



TO THE CHAIRMAN AND MEMBERS OF THE **OVERVIEW AND SCRUTINY COMMITTEE**

You are hereby summoned to attend a meeting of the Overview and Scrutiny Committee to be held on Monday, 26 February 2018 at 7.00 pm in the Council Chamber - Civic Offices.

The agenda for the meeting is set out below.

RAY MORGAN
Chief Executive

NOTE: Filming Council Meetings

Please note the meeting will be filmed and will be broadcast live and subsequently as an archive on the Council's website (www.woking.gov.uk). The images and sound recording will also be used for training purposes within the Council. Generally the public seating areas are not filmed. However by entering the meeting room and using the public seating area, you are consenting to being filmed.

AGENDA

PART I - PRESS AND PUBLIC PRESENT

Part I - Press and Public Present

1 Minutes

To approve the minutes of the meeting of the Committee held on 22 January 2018 as published.

2 Urgent Business

To consider any business that the Chairman rules may be dealt with under Section 100B(4) of the Local Government Act 1972.

3 Declarations of Interest

To receive declarations of disclosable pecuniary and other interests from Members in respect of any item to be considered at the meeting.

Matter for Determination

4 Work Programme (Pages 3 - 18)

Reporting Person: Councillor I Johnson

Performance Management

5 Performance and Financial Monitoring Information

To consider the current publication of the Performance & Financial Monitoring Information (Green Book).

Reporting person: Councillor I Johnson

Presentation

6 Woking 2050 and Climate Change Agenda Update (Pages 19 - 44)

Reporting Person: Tracey Haskins and Lara Beattie

Matters for Scrutiny

7 Waste and Recycling Contract - Update

To review the performance of the new waste and recycling contract.

Reporting Person: Matt Smyth

8 Air Quality Monitoring (Pages 45 - 90)

To receive a report on the Council's activities in respect of air quality monitoring.

Reporting Person: Emma Bourne

Matter for Consideration

9 Basingstoke Canal Proposals Update (Pages 91 - 106)

To receive and consider the updates on the proposals for Basingstoke Canal.

Reporting Person: Ray Morgan

AGENDA ENDS

Date Published - 14 February 2018

For further information regarding this agenda and arrangements for the meeting, please contact Julie Bone, Democratic Services Officer



Mixed Sources

Product group from well-managed forests and other controlled sources

www.fsc.org Cert no. SA-COC-001794
© 1996 Forest Stewardship Council



WOKING BOROUGH COUNCIL

Overview and Scrutiny

Work Programme

**CIVIC OFFICES
GLOUCESTER SQUARE
WOKING GU21 6YL
01483 755855
www.woking.gov.uk**

INTRODUCTION TO WOKING BOROUGH COUNCIL'S OVERVIEW AND SCRUTINY WORK PROGRAMME

This Overview and Scrutiny Work Programme is published with the purpose of assisting the Council in its overview and scrutiny role. The Work Programme is published in five sections as follows:-

- Section A – Details items for consideration at future meetings of the Overview and Scrutiny Committee.
- Section B – Outlines the proposed topics for future review by Woking Borough Council.
- Section C – Provides the latest version of the Council's Forward Plan, showing all changes to the Forward Plan since last considered by the Committee. Key decisions to be taken by the Executive are identified by an asterisk in the left hand column.
- Section D – Sets out the topics identified for pre-decision scrutiny.
- Section E – Lists the current Task Groups, including Membership details, resource implications and purpose of the reviews.

The Work Programme is designed to assist the Council with its overview and scrutiny role by providing Members with an indication of the current workload, subjects to be considered for review and items which the Executive expects to consider at its future meetings, so that matters can be raised beforehand and/or consultations undertaken with a Member of the Executive prior to the relevant meeting.

Any published reports (with the exception of confidential information) can be viewed at the Civic Offices, or are available on the Council Web site (www.woking.gov.uk). A notice setting out the outcome of the meeting will be available following the relevant meeting. For further details contact Members Services on 01483 743863 or e-mail memberservices@woking.gov.uk.

Chairman

INDEX

Section	Page No.
Section A – Activity Plan	5
Section B – Proposed Review Topics	No topic suggestions received
Section C – Annual Forward Plan	11
Section D – Pre-Decision Scrutiny	No items proposed
Section E – Current Task Groups	15

The Committee

Chairman: Councillor I Johnson

Vice-Chairman: Councillor K Davis

Councillor H J Addison

Councillor J Kingsbury

Councillor A-M Barker

Councillor R Mohammed

Councillor J Bond

Councillor M I Raja

Councillor G G Chrystie

Councillor C Rana

Officers

Corporate Management Group

Chief Executive:

Ray Morgan

Deputy Chief Executive:

Douglas Spinks

Strategic Director

Sue Barham

**Head of Democratic & Legal Services/
Monitoring Officer**

Peter Bryant

Chief Finance Officer

Leigh Clarke

Section A

Committee's Approved Activity Plan Matters For Future Consideration

Overview and Scrutiny Committee Meeting – 26 March 2018

Decision to be Taken	Consultation	Background Documents	Contact Person
Matters for Determination			
Work Programme – The Committee to receive the updated Work Programme.	None	None	Frank Jeffrey
Performance Management			
Performance & Financial Monitoring Information – The Committee to consider the current publication of the Performance & Financial Monitoring Information (Green Book)	None	None	Cllr I Johnson
Presentations			
Presentation by the Surrey Heathland Partnership	None	None	Cllr I Johnson
Countryside Access	None	None	Tracey Haskins
Matters for Consideration			

Affordable Housing Proposal	None	None	Cllr I Johnson/ Ray Morgan
Safer Woking Partnership – Community Safety Plan – The Police and Justice Act 2006 gave local authorities responsibility for considering crime and disorder matters. In 2010 the Committee agreed that the Safer Woking Partnership Plan would be brought forward annually for scrutiny.	None	None	Camilla Edmiston
Annual Report of the Overview and Scrutiny Committee – To agree the annual report on the activities of the Committee and its Task Groups for submission to Council.	None	None	Cllr I Johnson
Matters for Scrutiny			
Preparations for Brexit. This piece of work will explore potential impact of Brexit on the services and activities of the Borough Council and where there are opportunities for the Council to influence national policy previously set by the EU.	Officers	None	Cllr K Davis
Task Group Updates			
Housing Task Group Update.	None	None	Cllr I Johnson
Economic Development Task Group Update.	None	None	Cllr I Johnson
Finance Task Group Update.	None	None	Cllr G Chrystie

Overview and Scrutiny Committee Meeting – 21 May 2018

Decision to be Taken	Consultation	Background Documents	Contact Person
Matters for Determination			
Election of Chairman – To elect the Chairman of the Committee for the 2018/19 Municipal Year.	Selection Panel	None	Frank Jeffrey
Appointment of Vice-Chairman – To appoint the Vice-Chairman of the Committee for the 2018/19 Municipal Year.	Selection Panel	None	Frank Jeffrey
Working Groups and Task Groups – To appoint Members to the Working Groups and Task Groups within the Committee's remit.	Selection Panel	None	Frank Jeffrey

Overview and Scrutiny Committee Meeting – 18 June 2018

Decision to be Taken	Consultation	Background Documents	Contact Person
Matters for Determination			
Work Programme – For the Committee to receive the updated Work Programme.	None	None	Frank Jeffrey
Performance Management			
Performance & Financial Monitoring Information – For the Committee to consider the current publication of the Performance & Financial Monitoring Information (Green Book)	None	None	Cllr I Johnson
Presentations			
Network Rail – Rail Track Modifications. Representatives of Network Rail to be invited to discuss their plans for rail link modifications and the stations within the Borough, together with timescales.	None	None	Douglas Spinks
South Western Railways – New Franchise. Representatives of South Western Trains to be invited to discuss their plans for the rail links through Woking.	None	None	Douglas Spinks

Matters for Consideration			
Overview of Complaints Received – Six Monthly Review – To consider the details of those complaints received since 1.1.18.	None	None	Peter Bryant
Task Group Updates			
Economic Development Working Group Update. To receive an update on the work of the Economic Development Task Group following its meeting on 28 March 2018.	None	None	Cllr I Johnson

Overview and Scrutiny Committee Meeting – 16 July 2018

Decision to be Taken	Consultation	Background Documents	Contact Person
Matters for Determination			
Work Programme – For the Committee to receive the updated Work Programme.	None	None	Frank Jeffrey
Performance Management			
Performance & Financial Monitoring Information – For the Committee to consider the current publication of the Performance & Financial Monitoring Information (Green Book)	None	None	Cllr I Johnson

Section C

Latest Version of the Annual Forward Plan

The Forward Plan gives an indication of the decision to be taken by the Executive. Published monthly, the Forward Plan has traditionally given an indication of the decisions to be taken over the following four months. Whilst still published monthly, the Forward Plan in this work programme will show the decisions to be taken over the coming twelve months.

22 March 2018

Key Decision	Subject	Decision to be Taken	Consultation (Undertaken prior to the meeting unless otherwise stated)	Background Documents	Contact Officer
	Parking Standards Supplementary Planning Document (SPD)	To note the analysis of various responses to the consultation on the Parking Standards and to recommend to Council the adoption of the Parking Standards SPD for the purposes of managing development across the Borough.	Portfolio Holder, Local Development Framework Working Group.	Woking Core Strategy. National Planning Policy Framework. Parking Standards Supplementary Planning Document (SPD) – July 2006.	Douglas Spinks

	Self-build and Custom Housebuilding Guidance Note	To note the analysis of the various responses to the consultation on the Self-build and Custom Housebuilding Guidance Note and to recommend to Council to adopt the Guidance Note to provide advice to those who wish to acquire serviced plots for self build and custom housebuilding.	Portfolio Holder, Local Development Framework Working Group.	1. Self-build and Custom Housebuilding Act (2015) 2. Self-build and Custom Housebuilding (Register) Regulations 2016 3. Housing and Planning Act 2016 4. Development Management Policies Development Plan Document (DPD)	Douglas Spinks
	Update of Financial Regulations	To update the Council's Financial Regulations.	Portfolio Holder.	None.	Leigh Clarke
	Update of Contract Standing Orders	To update the Council's Contract Standing Orders.	Portfolio Holder.	None.	Peter Bryant
*	Homelessness Reduction Act - Implications arising from its implementation	To seek approval to new and amendment of existing Policies and Practices as maybe necessary to enable the Homelessness Reduction Act 2017 to be implemented	Housing Task Group, Portfolio Holder and colleagues.	Homelessness Reduction Act 2017, DCLG - Homelessness Code of	Sue Barham

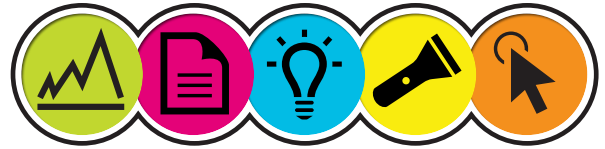
		successfully.		Guidance for LAs.	
*	Hoe Valley Flood Alleviation and Environmental Enhancement Scheme	Authorisation to release remaining funds to allow scheme to be constructed.	Portfolio Holder.	None.	Douglas Spinks
	Regulation of Investigatory Powers Act 2000 - Annual Monitoring Report	To receive details of RIPA authorisations during 2017 calendar year.	Portfolio Holder.	None.	Peter Bryant
	Performance and Financial Monitoring Information	To consider the Performance and Financial Monitoring Information contained in the Green Book.	Portfolio Holder.	None.	Ray Morgan
	Contaminated Land Strategy Review Report and Future Funding	To receive the Contaminated Land Strategy Review Report and the requirements for future funding of desk top studies and site investigations. (The press and public will be excluded from the meeting during consideration of this item in view of the nature of the proceedings that, if members of the press and public were present during this item, there would be disclosure to them of exempt information as defined in paragraph 3 of Part 1 of Schedule 12A, to the Local Government Act 1972.)	Portfolio Holder.	None.	Ian Tomes

Section E

Current Task Groups Responsible to the Committee

The table below provides a list of current Task Groups established by the Committee, including an indication of the resource requirements and the anticipated completion date. Updates on the progress of individual Task Groups are included elsewhere on the Committee's agenda.

Task Group	Topic	Membership	Resources	Date Established	Anticipated Completion Date
Economic Regeneration Task Group	To identify and seek the implementation of measures to mitigate the impact of the economic downturn on the residents, community organisations and businesses in the Borough of Woking.	Cllrs Addison, Ali, Barker, Chrystie, Hussain, Johnson and Kingsbury.	Officer and Councillor time.	11.03.09	
Standing Finance Task Group	To review Financial issues as and when identified by the Committee. Financial Performance of the Council Management and Administration of Accounts procurement Strategy, Pension fund, Financial Strategy.	Cllrs Bond, Chrystie, Davis, Hughes, Morales, Pengelly and Rana.	Officer and Councillor time.	25.05.06	Ongoing
Standing Housing Task Group	To review Housing issues as and when identified by the Committee, including Housing Strategy, Housing Business Plan, Housing Service Plans, Housing Revenue Account, Housing Conditions, Housing Needs, Private Sector Housing, Home Improvement Agency, Housing and Council Tax Benefits, and monitor/review progress of the PFI Scheme	Cllrs Addison, Aziz, Barker, Bridgeman, Harlow, Johnson and Mohammad.	Officer and Councillor time.	25.05.06	Ongoing



A councillor's workbook on acting on climate change



Contents

Introduction	3
Why does this agenda matter?	4
What is the role of councils?	5
What are the opportunities?	7
Economy	7
Housing and planning	8
Environment and transport	9
Health and social care	10
Finance	11
A final word	13
Appendix – sources of further information	14

Introduction

This workbook is a learning aid for councillors on the roles, opportunities and drivers for council-led action on the changing climate, both to reduce local carbon emissions and to build resilience to extreme weather. It sets out the benefits for local people and places – lower bills, opportunities to generate income, and how to avoid some of the damage costs from weather events.

It is relevant to all councillors at ward level – but also touches on some of the key opportunities in portfolio area. Further information can be obtained from the Local Government Association's (LGA) resources on key services for building resilience: flooding, energy efficiency and transport.

The workbook can be used as a standalone learning aid or alongside other material you may cover such as e-learning modules or sessions within your own council. As such, the workbook should serve more as a direction marker rather than a road map. The important thing is to think about the issues presented in the workbook, their relevance to your local setting, the people you serve and the council as a whole.

This workbook includes a number of features designed to help you think about the role that you and your council can play in creating a low carbon, climate-resilient community. It includes key facts, case studies and questions to help prompt your thinking on key areas:

- why the agenda matters
- the role you and your council can play, particularly around leadership in this area
- the opportunities for taking action, focusing on:
 - the economy
 - housing and planning
 - environment and transport

- health and social care
- finance.

In working through the material contained in this workbook you will encounter a number of features designed to help you think about your role in chairing meetings. These features are represented by the symbols shown below:



Guidance – this is used to indicate guidance, research, quotations, explanations and definitions that you may find helpful.



Challenges – these are questions or queries raised in the text which ask you to reflect on your role or approach – in essence, they are designed to be thought-provokers.



Case studies – these are 'pen pictures' of approaches used by councils elsewhere.



Useful links – these are signposts to sources of further information that may help with principles, processes, methods and approaches. A full list of useful additional information and support is also set out in the appendices to the workbook.

Why does this agenda matter?

Action to cut carbon and increase resilience can save councils thousands of pounds on their energy bills while also avoiding millions of pounds of future costs that will be incurred if no adaptive actions are taken.

There are also economic benefits in providing low cost energy infrastructure for local businesses, and the potential for innovation in new technologies to provide a low carbon future.

Councils can work to ensure that their area benefits as much as possible from employment in this sector. Further economic benefits will accrue from helping people without jobs or on low incomes to heat homes affordably, freeing up spending power for other goods and services.

With energy bills on the increase, fuel poverty is also rising, and this costs the NHS around £1.4 billion a year. Tackling the causes of fuel poverty, rather than the symptoms, will result in this bill being reduced, making economic sense as well as increasing wellbeing.

There are also opportunities to avoid future costs by improving the resilience of council services to withstand the future climate – hotter, drier summers and greater risk of flooding.

Low carbon and renewable energy activities generated £43.1 billion turnover in 2015, accounting for 1.3 per cent of total UK non-financial turnover¹.

LGA research showed that recent winter flooding caused damage to infrastructure such as bridges, road and drains in excess of £250 million²

The economic cost to the Leeds City Region from the December 2015 floods was estimated to be in excess of £0.5 billion.³

The Committee for Climate Change, an advisory body to Government, noted that while UK emissions fell 6 per cent in 2016 and are down 19 per cent since 2012, this progress has been dominated by the power sector. Carbon dioxide emissions from transport and buildings rose in 2015 and 2016.⁴



Case study Northamptonshire County Council

The council has produced a flood toolkit for local residents and businesses. It brings together relevant information in one location, including flood risk maps, step-by-step guides on what to do during different stages of flooding – from preparation to recovery, community resilience guides and education packs for primary schools.

1 UK environmental accounts: Low carbon and renewable energy economy survey, final estimates: 2015, ONS April 2017

2 <https://www.local.gov.uk/about/news/press-release-winter-flooding-nearly-ps250-million-damage-caused-roads-and-bridges-new>

3 Leeds City Region Flood Review Report: <https://www.westyorks-ca.gov.uk/uploadedFiles/Content/News/Leeds%20City%20Region%20Flood%20Review%20Report%20-%20Executive%20Summary%20FINAL.pdf>

4 2017 Report to Parliament – Summary and recommendations, Committee for Climate Change

What is the role of councils?

Councils can play a significant role in realising the benefits and opportunities of climate action in their area. They are ideally placed to bring agendas together to ensure 'win-win' outcomes for the local community.

In this sense climate action is not a 'new' or 'different' agenda.

Coordinating action to retrofit homes, for example, can help address fuel poverty, create local jobs, cut carbon and make homes more resilient to the effects of severe weather.

Leadership

Councils have an important leadership role in creating low carbon and climate-resilient communities. Individual councillors also have an important leadership role. This role includes:

- offering vision and direction to local groups, and building support for that vision
- identifying and advocating opportunities to mainstream ownership and responsibility for climate action across the council
- participation in plan making and decisions on climate action
- representing local level concerns and perspectives to the council and other important local organisations
- encouraging and empowering residents and businesses to participate and act
- brokering agreements between different interests and partners, working across sectors to facilitate and encourage coordinated action.



What is climate leadership?

- demonstrating leadership within the council, developing a vision and mainstreaming ownership and responsibility
- communication and engagement, listening and engaging with the community
- establishing partnerships for action
- making things happen, eg supporting local energy projects actively championing flood defence measures
- representing: advocating for change at national, regional and local levels, looking after the interests of the vulnerable
- empowering communities: providing support, funding, information and capacity
- transparency and accountability about goals, actions and progress against targets.

Councils have significant scope to influence emissions in residential buildings, surface transport and waste, which together account for 31 per cent of UK greenhouse gas emissions⁵.

⁵ 2015 UK Greenhouse gas emissions: final figures – statistical summary, BEIS



Challenge 1

(a) What are the opportunities for showing leadership on climate action in your council area?

(b) What ward-level priorities could council action to create low-carbon, climate-resilient communities help address?

(c) What local organisations can you work with to help realise opportunities within your ward?

(d) What obstacles to action are there? How can they be overcome?

(e) What questions should I ask of my council decision-makers to help achieve change?

What are the opportunities?

Economy

Councils can work in a wide variety of ways to support the growth of a low carbon economy and ensure that businesses are less vulnerable to the impacts of climate change, delivering huge economic, social and environmental benefits.

Key opportunities include:

- supporting local economic growth through the development of a low carbon economic strategy that identifies local opportunities and supports the development of local jobs, knowledge and infrastructure
- helping local businesses to cut costs and increase competitiveness by working with them to cut energy, water and resource use
- boosting local employment by ensuring that practical training opportunities are provided in local colleges, including in energy assessment and the installation of solar panels.

Councils and local enterprise partnerships (LEPs) are already engaged in a wide range of action to promote the low carbon economy – with the new freedoms available under the ‘general power of competence’ offering huge scope for action



Case study

Peterborough Council’s energy services company ‘Blue Sky Peterborough Ltd’ is generating renewable energy and reducing energy consumption while generating income and creating financial benefits for the community⁶.



Challenge 2

How will your local economy be affected by the changing climate?

How can the council improve local resilience and support local businesses to plan for extreme weather?

What are the strengths, opportunities and natural advantages for developing the low carbon sector in your ward and the wider local area?

What could you do to support low carbon activity in your ward?

⁶ <https://www.local.gov.uk/saving-through-energy>

Housing and planning

There are major opportunities for councils to support local growth and improve people's lives by making improvements to the local housing stock, setting the framework for development in local plans and by working with local partners to support those most vulnerable. These include:

- saving money for the council and local people by ensuring that local homes, businesses and public buildings use energy and water efficiently
- helping the most vulnerable by understanding who is most at risk from fuel poverty and the impacts of extreme weather such as flooding, over-heating and cold
- boosting the local economy by creating new demand for low-carbon and resilient goods and services and helping to make places safer to invest in
- generating income for the council: making the most of the council's natural resources and assets to generate power.



Case study Kirklees Council

Affordable heat for all

The council is working to ensure all residents can afford to heat their homes. More than 50,000 homes have been improved to-date. Total benefits by 2050 are estimated to be £250 million from an initial investment of £11 million from the council plus £10 million from the energy suppliers.



Case study Islington Council

The Council's Bunhill Heat and Power Network uses heat created as a byproduct of generating electricity to heat homes, the baths and leisure centres making it more efficient, cheaper and greener. It is bringing cheaper energy to over 700 homes⁷.

⁷ <https://www.islington.gov.uk/energy-and-pollution/energy/bunhill-heat-network>



Challenge 3

How will your local economy be affected by the changing climate?

How will your local area be affected by the changing climate and what impacts could this have on local homes and businesses?

(b) What policies are in place to:

- ensure new development is low carbon?
- encourage renewable energy generation?
- ensure new development is resilient to climate impacts like flooding, heat wave, or reduced water availability?
- encourage existing buildings to be retrofitted with measures that cut carbon and increase resilience?

(c) How could you and the council work with community organisations within the area to ensure communities are primed to take advantage of funding to install energy saving measures, for example support from energy companies for people on low incomes?

Environment and transport

Councils can improve local health and well-being and encourage inward investment by promoting sustainable transport and a clean environment. Many measures can also provide low cost protection from extreme weather events.

