economy and Environment Directorate for detailed design of the scheme. This is to be funded from uncommitted capital earmarked reserves.
- 3.2 Cabinet is asked to agree for a contingency fund of £100k to be made available to the Economy and Environment Directorate for further temporary stabilisation works should these be required prior to implementation of the full scheme. Again, this is to be funded from uncommitted capital earmarked reserves.
- 3.3 Cabinet is asked to agree that no compensation will be offered to property owners / landowners in relation to the removal of structures built close to the top of the banks and / or spanning the watercourse, but that CCBC will commission detailed design and construction works at no cost to the property owners / landowners.

4. REASONS FOR THE RECOMMENDATIONS

- 4.1 The preferred option for the scheme uses a mix of Green Infrastructure and hard engineering approaches for different parts of the affected watercourse. The scheme will widen and re-naturalise parts of the watercourse to reduce flow velocities and thereby lower the likelihood and impact of scour and erosion.
- 4.2 The detailed design of the scheme is complex and requires a multi-disciplinary approach. It is recommended that this is procured using the South East Wales Technical and Professional Services (SEWTAPS) framework.
- 4.3 Failure to act could result in a reasonable worst case scenario involving collapse of the banks of the watercourse, leading to widespread flooding, damage to properties, adverse environmental impacts and risk of injury or loss of life.
- 4.4 A continued managed risk scenario with temporary works carried out as needed may reduce the likelihood of failure but only provides temporary risk reduction.

- 4.5 CCBC as landowner has a formal legal responsibility for maintenance of part of the affected watercourse and as Lead Local Flood Authority (LLFA) has a regulatory responsibility for the overall management of the watercourse and is therefore the best placed to take measures to repair, restore and re-naturalise the watercourse.

5. THE REPORT

- 5.1 The Nant Cylla is formally classified as a “heavily modified waterbody” meaning that its form has been substantially altered from a natural stream course, that flows north to south from Penpedairheol through Hengoed and Ystrad Mynach to the River Rhymney.
- 5.2 The lower reaches of the watercourse is channelised through the centre of Ystrad Mynach with banks largely formed of gabion baskets. Lateral movement of the watercourse is constrained by the existing urban development to both sides of the watercourse.
- 5.3 The Nant Cylla reacts quickly to rainfall events and has a steep gradient that results in high flow velocities within the stream. A resident video shows the stream under high flow conditions.
- 5.4 The combination of constrained watercourse and high flow conditions is leading to progressive erosion of the banks of the watercourse (see Figure X to Y below).
- 5.5 This results in the channel becoming ever more incised (cutting deeper into its channel) and undermining existing erosion protection measures.
- 5.6 The undermining of the erosion protection measures is causing a progressive failure of the banks, adjacent structures, and bridges / structures over the watercourse.
- 5.7 In some areas, residents have built unauthorised / unconsented outbuildings or other structures either close to the top of the banks and / or spanning the watercourse. These structures limit access to the watercourse for any maintenance works and are placing an additional load on the banks of the watercourse. The banks, including areas of gabion baskets, were not designed to take the structural loading from these outbuildings and other structures and this is also contributing to the failure of the watercourse.
- 5.8 The gabion baskets were installed in July / August 2018 as an erosion protection measure. Gabion baskets are rectangular wire mesh baskets filled with small rock of approximately 100-250mm in diameter. The baskets are often placed on top of one another to form a vertical or terraced retaining wall against a riverbank.
- 5.9 Progressive scour and erosion continued with significant movement of the gabion baskets occurring in December 2021.
- 5.10 Emergency stabilisation works have been carried out to provide temporary support and stabilisation of the banks of the watercourse. Most recently, this included works in March / April 2022 with rock mattresses installed underneath the gabion baskets and to the bed of the watercourse at a cost of £20k. Further stone fill is selectively applied to individual areas as required. .

- 5.11 The condition of the watercourse is being monitored by a specialist contractor, Edwards Diving Services (EDS) at a monthly rate of £450. EDS themselves do not enter into part of the watercourse during these monitoring visits due to the potential instability and risk of collapse in this area.
- 5.12 The gap across the watercourse at the top of the gabion baskets has reduced by 208mm between April 2022 and November 2023.
- 5.13 Gaps between the baskets in key monitored areas have increased by 20mm in the same period.
- 5.14 There are observed areas of voids of up to 2.5m below the banks and gabion baskets with little or no connectivity between the underside of the baskets and the stream bed.
- 5.15 Therefore, whilst the works carried out in March / April 2022 have reduced the rate of failure of the banks of the watercourse, the progressive movement shows that erosion is continuing and, if not addressed through a long-term scheme, could result in failure / collapse of the watercourse banks and associated structures on the banks or across the watercourse.
- 5.16 Under a **reasonable worst-case scenario** an individual high-flow event or a wet winter period can cause a rapid deterioration and sudden loss of support to the banks underneath or very close to one of the outbuildings, bridges, or decking areas, with the following outcomes:
- The bridge or structure is occupied by one or more residents at the time of collapse, resulting in a threat of severe injury or loss of life.
 - As a result of the collapse, 38 properties are formally prohibited from any use of rear gardens due to a safety risk.
 - The collapsed bank and structure cause a full or substantial blockage of the Nant Cylla, resulting in surcharge to the upstream culvert and causing flooding to High Street, Penallta Road, Bedwlwyn Road and Lewis Girls Comprehensive School.
 - A pollution incident is recorded within the River Rhymney by Natural Resources Wales (NRW) due to sediment and other debris from the collapsed bank and structures being mobilised and washed downstream into the River Rhymney.
 - Ystrad Mynach town centre and Lewis Girls Comprehensive School are closed whilst clearance works and emergency repairs are undertaken, with full closures lasting approximately 2-6 weeks.
 - Parts of Lewis Girls Comprehensive School grounds remain out of use due to further risk of bank erosion and to facilitate access to the watercourse for a number of months.
 - Repair works are carried out during high flow / winter period and under emergency conditions. This results in escalating costs due to the increased difficulty of working in adverse conditions, associated increased plant hire and increased health and safety risks.
- 5.17 Under a **managed risk scenario**, monthly inspections continue, with the frequency of inspections increased should sudden or excessive movement be observed. Insofar as possible, temporary works to stabilise any areas of excessive movement are carried

out during dry weather periods and outside of the fisheries window. The condition and stability of the watercourse is managed during the detailed design and procurement phases of the project, with a reasonable control on costs possible. Full scale improvement works are scheduled to minimise impact on residents, businesses and the school in full consultation / engagement with elected members and the public.

- 5.18 A feasibility study has been undertaken by CCBC's Engineering Projects Group (EPG) with support from an external consultant, WSP. This identified two alternative strategies for long-term stabilisation options:
- Strategy 1 uses Green Infrastructure approaches to widen and re-naturalise parts of the watercourse thereby reducing velocities and lowering the likelihood and impacts of scour. The total estimated cost (including detailed design cost) for construction is £2.9M. The scheme is anticipated to have a 100-yr design life, with a whole life cost of £3.5M.
 - Strategy 2 uses a more heavily engineered approach to manage / mitigate the scour. The total estimated cost (including detailed design cost) for construction is £1.8M. The scheme is anticipated to have a 50-yr design life, with a whole life cost (including for renewal at year 50) of £4.5M.
- 5.19 Whilst Strategy 1 has a higher initial cost, it is considered to have additional wider environmental benefits using Green Infrastructure approaches. It better aligns with Welsh Government policy and with the Well-Being of Future Generations objectives. Strategy 1 is, therefore, the preferred approach.
- 5.20 As outlined in Section 12 below, CCBC have a legal responsibility for works within some areas of the watercourse. Whilst the formal legal responsibility for works in other areas rests with the individual landowners, there is no certainty that the individual landowners would be in a position to be able to design and implement individual schemes.
- 5.21 It is understood that some of the land now in private ownership was obtained through adverse possession claims by the residents and that many of the outbuildings, bridges and other structures were erected without the necessary permissions and consents. However, due to the length of time elapsed since the structures were built, it is not now possible to take any formal enforcement action against the property owners for breach of planning permission or other consents. Some of the structures will have been built at considerable expense to the residents. These structures would have to be removed for bank stabilisation works to be carried out. It is not currently intended that the property owners would be offered any compensation for removal of the structures due to the unlawful nature of the original construction.
- 5.22 It is proposed that CCBC commission the detailed design and subsequent works for the full length of affected watercourse at no cost to the private landowners.
- 5.23 An outline engagement strategy has been developed and is described in Section 11 below.

5.24. CONCLUSION

- 5.24.1 If funding is not secured the Nant Cylla will continue to erode the stream bed, undermine bank support, and garden structures, potentially leading to a reasonable worst-case scenario of partial or complete collapse of the banks and bankside or bridge structures, flooding of the local area, considerable disruption to Ystrad Mynach, environmental damage and potentially serious injury or loss of life.
- 5.24.2 A continued managed risk scenario can reduce the likelihood of collapse of the banks but does not entirely remove the risk and requires continuous monitoring and interventions. A contingency fund is needed to ensure budget availability should intervention works be needed at short notice.
- 5.24.3 A scheme is needed to fully address the issue and to provide long-term stability to the watercourse. The detailed design is complex and requires an initial spend of £270k.

6. ASSUMPTIONS

- 6.1 That detailed design will result in an economically viable scheme.
- 6.2 That the continued managed risk scenario involving ongoing monitoring and temporary stabilisation works as required will prevent full or partial collapse of the watercourse banks whilst the scheme is designed and procured.
- 6.3 That no legal challenges are received in relation to the proposed removal of outbuildings, decking areas, bridges or other structures that are impacting on the stability of the watercourse.

7. SUMMARY OF INTEGRATED IMPACT ASSESSMENT

- 7.1 [Link to IIA](#)

8. FINANCIAL IMPLICATIONS

- 8.1 WSP, who provided support for the feasibility study assessment, have given an estimated cost for detailed design work of £270k.
- 8.2 Detailed design work will be commissioned through the South East Wales Technical and Professional Services (SEWTAPS) framework to ensure best value arrangements are achieved through competitive procurement.
- 8.3 A contingency fund of £100k is requested to be earmarked in case of further emergency / temporary repairs whilst the full detailed design is developed and construction procured.
- 8.4 The combined Corporate and Non-Corporate capital budgets for Drainage and Flood Alleviation works for 2023/24 is merely £246k and is fully committed to other flood priority schemes.

- 8.5 The Corporate Land Drainage budget of £123k is used to carry out repairs and maintenance work on land across various directorates where no specific budget allocation is included within individual service area budgets and is already fully committed.
- 8.6 The Non-Corporate Land Drainage budget of £123k is used for match funding on Welsh Government flood grant schemes and for priority capital works.
- 8.7 Given the limited budget availability and anticipated design costs and following consultation with the Section 151 Officer, it is proposed that the detailed design costs and contingency fund are funded from uncommitted capital earmarked reserves.
- 8.8 The current preferred option has an estimated construction cost of circa £2.9M, is anticipated to have a design life of 100-years and a whole life cost of £3.5M. These costs will be reviewed and confirmed during the detailed design phase of the scheme.

9. PERSONNEL IMPLICATIONS

- 9.1 There are no Personnel implications foreseen.

10. CONSULTATIONS AND ENGAGEMENT STRATEGY

- 10.1 The following statutory bodies and service areas have been consulted during the development of this proposal thus far:
- Natural Resources Wales.
 - Caerphilly CBC Ecologists.
 - CCBC Education department.
 - CCBC Estates Department
 - CCBC Legal Services Department
 - CCBC Planning Department
- 10.2 It is understood that a previous letter was drafted and issued to ward members prior to the emergency works in March / April 2022 but it is not clear whether this letter was issued to property and landowners. At that time, it was proposed that CCBC would carry out the works **and** compensate residents for the loss of the unauthorised structures. Given further legal advice on the legal status of the structures, land ownership and riparian responsibilities, combined with the wider shift in the economy, it is still proposed that CCBC progress with detailed design at no cost to the residents. However, it is not proposed that any compensation will be offered to the residents for the removal of unauthorised structures.
- 10.3 An outline engagement strategy has been developed as follows:
- Detailed structural assessment of the full impacted length of the watercourse to provide an accurate appraisal of the current condition of the watercourse at an individual property level.
 - Meeting between ward members and officers to update current status and advise of next steps.
 - Write to individual property owners / occupiers to outline overall issues and detail specific risks in relation to their individual property. This is likely to include a

recommendation that outbuildings, bridges and other structures identified as being at risk are not used at any time. This is also likely to include a recommendation that residents do not use the lower ends of their gardens. The letters will include an invitation to meet with Officers.

- Officers to meet with property owners / occupiers on an individual basis to discuss their specific concerns in relation to the overall issues and at a specific property level.
- Quarterly updates issued to property owners / occupiers to advise of any changes observed through regular monitoring and updates on progress of detailed design process.
- Property owners / occupiers to be informed of any significant changes observed through monitoring reports resulting in a substantially increased risk to individual properties and / or the need for emergency works to be undertaken at the earliest practical opportunity.

11. STATUTORY POWERS AND LEGAL OBLIGATIONS

- 11.1 CCBC are the Lead Local Flood Authority (LLFA) under the Flood and Water Management Act (2010). The LLFA have a responsibility for strategic management of flood risk relating to streams and small watercourses such as the Nant Cylla.
- 11.2 The Landowner has riparian rights and responsibilities to maintain the watercourse and both banks, vegetation to the banks and the watercourse. Figure 2 below shows land ownership as confirmed by Land Registry searches.

[Link to – a guide to your rights and responsibilities of riverside ownership in Wales \(naturalresources.wales\).](#)

- 11.3 In Section 1, from Commercial Street / Bedwlwyn Road (no.6) to the rear of no. 60, CCBC is not the landowner of either bank of the watercourse and therefore, the legal responsibility to maintain the banks rests with the individual property owners. The ability of the landowners to be able to design and implement individual schemes in this area is questioned.
- 11.4 In Section 2, to the rear of no. 62, 64 and 66, CCBC is the landowner of the eastern bank with the property owners being the owners of the western bank. CCBC therefore has shared legal responsibility with the property owners for maintenance of the banks.
- 11.5 In Section 3, from the rear of no. 68 to the confluence with the River Rhymney, CCBC is the landowner of both banks where works are anticipated and therefore has legal responsibility for maintenance of the banks. A license for use of the western bank has been granted to White Rose Cottage. Part of the western bank in this section is unregistered, although it is to be anticipated that fair use of this land could also be demonstrated by White Rose Cottage and there are limited works proposed to the western bank at this point.
- 11.6 The Land Drainage Act 1991 Section 14A confers general powers upon the LLFA to carry out flood risk management works including:

- a) to maintain existing works (including buildings and structures) to maintain the efficiency of the watercourse
- b) to improve or alter an existing watercourse, including removal of dams, weirs or other obstructions
- c) to construct new works
- d) to alter or remove works

Author: Mark Goodger, Principal Engineer - (Lead Local Flood Authority)

Consultees: Cllr Nigel George, Cabinet Member for Corporate Services, Property and Highways
 Dave Street, Deputy Chief Executive
 Cllr. Andrew Whitcombe, Chair of Housing and Environment Scrutiny Committee
 Cllr. Shane Williams, Vice-Chair of Housing and Environment Scrutiny Committee
 Cllr. Alan Angel – Ward Member
 Cllr Martyn James – Ward Member
 Mark S Williams, Corporate Director for Economy and Environment
 Richard Edmunds, Corporate Director of Education and corporate Services
 Marcus Lloyd, Head of Infrastructure
 Lynne Donovan, Head of People Services
 Robert Tranter, Head of Legal Services and Monitoring Officer
 Stephen Harris, Head of Financial Services and S151 Officer
 Gareth Richards, Highway Services Group Manager
 Anwen Cullinane, Senior Policy Officer – Equalities, Welsh Language National Resources Wales

Appendices:

- Appendix 1 Nant Cylla Scour Feasibility Study – Regarding Appendix A which is part of the Feasibility Study, entitled “Utilities” – This document contains plans which cannot be made accessible. Therefore, should anyone wish to discuss the content they may contact Mark Goodger, Author of the Report on goodgm@caerphilly.gov.uk
- Appendix 2 Nant Cylla Monitoring Survey.

This page is intentionally left blank

Caerphilly County Borough Council

NANT CYLLA

Scour Feasibility Study


CONFIDENTIAL

.

Strategy for discussion

DATE: FEBRUARY 2020

QUALITY CONTROL

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	DRAFT			
Date	7 February 2020			
Prepared by	Pierre Vandervorst			
Checked by	Simon Gilliland			
Authorised by	Claire Storer			
Signature	 Storer Claire			
Project number	70061157			
Report number	N/A			
File reference	N/A			



CONTENTS

CONTENTS	3
1 SITE LOCATION	6
2 STUDY OBJECTIVES	7
3 INCOMING INFORMATION	8
4 SITE VISIT	9
5 SITE CONSTRAINTS	12
5.1 INTRODUCTION	12
5.2 ACCESS	12
5.3 PUBLIC ENCROACHMENT	12
5.4 ENVIRONMENTAL CONSTRAINTS	13
5.5 UTILITIES	13
6 SCOUR PROTECTION STRATEGIES	14
6.1 INTRODUCTION	14
6.2 STRATEGY 1 - REMOVE SCOUR EFFECTS	14
6.3 STRATEGY 2 – MANAGE SCOUR EFFECTS	15
7 OPTIONS ASSESSMENT	16
7.1 REMEDIAL WORK TO EXISTING SCOUR PROTECTION STRUCTURES	16
7.2 SCOUR PROTECTION OPTIONS	17
7.3 REVIEW OF OPTIONS	23
8 RECOMMENDED STRATEGY AND PREFERRED OPTIONS	26
9 OPTIONS COST REVIEW	28
10 RECOMMENDATIONS	30

10.1	TO FINALISE THIS STUDY	30
10.2	TO PROGRESS DESIGN	30
11	APPENDICES	2

FIGURES

Figure 1 – Study Area	6
Figure 2 – Section 1: Concrete lined channel and bank retaining structures	9
Figure 3 – Section 2: Concrete weir	10
Figure 4 – Section 2: Gabion foundations exposed to scour	10
Figure 5 – Section 3: Typical photos of banks affected by scour	11
Figure 6 – Example of channel energy dissipation structures	17
Figure 7 – Typical rock weir section	18
Figure 8 – Energy dissipation structures / rock weirs and meanders (typical)	20
Figure 9 – Rock weirs at intervals (typical)	21
Figure 10 – Example of possible widened channel (channel profile to be confirmed)	22

TABLES

Table 1 – Section 1: Review of scour protection options	23
Table 2 – Section 2: Review of scour protection options	24
Table 3 – Section 3: Review of scour protection options	25
Table 4 – Cost Estimate for Strategy 1	28
Table 5 – Cost Estimate for Strategy 2	29

APPENDICES

APPENDIX A

UTILITY RECORDS

APPENDIX B



PREFERRED OPTION PLAN
APPENDIX C
OPTION COST ESTIMATE

1 SITE DESCRIPTION

The section of Nant Cylla in Ystrad Mynach from the Commercial Street culvert to the confluence with the River Rhymney has historically been affected by erosion and scour. Original protection structures along the watercourse are reaching the end of their life and are failing dramatically. The erosion has left the banks vulnerable to the effects of river scour and possible future undermining posing a risk to the banks and adjoining properties.

WSP has been commissioned by Caerphilly County Borough Council (CCBC) to carry out a feasibility study and to consider possible permanent scour protection options to mitigate the future risk of damage. The study reach of the Nant Cylla has been split into three different sections according to the watercourse characteristics; these are shown in Figure 1.

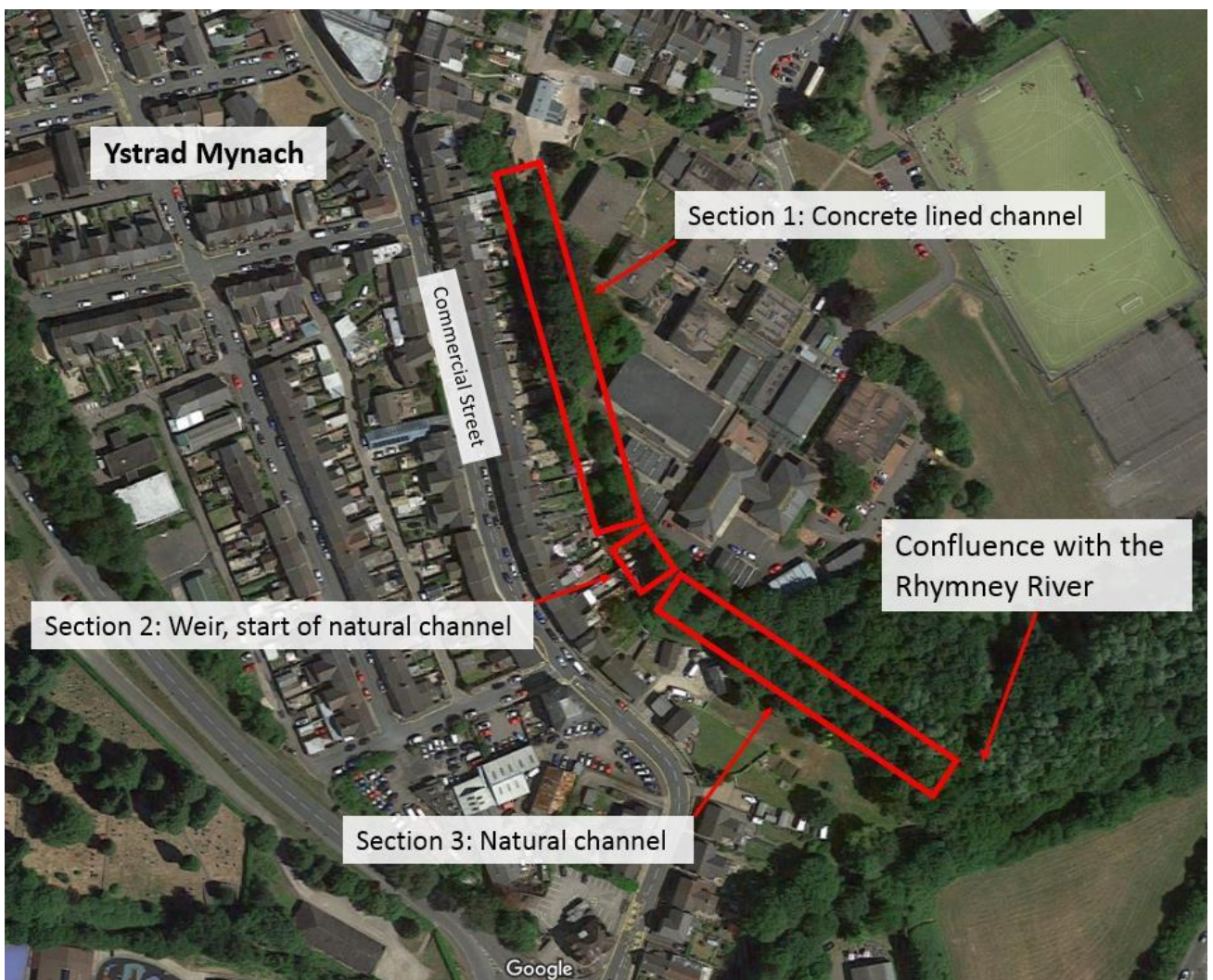


Figure 1 – Study Area

2 STUDY OBJECTIVES

The objectives of this feasibility study are summarised as follows:

- Undertake a river reconnaissance visit with representatives from CCBC along the Nant Cylla study area in order to review the site context, assess conditions and local constraints;
- Carry out a desk-based assessment reviewing existing information provided by CCBC to assess the likely causes and mechanisms of scour and the site constraints;
- Undertake a desktop appraisal and assessment of potential options for scour protection measures, outlining advantages and constraints and recommend a preferred solution;
- Consultation with CCBC and other key stakeholders to discuss the options report and agree the preferred option;
- Make recommendations to progress the design considering factors such as construction access; potential land take and availability; environmental impact; longer term robustness; stakeholder consultation and future maintenance.

3 INCOMING INFORMATION

The following information has been supplied by CCBC for use in this study. The information supplied at this stage is for information purposes only and has been used to support the feasibility study and optioneering stage and will need verifying as design progresses.

Drawings and Models:

- 2016 Gabion wall repair drawings;
- 2019 3D Survey Model and CAD files.

Legal Documents:

- Land ownership certificates for properties on Commercial Street;
- A3 size plan with ownership and Land Registry web data.

Photographs:

- Commercial street culvert works;
- Gabion wall failure;
- General photos 2014;
- General photos 2016;
- Historic flooding photos.

Reports:

- June 2006 - Inspection report for Commercial Street culvert;
- 2016/17 Confined Space Maintenance report.

Statutory Undertakers Apparatus:

- Western Power Distribution;
- Dwr Cymru / Welsh Water;
- Before you Dig;
- Openreach;
- Wales & West Utilities.

4 SITE VISIT

Engineers from WSP and CCBC undertook a river reconnaissance site visit to the Nant Cylla study area on Tuesday 27th August 2019 in order to establish the site context; review the condition of existing watercourse banks and scour protection structures; and identify local constraints to inform the development of options to mitigate the ongoing effects of scour.

The following key observations were made in each section of the study area.

Section 1:

This section runs from the Commercial Street culvert outlet downstream to the concrete weir and recently repaired gabion walls in Section 2. In this section of the watercourse the bed of the channel is concrete lined and the bank retaining structures appear to be in generally good condition (a typical channel section is shown in Figure 2). The comparably smooth channel bed and banks in Section 1 allow water to be conveyed quickly downstream with reduced turbulence in the flow. The channel width in Section 1 is approximately 3m.



Figure 2 – Section 1: Concrete lined channel and bank retaining structures

Section 2:

At the end of Section 1 the river reverts to a more natural channel bed. The transition from the concrete lined channel bed in Section 1 to the natural channel bed in Section 3 is achieved via a concrete weir in Section 2.

This transition area has been significantly affected by scour which resulted in failure in of the bank retaining structures in 2017. The gabion baskets collapsed and gradually fell into the river bed, restricting the cross-sectional area of the river. This area was repaired in the summer of 2018 with new gabions baskets installed on new concrete foundations and riprap was placed on the bed directly downstream of the weir. However, a subsequent high flow event in October 2018 caused the riprap

to be washed downstream and a large scour hole developed at the base of the channel immediately downstream of the weir, leaving the concrete foundations of the gabions baskets exposed to erosion and at risk of being undermined (see Figure 3 and Figure 4).



Figure 3 – Section 2: Concrete weir



Figure 4 – Section 2: Gabion foundations exposed to scour

Section 3:

Downstream of the weir in Section 2, the river characteristics change. The bed of the river reverts to a more natural bed made of rocks and boulders. There is extensive erosion protection on both banks of the watercourse in Section 3 which constrains the channel laterally. The bank protection is a mix of rock filled gabions, rock filled gabions on concrete foundations, concrete walls and/or brick work in some locations. These protection measures are failing, and the ongoing effects of scour have exposed the concrete foundations in many locations, leaving the river banks at risk of undermining and collapse.



Figure 5 – Section 3: Typical photos of banks affected by scour

5 SITE CONSTRAINTS

5.1 INTRODUCTION

A number of key constraints have been identified within the study area as described below. The assessment of potential options takes these constraints into consideration to identify a feasible and practical design solution.

5.2 ACCESS

Access to the Nant Cylla watercourse in the study area is limited as there are no designated public access points to either bank of the watercourse. The west bank of Nant Cylla along Commercial Street is bordered by residential dwellings and business premises from the upstream culvert outlet (close to the junction of Commercial Street and Bedwlwyn Road) downstream to the confluence with the River Rhymney. The east bank of Nant Cylla is bordered by dense vegetation, beyond which is the Lewis Girls' School.

Access to the bed of the watercourse is made difficult by the steeply sloping banks on either side of the watercourse, formed by the constrained urban environment and existing scour protection structures. The movement of material, machinery and construction personnel along the bed of the watercourse itself is also difficult due to the narrow channel and presence of rocks and other obstructions along the channel bed in Sections 2 and 3 (refer to Figure 1). As a result, during any construction works, temporary accesses and site compounds will need to be provided at strategic points to minimise the requirements for manual handling of materials and equipment. Consideration of safe systems of work and manual handling are also required.

In Section 1, the watercourse bed is lined with concrete allowing comparatively easy movements up and down this section. However, further details on the construction of the concrete apron and allowable loadings are required to confirm the size of plant that could operate.

For the repair works carried out at Section 2 in 2018, a temporary access was agreed on the east bank via the grounds of Lewis Girls' School. Thus, for this feasibility study, it is assumed that temporary works access will be possible on the east bank of the watercourse. Vegetation removal will likely be required to establish temporary access tracks between the school and Nant Cylla.

Further consideration of access constraints and temporary works designs will be required as part of the design development of the chosen option.

5.3 PUBLIC ENCROACHMENT

There has been unauthorised encroachment over the Nant Cylla and on to the east bank of the watercourse.

Residents on Commercial Street have constructed various structures, including sheds, decking and gardens on both banks of the watercourse along with makeshift footbridges and garden extensions to access the structures on the east bank. These unauthorised structures place additional localised loading on the banks of the watercourse increasing the risks of bank collapse.

The makeshift structures are a construction access constraint as they limit the available head room and thereby the movements of material, equipment and personnel along the channel bed.

In addition, the poor condition of the structures also poses a health and safety risk to construction personnel in the event of impact or collapse.

Legal / planning issues associated with these encroachments are unclear at the moment. This should be confirmed with CCBC prior to start of the design as these could influence decisions and affect potential solutions.

5.4 ENVIRONMENTAL CONSTRAINTS

CCBC and local residents have confirmed that fish (trout) are present in Section 3 of the Nant Cylla, up to the concrete weir structure behind No 36 Commercial Street (Section 2). The stream is also understood to provide a spawning area for fish.

Therefore, the recommended scour protection options should seek to maintain the current habitats in Nant Cylla and structures provided as part of the solution should support fish passage where required. Further consultation should be undertaken with NRW and the Council's biodiversity officers to confirm the preferred option and as the design develops.

Discussions thus far with the LLFA have highlighted that options that are sustainable / environmentally friendly are favoured where practically possible; and that the preferred option taken forward to construction will not require SAB approval, only Consent to work in an ordinary watercourse.

Proposed options will require engineering works within the stream. There are water quality risks associated with potential silt displacement and the use of imported and potentially hazardous materials. Water quality risks will need to be considered early in the design process and mitigated during the works using appropriate construction methods and temporary works.

5.5 UTILITIES

Utility record plans were obtained by CCBC using "Linesearch Before U Dig" and supplied to WSP. At this stage the information supplied is indicative only and should be confirmed as the design is developed. The exact locations of all statutory undertaker apparatus should be determined and confirmed prior to any works commencing on onsite.

The utility record plans obtained are included in Appendix A.

The following utilities providers have confirmed that they have assets within the study area:

Dwr Cymru / Welsh Water:

- A rising main is located between the back of properties on Commercial Street and the west bank of Nant Cylla in the gardens of the properties. The rising main runs from Commercial Street culvert to the River Rhymney.
- Rising mains cross the Nant Cylla at three separate points at the downstream end of the watercourse (in Section 3). All rising mains appear to converge at a point south of the White Rose Cottages' garden before crossing the River Rhymney.

Western Power Distribution:

- Three low voltage overhead lines cross the Nant Cylla approximately to the rear of No 26 Commercial Street. On the east bank of the watercourse there is an external PME (Protective Multiple Earthing) following which the power lines are buried and carry on towards the school grounds.

6 SCOUR PROTECTION STRATEGIES

6.1 INTRODUCTION

The Nant Cylla in the study area is channelized and laterally constrained by the existing urban environment and scour protection structures. In conjunction with the steep bed slope this creates a watercourse environment characterised by high flow velocities and increased scour effects. In its current state the Nant Cylla watercourse has limited scope for dissipating energy laterally and is therefore dissipating more energy vertically; resulting in the channel becoming ever more incised; undermining existing erosion protection measures and banks; and leading to potential bank collapse overtime.

Scour is a natural phenomenon caused by the erosive action of flowing watercourses on erodible beds. More dramatic scour can occur during high flows however on this reach of the Nant Cylla, it is believed that ongoing scour of sediments is also occurring during low and medium flow conditions.

The effect of the ongoing scour is to undercut the bed and foundations of existing erosion protection structures and this is a significant contributing factor to accelerated deterioration of the bed and banks during high flow conditions. Scour is progressively weakening the stability of the protection structures and failures in high flow conditions can then occur without warning and result in sudden damage.

Therefore, the ongoing scour effects from the low and medium flows are a large part of the problem and the options developed in this study have been considered in this context. Slowing down the scour effects from low to medium flows will contribute to protecting against erosion during high flow conditions.

In developing the approach to managing the prevailing scour in Nant Cylla two principal overarching strategies have been identified: Strategy 1 – Remove Scour Effects; and Strategy 2 – Manage Scour Effects. These two strategies are discussed in the following section.

6.2 STRATEGY 1 - REMOVE SCOUR EFFECTS

Widen the channel and regrade banks to create a more natural channel lessening the effects of scour.

Strategy 1 is considered to be a more sustainable long-term solution as Nant Cylla would be brought back to a more natural state with less or no reactive options or maintenance needed going forward.

In Section 1, the watercourse channel cannot be practically modified to accommodate these changes due to the proximity of existing properties bordering the channel. However, this section could be retained and modified to maximise energy dissipation.

An engineered solution would also be required in Section 2 of Nant Cylla, at the transition from the concrete channel bed in Section 1 to the more natural (less modified) watercourse in Section 3.

Widening the Nant Cylla channel and regrading and slackening the gradient of the east bank in Section 3 would increase the channel flow capacity and thereby reduce the flow velocities and effects of scour in this section. Reduced channel velocities would also support the use of more natural scour protection solutions where needed.

Strategy 1 would require significant land take along Section 3 on the east bank of the watercourse in order to sufficiently widen the channel bed and slacken the bank gradients. As part of this, existing

erosion protection structures would need to be removed from Section 3 and unusable material taken off site.

Where there is insufficient space to widen the channel to eliminate the need for scour protection, partial widening may help to reduce velocities and allow for less engineered protection solutions.

The extent of channel widening and bank regrading required in Section 3 will be dependent on a number of constraints. The effectiveness of the widening in reducing flow velocities and the risk of scour would need to be determined through hydraulic assessment of the Nant Cylla during the design stage.

6.3 STRATEGY 2 – MANAGE SCOUR EFFECTS

Provide engineering solutions within existing watercourse to manage the ongoing effects of scour.

Strategy 2 is considered to be a less sustainable medium-term solution to better manage the effects of scour in the Nant Cylla and would still require reactive maintenance going forward. Under this strategy measures would be provided to limit the extent of undermining and protect the banks and channel bed from erosion within the current footprint of the watercourse.

