

To: Councillor Cross (Chair) Councillors Hornsby-Smith, Ballsdon, Ennis, Griffith, Juthani, Keeping, Lanzoni, Leng, Magon, McElroy, Moore, Page, R Singh and Terry Jackie Yates Chief Executive

Civic Offices, Bridge Street, Reading RG1 2LU

0118 937 3787

Direct: Total 0118 937 2744 e-mail: andrew.wood@reading.gov.uk

5 March 2024

Your contact is: Andrew Wood - Committee Services

NOTICE OF MEETING - STRATEGIC ENVIRONMENT, PLANNING AND TRANSPORT COMMITTEE 13 MARCH 2024

A meeting of the Strategic Environment, Planning and Transport Committee will be held on Wednesday, 13 March 2024 at 6.30 pm in the Council Chamber, Civic Offices, Reading. The Agenda for the meeting is set out below.

		<u>WARDS</u> AFFECTED	<u>Page No</u>
1.	DECLARATIONS OF INTEREST		
2.	MINUTES		5 - 18
	To confirm the Minutes of the Strategic Environment, Planning and Transport Committee held on 15 November 2023.		
3.	MINUTES OF THE MEETING OF THE TRAFFIC MANAGEMENT SUB-COMMITTEE		19 - 34
	To receive the Minutes for meetings of the Traffic Management Sub-Committee held on 13 November 2023 and 11 January 2024.		
4.	MINUTES OF OTHER BODIES		35 - 70
	To receive the Minutes for meetings of the:		
	 Atomic Weapons Establishment (AWE) Local Liaison Committee on 9 November 2023; and the Joint Waste Disposal Board on 21 September 2023 and 11 January 2024. 		

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5. PETITIONS

Petitions submitted pursuant to Standing Order 36 in relation to matters falling within the Committee's powers and duties which have been received by the Assistant Director of Legal & Democratic Services by no later than 12 noon, four clear working days before the day of the meeting.

6. QUESTIONS FROM COUNCILLORS AND MEMBERS OF THE PUBLIC

Questions submitted pursuant to Standing Order 36 in relation to matters falling within the Committee's powers and duties which have been submitted in writing and have been received by the Assistant Director of Legal & Democratic Services by no later than 12 noon, four clear working days before the day of the meeting.

7. DRAFT CHRISTCHURCH CONSERVATION AREA KATESGROVE 71-170 APPRAISAL & REDLANDS

A report seeking Committee approval to publish the draft Christchurch Conservation Area Appraisal for public consultation. A short presentation will also be given by representatives from the Reading Conservation Area Advisory Committee (CAAC).

8. AIR QUALITY ACTION PLAN REVIEW

A report updating the Committee on the changes made to the Air Quality Action Plan (AQAP) following the conclusion of the public consultation and seeking Committee approval to adopt and endorse a final version of the AQAP to be submitted to the Department for Environment, Food & Rural Affairs (Defra) to allow formal adoption.

9. STRATEGIC TRANSPORT SCHEMES UPDATE BOROUGHWIDE 287 - 294

A report providing the Committee with an overview on progress towards the delivery of the current programme of strategic transport schemes in Reading.

10. ELECTRIC VEHICLE CHARGING INFRASTRUCTURE BOROUGHWIDE 295 - 378 STRATEGY

A report updating on the changes made to the draft Electric Vehicle Charging Infrastructure Strategy following the completion of a public consultation and seeking the approval of the Committee for the Council to adopt the final version of the strategy.

BOROUGHWIDE 171 - 286

11. ELECTRIC VEHICLE (EV) CHARGING IN READING BOROUGHWIDE 379-384 TENDER

A report updating the Committee on the intention to tender for a suitably qualified and experienced partner to roll out an Electric Vehicle (EV) charging programme within Reading and to assure the Committee that any planned installation will be in line with the outcome of Reading's Electric Vehicle Charging Strategy.

12. ELECTRIC VEHICLE (EV) CHARGING ACROSS BOROUGHWIDE 385 - 400 PUBLIC HIGHWAY LICENCE - TRIAL OUTCOME

A report updating the Committee on the outcome of the Electric Vehicle (EV) Charging on the public highway trial that commenced in April 2021. The report also seeks the Committee's authorisation to permit the Assistant Director of Environmental & Commercial Services to enter into 'Electric Vehicle Charging Across the Public' licences with applicants under the terms of the licence described within the report.

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Agenda Item 2 Strategic environment, planning and transport committee meeting Minutes - 15 November 2023

- **Present:** Councillor Cross (Chair); Hornsby-Smith (Vice-Chair), Ballsdon, Ennis, Griffith, Keeping, Lanzoni, Leng, Magon, McElroy, Moore, R Singh and Terry
- **Apologies:** Councillors Juthani and Page

10. MINUTES

The Minutes of the meetings held on 29 June 2023 were confirmed as a correct record and signed by the Chair.

11. MINUTES OF THE MEETING OF THE TRAFFIC MANAGEMENT SUB-COMMITTEE

The Minutes of the meetings of Traffic Management Sub-Committee held on 4 June 2023 and 13 September 2023 were received.

12. MINUTES OF OTHER BODIES

The Minutes of the following meetings were received:

- Joint Waste Disposal Board on 2 March 2023 and 15 June 2023
- Reading Climate Change Partnership on 20 April 2023 and 20 July 2023

In response to a question from Councillor Moore relating to the minutes of the Joint Waste Disposal Board held on 15 June 2023, Councillor Cross undertook to arrange for the Lead Councillor for Environmental Services and Community Safety to respond to Councillor Moore's query concerning Waste Electrical and Electronic Equipment in writing.

13. QUESTIONS FROM COUNCILLORS AND MEMBERS OF THE PUBLIC

Questions on the following matters was asked in accordance with Standing Order 36.

Questioner	Subject
Councillor Singh	Number 18 Bus Route

(The full text of the questions and replies were made available on the Reading Borough Council website).