Opportunities include:

- building the resilience of your own estate through appropriate tree planting, water harvesting, use of sustainable drainage and natural shading
- using the planning system to reduce the need to travel and promote cycling, walking and public transport
- promoting green and blue infrastructure by supporting investment natural solutions that will help protect against extreme weather events.



Case study Devon County Council

Building community resilience

The council worked in partnership with Plymouth City Council, Torbay Council and the Environment Agency to implement a package of measures to improve local resilience in 24 communities, including establishing and training volunteer 'Flood Warden' groups.

<https://new.devon.gov.uk/floodriskmanagement/flood-resilience/>



Case study Stroud District Council

Rural sustainable drainage project

The council is working with local community flood groups, land owners, farmers and partner organisations to implement a range of measures that will reduce flood risk but also improve water quality and enhance the biodiversity of the streams, brooks and the wider River Frome catchment.

<https://www.stroud.gov.uk/environment/flooding-and-drainage/stroud-rural-sustainable-drainage-rsuds-project>



Case study Bristol City Council – promoting active travel

Bristol are seeking to make trips by bike the natural choice for their increasing number of commuters in order to tackle congestion and reduce emissions. Bristol have committed to:

- consulting on shared use routes; to resolve some of the key issues they are focusing on delivering segregated infrastructure for cyclists wherever possible
- improving legibility in shared use areas to make it clearer to those on bike and foot
- delivering improved on-street cycle parking, plus up to 20 new on street cycle hangars for residents who have difficulty parking their bike at home
- working closely with the Access Fund to ensure the promotion of new infrastructure to employees, schools and the wider community through new residential developments and their developed network of community groups
- providing loan bikes, cycle training and route planning
- working closely with planning colleagues to ensure that new cycling infrastructure is included in developments.



Challenge 4

a) What impacts could the changing climate have on the natural environment in your ward including local parks and green spaces, coastlines and rivers?

What local transport systems might be vulnerable to climate change in your area and what is being done to increase resilience?

What are the main sources of transport emissions in your area and how are these changing? How could these emissions be cut?

d) How are you engaging with the council and the community to encourage cycling and walking?

Health and social care

There are major opportunities for councils to support local growth and improve people's lives and their health by making improvements to the local housing stock, setting the framework for development in local plans and by working with local partners to support the most vulnerable.

These include:

- helping households save money on their energy bills and keep warm by improving the energy efficiency of local homes
- helping the most vulnerable by identifying those most at risk from the impacts of extreme weather such as flooding, over-heating and cold
- working with partners to promote active, healthy lifestyles and to refer those at risk of fuel poverty to sources of help.



Case study

Liverpool Council's Healthy Homes

team provide free help and advice to local people who are struggling to pay their energy bills and heat their homes. The team operate from GP surgeries, hospital discharge wards and also provide advice on benefits. <http://liverpool.gov.uk/council/strategies-plans-and-policies/housing/healthy-homes-programme/healthy-homes-what-we-do/>

The proportion of households in England in fuel poverty in 2015 was estimated at 11.0 per cent. Levels are highest for people living in privately rented homes⁸.

8 Annual Fuel Poverty Statistics Report 2017, BEIS



Challenge 5

How will your area be affected by the changing climate and what impact could this have on local health and health services? Are any health services or facilities particularly vulnerable?

Who is most vulnerable to extreme weather events in your ward? For example, are there older people's homes which may be vulnerable to increased flood-risk, heat waves or cold?

What impact could hotter temperatures have on local air quality and how could this affect local health?

How many households in your ward are in fuel poverty? What measures can be taken to reduce this number?

Finance

Reducing energy use and avoiding damage costs from extreme weather like flooding makes real financial sense for councils.

Opportunities include:

- direct cost savings: through initiatives to reduce the council's use of energy and water and to minimise waste. Potential savings for low cost, quick payment energy efficiency measures range from £60,000 to £2.4 million a year for an individual council⁹
- income generation: by investing in revenue-generating technology such as microgeneration and decentralised energy, and creating public-private partnerships to minimise risk, maximise investment and boost returns
- pooling resources: working in partnership with others, sharing services and increasing your purchasing power
- external funding: maximising opportunities to bring in investment through external funding mechanisms
- protection from future costs: making sure you area is prepared to manage future weather-related costs such as the repair and clear-up from flooding and storm damage.



Case study Northumberland Council

The council worked with the Environment Agency to jointly deliver a £27 million flood alleviation scheme including a dam, upstream storage area and other flood protection measures to reduce flood risk to around 1,000 properties in Morpeth.

⁹ <https://www.local.gov.uk/sites/default/files/documents/download-potential-energy-9f8.pdf>



Case study Woking Borough Council

Generating income

Thameswey Energy Ltd (TEL) is an energy company owed by Woking Council. It was set up in May 2000 to build and operate an energy station in Woking town centre. TEL provide low carbon heating, cooling and electricity to buildings within Woking Town Centre, including the Civic Offices and has over 170 business and domestic customers who purchase their electricity and heat from the company's energy stations.



Challenge 6

a) What impacts could the changing climate have on the natural environment in your ward including local What are the opportunities to save your council money (and reduce carbon emissions) by becoming more energy, water and resource efficient?

What are the opportunities for boosting income through local energy generation or other environmental infrastructure?

Is your council planning now to reduce the costs of future climate impacts in your ward and the wider area? Are planning policies in place to reduce the cost of future flood events and reduce insurance costs

A final word

Action to create low carbon and climate-resilient communities can yield significant opportunities for councils and their communities. Coordinated action can help the deliver on a range of local priorities, improving health outcomes, saving the council money, creating jobs, boosting the local economy, enhancing the natural environment and strengthening local transport systems.

It is up to individual councillor to have the vision, commitment and drive to help the local area realising these benefits and opportunities of climate action in their area.



Challenge 7

a) What impacts could the changing climate have What three things will you do after completing this workbook to help your local community seize the opportunities that local climate action can bring?

1

2

3

Appendix – sources of further information

Further information

Climate Local is local government initiative to drive, inspire and support council action on carbon reduction and climate resilience, and support networking between councils. It was launched in June 2012 and provides an opportunity for councils to sign-up and make a public commitment to tackle climate change.

More information about Climate Local can be found on the LGA website www.local.gov.uk/topics/environment-and-waste/climate-change

Useful links

Carbon Trust

Tools, guidance and support for measuring and reducing carbon emissions.

Energy Savings Trust

Information on the energy saving, district heating, local housing and strategic energy planning.

Climate Change Risk Assessment

National climate change risk assessment with links to regional summaries.

Cabinet Office

General advice, resources and toolkits for improving community resilience.

Local Climate Impacts Profile

An online tool to help local areas assess the impacts of current weather events, available from the Environment Agency's Climate Ready support service.

The potential for energy efficiency and renewable energy, LGA

<https://www.local.gov.uk/sites/default/files/documents/download-potential-energy-9f8.pdf>

Useful websites

LGA resources on flooding

www.local.gov.uk/topics/civil-emergencies/flooding

www.carbontrust.com/resources

www.energysavingtrust.org.uk

www.cabinetoffice.gov.uk/content/community-resilience

LGA resources on transport

<https://www.local.gov.uk/topics/transport>

<https://www.local.gov.uk/tackling-congestion>

<https://www.local.gov.uk/lga-survey-member-highways-authorities-cycling-and-walking>



Local Government Association

Local Government House
Smith Square
London SW1P 3HZ

Telephone 020 7664 3000
Fax 020 7664 3030
Email info@local.gov.uk
www.local.gov.uk

© Local Government Association, October 2017

For a copy in Braille, larger print or audio,
please contact us on 020 7664 3000.
We consider requests on an individual basis.

Climate Local: Acting on Climate Change

Ward Councillor workbook

Workbook Questions

Section 1: The role of Councils

- a. What are the opportunities for showing leadership on climate change in your council area?
- Long term commitments on climate change and sustainability as demonstrated through [Woking 2050](#) and long term action plans.
 - Information and advice available on the web, including copies of the Strategy and Action Plan.
 - Councillor leadership and commitment as demonstrated through the cross-party Climate Change Working Group which has been in place since 2002 when the Strategy was first adopted.
 - Partnership working with local businesses and voluntary groups such as Action Surrey, Woking Chamber and LA21.
 - Supporting local initiatives that contribute to a sustainable Woking.
 - Signposting to information, advice and funding e.g. through Action Surrey.
 - Leading by example – Woking Borough Council has been recognised as a leader in this area of work e.g. Beacon Council for Tackling Climate Change; Promoting Sustainable Communities; Sustainable Energy.
 - Continued commitment to a sustainable Woking through a revised Strategy – Woking 2050.
 - Encouraging participation in schemes such as recycling; food waste collections; using sustainable transport.
 - Including requirements to support the Council's Woking 2050 objectives in the procurement of all major contracts.
- b. What ward-level priorities could council action to create low-carbon, climate-resilient communities help address?
- Priorities may vary depending on the location / demographic profile of the ward.
 - Action could include identifying vulnerable people that could be at risk of fuel poverty or heatwaves.
 - Supporting flood alleviation projects that could protect houses from flood events e.g. the flood alleviation works in the Hoe Valley.
 - Supporting new low-carbon development e.g. Brookwood Farm development.
 - Encourage uptake of energy efficiency and renewables by residents through Action Surrey. This would assist residents in making their homes more efficient and in reducing energy consumption and expenditure.
 - Encourage sustainable transport. Signpost residents and businesses to existing initiatives such as TravelSMART (SCC) – a Surrey County Council led programme that encourages all sustainable modes of transport and offers advice on journey planning; cycle infrastructure; cycle parking; electric vehicle charging etc as well as funding for local businesses to improve staff transport plans and facilities. More information is available at www.travelsmartsurrey.info
 - Support partnership projects e.g. through Action Surrey.
 - Reducing waste – encourage participation in the Council's waste collection initiatives to increase the percentage of waste diverted from landfill.

- Encouraging Residents Associations and special interest community groups to develop new initiatives and support existing projects that further the community based objectives of Woking 2050.
- c. What local organisations can you work with to help realise opportunities within your ward?
 - Action Surrey (web: www.actionsurrey.org or tel: 0800 783 2503)
 - LA21(web: www.wokingla21.wordpress.com)
 - TravelSmart (web: www.travelsmartsurrey.info)
 - Woking Chamber (web: www.wokingchamber.org.uk tel: 01483 729922)
 - Surrey Wildlife Trust (web: www.surreywildlifetrust.org)
 - Woking Association of Voluntary Service (website currently being updated)
 - Residents Associations (various contacts)
- d. What obstacles to action are there? How can they be overcome?
 - Funding. For local authorities: External funding can assist local authorities finance action across the Council estate and within the community. For residents: Action Surrey can advise on available funding streams.
 - Knowledge and know-how. There is lots of information available but sometimes it is difficult for the public to know how best to access it. The Council, with Action Surrey, can provide leadership and support by signposting to the relevant resources.
 - Resources – local authorities can work together to share expertise and pool resources e.g. waste contract through Amey; Action Surrey working with Local Authorities across Surrey.
 - Local opposition to sustainable infrastructure. Professional bodies and trade associations can be referenced to demonstrate benefits of sustainable development (e.g. energy, waste management and property infrastructure) and to answer concerns.
- e. What questions should I ask of my council decision-makers to help achieve change? Woking Borough Council is actively engaged in positively contributing to a more sustainable Woking. There is ongoing commitment from Members and Corporate Management Group.

Section 2: What are the opportunities?

- a. How will your local economy be affected by the changing climate?

It is widely accepted that the changing climate will inevitably lead to more extremes in weather particularly in terms of the cold and the heat; and more frequent extreme weather events such as flooding, snow etc. The local economy will be affected by these events in particular through:

 - rising energy costs (both in terms of heating and cooling demands);
 - insurance claims through flood damage etc;
 - staff wellbeing affected by very cold or very hot weather;
 - adverse impacts on transportation of goods, customer visits and staff travel.
- b. How can the Council improve local resilience and support local businesses to plan for extreme weather?

Recognising the need to adapt to and prepare for changes in the climate is key to effectively dealing with and planning for extremes in weather.

The Council has strengthened its own resilience through the following:

- Energy security – protecting against rising energy costs and availability/supply issues through the use of renewable and sustainable energy technologies and incorporating energy and resource efficiency measures. Projects include photovoltaic and CHP installations across the Council estate; rolling maintenance programme of energy and water efficiency measures; identification of further improvements through contracts e.g. Honeywell and Skanska.
- In the event of extreme weather such as flooding, the Council can invoke its emergency planning protocols. The Council has various plans and procedures in place to ensure it is able to safeguard the wellbeing of its residents and to continue to deliver its core services. In the event of an incident spanning beyond Woking borough, the Council would work together with neighbouring local authorities and agencies as part of the Surrey Local Resilience Forum. Specific plans are established and tested in the event that they need to be invoked.
- Transport – during previous extreme weather events, in order to continue to carry out key services such as meals deliveries, the Council secured four by four vehicles from Enterprise Rent A Car Ltd in order to better reach vulnerable residents. Staff from across departments assisted the delivery service by providing extra drivers and 'buddies'.

The Council can support the resilience of local businesses and residents by:

- Providing advice and information to residents and businesses helping them to be prepared for extreme weather e.g. how to keep warm and well during the winter; how to cope with heatwaves; how to help vulnerable family / friends / neighbours.
- Signposting to existing resources e.g. Action Surrey (www.actionsurrey.org) and Surrey Local Resilience Forum (<https://www.surreycc.gov.uk/people-and-community/emergency-planning-and-community-safety/emergency-planning/surreys-local-resilience-forum>).
- Identifying vulnerable people in affected areas.
- Building resilience to continue services such as meals deliveries in periods of extreme weather.
- Sharing learning with local businesses in order to help them prepare for extreme weather.
- Ensuring that planning applications for commercial premises adequately address the need for adaptability and resilience to a changing climate.

- c. What are the strengths, opportunities and natural advantages for developing the low carbon sector in your ward and the wider local area?
- Greater resilience against rising energy costs.
 - Alleviating pressures on health services by helping residents keep warm and well in winter.
 - Growth in the renewable energy sector both through purchasing technologies and supporting local companies in this field.
 - By cutting costs through saving energy and water, local businesses may find this helps them become more competitive.
 - Green credentials appeal to many consumers.
- d. What could you do to support low carbon activity in your ward?
- Signpost to existing information and advice on issues which support low carbon activity such as travel planning (www.travelsmartsurrey.info); how to reduce energy and water consumption (www.actionsurrey.info); encourage take up of renewable energy technologies and energy efficiency measures (www.actionsurrey.info); encourage

participation in waste and recycling schemes (<http://www.woking.gov.uk/waste>). Implement some of the above advice and solutions into business and personal life and be prepared to share experiences with networks and individuals.

Section 3: Housing and Planning

- a. How will your local area be affected by the changing climate and what impacts could this have on local homes and businesses?
- Areas within the Borough that are susceptible to flooding (including properties and roads) have been identified and the Council's Emergency Plan outlines the response procedures.
 - Other issues which could affect local homes include fuel poverty (see section 5) and heatwaves.
 - Incorporating renewable energy technologies and energy and water efficiency measures can help tackle rising energy prices and enhance energy security - issues that could be experienced by both local homes and businesses.
- b. What policies are in place to:
- Ensure new development is low carbon?
 - Encourage renewable energy generation?
 - Ensure new development is resilient to climate impacts like flooding, heat wave, or reduced water availability?
 - Encourage existing buildings to be retrofitted with measures that cut carbon and increase resilience?
- The Climate Change Supplementary Planning Document (SPD) covers all of these issues. The SPD provides detailed guidance for the application of Policies CS22 – Sustainable Construction and CS23 Renewable and Low Carbon Energy Generation of the Core Strategy. They set high standards for sustainable construction and a positive framework for renewable projects. The SPD includes details on standards for new development; sustainable energy; design, materials and waste; sustainable transport; and adapting to climate change.
- c. How could you and the Council work with community organisations within the area to ensure communities are primed to take advantage of funding to install energy saving measures, for example support from energy companies for people on low incomes? Advice and support in accessing ECO funding is available for residents across Surrey from Action Surrey (web: www.actionsurrey.org or tel: 0800 783 2503).

Section 4: Environment and Transport

- a. What impacts could the changing climate have on the natural environment in your ward including local parks and green spaces, coastlines and rivers?
- Heathland fire
 - Local flood risk
 - Opportunities to protect and enhance biodiversity
- b. What local transport systems might be vulnerable to climate change in your area and what is being done to increase resilience?
- Extreme weather events such as flooding, snow, etc can impact on local transport systems. Resilience to these events is enhanced through Borough and County

preparations through Emergency Planning. Highways problems such as potholes can be exacerbated during extremes in temperatures.

- c. What are the main sources of transport emissions in your area and how are these changing? How could these emissions be cut?
- Transport emissions account for almost 20% of the Borough's emissions (Department of Energy and Climate Change 2015 statistics). The M25, M3 and A3 are within ten minutes' drive of Woking town centre.
 - Local authorities are required to undertake periodic reviews of local air quality to assess current levels of pollutants and review predicted future levels against government health based standards. Nitrogen dioxide diffusion tubes are located throughout the borough and are changed on a monthly basis. The latest reports are available [here](#).
 - By encouraging residents to plan their journeys and consider sustainable modes of transport, road transport emissions could be reduced. TravelSMART offers a useful journey planner which shows journey details for different modes of transport across the county and beyond (www.travelsmartsurrey.info).
- d. How are you engaging with the council and the community to encourage cycling and walking?
- In March 2008, Woking became a cycle demonstration town. During the three year Cycle Woking initiative, Woking Borough Council and Surrey County Council worked in partnership to deliver cycling (and walking) infrastructure projects and campaigns to deliver new facilities and enhance existing provisions across the Borough with £1.8m of government funding.
 - In 2012, Surrey County Council successfully bid for a further £18m of Department for Transport funding to deliver sustainable transport measures across the centres of Woking, Guildford, Redhill and Reigate. The TravelSMART programme improved and installed cycle lanes; invested in interactive and live travel information; and encouraged and supported more people in travelling sustainably. As well as working closely with borough and district councils, SCC worked with local businesses to help deliver infrastructure improvements and behaviour change schemes to assist in delivering staff travel plan benefits. More information is available at www.travelsmartsurrey.info.
 - Enterprise Rent A Car Ltd operates a car club in partnership with Woking Borough Council. Two low emission vehicles are available for hire by the public in the evenings and at the weekends. More details available [here](#).
 - The Council's Staff Transport Plan aims to encourage staff to utilise low emission vehicles and other sustainable means of transport in order to reduce CO2 equivalent emissions associated with staff travel to and for work. The Plan includes incentives to encourage walking and cycling. More details can be found at <http://ewokplus/business/strategy/hr/benefits/healthwell/transport/Pages/default.aspx>

Section 5: Health and Social Care

- a. How will your area be affected by the changing climate and what impact could this have on local health and health services? Are any health services or facilities particularly vulnerable?
- Vulnerable people more at risk during periods of extreme weather e.g. cold and heat; flooding.

- Fuel poverty and heatwaves are two issues which can negatively affect people in the Borough, particularly the elderly and the very young.
 - These issues can result in increased pressure on local health services and on Council services.
- b. Who is most vulnerable to extreme weather events in your ward? For example, are there older people's homes which may be vulnerable to increased flood-risk, heat waves or cold?
- In the event of extreme weather such as flooding or snow, vulnerable people in a particular area would be identified in order to ensure they are evacuated if required or that they receive the appropriate care and services.
 - Fuel poverty affects those who cannot afford to heat their home or who spend more than 10% of their household income on heating their property. It is anticipated that by 2030 as many as one in three households could be in fuel poverty.
 - Heatwaves can be particularly dangerous for the very young or the elderly.
- c. What impact could hotter temperatures have on local air quality and how could this affect local health?
- Local air quality could be adversely affected by hotter temperatures. More information on air quality monitoring can be found in section 4c.
 - Degradation in air quality could result in more incidences of respiratory illnesses. These could in turn impact upon local health services.
- d. How many households in your ward are in fuel poverty? What measures can be taken to reduce this number?
- There are two government definitions of fuel poverty. The most recent – the Low Income High Costs Indicator (LIHC) was adopted this year. Under the LIHC definition, a household is said to be in fuel poverty if:
- They have required fuel costs that are above average (the national median level);
 - Were they to spend that amount they would be left with a residual income below the official poverty line.

Under the 10% definition, a household spends more than 10% of its income on fuel to maintain a satisfactory heating regime (usually 21 degrees for the main living area and 18 degrees for other occupied rooms).

According to the Association for the Conservation of Energy, over 80 per cent of heating used in UK homes, businesses and industry is produced by burning fossil fuels, and over a third of the UK's carbon emissions come from the energy used to produce heat. Britain tops the fuel poverty table for Western Europe, with some five million UK households, or 19.2 per cent of the total, now affected.

The key factors behind fuel poverty are:

- The energy efficiency of the property (and therefore the energy required to heat and power the home);
- The cost of energy; and
- Household income.

The latest fuel poverty statistics for Woking Borough for 2015 (published by DECC in June 2017) show that 7.7% of Woking households are in fuel poverty.

Further data on fuel poverty is available [here](#).

Section 6: Finance

- a. What are the opportunities to save your Council money (and reduce carbon emissions) by becoming more energy, water and resource efficient?

Energy and resource efficiency are practices that have been adopted by the Council. Targets to reduce energy consumption and increase use of renewables are embedded within Woking 2050. The Council produces an annual report on its greenhouse gas emissions across its own estate. This report highlights where greenhouse gas emissions through energy use or business mileage have decreased or increased over the last reporting period. The latest report is available at <https://www.woking.gov.uk/environment/climatechange/Greeninitiatives/ghg1617>

Display Energy Certificates (DECs) – The Council is required to produce DECs for buildings with a total useful floor area over 500m². DECs show the actual energy use of a building, the operational rating, and help the public see the energy efficiency of a building. Usage is based on energy consumption as recorded by gas, electricity and other meters. Organisations are required to display these DECs visible to the public. Further information can be found at <https://www.woking.gov.uk/environment/climatechange/Greeninitiatives/wbcdecs>

- b. What are the opportunities for boosting income through local energy generation or other environmental infrastructure?

- **Direct cost savings** through energy and water efficiency and waste minimisation measures. Many measures have been installed across Council buildings.
- **Pooling resources** – by working in partnership with others we can share services and expertise; reduce costs and maximise outputs. All Surrey district and boroughs have signed a 3 year contract with Action Surrey (part of the Thameswey Group) to encourage the take up of energy saving and renewable energy technologies by residents across the county. For further information visit www.actionsurrey.org.
- The Council can help protect itself, and its residents and local businesses, from **future costs**. E.g. flood alleviation works at Hoe Valley <https://www.woking.gov.uk/business/casestudies/hoevalley>
- **Local Job Creation**. Development of local energy generation or other environmental infrastructure may have the added benefit of creating jobs and developing expertise within the locality.