In Strategy 2, engineering solutions would be kept within the existing watercourse channel and banks, with less land required than in Strategy 1. The options considered in this strategy would seek to reduce the effects of scour, accepting to a degree that scour will continue to occur overtime, through the use of more robust engineering options to better dissipate energy in the channel and manage the flows of water downstream.

The scour effects are currently taking place in Section 2 and in Section 3 the more natural (less modified) section of Nant Cylla. However, there are significant opportunities for energy dissipation interventions in Sections 1 and 2 of the watercourse to remove as much energy as possible from the watercourse upstream. This will mean that less energy will need to be dealt with in Sections 2 and 3, thus adding value to the solutions provided in Section 3.

It should be noted that Strategy 2 would not remove the scour issues completely but will attempt to manage them in-situ. As such, Strategy 2 is not considered to be a permanent / long term solution. The effects of scour will remain in Section 2 and 3 and regular inspections, maintenance and remedial works will be needed overtime.

7 OPTIONS ASSESSMENT

7.1 REMEDIAL WORK TO EXISTING SCOUR PROTECTION STRUCTURES

Notwithstanding the overarching strategy taken forward (Strategy 1 or Strategy 2), there is a requirement to review the condition of existing scour protection structures and undertake remedial works to structures in a poor condition.

A high-level assessment of the remedial interventions required to the existing scour protection structures in each section of Nant Cylla are provided below. More detailed assessments would be required as the proposed scour protection strategy is developed and the interaction between proposed and existing scour protection structures is better understood.

The additional scour protection options considered in each section of the watercourse, outside of the remedial options below, are provided in section 7.2 of this report with a review of these options provided in section 7.3.

SECTION 1:

In Section 1 the watercourse has a concrete apron which forms a continuous scour protection feature with the retaining features at each bank. This provides limited opportunity for scour to develop and as a result the channel bed and bank structures are in reasonable condition (compared with Sections 2 and 3) with no obvious signs of scour defects requiring immediate attention.

There are no visible issues with existing scour protection structures in Section 1. Therefore, no remedial work is currently proposed.

SECTION 2:

Section 2 is highly vulnerable to scour as it is located at the transition between the concrete channel (Section 1) and the natural bed (Section 3). The watercourse is carrying significant energy at this point due to limited opportunity for the watercourse to dissipate energy in the smooth concrete channel section upstream.

Section 2 has been significantly affected by scour. This resulted in the recent failure of existing gabion bank protection. Repairs were carried out in the summer of 2018 with new gabion baskets installed on new concrete foundations and rock (riprap) material placed on the channel bed. However, subsequently the riprap bed material was washed downstream, during a high flow event in October 2018 and a large scour hole has now developed in the channel immediately downstream of the existing concrete weir. In its current state the foundations of the recently installed gabion baskets are exposed to erosion and at risk of being undermined. Further intervention is therefore required to shore up existing scour protection structures in this location.

Remedial engineering works are required to existing scour protection structures in Section 2 to better dissipate the watercourse energy accumulated in Section 1.

SECTION 3:

Section 3 is the least modified section of Nant Cylla in the study area. The watercourse bed is typically formed from native rocks and boulders and material passed downstream from the upper reaches of the watercourse. The east and west banks of the watercourse are typically protected by rock gabions with smaller sections of concrete wall and natural banks. These scour protection measures are

generally in a poor condition. Scour has exposed the concrete foundations and sub soil in places leaving the banks of the watercourse at risk of further undercutting and collapse.

The existing scour protection structures in Section 3 are in generally poor condition. Remedial engineering works are required along the whole of Section 3 to the confluence with the River Rhymney.

7.2 SCOUR PROTECTION OPTIONS

The scour protection options presented here are in addition to the remedial works outlined in section 7.1 of this report.

SECTION 1:

- **No action**

Leave Section 1 of Nant Cylla in its current state. It is currently in good condition with no obvious scour related issues.

- **Removal of concrete channel bed**

Remove existing concrete channel bed in Section 1 to create a more natural watercourse, slow flows and better dissipate water energy.

- **Check weirs**

Provide artificial check weirs / dams in the channel to slow flows and dissipate more energy in Section 1 and reduce the scour effects in Sections 2 and 3 of the watercourse.

- **Energy dissipation structures**

Install energy dissipation structures, or baffles, in the bed and banks of the channel to better replicate the roughness of a natural watercourse and reduce the scour effects in Sections 2 and 3. In-situ or precast baffles could be cast or dowelled in to the existing channel bed and banks to artificially increase channel roughness; typical example shown in Figure 6.

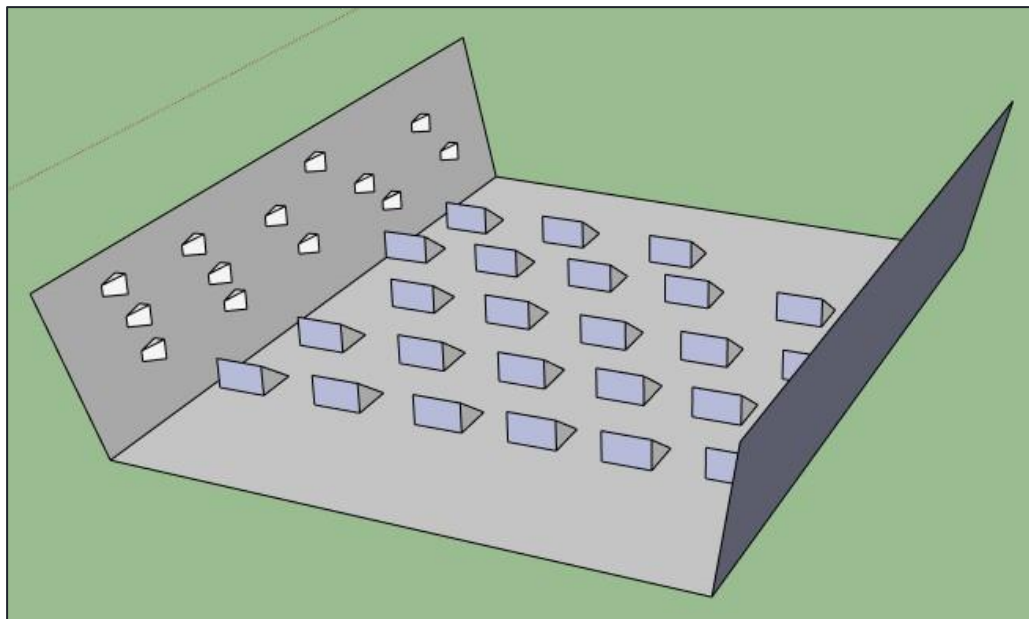


Figure 6 – Example of channel energy dissipation structures

SECTION 2:

- **Replace riprap**

Undertake remedial works to replace the rock riprap material that has been recently washed downstream. Rock specification will need to be reviewed to ensure it can withstand high flow conditions and provide adequate energy dissipation. The feasibility of installing larger size riprap will need to be assessed.

- **Formalise stilling basin**

Formalise basin in between the two recently installed gabion walls, and a transition feature at the downstream end to create a more formal stilling basin structure. This would better manage the effects of scour in Section 2 and downstream to Section 3 and dissipate energy from Section 1.

Further energy dissipation features, such as baffles, could be cast in the proposed bed to help with energy dissipation. The stilling basin could also potentially be enlarged, depending on land take, to further increase energy dissipation potential.

- **Energy dissipation / rock weir**

Retain existing channel width between the gabion walls and install a “rock weir” to connect Section 1 to Section 3. The rock weir would start at the concrete apron/ weir at the downstream end of Section 1 and fall at a low gradient to merge with the natural bed in Section 3. Due to the restricted access to the bed of the watercourse, it may not be possible to bring rocks large enough to resist high velocities. Thus, for constructability reasons, a new concrete channel base would likely be required with smaller rocks / boulders to be cast in-situ within the base to ensure that they are not washed away during high energy flows. This would better manage the effects of scour in Section 2 and downstream to Section 3 and dissipate energy from Section 1 in low to medium flow conditions; a typical section through a rock weir is shown in Figure 7.

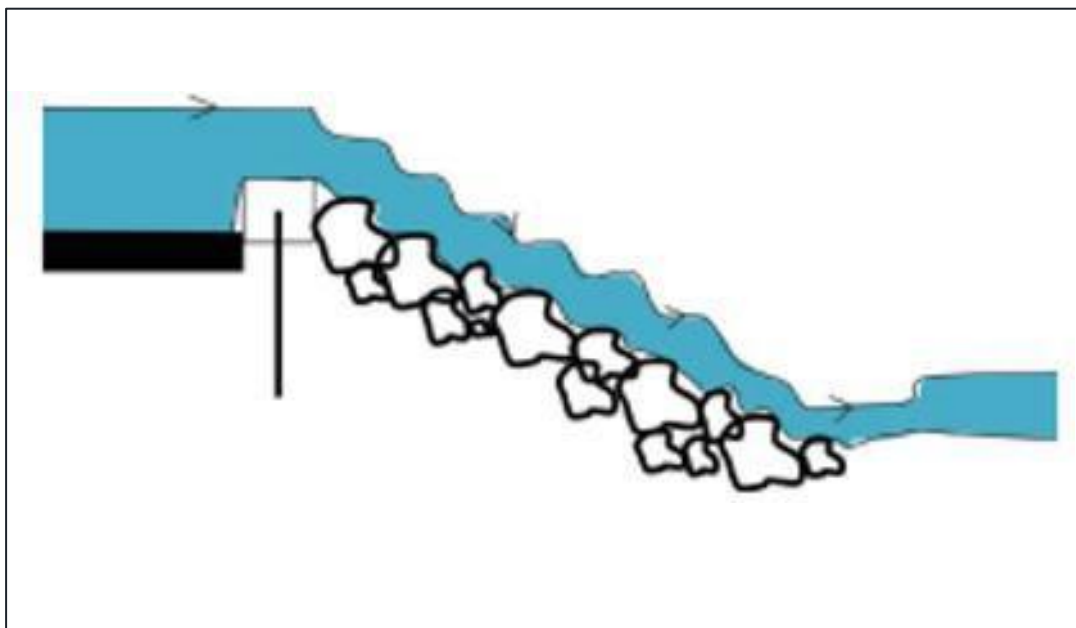


Figure 7 – Typical rock weir section

SECTION 3:

- **Replace existing scour protection**

Undertake works to replace existing scour protection measures like for like and undertake other repairs where necessary to improve the generally poor condition of the existing scour protection in Section 3. This option represents enhanced renewal and replacement of existing scour protection structures over and above the remedial works outlined in section 7.1 of this report.

- **Green engineering**

Install sustainable green engineering measures in Section 3. These could consist of soft engineering techniques such as trees, coir and fibre rolls and matts, log dams and planting.

Green engineering's strengths rely on it establishing through growth and becoming stronger over time as vegetation and roots establish and act as reinforcement. This requires that the watercourse is not subject to high velocity flows while the structures establish.

- **Energy dissipation structures**

Increase the roughness of the channel and dissipate energy through installing engineered structures in the watercourse. By dissipating energy, the scour effects in Section 3 would be reduced, helping to maintain the banks and bed of the watercourse in a better condition. Structures could include:

- Rock weirs at regular intervals. These would lower the gradient of the watercourse, creating "steps", which would contribute to reducing velocities. Flow energy would be dissipated while going over the rock weir structures. Due to the restricted channel access smaller rocks may need to be cast into the watercourse channel on a local concrete base to avoid them being washed out during storm conditions; alternatively, gabion rock mattresses could also be used.
- Incorporate meanders. Meanders could be incorporated within the existing width of the watercourse. Due to the restricted channel access, these would likely need to be created using cast-in boulder structures on a local concrete base, to avoid smaller rocks being washed out during storm conditions. Meanders would contribute to dissipate energy and reduce velocities at the base of the banks thus reducing the ongoing scour effects from lower flows.

Existing erosion protection structures may be retained and repaired in some locations where required. Typical details are shown in Figure 8 and Figure 9.

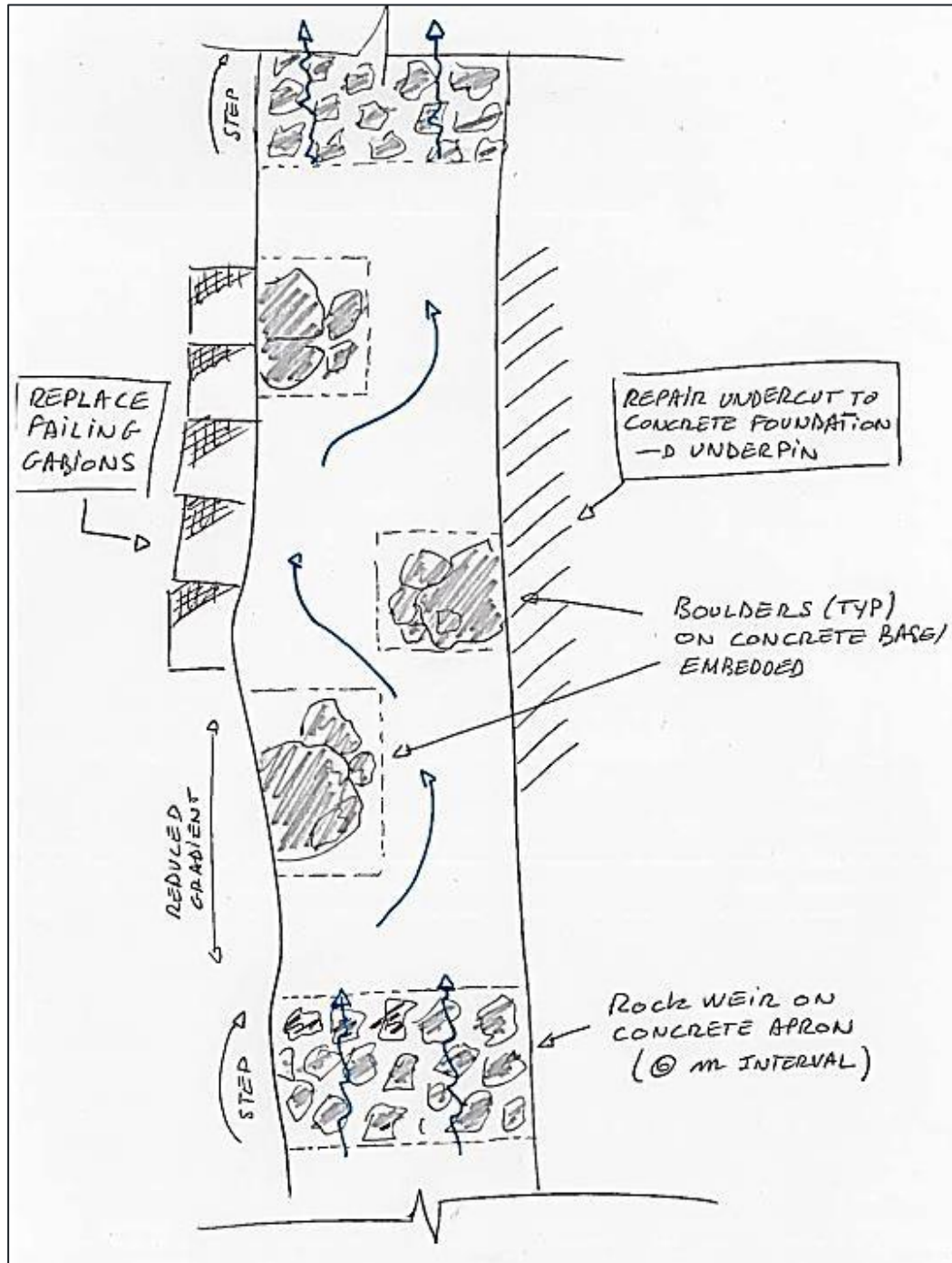


Figure 8 – Energy dissipation structures / rock weirs and meanders (typical)

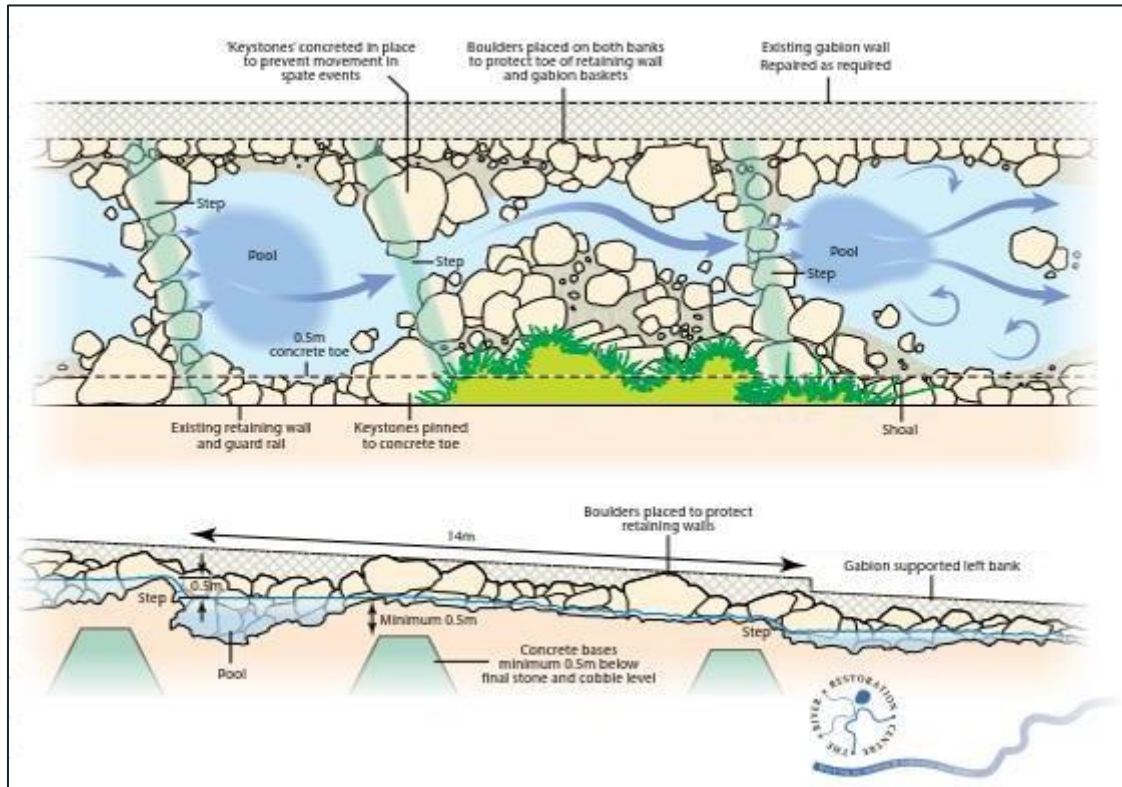


Figure 9 – Rock weirs at intervals (typical)

- **Widen channel and regrade banks**

Widening the channel and re-grading the banks in Section 3 would increase the capacity of the watercourse and reduce velocities and scour effects. Reduced velocities would allow for incorporation of green engineering solutions such as fibre (coir) rolls and matts, log dams and planting, as well as rock weirs and meanders as described above. This strategy is a more sustainable long-term solution with the watercourse being brought back to a more natural state with less or no reactive maintenance required.

This option was discussed with CCBC and it was suggested that channel widening could likely be accommodated on the east bank, provided the land take requirement does not exceed 10m. There may be scope for further land take on this bank, up to say 20m, but this is less likely to be feasible.

The viability of this option is dependent on the width available for widening and the treatment of the bank slopes. The amount of land take available would need to be confirmed to assess whether sufficient for this option to be acceptable.

The extent and effect of widening on scour would need to be assessed at design stage.

Widening of the west bank would not be possible as this land is in private ownership. Thus, erosion protection works would still be required on the west bank to limit erosion. However, velocities would be reduced as a result of the channel widening and scour effects on the west bank of the watercourse would therefore be reduced.

A higher level of scour protection may be required on the western bank of the watercourse at the bend in the channel, at Ty Lloyd / Tyr Llan / Penffordd, as there is a higher risk of scour at this location.

Widening would therefore only take place on the eastern bank of the watercourse (see example of possible channel widening in Figure 10). The land on the eastern bank is understood to be publicly owned. Widening of the channel would extend toward the school and into the adjacent wooded area.

The overall feasibility of widening the channel would need to be confirmed through review of existing ground levels on the east bank of the watercourse and the possibility of re-grading existing ground without causing bank instability will need to be assessed and confirmed. Topographic and ground investigation surveys on the east bank would therefore be required.

The existing area of woodland on the east bank of the watercourse would also need to be removed to allow the channel to be widened. Additional woodland removal may also be necessary to support reprofiling of surrounding ground and provide access for ground work machinery. Areas cleared of vegetation may require replanting on completion of the works.

In this option it may also be possible to retain and reuse some of the excavated material on site, however, it is expected that a large percentage of this material will need to be taken of site. Volumes will be confirmed at design stage.



Figure 10 – Example of possible widened channel (channel profile to be confirmed)

7.3 REVIEW OF OPTIONS

This review has been undertaken on the scour protection options presented in section 7.2 of this report. The review considers a range of criteria including technical, environmental, economic, construction and operation and maintenance considerations with each option given an indicative Low, Medium or High rating depending on its suitability.

Option	Advantages	Disadvantages	Rating
SECTION 1			
No action	<ul style="list-style-type: none"> No cost Low risk 	<ul style="list-style-type: none"> Does nothing to address scour issues downstream No energy dissipation Very high energy passed downstream to Sections 2 and 3 	Low
Remove concrete channel bed	<ul style="list-style-type: none"> Higher energy dissipation Retain more flow in Section 1 of watercourse Ecological benefit for fish and other flora/ fauna extended up to culvert outlet. 	<ul style="list-style-type: none"> High cost Structural risk Increased scour at existing culvert outlet Increased potential for bank scour Access difficult Manual handling of material Services may need diverting 	Low
Check weirs	<ul style="list-style-type: none"> Good energy dissipation in low to medium flows Reduces flow velocities Provides benefit to downstream sections 	<ul style="list-style-type: none"> Overtopped in high flow conditions Structural risk to existing concrete bed Access difficult Manual handling of material Risk of flows backing up in culvert and elevated water level to be assessed. 	Medium
Energy dissipation structures to bed and walls	<ul style="list-style-type: none"> Good energy dissipation in low to medium flows on base of channel Reduces flow velocities Only solution that provides some level of energy dissipation in high flow conditions due to baffle installed at high level on channel walls Provides benefit to downstream sections Limited maintenance requirements Long design life 	<ul style="list-style-type: none"> Structural risk to existing concrete bed and earth retaining structures to be assessed Risk of flows backing up in culvert and elevated water level to be assessed. Access difficult Manual handling of material 	High

Table 1 – Section 1: Review of scour protection options

Option	Advantages	Disadvantages	Rating
SECTION 2			
Replace riprap	<ul style="list-style-type: none"> • Low cost • Known works access point on east bank due to works undertaken recently 	<ul style="list-style-type: none"> • Limited impact on scour issues downstream • Regular ongoing inspection and maintenance required • Manual handling of material • Size could be restricted by access constraints • Could be washed out with high flows. 	Low
Formalise stilling basin	<ul style="list-style-type: none"> • Good energy dissipation in low to medium flows • Reduces flow velocities • Provides some level of energy dissipation in high flow conditions • Provides benefit to downstream sections • Known works access point on east bank due to works undertaken recently • Engineered structure - longer design life 	<ul style="list-style-type: none"> • Moderate cost • Requires additional land take • Risk of scour at transition to Section 3 • Does not enhance natural habitat / aesthetics • Reduced impact in high flows • Manual handling of material • Maintenance required to maintain performance 	Medium
Energy dissipation / rock weir	<ul style="list-style-type: none"> • Good energy dissipation in low to medium flows • Can be constructed without additional land take • Reduces flow velocities • Provides some level of energy dissipation in high flow conditions • Provides benefit to downstream sections • Known works access point on east bank due to works undertaken recently • Engineered feature - longer design life • Less scour risk on transition to Section 3 • Replicates natural features 	<ul style="list-style-type: none"> • Moderate cost • Reduced impact in high flow conditions • Manual handling of material • Condition of existing gabions to be monitored 	High

Table 2 – Section 2: Review of scour protection options

Option	Advantages	Disadvantages	Rating
SECTION 3			
Replace existing scour protection	<ul style="list-style-type: none"> Utilises and improves existing scour protection structures Natural bed of watercourse retained in current state 	<ul style="list-style-type: none"> Moderate cost Has limited impact on energy dissipation and passes problems downstream Limited design life Regular inspection and maintenance required Access difficult Manual handling of material 	Low
Green engineering	<ul style="list-style-type: none"> Utilises soft engineering / natural materials Multiple ecological benefits to fish and other flora/ fauna in watercourse Provides space for the growth of vegetation when placed 	<ul style="list-style-type: none"> Moderate cost Requires relatively high levels of monitoring Strong only once fully established Risk of damage before fully established Reduced impact in high flow conditions Access difficult Manual handling of material 	Low
Energy dissipation structures (rock weirs and meanders at intervals) - In combination with repairs to existing scour protection structures.	<ul style="list-style-type: none"> Good energy dissipation in low to medium flows Reduces bed slope (creates steps) - reduces flow velocities Scour effect reduced along Section 3 Reduced detrimental effect on natural habitat / environment Flexibility in construction methods/ techniques 	<ul style="list-style-type: none"> Moderate cost Requires careful consideration of placement of structures so as not to increase scour risk elsewhere May require initial monitoring regime to confirm effectiveness Regular inspection and maintenance required Access difficult Manual handling of material Services may need diverting 	Medium
Widen channel and regrade banks in combination with rock weirs, meanders and green engineering	<ul style="list-style-type: none"> Increases watercourse capacity Reduces velocities and scour effects in channel Increased potential for green engineering solutions Beneficial for ecology and aesthetic of the watercourse Longer term solution Less or no reactive maintenance 	<ul style="list-style-type: none"> High cost Significant land take required Removal of established woodland Existing services to be diverted Large amount of material to be removed and disposed of Significant and heavy plant movements required Access difficulties compounded by level of access required Services may need diverting 	Medium

Table 3 – Section 3: Review of scour protection options

8 RECOMMENDED STRATEGY AND PREFERRED OPTIONS

The recommended scour protection strategy for Section 1 and 2 of Nant Cylla is Strategy 2:

Providing engineering solutions within existing watercourse to manage the ongoing effects of scour.

The engineering solutions in Section 1 and 2 would be kept within the existing channel and banks and will aim to dissipate as much energy as possible within the upstream section of the watercourse; so that less energy will be passed downstream to Section 3.

The recommended scour protection strategy for Section 3 of Nant Cylla is Strategy 1.

Widen the channel and regrade banks to create a more natural channel lessening the effects of scour.

This approach will reduce the flow velocities and effects of scour in Section 3. The reduced channel velocities would also support the use of more natural scour protection solutions where needed. Whilst there are significant delivery constraints and risks with this strategy it is considered the benefits of a more sustainable long term solution make this worthwhile.

The preferred engineering options to use in line with the strategies recommended are detailed below. Reference should also be made to the supporting options plan included in Appendix B.

SECTION 1:

Although there are no presenting scour effects in this section of Nant Cylla, the smooth channel bed and wall surfaces contribute to increase the velocity of the water as it flows downstream. The preferred option for Section 1 is to reduce the amount of energy passed on to the downstream sections of the watercourse.

The existing concrete channel bed and walls provide an opportunity to install energy dissipation structures relatively easily. Such structures will maximise the potential to reduce channel velocities in this section and decrease the energy passed downstream to Sections 2 and 3.

The recommended option in Section 1 is to install energy dissipation structures or baffles tied in to the bed and banks of the existing concrete lined channel.

SECTION 2:

This section of Nant Cylla is subject to intense energy due to fast flowing water which currently enters it from Section 1 upstream. The preferred option for Section 1 will reduce the energy in the watercourse when it reaches Section 2. The preferred option for Section 2 is to dissipate as much of the remaining energy as possible prior to it flowing downstream to Section 3, the more natural section of the watercourse, where the effects of scour are significant.

Previous riprap options have failed when subjected to the high energy flows in flood conditions, which is likely due to restrictions on the maximum stone size that could be used. Due to the restricted channel access it is impractical to import large diameter rocks. Thus, a more robust engineering solution is currently favoured with rocks cast into a concrete channel bed.

The recommended option in Section 2 is to install an energy dissipation structure. The structure should be a rock weir type with embedded boulders.

It is also recommended that the channel is widened at this location, if possible, to allow a larger energy dissipation structure to be installed and further reduce the energy within the watercourse before it passes downstream to Section 3.

SECTION 3:

This section of Nant Cylla has more natural features and is therefore susceptible to scour. Previous erosion protection measures used have failed over time due to the high channel velocities and high levels of energy created upstream; which are sustained by the narrow channel bed and steep banks.

Widening of the channel in Section 3 would reduce flow velocities and scour effects significantly. This would also allow more natural engineering solutions to be implemented. The watercourse would be brought back to a more natural state with less maintenance required over the longer term.

The recommended option for Section 3 is to widen the channel in combination with additional scour protection measures. The measures will include:

- **Widen channel bed and regrade eastern bank**

Widening the channel and re-grading the banks to increase the capacity of the watercourse and reduce velocities and scour effects.

- **Renewal of existing scour protection on western bank**

Enhanced renewal and replacement of existing scour protection measures, undertaking repairs where necessary, to improve the condition of the existing scour protection.

- **Incorporate natural scour protection measures**

The reduced channel velocities will allow more natural engineering solutions to be utilised. Rock weirs and meanders will be replicated and where appropriate sustainable green engineering measures will be installed, such as: trees, coir and fibre rolls and matts, log dams and planting.

9 OPTIONS COST REVIEW

As requested by CCBC two high level cost estimates have been prepared.

Cost estimate for Strategy 1: This includes costs for the preferred options in Section 1 and 2; the cost for widening the channel bed and regrading the eastern bank in Section 3 and incorporating natural scour protection measures; and enhanced renewal of existing scour protection on the western bank of the watercourse in Section 3 where there is no available land to regrade the bank.

Cost estimate for Strategy 2: This includes costs for the preferred options in Section 1 and 2; and enhanced renewal of existing scour protection on the eastern and western bank of the watercourse in Section 3.

The costs presented at this stage of the study are preliminary estimates only. These should be reviewed during design development, once the extent of widening achievable in Strategy 1 has been confirmed; and further ground investigations, surveys and consultation has taken place. The estimates have been developed with reference to standard price books (CESMM) and estimates for similar works on previous schemes. An allowance is included for identified risk items, however no specific Optimism Bias is included at this stage.

A summary of the cost estimates for Strategy 1 and 2 are provided in Table 4 and 5 respectively. A more detailed breakdown for each strategy is provided in Appendix C.

Item	Estimated Cost
Preliminaries	£22,983
Section 1: Energy dissipation baffles	£22,392
Section 2: Energy dissipation rock weir	£22,949
Section 3: Channel widening, regrade eastern bank, renewal of existing scour protection (west bank), rock meanders and green engineering	£306,634
Contingencies	£93,739
Design & Site Supervision	£93,739
Risk Allowance	£240,000
Total Estimated Works Costs	£802,436

Table 4 – Cost Estimate for Strategy 1

Item	Estimated Cost
Preliminaries	£17,006
Section 1: Energy dissipation baffles	£22,392
Section 2: Energy dissipation rock weir	£22,949
Section 3: Renewal of existing scour protection (east and west banks)	£106,426
Contingencies	£42,193
Design & Site Supervision	£42,193
Risk Allowance	£95,000
Total Estimated Works Costs	£348,160

Table 5 – Cost Estimate for Strategy 2

10 RECOMMENDATIONS

10.1 TO FINALISE THIS STUDY AND CONFIRM PREFERRED OPTION

- Consult with Natural Resources Wales (NRW) to review recommended option and establish WFD requirements in relation to fish passage;
- Confirm the land available on the east bank of the watercourse for widening the channel in Section 3 and consult with landowners (Lewis Girls' School) on land take and access;
- Confirm position in relation to private landownership on west bank of watercourse and encroachment; and associated means of access to the channel.
- Consult with NRW and CCBC to determine the expected planning and consent requirements for the scheme.

10.2 TO PROGRESS DESIGN

- Undertake hydraulic assessment of preferred option to confirm hydraulic parameters for detailed design;
- Undertake further surveys (topographic, condition, ecological) and Ground Investigations to support the detailed design;
- Undertake intrusive investigations to confirm the structural characteristics of the concrete lined channel in Section 1 and verify its suitability for the installation of proposed energy dissipation baffles;
- Confirm temporary and permanent accesses to the watercourse for the construction phase and to support ongoing operation and maintenance;
- Consult statutory undertakers with assets in the vicinity of the proposed works to identify whether diversions will be necessary.

Appendix A

UTILITY RECORDS

Appendix B

PREFERRED OPTION PLAN



Appendix C

OPTION COST ESTIMATES





8 First Street
Manchester
M15 4RP

wsp.com



Enquiry Confirmation

LSBUD Ref: 11990220

Date of enquiry: 12/01/2018

Time of enquiry: 14:15

Enquirer			
Name	Mrs Trudi Phillips	Phone	01443 815050
Company	Caerphilly CBC	Mobile	Not Supplied
		Fax	Not Supplied
Address	Dyffryn House Ty Dyffryn Business Park Ystrad Mynach Hengoed Caerphilly CF82 7TW		
Email	phillt@caerphilly.gov.uk		
Notes	Please ensure your contact details are correct and up to date on the system in case the LSBUD Members need to contact you.		

Enquiry Details			
Scheme/Reference	Nant Cylla Gabian Baskets		
Enquiry type	Initial Enquiry	Work category	Watercourses/Canals/Drainage
Start date	23/07/2018	Work type	Bank Works
End date	01/09/2018	Site size	405 metres diameter
Searched location	XY= 314622, 194181 Easting/Northing	Work type buffer*	25 metres
Confirmed location	314622 194180		

* The WORK TYPE BUFFER is a distance added to your search area based on the Work type you have chosen.



Asset Owners

Terms and Conditions. Please note that this enquiry is subject always to our standard terms and conditions available at www.linesearchbeforeudig.co.uk ("Terms of Use") and the disclaimer at the end of this document. Please note that in the event of any conflict or ambiguity between the terms of this Enquiry Confirmation and the Terms of Use, the Terms of Use shall take precedence.

Validity and search criteria. The results of this enquiry are based on the confirmed information you entered and are valid only as at the date of the enquiry. It is your responsibility to ensure that the Enquiry Details are correct, and LineSearchbeforeUdig accepts no responsibility for any errors or omissions in the Enquiry Details or any consequences thereof. LSBUD Members update their asset information on a regular basis so you are advised to consider this when undertaking any works. It is your responsibility to choose the period of time after which you need to resubmit any enquiry but the maximum time (after which your enquiry will no longer be dealt with by the LSBUD Helpdesk and LSBUD Members) is 28 days. If any details of the enquiry change, particularly including, but not limited to, the location of the work, then a further enquiry must be made.