14. THAMES WATER SCRUTINY

Further to the Motion passed by Council on 27 June 2023 (Minute 18 refers) and at the invitation of the Chair, Richard Aylard, Sustainability Director, James Bentley, Operations Director, and Nikki Hines, South Thames Valley Stakeholder Engagement Manager, of

Thames Water gave a presentation and answered questions on Thames Water's investment plans for Reading and on the company's work and operations within the Borough. Thames Water's presentation covered several different topics including:

- Recent leadership changes, the company's liquidity position and shareholder investment;
- Thames Water's refocused three-year Turnaround Plan;
- Thames Water's recently published five-year PR24 Business Plan (for the period 2025-2030);
- An overview of how a Sewage Treatment Works functioned, including an explanation of storm discharges and the reasons for needing to make them;
- Ways that storm discharges from Sewage Treatment Works could be reduced;
- An explanation of why flows in foul sewers increased after heavy rainfall;
- A demonstration of Thames Water's interactive storm discharges map;
- An overview of storm discharge points within the Borough;
- A summary of the number of storm discharges that had taken place within the Borough in the previous four years;
- An assessment of Reading's performance in relation to storm discharges compared to the average across the rest of the Thames Water network;
- An overview of Thames Water's plan to reduce the number of storm discharges it made by the Government's 2050 target date;
- An overview of the impacts of pollution on river water quality and the Reasons for Not Achieving Good (RNAG) status in the Thames River Basin area;
- Planned investment at the Reading Sewage Treatment Works;
- Past, current and planned sewer maintenance works within the Borough;
- A brief overview of Thames Water's approach to dealing with sewer abuse from residential properties and food service establishments;
- Guidance on what customers should do if sewer flooding affected their home and ways to report problems to Thames Water;
- An overview of how Thames Water communicated with Council officers, including detail on the resumption of regular liaison meetings.

The Committee discussed the presentation and asked several questions and. some of the points raised included:

- Thames Water and the Council's Highways & Traffic Services Manager advised the Committee that regular liaison meetings between relevant RBC officers and their counterparts at Thames Water had been reestablished to proactively address problems within the Borough. Thames Water had also provided Council officers with its Professional Partners Line number and its dedicated Highways Authority number to allow professionals from both sides to communicate effectively on a routine basis and in emergency situations.
- Thames Water responded to concerns that the Council had invested large amounts of money resurfacing roads in the Borough only for the newly

resurfaced road to be dug up shortly afterwards by Thames Water to conduct repairs and maintenance. Concerns were also raised about the effectiveness of traffic management measures put in place by Thames Water and by their contractors when conducting emergency repairs and maintenance in the town. These often resulted in traffic problems, particularly at pinch points in the town. Recent examples included the Thames Water works in Caversham and on Shinfield Road, Oxford Road and Castle Hill.

- Thames Water responded to concerns about an apparent lack of communication with residents when conducting emergency repairs and general maintenance works. This included a need to keep local residents informed about how and when repair works would be taking place and whether they would affect residents' access to their homes. The Committee also expressed concern around the lack of explanative signage at roadworks that would allow people to know who was conducting certain roadworks and therefore who they should contact if there was a problem.
- Thames Water responded to concerns relating to sewage/storm discharges into the Foudry Brook from the Reading Sewage Treatment Works. They advised that the treated effluent that came out the works was generally of good quality and met with Environment Agency standards. However, there had been occasions when untreated effluent had been discharged from the site. Such discharges had taken place when the works were working at full capacity and so were unable to process and treat the large volume of sewage travelling through the site. This tended to occur during periods of heavy rainfall which increased the amount of sewage needing to be processed. In such instances Thames Water had a permit from the Environment Agency to allow it to discharge effluent into the Foudry Brook. Thames Water took measures to avoid needing to discharge untreated effluent and, whenever possible, sewage would be stored in storm tanks and then treated, however this was not an option if the tanks had reached capacity. Thames Water advised that there had been a long-term average of 8 discharges from the location per year. The number of spills that took place each year would vary depending on if it was a wet year or a dry year. The current long-term average of 8 per year was below the Government's target of 10 spills on average per site, per year by 2050. Thames Water reassured the Committee that it wanted to reduce the number of discharges from the site as much as possible and that a considerable amount of money had been invested to make improvements at the site that would hopefully help to bring the number of discharges down further.
- Thames Water responded to concerns relating to the odors and smells that sometimes came from the Reading Sewage Treatment Works and which particularly affected residents living in Whitley Ward. A considerable amount of work had taken place to investigate the causes of the smells and to try pinpoint the source. Thames Water outlined some of the remedial measures that had been instigated on the site, including targeted maintenance/repair

works, changes to operational procedures and regular inspection visits from Environmental Health officers. All of which it was hoped would help to minimise unpleasant odors coming from the facility. Thames Water also encouraged residents to report incidents of strong smells emanating from the site as soon as possible so that any problems could be swiftly investigated and addressed.

- Thames Water explained that its key performance indicators (KPIs) were approved by the regulator Ofwat and were published on its website. Performance against KPIs was reported in the company's annual performance report. There were financial penalties if the company fell short of targets and bonuses for outperforming them. The KPIs and performance reports were available for public scrutiny on the company's website.
- Thames Water responded to concerns relating to surface water flooding and blocked drains and gullies on roads in the Borough. Some examples included the regular problems with flooding on Woodcote Road (A4074) and along Caversham Park Road. Thames Water advised that the causes of flooding could vary and that a holistic approach was required to investigate and resolve problems. Resumption of regular liaison meetings with Council officers would help to identify, establish responsibility for and address issues at problem locations. Thames Water undertook to investigate the specific locations mentioned above further.
- Thames Water responded to concerns following the Crown Court judgment that saw the company issued with a £3.4m fine for allowing untreated sewage to enter a river near Gatwick Airport. Thames Water also described what it was doing to reduce sewage discharges into the tidal River Thames.
- Thames Water responded to concerns about senior executives' salaries, bonuses and perks in the wider context of rising customer bills. Thames Water advised that its former Chief Executive Officer and the current Interim Co-Chief Executive Officer both forwent any payment that might have been made to them in the previous year in recognition that Thames Water services needed to improve.
- Thames Water responded to concerns about its customer services and to a request for the company to implement a call queuing system on its emergency helpline. Thames Water explained that it operated a priority services register for vulnerable customers which anybody over a certain age or who had a medical condition could register. Those who had signed up to the priority services register would receive a personal bespoke service should they experience any issues with services provided by Thames Water and, if they contacted the emergency helpline by phone, would go straight to the front of the queue. It was for this reason that a call queuing system could not be introduced as it was possible that a caller's place in the queue would change if a priority user called in. Thames Water also advised that it had multiskilled

its customer services staff so that all staff were trained to take emergency calls during busy periods.