- c. Is your Council planning now to reduce costs of future climate impacts in your ward and the wider area? Are planning policies in place to reduce the cost of future flood events and reduce insurance costs?

Many of the schemes outlined in previous sections are long term in their outlook and will assist in reducing the costs of future climate impacts both for the Council, and for residents.

The Climate Change Supplementary Planning Document outlines the Council's Planning Policies with regard to encouraging sustainable development incorporating

renewables, sustainable construction practices and building resilience and adapting to a changing climate such as flooding, passive heating and cooling. It outlines the application of policies CS22 Sustainable Construction and CS23 Renewable and low carbon energy generation. For further information see section 3 and visit <http://www.woking2027.info/supplementary/climatechangespd>

As outlined in sections 3 and 6, Action Surrey assists residents across the Borough (and the county) to take up energy efficiency measures and renewables.

The Hoe Valley scheme saw major investment in flood defence and flood alleviation works to protect almost 200 homes from future flooding events. See section 6b.

Further reading

Climate Change Strategy / Woking 2050 Update Reports

For further information on projects implemented by the Council, the update reports produced for each Climate Change Working Group meeting provide a useful summary of latest developments. These are available on Shikari.

Council Web Resources

There is a variety of resources available online about the various energy and environmental schemes and projects implemented by the Council. A selection of links is shown below:

<http://www.woking.gov.uk/environment/waste>

<http://www.woking.gov.uk/environment/climate>

<http://www.woking.gov.uk/environment/climate/Greeninitiatives>

<http://www.woking.gov.uk/environment/climate/Greeninitiatives/wbcdecs>



Woking 2050

Lara Beattie, Senior Policy Officer

Tracey Haskins, Green Infrastructure Manager

26 February 2018



2005-2006
Sustainable Energy



2007-2008
Promoting Sustainable
Communities Through
the Planning Process



2008-2009
Tackling Climate Change

Towards tomorrow today



Agenda

- Introductions
- Sustainable Woking
- Woking 2050 and Natural Woking
- Delivery
- Local Projects
- Councillor Workbook
- Further Information



Sustainable Woking

Woking LA21 Annual General Meeting presents
Restoring Surrey's rivers through community restoration



Woking LA21 welcomes **Glen Skelton**, RiverSearch Coordinator at Surrey Wildlife Trust, who will discuss the key challenges facing Surrey's river network and how communities are working together to monitor and restore these important wildlife habitats.

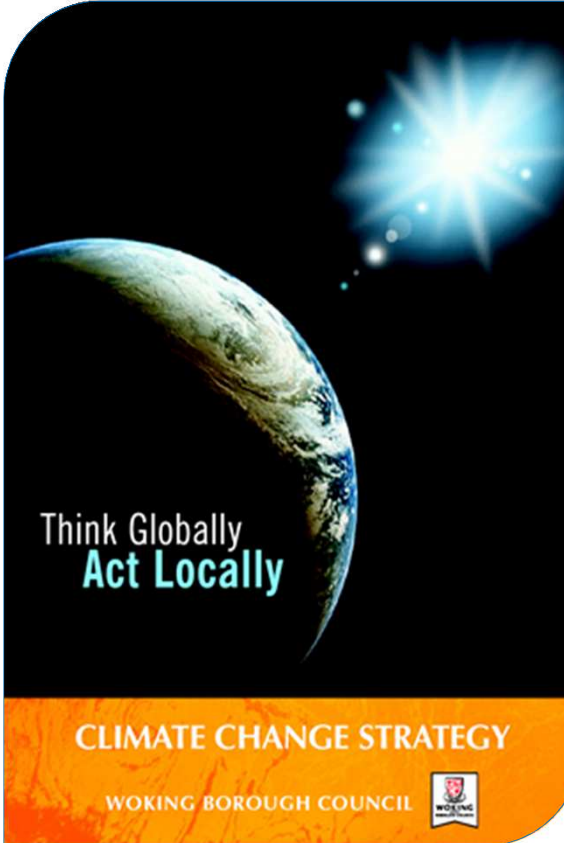
Thursday 17 November 2016, 7pm
WWF-UK Living Planet Centre, Brewery Road, Woking GU21 4LL.

To book your free place, email green@woking.gov.uk

For more information:

- Green Infrastructure on **01483 755855**
- green@woking.gov.uk
- www.wokingla21.wordpress.com






**Think Globally
Act Locally**

CLIMATE CHANGE STRATEGY

WOKING BOROUGH COUNCIL




Operation Owl, Woking Local Action 21; Early WBC Climate Change Strategy; Town Centre Combined Heat and Power Station



Towards tomorrow today



Woking 2050

- Climate change strategy (2015).
- Looks at our whole way of living and how it can influence our environment.
- Balancing environmental aspirations with development and economic needs.
- A framework to coordinate efforts.

Woking 2050
A Vision for a Sustainable Borough

Summary Strategy



Woking 2050

Themes:

- Home is where the heart is
- In the workplace
- Getting around
- The Great Outdoors
- What the Council is doing

Woking 2050
A Vision for a Sustainable Borough

Summary Strategy



Towards tomorrow today

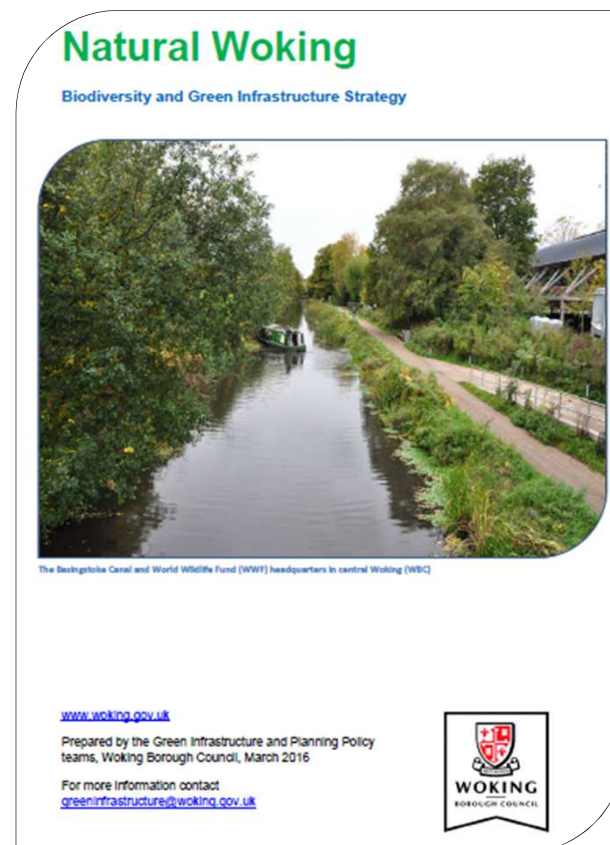


INVESTOR IN PEOPLE



Natural Woking

- Biodiversity and green infrastructure strategy
- Supporting information
- Positive outcomes for habitats and people.



INVESTOR IN PEOPLE



Towards tomorrow today



Delivery

- Action plans for Woking 2050 and Natural Woking
 - Three year rolling programme
 - What, when, how and who
 - What is already being done
 - What should we prioritise.
- Building a network of interested organisations and individuals.

Theme 1: Home is where the heart is						
No.	Action	Timeframe	Progress	Measures	Resources	Res
1	Continue to reduce residual waste collected from households	1 - 3 years	Baseline: residual waste collected by households was 198.8kg (July - Sept 2015). The cumulative figure stood at 273.9 kg (Oct - Dec 2015)	Progress through Surrey Waste Partnership Strategy and local performance indicators	Existing resources with external partners	Pla
2	Continue to increase the Borough recycling rate	1 - 3 years	The latest monthly figures published in October 2017's Green Book, showed that the Council processed 59% of household waste arisings for recycling, composting or anaerobic digestion. The waste contract has now moved to Amey.	Progress through Surrey Waste Partnership Strategy and local performance indicators	Existing resources with external partners	Pla
3	Provide an integrated transport system that promotes lower carbon and healthy transport choices.	1 - 3 years	Baseline: Transport accounted for 123,200 tonnes of Borough carbon footprint in 2013 (source: DECC - latest available stats published in June 2015). This has reduced from 127,900 tonnes in 2011 and 126,900 tonnes in 2012.	Progress through relevant Council strategies such as Health and Wellbeing Strategy and TravelSmart 2015/16 targets and baselines	Work with partners such as SCC's TravelSmart team; health	Leis Cult Dev (Pe Gre Infr (Pla

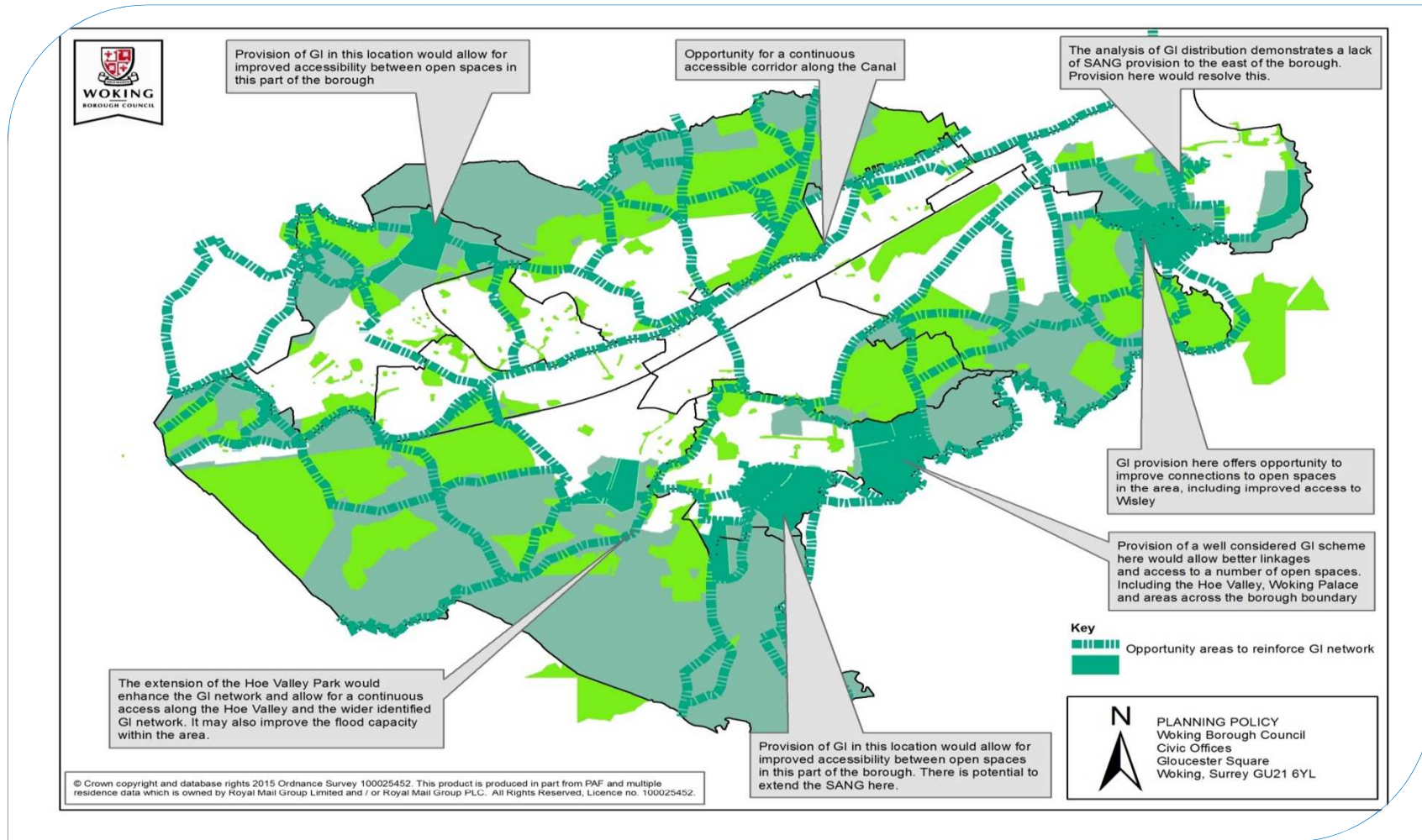


Local Projects



Woking Peregrine Project (photo: WPP webcam June 2017); Common Pipistrelle Bat (photo: Hugh Clark BCT); Great Crested Newt (photo: Acer Ecology)





Map 24, Green infrastructure opportunity areas within the Borough, Natural Woking Supporting Information

Local Projects



Electric vehicle and fleet review; rainwater gardens; Woking STP cycle and pedestrian schemes; green walls



INVESTOR IN PEOPLE



Towards tomorrow today



LGA Councillor Workbook

- A Councillor's Workbook: acting on climate change - published 20 October 2017
- Learning aid for Councillors on roles, opportunities and drivers for Council-led action on the changing climate, both to reduce local carbon emissions and to build resilience to extreme weather.



INVESTOR IN PEOPLE



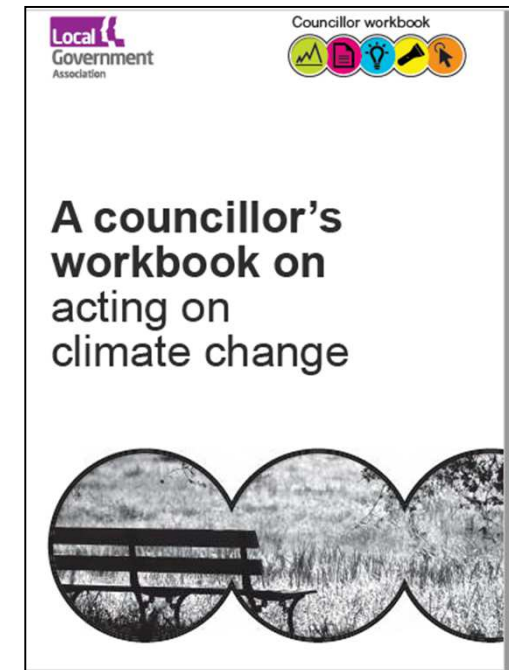
Towards tomorrow today



LGA Councillor Workbook

Useful ideas and guidance to Councillors on how your role can contribute to local action on climate change.

WBC tailored responses with local examples for Councillors.



Questions

- *Any questions?*
- *What can you do? How can you make a positive difference for climate change in your ward?*



Further Information

Web resources:

- www.woking.gov.uk/environment
- www.local.gov.uk/councillor-workbook-acting-climate-change

Email: green@woking.gov.uk



INVESTOR IN PEOPLE



Towards tomorrow today





Joint waste collection contract update

Matt Smyth, Director, JWS
Richard Bisset, Woking Team Manager, JWS
Mark Stammers, Account Director, Amey
Tom Carter, Principal Operations Manager - Amey

Introduction

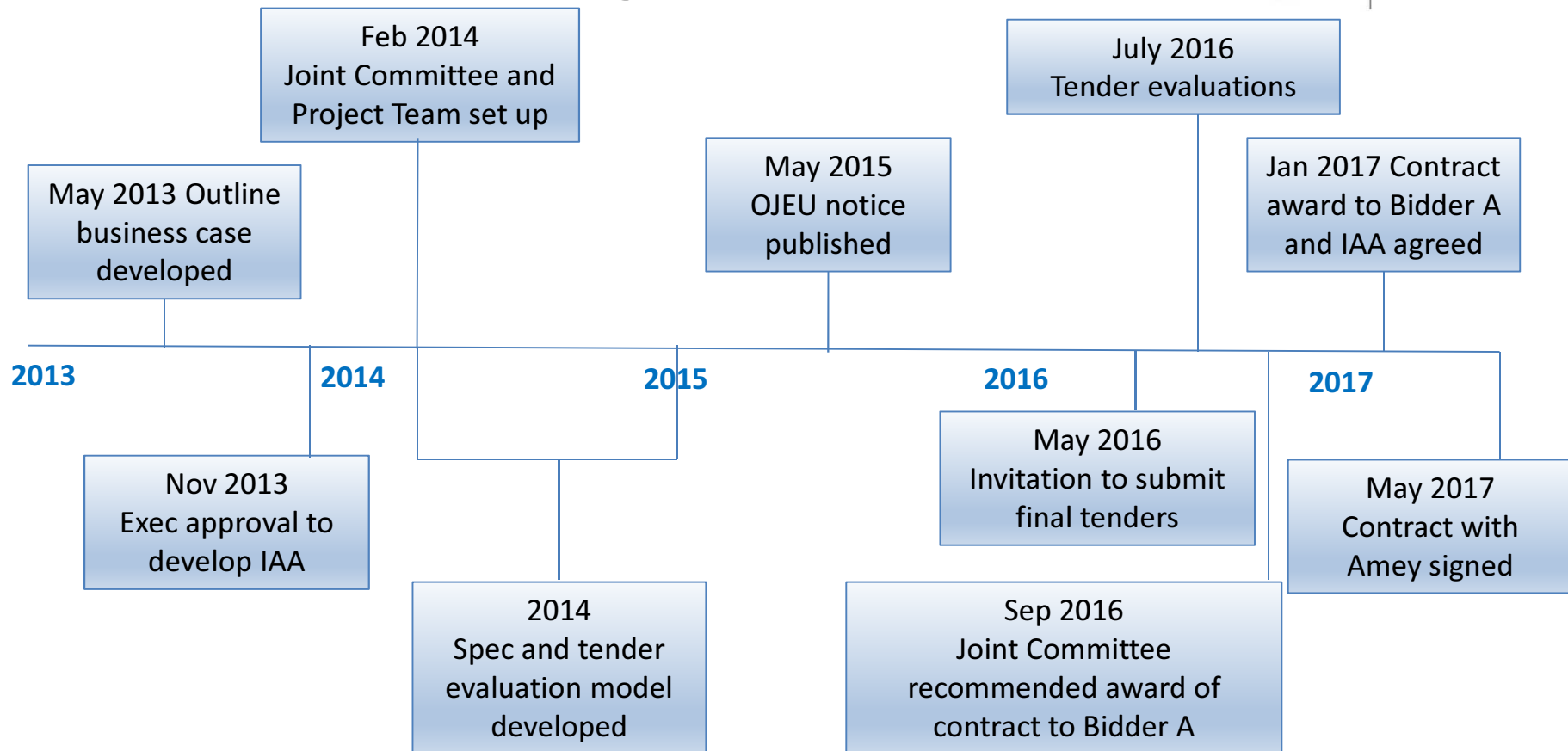


- History of the joint contract
- What's included and how is it governed?
- Contract performance
- Background to Amey
- Working mobilisation
- Next steps



History of the joint contract

History of the joint contract





What's included?

Objectives



- Value to the council taxpayer
- High levels of customer satisfaction
- The objectives, targets and actions of the Surrey Waste Partnership Joint Strategy
- Appropriate levels of shared risk and reward
- Carbon and environmental impact reduction
- Continuous service improvement
- Flexibility to adapt to changing legislation and policy
- Innovation
- Ongoing efficiency savings

Key features



- 10 year term extendable by up to 14 years
- Comprehensive performance management framework with 15 KPIs
- Innovation and ongoing efficiencies
- Other Surrey authorities can join at any time

Operation



- Alternate weekly collection of residual and recycling in wheeled bins
- Weekly food waste collection
- Weekly collection of WEEE and textiles
- Clinical waste collections
- Paid for services
 - Garden waste collections
 - Bulky collections

Operation

- Extended hours contact centre
- Garden waste administration



Vehicle livery



Vehicle livery



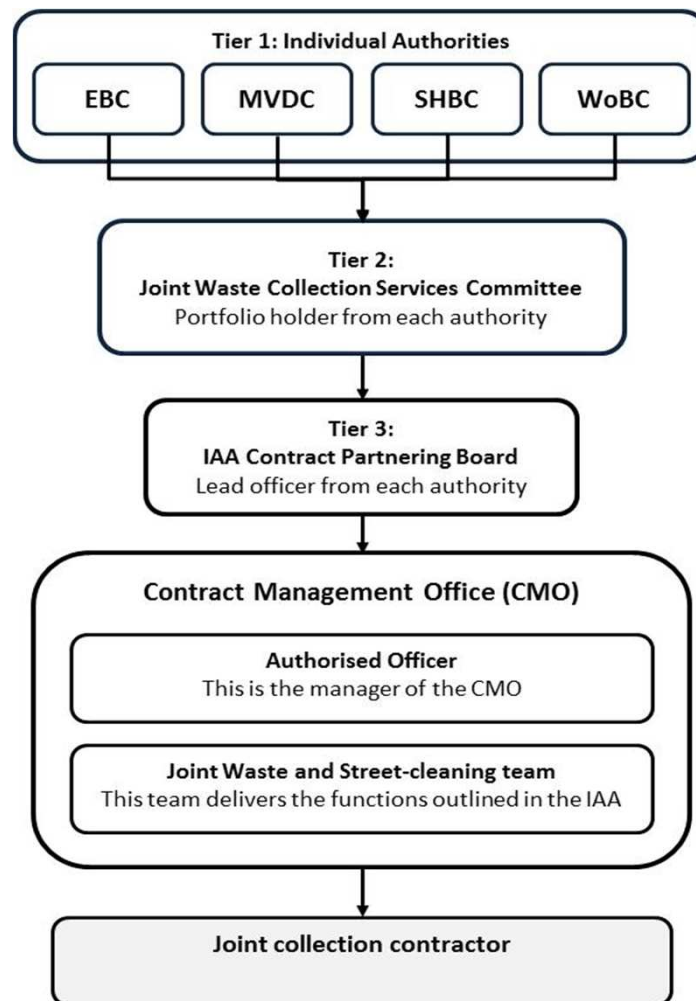


How is it governed?

How is it governed?