Asset Owners & Responses. Please note the enquiry results include the following:

1. "LSBUD Members" who are asset owners who have registered their assets on the LSBUD service.
2. "Non LSBUD Members" are asset owners who have not registered their assets on the LSBUD service but LSBUD is aware of their existence. Please note that there could be other asset owners within your search area.

Below are three lists of asset owners:

1. **LSBUD Members who have assets registered within your search area. ("Affected")**
 - a. These LSBUD Members will either:
 - i. Ask for further information ("Email Additional Info" noted in status). The additional information includes: Site contact name and number, Location plan, Detailed plan (minimum scale 1:2500), Cross sectional drawings (if available), Work Specification.
 - ii. Respond directly to you ("Await Response"). In this response they may either send plans directly to you or ask for further information before being able to do so, particularly if any payments or authorisations are required.
2. **LSBUD Members who do not have assets registered within your search area. ("Not Affected")**
3. **Non LSBUD Members who may have assets within your search area.** Please note that this list is not exhaustive and all details are provided as a guide only. It is your responsibility to identify and consult with all asset owners before proceeding.

National Grid. Please note that the LSBUD service only contains information on National Grid's Gas above 7 bar asset, all National Grid Electricity Transmission assets and National Grid's Gas Distribution Limited above 2 bar asset.

For National Grid Gas Distribution Ltd below 2 bar asset information please go to www.beforeyoudig.nationalgrid.com

LSBUD Members who have assets registered on the LSBUD service within the vicinity of your search area.

List of affected LSBUD members

Asset Owner	Phone/Email	Emergency Only	Status
Western Power Distribution	08000963080	08006783105	Await response

LSBUD Members who do not have assets registered on the LSBUD service within the vicinity of your search area. Please be aware that LSBUD Members make regular changes to their assets and this list may vary for new enquiries in the same area.

List of not affected LSBUD members

AWE Pipeline	Gamma	Premier Transmission Ltd (SNIP)
BOC Limited (A Member of the Linde Group)	Gateshead Energy Company	Prysmian Cables & Systems Ltd (c/o Western Link)
BP Exploration Operating Company Limited	Gigaclear PLC	Redundant Pipelines - LPDA
BPA	Humbly Grove Energy	RWEnpower (Little Barford and South Haven)
Carrington Gas Pipeline	IGas Energy	SABIC UK Petrochemicals
CATS Pipeline c/o Wood Group PSN	INEOS FPS Pipelines	Scottish Power Generation
Cemex	INEOS Manufacturing (Scotland and TSEP)	Seabank Power Ltd
Centrica Storage Ltd	INOVYN Enterprises Limited	SGN
CLH Pipeline System Ltd	Intergen (Coryton Energy or Spalding Energy)	Shell (St Fergus to Mossmorran)
Concept Solutions People Ltd	Mainline Pipelines Limited	Shell Pipelines
ConocoPhillips (UK) Ltd	Manchester Jetline Limited	SSE (Peterhead Power Station)
DIO (MOD Abandoned Pipelines)	Manx Cable Company	Total (Colnbrook & Colwick Pipelines)
E.ON UK CHP Limited	Marchwood Power Ltd (Gas Pipeline)	Total Finaline Pipelines
EirGrid	Melbourn Solar Limited	Transmission Capital
Electricity North West Limited	National Grid Gas (Above 7 bar), National Grid Gas Distribution Limited (Above 2 bar) and National Grid Electricity Transmission	UK Power Networks
ENI & Himor c/o Penspen Ltd	Northumbrian Water Group	Uniper UK Ltd
EnQuest NNS Limited	NPower CHP Pipelines	Vattenfall
EP Langage Limited	Oikos Storage Limited	Veolia ES SELCHP Limited
ESP Utilities Group	Ørsted	Westminster City Council
ESSAR	Perenco UK Limited (Purbeck Southampton Pipeline)	Wingas Storage UK Ltd
Esso Petroleum Company Limited	Petroineos	Zayo Group UK Ltd c/o JSM Group Ltd
Fulcrum Pipelines Limited	Phillips 66	

The following Non-LSBUD Members may have assets in your search area. It is YOUR RESPONSIBILITY to contact them before proceeding. Please be aware this list is not exhaustive and it is your responsibility to identify and contact all asset owners within your search area.

Non-LSBUD members (Asset owners not registered on LSBUD)			
Asset Owner	Preferred contact method	Phone	Status
BT	https://www.swns.bt.com/pls/mbe/welcome.home	08009173993	Not Notified
Caerphilly Council	parhab@caerphilly.gov.uk	01495235372	Not Notified
CityFibre	asset.team@cityfibre.com	033 3150 7282	Not Notified
Colt	plantenquiries@catelecomuk.com	01227768427	Not Notified
Dwr Cymru Welsh Water	ndcenquiries@dwrcymru.com	0800 917 2652	Not Notified
Energetics Electricity	plantenquiries@energetics-uk.com	01698404646	Not Notified
ENGIE	nrswa@cofely-gdfsuez.com	01293 549944	Not Notified
GTC	https://pe.gtc-uk.co.uk/PlantEnqMembership	01359240363	Not Notified
Gtt	owen.maguire@gtt.net	02807380028	Not Notified
Interoute	interoute.enquiries@plancast.co.uk	02070259000	Not Notified
KPN (c/-Instalcom)	kpn.plantenquiries@instalcom.co.uk	n/a	Not Notified
Level 3 Communications UK Ltd (C/-Instalcom)	plantenquiries@instalcom.co.uk	02087314613	Not Notified
Mobile Broadband Network Limited	mbnl.plant.enquiries@turntown.com	01212 621 100	Not Notified
Tata (c/-McNicholas)	plantenquiries@mcnicholas.co.uk	03300558469	Not Notified
Utility assets Ltd	assetrecords@utilityassets.co.uk		Not Notified
Verizon Business	osp-team@uk.verizonbusiness.com	01293611736	Not Notified
Virgin Media	http://www.digdat.co.uk	08708883116	Not Notified
Vodafone	osm.enquiries@atkinsglobal.com	01454662881	Not Notified
Vtesse Networks	https://plant.interoute.com/plant-enquiries/	01992532100	Not Notified
Wales and The West Utilities	www.wutilities.co.uk/login.aspx	02920278912	Not Notified

Disclaimer

Please refer to LinesearchbeforeUdig's Terms of Use for full terms of use available at www.linesearchbeforeudig.co.uk

The results of this Enquiry are personal to the Enquirer and shall not be shared with or relied upon by any other party. The asset information on which the Enquiry results are based has been provided by LSBUD Members, therefore LinesearchbeforeUdig will provide no guarantee that such information is accurate or reliable nor does it monitor such asset information for accuracy and reliability going forward. There may also be asset owners which do not participate in the enquiry service operated by LinesearchbeforeUdig, including but not exclusively those set out above. Therefore, LinesearchbeforeUdig cannot make any representation or give any guarantee or warranty as to the completeness of the information contained in the enquiry results or accept any responsibility for the accuracy of the mapping images used. LinesearchbeforeUdig and its employees, agents and consultants accept no liability (save that nothing in this Enquiry Confirmation excludes or limits our liability for death or personal injury arising from our negligence, or our fraud or fraudulent misrepresentation, or any other liability that cannot be excluded or limited by English law) arising in respect thereof or in any other way for errors or omissions including responsibility to any person by reason of negligence.



WESTERN POWER DISTRIBUTION
Serving the Midlands, South West and Wales

Contact Us
Mapping Enquiries:
 All areas 0121 623 9780
General Enquiries:
 All areas 0800 096 3080

Date Requested: 12/01/2018
 Job Reference: 11990220
 Site Location: 314622 194180
 Requested by:
 Mrs Trudi Phillips
 Your Scheme/Reference:
 Nant Cylla Gabian Baskets

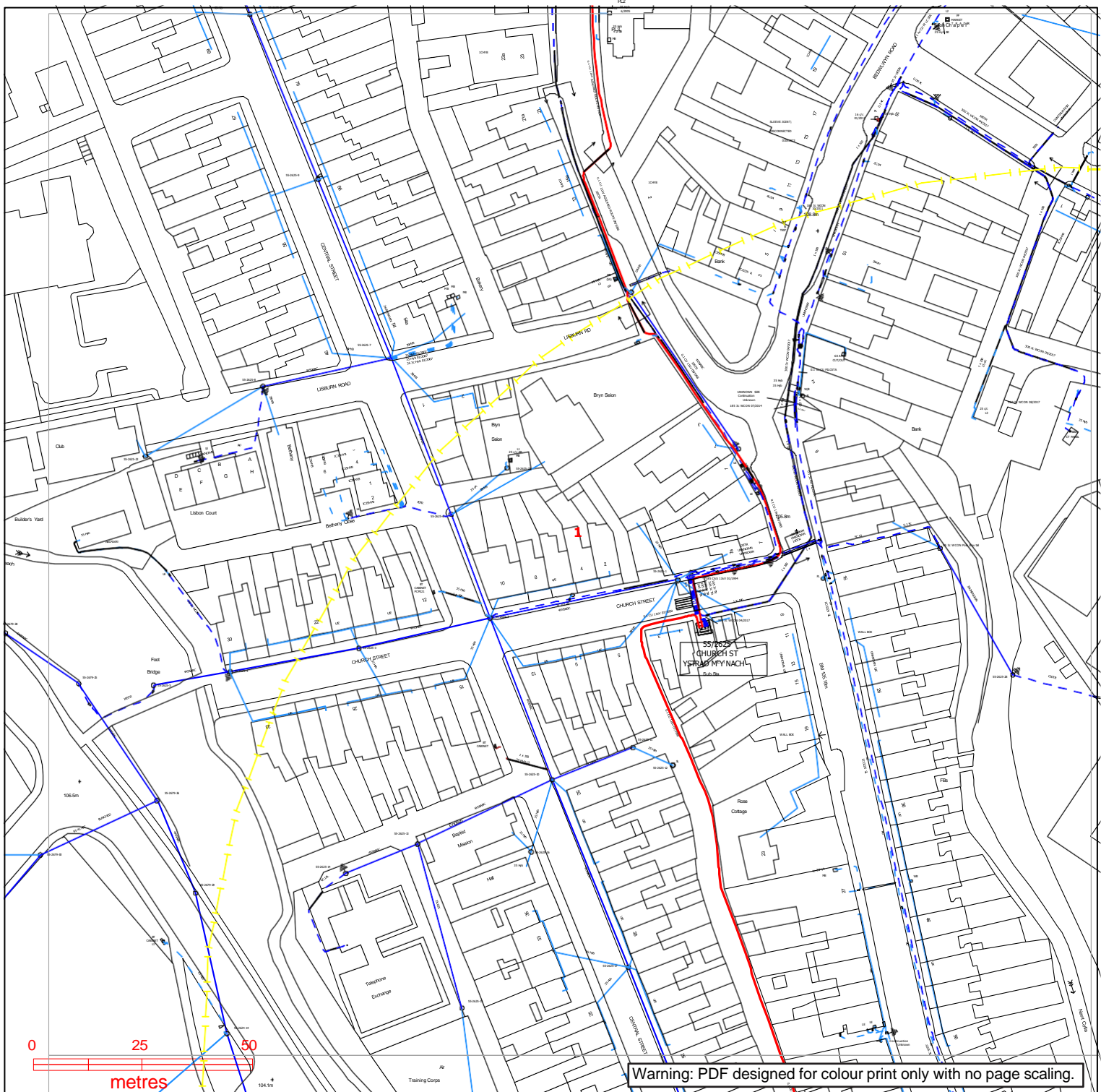
Link Box	Overhead Line	Underground Cable	SURF Telecoms	Pilot Cables
●	○ PL ○ Service ○ LV ○ HV (11kV) ○ HV (33kV) ○ HV (66kV) ○ HV (132kV)	— —	— S — S — PME Earth Underground Earth	— P — P — Pole Mounted Transformer Ground Mounted Transformer

IMPORTANT NOTICES

- This information is given as a guide only and its accuracy cannot be guaranteed. Services or recent additions to the network may not be shown.
- Cables, overhead lines & substations owned by other electricity network owners or private companies may be present and may not be shown.
- You should always verify exact locations of cables using a cable locator and by careful use of hand tools in accordance with HSE guidance note HSG47.
- When working within 10m of any overhead electric line you should follow the requirements of HSE Guidance Note GS6.
- For further advice on working near our electricity cables or lines, call our General Enquiries number.
- Advice should be sought from the Western Power Distribution General Enquiries team for any work that is to take place in proximity to 132kV underground cables and 132kV overhead lines.

Report damage immediately – KEEP EVERYONE AWAY FROM THE AREA
0800 6783 105

Crown Copyright © All Rights Reserved. Ordnance Survey Licence Number: EL27318X, 100024877 and 100021807.
 WPD Copyright: This copy has been made by or with the authority of Western Power Distribution (WPD) pursuant to Section 47 of the Copyright Designs and Patents Act 1988 unless that Act provides a relevant exception to copyright the copy must not be copied without the prior permission of the copyright owner



WESTERN POWER DISTRIBUTION
Serving the Midlands, South West and Wales

Contact Us
Mapping Enquiries:
 All areas 0121 623 9780
General Enquiries:
 All areas 0800 096 3080

Date Requested: 12/01/2018
 Job Reference: 11990220
 Site Location: 314622 194180
 Requested by:
 Mrs Trudi Phillips
 Your Scheme/Reference:
 Nant Cylla Gabian Baskets

Exact Scales:
 1:1250 Area or Circle dig site
 1:500 Line dig site

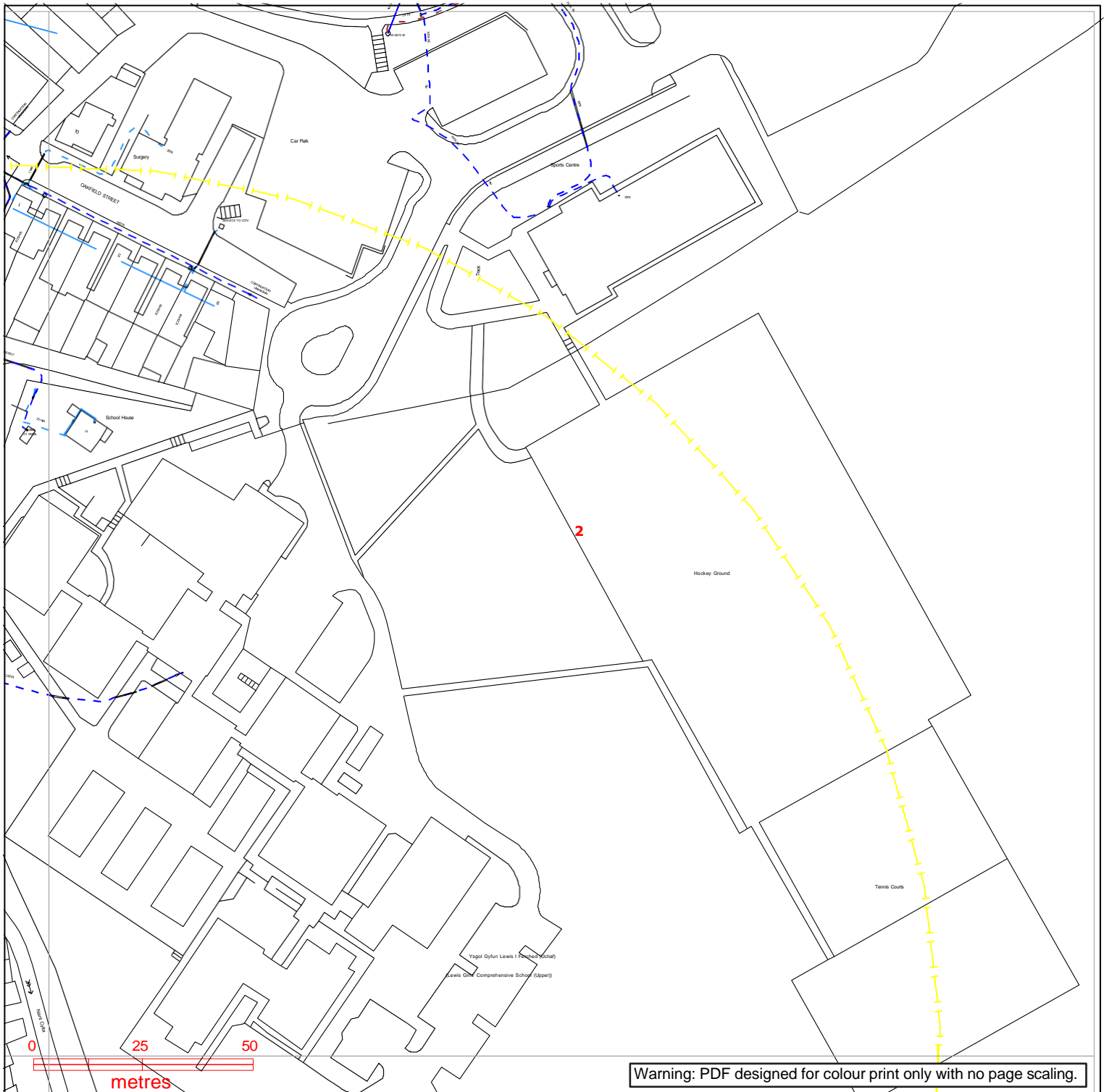
Link Box	Overhead Line	Underground Cable	SURF Telecoms	Pilot Cables
●	○ PL ○ Service ○ LV ○ HV (11kV) ○ HV (33kV) ○ HV (66kV) ○ HV (132kV)	— —	— S — S — — S — S — — S — S — — S — S —	— P — P — — P — P — — P — P — — P — P —
Site Location Line/Area			PME Earth — E — E — — E — E — — E — E —	Pole Mounted Transformer ○ Ground Mounted Transformer □

IMPORTANT NOTICES

- This information is given as a guide only and its accuracy cannot be guaranteed. Services or recent additions to the network may not be shown.
- Cables, overhead lines & substations owned by other electricity network owners or private companies may be present and may not be shown.
- You should always verify exact locations of cables using a cable locator and by careful use of hand tools in accordance with HSE guidance note HSG47.
- When working within 10m of any overhead electric line you should follow the requirements of HSE Guidance Note GS6.
- For further advice on working near our electricity cables or lines, call our General Enquiries number.
- Advice should be sought from the Western Power Distribution General Enquiries team for any work that is to take place in proximity to 132kV underground cables and 132kV overhead lines.

Report damage immediately – KEEP EVERYONE AWAY FROM THE AREA
0800 6783 105

Crown Copyright © All Rights Reserved. Ordnance Survey Licence numbers: EL27318X, 100024877 and 100021807.
 WPD Copyright: This copy has been made by or with the authority of Western Power Distribution (WPD) pursuant to Section 47 of the Copyright Designs and Patents Act 1988 unless that Act provides a relevant exception to copyright the copy must not be copied without the prior permission of the copyright owner



Warning: PDF designed for colour print only with no page scaling.



Contact Us
Mapping Enquiries:
 All areas 0121 623 9780
General Enquiries:
 All areas 0800 096 3080

Link Box

Site Location
Line/Area

Overhead Line

 PL
 Service
 LV
 HV (11kV)
 HV (33kV)
 HV (66kV)
 HV (132kV)

Underground Cable

 LV
 HV (11kV)
 HV (33kV)
 HV (66kV)
 HV (132kV)

SURF Telecoms

PME Earth

Underground Earth

Pilot Cables

Pole Mounted Transformer

Ground Mounted Transformer

IMPORTANT NOTICES

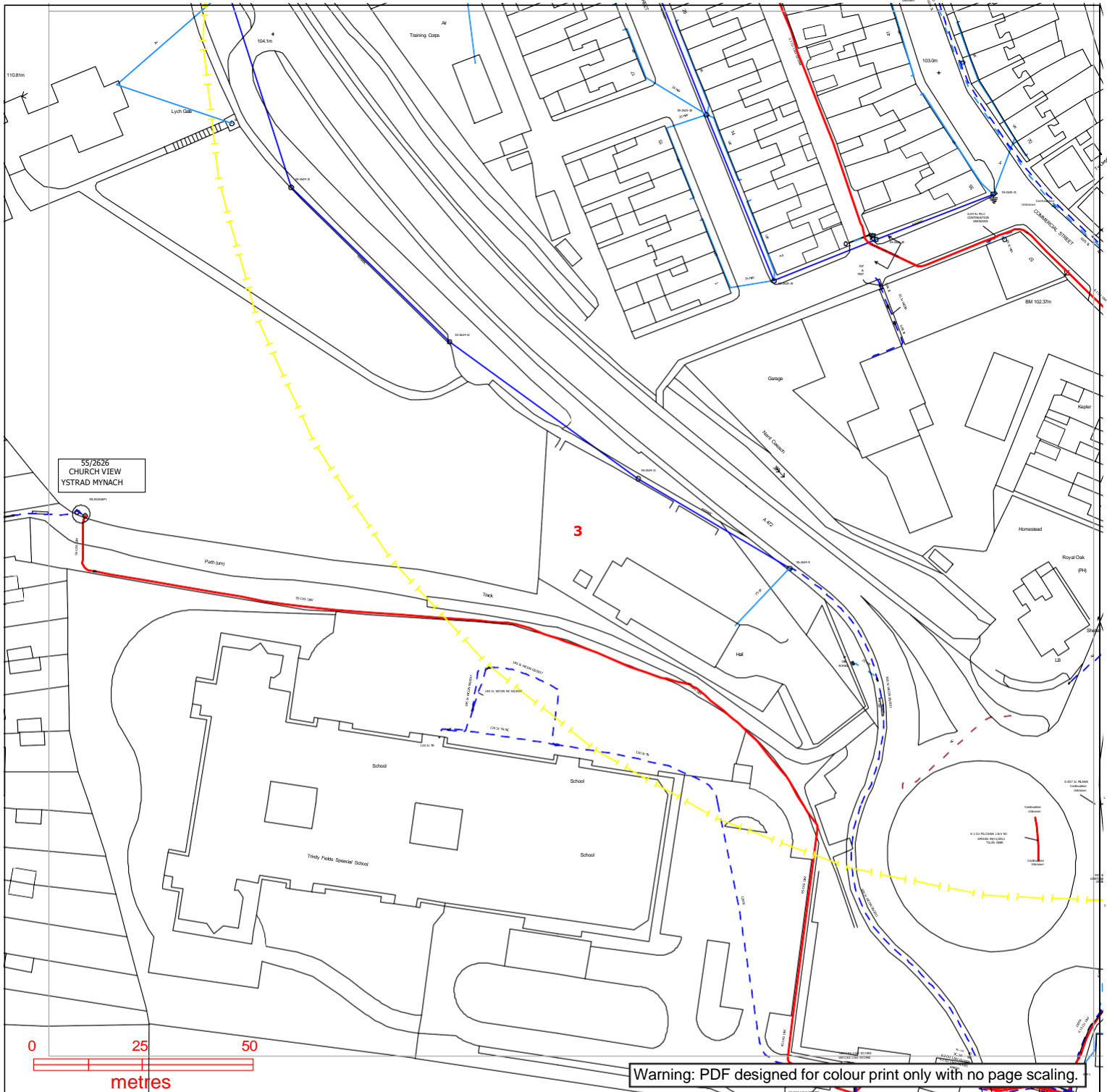
- This information is given as a guide only and its accuracy cannot be guaranteed. Services or recent additions to the network may not be shown.
- Cables, overhead lines & substations owned by other electricity network owners or private companies may be present and may not be shown.
- You should always verify exact locations of cables using a cable locator and by careful use of hand tools in accordance with HSE guidance note HSG47.
- When working within 10m of any overhead electric line you should follow the requirements of HSE Guidance Note GS6.
- For further advice on working near our electricity cables or lines, call our General Enquiries number.
- Advice should be sought from the Western Power Distribution General Enquiries team for any work that is to take place in proximity to 132kV underground cables and 132kV overhead lines.

Report damage immediately – KEEP EVERYONE AWAY FROM THE AREA
0800 6783 105

Date Requested: 12/01/2018
 Job Reference: 11990220
 Site Location: 314622 194180
 Requested by:
 Mrs Trudi Phillips
 Your Scheme/Reference:
 Nant Cylla Gabian Baskets

Exact Scales:
 1:1250 Area or Circle dig site
 1:500 Line dig site

Crown Copyright © All Rights Reserved. Ordnance Survey Licence numbers: EL27318X, 100024877 and 100021807.
 WPD Copyright: This copy has been made by or with the authority of Western Power Distribution (WPD) pursuant to Section 47 of the Copyright Designs and Patents Act 1988 unless that Act provides a relevant exception to copyright the copy must not be copied without the prior permission of the copyright owner



WESTERN POWER DISTRIBUTION
Serving the Midlands, South West and Wales

Contact Us
Mapping Enquiries:
 All areas 0121 623 9780
General Enquiries:
 All areas 0800 096 3080

Date Requested: 12/01/2018
 Job Reference: 11990220
 Site Location: 314622 194180
 Requested by:
 Mrs Trudi Phillips
 Your Scheme/Reference:
 Nant Cylla Gabian Baskets

Exact Scales:
 1:1250 Area or Circle dig site
 1:500 Line dig site

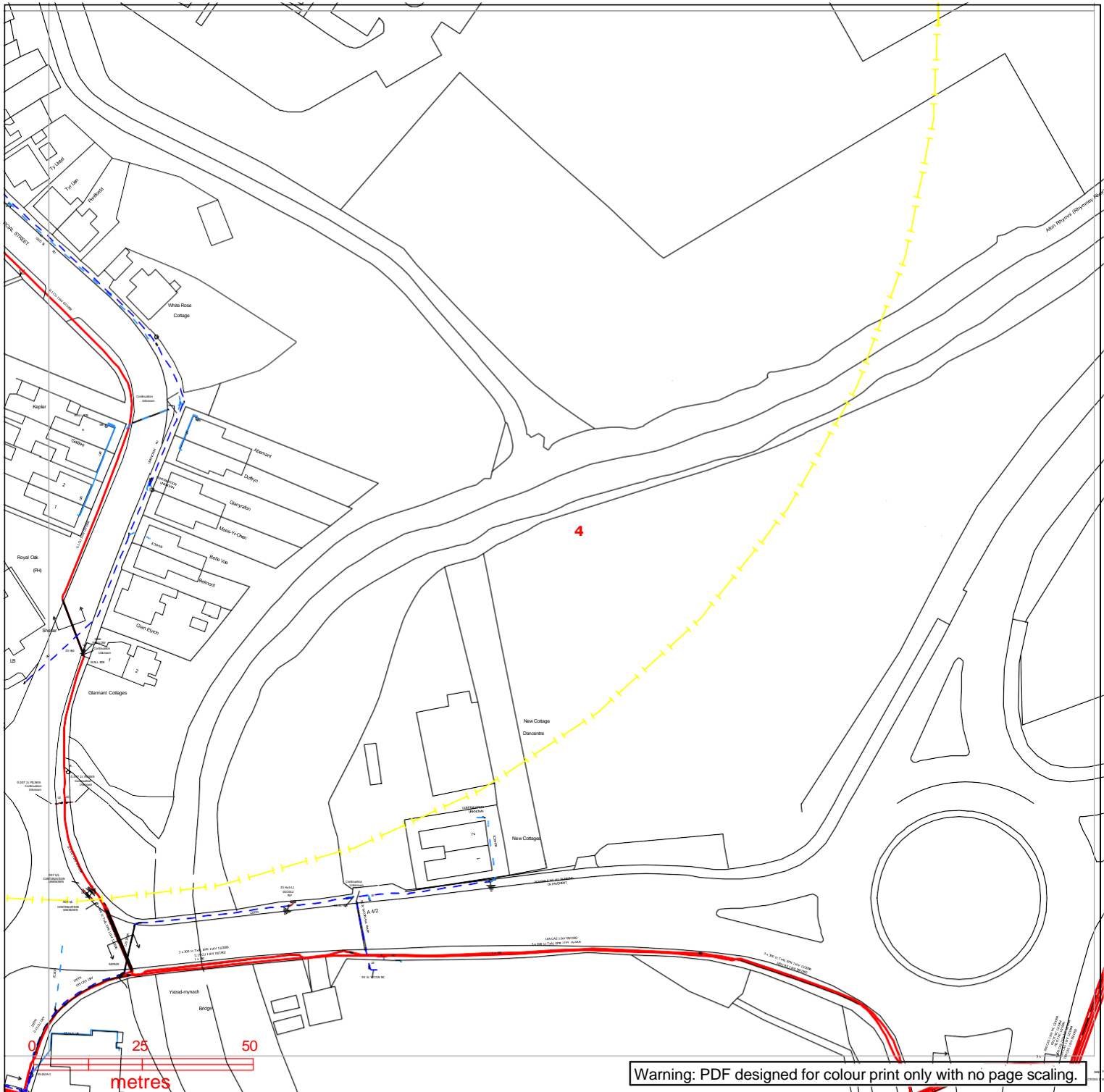
Link Box	Overhead Line	Underground Cable	SURF Telecoms	Pilot Cables
●	○—○ PL	— — — — —	— S — S —	— P — P —
●	○—○ Service	— — — — —	— S — S —	○ Pole Mounted Transformer
●	○—○ LV	— — — — —	— S — S —	□ Ground Mounted Transformer
●	○—○ HV (11kV)	— — — — —	— S — S —	
●	○—○ HV (33kV)	— — — — —	— S — S —	
●	○—○ HV (66kV)	— — — — —	— S — S —	
●	○—○ HV (132kV)	— — — — —	— S — S —	
— — —			— E —	

IMPORTANT NOTICES

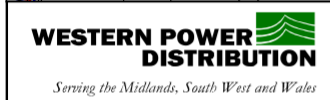
- This information is given as a guide only and its accuracy cannot be guaranteed. Services or recent additions to the network may not be shown.
- Cables, overhead lines & substations owned by other electricity network owners or private companies may be present and may not be shown.
- You should always verify exact locations of cables using a cable locator and by careful use of hand tools in accordance with HSE guidance note HSG47.
- When working within 10m of any overhead electric line you should follow the requirements of HSE Guidance Note GS6.
- For further advice on working near our electricity cables or lines, call our General Enquiries number.
- Advice should be sought from the Western Power Distribution General Enquiries team for any work that is to take place in proximity to 132kV underground cables and 132kV overhead lines.

Report damage immediately – KEEP EVERYONE AWAY FROM THE AREA
0800 6783 105

Crown Copyright © All Rights Reserved. Ordnance Survey Licence number: EL27318X, 100024877 and 100021807.
 WPD Copyright: This copy has been made by or with the authority of Western Power Distribution (WPD) pursuant to Section 47 of the Copyright Designs and Patents Act 1988 unless that Act provides a relevant exception to copyright the copy must not be copied without the prior permission of the copyright owner



Warning: PDF designed for colour print only with no page scaling.



Contact Us
Mapping Enquiries:
 All areas 0121 623 9780
General Enquiries:
 All areas 0800 096 3080

Date Requested: 12/01/2018
 Job Reference: 11990220
 Site Location: 314622 194180
 Requested by:
 Mrs Trudi Phillips
 Your Scheme/Reference:
 Nant Cylla Gabian Baskets

Exact Scales:
 1:1250 Area or Circle dig site
 1:500 Line dig site

Link Box ●	Overhead Line ○ ○ PL ○ ○ Service ○ ○ LV ○ ○ HV (11kV) ○ ○ HV (33kV) ○ ○ HV (66kV) ○ ○ HV (132kV)	Underground Cable - - - PL - - - Service - - - LV - - - HV (11kV) - - - HV (33kV) - - - HV (66kV) - - - HV (132kV)	SURF Telecoms - - - S - - - S PME Earth Underground Earth	Pilot Cables P - - - P ○ Pole Mounted Transformer □ Ground Mounted Transformer
----------------------	--	--	---	--

IMPORTANT NOTICES

- This information is given as a guide only and its accuracy cannot be guaranteed. Services or recent additions to the network may not be shown.
- Cables, overhead lines & substations owned by other electricity network owners or private companies may be present and may not be shown.
- You should always verify exact locations of cables using a cable locator and by careful use of hand tools in accordance with HSE guidance note HSG47.
- When working within 10m of any overhead electric line you should follow the requirements of HSE Guidance Note GS6.
- For further advice on working near our electricity cables or lines, call our General Enquiries number.
- Advice should be sought from the Western Power Distribution General Enquiries team for any work that is to take place in proximity to 132kV underground cables and 132kV overhead lines.