- Thames Water responded to questions relating to the company's finances. They advised that the company's liquidity position was good. The Committee heard that Thames Water's shareholders had invested significant amounts of money into the company and also that dividends had not been paid out to them for six years. Thames Water undertook to provide the Committee with a written technical explanation of what an "internal dividend" was.
- In response to a question relating to the number of outstanding Section 81 notices in the Borough (a Section 81 notice was a notice that could be served to a utility company, in this case Thames Water, if their apparatus was found to be defective) Thames Water advised that it did not have the compliance statistics relating to the resolution of Section 81 notices to hand but that, generally speaking, Reading, whilst not one of the better performers, was not one of the worst performers either.

It was suggested at the meeting that Thames Water could attend the Committee on a regular basis to provide updates on the company's performance and talk on specific topics such as the Climate Emergency.

Resolved – That Thames Water's representatives be thanked for their attendance and for their presentation and for responding to the Committee's questions.

15. ANNUAL REPORTS FOR 2022/23 ON: (I) READING CLIMATE EMERGENCY STRATEGY AND (II) RBC'S GREENHOUSE GAS EMISSIONS

The Committee received a report presenting two Annual Reports for 2022/23 on key elements of Reading's response to the climate emergency.

The 2022/23 Annual Report on the Reading Climate Emergency Strategy 2020-25 was attached to the report at Appendix 1. The Annual Report had been prepared by the Reading Climate Change Partnership and reflected the activity of a range of partners across Reading, not just the Council. The headline messages from the report were that, in common with the rest of the UK, emissions for 2021 (the latest year for which data had been available) had risen in comparison to 2020. The was because emissions had rebounded following the lifting of pandemic restrictions. The long-term trend remained positive, however, with Borough emissions having fallen by 51% since 2005. This was down from the 55% reduction reported in 2020, but Reading had still seen the 8th largest reduction in emissions out of 374 UK local authority areas. Reading's per capita emissions also remained the lowest in Berkshire. The pace of emissions reduction would, however, need to increase significantly to get back on track to achieve the Strategy target of 'net zero by 2030'. A summary of the key conclusions drawn from the Annual Report 2022/23 on the Reading Climate Emergency Strategy were set out in the report.

A copy of the 2022/23 Annual Report on the Council's Corporate Greenhouse Gas Emissions was attached to the report at Appendix 2. The Annual Report, which was produced annually by the Council, tracked the progress made towards the implementation of the Council's Carbon Plan and the targets contained within it. The headline message from the report was that the Council's carbon footprint had been cut by 73.9% since 2008/09, a further reduction from the 71.3% figure that had been reported in 2021/22. This meant the Council remained broadly on track to meet its interim target of an 85% cut in emissions by 2025. However, further action and investment would be needed to achieve this target, and to make progress towards the ultimate target of becoming a net zero organisation by 2030. A summary of the key conclusions of the Council's Annual Greenhouse Gas Emissions report for 2022/23 were summarised in the report.

The Head of Climate Strategy provided the Committee with an update and explained that, since the publication of the report, the Council had received the results of the annual assessment that had been carried out by the Carbon Disclosure Project (CDP), an international non-government organisation that operated a reporting process for corporations and councils which was regarded as the 'gold-standard' for climate reporting. The Council had first submitted its data to the CDP in 2021 and had been added to the A-List of Councils that demonstrated good practice. The Head of Climate Strategy reported that, following this year's assessment, the Council had retained its position on the CDP's A-List.

The Head of Climate Strategy also informed the Committee of a correction to the figures contained in the Council's Corporate Greenhouse Gas Emissions report (Appendix 2). It had been noticed that figures relating to the emissions reported from leisure facilities were higher than expected. Following an investigation, it had been discovered that there had been an issue with the meter exchange at Meadway Leisure Centre which had resulted in an overestimate of the gas consumption for the site. The actual consumption figures had since been obtained and were significantly lower than the estimated consumption. Consequently the Annual Report attached at Appendix 2 significantly overstated the emissions from the Council's leisure estate. The Head of Climate Strategy advised that the thrust of the report otherwise remained accurate and that the Council had improved its leisure offer at the same time as reducing emissions. However, the reduction in overall leisure emissions compared to the last pre-covid year (the most meaningful year for comparison) was in fact 31% and the not the 20% reported. The Head of Climate Strategy advised that the corrected figures would be reflected in the final version when it was published on the Council's website.

Resolved –

- (1) That the progress in reducing Reading Borough's carbon emissions, which have fallen by 51% since 2005, be noted;
- (2) That the progress in reducing Reading Borough Council's corporate emissions, which have fallen by 74% since 2008/09, be noted;

- (3) That it be noted that, while progress was being made, the Council and other partners needed to increase the pace of emissions reduction to meet the targets for a net zero Reading, and a net zero Council, by 2030;
- (4) That the corrections to be made to the leisure estate emissions figures in Appendix 2 to the report be noted.

16. AIR QUALITY ACTION PLAN REVIEW

The Committee received a report on the development of the Reading Air Quality Action Plan 2024-2028. The report sought the approval of the Committee to conduct a public consultation on the on the draft Reading Air Quality Action Plan 2024-2028 and outlined the next steps for its adoption. A copy of the draft Reading Air Quality Action Plan 2024-2028 was attached to the report at Appendix 1.

The report explained that, whilst air quality had improved in the town, there were still some locations where nitrogen dioxide (NO_2) levels were above recommended UK and World Health Organization (WHO) air quality limits. The Air Quality Action Plan (AQAP) sought to target these locations to make them compliant with UK and WHO standards and at the same as air quality across Reading as a whole. The draft AQAP identified the areas where the Council needed to improve air quality and set out the actions that officers planned to take over the next five years.