- Governed by a legally binding inter authority agreement
 - Culture of mutual co-operation and honest partnership working
 - Liabilities, rights, duties, undertakings and responsibilities of partners
 - Contract Management Office – Joint Waste Solutions
 - Contract governance model





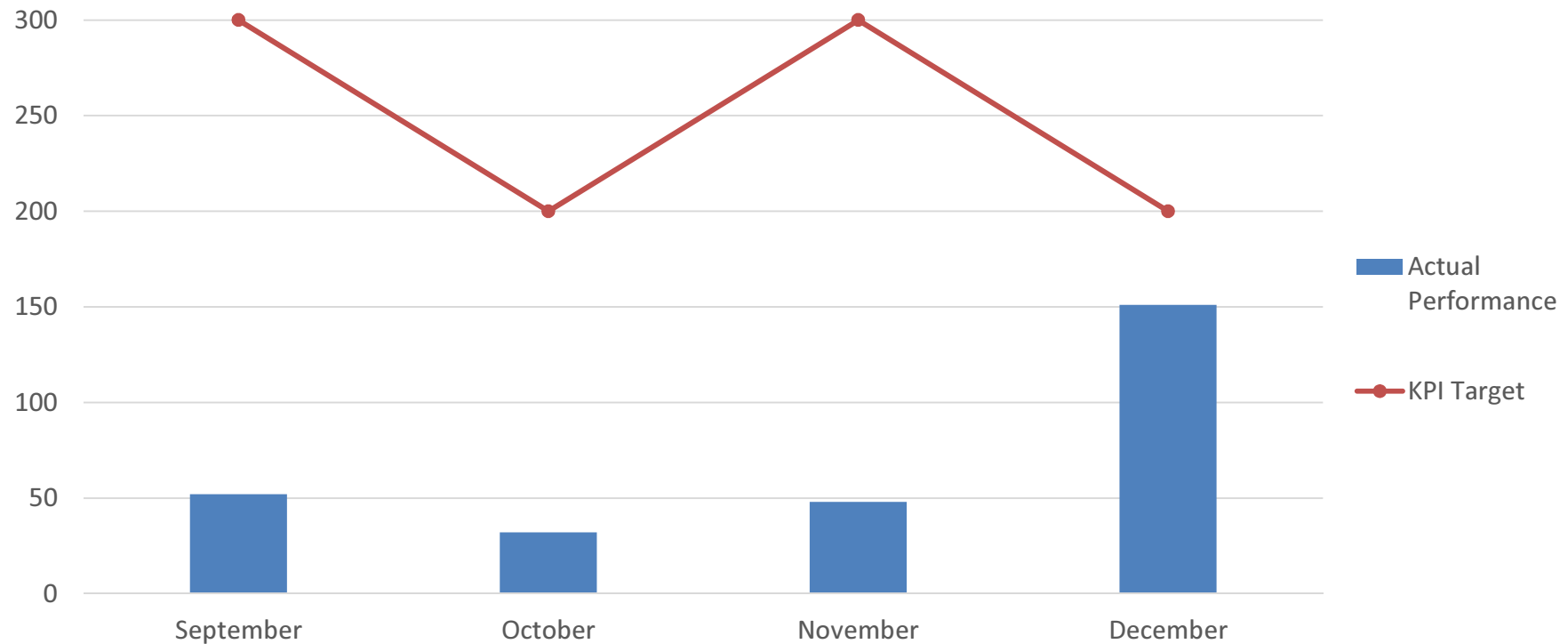
Contract performance

Contract performance

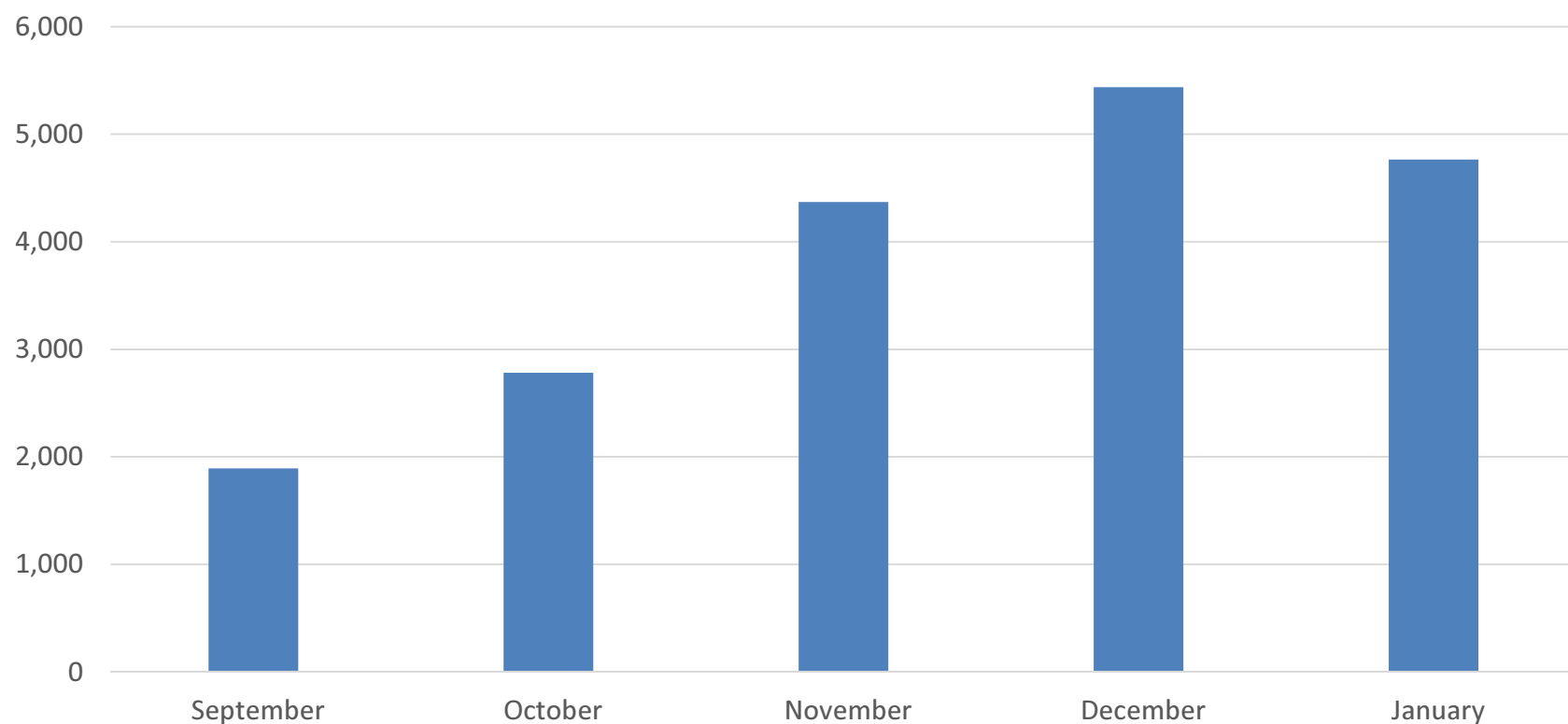


- 99.9% of collections made on time
- Number of missed bins is within KPI targets
- Enquiries and complaints are swiftly addressed
- Recycling rate is 58.5% (average)
- Contact centre calls have reduced

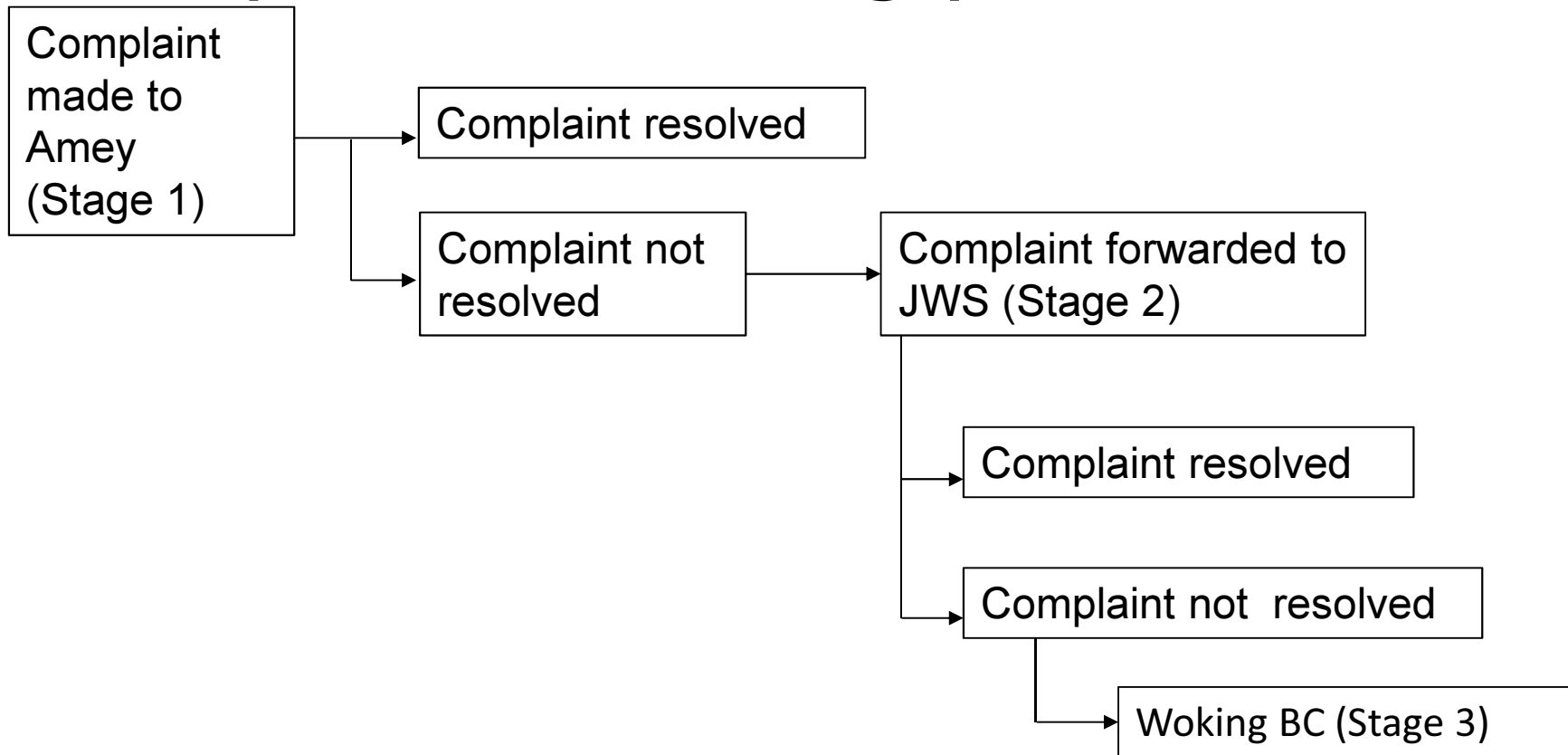
Missed bins per 100,000 collections



Calls to contact centre



Complaints handling process

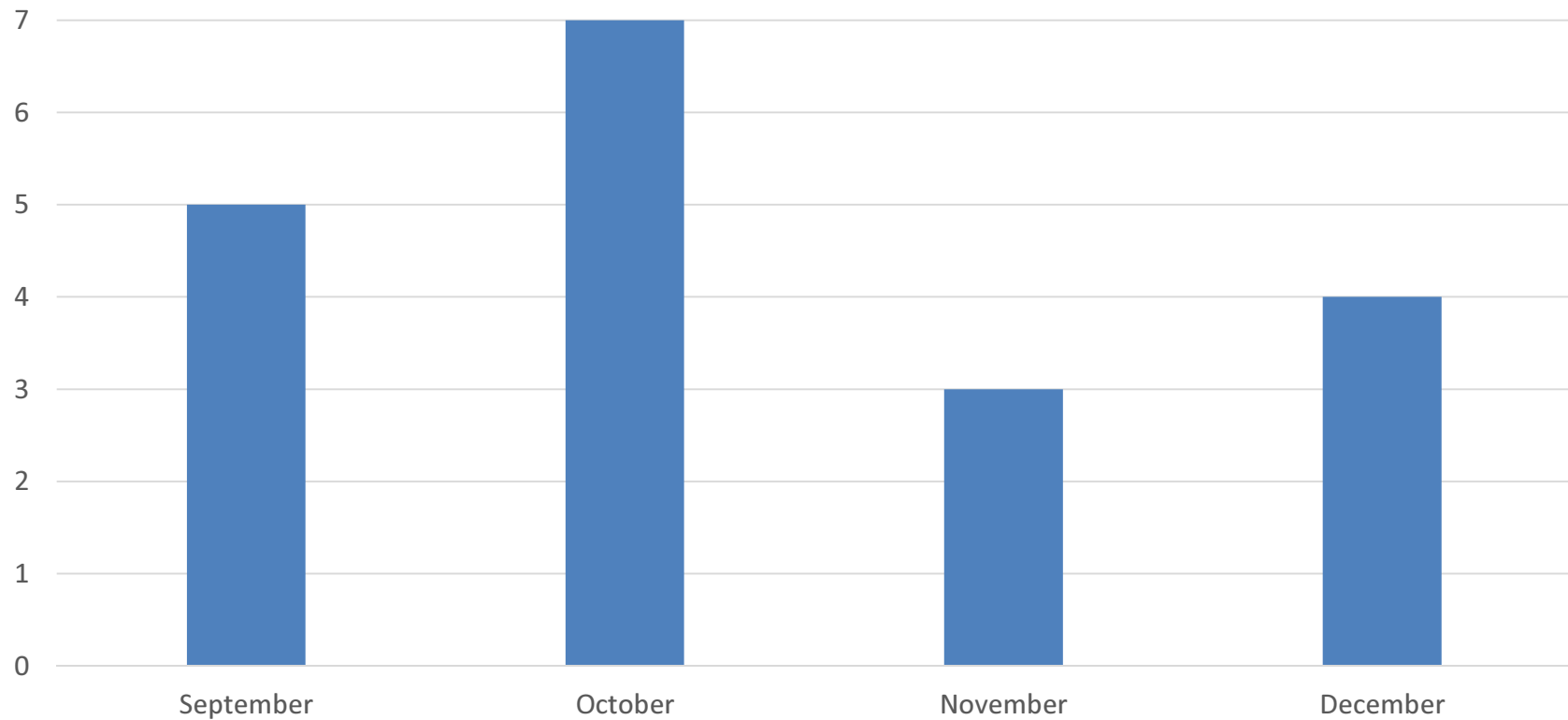


Recycling bin contamination



- Contamination can 'reject' entire loads
- Cost to this as well as loss of recyclables
- JWS proactively address this through resident engagement (telephone calls, visits)

Number of contaminated loads





Background to Amey

Our parent company

Ferrovial is a leading global infrastructure company, operating all around the world. They have four divisions: Toll Roads, Construction, Airports and Services, which Amey is part of.

ferrovial

13.1

Market Cap. (€ bn) ¹

10.7

Revenues (€ bn) ²

96,000

Employees ²

1. March 7th, 2017

2. 2016 Ferrovial Integrated Report figures

Service focused

Services

- Transport infrastructure maintenance
- Environmental services
- Services to resources & industrial sectors
- Facilities management
- Services to Utilities

Construction

- Civil engineering
- Industrial engineering
- Water treatment plants
- Over 80 years of experience

Investment focused

Airports

- Largest private investor in airports
- Four airports in the UK:
 - 25% stake in Heathrow
 - 50% stake in Aberdeen, Glasgow & Southampton
 - 90m passengers

Toll Roads

- Private development of Transport infrastructure
- Management of 407 ETR (CA)
- 27 concessions in ten countries

A bit about us



19,000
employees



£2.2bn
turnover



125
clients



100
years old in 2021



300+
locations



Nearly **everyone** in the UK
benefits from an Amey
service **each day**



Providing services
across the UK,
Australia and USA



50,000
disadvantaged people
supported through our
DofE partnership

Our values

We're living and breathing our values, working hard to deliver our goal, creating better places to live, work and travel. They provide a framework for delivering services and guide us every day, in everything we do.



PUTTING PEOPLE FIRST

Looking out for each other in our relentless pursuit of zero harm

Involving and empowering everyone to deliver and grow

Being both accountable and supportive



DELIVERING GREAT SERVICE

Showing our passion for great customer service

Delivering brilliantly on what we promise

Listening and responding quickly to solve problems together



CREATING BETTER SOLUTIONS

Doing things better every day

Innovating and finding new ways to improve and make things simpler

Collaborating, sharing our knowledge and learning from best practice

Creating better environments

Environment

We protect our environment by encouraging you to reuse and recycle more – reducing the amount of waste going to landfill, creating energy from waste and keeping our streets and public spaces, like parks, clean.

A better environment means a better quality of life for everyone.

We do this by:

- **Looking after open spaces**
so you can live, work and relax in the comfort of your local community
- **Keeping litter off streets**
so you can enjoy clean surroundings
- **Collecting, reusing and recycling waste**
to create a more sustainable future
- **Providing education and awareness projects**
to help us all to recycle more and reduce waste
- **Generating energy from waste**
to save and protect natural resources



A bit about us

Environment



3,200
employees



4 million
people visit the **47 HWRC**
(household waste recycling centres)
we manage every year



20+
local authority contracts



16,000+
trade waste customers



290,000 MWh
energy created each year
by 2018 – enough to power
60,000 homes



1.8 million
tonnes of waste transported
per annum



860,000 trees
saved by the amount of paper
and card we recycled in 2016



127 million m²
of space maintained – the
same as 289 Vatican Cities





Working mobilisation

Woking mobilisation



- Face to Face with staff in advance of the start date of 11th September
- Two phase mobilisation.
- Additional Agency staff were pre-inducted to ensure that we had additional staff for day one
- In the first 2 weeks of the contract additional support to ensure that full completion was achieved
- First 3 months used to validate data, one to ones with crews to finalise the re-routing of the Rounds in preparation of phase 2 of the mobilisation.
- New fleet arrived during the course of October and early November.
- New service went live 27th November 2017
- Big Change for crews and residents.

Working mobilisation



- We experienced a few teething issues as a lot of information regarding each individual property had to be transferred into the InCab system
- Residents needed to get use to the separate collections, raised levels of complaints.
- The incab system has been successful so crews can report in real time roads completed, bins not presented, bins contaminated, etc.
- This meant that in the first month 40% of reported missed collections were not justified. This was mainly in two areas, Food waste collected at a different time and Christmas holiday working.

Working mobilisation



- Hard work carried out by the team to ensure that we continue to improve on the high level of service that residents expect
- We have had some issues, which the team are working through:
 - Addressing driver shortage and reliance on agency staff
 - Re-calibrating collection routes
 - Addressing repeat missed collections
 - Staff engagement

Next steps



- Address current issues and ensure performance continues to improve
- Comprehensive resident engagement programme in 2018/19
- Contract innovations

OVERVIEW & SCRUTINY COMMITTEE - 26 FEBRUARY 2018

AIR QUALITY MONITORING

Executive Summary

The Environment Act 1995 places a duty on the Council to monitor air quality (AQ) within the Borough. Generally the AQ across the Woking Borough is good. We have a total of 34 diffusion tubes in place which monitor levels of Nitrogen Dioxide (NO_x) and each year we produce a report which is submitted to Defra for approval which outlines pollution levels across the Borough and how these compare to Government standards.

Recommendations

The Overview & Scrutiny Committee is requested to:

RESOLVE That the report be noted.

The Committee has authority to determine the above recommendations.
--

Background Papers:

Sustainability Impact Assessment
Equalities Impact Assessment

Reporting Person:

Geoff McManus, Assistant Director
Ext. 3707, E Mail: geoff.mcmanus@woking.gov.uk

Contact Person:

Emma Bourne, Environmental Health Manager
Ext. 3654, E Mail: emma.bourne@woking.gov.uk

Portfolio Holder:

Cllr Beryl Hunwicks
E Mail: CllrBeryl.Hunwicks@woking.gov.uk

Shadow Portfolio Holder:

Cllr Ken Howard
E Mail: cllrken.howard@woking.gov.uk

Date Published:

14 February 2018

1.0 Introduction

- 1.1 District and Borough councils have a statutory duty to assess air quality (under the Environment Act 1995) and declare an Air Quality Management Area (AQMA) if there is a potential breach in the standards. Generally, the AQ in Woking is good. AQ in the Borough is measured by monitoring levels of Nitrogen Dioxide (NO_x). The main source of NO_x across the Borough, and County, is road traffic vehicle emissions, and this is a reflection of the national picture.
- 1.2 We currently have 34 NO_x tubes around the Borough which are changed over every month and then submitted to the laboratory for analysis. The Council has a legal duty to produce a yearly report, the 'Annual Status Report' outlining the levels across the Borough and how these compare to the Government standard of 40ug/m³. This report is submitted to Defra for approval and the most current version is attached as Appendix 1 – Annual Status Report 2017. Within the report are maps showing the locations of each of the diffusion tubes (see Appendix D within the report. Enlarged maps will be available in the Members Lounge and during the meeting on 26th Feb) and also a table which shows the average annual result from each tube (see Appendix B within the report). Please note that during 2016 there were 30 tubes installed around the Borough.
- 1.3 If annual average results are above the Government standard, we are required to undertake further analysis of that particular area, in terms of a Detailed Assessment. This consists of modelling AQ in the specific area and looking at traffic data, among other parameters. The Detailed Assessment identifies if any receptors are going to be exposed to the high levels of pollution and this will determine whether we need to declare an AQMA for that location.

2.0 Air Quality Management Areas

- 2.1 Woking currently has 2 AQMAs in the borough, one at Anchor Hill which was declared in 2014, and one along Guildford Road which was declared in May 2017. There are currently 26 AQMAs declared in Surrey distributed between nine of the eleven boroughs and districts. Mole Valley and Tandridge have not, to date, declared any AQMAs.
- 2.2 The Annual Status Report 2017 identified that the results for the 7 tubes in the Anchor Hill location were all below the Government standard in 2016, which is the first time that this has happened since we declared the AQMA. This indicates that the pollution in the area is improving, and if we have 2 further years where the results are below the Government standard, we hope to revoke the AQMA.
- 2.3 The majority of the results in 2016 reduced in comparison to the results in 2015, with only 6 locations increasing in levels, although several of these sites only increased marginally.

3.0 Addition and Removal of NO_x Tubes

- 3.1 It is considered that we have an adequate number of tubes around the Borough. They are carefully located where pollution could have the potential to be high, but also in places which provide average residential pollution levels and represent background sites to provide baseline data. Locations are chosen where poor AQ would have most impact on public health, which usually means long exposure e.g. housing near to the source e.g. roadside. This provides a good overall picture of AQ across the Borough and we therefore have no intention of adding to current numbers.
- 3.2 We do not tend to install new tubes on individual request, although requests are considered and an additional tube may be permitted dependant on the reasons for that

request, locations of the nearest diffusion tubes and therefore the value of extra monitoring data. New tubes are normally put up either as part of planning application for a large scale housing or business development, or from recommendations set out by our consultants to allow us to gather further data regarding pollution levels in a certain location if the results from existing tubes demonstrate that there may potentially be a problem.