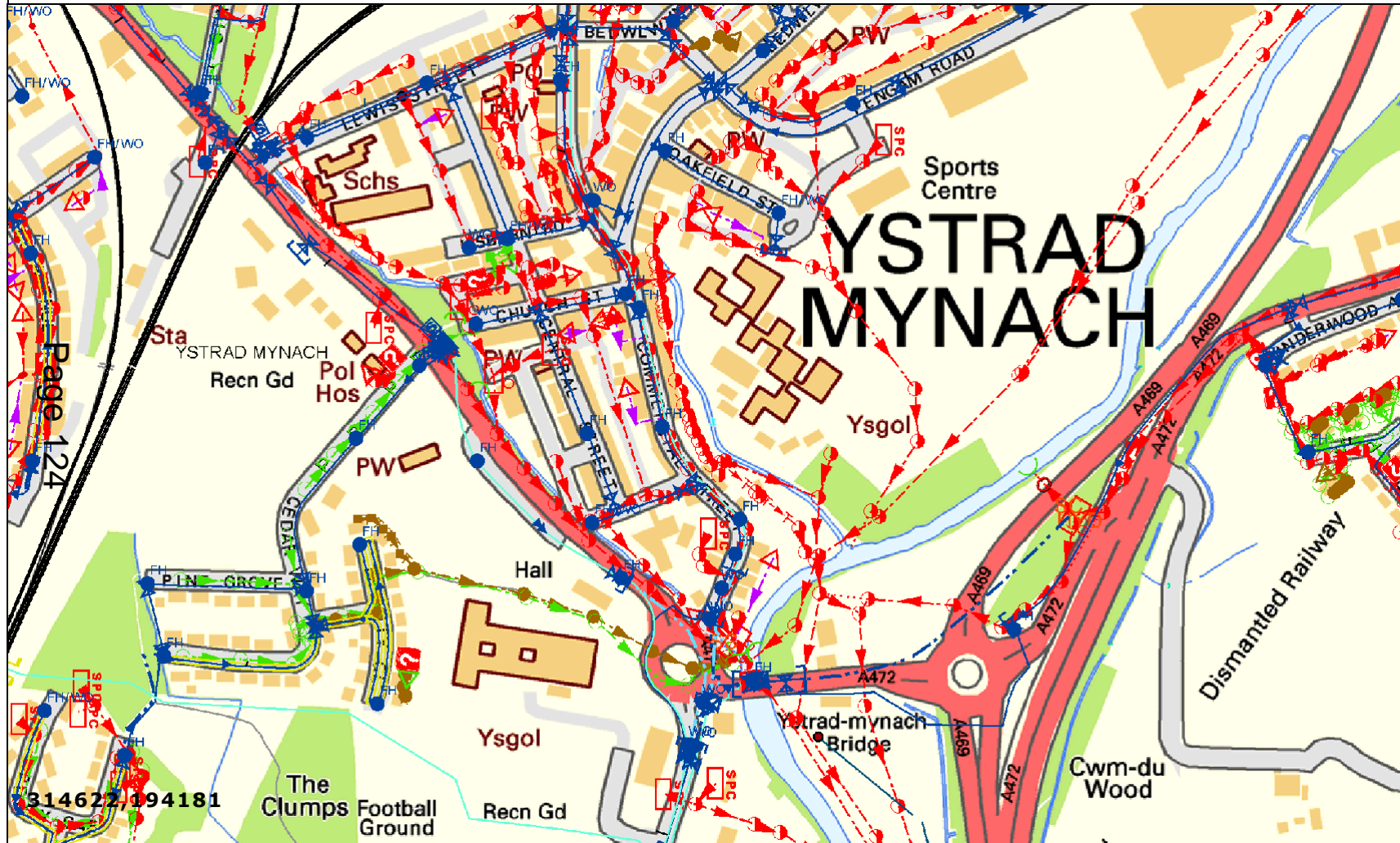
Report damage immediately – KEEP EVERYONE AWAY FROM THE AREA
0800 6783 105


























Crown Copyright © All Rights Reserved. Ordnance Survey Licence number: EL27318X, 100024877 and 100021807.
 WPD Copyright: This copy has been made by or with the authority of Western Power Distribution (WPD) pursuant to Section 47 of the Copyright Designs and Patents Act 1988 unless that Act provides a relevant exception to copyright the copy must not be copied without the prior permission of the copyright owner

Nant Cylla Gabian Baskets



Scale: 1:5000



- LEGEND**
- Clean Water**
-  Sluice Val
 -  Air Val, SINGLE
 -  Tap
 -  Pressure Reducing Valve
 -  Meter
 -  BULK Meter
 -  FH
 -  Cap
 -  Existing Main
 -  NON COMPANY
- Sewerage External**
-  Foul
 -  Surface Water
 -  Combined
 -  Rising Main
 -  Private
 -  Treatment Works
 -  Pumping Station
 -  Special Purpose
 -  Unknown End
 -  Change, Combined Overflow
 -  Outfall, FOUL
 -  Lamp Hole, Foul
 -  Private Sewer Transfer
 -  Lateral Drain
 -  Inspection Chamber

Page 124

314622 194181

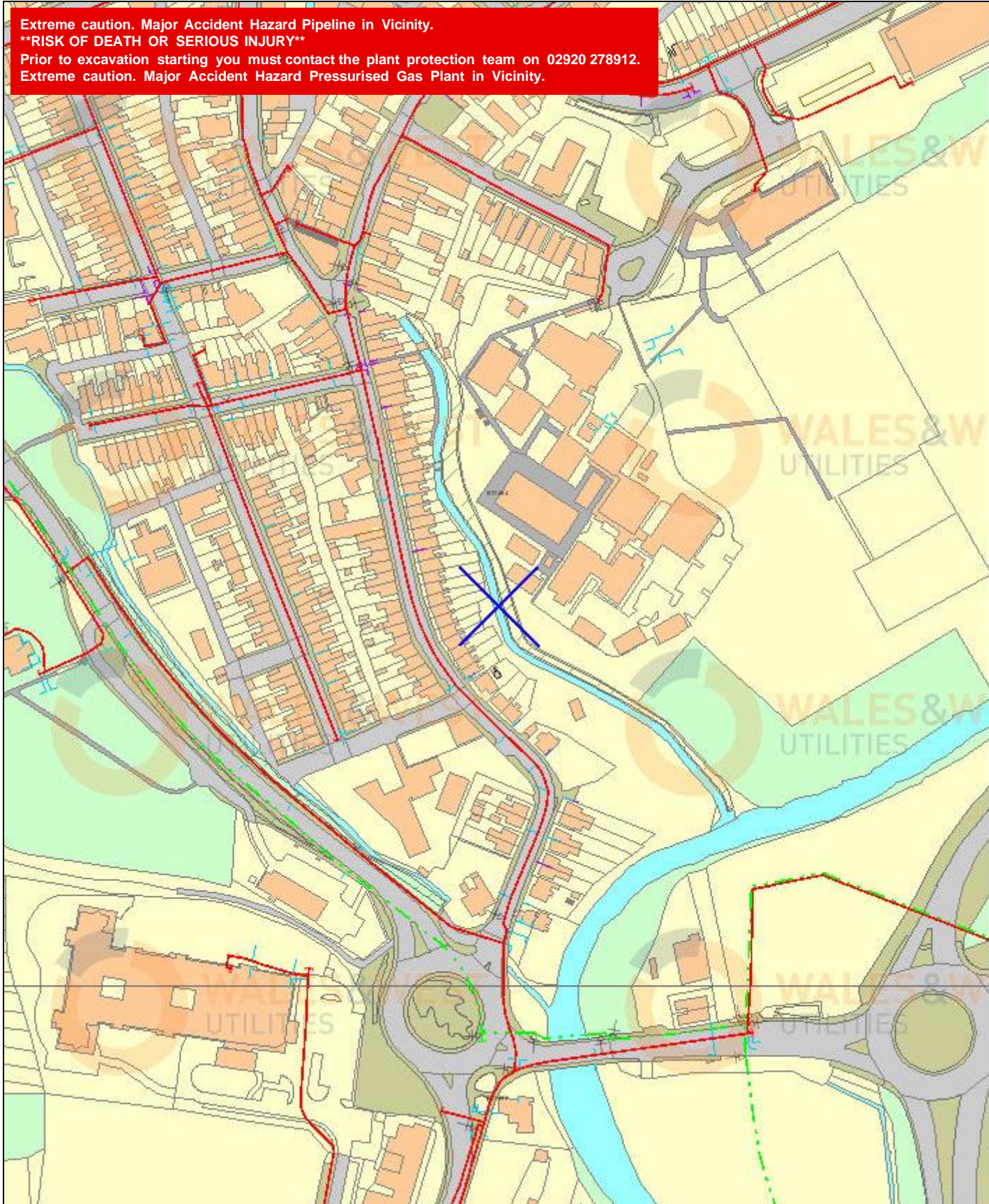
Dwr Cymru Cyfyngedig ('the Company') gives this information as to the position of its underground apparatus by way of general guidance only and on the strict understanding that it is based on the best information available and no warranty as to its correctness is relied upon in the event of excavations or other works made in the vicinity of the Company's apparatus and any onus of locating the apparatus before carrying out any excavations rests entirely on you. The information which is supplied hereby by the Company, is done so in accordance with statutory requirements of sections 198 and 199 of the Water Industry Act 1991 based upon the best information available and in particular, but without prejudice to the generality of the foregoing, it should be noted that the records that are available to the Company may not disclose the existence of a drain sewer or disposal main laid before 1 September 1989, or if they do, the particulars thereof including their position underground may not be accurate. It must be understood that the furnishing of this information is entirely without prejudice to the provision of the New Roads and Street Works Act 1991 and the Company's right to be compensated for any damage to its apparatus.

EXACT LOCATION OF ALL APPARATUS TO BE DETERMINED ON SITE

Reproduced from the Ordnance Survey's maps with the permission of the Controller of Her Majesty's Stationary Office. Crown Copyright. Licence No: WU298565.

Whilst every reasonable effort has been taken to correctly record the pipe material of DCWW assets, there is a possibility that in some cases pipe material (other than Asbestos Cement or Pitch Fibre) may be found to be asbestos cement (AC) or Pitch Fibre (PF). It is therefore advisable that the possible presence of AC or PF pipes be anticipated and considered as part of any risk assessment prior to excavation.

Extreme caution. Major Accident Hazard Pipeline in Vicinity.
****RISK OF DEATH OR SERIOUS INJURY****
 Prior to excavation starting you must contact the plant protection team on 02920 278912.
 Extreme caution. Major Accident Hazard Pressurised Gas Plant in Vicinity.



Scale	1 : 2500@A4
User ID	phill@caerphilly.go
Date	12/01/2018
Grid Ref:	Easting: 314622 Northing: 194181

TITLE : Nant Cylla Gabian Baskets

The plan shows the gas pipes owned by Wales & West Utilities (WU) in its role as a Licensed Gas Transporter (GT). The information shown on this plan is derived from historic information and may have involved re-surveying plans, and the accuracy of it can not be guaranteed. Service pipes, valves, syphons, stub connections, etc. may not be shown but their presence should be anticipated. No warranties are therefore given in respect of it. WU its employees and contractors do not accept any liability for any inaccuracies or incompleteness in it.

You must use safe digging practices, in accordance with HSG47, to establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you or near gas apparatus. The information shown on this plan should not be used beyond 28 days from the date of issue of this plan as it is subject to updating.

The plan also provides indications of gas pipes owned by other GTs, or otherwise privately owned, which may be present in this area. This information is not information of WU and WU is unable to verify this information or to confirm whether it is accurate or complete. It is supplied voluntarily to assist the user in determining whether to make contact with other GTs or others. The user must obtain such information from the other GT or person concerned. WU, its employees and contractors do not accept any liability for this information or any inaccuracies or incompleteness in it.

- Low Pressure
- Medium Pressure
- Intermediate Pressure
- High Pressure
- Design Pipes
- Abandoned

Page 125



Wales and West Utilities Ltd., Wales and West House, Spooner Close, Celtic Springs, Coedkernew, Newport, NP10 8FZ

Internal Use Only

© All Master Map data is reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright and database right 2018. All rights reserved. Ordnance Survey Licence number 0100044306.

This page is intentionally left blank

NANT CYLLA SCOUR PROTECTION –COST ESTIMATES (2023 V1.0)

Summary (initial delivery estimate)

Preferred Option Cost Estimate - Strategy 1

Preliminaries	£	81,522
Section 1: Energy dissipation baffles	£	73,081
Section 2: Energy dissipation rock weir	£	162,597
Section 3: Channel widening, regrade eastern bank, renew existing scour protection, rock meanders and green engineering	£	861,067
Contractor's fees	£	294,567
Pre-construction activities:	£	270,283
Risk Allowances:	£	1,150,457
Total Estimated Works Costs	£	2,893,574

Preferred Option Cost Estimate - Strategy 2

Preliminaries	£	81,522
Section 1: Energy dissipation baffles	£	73,081
Section 2: Energy dissipation rock weir	£	162,597
Section 3: Renewal of existing scour protection east and west bank	£	381,250
Contractor's fees:	£	174,612
Pre-construction activities:	£	210,306
Risk Allowances:	£	715,023
Total Estimated Works Costs	£	1,798,391

Scheme: Preferred Option Cost Estimate - Strategy 1

Main Works Elements		
Preliminaries		
0.10	General site clearance and vegetation removal to facilitate site access.	£3,300
0.20	Provision of 2 No. permanent access tracks/ points to watercourse to facilitate longer term operation and maintenance.	£26,396
0.30	Provision and fixing of temporary access gates - hire and installation for duration of works and removal on completion	£2,200
0.40	Provision of temporary fencing - hire and installation for duration of works and removal on completion	£2,250
0.50	Establish and remove site offices	£1,403
0.60	Hire, service and operate site offices	£4,500
0.70	Dewatering	£41,474
Section 1: Energy dissipation baffles		
1.10	Coring/ dowelling in channel bed and bank to facilitate installation of concrete baffles.	£16,500
1.20	Cast in baffles into base of channel	£33,118
1.30	Cast in baffles into walls of channel	£23,463
Section 2: Energy dissipation rock weir		
2.10	Excavation for foundations (Maximum depth 0.5 - 1m) - incl removal off site	£18,809
2.20	Provision of concrete: Grade C30/20 mm aggregate to BS EN 197	£18,222
2.30	Concrete ancillaries: formwork fair finish (plane vertical exceeding 1.22m width)	£28,028
2.40	Placing of concrete: mass concrete blinding (thickness not exceeding 150mm)	£662
2.50	Placing of concrete: RC ground slab (thickness 150 - 300mm)	£1,983
2.60	Placing of concrete: RC wall (thickness 150 - 300mm)	£3,074
2.70	Reinforcement: bent and cut to length (nominal bar size 16mm). Plain round steel bars to BS 4449.	£80,365
2.80	Rock armour provision	£10,863
2.90	Placing of concrete: mass concrete (for rock embedment)	£592
Section 3: Channel widening, regrade eastern bank, renew existing scour protection, rock meanders and green engineering		
3.10	Vegetation clearance (east bank)	£822
3.20	Tree removal (east bank)	£6,593
3.30	Stump removal (east bank)	£10,623
3.40	Excavation of material (east bank)	£17,996
3.50	Disposal of material (east bank)	£555,984
3.60	Removal and dispose of existing erosion protection measures (concrete)	£61,695
3.70	Removal and disposal of existing erosion protection material (gabions)	£58,870

Scheme: Preferred Option Cost Estimate - Strategy 1

3.80	Provision of concrete: Grade C30/20 mm aggregate to BS EN 197, for gabion foundations (west bank)		£27,332
3.90	Placing of mass concrete blinding (thickness not exceeding 150mm) for gabion foundations (west bank)		£662
3.10	Placing of gabion concrete foundations (west bank)		£7,222
3.11	Reinforcement		£8,250
3.12	Provision and installation of new erosion protection / gabions (west bank)		£28,781
3.13	Geotextiles		£10,384
3.14	Coir matting		£5,500
3.15	Rock mattresses to replicate natural channel features		£31,653
3.16	Topsoiling (reuse of existing)		£3,697
3.17	Planting and re-landscaping / trees		£14,905
3.18	Landscaping - grass seeding (10 - 45 degrees to horizontal)		£10,098
Main Works Elements:			£1,178,267
Contractor's fees			
	Contractors profit & overheads	20%	£235,653.34
	Contractors personnel - Contracts Manager, Site Agent	5%	£58,913.34
Sub-total Works Costs:			£1,472,833
Pre-construction activities:			
	Feasibility study, hydraulic modelling & assessment		£50,000
	Topographic / channel survey		£8,000
	Ecology surveys		£10,000
	GI		£15,000
	Structural inspections		£10,000
	Consents (assumes planning not required)		£10,000
	Legal fees relating to land access and acquisition (purchase / compensation excl)		£20,000
	Design incl surveys all associated fees (liaise, manage) & site supervision	10%	£147,283
Sub-total Works Costs including Design and Supervision (excluding Risk Allowances):			£1,743,117
Risk Allowances:			
	Optimism Bias (based on the supplementary Green Book Guidance)	66%	£1,150,457
Total Estimated Works Costs (including Risk Allowances):			£2,893,574

Scheme: Preferred Option Cost Estimate - Strategy 2

Main Works Elements		
Preliminaries		
0.10	General site clearance and vegetation removal to facilitate site access.	£3,300
0.20	Provision of 2 No. permanent access tracks/ points to watercourse to facilitate longer term operation and maintenance.	£26,396
0.30	Provision and fixing of temporary access gates - hire and installation for duration of works and removal on completion	£2,200
0.40	Provision of temporary fencing - hire and installation for duration of works and removal on completion	£2,250
0.50	Establish and remove site offices	£1,403
0.60	Hire, service and operate site offices	£4,500
0.70	Dewatering	£41,474
Section 1: Energy dissipation baffles		
1.10	Coring/ dowelling in channel bed and bank to facilitate installation of concrete baffles.	£16,500
1.20	Cast in baffles into base of channel	£33,118
1.30	Cast in baffles into walls of channel	£23,463
Section 2: Energy dissipation rock weir		
2.10	Excavation for foundations (Maximum depth 0.5 - 1m) - incl removal off site	£18,809
2.20	Provision of concrete: Grade C30/20 mm aggregate to BS EN 197	£18,222
2.30	Concrete ancillaries: formwork fair finish (plane vertical exceeding 1.22m width)	£28,028
2.40	Placing of concrete: mass concrete blinding (thickness not exceeding 150mm)	£662
2.50	Placing of concrete: RC ground slab (thickness 150 - 300mm)	£1,983
2.60	Placing of concrete: RC wall (thickness 150 - 300mm)	£3,074
2.70	Reinforcement: bent and cut to length (nominal bar size 16mm). Plain round steel bars to BS 4449.	£80,365
2.80	Rock armour provision	£10,863
2.90	Placing of concrete: mass concrete (for rock embedment)	£592
Section 3: Renewal of existing scour protection east and west bank		
4.10	Removal and dispose of existing erosion protection measures (concrete)	£123,390
4.20	Removal and disposal of existing erosion protection material (gabions)	£117,741
4.30	Provision of concrete: Grade C30/20 mm aggregate to BS EN 197, for gabion foundations (east and west bank)	£54,665
4.40	Placing of mass concrete blinding (thickness not exceeding 150mm) for gabion foundations (east and west bank)	£1,261

Scheme: Preferred Option Cost Estimate - Strategy 2

4.50	Placing of gabion concrete foundations (east and west bank)		£15,887
4.60	Reinforcement		£16,500
4.70	New erosion protection / gabions (east and west bank)		£51,806
Main Works Elements:			£698,450
Contractor's fees:			
	Contractor's profit and overheads	20%	£139,689.93
	Contractors personnel - Contracts Manager, Site Agent	5%	£34,922.48
Sub-total Works Costs:			£873,062
Pre-construction activities:			
	Feasibility study, hydraulic modelling & assessment		£50,000
	Topographic / channel survey		£8,000
	Ecology surveys		£10,000
	GI		£15,000
	Structural inspections		£10,000
	Consents (assumes planning not required)		£10,000
	Legal fees relating to land access and acquisition (purchase / compensation excl)		£20,000
	Design incl surveys all associated fees (liaise, manage) & site supervision	10%	£87,306
Sub-total Works Costs including Design and Supervision (excluding Risk Allowances):			£1,083,368
Risk Allowances:			
	Optimism Bias (based on the supplementary Green Book Guidance)	66%	£715,023
Total Estimated Works Costs (including Risk Allowances):			£1,798,391

Whole life cost estimate

Strategy 1

Approximate 100 year design life; minor repairs approximately every 25 years.

	Low end WLC	Mid range WLC	High end WLC
Initial cost	£2,893k (cash) Prelims: £82k Section 1: £73k Section 2: £163k Section 3: £861k Contractor fees (25%): £295k Pre construction activities, design & supervision: £270k Risk allowance: £1,150k		
Repair cost	£139k per repair (cash) Prelims: £30k Section 1: £7.3k (10% of initial capital) Section 2: £16k (10% of initial capital) Section 3: £24k (10% of in-channel works only) Contractor fees (25%): £19k Pre construction activities, Design & supervision: £30k Risk allowance (10%): £13k Repairs every 30 years.	£207k per repair (cash) Prelims: £30k Section 1: £11k (15% of initial capital) Section 2: £24k (15% of initial capital) Section 3: £36k (15% of in-channel works only) Contractor fees (25%): £25k Pre construction activities, Design & supervision: £45k Risk allowance (20%): £34k Repairs every 25 years.	£280k per repair (cash) Prelims: £30k Section 1: £15k (20% of initial capital) Section 2: £33k (20% of initial capital) Section 3: £48k (20% of in-channel works only) Contractor fees (25%): £31k Pre construction activities, Design & supervision: £59k Risk allowance (30%): £65k Repairs every 20 years. Repair undertaken at end of design life (99 years)
Total	Cash (excl inflation): £3,312k PV: £2,975k	Cash (excl inflation): £3,513k PV: £3,046k	Cash (excl inflation): £4,295k PV: £3,197k

Strategy 2

Approximate 50 year design life (section 3); moderate repairs approximately every 10 - 20 years.

	Low end WLC	Mid range WLC	High end WLC
Initial cost	£1,798k (cash) Prelims: £82k Section 1: £73k Section 2: £163k Section 3: £381k Contractor fees (25%): £175k Pre construction activities, design & supervision: £210k Risk allowance: £715k		
Repair cost	£139k per repair (cash) Prelims: £30k Section 1: £7.3k (10% of initial capital) Section 2: £16k (10% of initial capital) Section 3: £76k (20% of initial capital) Contractor fees (25%): £32k Pre construction activities, Design & supervision: £36k Risk allowance (10%): £20k Repairs every 20 years.	£313k per repair (cash) Prelims: £30k Section 1: £11k (15% of initial capital) Section 2: £24k (15% of initial capital) Section 3: £95k (25% of initial capital) Contractor fees (25%): £40k Pre construction activities, Design & supervision: £60k Risk allowance (20%): £52k Repairs every 15 years.	£415k per repair (cash) Prelims: £30k Section 1: £15k (20% of initial capital) Section 2: £33k (20% of initial capital) Section 3: £114k (30% of in-channel works only) Contractor fees (25%): £48k Pre construction activities, Design & supervision: £80k Risk allowance (30%): £96k Repairs every 10 years. Repair undertaken at end of design life (99 years)
Section 3 renewal cost	£680k (cash) Prelims: £30k Section 1: £7.3k (10% of initial capital) Section 2: £16k (10% of initial capital) Section 3: £381k (same as initial capital) Contractor fees (25%): £109k Pre construction activities, Design & supervision: £74k Risk allowance (10%): £62k Occurs at year 50. No renewal at year 99	£828k (cash) Prelims: £30k Section 1: £11k (15% of initial capital) Section 2: £24k (15% of initial capital) Section 3: £381k (same as initial capital) Contractor fees (25%): £112k Pre construction activities, Design & supervision: £132k Risk allowance (20%): £138k Occurs at year 50. No renewal at year 99	£957k (cash) Prelims: £30k Section 1: £15k (20% of initial capital) Section 2: £33k (20% of initial capital) Section 3: £381k (same as initial capital) Contractor fees (25%): £115k Pre construction activities, Design & supervision: £163k Risk allowance (30%): £221k Repairs every 10 years. Repair undertaken at end of design life (99 years)
Total	Cash (excl inflation): £3,351k PV: £2,144k	Cash (excl inflation): £4,505k PV: £2,430k	Cash (excl inflation): £6,491k PV: £2,965k

Risks & assumptions

CONSTRUCTION RISKS (NOT EXCLUSIVE)

Ground conditions - additional excavation required due to soft spots

Ground conditions - additional material to be disposed offsite

Access - additional over extra uplift to account for difficulties accessing works site

Adverse weather conditions

Environmental impacts and mitigation

Statutory undertakers - works required to facilitate works

Landownership - land access and purchase of land in private ownership

Safety considerations with respect to the proximity of the site to a school and also alongside private residences may need additional provision.

Additional manual handling, barrowing, smaller plant or temporary access equipment or structures may be required, beyond those accounted for here.

Additional temporary access track may be needed.

A weak channel base could reduce the volume of materials transported to site or require negotiation of access via private property.

Weak channel bed and walls could require additional strengthening works to support fixing of baffles. The structural requirements for attachment of baffles are likely to be higher for the walls than for the base. Failure to undertake adequate testing could result in wall collapse.

Additional costs may be incurred if ground investigation identifies unstable or inadequate strength ground for banks and foundations.

Excavations made need propping and the costs of this have not been included.

ASSUMPTIONS (NOT EXCLUSIVE)

The same access used for works in 2018 will be available and agreement for landowner access can be negotiated feasibly.

The structures crossing the watercourse will be removed and access is possible along the length of the watercourse.

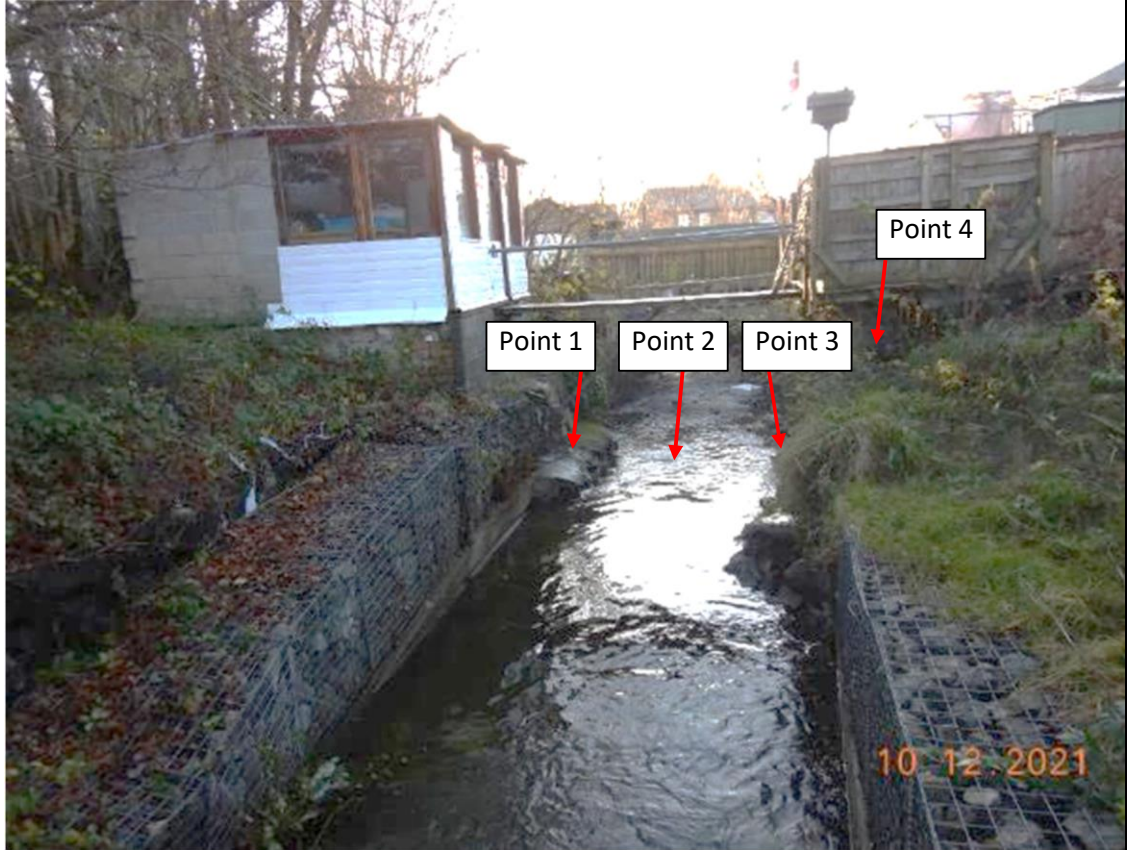
Access can be feasibly achieved throughout.

The same construction duration has been assumed for both strategies.

The concrete channel walls and base are tested and confirmed as structurally suitable for fixing baffles.

Baffle and rock armour will be unsuitable for manual handling.

Appendix 2	
Structure:	
Location:	ST 14715 94394



Location of Monitoring Points (Note: All photos to be taken looking upstream from locations)

Point 4

Point 1

Point 2

Point 3



Distance from Block Wall to Gabion opposite

Monitoring Point 1 – 15th November 2023



Monitoring Point 1 – 14th December 2023



Monitoring Point 2 – 15th November 2023



Monitoring Point 2 – 14th December 2023



Monitoring Point 3 – 15th November 2023



Monitoring Point 3 – 14th December 2023



Monitoring Point 4 – 15th November 2023



Monitoring Point 4 – 14th December 2023



Additional Information:

It appears that the baskets and foundation have not significantly dropped since the previous survey, with similar levels of the embankment behind visible.

There was an area of scour to the base of the right gabion baskets (looking downstream) at the end of the concrete apron, previously measuring 700mm long, 320mm high and up to 180mm deep. However, there was evidence of attempts to fill the void with stonework since the previous inspection (photo 1).

There was an area of scour to the concrete apron downstream of the right concrete foundation (facing downstream) previously measuring 2.2m long, 0.4m high and up to 0.77m deep. However, there was evidence of attempts to fill the void with stonework since the previous inspection (photo 2).

The gabion baskets downstream of the footbridge are undercut along their length with minor stone loss to the baskets at present (photo 3).

There was an area of scour to the right training wall (looking downstream), with the concrete apron undercut, measuring up to 2.9m long, up to 0.4m high and up to 0.6m deep. The area of scour did not appear to have deteriorated since the previous inspection (photos 4 – 6).

There was an area of scour to the base of the concrete foundation along the left training wall (looking downstream), measuring 2m long, up to 0.45m deep and up to 0.25m high. The area of scour did not appear to have deteriorated since the previous inspection (photos 7 – 9).

There was scouring and undercutting across the width of the weir upstream of the gabion baskets, measuring 2.5m wide, up to 0.5m high and up to 0.6m deep. Along the left side of the weir (facing downstream), the depth of the undercutting measured up to 1m (photo 10 – 13). However, owing to the turbidity of the water along the weir on the day of the latest inspection, it was not possible to obtain dimensions to determine whether the scouring and undercutting had deteriorated since the previous inspection.

Photo 1

Scour to the base of the right gabion baskets at the end of the concrete foundation (looking downstream)



Photo 2

Scour to concrete apron downstream of right concrete foundation (facing downstream)



Photo 3

Scour to the base of the left gabion baskets downstream of the footbridge (looking downstream)



Photo 4

Concrete apron undercut along right training wall (looking downstream)



Photo 5

Concrete apron undercut along right training wall (looking downstream)



Photo 6

Concrete apron undercut along right training wall (looking downstream)



Photo 7

Concrete apron undercut along left training wall (looking downstream)



Photo 8

Concrete apron undercut along left training wall (looking downstream)



Photo 9

Concrete apron undercut along left training wall (looking downstream)



Photo 10

Undercutting to weir upstream of gabion baskets



Photo 11

Undercutting to weir upstream of gabion baskets



Photo 12

Undercutting to weir upstream of gabion baskets – photograph taken from October 2023 inspection



Photo 13

Undercutting to weir along upstream of gabion baskets – photograph taken from October 2023 inspection



Photo 14

Misalignment of baskets along the left training wall (looking downstream)



Photo 15

Gap between the baskets along the left training wall (looking downstream)



Photo 16

Misalignment of foundation along the left training wall (looking downstream)



Photo 17

Measurement from the back of the upstream left gabion to the front of the adjacent basket



Photo 18

View behind the left gabion baskets from the top of the weir (looking downstream)



This page is intentionally left blank



CABINET - 21ST FEBRUARY 2024

SUBJECT: CAERPHILLY STATION FOOTBRIDGE REVIEW

REPORT BY: CORPORATE DIRECTOR FOR ECONOMY AND ENVIRONMENT



1. PURPOSE OF REPORT

- 1.1 This Report is provided for Cabinet to consider the options available regarding the future provision and alternative proposals of a pedestrian rail crossing at Caerphilly Railway Station.

2. SUMMARY

- 2.1 During a routine General Inspection of the existing Tubewright footbridge a number of precast units forming the stepped access at either side were noted to be rocking / moving when checked. A decision was taken to close the bridge in the interests of public safety on the 3rd July 2023, to prevent slips, trips or falls to any member of the public wishing to use the bridge.
The footbridge was officially closed under a temporary footbridge order dated 20th July 2023. The closure was initially for a period of six months while the condition and feasibility of repairs is undertaken.
Liaison with Transport for Wales (TfW) and their agents AMEY Infrastructure Wales to jointly gain full access for inspection was delayed due to the live rail track beneath the bridge. Discussions have continued and the rail closure and inspection date of Saturday 20th January 2024 proceeded, which was confirmed via Amey on 31st January 2024. A detailed Inspection Report will be provided by Amey in the coming weeks. The Bridge remains closed in the interim, in the interests of public safety.
An extension to the closure has been granted until July 2024, however, there is a need to progress options for the future of the bridge as closure extensions cannot continue indefinitely and a way forward needs to be agreed.

3. RECOMMENDATIONS

- 3.1 Cabinet is asked to consider the contents, options and capital requirements of this report and approve option 4 as the way forward. Removal of the bridge is the preferred option, as replacement/repair is not a cost-effective solution when alternative routes and proposals are available.

- 3.2 Cabinet is asked to agree that the £200,000 funding for the removal is made available from uncommitted capital earmarked reserves.

4. REASONS FOR THE RECOMMENDATIONS

- 4.1 Officers have reviewed the history and condition of the bridge together with the options and funding available. Officers have also consulted and reviewed options with local members. While local members understood the reasoning for the removal of the bridge, they were not fully supportive of the thought of losing this crossing point. Given the close proximity of alternative crossing provision the removal of the existing bridge is the most cost-effective solution.

5. THE REPORT

- 5.1 The original footbridge was constructed under a 1910 agreement whereby the Authority became responsible for future maintenance liabilities. The original footbridge was a multi span structure. This original structure was replaced in 1965 with the now existing two-span “Tubewright” footbridge. This existing Tubewright structure was typically designed with a 25-year design life (1990). The bridge was totally refurbished in 1997 and landings were replaced in 2009 and 2012. The central pier was also amended by Network Rail in 2012/13.

The Tubewright arrangement of the bridge is complicated for maintenance in lieu of its location. The Authority may have limited control over future maintenance costs due to the live rail line.

- 5.2 The footbridge in its current state is unsafe for public use. The current closure notice ended on the 20th January 2024 and the closure extension will expire in July 2024. A way forward needs to be determined to allow officers time to execute any decisions. Essentially there are only 4 options available to us.

1. Do nothing and leave the bridge as it is.
2. Refurbish and repair the structure.
3. Remove and replace the structure.
4. Make the existing structure redundant and remove it.

- 5.3 Option 1 – Do nothing.

- This is not an option as we have a duty to pedestrian and rail user safety.

- 5.4 Option 2 – Refurbish and repair existing structure – Indicative capital cost estimate £600k+

- This is the most inexpensive option to re-open the bridge, although limited future life expectancy is achievable due to the bridge being beyond its serviceable life.
- Refurbishment will improve the overall condition of the structure and maintain pedestrian access for a very limited period.
- No improvements will be made to allow for disabled access/inclusivity.
- There is a high risk that during repairs, the structure will require major works that are unforeseen at this time. This is because Tubewright structures generally rot or corrode from the inside out.
- Extensive operation that will require expensive rail line closures.
- Bridge will need to be removed off site for repairs to be undertaken.
- Current rail electrification plans may impact the design of the existing bridge.