The previous Air Quality Action Plan, which had run between 2016 and 2020, had focused on actions to reduce nitrogen dioxide (NO_2) levels in order to achieve compliance with national objectives. The report listed several of the successful initiatives that had been delivered through the last action plan and provided figures gathered from the Council's monitoring network that demonstrated that there had been considerable improvements in NO_2 levels between 2018 and 2022.

The new draft AQAP aimed to continue with efforts to reduce NO_2 levels but also placed a new emphasis on targeting and reducing fine particulate matter ($PM_{2.5}$) emissions. The new emphasis was required due to the mounting evidence that pointed to $PM_{2.5}$ emissions being extremely harmful to human health and meant that the new AQAP aligned with the changes that had been made to national policy in response to this latest evidence. Measures to address $PM_{2.5}$ emissions had therefore been given considerable weight throughout the new draft AQAP.

The initial draft AQAP (attached at Appendix 1) had been produced working with the support of environmental consultants Phlorum. The draft AQAP contained updated baseline data figures and trajectories for Reading, updates to align the AQAP with changes made to local and national policies over the last two years, updates to align the AQAP with the Reading Transport Plan and current thinking relating to air quality practice and listed the members of the Air Quality Steering Group (AQSG) who had contributed to the development of the draft AQAP. Policies outlined with the AQAP included direct policy interventions, infrastructure schemes and education/enabling options that would help to support Reading's ambitious plans and UK strategies going forward. Policy options would

also include strategies to encourage or accelerate the uptake of low to zero emission vehicles, non-diesel vehicles, increase modal shift and discourage vehicle usage in certain areas where people lived or went to school. Active Travel and health options were also prioritised, alongside specific measures to reduce particulate matter (PM) concentrations.

The report explained that, subject to the approval of the Committee, a consultation process, as prescribed in Local Air Quality Management guidance, would be carried out to ensure that all the required stakeholders were able to comment and provide feedback. The consultation would include members of the Air Quality Steering Group, statutory consultees and the public. A report setting out the results of the consultation would be submitted to a future meeting of the Committee at which the approval would also be sought to adopt a final version of the Air Quality Action Plan.

At the meeting the Principal Air Quality Project Officer advised the Committee that the Council were required to submit an annual progress report on air quality to the Department for Environment, Food and Rural Affairs (Defra) and that the same report could be shared with the Committee as a means of tracking the progress of the AQAP.

Resolved –

- (1) That the draft Air Quality Action Plan be approved to be taken forward for consultation;
- (2) That it be noted that a further report would be submitted to the March 2024 meeting following the consultation to adopt the final Air Quality Action Plan.

17. OUTCOMES OF 'THE STRATEGY ROOM' PROJECT

The Committee received a report and presentation on the outcomes of The Strategy Room Project. The Strategy Room was a project designed to engage people in discussions about climate change led by Nesta, the innovation agency, University College London's Climate Action Unit and Fast Familiar, a Reading-based digital agency. It was described as "an immersive experience which uses facilitated deliberation, interactive polling and collective intelligence to identify the climate change policies that would best help a local area to reach net zero emissions"; and as "a way for people to walk in off the street, and within 90 minutes imagine together the benefits of a Net Zero future, and help create a strategy for their local area on how to get there".

In late 2022, the Council had been invited to be one of 12 local authorities to take part in the pilot phase of the project. The Council had welcomed the opportunity to participate and had worked with partners to organise five workshops in March 2023. Three sessions had been arranged for residents, one for Reading Climate Change Partnership (RCCP) Board members and one session for Councillors. The project team had also worked with the University of Reading who had hosted a session so that six workshops were held in total in Reading with 67 people taking part, over 10% of the total participating in the entire pilot.

Reading had achieved the highest participation rates of any of the 12 pilot areas with a good turnout at all of the workshops.

The report explained that, following the workshops that had been held around the country in spring 2023, the data that had been gathered had been analysed and published at a launch event on 12 July 2023. The results could be interrogated via a new website that had been created for the project at <u>strategyroom.uk</u>. The website gave further details of the scenarios and policy prescriptions that had been discussed at the workshops and allowed the results from Reading to be compared against the national results. The report explained that the Councillors who had participated in the workshop in March 2023 had expressed an interest in receiving a presentation on the findings of the project.

The presentation gave an overview of the Strategy Room project nationally, explained the project's general approach and methodology, and set out the project's headline findings. The findings had shown that there had been a strong level of support for net zero ideas across energy, travel and food scenarios and that levels of support for policies that tackled climate change were higher than the current political debate would suggest. The project also found that climate 'deniers' were rare, there had been only one out of the 639 participants and the 70 people who had taken part in the co-creation workshops. The project had found that disagreements tended to be about what should be done about climate change and what policies were felt to be meaningful and fair. The project had also found that people really valued the opportunity to discuss climate change even if it was with people who held different opinions to themselves. Overall, the support for policies had increased following discussions. However, the project had also found that the biggest obstacle faced in tackling climate change was a perceived lack of trust. People felt they were living through a crisis of trust and that it was hard for to people to buy-in to systematic measures of change whilst that trust did not exist.

The presentation provided a summary analysis of Reading's Strategy Room Project data. Ten policy ideas had been presented to participants who had then ranked them from those that they recommended the most to those they recommended the least. The presentation compared Reading's results to the results of the rest of the UK. Reading participants of the Strategy Room project were comparatively more supportive of policies to make social housing more energy efficient, policies to redevelop the town centre in order to cut traffic and community renewable energy schemes. By contrast Reading participants were comparatively less supportive of subsised car clubs, policies to provide more electric vehicles and infrastructure, environmental ratings for supermarkets and policies to trade-in schemes for petrol/diesel cars. It was noted however that all ten of the policies had achieved a level of at least 50% support from participants.

The Head of Climate Strategy advised the Committee that the Strategy Room Project had provided some useful data and insights and that consideration was being given as to whether it could be used as a tool to form part of the future engagement plan to inform the review of the Reading Climate Emergency Strategy which would take place over the next two-year period.