- 3.3 We have recently installed 3 new tubes in the town centre along Victoria Way between Lockfield Drive and Victoria Arch. This is due to a proposal as part of the town centre development to install 'moss walls' and central reservation vegetation which is designed to absorb harmful pollutants from the air. The new tubes will monitor AQ before and after the walls and vegetation are installed to determine whether there is an improvement in the AQ as a result of this project.
- 3.4 We do not propose to remove the majority of the tubes that we currently have in place. Diffusion tubes that have been added to monitor AQ as part of a planning application or due to the declaration of an AQMA may be removed once they are no longer needed if it is felt that they do not contribute to the overall picture of AQ across the Borough, (e.g. if the development has been built for a period of time or the results of monitoring in an AQMA are consistently below the government objective).

4.0 Overall Quality of Air in Woking Borough Council

- 4.1 Although AQ in Woking is generally very good, air pollution is an important determinant of health, and therefore the Council is committed to finding ways to improve AQ.
- 4.2 AQ has become headline news in the last couple of years, mainly due to the successful legal action that Client Earth took against the Government in relation to poor air quality across the whole country. As a result of this legal action, a national report was produced in 2017, 'UK Plan for Tackling Roadside Nitrogen Dioxide Concentrations, July 2017' https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/633269/air-quality-plan-overview.pdf which provides a list of local authorities where poor air pollution required action as soon as possible to improve the situation. Woking was not named in this report as needing to take action, however, Guildford and Surrey Heath are included on the list of Local Authorities that need to implement measures to reduce NOx due to the A331 running through their Boroughs.
- 4.3 Across Surrey there is recognition that AQ is important in the health and well-being of our residents. The Surrey Air Alliance has been formed of colleagues from all the 11 Surrey Boroughs, Surrey County Council and Public Health England. The group has agreed to work in partnership and has drafted a work plan identifying actions that can be taken to improve AQ. The work plan will be taken to the Surrey Chief Executive Group and the Health & Well-Being Board. Quarterly meetings allow colleagues to discuss AQ matters and monitor progress of the work plan.
- 4.4 Woking Borough Council now provides Air Alert which is a free subscription service which any resident who suffers from a respiratory illness can sign up to. Whenever the pollution levels are moderate, high, or very high, the resident will receive a notification, informing them of the elevated levels, and the expected time period that it will be at this level. This service allows residents to manage their respiratory condition more effectively.
- 4.5 In addition, the Council has agreed to participate, along with 9 other LA's in Surrey, to undertake a detailed modelling exercise of particulate matter (PM_{2.5}), which will also give an indication of predicted levels of NOx in coming years. This will provide a more accurate picture and prediction of AQ levels across the Borough, as well as looking at source apportion to allow us to see where the main source of pollution may be and hence

where to target improvement measures. The modelling exercise will be conducted during 2018.

- 4.6 Woking's taxi licensing is ahead of other local authorities in Surrey in terms of the more stringent conditions that taxis are required to meet with regard to vehicle emissions.
- 4.7 Further options to improve AQ will also be considered, particularly in the Guildford Road area where there is an AQMA in place. We are liaising with Surrey County Council to develop an action plan for this area within the Woking Borough.

REPORT ENDS



2017 Air Quality Annual Status Report (ASR)

In fulfilment of Part IV of the
Environment Act 1995
Local Air Quality Management

June 2017

Local Authority Officer	Joseph Dutfield
Department	Neighbourhood Services
Address	Woking Borough Council, Civic Office, Gloucester Square, Woking, Surrey GU21 6YL
Telephone	01483 743658
E-mail	Joseph.dutfield@woking.gov.uk
Report Reference number	
Date	June 2017

Report for	Joseph Dutfield Woking Borough Council Civic Office Gloucester Square, Woking Surrey GU21 6YL		
Main contributors	Ellénore Calas Rachel Hicks		
Issued by	Ellénore Calas		
Approved by	Ben Warren		
Amec Foster Wheeler Floor 12 25 Canada Square Canary Wharf London E14 5LQ Doc Ref H:\Projects\39711 STH AQ Woking 2017 ASR\ID Design\Report\2017\39711 Woking 2017 ASR_Final_i1.docx	Document revisions		
	No.	Details	Date
	1	Draft	25/05/2017
	2	Issued	15/06/2017
	<p>Draft report disclaimer</p> <p>This report has been prepared in a working draft form and has not been finalised or formally reviewed. As such it should be taken as an indication only of the material and conclusions that will form the final report. Any calculations or findings presented here may be changed or altered and should not be taken to reflect Amec Foster Wheeler’s opinions or conclusions.</p>		
<p>Third-party disclaimer</p> <p>Any disclosure of this report to a third party is subject to this disclaimer. The report was prepared by Amec Foster Wheeler at the instruction of, and for use by, our client named on the front of the report. It does not in any way constitute advice to any third party who is able to access it by any means. Amec Foster Wheeler excludes to the fullest extent lawfully permitted all liability whatsoever for any loss or damage howsoever arising from reliance on the contents of this report. We do not however exclude our liability (if any) for personal injury or death resulting from our negligence, for fraud or any other matter in relation to which we cannot legally exclude liability.</p> <p>Management systems</p> <p>This document has been produced by Amec Foster Wheeler Environment & Infrastructure UK Limited in full compliance with the management systems, which have been certified to ISO 9001, ISO 14001 and OHSAS 18001 by LRQA.</p>			

Executive Summary: Air Quality in Our Area

Air Quality in Woking Borough Council (WBC)

Air pollution is associated with a number of adverse health impacts. It is recognised as a contributing factor in the onset of heart disease and cancer. Additionally, air pollution particularly affects the most vulnerable in society: children and older people, and those with heart and lung conditions. There is also often a strong correlation with equalities issues, because areas with poor air quality are also often the less affluent areas^{1,2}.

The annual health cost to society of the impacts of particulate matter alone in the UK is estimated to be around £16 billion³.

WBC have completed all past rounds of Review and Assessment. This ASR considers all new monitoring data and assesses the data against the Air Quality Strategy Objectives (AQOs). It also considers any changes that may have an impact on air quality. Progress on measures to improve air quality are identified, as well as WBC's approach to reducing emissions and/or concentrations of fine particulates (PM_{2.5}), which has increased focus in the ASR as a result of emerging evidence of the health impacts.

Dispersion modelling in the 2012 Detailed Assessment identified predicted exceedances of the annual mean NO₂ AQO at the façade of properties at the top of Anchor Hill. Contour plots showed that concentrations at the three main housing blocks at the top of Anchor Hill exceeded the objective or were within 10% of the objective. Due to the historical trend of high pollution levels at this location and the modelled exceedances it was recommended that WBC declared an AQMA as a result of exceedances of the annual mean NO₂ AQO at Anchor Hill.

Based on the results of the Anchor Hill Further Assessment in January 2015 it was recommended that the AQMA should remain in place as both monitoring and modelling results show that although in some places the objective was being achieved, concentrations in some places were above the AQO.

An Air Quality Action Plan (AQAP) was produced for the Anchor Hill AQMA in July 2015. The plan determined that the upgrade of signals at the Anchor Hill junction are likely to reduce NO₂ concentrations so that the annual mean AQO is no longer exceeded in the AQMA. The progress towards compliance is currently being tracked using monitoring data collected by WBC and being reported in the ASRs. In line with DEFRA guidance, WBC will need to consider measurements carried out over several years or more, national trends in emissions, as well as local factors that may affect the AQMA, including measures introduced as part of the Action Plan, together with

¹ Environmental equity, air quality, socioeconomic status and respiratory health, 2010

² Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006

³ Defra. Abatement cost guidance for valuing changes in air quality, May 2013

information from national monitoring on high and low pollution years, before the AQMA can be revoked. The AQMA will be revoked when monitoring results from three consecutive years show no exceedances of the AQO, so that a permanent improvement in air quality can be demonstrated, and actions implemented around Anchor Hill are considered to be effective. As shown in this report, 2016 NO₂ levels complied with the AQO at every Anchor Hill site.

The 2015 Updating and Screening Assessment determined that monitoring and analysis of concentrations at all locations included in the monitoring programme should continue, with specific consideration on Anchor Hill and Guildford Road.

Exceedances of the annual mean AQO for NO₂ have been recorded in 2012, 2013, 2014 and 2015 at diffusion tubes located at Guildford Road. Additional monitoring in the area around Guildford Road commenced in 2014 and recorded exceedances of the AQO at five locations in 2015. A Detailed Assessment was carried out in November 2016 at the junction between Guildford Road, Constitution Hill and Mount Hermon Road. This assessment indicated that concentrations at some receptor locations with relevant exposure were exceeding the AQO because of road traffic emissions around Guildford Road. It was recommended that an AQMA should be declared on Guildford Road. Further monitoring was recommended around the junctions where Guildford Road meets York Road and Station Approach, to confirm if the NO₂ annual mean AQO is exceeded where there is relevant exposure. Consequently, the AQMA for Guildford Road was declared in May 2017.

Bias adjusted annual mean NO₂ concentrations at four sites around Guildford Road were exceeding the AQO in 2016. However, following distance correction to estimate concentrations at locations of relevant exposure, concentrations at relevant locations are below the AQO. The highest annual mean NO₂ concentration was 36.2 µgm⁻³ at diffusion tube CH in 2016 following distance correction. Local Highways have advised that the particularly high NO₂ concentrations monitored in the Guildford Road area in 2015 were likely to be due to roadworks in the Town Centre causing diversions in the area, which resulted in increased traffic along Guildford Road. WBC have confirmed that there is likely to be increased development occurring in the Town Centre over the next few years and therefore concentrations around Guildford Road are likely to vary, but may increase during times of traffic diversion. In line with DEFRA guidance, before the AQMA can be revoked, WBC will need to consider measurements carried out over several years, national trends in emissions, as well as local factors that may affect the AQMA, including measures introduced as part of the Action Plan, together with information from national monitoring on high and low pollution years. The AQMA will be revoked when monitoring results from three consecutive years show no exceedances of the AQO at relevant locations, so that a permanent improvement in air quality can be demonstrated, and actions implemented around Guildford Road are considered to have been effective.

Actions to Improve Air Quality

The Further Assessment of the Anchor Hill AQMA included recommendations to improve air quality at the junction. As a result of the recommendations, Surrey County Council (SCC) have updated the Traffic Signals in operation at the junction of Anchor Hill and High Street, Knaphill. In August 2016, a Microprocessor Optimised Vehicle Actuation (MOVA) scheme was introduced on Anchor Hill, no data on the effects that this has had is available yet.

An AQAP for WBC is currently being prepared for the Guildford Road AQMA. This is due to monitored NO₂ concentrations along Guildford Road in 2015, and the subsequent Detailed Assessment, identifying exceedances of the AQO at locations representative of residential receptors. WBC have confirmed that there is likely to be increased development occurring in the Town Centre over the upcoming years, therefore the Action Plan will focus on measures that can be implemented to manage increased influxes of traffic diverted down Guildford Road.

Conclusions and Priorities

WBC has declared two AQMAs at Anchor Hill and Guildford Road as a result of exceedances of the annual mean NO₂ AQO. Although 2016 monitoring results indicate that the AQO is not exceeded at relevant locations in the AQMAs, these remain the main priority locations for improving air quality.

The priorities for WBC following this ASR are as follows:

- Continue monitoring of NO₂ to confirm if concentrations remain below the annual mean AQO at locations of relevant exposure.
- Prepare an AQAP for the Guildford Road AQMA.

Local Engagement and How to get Involved

The following sources of information are available on WBC's website for improving air quality in the borough and seeking further information:

- List of Air Quality Management Areas (AQMAs) in the borough, where health based air quality standards are not expected to be met:
https://www.woking.gov.uk/airquality#air_quality_management_areas
- The Air Quality Action Plan for the Anchor Hill AQMA:
http://aqma.defra.gov.uk/action-plans/woking-borough-council_aqap_final.pdf
- Overview of the air quality in Surrey and a range of articles about problems, solutions and how pollution affects the public:
<http://www.woking.gov.uk/planning/envhealthservice/control/airquality/surreyai>

- airAlert service warning local residents who have respiratory problems of whenever the air pollution in Woking is going to be high. This is a free subscription service which individuals, who suffer from asthma, COPD, emphysema or other respiratory illnesses, can sign up to, and they will receive either an email, text message or voicemail giving an advanced warning of high pollution levels: <http://airalert.info/Surrey/Default.aspx>



Table of Contents

Executive Summary: Air Quality in Our Area	i
Air Quality in Woking Borough Council (WBC)	i
Actions to Improve Air Quality	iii
Conclusions and Priorities	iii
Local Engagement and How to get Involved	iii
1 Local Air Quality Management	1
2 Actions to Improve Air Quality	2
2.1 Air Quality Management Areas	2
2.2 Progress and Impact of Measures to address Air Quality in Woking	4
2.3 PM _{2.5} – Local Authority Approach to Reducing Emissions and/or Concentrations	11
3 Air Quality Monitoring Data and Comparison with Air Quality Objectives and National Compliance	12
3.1 Summary of Monitoring Undertaken	12
3.1.1 Automatic Monitoring Sites	12
3.1.2 Non-Automatic Monitoring Sites	12
3.2 Individual Pollutants	12
3.2.1 Nitrogen Dioxide (NO ₂)	12
3.2.2 Particulate Matter (PM ₁₀)	13
3.2.3 Particulate Matter (PM _{2.5})	13
3.2.4 Sulphur Dioxide (SO ₂)	13
Appendix A: Monitoring Results	14
Appendix B: Full Monthly Diffusion Tube Results for 2016	20
Appendix C: Supporting Technical Information / Air Quality Monitoring Data QA/QC	22
Appendix D: Maps of Monitoring Locations and AQMAs	23
Appendix E: Summary of Air Quality Objectives in England	28
Glossary of Terms	29
References	30

List of Tables

Table 2.1 – Declared Air Quality Management Areas	3
Table 2.2 – Progress on Measures to Improve Air Quality	6

List of Figures

Figure 1 Location of non-automatic monitoring sites - West.....	24
Figure 2 Location of non-automatic monitoring sites - East.....	25
Figure 3 Anchor Hill AQMA boundary.....	26
Figure 4 Guildford Road AQMA boundary.....	27

1 Local Air Quality Management

This report provides an overview of air quality in Woking during 2016. It fulfils the requirements of Local Air Quality Management (LAQM) as set out in Part IV of the Environment Act (1995) and the relevant Policy and Technical Guidance documents.

The LAQM process places an obligation on all local authorities to regularly review and assess air quality in their areas, and to determine whether or not the air quality objectives are likely to be achieved. Where an exceedance is considered likely the local authority must declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in pursuit of the objectives. This Annual Status Report (ASR) is an annual requirement showing the strategies employed by Woking to improve air quality and any progress that has been made.

The statutory air quality objectives applicable to LAQM in England can be found in Table E.1 in Appendix E.

2 Actions to Improve Air Quality

2.1 Air Quality Management Areas

Air Quality Management Areas (AQMA(s)) are declared when there is an exceedance or likely exceedance of an Air Quality Objective (AQO). After declaration, the authority must prepare an Air Quality Action Plan (AQAP) within 12-18 months setting out measures it intends to put in place in pursuit of compliance with the objectives.

A summary of AQMA(s) declared by Woking can be found in Table 2.1. Further information related to declared or revoked AQMA(s), including maps of AQMA boundaries are available online at http://uk-air.defra.gov.uk/aqma/local-authorities?la_id=317. Alternatively, see Appendix D: Maps of Monitoring Locations and AQMA(s), which provides for a map of air quality monitoring locations in relation to the AQMA(s).

Table 2.1 – Declared Air Quality Management Areas

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	City / Town	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Level of Exceedance (maximum monitored/modelled concentration at a location of relevant exposure)		Action Plan (inc. date of publication)
						At Declaration	Now	
Anchor Hill AQMA	Declared 1 st February 2014,	NO ₂ Annual Mean	Knaphill, Woking	A small area covering a 4 way junction at the top of a steep hill.	N	41.5	36.0 (with distance correction)	Anchor Hill Air Quality Action Plan: http://aqma.defra.gov.uk/action-plans/woking-borough-council_aqap_final.pdf
Guildford Road AQMA	Declared 15 th May 2017	NO ₂ Annual Mean	Woking	A small section of the road where Guildford Road meets Constitution Hill and Mount Hermon Road	N	42.2 (modelled)	32.6 (with distance correction)	Currently being prepared (expected publication in 2017)

☐ Woking confirm the information on UK-Air regarding their AQMA(s) is up to date

2.2 Progress and Impact of Measures to address Air Quality in Woking

Defra's appraisal of last year's ASR highlighted that monitoring results showing exceedances of the AQO on Guildford Road needed to be distance corrected before considering the declaration of a second AQMA. The distance corrections were applied to the results and there were still exceedances of the AQO predicted at receptor locations, based on the distance of the flats on the corner of Guildford Road and Constitution Hill from the roads. The distance corrected results supported the Detailed Assessment in to the extent of exceedances at receptor locations and helped determine the extent of the proposed AQMA at Guildford Road.

WBC has taken forward a number of direct measures during the current reporting year of 2016 in pursuit of improving local air quality. Details of all measures completed, in progress or planned are set out in Table 2.2.

More detail on these measures can be found in WBC's Anchor Hill AQAP and the Surrey Transport Plan: Air Quality Strategy (Surrey County Council, 2011). An AQAP is currently being prepared for the Guildford Road AQMA. WBC have confirmed that there is likely to be increased development occurring in the Town Centre over the upcoming years, therefore the Action Plan will focus on measures that can be implemented to manage increased influxes of traffic diverted down Guildford Road.

WBC works from the Surrey Transport Plan (LTP3). A twin-track strategy is proposed to address air quality in Surrey County Council (SCC), which focuses on AQMAs and synergies with other strategies to deliver countywide air quality improvements. Measures to improve air quality are included in a "Strategy Toolkit" within the Air Quality Strategy.

Key completed measures are:

- Installation of a MOVA system in August 2016 at the junction between Anchor Hill and High Street. This measure will likely have an impact on NO₂ levels from road traffic in the Anchor Hill AQMA.
- Improvement of cycling and walking infrastructure. These measures will likely reduce road traffic congestion and improve air quality.

Additionally, eleven local authorities across Surrey and the SCC, including public health professionals, have set up an Air Quality Alliance. The Surrey Air Alliance will produce a Surrey Action Plan by the end of 2017. The alliance is also planning a dispersion modelling of PM_{2.5} and NO_x levels across the borough, which will identify the sources of these pollutants. This will help develop target measures to reduce pollution from the relevant sources.

WBC anticipates that the measures stated above and in Table 2.2 will help to achieve compliance in the Anchor Hill and Guildford Road AQMAs.

Whilst the measures stated above and in Table 2.2 will help to contribute towards compliance, WBC anticipates that further additional measures not yet prescribed will be required in subsequent years to achieve compliance and enable the revocation of the Anchor Hill and Guildford Road AQMAs.

Table 2.2 – Progress on Measures to Improve Air Quality

Measure No.	Measure	EU Category	EU Classification	Organisations involved and Funding Source	Planning Phase	Implementation Phase	Key Performance Indicator	Reduction in Pollutant / Emission from Measure	Progress to Date	Estimated / Actual Completion Date	Comments / Barriers to implementation
1	Urban Traffic Management and Control (UTMC)	Traffic Management	UTC, Congestion Management, Traffic Reduction	SCC / WBC	2015	2015	Restrain or reduce traffic volumes in AQMA	Y	MOVA installed and in operation since August 2016 at the busy junction in the Anchor Hill AQMA	August 2016	N/a
2	New and/or improved cycle lane	Transport Planning & Infrastructure	Cycle Network	SCC / WBC	N/a	2008 - 2011	Restrain or reduce traffic volumes in AQMA	Y	Shared cycle and pedestrian path, West Byfleet recreation ground. Additional bicycle pump stands and cycle parking in Woking Town Centre and cycle stands donated to other local premises (leisure centre, the Mosque, day centres). Footpath link created between the Hoe Valley Scheme path and the playground at Willow Reach (the former Westfield Tip development site). Disabled ramp to fishing platform at Goldsworth Park. Existing shared path 19, Horsell has been widened, surfaced and landscaping and low level lighting added. Surrey County Council's website provides information on cycle and walking improvements in Woking completed by March 2016 (www.travelsmartsurrey.info/achievements/cycling-and-walking-improvements-in-Surrey). In addition, a new	Ongoing	N/a
3	New and/or improved cycle track	Transport Planning & Infrastructure	Cycle Network	SCC / WBC	N/a	2008 – 2011	Restrain or reduce traffic volumes in AQMA	Y		Ongoing	N/a

Woking Borough Council

Measure No.	Measure	EU Category	EU Classification	Organisations involved and Funding Source	Planning Phase	Implementation Phase	Key Performance Indicator	Reduction in Pollutant / Emission from Measure	Progress to Date	Estimated / Actual Completion Date	Comments / Barriers to implementation
									cycle path will link the Broadway, Albion Square, High Street and the new link road in Woking. Town Centre Engineering team have fitted additional stainless steel cycle racks on Gloucester Walk and Commercial Way.		
Page 112	Cycle parking	Transport Planning & Infrastructure	Cycle Network	SCC / WBC	N/a	2008 - 2011	Restrain or reduce traffic volumes in AQMA	Y	Various improvements made under Cycle Woking 2008 – 2011. In 2015 the Cycle Hub was installed at Woking station providing storage for over 200 cycles and encouraging cycle / rail integration. New cycle storage compound implemented at Brookwood station in 2016. These storage facilities have been funded by Department for Transport funding secured by South West Trains together with WBC S106 funding contributions.	August 2016	N/a
5	Park and ride	Alternatives to Private Vehicle Use	Bus based Park & Ride	SCC / WBC	N/a	2012	Restrain or reduce traffic volumes in AQMA	Y	Following on from Cycle Woking, Surrey County Council's TravelSmart initiative won further Department for Transport Local Sustainable Transport Fund monies for the period from 2012 until 2015, with over £18 million to spend on schemes like improving and installing cycle lanes, investing in interactive and live travel information and encouraging and supporting	Cancelled	Not suitable or relevant for Woking
6	Park and stride	Alternatives to Private Vehicle Use	Other	SCC / WBC	N/a	2012	Restrain or reduce traffic volumes in AQMA	Y		Cancelled	Not suitable or relevant for Woking