- The complicated and onerous 1910 maintenance agreement with TfW will be maintained.
 - Future inevitable maintenance will become extremely difficult due to the proposed location of overhead line electrification apparatus.
- 5.5 Option 3 - Replace the existing structure – Indicative capital cost estimate £1.9m+
- This is the most expensive option.
 - New design would incorporate disabled access ramps as required by design standards, although the length of ramps required (approximately 140m each side) would make its use unfeasible compared to shorter alternative routes.
 - Pedestrian access would be restored, and the new structure would have an 120year design life.
 - Site topography, available space, and land ownership is not conducive to the construction of disabled ramps that would be required either side (approximately 140m length).
 - Options to progress without disability inclusive ramps would likely result in very poor publicity and loss of reputation for the Authority.
- 5.6 Option 4 – Make structure redundant and remove it. Indicative capital cost estimate £200k+
- This is the least expensive overall option.
 - It would remove maintenance liabilities and future costs from the authority.
 - Pedestrian access would be accommodated by using alternative existing access or proposed interchange facilities that are more inclusive for disabled users.
 - Minimal disruption to residents during decommissioning (all options will require over night and weekend working)
 - The alternate route is approximately 5m longer via the existing road bridge which would be shorter than using the disabled ramps of a new footbridge.
 - TfW are looking to implement an Access for All initiative within the newly proposed interchange that would aid crossing of the railway line and be an alternative to the existing road bridge.
- 5.7 An initial consultation meeting was held on the 26th of July 2023 with 3no. St Martins ward Councillors who were invited to discuss the options above. Only Cllr Fussell attended the meeting. Cllr Fussell found the meeting and presentation very useful and while he stated the removal of the bridge was unlikely to gain favour, he was able to understand the issues. A further meeting was subsequently arranged on the 20th November with Cllrs from St Martins, Morgan Jones and Van Wards due to the wider impacts the bridge may have on the community.
- 5.8 During the meetings the question was raised about raising funding via the interchange project. Officers had made this approach, but the proposal was rejected by TfW as the new interchange will already be incorporating their own DDA inclusive crossing funded via Access For All.
- 5.9 When considering the removal of the bridge the impacts were discussed. It was noted as part of the presentation that:
- Distance to Caerphilly town centre using existing crossing was 255m
 - Distance to Caerphilly town centre using existing highway 260m (extra 5m)
 - Distance to Caerphilly town centre using proposed inclusivity compliant new bridge 578m (extra 323m due to length of inclusive ramps)
- Please refer to appendix1 for further information
The distance using new proposed interchange crossing was not calculable but is estimated to be broadly similar the existing arrangement.

5.10 CONCLUSION

The removal of the bridge was a highly emotive discussion in the member consultation meeting and a decision that was not favoured by some of the local Councillors. It was noted and agreed by some of the members present, that the condition of the bridge and the financial commitment required was not justifiable when a suitable alternative route was available together with the alternative inclusive route proposed within the new interchange. As the highway diversion route would need to be used until the interchange was completed, it was agreed that the route would be reviewed to ensure it was safe and suitable for all users.

6. ASSUMPTIONS

6.1 No assumptions have been made.

7. SUMMARY OF INTEGRATED IMPACT ASSESSMENT (IIA)

7.1 [Link to IIA](#)

8. FINANCIAL IMPLICATIONS

8.1 Capital funding will be required to facilitate the repair/replacement/removal of the bridge depending on the option chosen.

- Option 1 N/A
- Option 2 repair - £600k (only provides a short term solution)
- Option 3 replace - £1900k
- Option 4 remove - £200k

8.2 In light of the current challenging financial climate and the limited capital resources available, it is the recommendation of officers that £200k is allocated from uncommitted capital earmarked reserves to fund option 4.

9. PERSONNEL IMPLICATIONS

9.1 None

10. CONSULTATIONS

10.1 The views of consultees have been incorporated and addressed within the report. The three St. Martins Ward Members have raised concerns during the consultation period, about removal of the Bridge.

One Member of the “relevant” Ward has confirmed support to remove the footbridge.

11. STATUTORY POWER

11.1 There is no statutory power or guidance binding us as an authority to undertake the works, however, there is an agreement with railtrack dated 1910 that puts all

maintenance liabilities on CCBC.

Author: Chris Adams, Highway Engineering Group Manager

Consultees:

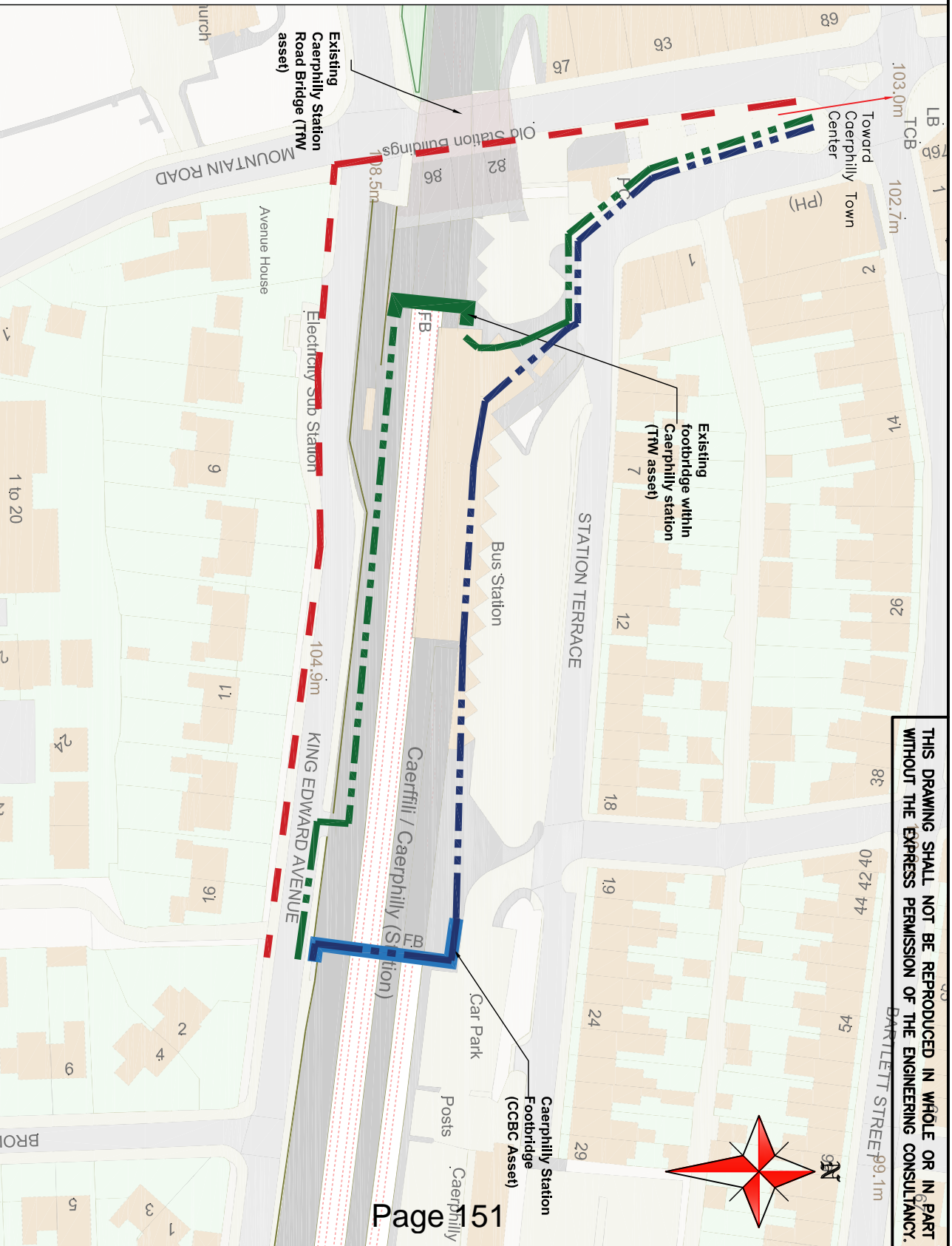
- Cllr Nigel George, Cabinet Member for Corporate Services, Property and Highways
- Dave Street, Deputy Chief Executive
- Mark S Williams, Corporate Director for Economy and Environment
- Marcus Lloyd, Head of Infrastructure
- Julian Higgs, Principal Engineer / Structures Department
- Robert Tranter, Head of Legal Services and Monitoring Officer
- Stephen Harris, Head of Financial Services and S151 Officer
- Clive Campbell, Transportation Engineering Group Manager
- Gareth Richards, Highway Services Group Manager
- Anwen Cullinane, Senior Policy Officer – Equalities, Welsh Language
- Lynne Donovan, Head of People Services
- Sue Richards, Head of Transformation, Education Planning and Strategy
- Cllr Colin Elsbury, St Martins Ward
- Cllr James E Fussell, St Martins Ward
- Cllr Stephen Kent, St Martins Ward
- Cllr Anne Broughton-Pettit, Morgan Jones Ward
- Cllr Shayne Cook, Morgan Jones Ward
- Cllr James Pritchard, Morgan Jones Ward
- Cllr Elaine Forehead, Van Ward
- Cllr Christine Forehead, Van Ward

Appendix 1 – Pedestrian access Routes – This document is an Engineering Drawing and cannot be made accessible. Therefore, should anyone wish to discuss the content they may contact Chris Adams, Author of the Report on adamsc@caerphilly.gov.uk

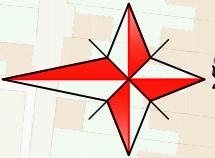
This page is intentionally left blank

Legend:

- Route length: Approx. 260metres. Only current accessible route for wheelchair users, mobility scooters, prams etc.
- - - Route length: Approx. 250 metres.
- - - Route length: Approx. 255 metres.



THIS DRAWING SHALL NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE EXPRESS PERMISSION OF THE ENGINEERING CONSULTANCY.



ENGINEERING PROJECTS GROUP
ENGINEERING CONSULTANCY
 Head of Infrastructure – Marcus Lloyd
 B.Eng, MBA, C.Eng, MCE, MCMI, MCHT

Project title	Caerphilly Station Footbridge		
drawing title	Existing pedestrian access		
date	Jan 24	drawn	LR
scale	NTS	@A4	checked
			LR
			SK01

This page is intentionally left blank



CABINET - 21ST FEBRUARY 2024

SUBJECT: DECARBONISATION ANNUAL REPORT NOVEMBER 2023

REPORT BY: CORPORATE DIRECTOR FOR ECONOMY AND ENVIRONMENT

1. PURPOSE OF REPORT

1.1 To provide Cabinet with an update on the work undertaken across the authority to deliver the aims of the Decarbonisation Strategy.

2. SUMMARY

2.1 In June 2019 Caerphilly County Borough Council (CCBC) declared a Climate Emergency and committed to 'making Caerphilly County Borough Council a net zero carbon local authority by 2030'.

2.2 On the 14th June 2023 Cabinet approved 10 recommendations related to implementing the Decarbonisation Strategy and Action Plan. These recommendations included reviewing the Action Plan, and preparing an annual progress report each November.

2.3 The Action Plan has been reviewed and the number of actions reduced from 122 to 76. Updates have been provided for each of the new actions, and an assessment of progress against each action has been undertaken. Of the 76 actions:

- 12 have been completed,
- 31 are making good progress,
- 26 are making reasonable progress,
- 7 have not yet started.

A full update of all the actions and their assessed progress is attached as Appendix 2.

2.4 Carbon baseline data was submitted through the Welsh Public Sector Net Zero Carbon Reporting Scheme in September 2023, in line with the Welsh Government reporting requirements. For the reporting year 2022/23 CCBC reported an emissions total of 103,308,185 kgCO₂e (22,110,491 kgCO₂e operational emissions plus 81,197,694 kgCO₂e supply chain emissions). This was offset by -7,413,691 kgCO₂e through our land use, giving a submitted carbon emissions figure of 95,894,494 kgCO₂e (or 95,894 tCO₂e).

2.5 The reported emissions for 2022/23 were an increase of 1,637,192 kgCO₂e or 1.74%. The increase is as a result of changes to Welsh Government reporting

methodologies which have brought in additional areas; better data and increased overall expenditure. The changes mean that it is difficult to make direct comparisons of year-on-year trends, but this should be easier as the methodology improves.

3. RECOMMENDATIONS

- 3.1 That Cabinet notes the progress made to date on the actions set out in the Decarbonisation Annual Report.

4. REASONS FOR THE RECOMMENDATIONS

- 4.1 To contribute to the Council's commitment to become net zero carbon by 2030.

5. THE REPORT

- 5.1 In June 2019 Caerphilly County Borough Council (CCBC) declared a Climate Emergency and committed to 'making Caerphilly County Borough Council a net zero carbon local authority by 2030'.
- 5.2 2022/23 marked the first year with a dedicated Decarbonisation team in place within the organisation. Recruitment of a team of four officers was completed in January 2023. The first 9 months of work has focused on establishing structures to take forward the work, including reviewing the Decarbonisation Action Plan that was approved in November 2020. Several significant projects including the 20MW Cwm lfor Solar Farm, and Covid Memorial Woodland have been progressed, as have opportunities to reduce revenue costs as part of the Mobilising Team Caerphilly work.
- 5.3 On the 14th June 2023 Cabinet approved 10 recommendations related to implementing the Decarbonisation Strategy and Action Plan. These recommendations included reviewing the Action Plan, and preparing an annual progress report each November.
- 5.4 The Strategy and Action Plan were structured on four pillars with an overarching section on corporate or cross-cutting actions. The pillars are:
- **Reduce** - Focussing on reducing the amount of energy we use through good housekeeping, changing behaviour and capital investment including insulation, low energy lighting or more efficient heating systems.
 - **Produce** - Generating our own 'green' electricity and heat through technologies such as photovoltaic systems or solar thermal.
 - **Offset** - Offsetting any carbon emissions through habitat management or tree planting.
 - **Buy** - Everything we purchase has embedded carbon associated with it and this will need to be considered in the procurement process
- 5.5 In line with recommendation 4, in the June 2023 Cabinet report, working groups were established to drive forward the work on each of the 4 pillars. Each working group reviewed the actions relating to that group to focus on the 2030 organisational requirements, and to align with the WG route map and timeframes. Actions relating to the Welsh Government territorial emissions aspiration, that each geographic area is net zero carbon by 2050 were removed.

- 5.6 As a result of the reviews of the Action Plan the number of actions has reduced from 122 to 76. Updates have been provided for each of the new actions, and an assessment of progress against each action has been undertaken. Of the 76 actions:
- 12 have been completed,
 - 31 are making good progress,
 - 26 are making reasonable progress,
 - 7 have not yet started

Corporate and Cross-Cutting Actions

- 5.7 The Corporate and Cross-Cutting section of the Decarbonisation Action Plan focuses firstly on measuring and understanding organisational emissions so that actions for emissions reductions are targeted and measurable. Secondly, there is a need for dissemination of this information and knowledge. A program of awareness raising, and skills development is key to ensuring that decarbonisation is embedded into the organisation's ways of working.
- 5.8 The Decarbonisation Team reviewed the previous Action Plan, revised and agreed the Corporate and Cross-Cutting section into 11 actions (See Appendix 2).
Of these actions:
- 1 has been completed
 - 4 are going well with good progress
 - 3 have had reasonable progress
 - 3 are not yet started.
- 5.9 For the reporting year 2022/23 CCBC reported an emissions total of 103,308,185 kgCO₂e (22,110,491 kgCO₂e operational emissions plus 81,197,694 kgCO₂e supply chain emissions). This was offset by -7,413,691 kgCO₂e through our land use, giving a submitted carbon emissions figure of 95,894,494 kgCO₂e (or 95,894 tCO₂e). The reported emissions for 2022/23 were an increase of 1,637,192 kgCO₂e or 1.74%.
- 5.10 The overall increase was in part driven by an increase in third party spend of £31.1 million which resulted in an increase in supply chain emissions of 2,080,108 kgCO₂e or 2.63%. Operational emissions decreased by 449,714 kgCO₂e or 2% as a result of reductions in streetlighting, buildings and waste emissions. Emissions from business travel (grey fleet) and commuting increased due to improvements in data collection. Reporting on F-gases (Fluorinated gases) was included for the first time resulting in a 9,187 kgCO₂e increase.
- 5.11 Changes to the Welsh Government methodology and scope of reporting mean that it is difficult to make direct comparisons of year-on-year trends, but this should be easier as the methodology improves.
- 5.12 The Decarbonisation Team has produced emissions baselines and footprints for each Directorate and Service Area, aligned with Welsh Government Net Zero Carbon Reporting for 2021/22 and 2022/23. The data is contained in spreadsheets and visualised using Power BI reports. To enable understanding of these emissions presentations have been developed with delivery and timeline to be agreed.
- 5.13 An initial cohort of 22 officers have completed Carbon Literacy training accredited by the Carbon Literacy Project and delivered by Cynnal Cymru.

The included officers from the Decarbonisation Strategy Working Groups, the wider Transformation Team and colleagues who had completed the Infuse Programme with a focus on Accelerating Decarbonisation.

Reduce Actions

- 5.14 The scope of the work under the Reduce heading means that this section of the Decarbonisation Action Plan is the largest, crossing many services and existing work streams. The identified targeted areas for action are:
- Existing Buildings – Corporate and Domestic
 - New Developments – Corporate and Domestic
 - Streetlighting
 - Travel & Transport
 - Waste Management
- 5.15 The Reduce working group and other stakeholders reviewed the previous Action Plan, revised and agreed the Reduce section into 30 actions (See Appendix 2). Of these actions:
- 4 are completed
 - 13 are going well with good progress
 - 11 have had reasonable progress
 - 2 are not yet started
- 5.16 Caerphilly CBC is responsible for 778 non-domestic sites with a combined gross internal area of 475,534 m². Reducing energy consumption of buildings is mostly achieved by improving the fabric of the buildings, improving the regulation of energy consumption, and reducing the emissions of the energy used through generating or using renewable energy.
- 5.17 The Energy Team have reviewed the existing backlog maintenance requirements for non-domestic buildings alongside Energy Performance and required upgrades for improved energy efficiency. From this exercise, priority sites for upgrades have been identified to form the initial phase of a full programme of works to improve the energy efficiency of non-domestic buildings. High-level costings of technologies to reduce carbon emissions of buildings have been provided which can be extrapolated based on internal floor area. These numbers will be improved as we move through the programme of works. From these high-level costings, a framework for contractors will be produced through the works can be procured. Funding opportunities for these works are continually being explored to include the Salix Invest to Save Scheme as well as Welsh Government Low Carbon Heat Grants.
- 5.18 Service Asset Management Plans (SAMPs) have been reviewed by the Asset Management Working Group and a list of identified properties that will be targeted in the short, medium and long term for vacating by services has been produced. As part of this options appraisal, the number of sites, running costs, backlog maintenance costs, lease costs, potential rental revenue and potential capital receipts are considered alongside the needs of the Service. This process has the potential to reduce number of Corporate Office sites, to streamline the estate and achieve improved efficiencies at remaining sites.
- 5.19 As of 30th September 2023, a total of 544 vehicles made up our fleet. This number represents a decrease of nearly 80 vehicles from 620 in the summer of 2020.

Installation and commissioning of EV charging infrastructure to date provides the charging capacity for around 100 fleet EVs. The breakdown is as follows:

- Ty Penallta charging hub – 15 double 7kW chargers.
- Tir y Berth charging hub (old Meals on Wheels site) 7 double 7kW chargers.
- We now have a total of 53 charge points on the CCBC charging network.
- This work includes the setting up of the back-office system to manage the charging network, monitoring of charge sessions (including electricity use and CO2 savings) and, where necessary, internal recharging.

5.20 A programme to convert all the county borough's street lanterns to LED was completed in January 2021. Concurrently, the authority has implemented part night lighting, between the hours of midnight and 5.30am, to all lighting, except at junctions and in major town centres. Cabinet approved the continuation of reduction in streetlight operating hours in November 2022, which resulted in a further 18.33% reduction in energy consumption from streetlighting in 2022/23.

Produce Actions

5.21 The Decarbonisation Strategy acknowledged the importance of generating our own "green" electricity and heat. The group has reviewed the Produce actions contained within the original Decarbonisation Action Plan under the Produce Pillar. The agreed new Produce Action Plan contains 12 actions (see Appendix 2).

Of these actions:

- 2 have been completed
- 6 are going well with good progress
- 3 have had reasonable progress
- 1 is not yet started

5.22 The authority has already installed Photovoltaic (PV's) panels on the roofs of 63 of its buildings. In some instances, these are small demonstration arrays on schools, but the authority has also installed larger arrays to good effect and is currently investigating its collective non-domestic roof space for medium sized PV arrays. In total 594,863 kWhrs of renewable energy is generated from these schemes.

5.23 The development of the flag ship, 20MW Cwm lfor Solar Farm is progressing well with a planning decision expected in February 2024 and probable construction, subject to Cabinet approval, in 2025. It is anticipated that when operational the solar farm would generate 23GWhrs of electricity per year, or enough to power around 6,000 homes. At current energy prices it will create income of between £669,000 and £892,000 per year over the 35-year life of the project.

5.24 The authority has undertaken a review of its capacity to generate hydroelectricity from rivers and streams on Council owned land. To date there is limited opportunity to progress projects although Cwmcarn Forest has been identified as offering some opportunity to generate electricity for onsite use at the visitor centre. An assessment has been commissioned to determine costs and potential payback for the scheme. It is estimated that a 27kW turbine could be installed onsite, which would produce at least half of the visitor's centre annual electricity requirements.

5.25 The original Decarbonisation Strategy identified that the Council has local arrangements in place at Bryn Quarry where Council collected food waste is converted into green energy via an Anaerobic Digester. Discussions have begun with the Bryn Group to identify opportunities, with an initial study being initiated to review options and

to develop an outline business case. This has included assessing the best route for any hardware, to identify any land studies or further ecological studies that may be required. As part of understanding the viability of the project, negotiations have begun on Heads of Terms and the principles of any potential power purchase agreements. A report on progress and business case development is due to be considered by the Corporate management Team.

Offsetting Actions

- 5.26 The Offset Working Group has been established and has reviewed the Offset actions contained within the original Decarbonisation Action Plan under the Offset Pillar. The agreed new Offset Action Plan contains 14 actions (see Appendix 2). Of these actions:
- 4 have been completed
 - 5 are going well with good progress
 - 4 have had reasonable progress
 - 1 not yet started
- 5.27 Detailed land mapping and evaluation has been undertaken to identify existing habitats to be protected and to identify land for tree planting. The authority owns 1,143 hectares of forest land which offset 8,306,886 kgCO₂e in 2022/23
- 5.28 Planting has been agreed on Countryside land for the 23/24 planting season. Designs and plans have been produced and agreed for sites at Ynys Hywel and Parc Cwm Darran. Approximately 15,000 trees will be planted at those sites, with around 3,000 being planted by volunteers. Initial sites on Housing and Infrastructure land for planting during the 2024/25 planting season have been identified with ecological surveys and initial feasibility work being undertaken.
- 5.29 One of 3 Covid Memorial Woodlands across Wales has been developed at Ynys Hywel. The new memorial park, covering an area of 7 hectares, seeks to complement the existing country park, and importantly retain key views across the valley and the overall rural character of the site. A total of 36,500 native trees and shrubs were planted in 2022/23, with 3,700 planted by volunteer groups. Further volunteer planting will continue for the next 5 years.
- 5.30 A Cabinet commitment was given to “set a target of planting 300,000 trees by 2030, where land availability allows”. To date a total of 81,000 trees have been planted since the Decarbonisation Strategy was approved.

Buy Actions

- 5.31 The Buy Working Group has been established with core members from Decarbonisation and Procurement alongside nominated representatives from each Directorate. This group has reviewed the existing Decarbonisation Action Plan under the Buy Pillar and agreed an updated Action Plan with 10 actions (see Appendix 2). Of these actions:
- 1 has been completed
 - 5 are going well with good progress
 - 2 have had reasonable progress
 - 2 have not yet started
- 5.32 Analysis of 22/23 spend data from Spikes Cavell has been completed to identify priority areas for further investigation. Similar to other local authorities, a large proportion of spend sits with a small number of suppliers and so understanding these

emissions and taking steps to reduce them will initially require engagement with a relatively small group of our suppliers.

- 5.33 Social care services spend contributes the most carbon to supply chain emissions using current methodologies as it represents the largest spend. More detailed analysis of this spend and the constituent parts has been completed for the previous year's spend. And as such social care has been identified as a priority area for trial of new carbon calculating toolkits and engagement with suppliers.
- 5.34 A list of upcoming contracts which might be suitable for further consideration as part of this work is being compiled to understand the actual emissions associated with these contracts so that improved methodologies can be used for emissions reporting.
- 5.35 Various decarbonisation and carbon calculating toolkits have been reviewed by the working group to determine which toolkits best suit each service within the organisation.

6. ASSUMPTIONS

- 6.1 It has been assumed that the WG guidance and net zero carbon reporting methodology will not change again. Previous reporting has changed which has made it impossible to compare year on year progress.

7. SUMMARY OF INTEGRATED IMPACT ASSESSMENT

- 7.1 The IIA identifies that as this covers a strategy there is no direct impact to service delivery from the provision of the strategy document. Impacts that come about as a result of the implementation and roll out of the strategy will be assessed in due course.

There will be CO₂ and greenhouse gas savings which will provide health and wellbeing benefits, and other advantages to be gained from the implementation of the strategy.

Link to IIA

8. FINANCIAL IMPLICATIONS

- 8.1 A budget of £500,000 was allocated for decarbonisation work by Cabinet in 2020/21. As of 30th September 2023 £56,344, has been spent from this budget. An additional £140,000 has been allocated to Cwm lfor solar farm. Further expenditure has been identified against hydrogen feasibility work, carbon literacy training, the hydro-electric scheme at Cwmcarn and private wire costs.
- 8.2 The internal Salix Local Authority Energy Fund (LAEF) invest to save scheme has invested over £2 million in energy efficient technologies in projects in corporate, non-domestic buildings which meet the scheme and pay back criteria. This will continue to be an important element in delivering our net zero ambitions.
- 8.3 The authority has been successful in securing funding from various grant sources to support this work. Identifying and securing grant support is an important element of achieving our decarbonisation targets.

- 8.4 Calculating the cost of becoming carbon neutral by 2030 is extremely difficult. Tools and studies to identify the cost of various elements of the work are in progress. This will provide high level costings for the decarbonisation of non-domestic buildings, investment in renewable energy generation to meet future needs, and offsetting forecasted residual emissions by 2030 to achieve Net Zero Carbon. This work is to be prioritised for the next year as a key action for the Decarbonisation Team.
- 8.5 Specific, detailed, and costed proposals for future work will be developed and brought forward as future reports for consideration.

9. PERSONNEL IMPLICATIONS

- 9.1 The Corporate Director Lead will be the Corporate Director for Economy and Environment. The Decarbonisation agenda is currently being driven by the decarbonisation team as well as the energy team in property services and in the longer term it would be more appropriate to create a single structure for delivering decarbonisation with all staff reporting to a single Head of Service. The decarbonisation performance data will feature in the Economy and Environment Directorate Performance Assessment (DPA) and Annual reports on progress against the agreed Decarbonisation Action Plan will be provided to the Environment and Sustainability Scrutiny Committee followed by Cabinet. Annual reports to Welsh Government through the Welsh Public Sector Net Zero Carbon Reporting Scheme will also be required.
- 9.2 For the authority to become carbon neutral by 2030 a whole organisation approach and cultural shift will be required. Service areas will need to allocate staff resources to understand and to reduce their emissions. Significant work will be required to build knowledge, understanding, and the skills required to enable all employees across the authority to play their part in delivering the Decarbonisation Strategy
- 9.3 The Decarbonisation Team will have a key role to play in driving forward this agenda, co-ordinating work, facilitating training and managing individual projects. The establishment of the four corporate pillar groups; Reduce, Produce, Offset and Buy are an important element, which should be the catalyst to drive culture change in services but also requires continuation of specific input from services. These groups are being co-ordinated by the Decarbonisation Team. The Team will also work with each directorate to enable them to understand their emissions, to identify priorities for reduction and to support with decarbonisation projects. Project specific work will be undertaken with all services, but will require input from Finance, Procurement, Legal and Property, plus support from HR, IT and Policy on specific work. Additionally, opportunities will be considered to engage employees in a “bottom up” approach to assist in mobilising employees in this programme of works.

10. CONSULTATIONS

- 10.1 The views of the listed consultees have been reflected within this report.
- 10.2 The report was considered by the Housing and Environment Scrutiny Committee on the 12th December 2024. The Committee noted the progress made to date on the actions set out in the Decarbonisation Annual Report and commented on the approach taken in relation to, and the content of this first annual progress report.

11. STATUTORY POWER

11.1 Climate Change Act 2008.

Author: Paul Cooke, Transformation Manager, Decarbonisation,
cookepa@caerphilly.gov.uk

Consultees: Cllr James Pritchard – Deputy Leader and Cabinet Member for Prosperity, Regeneration and Climate Change
Cllr Nigel George – Cabinet Member for Corporate Services, Property and Highways
Cllr A Whitcombe Chair Housing and Environment Scrutiny Committee
Cllr S Williams Vice Chair Housing and Environment Scrutiny Committee
Richard Edmunds, Corporate Director, Education and Corporate Services
Dave Street, Deputy Chief Executive
Mark S Williams, Corporate Director of Economy and Environment
Rob Tranter, Head of Legal Services/ Monitoring Officer
Stephen Harris, Head of Financial Services and S.151 Officer
Sue Richards, Head of Transformation and Education Planning and Strategy
Keri Cole, Chief Education Officer
Ben Winstanley, Head of Land and Property
Lynne Donovan, Head of People Services
Liz Lucas, Head of Customer and Digital Services
Marcus Lloyd, Head of Infrastructure
Rhian Kyte, Head of Regeneration and Planning
Rob Hartshorn, Head of Public Protection, Community and Leisure Services
Nick Taylor-Williams, Head of Housing
Jo Williams, Assistant Director – Adult Services
Gareth Jenkins, Interim Director of Social Services
Allan Dallimore, Regeneration Services Manager
Paul Rossiter, Energy and Water Officer
Heather Richardson, Decarbonisation Project Officer
Environment and Sustainability Scrutiny Committee.

Appendices

Appendix 1. Decarbonisation Annual Report November 2023

Appendix 2. Updated Decarbonisation Action Plan November 2023

This page is intentionally left blank

Decarbonisation Team Annual Report

November 2023



Introduction

In June 2019 Caerphilly County Borough Council (CCBC) declared a Climate Emergency and committed to 'making Caerphilly County Borough Council a net zero carbon local authority by 2030'. A Decarbonisation Strategy and accompanying Action Plan, containing 122 actions was approved in November 2020. A Decarbonisation Team was appointed in 2022.

This report highlights the work of the Decarbonisation Team in 2023. The Team works in partnership with multiple teams and service areas internally including Procurement, Land & Property Services, Fleet, Housing, Regeneration & Planning, Sustainable Communities for Learning, Social Services, Highways, Countryside, Community & Leisure and Parks.

Aligned with the structure of the Decarbonisation Strategy and Action Plan, the work of the Team is divided under the following five headings:

- (i) Corporate and Cross-Cutting Actions
- (ii) Reduce
- (iii) Produce
- (iv) Offset
- (v) Buy

This Annual Report is structured to reflect these areas of work.

Corporate and Cross-Cutting Actions

To achieve Net Zero Carbon by 2030 it is fundamentally important that the organisation is able to measure its carbon emissions. Without measuring emissions and ascertaining the effect of targeted actions, the commitment to Net Zero Carbon is unachievable.

The Corporate and Cross-Cutting section of the Decarbonisation Action Plan focuses firstly on measuring and understanding organisational emissions so that actions for emissions reductions are targeted and measurable. Secondly, there is a need for dissemination of this information and knowledge. A program of awareness raising, and skills development is key to ensuring that decarbonisation is embedded into the organisation's ways of working.

The Decarbonisation Team reviewed the previous Action Plan, revised and agreed the Corporate and Cross-Cutting section into 11 actions (See Appendix 2).

Of these actions:

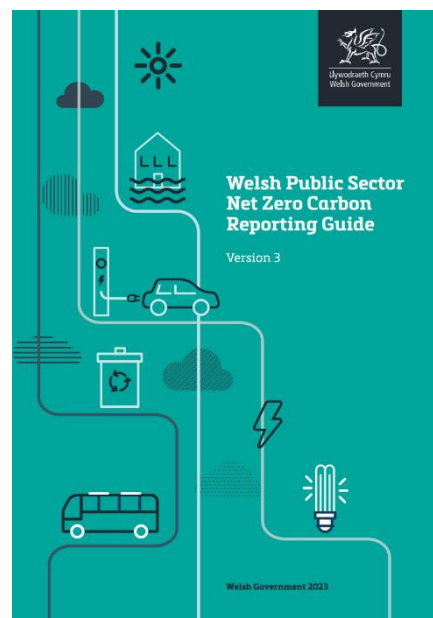
- 1 is completed
- 4 are going well with good progress
- 3 have had reasonable progress
- 3 are not yet started

Emissions Reporting

For the reporting year 2021/22 Caerphilly CBC reported an emissions total of 101,677,791 kg CO₂e (22,560,205 kg CO₂e operational emissions plus 79,117,586 kgCO₂e supply emissions). This was offset by -7,420,489 kgCO₂e through our land use, giving a submitted carbon emissions figure of 94,257,302 kgCO₂e (or 94,257tCO₂e).

For the reporting year 2022/23 Caerphilly CBC reported an emissions total of 103,308,185 kgCO₂e (22,110,491 kgCO₂e operational emissions plus 81,197,694 kgCO₂e supply chain emissions). This was offset by -7,413,691 kgCO₂e through our land use, giving a submitted carbon emissions figure of 95,894,494 kgCO₂e (or 95,894 tCO₂e).

The reported emissions for 2022/23 were an increase of 1,637,192 kgCO₂e or 1.74%. Changes to reporting methodologies which have brought in additional areas, and better data mean that direct comparison of year on year trends is not possible at this stage.



The overall increase was in part driven by an increase in third party spend of £31.1 million which resulted in an increase in supply chain emissions of 2,080,108 kgCO₂e or 2.63%. Operational emissions actually decreased by 449,714 kgCO₂e or 2%. Despite emissions from business travel (grey fleet) and commuting increasing and the introduction of reporting on F-gases, the reduction in emissions from streetlighting, buildings and waste led to the 2% reduction operationally.

Emissions Source	2021/22	2022/23	Difference	% Change
Buildings	14,461,974	13,154,526	-1,307,448	-9.04%
Streetlighting	976,579	797,619	-178,960	-18.33%
Fleet and equipment	4,107,401	3,988,849	-118,552	-2.89%
F-Gases		9,187	n/a	n/a
Agriculture	49,972	49,355	-617	-1.23%
Business travel	298,704	637,343	338,639	113.37%
Commuting	1,299,784	2,124,885	825,101	63.48%
Homeworking	886,897	912,032	25,135	2.83%
Municipal waste	478,894	436,695	-42,199	-8.81%
Total Operational Emissions	22,560,205	22,110,491	-449,714	-1.99%
Total Land Use emissions	-7,420,489	-7,413,691	6,798	-0.09%
Supply chain - Tier 1	79,117,586	81,197,694	2,080,108	2.63%
Total Emissions	94,257,302	95,894,494	1,637,192	1.74%

Table 1, Breakdown of Organisational Carbon Emissions 2021/22 – 2022/23

Following deeper analysis of the reported emissions from 2021/22 it was anticipated that emissions would rise in 2022/23 as data collection and analysis improves year on year. This results in emissions that were previously unable to be collected and reported on being included in the organisational report, giving a more accurate representation of Caerphilly CBC emissions.