Resolved –

- (1) That the outcomes of 'The Strategy Room' project to engage residents in discussions about climate change, as summarised in the presentation, be noted;
- (2) That the organisers, The Strategy Room Project, be thanked for their work and presentation.

18. READING CLIMATE FESTIVAL 2023 EVALUATION

The Committee received a report and watched a short video clip that gave an evaluation and overview of the 2023 Reading Climate Festival. A copy of the Gaia Evaluation Report, which included a full legacy plan, was attached to the report at Appendix 1.

The report explained that the Festival had taken place between 10 and 21 June 2023 with the stated aim of "inspiring and encouraging positive action on climate change". The Festival, which had been held annually since 2020, had been organised and curated by the Reading Climate Action Network (RCAN), the public-facing brand of the Reading Climate Change Partnership, a multi-agency partnership for which the Council were the 'host' and accountable body. The Festival's strategic priorities were; (1) to showcase the important role that Reading played on the world stage in understanding and addressing climate change; (2) to inform and engage the community about the work of RCAN/partner organisations in working towards a net-zero climate resilient town by 2030; and (3) to inspire and facilitate individuals/families to make clear pledges to adopt greener behaviours in support of the community's effort to address climate change.

To help realise the ambitions of the Festival and given the ability of arts and culture to reach new audiences and to act as a vehicle to have wide ranging conversations, Luke Jerram's iconic artwork Gaia had been brought to Reading Town Hall as a key focal point for the Festival. Gaia was chosen as a unifying piece of artwork that met all partners' strategic priorities. It was a piece that spanned all audiences, and which could very easily be linked to the climate narrative in a positive and informative way. It was also internationally known and drew people from other parts of the country.

Gaia had been hosted in the Concert Hall at Reading Town Hall between 10 and 18 June 2023. The partnership had collaborated to deliver 57 public ticketed sessions, including 'Twilight' (evening) sessions and 'Relaxed' events (aimed at neurodivergent audiences). Sessions were charged at £2 per ticket for over 16s, with free admission for under 16s. There were 10 curated events and 10 school sessions that sat alongside Gaia. An additional 19 events had taken place as part of the Reading Climate Festival programme. The cost of bringing Gaia to Reading had been recovered through ticket income and the joint investment from partners thereby delivering high value for money at no cost to the public purse.

The report set out the key outcomes of the 2023 Reading Climate Festival and explained that using Gaia as the Festival's centrepiece had increased the Festival's reach to around 13,000 people. This compared to previous year's audiences of around 1,000 and

represented an increase of 1200%. The success of Gaia demonstrated the potential that cultural events and the arts had to attract new and different people to the climate change discussion. The report added that plans for the 2024 Reading Climate Festival were already in development with the same partners and centered around Show Your Stripes Day on 21 June 2024. The report explained that the partnership was keen to build on the success of the 2023 Festival and arts and culture would therefore continue to feature strongly in future years.

Resolved –

- (1) That the evaluation of the 2023 Reading Climate Festival, as outlined in Appendix 1 attached to the report, be noted and the efforts of the partners be recognised;
- (2) That the impact of Luke Jerram's Gaia on participation and engagement in the Reading Climate Festival 2023 be noted;
- (3) That the value of arts, culture and creativity in engaging people in wider social issues, in this case climate change, be noted.

19. STRATEGIC TRANSPORT SCHEMES UPDATE

The Committee received a report that provided an update on the progress made towards the delivery of the current programme of strategic transport schemes in Reading. The programme included major enhancements to public transport and active travel facilities, aimed at encouraging more healthy lifestyles and helping to address the Climate Emergency. The programme included the following schemes and initiatives:

- Bus Service Improvement Plan (BSIP) Programme
- South Reading Bus Rapid Transit
- Reading West Station Upgrade
- Tilehurst Station Upgrade
- Shinfield Road Active Travel Scheme
- Bath Road Active Travel Scheme
- Active Travel Behavioural Change Programme
- School Streets Programme

The report provided a summary of the position concerning the delivery of the individual schemes and initiatives listed above. At the meeting the Strategic Transport Manager provided an update on the ongoing work taking place at Reading West Station and informed the Committee that the footpath at the station was due to reopen on 20 November 2023 and that, following this, the nearby traffic management measures would be removed and the process to bring the new station building into use would start.

The Strategic Transport Manager also provided an update on the programme of works relating to the Bus Service Improvement Plan (BSIP) and reported that, on 1 November 2023, bus operators in the area had launched a 'tap on tap off' contactless payment

system. To promote the launch of contactless payment an introductory offer of £3 for all-day travel, funded by the BSIP grant, would run until 31 December 2023. The statutory consultation for six proposed new bus lanes in the Borough had also started and would run until 7 December 2023. Plans for the new bus lanes had also been available to view at the various public drop-in sessions that had been held in relation to the draft Transport Strategy so that members of the public could see the plans and speak to officers about them.

Resolved – That the progress made on delivery of the current programme of strategic transport schemes, as summarised in the report, be noted.

20. LOCAL PLAN PARTIAL UPDATE CONSULTATION ON SCOPE AND CONTENT

The Committee received a report on the Local Plan Partial Update. The report sought approval from the Committee to conduct a consultation on the scope and content of the Partial Update.

The report explained that the Reading Borough Local Plan had been adopted in 2019 and that there was a statutory requirement to undertake a review of the Local Plan within five years of its adoption. To comply with this requirement, a Local Plan Review had been conducted which had identified the need to undertake a Partial Update. At the meeting held on 23 March 2023 the Committee had agreed to proceed with a Partial Update according to the timetable set out within the Local Development Scheme (LDS) (Minute 36 refers). This included a 'Regulation 18' consultation on the scope and content of the Partial Update that would begin in November or December 2023.

The report therefore recommended that the Committee approve a 'Regulation 18' consultation on the scope and content of the Local Plan Partial Update to take place between November 2023 and January 2024. The proposed consultation document was attached to the report Appendix 1.