Woking Borough Council

Measure No.	Measure	EU Category	EU Classification	Organisations involved and Funding Source	Planning Phase	Implementation Phase	Key Performance Indicator	Reduction in Pollutant / Emission from Measure	Progress to Date	Estimated / Actual Completion Date	Comments / Barriers to implementation
									more people in travelling sustainably. To deliver its programme of improvements, Travel SMART worked closely with borough councils, residents, community groups and businesses (https://www.travelsmartsurrey.info/about).		
7	Infrastructure to support the use of hybrid/electric vehicles	Traffic Management	Other	SCC / WBC	N/a	2015	Reduce tailpipe emissions in AQMA	Y	WBC trialled an electric car for six months as part of our car club arrangements for staff business use (CarShare). The trial ended in October 2015. WBC have recently installed a further six electric vehicle charging points in the Yellow Car Park. This is in addition to the eight existing points.	Ongoing	N/a
8	Car clubs	Alternatives to private vehicle use	Car Clubs	SCC / WBC	N/a	N/a	Restrain or reduce traffic volumes in AQMA	Y	The Council has a car club arrangement with Enterprise Rent A Car Ltd for staff business use – the CarShare scheme – see more info on 'ewokplus:'. Enterprise recently acquired City Car Club who recently won the contract to operate Surrey County Council's car club scheme that is also available for the public. In Woking, there are cars available in Guildford Road and at Quadrant Court. ⁴⁵	Ongoing	N/a

Woking Borough Council

Measure No.	Measure	EU Category	EU Classification	Organisations involved and Funding Source	Planning Phase	Implementation Phase	Key Performance Indicator	Reduction in Pollutant / Emission from Measure	Progress to Date	Estimated / Actual Completion Date	Comments / Barriers to implementation
9	Workplace travel planning	Promoting Travel Alternatives	Personalised Travel Planning	SCC / WBC	N/a	N/a	Restrain or reduce traffic volumes in AQMA	Y	The Council has its own Staff Transport Plan including various initiatives to encourage alternative modes of transport to the car. Criteria has been applied to lease cars in order to lower emissions and air pollution associated with this fleet. Environmental standards also apply to cash alternative vehicles.	Ongoing	N/a
Page 114 10	Differential parking charges	Traffic Management	Emission based parking or permit charges	SCC / WBC	N/a	N/a	Reduce tailpipe emissions in AQMA	Y	Differential parking charges. ⁶ The cost of a season ticket is based on a vehicle's CO2 emission rating (determined by the Vehicle Certification Agency). A 50% discount is applied for vehicles that produce the lowest emissions (CO2 band A) and a 25% discount for band B vehicles. Those with a band G rating (the highest band) pay a 25% surcharge.	Ongoing	N/a
11	Encourage boroughs and districts to consider adopting minimum emissions standards	Promoting Low Emission Transport	Taxi Licensing conditions	SCC / WBC	N/a	2014	Reduce tailpipe emissions in AQMA	Y	With effect from the 4th of January 2014, WBC have required all Private Hire Vehicles and all non-wheelchair compliant Hackney Carriages to meet the Euro Emissions V (five) Criteria. As wheelchair accessible vehicles tend to be larger and more van-like, it is	Ongoing	N/a

Woking Borough Council

Measure No.	Measure	EU Category	EU Classification	Organisations involved and Funding Source	Planning Phase	Implementation Phase	Key Performance Indicator	Reduction in Pollutant / Emission from Measure	Progress to Date	Estimated / Actual Completion Date	Comments / Barriers to implementation
Page 115	or vehicle age restrictions into taxi licensing procedures								unrealistic for us to expect them to meet the low emissions criteria. However – there are at least 540 private hire vehicles in Woking – all of which are at least Euro Emissions V (five). Some even are Euro Emissions VI (six). Euro Emission Standard VI (six) has been applied to manufactures of new vehicles from September 2014 and they are given 12 months to comply. This means that from September 2015 no new vehicle (passenger car) should be being produced that is not Euro VI. Our policy is stating that as Euro Emissions VI (six) is to be applied to manufacturers from September 2014, it will therefore apply to new and renewal vehicles presented to Woking Borough Council from 20th of January 2022. With effect from the 20th of January 2022 there will be no Euro Emissions V (five) vehicles licenced by Woking Borough Council.		

⁴ <http://www.woking.gov.uk/transport/parking/carparks/chargepoints>

⁵ <https://www.travelsmartsurrey.info/driving/car-clubs>

⁶ <http://www.woking.gov.uk/transport/parking/season>

2.3 PM_{2.5} – Local Authority Approach to Reducing Emissions and/or Concentrations

As detailed in Policy Guidance LAQM.PG16 (Chapter 7), local authorities are expected to work towards reducing emissions and/or concentrations of PM_{2.5} (particulate matter with an aerodynamic diameter of 2.5µm or less). There is clear evidence that PM_{2.5} has a significant impact on human health, including premature mortality, allergic reactions, and cardiovascular diseases.

WBC is working to address PM_{2.5} through implementation of the measures to improve air quality detailed in Table 2.2.

3 Air Quality Monitoring Data and Comparison with Air Quality Objectives and National Compliance

3.1 Summary of Monitoring Undertaken

This section sets out what monitoring has taken place and how it compares with objectives.

3.1.1 Automatic Monitoring Sites

There are no continuous monitoring sites located within Woking Borough.

3.1.2 Non-Automatic Monitoring Sites

Woking undertook non-automatic (passive) monitoring of NO₂ at 30 sites during 2016. Table A.1 in Appendix A shows the details of the sites.

Maps showing the location of the monitoring sites are provided in Appendix D. Further details on Quality Assurance/Quality Control (QA/QC) for the diffusion tubes, including bias adjustments, are included in Appendix C.

3.2 Individual Pollutants

The air quality monitoring results presented in this section are, where relevant, adjusted for bias, “annualisation” and distance correction. Further details on adjustments are provided in Appendix C.

3.2.1 Nitrogen Dioxide (NO₂)

Table A.2 in Appendix A compares the ratified and adjusted monitored NO₂ annual mean concentrations for the past five years with the air quality objective of 40µg/m³.

For diffusion tubes, the full 2016 dataset of monthly mean values is provided in Appendix B.

After bias adjustment, exceedances of the annual mean 40 µg/m³ objective limit were recorded at five locations in 2016, as shown in bold in Table B.1. However, after distance correction, only an exceedance at the M25 site was recorded.

The monitoring site at the M25 is located on a bridge over the motorway. The site has recorded high concentrations of NO₂ as would be expected close to a motorway. Previous rounds of Review and Assessment have determined this site is not representative of relevant exposure (Woking Borough Council, 2014). This site is still not representative of relevant exposure in 2016. The monitoring site at Victoria Way has also recorded exceedances of the NO₂ AQO over a number of years and has been confirmed to be non-representative of relevant exposure as the properties in the locality are all commercial. In 2016 the annual mean didn't exceed the AQO.

The Anchor Hill monitoring sites are located on a steep hill leading to a traffic light controlled junction. This site had a Detailed Assessment carried out in 2012 and a Further Assessment carried out in 2015. The results in the 2015 Further Assessment highlighted the need to consider options to reduce exposure of nearby residential receptors (Amec Foster Wheeler, 2015). Due to exceedances of the AQO at diffusion tubes AH and AH6 along Anchor Hill, it was recommended that the AQMA remain in place until further monitoring consistently records concentrations below the AQO. In 2016 there were no exceedance of the AQO at any of the sites within the Anchor Hill AQMA (AH, AH1, AH2, AH3, AH4, AH5, AH6 and LGR).

Before distance correction all four diffusion tubes along Guildford Road, recorded exceedances of the AQO in 2016 and 2015. The site Cott1 located at the end of Constitution Hill recorded exceedances in 2015. Monitoring has been undertaken at the site CH since 2012 and has records of exceedances for every year except 2014. After distance correction to nearest exposure, all sites on Guildford Road recorded NO₂ levels under the AQO in 2016.

LAQM (TG.16) guidance suggests that declaration of an AQMA should be provided in the ASR if the monitoring results are deemed sufficient to conclude on the risk of exceedance and the area likely to be affected. A Detailed Assessment in November 2016 indicated that concentrations at some receptor locations with relevant exposure were exceeding the AQO when contour plots were mapped. Consequently, this part of Guildford Road was declared an AQMA in May 2017. A map of the Guildford Road AQMA is included in Appendix D.

Analysis of UK continuous NO₂ monitoring data has shown that it is unlikely that the hourly mean NO₂ objective, of 18 hourly means over 200 µg/m³, would be exceeded where the annual mean objective is below 60 µg/m³. There was one exceedance of 60 µg/m³ in 2015 at the diffusion tube located near the M25, which is not representative of human exposure. In 2016 no exceedances of 60 µg/m³ have been recorded.

3.2.2 Particulate Matter (PM₁₀)

No PM₁₀ monitoring is undertaken in the Woking Borough Council area.

3.2.3 Particulate Matter (PM_{2.5})

No PM_{2.5} monitoring is undertaken in the Woking Borough Council area.

3.2.4 Sulphur Dioxide (SO₂)

No SO₂ monitoring is undertaken in the Woking Borough Council area.

Appendix A: Monitoring Results

Table A.1 – Details of Non-Automatic Monitoring Sites

Site ID	Site Name	Site Type	X OS Grid Ref	Y OS Grid Ref	Pollutants Monitored	In AQMA?	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m) ⁽²⁾	Tube collocated with a Continuous Analyser?	Height (m)
Cott1	Constitution Hill 1	Kerbside	500437	158120	NO ₂	NO	3.0	1.0	NO	-
Cott2	Constitution Hill 1	Kerbside	500453	158100	NO ₂	NO	15.0	1.0	NO	-
M25	M25	Other	505611	161180	NO ₂	NO	N/a	0.0	NO	-
Church	Church Road	Kerbside	506401	160504	NO ₂	NO	6.0*	1.0*	NO	-
RC	Rosebery Crescent	Kerbside	500946	157110	NO ₂	NO	10.0	1.0	NO	-
AH	Anchor Hill 1	Kerbside	496618	158699	NO ₂	YES	69.0	1.0	NO	-
AH2	Anchor Hill 2	Roadside	496615	158696	NO ₂	YES	0.0	5.0	NO	-
AH3	Anchor Hill 3	Roadside	496646	158750	NO ₂	YES	0.0	5.0	NO	-
AH4	Anchor Hill 4	Roadside	496679	158767	NO ₂	YES	6.0	2.0	NO	-
AH5	Anchor Hill 5	Roadside	496594	158698	NO ₂	YES	0.0	5.0	NO	-
AH6	Anchor Hill 6	Roadside	496587	158668	NO ₂	YES	0.0	2.0	NO	-
LGR	Lower Guildford Rd	Roadside	496601	158668	NO ₂	YES	0.0	3.0	NO	-
LD	Lincoln Drive	Kerbside	503244	159659	NO ₂	NO	12.0	1.0	NO	-
VW	Victoria Way	Kerbside	500510	159030	NO ₂	NO	N/a	1.0	NO	-

BD	Bitterne Drive	Roadside	498025	158949	NO ₂	NO	6.0*	2.0*	NO	-
BR	Bagshot Road	Kerbside	495821	157793	NO ₂	NO	15.0	1.0	NO	-
BR1	Bagshot Road	Roadside	495852	157188	NO ₂	NO	21.0	1.5	NO	-
PR	Dartnell Avenue (previously Parvis Road)	Kerbside	504926	161063	NO ₂	NO	12.0	1.0	NO	-
WL	Woodham Lane	Kerbside	502854	161062	NO ₂	NO	31.0	1.0	NO	-
GR	Goldsworth Road	Kerbside	499952	158545	NO ₂	NO	6.0	1.0	NO	-
MR	Monument Road	Roadside	501611	159645	NO ₂	NO	4.0	2.0	NO	-
MR2	Monument Road	Roadside	501613	159646	NO ₂	NO	18.0	2.0	NO	-
CW	Cavell Way	Roadside	496214	157989	NO ₂	NO	5.0*	2.0*	NO	-
BW	Broadway	Kerbside	495874	157971	NO ₂	NO	18.7	1.0	NO	-
CH	Constitution Hill 4	Roadside	500417	158102	NO ₂	YES	4.0	1.5	NO	-
CH2	Constitution Hill 5	Kerbside	500367	158073	NO ₂	YES	12.0	1.0	NO	-
CH3	Constitution Hill 6	Roadside	500330	158012	NO ₂	YES	14.0	1.5	NO	-
CH4	Constitution Hill 7	Kerbside	500332	157983	NO ₂	NO	17.0	1.0	NO	-
TC	The Cedars	Roadside	506731	161229	NO ₂	NO	24.0*	4.0	NO	-
OR	Oriental Road	Roadside	501649	159148	NO ₂	NO	26.0*	3.0	NO	-

Notes:

(1) 0m if the monitoring site is at a location of exposure (e.g. installed on/adjacent to the façade of a residential property).

(2) N/A if not applicable.

* Distances estimated from online mapping sources.

Table A.2 – Annual Mean NO₂ Monitoring Results

Site ID	Site Type	Monitoring Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2016 (%) ⁽²⁾	NO ₂ Annual Mean Concentration (µg/m ³) ⁽³⁾				
					2012	2013	2014	2015 ⁽⁴⁾	2016 ⁽⁴⁾
Cott1	Kerbside	Diffusion Tube	83	83	34.8	36	31	40.7 (34.7)	23.6 (22.2)
Cott2	Kerbside	Diffusion Tube	100	100	24.9	27.4	17.8	24.9 (21.8)	33.9 (25.3)
M25	Other	Diffusion Tube	100	100	50.4	52.1	50.3	61.0	51.4
Church	Kerbside	Diffusion Tube	92	92	41.1	43.9	19.9	24.7 (22.1)	23.9 (21.2)
RC	Kerbside	Diffusion Tube	92	92	18.6	21.4	17.7*	16.5 (15.6)	16.6 (15.3)
AH	Kerbside	Diffusion Tube	100	100	35.1	41.5	37.1	44.1	36.0
AH2	Roadside	Diffusion Tube	100	100	42.8	36.5	29.1	36.7	34.9
AH3	Roadside	Diffusion Tube	100	100	30.4	30.7	20.7	27.1	23.3
AH4	Roadside	Diffusion Tube	100	100	33.3	32	24.6	34.5 (28.1)	31.6 (25.9)
AH5	Roadside	Diffusion Tube	100	100	15.5	32	26.3	34.0	29.4
AH6	Roadside	Diffusion Tube	100	100	-	32	33.5	40.9	34.7
LGR	Roadside	Diffusion Tube	100	100	-	32.3	25.2	32.0	26.2
LD	Kerbside	Diffusion Tube	100	100	21.7	19.8	16.3	20.7 (17.8)	18.7 (16.5)

VW	Kerbside	Diffusion Tube	100	100	37.8	40.4	27.4	43.2	35.7
BD	Roadside	Diffusion Tube	100	100	20.8	17.8	13.9	17.0 (16.0)	18.0 (16.5)
BR	Kerbside	Diffusion Tube	100	100	30.6	30.6	24.5	31.6 (21.4)	28.4 (19.7)
BR1	Roadside	Diffusion Tube	100	100	-	-	23.1*	26.2 (18.6)	24.4 (17.5)
PR	Kerbside	Diffusion Tube	100	100	25.7	26.8	23.3	28.4 (22.6)	25.9 (21.0)
WL	Kerbside	Diffusion Tube	92	92	31.7	33.3	26.4	29.0 (18.9)	30.5 (19.0)
GR	Kerbside	Diffusion Tube	100	100	30	32.2	23.6	26.8 (22.4)	27.3 (22.5)
MR	Roadside	Diffusion Tube	83	83	32.5	33.3	27.1*	35.0 (30.2)	37.8 (32.1)
MR2	Roadside	Diffusion Tube	100	100	-	34	29.3	35.7 (25.3)	32.5 (23.5)
CW	Roadside	Diffusion Tube	100	100	22.6	28.1	21.5	23.5 (20.5)	22.3 (19.5)
BW	Kerbside	Diffusion Tube	83	83	22.8	28	19.2	21.9 (16.8)	20.1 (15.7)
CH	Roadside	Diffusion Tube	100	100	41.1	43.9	34.2	48.8 (40.4)	43.3 (36.2)
CH2	Kerbside	Diffusion Tube	100	100	-	-	40.6*	51.6 (34.9)	47.6 (32.6)
CH3	Roadside	Diffusion Tube	100	100	-	-	37.9*	51.5 (35.0)	45.4 (31.6)
CH4	Kerbside	Diffusion Tube	100	100	-	-	34.5*	42.4 (26.6)	40.0 (25.2)
OR	Roadside	Diffusion Tube	100	100	-	-	-	-	27.6 (22.6)

TC	Roadside	Diffusion Tube	92	92	-	-	-	-	29.9 (21.6)
----	----------	----------------	----	----	---	---	---	---	-------------

☒ Diffusion tube data has been bias corrected

☒ If applicable, all data has been distance corrected for relevant exposure

Notes:

Exceedances of the NO₂ annual mean objective of 40µg/m³ are shown in **bold**.

NO₂ annual means exceeding 60µg/m³, indicating a potential exceedance of the NO₂ 1-hour mean objective are shown in **bold and underlined**.

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

(3) Means for diffusion tubes have been corrected for bias.

(4) If applicable, annual means in brackets are distance corrected to nearest exposure.

*Means have been “annualised” as per Boxes 7.9 and 7.10 in LAQM.TG16 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

Appendix B: Full Monthly Diffusion Tube Results for 2016

Table B.1 – NO₂ Monthly Diffusion Tube Results - 2016

Page 125

Site ID	NO ₂ Mean Concentrations (µg/m³)														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean		
													Raw Data	Bias Adjusted (0.94) and Annualised ⁽¹⁾	Distance Corrected to Nearest Exposure ⁽²⁾
Cott1	41	26	44	18	20	20	18	18	18	28			25.1	23.6	22.2
Cott2	30	32	47	32	32	34	34	32	35	34	45	46	36.1	33.9	25.3
M25	65	44	68	47	57	54	43	55	48	56	59	60	54.7	51.4	N/a
Church	31		36	22	23	20	18	22	21	26	31	30	25.5	23.9	21.2
RC	24	17	26	16	15	14	13	11	13		23	22	17.6	16.6	15.3
AH	58	26	48	34	45	36	33	28	24	34	44	50	38.3	36.0	N/a
AH2	47	43	47	31	33	38	40	24	25	34	39	44	37.1	34.9	N/a
AH3	32	19	25	25	23	21	20	23	20	21	31	38	24.8	23.3	N/a
AH4	41	22	32	22	28	26	23	42	44	47	48	29	33.7	31.6	25.9
AH5	34	32	38	30	29	28	27	25	33	27	36	36	31.3	29.4	N/a
AH6	51	44	39	34	43	32	33	25	35	30	41	36	36.9	34.7	N/a
LGR	36	32	31	25	26	28	34	20	10	24	34	34	27.8	26.2	N/a
LD	23	17	33	17	14	8	16	17	16	25	28	25	19.9	18.7	16.5
VW	45	35	38	28	43	38	34	35	33	41	44	42	38.0	35.7	N/a
BD	25	21	26	21	10	12	11	12	29	17	23	23	19.2	18.0	16.5

Woking Borough Council

BR	38	25	39	29	29	24	25	27	21	34	45	27	30.3	28.4	19.7
BR1	30	22	31	22	24	16	20	18	28	30	30	41	26.0	24.4	17.5
PR	30	20	32	29	24	28	23	24	24	33	32	31	27.5	25.9	21.0
WL	37	30	40	32	28		30	29	24	32	42	33	32.5	30.5	19.0
GR	37	33	36	26	30	23	21	14	25	36	28	40	29.1	27.3	22.5
MR	45			26	45	40	30	35	36	54	48	43	40.2	37.8	32.1
MR2	50	30	45	30	32	30	30	30	26	41	30	41	34.6	32.5	23.5
CW	28	28	32	20	20	14	16	18	20	30	30	29	23.8	22.3	19.5
BW	28	24	28	16	15		15	12	16		31	29	21.4	20.1	15.7
CH	49	36	48	40	54	51	37	35	43	56	54	50	46.1	43.3	36.2
CH2	69	37	59	64	48	50	39	44	42	51	46	59	50.7	47.6	32.6
CH3	66	42	49	39	57	47	47	43	43	54	43	50	48.3	45.4	31.6
CH4	60	46	35	40	36	51	33	38	36	33	48	54	42.5	40.0	25.2
OR	37	35	41	24	29	29	19	22	18	31	37	30	29.3	27.6	22.6
TC		33	45	30	31	36	22	29	26	31	38	29	31.8	29.9	21.6

☐ Local bias adjustment factor used

☒ National bias adjustment factor used

☒ Annualisation has been conducted where data capture is <75%

Notes:

Exceedances of the NO₂ annual mean objective of 40µg/m³ are shown in **bold**.

NO₂ annual means exceeding 60µg/m³, indicating a potential exceedance of the NO₂ 1-hour mean objective are shown in **bold and underlined**.

⁽¹⁾ See Appendix C for details on bias adjustment and annualisation.

⁽²⁾ Distance corrected to nearest relevant public exposure.

Appendix C: Supporting Technical Information / Air Quality Monitoring Data QA/QC

Diffusion tube bias adjustment factors

The diffusion tubes for 2016 were supplied by Lambeth Scientific Services, and prepared using a 50% triethanolamine (TEA)/Acetone method.

The bias adjustment factor has been taken from Defra's UK national bias adjustment spreadsheet (03/17 V2) and is based on the results of one study in the UK. As only one study was used, caution should be taken when using the bias correction factor produced. The bias adjustment factor for 2016 monitored data is 0.94. Table 3 below details the bias adjustment factors for the period 2012 through 2016 used to adjust the Woking monitoring data.