The increase in emissions from Business Travel and Commuting are due to improved data collection for the most recent reporting year. Previous year's emissions omitted HART mileage from Business Travel and Schools from Commuting.

There were a number of changes to emissions factors from 2021/22 to 2022/23, most noticeably in the supply chain. The grid electricity emissions factor now includes a proportion of emissions outside of scope, so whilst consumption has increased, associated emissions have decreased.

The increase in supply chain emissions highlights once again the need for improvement in methodology for calculating these emissions; spend went up and so

emissions went up – despite the emissions factors being re-calculated so that many fell. Also, with the ability to analyse the spend more closely, emissions that previously would have been classified just as construction or food were able to be more accurately classified to the specific SIC code relating to the product. This in some cases placed more spend in categories with slightly higher emissions factors leading to higher emissions.

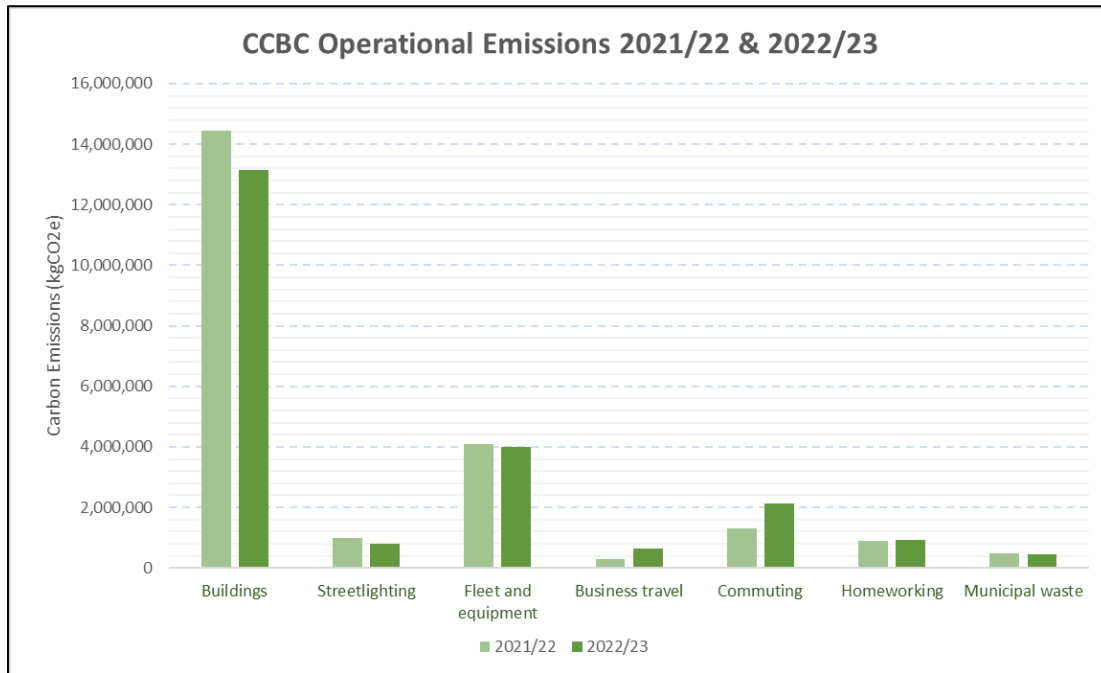


Figure 1, CCBC Operational Emissions 2021/22 & 2022/23

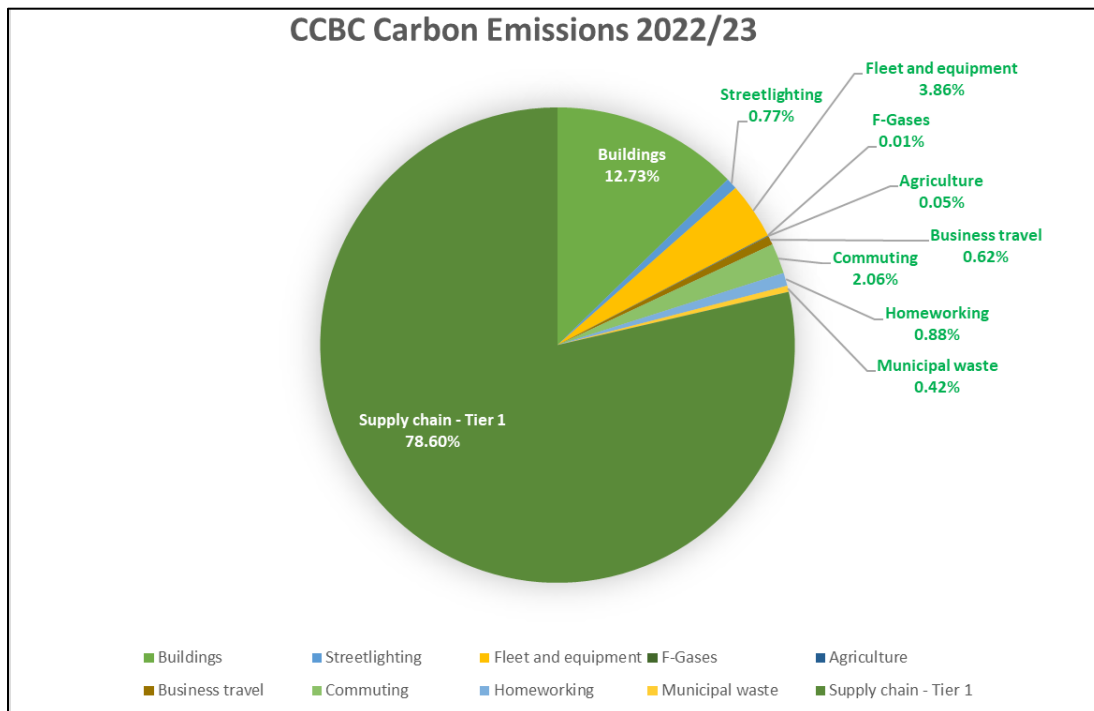


Figure 2, CCBC Organisation Carbon Emissions 2022/23

Service Area Baselines

In June 2023 a Cabinet recommendation was approved (Recommendation 2), that **“each Directorate and Service Area is given a copy of their carbon baseline, and that during 2023/24 financial year work is done to support them to fully understand and analyse those emissions and to identify priority areas for reduction.”**

The Decarbonisation Team has produced emissions baselines and footprints for each Directorate and Service Area, aligned with Welsh Government Net Zero Carbon Reporting for 2021/22 and 2022/23. The data is contained in spreadsheets and visualised using Power BI reports. To enable understanding of these emissions presentations have been developed with delivery and timeline to be agreed.

Following the presentation of baselines to services, further analysis of these emissions in partnership with services can begin. This will enable budgets to be set for carbon emissions from 2024/25 as approved in June 2023 by Cabinet (Recommendation 3).

A calculation of residual operational emissions will help to inform this work and is being completed as part of an offsetting project detailed below.

Carbon Literacy Training



Aligned to Recommendation 6 approved by Cabinet in June 2023, there are three actions in the Corporate and Cross-Cutting section of the Decarbonisation Action Plan focused on carbon literacy training and developing a carbon literate organisation. This is because achieving Net Zero Carbon will require the efforts of every member of Team Caerphilly. Every person has an impact on the carbon emissions produced by the organisation and will have agency within their role to consider these impacts and ways that they can reduce them. To enable this, each person should understand what Net Zero Carbon is, why we are working towards it and how they can make a positive difference.

The first action is to raise awareness of Carbon Literacy. Healthy Schools have organised and funded 12 schools to attend Carbon Literacy for Educators training via Keep Wales Tidy, and a further 3 schools were funded by Keep Wales Tidy.

Additionally, an initial cohort of 22 officers have completed Carbon Literacy training accredited by the Carbon Literacy Project and delivered by Cynnal Cymru.

The initial cohort comprised of officers from the Decarbonisation Strategy Working Groups, the wider Transformation Team and colleagues who had completed the Infuse Program with a focus on Accelerating Decarbonisation.

Feedback was collected from the attendees and from those that responded:

- 100% would recommend the training to a friend/colleague, of which 57% are extremely likely to recommend.
- 100% found the training relevant to their role, of which 57% finding it extremely relevant.
- 100% found the information present to be clear, of which 71% found the information to be extremely clear.
- 85% found the course to contain about the right amount of information with 15% finding there to be too much information.
- 100% of attendees are clear on the takeaways from the training and 100% are confident that they will be able to achieve their pledges.
- 71% would consider undertaking 'Train the Trainer' training to deliver an in-house course to others within their service area.

All attendees are required to commit to two pledges in the workplace, one personal and one group. Examples of these pledges have been uploaded to the Decarbonisation intranet pages to provide insight for those who will be undertaking the training in future to understand what is required for accreditation.

One attendee commented,

"I believe this was an excellent introduction to the topic and could be delivered in house with the suitable Carbon Literacy Trust accreditation ... We all have a part to play and whilst very much focused on the workplace from a pledge perspective, will undoubtedly impact on the home as well."

This demonstrates the value of delivering the training and the potential impact of a wider rollout of training on the organisation and our commitment to achieving Net Zero Carbon.

Two further actions are aspirations to become accredited as a Carbon Literate Organisation. There are tiers of accreditation beginning with Bronze, running through Silver and Gold and ending with Platinum.

As an organisation the requirements for the Bronze award have been satisfied and an application to the Carbon Literacy Project to receive this award will now be submitted. The Team anticipates achieving Silver accreditation by March 2025.

Becoming accredited signifies our commitment to achieving Net Zero Carbon and acting upon the declaration of the climate emergency in 2019.

Two further actions centre on developing a skilled workforce. Carbon literacy is the first step of this process, but it is not enough to do this training once. In delivery of these actions, we propose integration of decarbonisation skills into existing people management processes. This will ensure the understanding, knowledge, skills and behaviours are embedded into our culture. It is also important to gauge what skills already exist, and which skills are needed for each role within the organisation. Through the Infuse programme, research has been undertaken to understand what the skills requirements are and how we can assess the skills that currently exist. The next stage of this experiment is to prototype the skills assessment with teams to develop an internal mechanism for decarbonisation specific training needs. This will in turn inform the development of training programmes to upskill the workforce.

Cultural & Behavioural Change

The shift to working in ways compatible with achieving Net Zero Carbon requires a cultural and behavioural change throughout the organisation. Carbon literacy training and other skills development will provide the knowledge and understanding, whilst other strategic policies will determine the application of these skills and guide Team Caerphilly to embedding low carbon considerations.

One of the Five Corporate Commitments approved by Cabinet in June 2023 (Recommendation 5) was that “**Net Zero Carbon considerations should be included in all major decisions as part of the Integrated Impact Assessment process**”. The Team has drafted an addition to the organisation’s Integrated Impact Assessment. This will require officers to consider the impacts that projects will have on each of the four pillars of the Decarbonisation Strategy. Resources to help with these considerations will be uploaded to the Decarbonisation section of the new CCBC Intranet. Carbon Literacy training will support the implementation of these considerations as officers develop the understanding and knowledge to enable them to ascertain how major decisions can impact upon the Net Zero Carbon status of the organisation.

Corporate Energy Usage Patterns

Identifying energy usage patterns of non-domestic buildings is key to assessing sites and the opportunities for actions under the Reduce or Produce pillars. Electricity that is consumed by Caerphilly CBC in any non-domestic building from the grid carries a carbon footprint. As detailed above, energy consumption accounts for 13% of all emissions. Those emissions come from natural gas usage as well as electricity but as we reduce the use of fossil fuels in our heating systems, electricity consumption will increase. The focus therefore is to reduce electricity consumption as much as possible, whilst also generating renewable energy which will reduce the carbon emissions for the consumption which is unavoidable.

A data science MSc student from the Data Science Academy based at Cardiff University collaborated as part of their summer dissertation project to create visualisations of energy consumption and headroom at 28 sites across the estate

where half-hourly electricity consumption data was available. The headroom at each site is the difference between the energy being consumed and the supply's maximum demand (the total amount of energy that can be imported during each half hour period) over each half hour period. Using minimum headroom, we can make assumptions on the available energy which can be utilised at each site without having to increase the supply's maximum demand.

Corporate Case Study – Data Science Academy Data Student

Through participation in the Infuse Programme, an opportunity to offer a summer placement of a Data Science MSc student was offered by Y Lab and the Cardiff University Data Science Academy. The purpose of this collaboration was to provide a MSc student with a topic for their dissertation whilst also providing a practical application of data science skills that would benefit the student as well as the organisation they were working with.

The Decarbonisation Team had set a Corporate and Cross-cutting Action to “Establish energy usage patterns across corporate buildings” and as such agreed that this would be a fantastic opportunity to complete this work and benefit from the skills of a data scientist.

An application for 3 students was submitted with the proposed project outcomes:

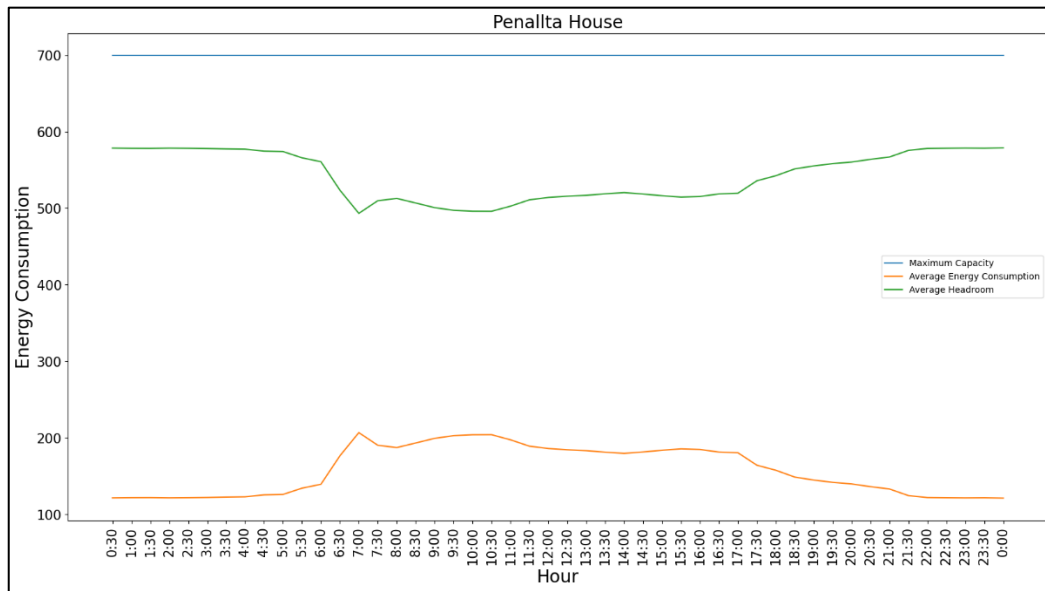
- (i) Establish energy usage patterns for corporate buildings where half-hourly data is available;
- (ii) Map this usage against current maximum demand for electricity supply;
- (iii) Use existing site headroom to determine number and size of potential EV chargers;
- (iv) Use sub-station headroom data to show opportunities for export/import of additional energy;
- (v) Additional supply from renewable energy projects to be modelled with existing grid capacity and energy demand to determine where additional supply would be best utilised.

The application was accepted in April 2023. The Team learned at the end of May 2023 that we had been successful and had been allocated 1 student for the project.

As part of the project, we asked for a collaboration agreement to be signed to protect the information that was going to be shared with the student. Once the agreement had been checked by the Legal and Information Governance teams, it was signed and returned to the Data Science Academy. An initial kick off meeting with the data student was then organised for the 20th of June 2023. At this meeting we agreed frequency of future meetings and how data would be shared.

An external sharepoint folder was arranged for the Decarbonisation Team so that large data files could be shared securely with the student. Half-hourly electricity consumption data for 28 sites were shared with the student alongside maximum demand values (the maximum amount of energy that can be imported from the grid at a time), generation headroom (substation level) and demand headroom (substation level) for each site.

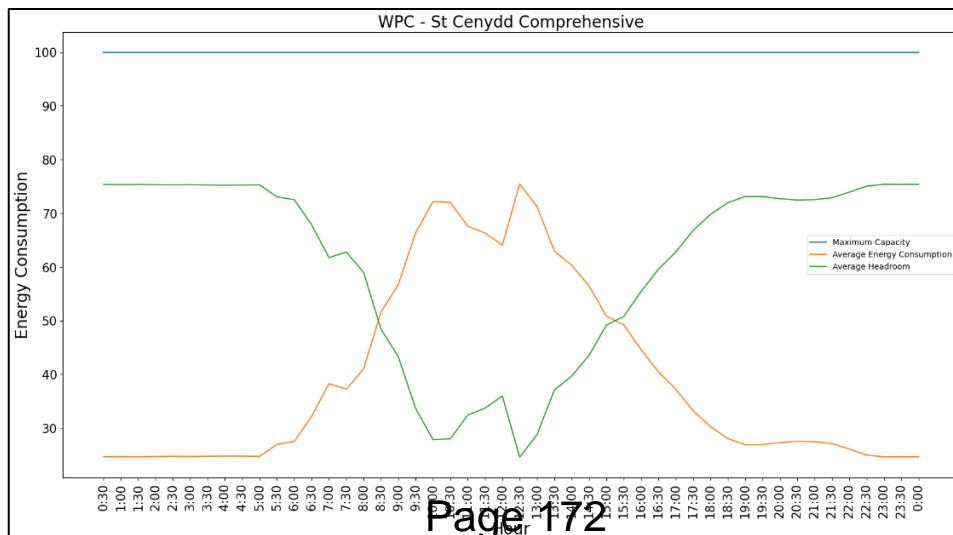
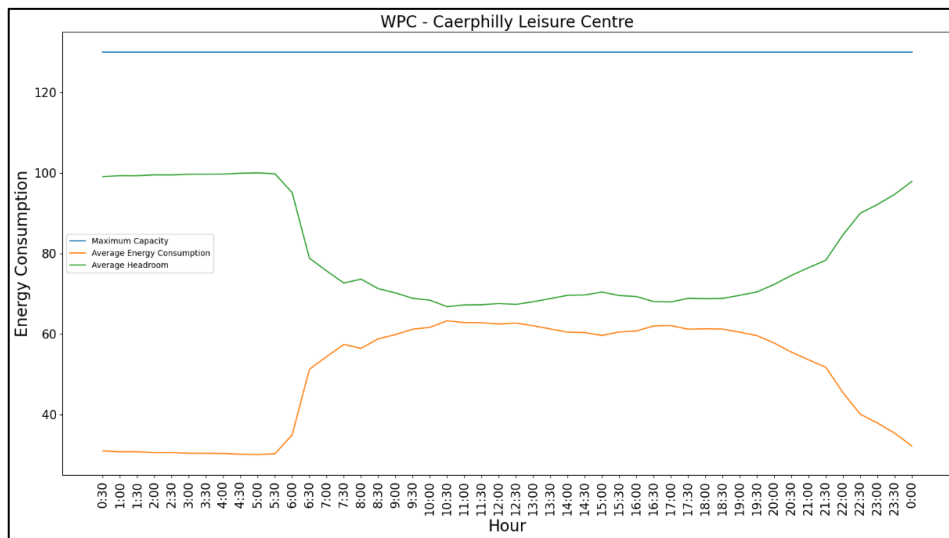
From this data the student was able to generate code to visualise energy usage patterns for each site looking at usage daily, weekly, monthly and seasonally. Maximum demand information was then added to each pattern to demonstrate the existing electricity headroom at each site. The student used the minimum headroom data to estimate the number of chargers which could be situated at each site without the need for additional supply.



Unfortunately energy modelling from the Cwm Ifor Solar Farm project was not available in time for the student to complete output (v) listed above.

A full folder of the modelling, coding and outputs has been shared with the Team and will be invaluable in assessing sites as part of future energy projects. The coding can then be replicated to reflect energy consumption data from year to year.

Opportunities to collaborate with a data science MSc student from the Data Science Academy arise every Spring and the connections made with the Academy and others at Cardiff University will enable academic support with ongoing decarbonisation projects.



Fossil Fuel Divestment

The Wales Pension Partnership (WPP) has now implemented a decarbonisation overlay on all of its equity sub-funds. For the Greater Gwent Fund, this means that there is a 25% reduction in carbon exposure relative to the respective benchmark on £1.13bn of its assets (which equates to c. 30% of total assets).

The WPP launched its Active Sustainable Equity (ASE) sub-fund in June 2023 and the Greater Gwent Fund invested £150m in this product. Collectively this sub-fund equates to £1.3bn of assets across Wales (c. 8% of total WPP assets) and this is expected to increase over time as the product develops.

The WPP is working closely with its advisors in preparing an “All Wales Climate Report” which is intended to highlight the collective exposure of investments and to demonstrate decarbonisation progress over many years. The report will also offer insight into forward looking objectives and various milestones that will need to be achieved if the WPP (and its underlying investor funds) are to achieve net zero by 2050 or sooner where possible.

The Greater Gwent Fund has continued to selectively invest in renewable energy infrastructure throughout the UK (with some investment now specifically in Wales) and this has increased to £130m (up from £70m quoted in last year’s update). The Fund continues to work with specialist investment managers and explore further opportunities that are consistent with its fiduciary duty. The Fund is actively considering its approach to “levelling up” or local impact investment opportunities (local defined as UK wide) in light of Government policy and its encouragement of the LGPS to invest in this area. As a result and alongside the investment strategy review we are preparing a high level policy covering the proposed approach which will likely be available in early 2024 for publication.

Reduce

Through delivery of services the authority will emit carbon. Whilst emitting some carbon is unavoidable, reducing the quantity of carbon emitted as much as possible is vital to achieving Net Zero Carbon.

The Decarbonisation Strategy recognised that reducing operational emissions through reducing energy consumption is imperative. The identified targeted areas for action are:

- Existing Buildings – Corporate and Domestic
- New Developments – Corporate and Domestic
- Streetlighting
- Travel & Transport
- Waste Management

The nature of this work has meant that the Reduce section of the Decarbonisation Action Plan is the largest, crossing many services and existing work streams.

The Reduce working group and other stakeholders have reviewed the previous Action Plan, revised and agreed the Reduce section into 30 actions (See Appendix 2).

Of these actions:

- 4 are completed
- 13 are going well with good progress
- 11 have had reasonable progress
- 2 are not yet started

Corporate Buildings

Reducing energy consumption of buildings is mostly achieved by improving the fabric of the buildings, improving the regulation of energy consumption, and reducing the emissions of the energy used through generating or using renewable energy. Caerphilly CBC is responsible for 778 non-domestic sites with a combined gross internal area of 475,534 m². The building condition on the sites varies depending on the nature of the site (see figure 3).

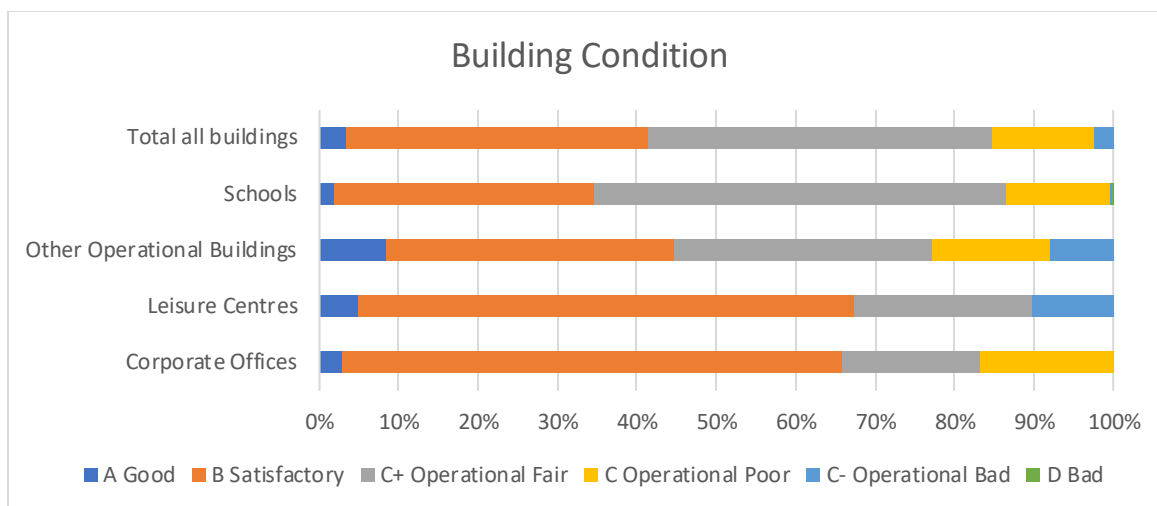


Figure 3, Building condition, type of site (non-domestic)

The condition of the sites detailed above is also reflected in the current cost of the backlog maintenance of the sites (see table 2). Improving the fabric of the building will improve energy efficiency but is a large programme of work requiring detailed analysis of each building and its requirements.

Category	Priority 1 (Urgent)	Priority 2 (Essential)	Priority 3 (Desirable)	Total
Corporate Offices	£30,000	£902,000	£1,518,000	£2,450,000
Leisure Centres	£73,000	£1,220,000	£2,230,000	£3,523,000
Other Operational Buildings	£638,000	£5,003,000	£5,999,000	£11,640,000
Schools	£440,000	£14,113,000	£20,661,000	£35,214,000
Total for all sites	£1,181,000	£21,238,000	£30,408,000	£52,827,000

Table 2, Site Category, backlog maintenance costs by priority

There is a rolling maintenance programme in place with refurbishment schemes undertaken. This means that condition survey ratings and backlog maintenance costs are not always reflective of current condition or the level of required repairs. These existing costs will affect the work to decarbonise the authority portfolio by assisting with the prioritisation of works for sites.

The Energy Team have reviewed the existing backlog maintenance requirements for non-domestic buildings alongside Energy Performance and required upgrades for improved energy efficiency. From this exercise, priority sites for upgrades have been identified to form the initial phase of a full programme of works to improve the energy efficiency of non-domestic buildings. High-level costings of technologies to reduce carbon emissions of buildings have been provided which can be extrapolated based on internal floor area. These numbers will be improved as we move through the programme of works. From these high-level costings, a framework for contractors will be produced through the works can be procured.

Funding opportunities for these works are continually being explored to include the Salix Invest to Save Scheme as well as Welsh Government Low Carbon Heat Grants.

Asset rationalisation

An asset rationalisation mechanism has been reviewing corporate buildings to identify and assess options for continued use and ownership of the assets. Service Asset Management Plans (SAMPs) have been reviewed by the Asset Management Working Group and a list of identified properties that will be targeted in the short, medium and long term for vacating by services has been produced. As part of this options appraisal, the number of sites, running costs, backlog maintenance costs, lease costs, potential rental revenue and potential capital receipts are considered alongside the needs of the Service. Consultation with Service area/s to fully understand needs and requirements is key. By understanding what elements of the service can be relocated to a central location and what (if anything) need to remain in current location/s, we can make informed and data enabled decisions which benefit Services, Service Users and the authority.

This process has the potential to reduce number of Corporate Office sites, to streamline the estate and achieve improved efficiencies at remaining sites.

Corporate Landlord Model

Through Mobilising Team Caerphilly, the Decarbonisation Team, worked as part of the 'Assets Efficiency' workstream. A key project proposal from this was the recommendation that the authority adopt a 'Corporate Landlord Model' to control assets. The Corporate Landlord model centralises property management and associated budgets and removes the demands of managing property from individual service areas, freeing them up to deliver the services our residents, businesses, and visitors expect.

The Corporate Landlord model will deliver a better strategic understanding of our asset base, and the costs of investing in them over time, as well as the day-to-day costs of managing and maintaining them. Managed strategically, our assets can address the challenges of saving money, and at the same time help us align with partners to achieve more effective use of assets to deliver common objectives.

At present, responsibilities for these assets rests largely with the individual service areas. The current approach does not allow for the maximising of efficiencies or optimum value for money and is inefficient in the allocation of resources. A move to a Corporate Landlord model proposed would see a change in responsibility for management, maintenance and investment in relation to the council's non HRA buildings and assets.

In short, the Corporate Landlord model seeks to ensure better governance and value for money, enhanced customer service (particularly when considering our customers internally) and a greater consistency of approach across all buildings and assets. It would ensure better quality of decisions being taken based on a sound evidence base, helping to ensure best value for money, and more efficient procurement of works and allocation of resource, across all of the council's non HRA estate.

Community Asset Transfer

A Community Asset Transfer (CAT) happens when a Public Sector Body transfers the management and/or ownership of a property asset to a community council or Third Sector/ Community Group. This will sometimes include the delivery of any associated services. Through Mobilising Team Caerphilly, the question of whether the authority should use CAT to contribute to savings was raised and discussed.

There may be services that are currently being delivered by the authority that might be better suited being delivered by the communities of the borough. There are things to consider as potential issues to transfer for example backlog maintenance considerations, covenants, restrictions on title e.g., charitable trusts etc, interest from management committees or groups. Through the Asset Efficiency workstream it was established that we would consider asset transfer of any asset in the portfolio in its current condition but also in an improved condition. By improving the fabric of the asset and decarbonising the site, the authority could ensure that an asset is being transferred rather than a liability.

Existing Housing

Welsh Housing Quality Standards (WHQS) has driven improvements to existing housing stock within the borough. The energy consumption of existing housing stock does not contribute to the authority's organisational carbon footprint reported annually through Public Sector Net Zero Carbon Reporting. However, reducing energy consumption through more efficient homes will reduce carbon emissions and contribute to the All Wales Net Zero Carbon by 2050 ambition set by Welsh Government, as well as easing cost of living pressures on residents by reducing energy bills.

WHQS23 has recently been agreed and will focus on further improvements to council owned housing stock. Target Energy Pathways will be undertaken for each CCBC owned property to formulate a whole stock assessment. Energy Performance Certificate (EPC) assessments will be completed for each home to establish their energy rating and identify the least energy efficient stock for prioritisation. The energy efficiency of domestic properties will be improved through the UPVC triple glazing window replacement programme that will introduce high specification energy

efficient glazing. This glazing is being manufactured by the authority and there is an install programme of 84 properties in this financial year.

Energy efficiency is also being improved in council owned sheltered housing schemes and measures are being delivered to two schemes – Maesteg and Oaklands – through the Optimised Retrofit Programme. A fabric first approach is being taken to address issues tenants were experiencing, aligned to PAS2035. Measures being taken include External Wall Insulation, Photo-voltaic installation, Mechanical Ventilation with Heat Recovery and low energy windows and doors. This will directly impact the operational carbon emissions of the authority, as the energy consumption within sheltered housing schemes is within scope for Public Sector Net Zero Carbon reporting. Surveying has started for the properties that will be included in next year’s decarbonisation programme.

Fleet

As of 30th September 2023, a total of 544 vehicles made up our fleet. This number represents a decrease of nearly 80 vehicles since the requirements of COVID-19 resulted in significant increases in our fleet numbers, reaching highs of over 620 in the summer of 2020. There has also been a change in the breakdown of the fleet with an increase in hired vehicles to replace those leased from Specialist Fleet Services (SFS) as that agreement comes to an end.

The 544 vehicles are made up of 94 vehicles that we own, ~170 vehicles on hire and 278 vehicles on long term lease (generally 5 years) with SFS. We now have 12 fully electric vehicles in the fleet.

Figure 4 below shows the total number of vehicles in our fleet since August 2019, and how this breaks down between owned, leased and hired.

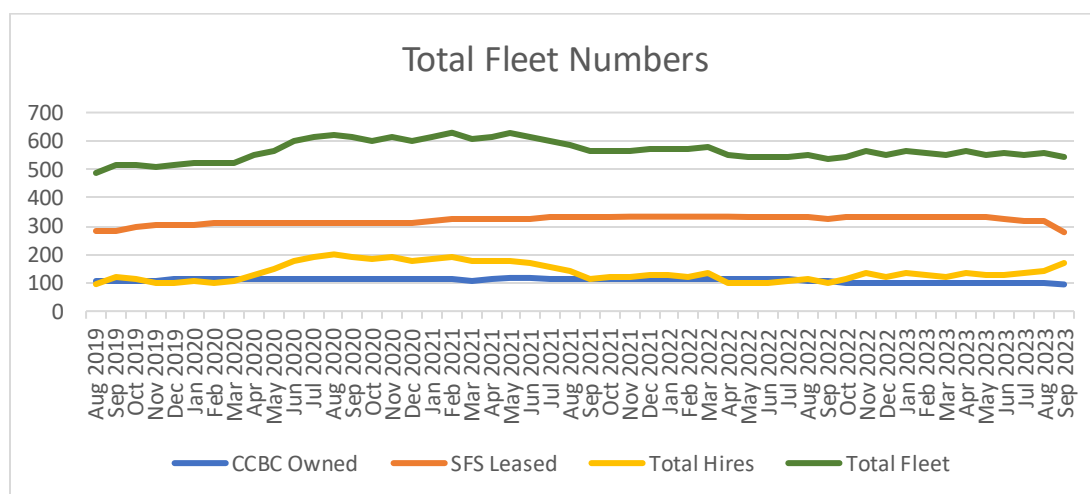


Figure 4, Breakdown of fleet vehicles by ownership, lease and hire 2019 – 2023

With the SFS contract ceasing at the end of January 2024, hired vehicles are replacing leased ones as the lease contracts come to an end. The cost of hired vehicles is about the same as SFS leased ones but have the added advantage that the arrangement can be terminated at any time. This means that we can easily remove them from our fleet if we find we no longer have a need for them or swap them for EV alternatives as service areas become ready to make the transition.

Table 3 below provides a breakdown of the end date of individual vehicle leases from SFS.

Month lease ends	No. Vehicles
End January 2024	236
Rest 2024	53
2025	6
2026	12
2027	8
2028	9

Table 3, Number of vehicles on lease from SFS with lease end date

This provides both a significant opportunity and challenge as theoretically these vehicles could be replaced with ULEV alternatives. This will require significant investment in and installation of infrastructure and resource to overcome the logistical challenge of the transition.

EV Infrastructure

Installation and commissioning of EV charging infrastructure to date provides the charging capacity for around 100 fleet EVs. The breakdown is as follows:

- Ty Penallta charging hub – 15 double 7kW chargers.
- Tir y Berth charging hub (old Meals on Wheels site) 7 double 7kW chargers.
- We now have a total of 53 charge points on the CCBC charging network
- This work includes the setting up of the back office system to manage the charging network, monitoring of charge sessions (including electricity use and CO2 savings) and, where necessary, internal recharging.
- Total value of works let to date £437,000

Alongside this we have introduced staff/visitor personal vehicle charging with a system that allows those individuals who choose to charge their vehicles at a CCBC site to pay for the electricity used. The tariff covers



the electricity and admin costs only. This work included the provision of all relevant policies, notices, instructions and compliance practices.



Optrak Consortium Project

CCBC secured funding from the Cardiff Capital Region Challenge Fund to run an innovation project looking at ways to effectively transition to electric vehicles and manage an electric fleet. This includes rationalising the fleet to gain the greatest advantages from a move to EV, managing vehicle charging requirements and providing suitable charging infrastructure.