The scope and content consultation document sought views on the proposed approach to updating those policies that formed part of the Local Plan, including matters such as the overall provision of housing as well as initially consulting on the sites that had been put forward for consideration for development. The consultation document did not include specific draft policies at this current stage, instead it outlined the proposed approach for updating each of the policies within Local Plan Partial Update and therefore asked targeted questions to garner stakeholders' views on the proposed direction of travel. The results of consultation would be used to inform the next stage of the Local Plan Partial Update, the pre-submission draft, planned for August 2024.

The report explained that there had been a variety of changes made to national policy, including a new version of the National Planning Policy Framework (NPPF) in July 2021 and an updated version of the standard methodology for assessing housing need, which placed a particular emphasis on the largest urban areas (including Reading) to deliver more housing which was the main reason for needing to conduct the Partial Update.

The scope and content consultation document also included proposals for additional sites for development or other uses. The consultation sought views on the potential inclusion of all additional sites that had been nominated through the "call for sites". The report emphasised that the Council had not yet decided on whether or not the sites should be included as part of the Partial Update but that the consultation was the only opportunity to consult on all the sites prior to the production of the full draft document. The report stated that many of the sites in the consultation document might ultimately not be considered suitable for inclusion when the full draft Partial Update was produced. The consultation document therefore included substantial caveats, but nevertheless afforded a vital opportunity for community involvement and to obtain feedback to ensure that any subsequent decision made about the inclusion or exclusion of the sites was as robust as possible.

The report also recommended that some small amendments be made to the agreed Local Development Scheme (LDS). The proposed changes mainly affected the timetable for the production of Supplementary Planning Documents (SPDs), namely the Biodiversity and Natural Environment SPD, the Town Centre Public Realm Strategy SPD, and the Sustainable Transport and Parking SPD. The changes did not alter the timetable for undertaking the Partial Update. The LDS timetable had been amended to ensure that preconsultation draft versions of the SPDs could be submitted to future meetings of the Committee in 2024. A tracked changes version of the LDS containing the new proposed timescales was attached to the report at Appendix 2.

Resolved –

- (1) That the Local Plan Partial Update Consultation on Scope and Content, as attached at Appendix 1, be approved for consultation;
- (2) That the Assistant Director for Planning, Transport and Public Protection be authorised to make any minor amendments necessary to the Local Plan Partial Update Consultation on Scope and Content in consultation with the Lead Councillor for Planning and Assets, prior to the consultation;
- (3) That the amended Local Development Scheme, as attached at Appendix 2, be agreed;

(The meeting started at 6.30 pm and closed at 9.52 pm)

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Agenda Item 3 TRAFFIC MANAGEMENT SUB-COMMITTEE MEETING MINUTES - 13 NOVEMBER 2023

Present: Councillor Ayub (Chair);

Councillors Lanzoni (Vice-Chair), Barnett-Ward, Cross, Ennis, Gittings, Griffith, Hornsby-Smith, Keeping, Kitchingham, McCann, Moore, Page and White

Apologies: Councillors Goss, Hacker and R Singh

26. MINUTES OF PREVIOUS MEETING

The Minutes of the meeting of 13 September 2023 were confirmed as a correct record and signed by the Chair.

27. QUESTIONS FROM MEMBERS OF THE PUBLIC AND COUNCILLORS

A question on the following matter was submitted, and answered by the Lead Councillor for Climate Strategy and Transport on behalf of the Chair:

Questioner	Subject
Councillor Yeo	Lower Henley Road North West Cycle Lane

(The full text of the question and reply was made available on the Reading Borough Council website).

28. PETITIONS

(a) Petition - Hemdean House School

The Sub-Committee received a report on the receipt of a petition from Hemdean House School.

The report explained that the detailed content of the petition was not yet know by officers, but it was expected to request measures to reduce safety risks outside the school on Hemdean Road. There had been good engagement between the school, Ward Councillors and officers around potential measures and officers would consider the content of the petition and submit a petition response to a future meeting. Resultant agreed measures would require funding, so it was likely that the petition response report would recommend a new/amendment to and existing entry onto the 'Requests for Traffic Management Measures' report.

The report explained that representatives from Hemdean House School had been in contact with Ward Councillors and officers, following their review of Hemdean Road and considering changes that could reduce risks. The proposals primarily included speed reduction measures, such as 20 mph, and traffic calming, signage as well as cycling

TRAFFIC MANAGEMENT SUB-COMMITTEE MEETING MINUTES - 13 NOVEMBER 2023

improvements. The school had been provided with high level feedback to inform their further review of desirable changes and had notified the Council of their intention to present a petition to the meeting.

The section of Hemdean Road in the vicinity of the school was open to two-way traffic including a scheduled bus route. There was a slight bend in the road as it passed the school and there was on-street parking on both side of the road to the north and south of the school. Parking was restricted immediately outside the school by the provision of 'School Keep Clear' markings. Within the last three year period of Police supplied data, up to 1 June 2023, there had been no recorded incidents on Hemdean Road between its junction with Queen Street and Hemdean Hill. Officers had therefore considered requested measures to be in the context of risk reduction, rather than casualty reduction.

The regular 'Requests for Traffic Management Measures' report contained an entry for a desired area 20 mph zone in Lower Caversham as a result of an earlier report having proposed a concept area including the section of Hemdean Road outside the school. The Lower Caversham 20 mph zone concept had been developed at a time when significant developer contributions were expected. Unfortunately, these did not materialise, however, this was still a desirable scheme for development and delivery. While the scale of the concept area was such that it would require significant funding. Smaller nominations could contribute to a phased delivery on an area priority basis.

At the invitation of the Chair five pupils form Hemdean House School addressed the Sub-Committee.

Resolved -

- (1) That the report be noted;
- (2) That officers consider the content of the petition and provide a petition response report to a future meeting.
- (b) Petition Holmes Road Traffic Plug

The Sub-Committee received a report on the receipt of a petition requesting the Council to install a one-way traffic plug on Holmes Road, at its junction with Wokingham Road, to tackle reported issues of speeding and through- traffic. A redacted petition sheet and supplementary documents included with the petition submission were attached to the report at Appendix 1.