Table C1 – Bias adjustment factors

Year	National Bias Adjustment Factor
2012	0.91
2013	0.87
2014	0.80
2015	1.07
2016	0.94

QA/ QC of diffusion tube monitoring

Lambeth Scientific Services are a UKAS accredited laboratory, complying with the requirements of ISO/IEC 17025

Appendix D: Maps of Monitoring Locations and AQMAs

Figure 1 Location of non-automatic monitoring sites - West

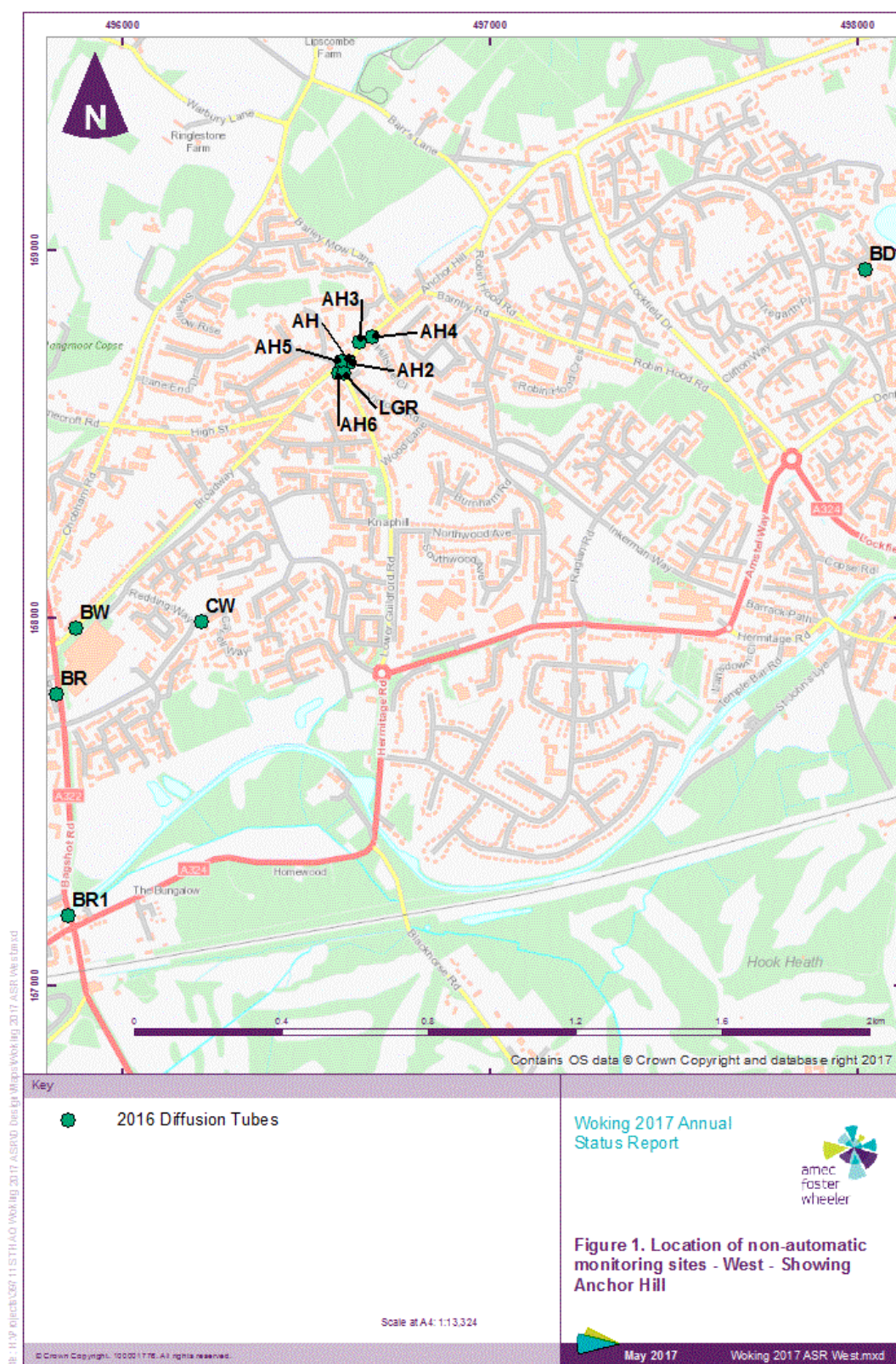


Figure 2 Location of non-automatic monitoring sites - East

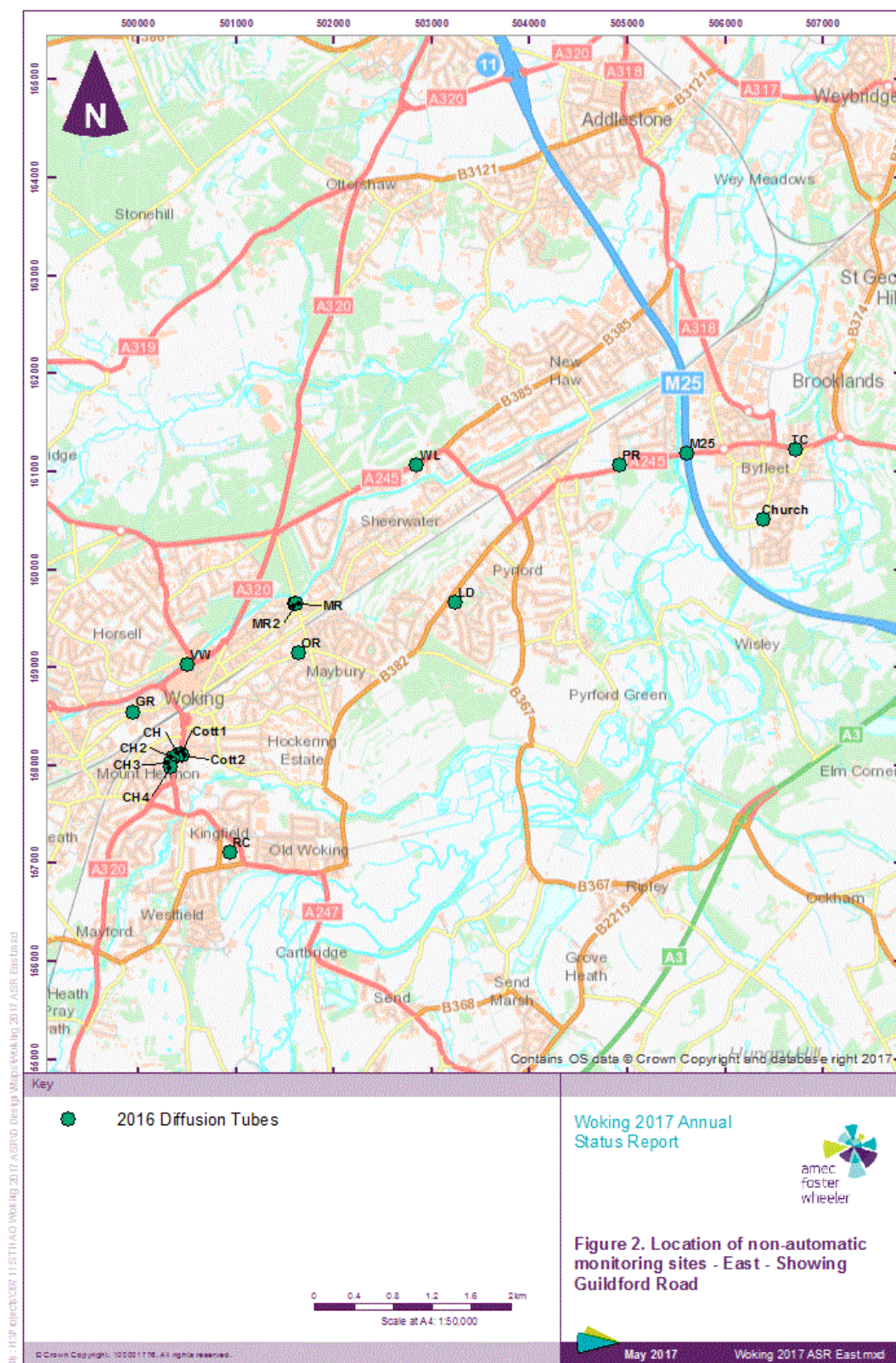
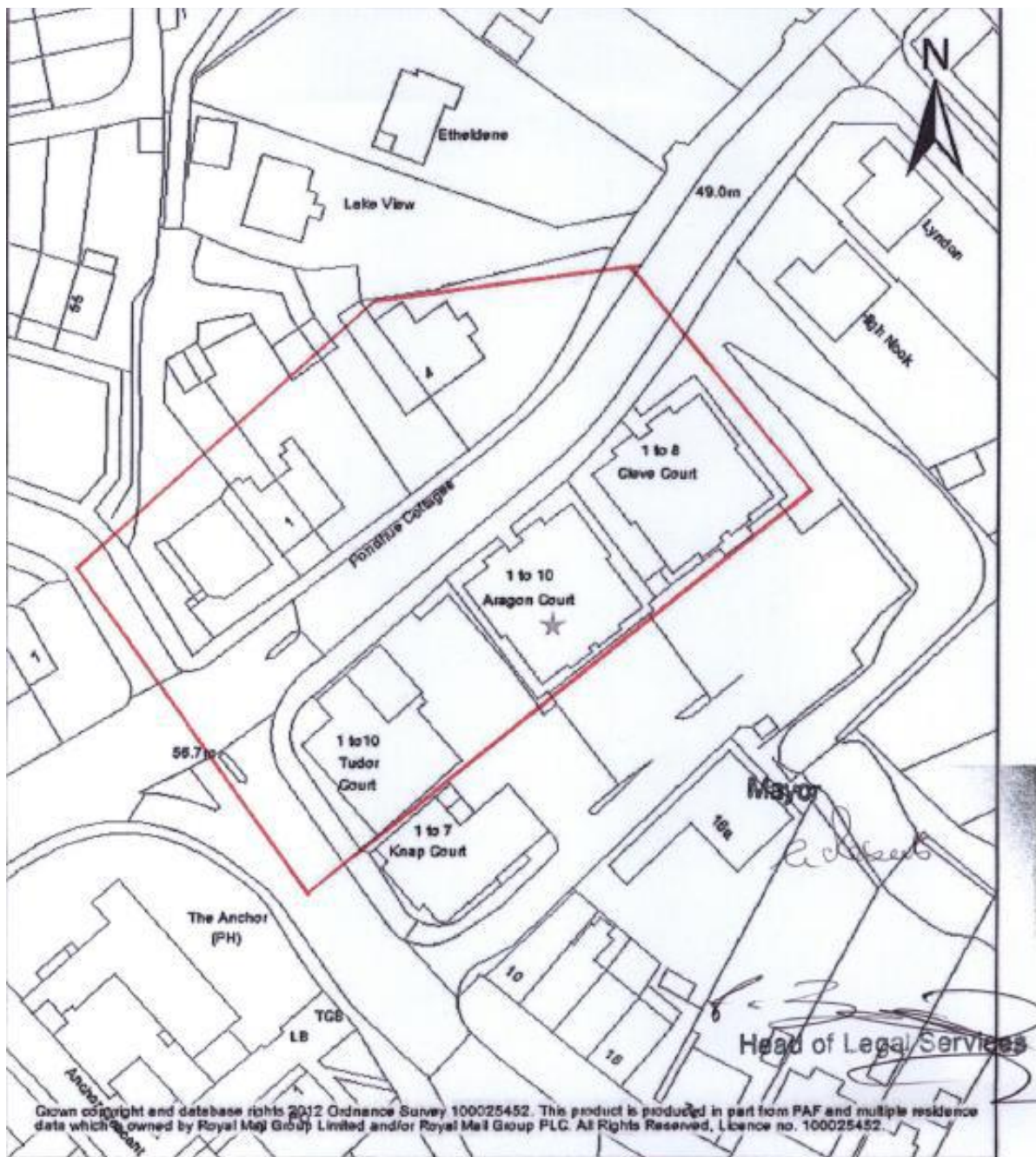


Figure 3 Anchor Hill AQMA boundary




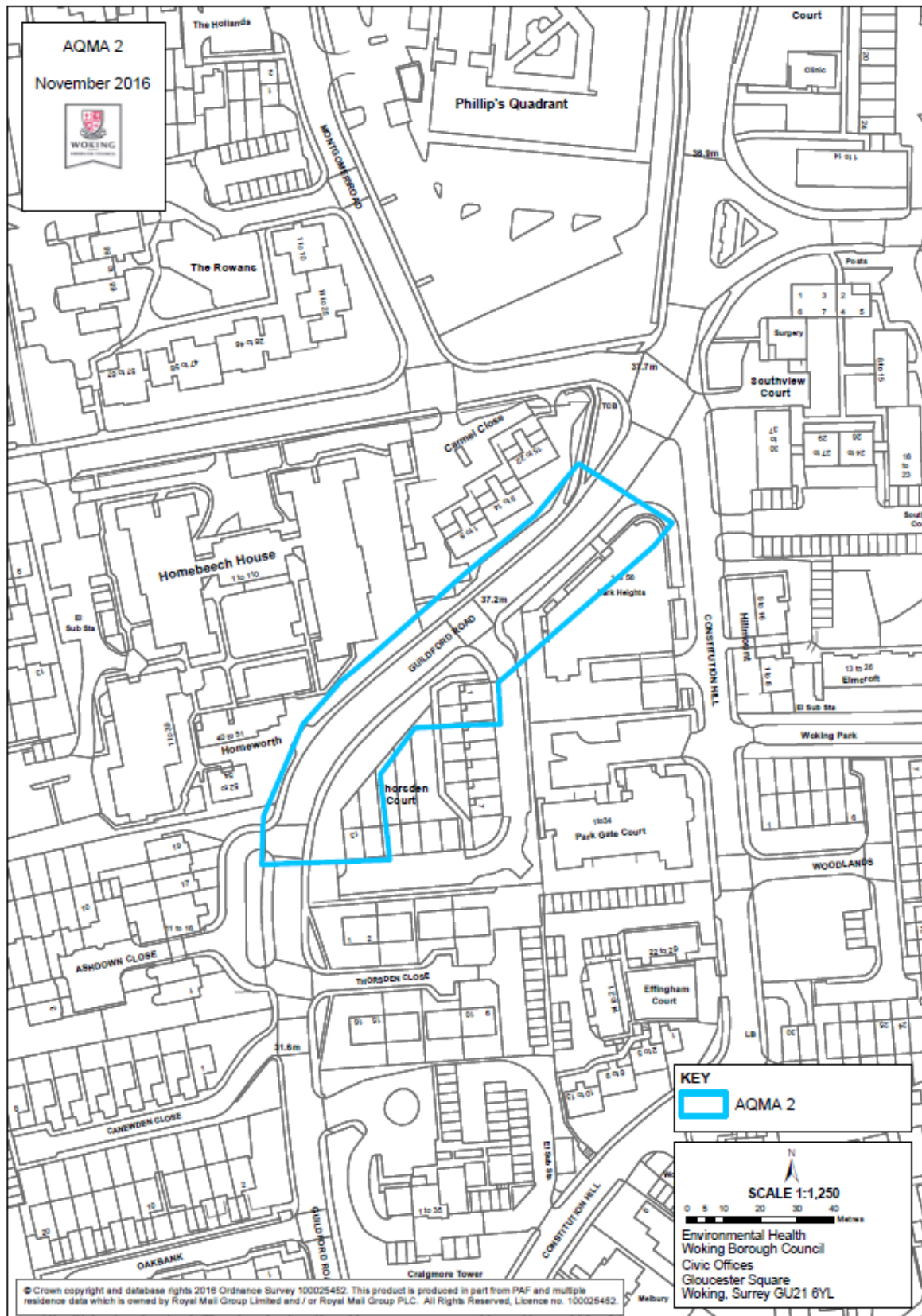
 <p>WOKING BOROUGH COUNCIL</p> <p>Woking Borough Council</p>	Title	Scale 1:700
	Project / Details	Date 01/11/2012
		XY centrepoint 496623,158696
		Drawn by / Department
		Drawing / Reference Number

Figure 4 Guildford Road AQMA boundary



Appendix E: Summary of Air Quality Objectives in England

Table E.1 – Air Quality Objectives in England

Pollutant	Air Quality Objective ⁴	
	Concentration	Measured as
Nitrogen Dioxide (NO ₂)	200 µg/m ³ not to be exceeded more than 18 times a year	1-hour mean
	40 µg/m ³	Annual mean
Particulate Matter (PM ₁₀)	50 µg/m ³ , not to be exceeded more than 35 times a year	24-hour mean
	40 µg/m ³	Annual mean
Sulphur Dioxide (SO ₂)	350 µg/m ³ , not to be exceeded more than 24 times a year	1-hour mean
	125 µg/m ³ , not to be exceeded more than 3 times a year	24-hour mean
	266 µg/m ³ , not to be exceeded more than 35 times a year	15-minute mean

⁴ The units are in microgrammes of pollutant per cubic metre of air (µg/m³).

Glossary of Terms

Abbreviation	Description
AQAP	Air Quality Action Plan - A detailed description of measures, outcomes, achievement dates and implementation methods, showing how the local authority intends to achieve air quality limit values'
AQMA	Air Quality Management Area – An area where air pollutant concentrations exceed / are likely to exceed the relevant air quality objectives. AQMAs are declared for specific pollutants and objectives
ASR	Air quality Annual Status Report
Defra	Department for Environment, Food and Rural Affairs
DMRB	Design Manual for Roads and Bridges – Air quality screening tool produced by Highways England
EU	European Union
FDMS	Filter Dynamics Measurement System
LAQM	Local Air Quality Management
MOVA	Microprocessor Optimised Vehicle Actuation
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxides
PM ₁₀	Airborne particulate matter with an aerodynamic diameter of 10µm (micrometres or microns) or less
PM _{2.5}	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less
QA/QC	Quality Assurance and Quality Control
SO ₂	Sulphur Dioxide

References

Environmental equity, air quality, socioeconomic status and respiratory health (2010).

Amec Foster Wheeler Environment & Infrastructure UK Ltd (2015). Air quality further assessment for Woking Borough Council.

Amec Foster Wheeler Environment & Infrastructure UK Ltd (2015). Woking Borough Council – Anchor Hill AQMA – Air Quality Action Plan.

Defra (2006). Air quality and social deprivation in the UK: an environmental inequalities analysis.

Defra (2013). Abatement cost guidance for valuing changes in air quality.

Defra (2016). Local Air Quality Management Technical Guidance LAQM.TG (16).

Woking Council (2014). Air quality progress report for Woking Council.

Surrey County Council (2011). Surrey transport plan: Air quality strategy.

OVERVIEW AND SCRUTINY COMMITTEE - 26 FEBRUARY 2018

UPDATE ON BASINGSTOKE CANAL PROPOSALS

Summary

This summary report is provided at the request of the Chairman in order to update the Overview and Scrutiny Committee.

The Committee considered a presentation on the Basingstoke Canal at its meeting on 27 February 2017 and made recommendations to the Executive for its meeting on 23 March 2017. The Executive resolved

- That (i) Officers look into which improvements could be made to the Basingstoke Canal in the town centre and its environs to increase the number of boats on the canal and encourage those boaters to use local amenities; and
- (ii) Officers look into which improvements can be made across the length of Woking-owned Canal to make the movement corridor safer and more efficient.

The following progress has been made:-

Town Centre

Town Quay

The outline of the proposal for Town Quay is attached at Appendix 1.

Agreement has been reached with Surrey County Council, as joint canal owner, for this work to be undertaken this year alongside the Woking Town Centre Integrated Transport project for which funding is allocated by Surrey County Council and supported by the Council and EnterpriseM3.

Work will be undertaken during 2018/19 subject to the determination of the Planning Applications related to the link bridge below as ideally the physical works will need to be coordinated.

Chobham Bridge Towpath Link

The outline of the proposal for Town Quay is attached at Appendix 2.

Agreement has been reached to pursue this proposal as part of the approved Woking Town Centre Integrated Transport project for which funding is allocated by Surrey County Council and supported by the Council and EnterpriseM3.

Two planning applications have been submitted, one for the link bridge and one for art work alongside the canal, both await determination.

Work will be undertaken during 2018/19 subject to the determination of the Planning Applications.

Lightbox Barge

The outline of the proposal for the Lightbox Barge is attached at Appendix 3.

Whilst discussions have been held with the Lightbox which is supportive of the ambition the design has not yet been progressed as officers consider what further funding sources may be available. It is unlikely that the Lightbox barge will be progressed further until 2019/20.

Canal Boat Basin

The outline of the proposal for the Canal Basin is attached at Appendix 4.

There have been a number of confidential discussions with potential developers that would enable the building of the Boat Basin with adjoin leisure and recreational uses. Any proposals would have to satisfy Green Belt considerations and the Common Land status of the site. Discussions continue and a formal update on proposals, if secured will be submitted to the Council's Executive, as landowner, for consideration and if agreed will be subject to obtaining all necessary consents.

Lockfield Drive Bridge

As part of the work to improve connectivity between the canal and the town centre a proposal is being jointly developed with Surrey County Council to secure funds, through EnterpriseM3 for a pedestrian and cycle bridge alongside the Lockfield Drive road bridge. This will enable pedestrians and cyclist to link to the canal from an extended pedestrian and cycle corridor alongside the current Woking Town Centre Integrated transport works use the area reserved for highway adjacent to the Cap Gemini building.

The bid is being submitted in March and hopefully the Council will find out if funds are allocated by June. If approved the works will be designed in 2018/19 and necessary consents obtained with work being scheduled for completion in 2019/20.

Across the Borough

Less work has been done across the wider canal network; this is due to capacity to do so. The only significant area that is being progressed is the integration of the Can towpath with the regeneration proposals for Sheerwater.

Recommendations

The Committee is requested to:

Resolve the update be received and the positive progress be noted.

Background Papers:

Review of Basingstoke Canal Presentation Slides (O&S Cttee 27/02/17); Overview and Scrutiny Committee Minutes, (27/2/17)
Sustainability Impact Assessment
Equalities Impact Assessment

Reporting Person:

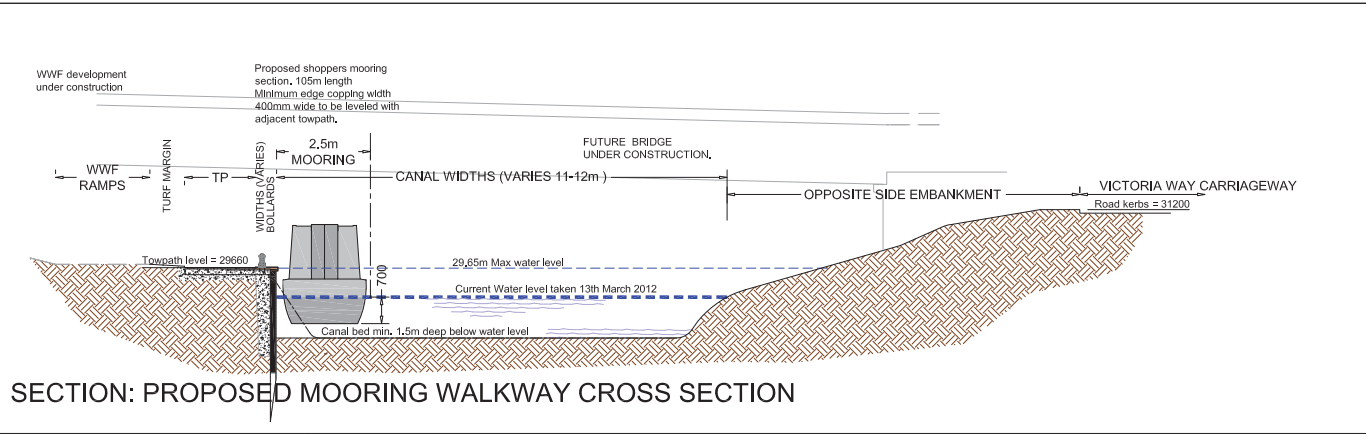
Ray.morgan@woking.gov.uk

Contact Person:

Ray.Morgan@woking.gov.uk

Date Published:

14 February 2018



WWF LIVING PLANET CENTRE DEVELOPMENT - UNDER CONSTRUCTION.