A lot of work has been done scoping out our requirements from the project which including a 10-week initial investigation exercise using actual fleet data from the Quartix tracking system. This provided an initial assessment of the task in hand, a valuable insight to the working of our fleet and has been vital in identifying the specific outcomes we are looking for from the project.

Those outcomes include:

- Fleet Analytics Solution
- EV Charger Siting Tool
- Service Area Support (e.g. Housing Maintenance)
- Support with Vehicle Pooling Solution

There are other possibilities that the information gained from the analysis of the data could help with that are being investigated. It is important to underline the fact that all of these outcomes depend upon continued access to the vehicle tracking data.

New Development – Housing & Non-Domestic Buildings

Whilst the energy consumption of authority owned housing doesn't sit in scope for Public Sector Net Zero Carbon reporting, the development and construction of housing is accounted for under scope 3 supply chain emissions. Currently, every £ spent on construction and materials will be translated into kgCO₂e by multiplying the £ amount by an emissions factor determined by The Department for Energy Security and Net Zero (formerly The Department for Business, Energy and Industrial Strategy or BEIS). The methodology constraints and issues of this process are discussed further in the "Buy" section of this report. Pertinent to reducing the carbon emissions relating to developments, is the adoption of lower carbon construction methods and measuring the impact of these.

Low carbon construction methods consider the carbon emissions at every stage of a construction project – cradle to grave. There is embodied carbon in the materials used to construct buildings, but there are considerations to be had in the transportation of materials to sites, the equipment and machinery used, and the waste created through the project. Cradle to grave then calculates the expected energy consumption and required maintenance of the building to estimate the carbon emissions of the building through its life cycle. Finally, the end of life of the building is considered – how will this building end its life and what will happen to the materials? These considerations and calculations are significant to all building and construction projects – housing and non-domestic buildings.

Housing

Cabinet have approved a Development and Governance Strategy that sets out a policy framework which now applies to all Caerphilly Homes developments. The strategy is to build all new homes using Modern Methods of Construction (MMC) fabric first principles and build to Building Regulations 2025 as a minimum thereby concentrating on thermal efficiency and ventilation. The strategy sets out an ambition to build to net zero carbon but recognises that reductions in embodied carbon are harder to deliver than operational reductions.

Caerphilly Homes have received planning approval for a 45 home, later living scheme at Ty Darran, Risca and 92 homes at the former Oakdale School site. All new homes built on both sites will be built with energy efficiency and lower costs for customers in mind. A report has been provided by Wilmott Dixon which discusses the ethical sourcing of the materials contained in photovoltaics and batteries together with the recycling options. At this time, Caerphilly Homes do not require the inclusion of renewables although that may change in the future. New homes in Oakdale and Risca do not require the introduction of renewables as they are designed to be super efficient using fabric first construction materials and methods.

The partnership with local steel frame manufacturer, Caledan – a company based in Ystrad Mynach – continues, however, Caerphilly Homes will shortly be bringing

forward a number of smaller sites and will seek to introduce a timber frame offer to the development programme. Caerphilly Homes is part of the All-Wales Net Zero Timber Frame group and will be offering a site to include in an all Wales project shortly.

United Welsh Housing Association (UWHA) have opened a new Modern Methods of Construction (MMC) factory in the borough with ambitions to increase the number of homes they build using MMC techniques. MMC projects use off-site manufacturing to build homes faster and with less waste. Timber frame for the Cwm Ifor developments (R25) were built in UWHA's MMC factory. UWHA has provided a presentation on the use of the MMC factory to the Affordable Homes Partnership and are in discussions with other community landlords about using the factory to build timber frames for their new developments.

Welsh Government now incentivises the use of MMC in new developments through the Social Housing Grant programme and, as a result, the Council expects to see an increase in the number of new homes developed using MMC.

Non-Domestic Buildings

Sustainable Communities for Learning Programme ensures all new capital investment for schools support net zero commitments and meet required standards for decarbonisation in the choice of materials, transport and construction techniques. Welsh Government have specific requirements and standards for net zero schools – this is currently focused on net zero operation, however embodied carbon is being considered.

Schemes identified for the programme:

- A new replacement Ysgol Gymraeg Cwm Gwyddon on the former Cwmcarn High School site
- An extension of Trinity Fields School and Resource Centre
- The amalgamation of Llancaeath Junior School and Llanfabon Infants School to create a new Primary School provision
- A new replacement Plasyfelin Primary School on the existing site
- The establishment of a Centre for Vulnerable Pupils (Pupil Referral Unit) on the former Pontllanfraith Comprehensive site

Streetlighting

A programme to convert all the county borough's street lanterns to LED was completed in January 2021. Concurrently, the authority has implemented part night lighting, between the hours of midnight and 5.30am, to all lighting, except at junctions and in major town centres. Cabinet approved the continuation of reduction in streetlight operating hours in November 2022.

The reduction in operating hours of streetlighting has multiple benefits for the authority. Reducing energy consumption at a time when the unit cost price of electricity is increasing will reduce the cost to the authority of providing lighting. Reducing energy consumption will also reduce operational carbon emissions and contribute to achieving net zero.

Table 4 below shows the achievements of these measures. There is a noticeable change from the conversion to LED bulbs and as the authority continues with part lighting and the grid decarbonises, the carbon emissions from the operation of streetlighting will continue to fall.

Year	kWh	% Change	kgCO ₂ e	% Change
2019/20	8,579,794		2,711,043	
2020/21	5,565,418	-35.13%	1,603,564	-40.85%
2021/22	3,352,484	-39.76%	976,579	-39.10%
2022/23	3,049,585	-9.04%	797,619	-18.33%

Table 4, Streetlighting energy consumption and carbon emissions with % change year on year

Waste

Carbon emissions from all waste collected or created by the authority is reported to Welsh Government through the Public Sector Net Zero Carbon reporting. Currently, municipal waste is reported alongside commercial and industrial waste collected by council vehicles. There is the opportunity to report on Organisational and Project waste. However, currently this data is not available for reporting.

The trend in waste emissions reported is detailed in table 5.

Waste Type	2021/22	2022/23	% Change
Mixed Recycling	374,930	343,397	-8.41%
WEEEE	5,782	4,990	-13.69%
Landfill	4,064	3,680	-9.45%
Combustion	39,630	36,581	-7.69%
Composting	28,008	23,920	-14.59%
Anaerobic Digester	26,481	24,125	-8.90%
Total	478,895	436,695	-8.81%

Table 5, Waste Emissions by Waste Disposal Method, 2021/22 – 2022/23

Actions for Waste align with the waste hierarchy – Prevent, Reduce, Re-Use, Recycle, Recover, Dispose. Actions to reduce carbon emissions from waste straddle the two distinct targets for Net Zero Carbon in Wales:

- (i) Net Zero Carbon Public Sector in Wales by 2030
- (ii) Net Zero Carbon Wales by 2050

The first of these targets is generally focused internally on organisational emissions, whilst the second is focused on the wider borough including residents and businesses. As we collect, handle and transport waste on behalf of our residents, we are responsible for reporting on the carbon emissions from this waste. Unlike most of the other actions aimed at the 2030 target, reducing emissions from waste will require higher levels of engagement with and action from our residents.

The Authority has signed up to the Public Sector Waste Minimisation Campaign and to this end provides infrastructure to facilitate recycling for its workforce. It has also recently signed up to the national WARPIT initiative (led by Procurement and FM) which reduces waste by redistributing office furniture and assets to increase the life-cycle of products and stop usable items from entering waste streams.

A Waste Strategy is in the process of being developed to enhance the sustainable management of municipal waste arising and in turn attain the statutory targets set by Welsh Government. There is a campaign in place to incentivise participation in the food waste recycling collection service which supplies feedstock for a local anaerobic digestion facility which is providing electricity for 2000 homes.

The Authority has committed to introducing a complete digital solution for waste. This will include back office and front-line functionality and capabilities that will allow for more efficient and paperless methods of working. Procurement is to conclude w/c 6th November and the implementation date is from February 2024. With the help of the successful supplier, we hope to be fully digital within 12 to 24 months.

Work is on-going as part of the Waste Route Map and Strategy to model the performance benefits and outputs of changing the recycling service to something more blueprint compliant. Collecting already separately presented items will result in a better quality of materials being collected. This will mean that there will be less dependence on a Material Recovery Facility to sort materials to transfer to market for sale and recycling. The Authority will have access direct to markets which will benefit carbon emissions and generate income.

Produce

The Decarbonisation Strategy acknowledged the importance of generating our own “green” electricity and heat. This will reduce carbon emissions, give greater energy security, insulate us against volatile price fluctuations and will bring the added benefit of offsetting grid demand whilst reducing system losses associated with grid supplied electricity if it is produced at the point of demand.

The Produce Working Group has been established with members from Decarbonisation, Transformation, Property, Housing, Planning and Infrastructure. The Team, which also receives external support from the Welsh Government Energy Service, meets monthly.

The first piece of work undertaken by the group was to review the Produce actions contained within the original Decarbonisation Action Plan under the Produce Pillar. The agreed new Produce Action Plan contains 12 actions (see Appendix 2).

Of these actions:

- 2 have been completed
- 6 are going well with good progress
- 3 have had reasonable progress
- 1 is not yet started

Land mapping and evaluation

The authority has significant land holdings. The review of land assets, in collaboration with the Welsh Government Energy Service with a view to identifying opportunities for renewable energy technology, is an ongoing process. The first round of reviews identified several sites which were progress to the next stage and were examined in greater detail to consider issues such as grid connection, planning, etc. This work identified potential opportunities for solar, on shore wind and hydroelectricity generation. Some examples of these projects are outlined below. The review process continues with further sites being assessed based on our energy needs.

Solar

The authority has already installed Photovoltaic (PV's) panels on roofs of its buildings. In some instances, these are small demonstration arrays on schools, but the authority has also installed larger arrays to good effect and is currently investigating its collective non-domestic roof space for medium sized PV arrays.

Produce Case Study 1 – Cwm Ifor Solar Farm

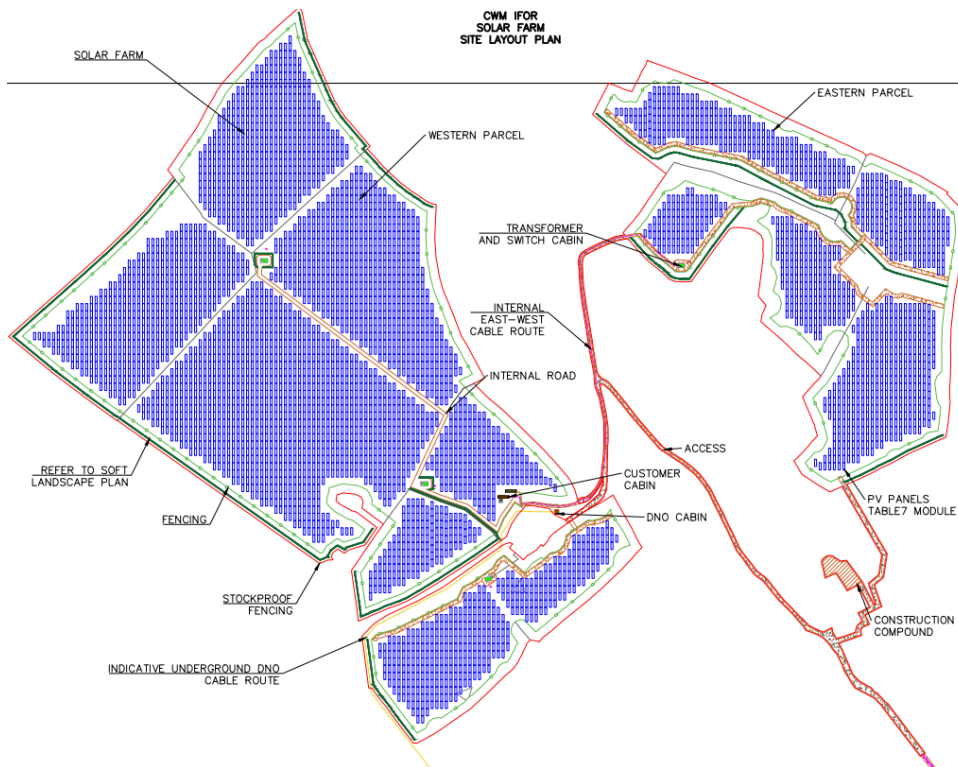
Background

Cwm Ifor is a privately-owned farm at Penyrhoel, just north of the town of Caerphilly. The land is low-grade and currently used for agricultural purposes. However, it is on a hill side with steep south, southeast and southwest facing slopes, which is suitable for solar arrays.

The project and grid connection were novated to the Council in April 2020 after the developer decided not to progress the project due to existing covenants on the land and potential access issues.

The Project

The project will develop a 20MW solar farm covering 36 hectares, which will potentially be the largest publicly owned solar farm in Wales. Grid connection is secured, and outline designs have been completed along with energy yield assessments so that financial modelling can be completed.



It is anticipated that when operational the solar farm would generate 23.5GWhrs of electricity per year, or enough to power around 6,000 homes. At current energy prices it will create income of between £669,000 and £892,000 per year over the 35-year life of the project.

As the solar farm is over 10MW in size it is deemed to be a development of national significance (DNS), and therefore the planning application will be determined by Planning and Environmental Decisions Wales (PEDW). The planning application was submitted in January 2023 with a decision anticipated early in 2024. As well as a generating significant amount of electricity the solar farm will also enhance biodiversity of the land, with the use of native plant species and the protection of bats and an owl nesting locally. The boundary will be protected by stock proof fencing to protect the solar farm from the farm animals.

The project has been a real team effort with internal representatives from Regeneration, Procurement, Communications, Transformation, Property Services and Finance. As well as external support from planning, landscape and visual and technical consultants, Welsh Government Energy Service, Local Partnerships and the Carbon Trust.

Consultees have included; the Local Planning Authority, Council Ecologist, Council Landscape Architect, Environmental Health, Highways, CADW, NRW, GGAT and the Fire Service. Ward Members, Community Councils and Cabinet have also been consulted along with communities local to the solar farm.

Life-time CO₂ savings are estimated at 55,300tCO₂e, or approximately 1,580 tCO₂e per year which will contribute to decarbonising the electricity grid and will have a positive impact on air quality.

There will also be a community benefit fund made available to groups within the area as part of the solar project. This will support community decarbonisation projects as well as wider support for the community. Not only will the project improve air quality and wellbeing it will also bring in a revenue to support council services for the most vulnerable. Community benefits clauses will also be included in the contract for the solar farm build.

Wind

As part of the land asset review, sites have been considered for wind turbine projects. The initial reviews have not identified significant opportunities. CCBC has been approached by developers to invest in wind developments in the county borough and this is the subject of ongoing discussions and evaluation.

Hydro-electric

The authority has undertaken a review of its capacity to generate hydroelectricity from rivers and streams on Council owned land. To date there is limited opportunity to progress projects although Cwmcarn Forest has been identified as offering some opportunity to generate electricity for onsite use at the visitor centre. An initial feasibility study for a scheme at Cwmcarn was undertaken in 2012 but a lack of clarity over ownership of the stream bed meant that this wasn't pursued. The current proposed design for the scheme overcomes this risk as the stream bed will not be utilised.

A reassessment of the feasibility study has been commissioned with Wallingford Hydro Solutions and Heidra to determine updated costs and potential payback for the scheme. It is estimated that a 27kW turbine could be installed onsite, which would produce at least half of the visitor's centre annual electricity requirements. The

peak load of the site (maximum energy imported at one time) is 30kW and the base load is 14kW (typically what is being imported overnight). With a 27kW turbine, during times of base load, the excess electricity could either be exported to the grid or utilised onsite by charging electric vehicles. The group exploring this opportunity took a site visit to Margam Park to see their hydro-electric scheme and how it is



adding value to the site as an additional tourism attraction. Should the result of the study be positive, the Group are committed to ensuring that there is an educational aspect to the scheme which demonstrates not only the technology being used but also the carbon emissions being saved.

Green Hydrogen

Significant work is being undertaken to develop partnerships and to secure funding to investigate the contribution that green hydrogen might play in delivering the authority's commitment to be net zero carbon by 2030 and its wider contribution to regeneration and decarbonisation in the county borough.

Produce Case Study 2 - Green Hydrogen Project

Background

Hydrogen is generated by splitting water (H₂O) into its constituent parts, hydrogen and oxygen by electrolysis - passing an electrical current through the water. The term green hydrogen is used when the electricity used in the electrolysis is generated from renewable sources such as wind or solar.

The Green Hydrogen project has included a review of Council owned land to identify suitable sites. Two potential locations have been identified and are the subject of more detailed feasibility studies. The project also incorporates an ethical water source rather than mains drinking water, with the use of water from the Council owned reed bed facility in Nelson.

Green hydrogen production will potentially support the decarbonisation of the larger fleet vehicles owned by CCBC and the other 10 councils within the region.

The Project

The green hydrogen project will see a 10MW electrolyser sited at one of two locations and will use water from the reed bed facility at Coed Top. 15MW of green energy will be needed for the project. This will be a mix of solar and wind. Ideally the green energy generation will be co-located with the electrolyser however if this is not possible then PPA arrangements for energy through the grid will be made.



Our estimated annual diesel use by our larger fleet vehicles is 69,000 gallons (315,000 litres) per year, at a cost of around £600,000 per year. The use of hydrogen has the potential to save around £60,000 per year, with an additional opportunity to sell hydrogen to the wider region.

There is potential to save 845,000 kg of CO2 emissions in the borough, equivalent to that emitted by 313 houses or 503 cars. This will also impact positively on local air quality.

Opportunities to inject hydrogen into the gas grid are also being investigated along with opportunities for heat networks and oxygen offtake, as well as selling hydrogen to businesses.

Funding for feasibility studies has been secured from two funding sources to date. Firstly, UK Government Funding of £72,496 from Innovate UK, for feasibility studies to examine the non-technical barriers to the project, for which CCBC is the lead partner. Secondly, £43,768.02 HyBRID funding from Welsh Government for feasibility studies investigating the technical barriers to the project, which is being led by the University of South Wales. Phase 2 HyBRID funding will also be sought as well as DESNZ, Cardiff Capital Region and Welsh Government funding. The Welsh Government Energy Service are also undertaking feasibility work around green energy and Wales and West Utilities around transport hubs.

The team developing the project includes External support from South Wales university, Cardiff University, Energy Systems Catapult, Wales and West Utilities, Welsh Government Energy Service, Jen Baxter Consulting and Prosona. A number of internal conversations have taken place with colleagues from Regeneration, Procurement, Communications, Transformation, Property Services, Planning, Highways, Parks and Countryside, Environmental Health and Finance.

Anaerobic Digester

The original Decarbonisation Strategy identified that the Council has local arrangements in place at Bryn Quarry where Council collected food waste is converted into green energy via an Anaerobic Digester. The linked Energy Prospectus highlighted the opportunity to take electricity directly from this site and utilise it at the Tredomen Campus. Anaerobic Digesters (AD) break down feeder fuels such as food waste to generate a biogas which is used to generate electricity. By utilising a locally generated electricity supply it will reduce the transmission system losses (wasted electricity) and free up additional capacity on the local grid.

Discussions have begun with the Bryn Group to identify opportunities, with an initial study being initiated to review options and to develop an outline business case. This has included assessing the best route for any hardware, to identify any land studies or further ecological studies that may be required. As part of understanding the viability of the project, negotiations have



begun on Heads of Terms and the principles of any potential power purchase agreements.

Mine Water Heat

The mine water heat network scheme is in the early stages; however, we are one of the first to engage with the coal authority and WG in this area we are already ahead of others and the mine water scheme at Pontllytyn is progressing through feasibility. CCBC will be in a good position for full funding for the project from WG. The coal authority has nearly completed the feasibility. There is a further report due from the coal authority on the best areas for mine water heat networks and CCBC is expected to be a potential hot spot for these networks from work undertaken so far.

Total amount of renewable energy generated 594,863 kWhrs from 63 installed Solar PV schemes.

Offset

It is inevitable that through delivering its services the authority will emit carbon. Therefore, in order to achieve net zero carbon these emissions will need to be offset. There are two principal ways that this can be done, carbon sequestration (capturing carbon usually by planting trees or by habitat management) or by purchasing carbon units/offsetting credits.

The Decarbonisation Strategy acknowledged that carbon dioxide removal through tree planting will play a major role in CCBC achieving its net zero target, and that it is imperative that the Council effectively manages its current land holdings to ensure that its woodland remains healthy. The purchasing of carbon credits is seen as the last resort and therefore the authority will seek to offset its carbon at this stage by the management, maintenance and creation of new greenspaces, woodlands and wetlands.

The Offset Working Group has been established with members from Decarbonisation, Countryside, Rural Development, Housing, Planning and Infrastructure. The group meets monthly.

The first piece of work undertaken by the group was to review the Offset actions contained within the original Decarbonisation Action Plan under the Offset Pillar. The agreed new Offset Action Plan contains 14 actions (see Appendix 2).

Of these actions:

- 4 have been completed
- 5 are going well with good progress
- 4 have had reasonable progress
- 1 not yet started

Land mapping and evaluation

In June 2023 a Cabinet recommendation was approved (Recommendation 8), that **“detailed land mapping and evaluation is undertaken to protect existing habitats and identify land for tree planting. Further work undertaken to assess the feasibility of a potential Caerphilly Forest programme and the potential for growing our own trees”**.

This mapping has been undertaken. Table 6 below sets out the total areas of land owned by the authority under the headings required in the Welsh Government reporting tool. The table also summarises the kgCO₂e, sequestered, and therefore offset by the land use types.

The 1,143 hectares of forest land owned by the authority offset 8,306,886 kgCO₂e in 2022/23

Land Use Type	Land Area (Hectares)	Carbon Emissions (kgCO ₂ e)
Forest Land	1,143	-8,306,886
Cropland	48	880,361
Grassland	825	12,835
Wetlands	20	n/a
Settlements	1,398	n/a
Other	2	n/a
Total	3,436.55	-7,413,691

Table 6, Land use type, land area and kgCO₂e offset.

Following the mapping of all CCBC land, a review of this land is being undertaken to identify areas that should be maintained and protected, and areas where there are opportunities for new tree planting. An internal mechanism has been developed by the Offset Working Group to identify land for future planting projects. The Team have created a form, which is uploaded to the Decarbonisation section of the CCBC Intranet, which services wishing to complete planting projects can complete. This will begin a process of assessing the land's suitability for planting. An initial desktop exercise utilising GIS makes a first assessment of suitability. A legal check for deeds, covenants, rights of way etc is then completed. If the land is still deemed suitable, an ecological assessment will be carried out and designs for the planting will be completed. This will ensure a cohesive approach to tree planting and enable the Team to track the location and number of trees planted so that we can create a database which monitors progress towards our agreed targets. Through this process, land has been identified for tree planting projects for both the 2023/24 and 2024/25 planting seasons. It is integral to our legal biodiversity obligations that we plant the right tree in the right place. Establishing this mechanism fulfils that obligation.

Tree planting programmes

Planting has been agreed on Countryside land for the 23/24 planting season. Designs and plans have been produced and agree for sites at Ynys Hywel and Parc Cwm Darran. Approximately 15,000 trees will be planted at those sites, with around 3,000 being planted by volunteers.

Initial sites on Housing and Infrastructure land for planting during the 2024/25 planting season has begun, with ecological surveys and initial feasibility work being undertaken.



Offset Case Study 1 – Ynys Hywel Covid Memorial Woodland 2023

Background

Ynys Hywel, a traditional working hill farm, forms part of the Sirhowy Valley Country Park, which is a popular location with people walking or cycling through the woodlands that rise from the riverbank and extend up the valley sides. Route 47 (the Celtic Trail) of the National Cycle Network runs the length of the park and beyond.

The Council owned farm was selected as the location for one of three covid memorial woodlands in Wales, to remember all those who have died during the pandemic. Funding of £499,000 was awarded from the Welsh Government to design, construct and maintain the memorial woodland for 5 years.

The Project

The new memorial park, covering an area of 7 hectares, was designed and implemented by Caerphilly Council's Landscape Architects. The design seeks to complement the existing country park, and importantly retaining key views across the valley and the overall rural character of the site. This includes both hard landscaping in the form of paths, where possible following the lie of the land to improve access, new timber access gates, benches, drystone walling entrances and natural water features, along with extensive native woodland planting. These enhancements will allow visitors to enjoy more of the picturesque scenery, whilst being able to walk, relax, contemplate and reflect.



The new woodland also respects the environmental quality of the site, with a landscape lead approach, including both improving and retaining biodiversity with retention of the species rich acid grassland meadows, mature trees and hedgerows and the overall landscape qualities.

The recent woodland planting contains a broad mix of native deciduous species to provide a robust mix that it is hoped will be able to withstand the challenges faced by climate change. Shrubs and trees species, including climax trees, have been planted throughout. A small percentage of native evergreens, Holly, Yew and Pine, are complimented by standard trees species including native Beech, Oak and Hornbeam. An extensive area of meadow has also been planted with Welsh daffodil and bluebell bulbs.

A total of 36,500 native trees and shrubs were planted in 2022/23, with 3,700 planted by volunteer groups. Further volunteer planting will be continued for the next 5 years. It's intended that the site will be maintained during the 5-year establishment period, using part of the grant funding.

The Team collaborated with external partners GAVO, Groundwork Wales and Keep Wales Tidy to co-ordinate the volunteer planting. Over 100 volunteers from various organisations and the local community took part in planting the trees over between 20th and 24th March 2023.

The Team organised facilities and refreshments for volunteers on site which were kindly donated by GAP and Castell Howell.



Minister for Climate Change, Julie James MS visited the site on the 23rd to mark the third anniversary of the first Covid lockdown and join volunteers in planting a tree.

Total number of trees planted

A Cabinet commitment was given to “**set a target of planting 300,000 trees by 2030, where land availability allows**”, as part of the Decarbonisation Strategy work.

To date a total of 81,000 trees have been planted since the Decarbonisation Strategy was approved.

Carbon Credits

The purchasing of carbon credits for offsetting is a complex and evolving area. Offsetting and carbon trading schemes exist across the UK to purchase carbon credits, allowing organisations, businesses and individuals to offset their carbon emissions. Carbon credits can only be used once - you can sell them to a third party

to compensate for their emissions or you can use them yourself against your own emissions. Each Carbon credit purchased is equivalent to 1 tCO₂e. The UK Emissions Trading Scheme is currently trading 1 tCO₂e at £38/tonne.

Should CCBC have been required to be carbon neutral for the financial year 2021/22 we would have needed to purchase carbon credits to offset the 94,257 tonnes of CO₂e. The market cost in that year of £78/tCO₂ would have cost the authority £7,352,046. Should CCBC have been required to be carbon neutral for the financial year 2022/23 we would have needed to purchase carbon credits to offset 95,894 tonnes of CO₂e. The current market cost of £38.11/tCO₂ would have cost the authority £3,654,539.17. This highlights firstly, the turbulent nature of carbon markets, but secondly and more importantly, the potential ongoing costs of millions of pounds should the authority fail to meet its Net Zero Carbon commitments.

If we were to plant trees to offset this annual amount, we would need to plant an area around a third of the size of Caerphilly County Borough.

To better understand this area and to allow us to make informed decisions on this, the Offset Group has commissioned consultants to provide detailed advice. This includes an exploration of the business case for purchasing land for tree planting. This will compare the cost of acquiring land and planting, to the cost of purchasing alternative credits. This work will also identify the co-benefits of acquiring land such as delivering public access, employment and biodiversity.

Buy

The Buy Working Group has been established with core members from Decarbonisation and Procurement alongside nominated representatives from each Directorate. This group has reviewed the existing Decarbonisation Action Plan under the Buy Pillar and agreed an updated Action Plan with 10 actions (See Appendix 2).

Of these actions:

- 1 has been completed
- 5 are going well with good progress
- 2 have had reasonable progress
- 2 have not yet started

Supply Chain emissions comprise nearly 80% of organisational carbon emissions annually. Tackling these emissions is key to achieving Net Zero. However, the methodology used to ascertain these emissions is the least accurate used in the reporting. Currently, every £ spent is multiplied by an emissions factor to calculate the amount of carbon. If spend goes up, so does the carbon, even if this is for the same amount of the same product. Therefore, the main focus of the Buy group has been initially to understand these emissions better and improve the methodology for calculating them.

Analysis of 22/23 spend data from Spikes Cavell has been completed to identify priority areas for further investigation. Similar to other local authorities, a large proportion of spend sits with a small number of suppliers and so understanding these emissions and taking steps to reduce them will require engagement with a relatively small group of our suppliers. From engagement we can ascertain which suppliers are already measuring emissions and implement methodologies to more accurately record our proportion of these emissions. A breakdown of the percentages of spend and transactions related to numbers of suppliers is in Table 7 below.

	% Spend	No. Suppliers	% Suppliers	% Transactions
Top 50 Suppliers	44.8%	50	1.1%	27.1%
Top 100 Suppliers	59.7%	100	2.2%	36.5%
Total Spend with Supplier >£1mil	48.20%	59	1.30%	30.30%
Total Spend with Supplier >£500k	63.70%	119	2.60%	39.80%
Top 50% Spend (£135.8mil)	50.00%	64	1.40%	31.20%
Top 25% Spend (£67.9mil)	25.00%	17	0.37%	20.95%

Table 7, Percentages of spend, suppliers and transactions 2022/23

It was reported to Cabinet in June 2023 that the majority of emissions from supply chain in 2021/22 were from Social Care Services, Construction and Computing and Electronic Equipment. This has continued in the 2022/23 data.

The top 50% of spend is concentrated in just 5 UK Standard Industrial Classification codes (SIC codes):

- 87-88 – Social Care Services
- 41.2 – Buildings and building construction works
- 26 – Computer, electronic and optical products
- 78 – Employment services
- 49.3-5 – Land Transport Services

Tables 8, 9 and 10 below detail the changes in £spend, kgCO₂e and UK emissions factors from 2021/22 to 2022/23.

UK SIC	Category	£Spend 2021/22	£Spend 2022/23	% £Change
87-88	Social Care Services	£73,642,254.16	£90,490,180.90	22.88%
41.2	Buildings and building construction works	£45,083,151.54	£24,630,747.13	-45.37%
26	Computer, electronic and optical products	£25,309,025.02	£23,283,039.79	-8.00%
78	Employment services	£19,936,622.19	£19,135,875.76	-4.02%
49.3-5	Land transport services	£12,302,298.88	£12,599,391.13	2.41%

Table 8, Top 5 spend categories with spend 2021/22 and 2022/23

UK SIC	Category	kgCO ₂ e 2021/22	kgCO ₂ e 2022/23	% kgCO ₂ e Change
87-88	Social Care Services	21,356,253.71	11,854,213.70	-44.49%
41.2	Buildings and building construction works	16,680,766.07	5,911,379.31	-64.56%
26	Computer, electronic and optical products	10,376,700.26	10,896,462.62	5.01%
78	Employment services	2,791,127.11	2,545,071.48	-8.82%
49.3-5	Land transport services	9,595,793.13	6,526,484.61	-31.99%

Table 9, Top 5 spend categories with carbon emissions 2021/22 and 2022/23

The tables above highlight the issues with the current supply chain methodology. Although spend for social care has risen nearly 23%, emissions have fallen nearly 45%. This is due to a change in the emissions factor as detailed in the table below. Whilst some emissions factors decrease, others rise, meaning that year on year comparisons can be difficult and improvements hard to ascertain.

UK SIC	Category	2021/22 Emissions Factor	2022/23 Emissions Factor	Difference
87-88	Social Care Services	0.290	0.131	-0.159
41.2	Buildings and building construction works	0.374	0.240	-0.134
26	Computer, electronic and optical products	0.411	0.468	+0.057
78	Employment services	0.138	0.133	-0.005
49.3-5	Land transport services	0.776	0.518	-0.258

Table 10, Top 5 spend categories with changes in emissions factors 2021/22 to 2022/23

Analysis of 22/23 spend data from Spikes Cavell has been completed to align the spend with UK SIC codes used for carbon emissions reporting. The top 25% of spend with most carbon emissions has been identified for each service area as part of the work developing carbon baselines. The next step is to have discussions with services as part of carbon baseline presentations to understand the spend and what

is being procured. Some engagement with services has taken place through the working group meetings.

Procurement have identified a list of upcoming contracts which might be suitable for further consideration as part of this work e.g. Home to School Transport. Work is being done to understand the actual emissions associated with these contracts so that improved methodologies can be used for emissions reporting.

Various decarbonisation and carbon calculating toolkits have been reviewed by the working group to determine which toolkits best suit which services within the organisation. External partners from other local authorities and public sector organisations have been engaged with an eye to collaborate on a unified approach to emissions reduction, with an initial emphasis on gaining a better understanding of these emissions so that targeted actions can be measurable. It is agreed that working with partners in the region to provide consistency for suppliers is favourable and the core membership of the group are beginning initial discussions on how new tools and supplier engagement can be rolled out.

Social care services spend contributes the most carbon to supply chain emissions using current methodologies as it represents the largest spend. More detailed analysis of this spend and the constituent parts has been completed for 2021/22. And as such, social care has been identified as a priority area for trial of new carbon calculating toolkits and engagement with suppliers.

Key Priorities & Next Steps

2023 will have been the first full year with a dedicated Decarbonisation Team in place within the authority focused on achieving Net Zero Carbon.

Whilst there have been some achievements in delivering the Decarbonisation Strategy prior to this, now there are dedicated officers, there is the required drive to fulfil our objectives at scale and pace. This said, collaboration across all services and with external partners is key to delivery.

Service Area Engagement

Services need to understand their emissions and the role that they need to play in reducing them before meaningful action at the scale and pace required can take place. The Decarbonisation Team have developed baselines for each Service with a view to presenting this information and building understanding so that targeted actions can be agreed, and budgets set. This process will begin as soon as possible, with initial presentations are delivered to senior leaders within each Service, before cascading down through the structure. A plan to engage all levels of each Service will need to be agreed and rolled out as part of this process.

Audit Wales

In November 2022 Audit Wales published an Assurance and Risk Assessment Review for CCBC. This review considered the Decarbonisation Strategy and its delivery and made two recommendations:

R1: The Council should ensure its proposed actions to reach net zero by 2030 are:

- fully costed in terms of their carbon and financial impact to enable it to prioritise actions;
- fully reflected in its Medium Term Financial Plan and Capital Strategy: and
- integrated into Directorate Performance Assessments.

R2: The Council should develop a robust set of metrics to measure and report progress on its decarbonisation journey.

Costed Plan

Costing the Decarbonisation Action Plan requires data from many sources and cuts across multiple areas of work. From three pillars of the Decarbonisation Strategy, tools and studies are being developed to achieve this.