The report explained that on 2 November 2023, a petition had been submitted to the Council containing 27 signatories, the petition read as follows:

"The residents of Holmes Road, who have signed below are petitioning for the installation of a one-way plug to prevent speeding traffic entering Holmes Rd. from the Wokingham Rd. The current volumes and speed of traffic in Holmes Rd is putting lives at risk. We believe that a plug would go some way to reducing the risk of serious accidents in Holmes Rd."

TRAFFIC MANAGEMENT SUB-COMMITTEE MEETING MINUTES - 13 NOVEMBER 2023

The report stated that the 'Requests for Traffic Management Measures' Report that was submitted to the Sub-Committee twice annually contained an entry for the one-way plug that was requested in the petition.

At the invitation of the Chair the lead petitioner Claire Gibney, addressed the Sub-Committee on behalf of the petitioners.

Resolved -

- (1) That the report be noted;
- (2) That the existing entry on the 'Requests for Traffic Management Measures' report being updated to reflect the receipt of this petition be agreed;
- (3) That the lead petitioner be informed of the decisions of the Sub-Committee, following publication of the agreed minutes of the meeting;
- (4) That no public inquiry be held into the proposals.

29. PARKING RESTRICTIONS AT FORMER RETAIL PARK EXIT CHATHAM STREET

The Sub-Committee received a report on traffic management measures associated with the development at the Former Wickes site on Weldale Street/Chatham Street and sought approval to carry out statutory consultation on the introduction of loading restrictions within a vehicular exit onto Chatham Street related to the retail park that had been previously occupied by Wickes and Iceland. An illustration of the proposal was attached to the report at Appendix 1 with an inset of that drawing showing the details clearer at Appendix 2.

The report explained that planning permission had been granted in March 2018 for the redevelopment of the former Wickes/Iceland site bounded by Weldale Street to the north and Chatham Street to the south. The permission had included the provision of 427 residential units and one flexible ground floor commercial unit. The first phase of development had been completed with the second phase having commenced. As a result of the development a S278 Highway Works Agreement was necessary which, amongst other things, was to close off the historic exit from the retail park on Chatham Street albeit that some egress was to be retained. The design had ensured that vehicles could exit but the area was secured by way of bollards making the ramp mainly for the use of pedestrians. The proposal consisted of providing a double yellow line no loading or unloading at any time restriction across the former exit to tie into existing restrictions either side of the former exit with the existing no waiting restriction to the east revised to also include loading or unloading. The inclusion of the waiting restriction had been deemed necessary to ensure that indiscriminate parking or loading did not occur along the Chatham Street frontage of the development causing obstructions to the flow of traffic along Chatham Street and the intervisibility between pedestrians and drivers at the zebra crossing located at the Chatham Street/Friar Street/IDR roundabout junction.

The loading restrictions were therefore essential to dissuade drivers from parking vehicles within the recessed exit and close to the existing zebra crossing.

Resolved -

- (1) That the report be noted;
- (2) That the Assistant Director of Legal and Democratic Services be authorised to undertake a statutory consultation in accordance with the Local Authorities Traffic Orders (Procedure) (England and Wales) Regulations 1996, for the proposals contained within Appendix 1, attached to the report;
- (3) That subject to no objections being received, the Assistant Director of Legal and Democratic Services be authorised to make the Traffic Regulation Order for the proposed scheme;
- (4) That any objection(s) received following the statutory advertisement be submitted to a future meeting;
- (5) That the Head of Transport (or appropriate Officer) in consultation with the appropriate Lead Councillor, be granted authority to make minor changes to the proposals;
- (6) That no public enquiry be held into the proposals.

30. REQUESTS FOR TRAFFIC MANAGEMENT MEASURES

The Sub-Committee received a report that informed the Sub-Committee of requests for traffic management measures that had been raised with officers. These were measures that had either been previously reported or those that would not typically be addressed in other programmes, where funding had yet to be identified.

- Appendix 1 List of requests that were new to the update report with initial officer comments and recommendations;
- Appendix 2 List of requests that had been previously reported, where significant amendments were proposed, with officer comments and recommendations;
- Appendix 3 The principal list of requests, as updated following the previous report to the Sub-Committee in March 2023. It also contained the prioritised list of cycling and walking measures from the LCWIP.

At the invitation of the Chair Andy Whisker and Paul Moore addressed the Sub-Committee in respect of Abbots Walk that was on the principal list of requests, set out in Appendix 3.

Resolved -

- (1) That the report be noted;
- (2) That having considered the officer recommendation for each request as set out in Appendix 1, attached to the report, the entries be retained on the primary list of requests, as set out in Appendix 3, attached to the report, subject to:
 - Northumberland Avenue in Redlands Ward Clarification that road markings to reduce speeding (indicating the 20mph restriction) were the primary desirable measure;
 - Norcot Road Concerns about vehicles speeding in the area to be included;
 - Redlands Road/Morgan Road/Alexandra Road It being noted that full details of all requests for changes were included in the report that was considered by the Sub-Committee in June 2023 (Minute 12 refers);
- (3) That having considered the officer recommendation for amendments to each request as set out in Appendix 2, attached to the report, the entries be retained/removed on the primary list of requests, as set out in Appendix 3, attached to the report, as per the officer recommendations;
- (4) That the items previously submitted to the Sub-Committee, as set out in Appendix 3, attached to the report, be agreed, subject to a separate review of current 'no through road' signage for Abbots Walk.
- 31. EXCLUSION OF PRESS AND PUBLIC

Resolved -

That, pursuant to Section 100A of the Local Government Act 1972 (as amended) members of the press and public be excluded during consideration of item 32 below, as it was likely that there would be disclosure of exempt information as defined in Paragraphs 1 and 2 of Part 1 of Schedule 12A of that Act.

32. APPLICATIONS FOR DISCRETIONARY PARKING PERMITS

The Sub-Committee received a report giving details of the background to the decisions to refuse applications for Discretionary Parking Permits from 26 applicants, who had subsequently appealed against these decisions.