TYPICAL CAST IRON BOLLARDS AND MOORING RINGS ANCHORING POINTS, ALTERNATE AT 2m CENTRE TO CENTRE ALONG EDGE OF WALKWAY FACING THE CANAL. EDGE CONSTRUCTION DETAILS AS RECOMMENDED BY THE BRITISH WATERWAY BOARDS. TAMPERED CONCRETE VERGE COPPING STONE BROKEN BY LINES OF GRANITE OR BRICK SETTS. CAST IRON MOORING RINGS SUNK FLUSH WITH THE GROUND SURFACE. RINGS AND BOLLARDS TO HAVE GRANITE SETTS AS TRIM.

EXISTING TARMAC TOWPATH TO BE GRADED AND FALL IN LEVELS WITH PROPOSED EDGES OF MOORING. PILED EDGES TO TOWPATH VARIES 600-1250mm (MARGIN WIDTHS TO SUIT SITE DIMENSION ALONG THE LENGTH OF THE MOORING STRIP)

RETAINING WALL STRUCTURE TO SUIT EXISTING CANAL BED DEPTH AND NEW TOWPATH LEVELS. TO HAVE CONCRETE EDGE SURFACE, MINIMUM 400mm WIDE CONCRETE COPPING WITH CAST IRON BOLLARDS AND RINGS. WITH 200mm MINIMUM ADDITIONAL MARGIN TO TOWPATH PAVEMENT. THAT LINED THROUGH WITH ADJACENT TARMAC TOWPATH FINISH LEVEL AS SHOWN. CANAL EDGE LINING IN ACCOYA® WOOD BOARDS & STAKE OR SIMILAR APPROVED HARDWOOD.

EXISTING TARMAC TOWPATH REALIGNED UNDER WWF DEVELOPMENT. WITH NEW FOOT BRIDGE ALL CURRENTLY UNDER CONSTRUCTION

RECENTLY COMPLETED FOOTBRIDGE - PART OF WWF DEVELOPMENT CURRENTLY

INFORMATION BOARD: 'Welcome to Woking' with TOWN PLAN (Exact sign position/ location to be agreed)

WWF DEVELOPMENT SITE WORKS CURRENTLY UNDER CONSTRUCTION

DO NOT SCALE OFF THIS DRAWING EXCEPT FOR PLANNING PURPOSES LAYOUT SUBJECT TO SURVEY ALL DIMENSIONS TO BE CHECKED ON SITE

The Lightbox

VICTORIA WAY


Basingstoke Canal

SOUTHERN SIDE EMBANKMENT

The Victoria Entertainments Centre


PRELIMINARY

P3 - Comments by Canal Working group 30.04.13



41 CHOBHAM ROAD, WOKING, SURREY. GU21 6JD
Tel : 01483 764407 Fax : 01483 763728
email : mail @ bbf-fielding.co.uk

CLIENT



WOKING BOROUGH COUNCIL

PROJECT

WBC Project
WOKING QUAY - SHOPPERS MOORING
Victoria Way, Woking, Surrey


DRAWING TITLE

Site Layout & Section
Feasibility Sketch
-

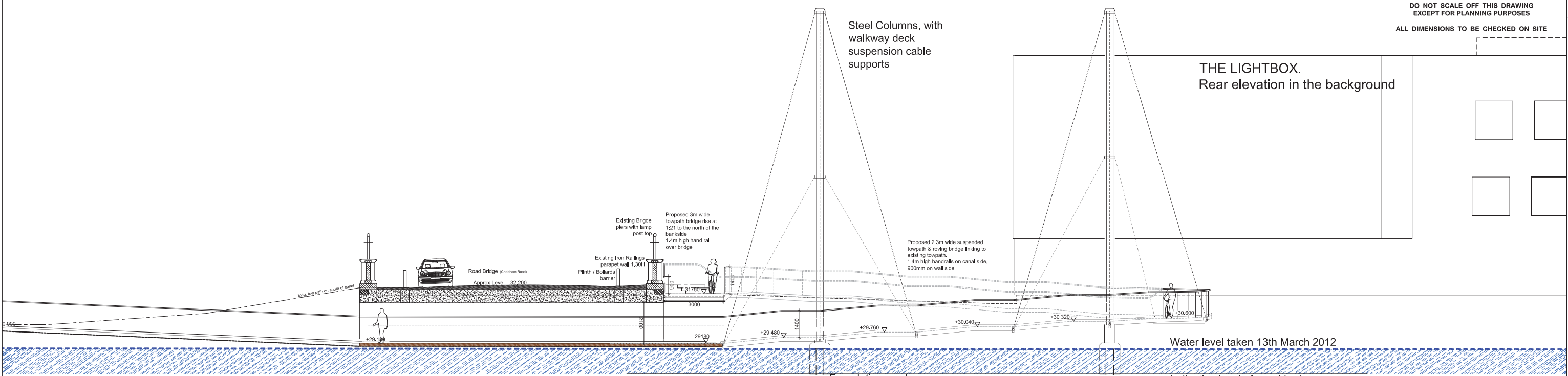
SCALE 1:100 & 1:200 @ A1 (1:200 & 1:400 @A3)

DATE	21st Mar 2012	DRN.	CS	CHK.	NBO
------	---------------	------	----	------	-----

JOB / DRAWING No. 12840.10 [F] 01

REV.	P3	
------	----	---

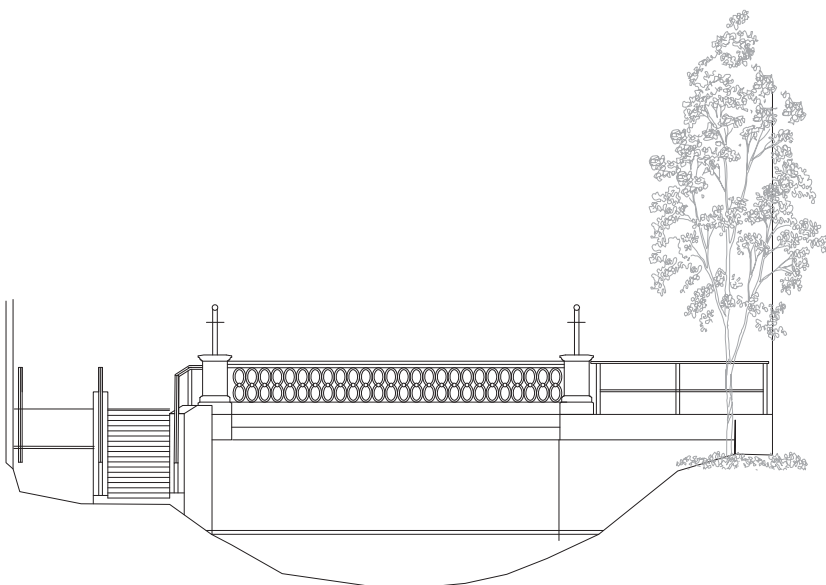
DO NOT SCALE OFF THIS DRAWING
EXCEPT FOR PLANNING PURPOSES
ALL DIMENSIONS TO BE CHECKED ON SITE



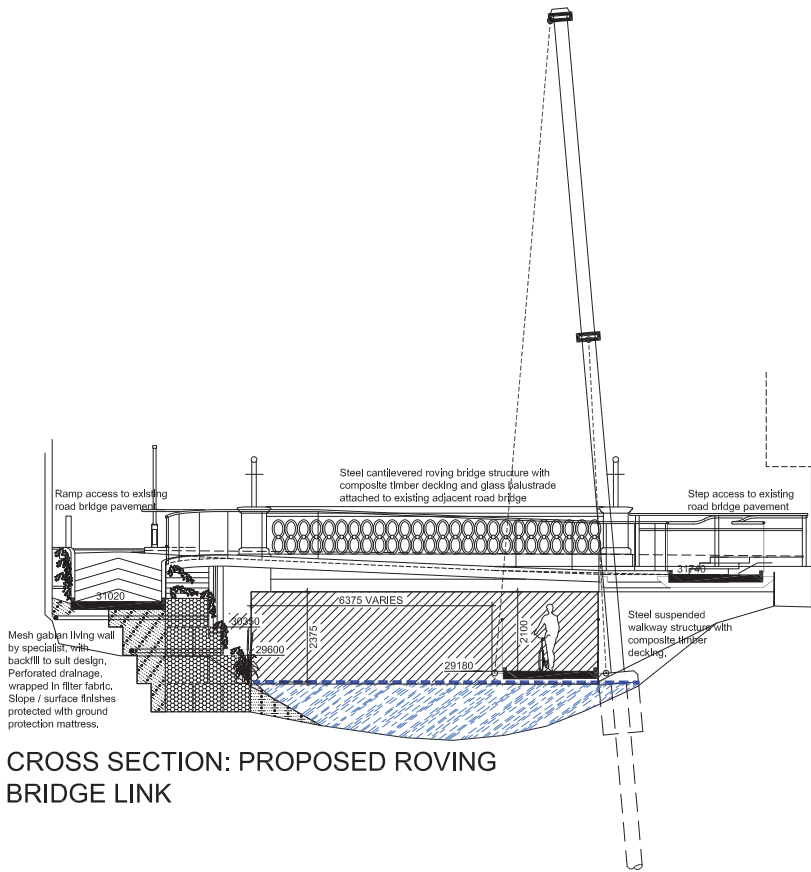
LONG SECTION: PROPOSED TOWPATH LINK

Foundations, column structure & walkway supports to structural engineers design.

Indicative level of canal bed




CROSS SECTION: EXISTING ROAD BRIDGE



CROSS SECTION: PROPOSED ROVING BRIDGE LINK


PRELIMINARY

P1 - Update following comment from CWG 24.06.13



Fielding
Architecture

41 CHOBHAM ROAD, WOKING, SURREY. GU21 6JD
Tel : 01483 764407 Fax : 01483 763728
email : mail @ bbf-fielding.co.uk



WOKING
BOROUGH COUNCIL

PROJECT

WBC Project
Chobham Road Bridge Tow Path Link
Woking, Surrey


DRAWING TITLE

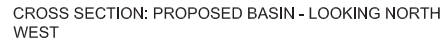
Sections
Feasibility Sketch
-

SCALE

1:100 @ A1 (1:200 @A3)

DATE	21th June 2013	DRN.	CS	CHK.	NBO
-------------	----------------	-------------	----	-------------	-----

JOB / DRAWING No.	12840.8 [F] 02	REV.	P1	
--------------------------	----------------	-------------	----	---



Page 147 LIN

REV.D	Scheme Layout amended	CS_29.04.13
REV.C	Basin Layout & Lifting Bridge updated	CS_03.07.12
REV.B	Canal FootBridge section added/ basin bridge updated	CS_14.05.12
REV.A	Amendments to client's comments 26/04	CS_02.05.12



CLIENT



PROJECT


WBC Project;
Land at Brookhouse Common
Proposed Boat Basin

DRAWING TITLE

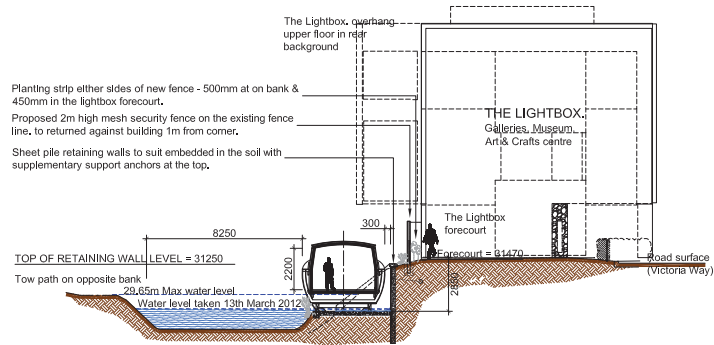
Basin Section
Sketch
Feasibility Study

SCALE 1:250 & 1:100 @ A1 (1:500&200 @A3)

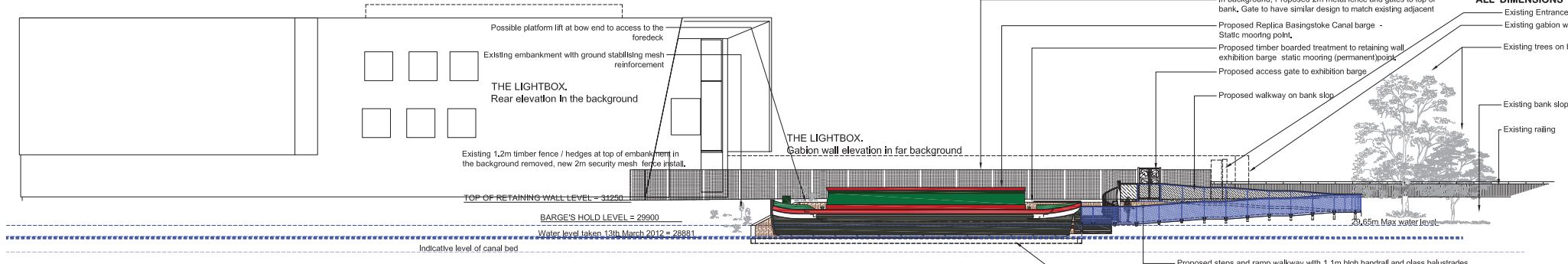
DATE	26th April 2012	DRN.	CS	CHK.	
------	-----------------	------	----	------	--

JOB / DRAWING No.	REV.	
12840.2 [FS] 102	D	

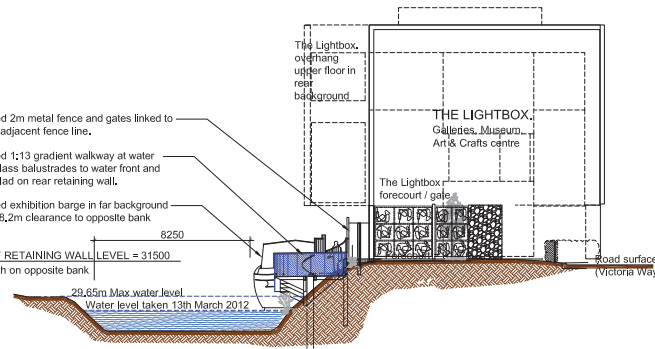
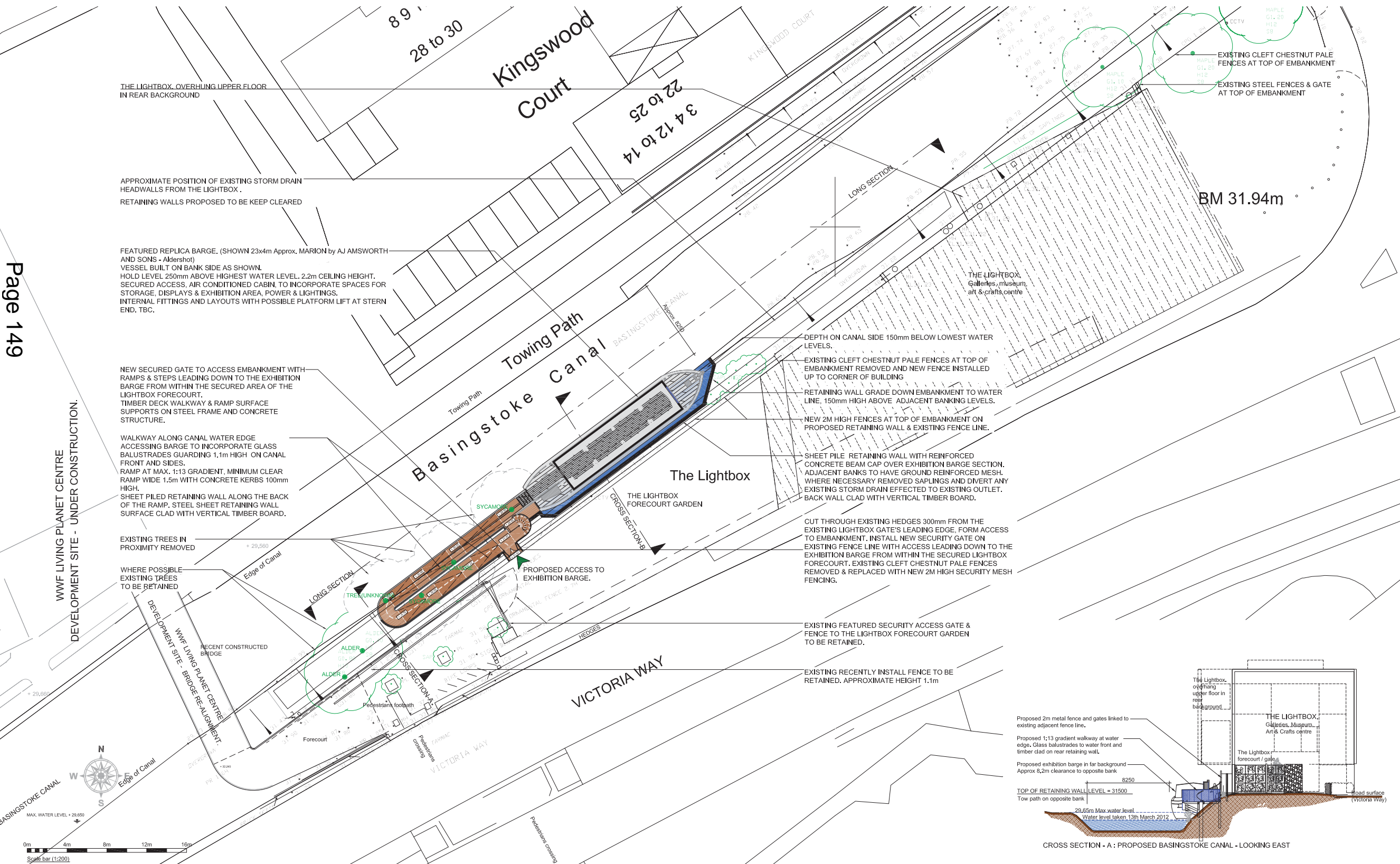




CROSS SECTION - B: PROPOSED BASINGSTOKE CANAL BARGE GALLERY - LOOKING EAST



LONG SECTIONAL ELEVATION: PROPOSED BASINGSTOKE CANAL BARGE GALLERY - LOOKING SOUTH



CROSS SECTION - A: PROPOSED BASINGSTOKE CANAL - LOOKING EAST

DO NOT SCALE OFF THIS DRAWING
EXCEPT FOR PLANNING PURPOSES
LAYOUT SUBJECT TO SURVEY
ALL DIMENSIONS TO BE CHECKED ON SITE

Existing Entrance Gate to the Lightbox 2.7m high
Existing gable wall to Lightbox in far background
Existing trees on bank slope retain where possible
Existing bank slope
Existing railing

Proposed steps and ramp walkway with 1.1m high handrail and glass balustrades
Proposed concrete slab - basin floor deck barge structure supports.
Barge to have board cover down to water line.

EXISTING CLEFT CHESTNUT PALE FENCES AT TOP OF EMBANKMENT
EXISTING STEEL FENCES & GATE AT TOP OF EMBANKMENT

BM 31.94m

THE LIGHTBOX.
Galleries, museum,
art & crafts centre

DEPTH ON CANAL SIDE 150mm BELOW LOWEST WATER LEVELS.
EXISTING CLEFT CHESTNUT PALE FENCES AT TOP OF EMBANKMENT REMOVED AND NEW FENCE INSTALLED UP TO CORNER OF BUILDING
RETAINING WALL GRADE DOWN EMBANKMENT TO WATER LINE, 150mm HIGH ABOVE ADJACENT BANKING LEVELS.
NEW 2M HIGH FENCES AT TOP OF EMBANKMENT ON PROPOSED RETAINING WALL & EXISTING FENCE LINE.

SHEET PILE RETAINING WALL WITH REINFORCED CONCRETE BEAM CAP OVER EXHIBITION BARGE SECTION. ADJACENT BANKS TO HAVE GROUND REINFORCED MESH. WHERE NECESSARY REMOVED SAPLINGS AND DIVERT ANY EXISTING STORM DRAIN EFFECTED TO EXISTING OUTLET. BACK WALL CLAD WITH VERTICAL TIMBER BOARD.

CUT THROUGH EXISTING HEDGES 300mm FROM THE EXISTING LIGHTBOX GATE'S LEADING EDGE, FORM ACCESS TO EMBANKMENT. INSTALL NEW SECURITY GATE ON EXISTING FENCE LINE WITH ACCESS LEADING DOWN TO THE EXHIBITION BARGE FROM WITHIN THE SECURED LIGHTBOX FORECOURT. EXISTING CLEFT CHESTNUT PALE FENCES REMOVED & REPLACED WITH NEW 2M HIGH SECURITY MESH FENCING.

EXISTING FEATURED SECURITY ACCESS GATE & FENCE TO THE LIGHTBOX FORECOURT GARDEN TO BE RETAINED.
EXISTING RECENTLY INSTALL FENCE TO BE RETAINED. APPROXIMATE HEIGHT 1.1m

Scale bar (1:200)

P5 - Update following comments from CWG
P4 - Update following comments from CWG

13.09.13
24.06.18

BBF Fielding Architecture

41 CHOBHAM ROAD, WOKING, SURREY. GU21 6JD
Tel : 01483 764407 Fax : 01483 763728
email : mail @ bbf-fielding.co.uk

CLIENT

WOKING BOROUGH COUNCIL

PROJECT

WBC Project
Replica Basingstoke Canal Barge Gallery
The Lightbox, Chobham Road, Woking

DRAWING TITLE

Site Plan, Elevations & Location
Proposed

SCALE

1:200 @ A1 (400 @ A3)

DATE

3rd April 2012

DRN.

CS

CHK.

-

JOB / DRAWING No.

12840.9 [F] 01

REV.

P5