Reduce:

- a) Local Partnerships in collaboration with the WLGA have developed a tool which will cost the decarbonisation of buildings based on internal floor area, current energy consumption etc. This tool, used in conjunction with the work already completed by the Energy Team will enable us to fully cost the programme of decarbonising non-domestic buildings.
- b) Tools to cost the transition to EV for fleet vehicles are being explored through the Optrak project.

Produce:

- a) The Local Area Energy Plan (LAEP) being developed by Carbon Trust, ARUP and Afallen in collaboration with the authority will identify key opportunities to decarbonise the energy system within Caerphilly and provide clarity on the costs of decarbonising homes and other low-regrets decarbonisation measures.

Offset:

- a) The Offset Working Group has commissioned a study to be completed by City Science which will cost the offsetting required to achieve Net Zero Carbon in 2030 based on various scenarios of residual emissions. This will consider the cost to plant trees on land already owned by the authority and also the cost of purchasing land with the intention of planting trees on it.
- b) NRW in collaboration with Data Map Wales have produced shapefile layers of the borough which detail which areas of the borough are best suited for tree planting. This can be used in conjunction with the City Science study/tool to determine the costs of offsetting projects.

A priority for the next year for the Decarbonisation Team is to compile the data from each of these tools and generate a costed version of the Decarbonisation Action Plan which can then be reflected in the authority's financial plans and strategies.

Metrics

The development of baselines for each Service will allow consistent gathering and reporting of data on carbon emissions for the authority. Targeted and measurable actions will be agreed with each Service, with the Outcome/Output recorded in the Decarbonisation Action Plan and reported annually by the Decarbonisation Team. Once Carbon Budgets have been set for each Service, these will be reported on through Directorate Performance Assessments as approved by Cabinet in June 2023.

APPENDIX 2

2023/24 Corporate and Cross-cutting Actions

Key

	Complete		Making reasonable progress
	Making good progress		Not yet started

REF	PROJECT	ACTION	DELIVERY BY	TIMESCALES	OUTCOME/OUTPUT	DELIVERY NOTES	
Page 201	C1	Carbon Emissions for 2022/23.	Identify emissions values via data capture for Scope 1, 2 and 3 emissions as prescribed by Welsh Government.	Decarb Team	Submission Date 4 th September 2023	COMPLETED: CO2 emissions data submitted to WG	-Part of annual WG reporting requirements. -Data collection, calculations and submission to be undertaken by Decarbonisation Team. Report for 2022/23 submitted to Welsh Government
		Establish carbon baselines for individual service areas in line with WG reporting	Identify emissions values via data capture for Scope 1, 2 and 3 emissions. Identify key carbon contributors to the baseline with individual service area responsibility	Decarb Team	31 st March 2023	Individual base line emissions data presented to each service area	-Calculations to be undertaken by Decarbonisation Team. -Presentation to be provided to Leadership Group explaining process, aims and timescales Baselines developed detailing emissions from 2021/22 and 2022/23 Timeline for presentation to services to be agreed
	C3	Establish Carbon Budgets with agreed savings for individual service areas using carbon baseline data	Agree targets for carbon reduction for service areas with corporate management team	CMT & Services co-ordinated by Decarb Team	31 st March 2024	Individual emissions budgets agreed with each service area Phased plan to reduce emissions for each service area	- Once understanding of baselines has been developed, SMART targets for emissions reductions can be set in collaboration with service areas Not yet started
	C4	Establish energy usage patterns across corporate buildings	Analyse energy usage patterns to develop understanding of how network capacity can be	Decarb Team & Property Services	30 th September 2023	Portfolio of corporate building energy use patterns	- Initial data analysis to be completed in partnership with Data

		maximised across all corporate buildings			with detail on available capacity	Science Academy and Cardiff University Project completed establishing usage patterns and energy headroom of corporate buildings where half-hourly energy consumption data was available. Outputs of project to be presented to Reduce Working Group to feed into the Asset Efficiency workstream.
C5	Raise awareness of carbon literacy	Develop carbon literacy approach/program	Decarb Team	30 th September 2023	Accredited carbon literacy training Program for training delivery Decarb champion “train the trainer” network established	Initial cohort of 22 officers have completed carbon literacy training. General awareness raising to form key part of introducing baselines to services Further training to be agreed and rolled out across the authority.
Page 202	Work towards becoming a Carbon Literate Organisation	Obtain a Bronze Carbon Literate Organisation award	Corporate Responsibility	30 th March 2024	(i) Registered training initiative with CLP (ii) Organisational Leader certified as Carbon Literate	- Submit evidence to CLP that requirements for Bronze award have been met Requirements for Bronze CLO award are met but this has not yet been registered with CLP
	Work towards becoming a Carbon Literate Organisation	Obtain a Silver Carbon Literate Organisation award – 15% of workforce Carbon Literate	Corporate Responsibility	31 st March 2025	(i) 15% of workforce Carbon Literate (ii) Carbon Literacy integrated into performance management (iii) Visual promotion of organisation’s carbon literacy (iv) Publication of one-page case study	- Carbon Literacy as a desirable in all job descriptions - Carbon Literacy as part of new starter induction See C5 above

C8	Develop skilled workforce	Complete skills audit to identify skills gaps within workforce	HR/Decarb Team	30 th March 2024	Toolkit for skills assessment Integration into HR portal Integration into My Time Extra	Development of a tool to audit decarbonisation skills ongoing as part of Infuse program experiment. Timescales updated to reflect current resource capacity. HR to be approached to collaborate on the delivery mechanism for the tool
C9	Develop skilled workforce	Develop training programmes with our educational partners to upskill workforce	HR/Decarb Team	30 th September 2024	Development pathway for green skills Integration of green skills into ways of working	See C6 above
C10	All Council Strategic Policy Documents to have decarbonisation at their heart.	Decarbonisation to be incorporated into the Integrated Impact Assessment	Transformation Team	30 th September 2023	Updated IIA which incorporates decarbonisation specifically	- Decarbonisation section of IIA drafted and agreed - Guidance on how to complete IIA developed - Guidance held on Decarbonisation Intranet pages Decarbonisation update to IIA process has been drafted, yet to be agreed.
Page 203	FOSSIL FUEL DIVESTMENT					
C11	Examine opportunities to decarbonise the authority's investments.	Work with pension schemes and managers to reduce investment with fossil fuel based and high emissions businesses.	Corporate approach		25% reduction in carbon exposure relative to the respective benchmark on £1.13bn of its assets (which equates to c. 30% of total assets)	The Wales Pension Partnership (WPP) has now implemented a decarbonisation overlay on all of its equity sub-funds. The WPP launched its Active Sustainable Equity (ASE) sub-fund in June 2023 and the Greater Gwent Fund invested £150m in this product. The WPP is working closely with its advisors in preparing an "All Wales Climate Report" which is intended to highlight the collective exposure of investments and to demonstrate

						<p>decarbonisation progress over many years.</p> <p>The Greater Gwent Fund has continued to selectively invest in renewable energy infrastructure throughout the UK.</p> <p>It should be noted that carbon emissions associated with investments are not reportable as part of organisational emissions and so have no impact on the 2030 targets</p>
--	--	--	--	--	--	--

REDUCE

REF	PROJECT	ACTION	DELIVERY BY	TIMESCALES	OUTCOME/OUTPUT	DELIVERY NOTES
R2	Establish Reduce Working Group	Establish Working Group, Terms of Reference and initial priorities	Decarb Team / Property Services	30 th September 2023	COMPLETED	Working Group established, meeting monthly
R4	Develop actions and delivery plan	Review Reduce section of action plan. Develop and agree new actions and delivery plan	Reduce Group	30 th November 2023		Action plan review is underway and revised/updated plan to be agreed as part of the Annual Report process.
	EXISTING NON DOMESTIC BUILDINGS					
R3	Identify buildings for upgrade works		Energy Team / Reduce Working Group	21 st December 2023		Spreadsheet info – get from minutes
R4	Develop Programme of works for initial delivery of upgrades		Energy Team / Reduce Working Group	31 st March 2024		Priority buildings have begun to be identified for works including LED lighting upgrades etc
R5	Provide energy efficiency training to key building staff.	Provide training on Building energy management systems and good housekeeping techniques.	Property Services	Ongoing		Training is provided on Building Energy Management Services as required. Training is provided to school staff and pupils on energy efficiency methods. Training has been identified for leisure

						services and will be delivered as a group event.
R6	Asset Efficiency	Assess and identify opportunities for portfolio rationalisation	Property Services	Ongoing		Being undertaken as part of Mobilising Team Caerphilly. Social services buildings rationalised as part of phase 1
R7	Agile Working	Review ways of working to allow implementation of the agile working strategy to maximise efficient use of buildings	Property Services	Ongoing		Agile work space created in Ty Penallta Rationalisation of work spaces in Ty Penallta to increase number of teams working from the building e.g. Housing
R8	Community Asset Transfer	Assess and identify opportunities for community asset transfer	Property Services			Being reviewed and considered as part of Mobilising Team Caerphilly
	EXISTING HOUSING STOCK					
R9	Target Energy Pathways and carry out a whole stock assessment	Undertake Target Energy Pathways to each CCBC owned property and formulate a whole stock assessment	Housing	March 31 st 2027		This is in line with WHQS23
Page 205	Optimised Retrofit Programme 3.2	Install energy efficiency measures in sheltered housing schemes.	Housing	Ongoing		Through the Optimised Retrofit Programme we are undertaking a fabric first and PV approach to Maesteg and Oakland to address the cold issues the tenants were experiencing, this is in line with PAS2035. EWI, PV, MVHR's, low energy windows and doors. Renewing the EWI to the defective properties in Panside.
R11	Optimised Retrofit Programme 3.3	Survey properties to be included in next year's Decarbonisation programme	Housing	Ongoing		We are formulating a decarbonisation programme for next year, analysing our EPC data to enable us to look at our least energy efficient properties to improve the thermal performance of them.
R12	Triple Glazing Window Replacement Programme	Improve energy efficiency of Council owned domestic properties through the UPVc	Housing	Ongoing		We are manufacturing our own triple glazing and have an install programme of 84 properties this financial year.

		triple glazing window replacement programme				
R13	Energy Performance Certificates	Survey all CCBC owned homes to establish their energy rating and to identify least energy efficient stock.	Housing	Ongoing		Ongoing
	NEW DEVELOPMENT – HOUSING					
R14	Develop a Development and Governance Strategy that sets out a policy framework to apply to all Caerphilly Homes developments.	Promote and encourage carbon friendly construction methods and a reduction in energy consumption in all new housing development.	Caerphilly Homes		Completed	Cabinet have approved a Development and Governance Strategy. The strategy is to build all new homes using MMC, fabric first principles and build to Building Regulations 2025 as a minimum thereby concentrating on thermal efficiency and ventilation. The strategy sets out an ambition to build to net zero carbon but recognises that reductions in embodied carbon are harder to deliver than operational reductions.
Page 206	Reduce energy consumption in new “Caerphilly Homes” properties.	Introduce new build specifications that aim to minimise heat loss, introduce efficient internal heating systems and reduce overall levels of carbon. Investigate utilising new battery technology to store energy within domestic properties.	Caerphilly Homes			Caerphilly Homes have received planning approval for a 45 later living scheme at Ty Darran, Risca and 92 homes at the former Oakdale School site. All new homes will be built on both sites will be built with energy efficiency and lower costs for customers in mind. A report has been provided by Wilmott Dixon which discusses the ethical sourcing of the materials contained in photovoltaics and batteries together with the recycling options. All new Caerphilly Homes will be built using a fabric first approach and to Building Regulations 2025 standards.
R16	Introduce carbon friendly construction methods in “Caerphilly Homes” new build programme.	Secure partnership arrangement with local steel frame off-site modular build company to build new homes in Caerphilly County borough.	Caerphilly Homes	Ongoing		Caerphilly Homes have a relationship with Caledan, a Ystrad Mynach based company via Willmott Dixon. Caerphilly Homes will shortly be bringing forward a number of smaller sites and

						will seek to introduce a timber frame offer to the development programme.
R17	Implement Modern Methods of Construction	Investigate and develop other off- site modular construction methods (e.g. Timber frame) for use within the Caerphilly Homes new build programme. Work collectively with zoned RSL's to Introduce more modular off site construction techniques to reduce carbon used in construction.	Caerphilly Homes	Ongoing		Caerphilly Homes is part of the All Wales Net Zero Carbon Timber Frame Consortium and will be offering a site to include in an all Wales project shortly. UWHA have opened a new MMC factory in the borough with ambitions to increase the number of homes they build using MMC techniques. Timber frame for the Cwm Ifor developments (R25) were built in UWHA's MMC factory. Welsh Government now incentivises the use of MMC in new developments through the Social Housing Grant programme and, as a result, the Council expects to see an increase in the number of new homes developed using MMC. All new Caerphilly Homes will be built using MMC.
Page 207	Agree a policy for no new fossil fuel heating in Caerphilly Homes new build homes	Move away from traditional fossil fuel heating systems on Caerphilly Homes new builds.	Caerphilly Homes		Completed	Cabinet approved policy of no fossil fuel heating systems to be used on any of Caerphilly Homes new build homes.
	NEW DEVELOPMENT – NON DOMESTIC					
R19	Sustainable Communities for Learning Programme	Ensure all new capital investment for schools support net zero commitments and meet required standards for decarbonisation in the choice of materials, transport and construction techniques.	Sustainable Communities for Learning	Plasy Felin Primary School currently in Planning; Anticipated Completion Date July 2025		Welsh Government have specific requirements and standards for net zero schools – currently net zero operation, however embodied carbon is being considered.
	TRAVEL AND TRANSPORT					
R20	Reduce the number and size of and mileage driven by our fleet vehicles	Undertake review of fleet vehicles with services to understand vehicle usage to enable plan for more efficient use of fleet vehicles	Policy Team/ Fleet Management	31 st January 2024		Being considered as part of Mobilising Team Caerphilly.

R21	Waste collection round re-configurations (route optimisation)	Review current collection routes to assess the feasibility of re-balancing collection routes.	Waste Management	Short/Medium	Lower emissions from waste vehicles	Work has already been undertaken to 'zone' our collection rounds. This approach will see the department adopt a more collaborative and teamwork approach to collections. This has been working in parallel to the route map and waste strategy and fits in well with the decarbonisation agenda as collection routes will be more efficient, travel fewer miles and thus using less fuel.
R22	Reduce the use of petrol and diesel vehicles through the transition to Ultra Low Emission Vehicles	Transition first 100 fleet vehicles to ULEV	Decarb Team/ Fleet Management Services	31 st March 2025		First 14 vehicles in service; Infrastructure is in place; vehicles to be transitioned will be identified through action R23 above.
R23	Home-based vehicle charging solution to enable transition to ULEV	Undertake pilot to agree solutions for home-based vehicle charging	Decarb Team/ Fleet / Housing	July 2024		Optrak study to inform how home-based vehicles could be charged to enable transition to ULEV
R24	Reduce 'grey fleet' work mileage made by staff.	Review Grey Fleet mileage claims. Develop and implement robust travel hierarchy, policies and actions to reduce emissions.	HR / Transformation Team	31 st March 2025		
R25	Reduce travel to work (commuting miles)	Collect and analyse commuting data through use of staff survey to gain understanding of commuting patterns	HR / Decarb Team	31 st July 2024		To be implemented through service area baseline presentations and action plan development
	INFRASTRUCTURE					
R26	Streetlighting Energy Efficiency	Continue with programme of part light lighting in the county borough.	Engineering	Ongoing	Carbon emissions from the energy consumption of streetlighting decreased 18.3% from 2021/22 to 2022/23	LED replacement completed January 2021. Cabinet approved continuation of reduction in street lighting operating hours in November 2022
R27	Material use	Use natural materials where suitable and recycled products	Engineering	Ongoing		Suppliers have begun using lower temperature aggregates for resurfacing

		where possible such as bollards, bins, benches and curbs on street-scene projects.				works. County Surveyors Society (Wales), have engaged with Consultants to produce an all Wales policy to measure and reduce carbon output. The use of recycled materials is something we try to incorporate in all schemes.
	WASTE MANAGEMENT					
R28	Investigate opportunities for reducing waste within the local authority.	Reduce waste collected by the authority, reducing reportable emissions from the collection and disposal of this waste.	Corporate approach/Communications	Ongoing		<p>The Authority has signed up to the Public Sector Waste Minimisation Campaign and to this end provides infrastructure to facilitate recycling for its workforce. It has also recently signed up to the national WARPIT initiative (led by Procurement and FM)</p> <p>A Waste Strategy is in the process of being developed to enhance the sustainable management of its municipal waste arising and in turn attain the statutory targets set by Welsh Government.</p> <p>There is a campaign in place to incentivise participation in the food waste recycling collection service which supplies feedstock for a local anaerobic digestion facility which is providing electricity for 2000 homes.</p>
R29	Digital Offer	Paperless office and operational practices to be introduced through waste management's new digital solution	Waste Management/IT	31 st March 2025		<p>The Authority has committed to introducing a complete digital solution for waste. This will include back office and front-line functionality and capabilities that will allow for more efficient and paperless methods of working.</p> <p>Procurement to conclude w/c 6th November and implementation date is from February 2024. With the help of the</p>

						successful supplier, we hope to be fully digital within 12 to 24 months.
R30	Assess opportunities to collect separately presented recycling	Less contamination and selling direct to market will improve the value chain of our recyclates.	Corporate / Waste Management	Ongoing		Work on-going as part of the Waste Route Map and Strategy to model the performance benefits and outputs of changing recycling service to something more blueprint compliant. With better quality of materials collected and already separately presented items, there will be no depends on a MRF to sort materials and transfer to market for sale and recycling. The Authority will have access direct to markets which will benefit carbon emissions and income generated.

PRODUCE

REF	PROJECT	ACTION	DELIVERY BY	TIMESCALES	OUTCOME/OUTPUT	DELIVERY NOTES
P1	Establish Produce Working Group	Establish Working Group, Terms of Reference and initial priorities	Decarb Team / Regeneration	30 th October 2023		
P2	Develop actions and delivery plan	Review Produce section of action plan. Develop and agree new actions and delivery plan	Produce Group	30 th November 2023		
P3	Review drivers, policies and strategies	Identify and assess local, regional and national strategies related to energy generation.	Produce Group	31 st January 2024		
P4	Establish baseline for renewable energy generation by CCBC	Identify all renewable energy generation across the authority	Produce Group / Decarb Team	30 th November 2023		
P5	Roof mounted PV on council buildings	Install PV systems on suitable council building roofs	Property Services	31 st March 2024	594,863kWh generated 2022/23	63 schemes currently installed on council buildings
P6	Green hydrogen production & use	Undertake feasibility study on opportunities for green hydrogen production and use	Decarb team / Transformation	31 st December 2023		Phase 1 study completed
P7	Cwm Ifor Solar Farm	Undertake work to gain planning approval for solar farm	Transformation Team	31 st March 2024		See separate action plan/OBC

P8	Cwmcarn Forest Drive Hydro-electric Scheme	Reassess design and cost options for hydro-electric scheme	Decarb Team / Regeneration / Property Services	31 st March 2024		
P9	Mine water heating	Review sites and opportunities for mine water heating with Coal Authority	Decarb Team / Caerphilly Homes	31 st March 2024		Coal Authority study highlighting opportunities for mine water to be published November 2023 Initial discussions held on the possibility of a scheme at St Clare's sheltered housing Pontllytyn
P10	Private wire	Evaluate feasibility of hardwire from anaerobic digester to Tredomen Campus	Transformation Team/Property Services	31 st March 2024		
P11	Produce green on shore wind energy.	Undertake feasibility for a wind turbine on Gelligaer Common with the commoners	Transformation Team	31 st March 2024		Initial studies underway
P12	Produce green on shore wind energy.	Discussions with RWE and a decision made on taking a commercial stake in wind farm	Regeneration / Transformation	31 st March 2024		Discussions ongoing

REF	PROJECT	ACTION	DELIVERY BY	TIMESCALES	OUTCOME/OUTPUT	DELIVERY NOTES
O1	Establish Offset Working Group	Establish Working Group, Terms of Reference and initial priorities	Decarb Team / Countryside	30 th June 2023		Working Group established, meeting monthly
O2	Develop actions and delivery plan	Review Offset section of action plan. Develop and agree new actions and delivery plan	Offset Group	31 st July 2023		Offset Pillar Action Plan reviewed, updated and agreed by Working Group
O3	Review drivers, policies and strategies	Identify and assess local, regional and national strategies related to carbon offsetting.	Offset Group	31 st March 2024		Action agreed to be completed internally Overview of policies to be included in external report assessing Caerphilly CBC offsetting requirements – see O6 below

O4	Identify opportunities for afforestation on CCBC land in the county borough.	Review land holding across the authority to identify opportunities for tree planting and habitat management.	Offset Group and Services	31 st March 2024		Ynys Hywel and Parc Cwm Darran identified as sites for 2023/24 planting season Housing sites reviewed and ecological assessments to be completed with a view to be included in the 2024/25 planting programme Tip review for tree planting to be completed, with a plan for planting in 2023/24 planting season to be drafted
O5	Habitat management	Review land holding across the authority to identify opportunities for reintroduction of wetland/grassland habitats Work to reduce active management and revert to natural processes to store carbon and improve biodiversity	Countryside	31 st March 2024		Through the LDP and other initiatives sites are being investigated for re-wetting; grassland restoration is being revisited.
O6	Develop business case for offsetting programme	Collate data, write brief and commission study to produce business case.	Offset Group	31 st March 2024		Study commissioned to assess offsetting requirements for Caerphilly CBC to achieve net zero; residual emissions to be calculated internally
O7	Data Methodology	Investigate improvement of land use carbon emission calculation methodologies, implement accurate methodologies and lobby Welsh Government to improve emissions reporting	Decarb Team	31 st March 2024		WG are developing a data map layer which will provide more accurate assessments of land use type across Wales Discussions have been held with WG regarding how emissions are reported and offset
O8	Data collection	Establish database and mechanism for collating the number of trees planted on CCBC land	Decarb Team	31 st July 2023		Form developed for data collection, to be utilised for all planting to ensure data is held centrally Form has been shared with members of the group and is live

						on the Decarbonisation section of the new intranet
O9	Develop and implement tree planting programme	Develop phased and costed programme of tree planting to achieve target of 300,000 trees by 2030	Decarb Team/Countryside/Parks	31st March 2024		See O6 above
O10	Implementation – Year 1	Implement planting programme for planting season 2021/22	Countryside/Parks/Decarb Team/PSB Partners	31st March 2022	35,000 trees planted	Trees planted at Ynys Hywel Farm
O11	Implementation – Year 2	Implement planting programme for planting season 2022/23	Countryside/Parks/Decarb Team/PSB Partners	31st March 2023	35,000 trees planted	Trees planted at Ynys Hywel Farm
O12	Implementation – Year 3	Implement planting programme for planting season 2023/24	Countryside/Parks/Decarb Team/PSB Partners	31st March 2024	35,000 trees planted	Designs to be completed by end of November 2023 for planting at Ynys Hywel and Parc Cwm Darran
O13	Implementation – Year 4	Implement planting programme for planting season 2024/25	Countryside/Parks/Decarb Team/PSB Partners	31st March 2025	35,000 trees planted	Housing sites identified; ecological studies to be completed by end of October 2023
O14	Implementation – Year 5 -9	Implement planting programme for planting season 2025/26	Countryside/Parks/Decarb Team/PSB Partners	31st March 2026	35,000 trees planted	Not yet started

BUY

REF	PROJECT	ACTION	DELIVERY BY	TIMESCALES	OUTCOME/OUTPUT	DELIVERY NOTES
B1	Establish Buy Working Group	Establish Working Group, Terms of Reference and initial priorities	Decarb Team / Procurement	30 th June 2023	COMPLETED	Working Group established, meeting monthly
B2	Understanding the 22/23 carbon emissions associated with supply chain	Undertake detailed spend analysis with service areas	Decarb Team / Procurement	Phased delivery to be agreed	Assessments completed in partnership with services to understand detail of spends	- Analysis of spend and refinement of data to calculate accurate emissions and develop understanding Analysis of 22/23 spend data from spikes cavell has been completed to align the spend with UK SIC codes used for carbon emissions reporting

						Next step is to have discussions with services as part of baseline presentations
B3		Identify carbon emissions and embodied carbon related to goods and services to prioritise target areas	Decarb Team	Phased delivery to be agreed	Prioritisation of spend categories determined by carbon implications	<ul style="list-style-type: none"> - Utilisation of refined data collected during service area assessments to identify key target areas <p>Top 25% of spend with most carbon emissions has been identified for each service area as part of the work developing carbon baselines</p>
B4	Page 214	Identify key opportunities for intervention within upcoming and existing contracts	Procurement	Phased delivery to be agreed	List/Plan of upcoming contracts List/Plan of existing contracts	<ul style="list-style-type: none"> - Assessment of upcoming contracts matched with identified target areas for carbon reduction - Assessment of existing contracts with opportunity for intervention within contract management <p>Procurement have identified a list of upcoming contracts which might be suitable for this work e.g. Home to School Transport Forward Work Plan is regularly reviewed to identify opportunities. Fortnightly updates with Procurement team</p>
B5		Working with Services	Provide training on the fundamentals of carbon emissions reporting related to goods and services that service areas procure	Decarb Team	Phased delivery to be agreed	<p>All staff with procurement responsibilities to have received training</p> <p>Staff responsible for procurement within service areas understand principles of carbon emissions within goods and services</p> <ul style="list-style-type: none"> - Develop training specific for service areas focused on the key target areas of spend - Agree delivery framework - Agree delivery timeframe <p>Initial awareness raising to form part of the baseline presentations Further guidance and resources uploaded to the Decarbonisation intranet page Further training delivery to be agreed</p>

B6		Provide clarity of understanding of the role of service areas in reducing carbon emissions in procured goods and services	Decarb Team / Procurement	Phased delivery to be agreed	All staff with procurement responsibilities to have received training Staff responsible for procurement within service areas are confident in their role in reducing carbon emissions through procurement	<ul style="list-style-type: none"> - Develop training with an emphasis on pre procurement work, scoping and understanding sensitivities - Agree delivery framework - Agree delivery timeframe <p>Training content and delivery to be agreed</p>
B7	Providing Central Support & Guidance	Develop Decarbonisation approach to Procurement	Procurement / Decarb Team / Buy Group	September 2023	Clear procurement cycle mechanism to consider decarbonisation	<ul style="list-style-type: none"> - Identify effectiveness of current systems including SRAs - Prototype approach with services to identify risks/issues <p>Discussions with other local authorities in South East Wales have identified opportunities for collaboration on and the development of a unified and co-ordinated approach to considering decarbonisation in the procurement cycle</p>
B8		Identify Tools to be used through Procurement Cycle	Procurement / Decarb Team	September 2023	Decarbonisation in Procurement Toolkit specific for CCBC	<ul style="list-style-type: none"> - Review existing toolkits - Identify which tools exist for each section of the procurement cycle - Collate tools into one central toolkit - Include toolkit in Procurement training <p>Various decarbonisation toolkits have been explored. Discussions with other local authorities in South East Wales have identified opportunities for collaboration on emissions toolkits and the development of a unified and co-ordinated approach</p>

B9		Develop standard clauses and requirements including continuous improvement clauses to be included in contracts	Procurement	Phased delivery to be agreed	Continuous Improvement Clauses included new contracts Contract management ensures compliance and improvement	<ul style="list-style-type: none"> - Review PPN for example clauses - Identify route for inclusion of clauses and mechanism for compliance <p>Clauses have been drafted and included in certain contracts. Strategy on wider implementation to be agreed</p>
B10		Research and identify potential funding streams to support low carbon procurement	Procurement / Decarb Team	September 2023 - Ongoing	Portfolio of potential funding streams available to services (and suppliers)	Internal discussions with Business Development team have identified some funding streams that may be available to suppliers



CABINET – 21ST FEBRUARY 2024

SUBJECT: DEMOLITION OF THE FORMER PONTLLANFRAITH COMPREHENSIVE SCHOOL

REPORT BY: CORPORATE DIRECTOR ECONOMY AND ENVIRONMENT

1. PURPOSE OF REPORT

- 1.1 To seek approval to partially reinstate some of the original budget to finalise the demolition and site clearance of the former Pontllanfraith Comprehensive school.

2. SUMMARY

- 2.1 In late December 2023 the contractor alerted property services to two areas of the site where abnormal ground conditions were identified.
- 2.2 The original budget for the demolition was £1.269m agreed by Cabinet on 20th September 2017. In 18/19 £470,000 was released back into capital reserves.
- 2.3 Demolition of the former Pontllanfraith Comprehensive school is required to enable the development of the Centre for Vulnerable Learners and adjoining respite facilities for adult and children.
- 2.4 The demolition commenced in July 2023 and was scheduled for completion in January 2024. The demolition of the buildings are now complete but there are issues relating to the ground clearance that now require additional works resulting in cost increases.

3. RECOMMENDATIONS

- 3.1 That approval is given to allocate a further £310,000 to the demolition and site clearance of the former Pontllanfraith comprehensive school.

4. REASONS FOR THE RECOMMENDATIONS

- 4.1 To enable the safe and effective site clearance required for the current development of the Centre for Vulnerable Learners and future development of the site.

5. THE REPORT

5.1 Pontllanfraith Comprehensive School was vacated at the end of June 2017 following the construction of Islwyn High School.

5.2 The site was identified as a suitable location for the development of the Centre for Vulnerable Learners alongside the development of respite facilities for adults and children.

5.3 The site also contains Pontllanfraith Leisure Centre which most recently has been used as a Mass Vaccination Centre by the NHS and a 3G sports pitch. It was a requirement of the contract to maintain access and operation of these assets throughout the contract which was achieved. **For absolute clarity Pontllanfraith Leisure Centre or 3G pitch is unaffected by this report.**

5.4 Work began on site in July 2023 and was scheduled for completion in January 2024. All buildings on the site have now been demolished.

5.5 In December 2023 the contractor alerted property services to two areas of abnormal ground conditions which were beyond the original scope of the contract but affected the site. The conditions identified are required to be dealt with in order to progress the development of the Centre for Vulnerable Learners.

5.6 The abnormal conditions relate to the discovery of asbestos cement sheets within substructures beneath the original school buildings. These sheets were not identified during the preparatory asbestos survey due to their subterranean location. It was only when the buildings were demolished and site clearance and regrading commenced that the asbestos was identified.

5.7 The presence of the material and the need to remove has been confirmed by a suitably qualified asbestos surveyor within the property team. This surveyor will also oversee the removal in conjunction with colleagues from Health and Safety.

5.8 Conclusion

The abnormal ground conditions could not have been reasonably foreseen however now identified they must be dealt with in a safe, compliant and timely manner in order to progress the development of the Centre for Vulnerable learners.

6. ASSUMPTIONS

6.1 No assumptions have been made in connection with this report.

7. SUMMARY OF INTEGRATED IMPACT ASSESSMENT

7.1 There is no effect on service delivery or services to any members of the public so an IAA is not required for this report.

8. FINANCIAL IMPLICATIONS

8.1 An additional £310,000 is required for the project to be successfully completed. It is proposed that this sum is funded from uncommitted capital reserves.

9. PERSONNEL IMPLICATIONS

9.1 There are no personnel implications associated with this report.

10. CONSULTATIONS

10.1 The views of the listed consultees have been reflected in the report.

11. STATUTORY POWER

11.1 Section 123 of the local government Act 1972 (as amended). Local Government Act 2000. This is a Cabinet function.

Author: Ben Winstanley, Head of Land and Property winstb@caerphilly.gov.uk

Consultees: David Street, Deputy Chief Executive
Mark Williams, Corporate Director for Economy and Environment
Richard Edmunds, Corporate Director of Education and Corporate Resources
Robert Tranter, Head of Legal Services and Monitoring Officer.
Stephen Harris, Head of Financial Services and Section 151 Officer.
Lynne Donovan, Head of People Services.
Sue Richards, Head of Education Planning and Strategy
Liz Lucas, Head of Customer and Digital Services.
Cllr Nigel George, Cabinet Member for Corporate Services, Property and Highways.
Cllr Colin Gordon, Pontllanfraith Ward Member.
Cllr Mike Adams, Pontllanfraith Ward Member.
Cllr Mrs Patricia Cook, Pontllanfraith Ward Member.

Background Papers:

[Link to the original Cabinet report 20th September 2017 - Demolition of Oakdale and Pontllanfraith Comprehensive Schools.pdf \(caerphilly.gov.uk\)](#)



CABINET – 21ST FEBRUARY 2024

PUBLIC INTEREST TEST - EXEMPTION FROM DISCLOSURE OF DOCUMENTS SCHEDULE 12A LOCAL GOVERNMENT ACT 1972

**SUBJECT: PRIVATE WIRE ARRANGMENT BETWEEN BRYN GROUP AND
CCBC**

REPORT BY: HEAD OF LEGAL SERVICES AND MONITORING OFFICER

I have considered grounds for exemption of information contained in the report referred to above and make the following recommendations to the Proper Officer:-

EXEMPTIONS APPLYING TO THE REPORT:

Paragraph 14 – information relating to the financial or business affairs of any particular person or company (including the authority holding that information).

FACTORS IN FAVOUR OF DISCLOSURE:

There is public interest in the way that a council makes decisions on its green energy projects.

PREJUDICE WHICH WOULD RESULT IF THE INFORMATION WERE DISCLOSED:

The report contains details of confidential information relating to the financial details of the parties involved and the various options available to the council. The final business case on the project is awaited and negotiations between the parties have yet to be concluded.

MY VIEW ON THE PUBLIC INTEREST TEST IS AS FOLLOWS:

My view on the Public Interest Test is that whilst there is a need to ensure transparency and accountability of the council in its involvement with the development of this site, this must be balanced against the fact that the report contains confidential financial and business information relating to the parties involved. Negotiations between the parties have yet to be concluded and the final business case is still awaited. It is considered that these factors outweigh the need for the information being made public at this stage.

On that basis I feel that the public interest in maintaining the exemption outweighs the public interest in disclosing the information. Members are asked to consider these factors when determining the public interest test, which they must decide when considering whether to exclude the press and public from this part of the meeting.

RECOMMENDED DECISION ON EXEMPTION FROM DISCLOSURE:

On that basis I feel that the public interest in maintaining the exemption outweighs the public interest in disclosing the information, and that the report should be exempt.

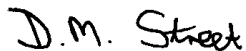


Signed:

Dated: 7.2.24

Post: **Head of Legal Services and Monitoring Officer**

I accept the recommendation made above.



Signed:

Proper Officer

Date: 07.02.24

Agenda Item 13

By virtue of paragraph(s) 12 of Part 1 of Schedule 12A
of the Local Government Act 1972.

Document is Restricted

This page is intentionally left blank

By virtue of paragraph(s) 12 of Part 1 of Schedule 12A
of the Local Government Act 1972.

Document is Restricted

This page is intentionally left blank

By virtue of paragraph(s) 12 of Part 1 of Schedule 12A
of the Local Government Act 1972.

Document is Restricted

This page is intentionally left blank