Resolved -

(1) That with regard to application 5, discretionary visitor permit books be issued personal to the applicant and subject to the applicant providing the required proofs of residency;

- (2) That a decision in respect of application 11, for a discretionary teachers permit, be deferred to allow officers to obtain more information;
- (3) That with regard to application 14, a first discretionary resident permit be issued subject to the Planning Department clarifying the position with regard to the planning informative;
- (4) That a decision in respect of applications 15 and 18, for a first discretionary Healthcare Professional permit be deferred and that officers seek advice from Communities and Adult Social Care Services and Brighter Futures for Children on the list of approved professions to be allowed to be issued with Healthcare Professional permits;
- (5) That with regard to application 16, a third discretionary permit be issued personal to the application, subject to the applicant providing the required proofs and charged at the standard rate;
- (6) That with regard to application 24, a first discretionary resident permit be issued subject to the applicant providing the required proofs and officers submit a report to a future meeting on the parking zones in the area;
- (7) That with regard to application 25, for three discretionary charity permits and discretionary charged visitor books, the application be refused, but it be noted that Councillors had a case open on the issue;
- (8) That with regard to application 26, a first discretionary resident permit and discretionary visitor permit books be issued personal to the applicant and subject to the applicant providing the required proofs;
- (9) That the Executive Director for Economic Growth and Neighbourhood Services' decision to refuse applications 1, 2, 3, 4, 6, 7, 8, 9, 10, 12, 13, 17, 19, 20, 21, 22 and 23 be upheld.

(Exempt information as defined in Paragraphs 1 and 2).

(The meeting closed at 8.00 pm)

Present: Councillor Ayub (Chair);

Councillors Lanzoni (Vice-Chair), Cross, Ennis, Gittings, Griffith, Hacker, Hornsby-Smith, Keeping, Kitchingham, McCann, Moore, Page, R Singh and White

Apologies: Councillors Barnett-Ward and Goss

33. DECLARATIONS OF INTEREST

Councillor Ayub declared an interest in item 37 on the grounds that he owned a hackney carriage.

34. MINUTES OF PREVIOUS MEETING

The Minutes of the meeting of 13 November 2023 were confirmed as a correct record and signed by the Chair.

35. PETITION UPDATE - HEMDEAN HOUSE SCHOOL REQUEST FOR SPEED CALMING MEASURES

Further to Minute 28(a) of the previous meeting, the Sub-Committee received a report providing an update on the receipt of a petition that had requested the Council to place speed calming measures on Hemdean Road, outside Hemdean House School. A copy of the written petition that had been submitted to the Council was attached to the report at Appendix 1.

The report explained that following the presentation at the previous meeting representatives from Hemdean House School had submitted a written petition that had been received by officers on 20 November 2023. The primary request was as follows:

"We the undersigned, petition the Council to place speed humps in front of our school which will slow the traffic down and reduce risks to pedestrians, cyclists, drivers and all other road users."

Later in the petition it was also implied that a speed reduction (i.e. 20mph) was also being requested alongside the speed calming features. The petitioners referred to an online petition that they had set up which has 120 signatures. It should be noted that the petition had originally been set up to request "*digital road signs*", but was later updated to request speed cushions.

The report stated that the regular Requests for Traffic Management Measures Report contained an entry for a desired area 20mph zone in Lower Caversham. This had been developed at a time when significant developer contributions were expected, but unfortunately these did not materialise. However, this was still a desirable scheme for development and delivery. While the scale of the concept area was such that it would require significant funding, relatively smaller funding nominations could contribute to a phased delivery on an area priority basis.

The report stated that there was currently no allocated funding for the development and delivery of the changes requested in the petition. Officers acknowledged the concerns that had been raised and the requested changes appeared appropriate for the location. The report recommended that a new entry be proposed on the next update of the Requests for Traffic Management Measures Report that would be submitted to the March 2024 meeting. Taking into consideration the petition references to speed cushions, humps and the reference to 30mph being too fast, it was suggested that the entry proposed a section 20mph with appropriate physical speed calming measures, which would be investigated and consulted on when funding was allocated. The report also recommended that the Lower Caversham 20mph entry be amended to include a summary reference to this proposed new report entry, as they potentially covered the same area. Given the specific nature of the petition, it was considered by officers that a new request, rather than a brief amendment to the wider area Lower Caversham request, was more appropriate. Finally, the report stated that it should be expected that scheme development would only commence once funding had been identified, where it would be programmed around other scheme development priorities.

Resolved -

- (1) That the report be noted;
- (2) That the proposal to add a new entry on the 'Requests for Traffic Management Measures' report to reflect the receipt of this petition and the requested measures be agreed;
- (3) That the lead petitioner be informed of the decisions of the Sub-Committee, following publication of the agreed minutes of the meeting;
- (4) That no public inquiry be held into the proposals.

36. WENSLEY ROAD INTRODUCTION OF WAITING AND LOADING RESTRICTIONS, RELOCATION OF SPEED CUSHIONS AND INTRODUCTION OF A BUS CAGE AT LOCATIONS SURROUNDING THE SITE AND INTRODUCTION OF A ONE WAY ROAD

The Sub-Committee received a report on the traffic management measures associated with the residential development at Wensley Road. The report sought approval to a carry out a Statutory Consultation on the introduction of waiting restrictions at the new and existing vehicular access around the development as well as waiting restrictions provided along the new road that ran through the site. The report also sought approval to carry out the necessary notice processes that related to the relocation of two speed humps to facilitate an uncontrolled pedestrian crossing and new vehicular junction. Drawings illustrating the proposals were attached to the report at Appendices 1 to 6.

The report explained that planning permission had been granted in December 2020 for the demolition of 29 garages and the development of 26 new dwelling units, including provision of affordable homes, that would be provided in a mixture of houses and apartments. The development had been under construction for some time and was due to be completed in 2024. The proposal consisted of the introduction of numerous changes surrounding the site as these had been broken down into smaller areas for ease of reference. The report commented on each of these areas separately.

Resolved -

- (1) That the report be noted;
- (2) That the Assistant Director of Legal and Democratic Services be authorised to undertake statutory consultation/notification processes;
- (3) That subject to no objections being received, the Assistant Director of Legal and Democratic Services be authorised to make the Traffic Regulation Order for the proposed scheme;
- (4) That any objection(s) received following the statutory advertisement be submitted to a future meeting of the Sub-Committee;
- (5) That the Head of Transport (or appropriate Officer) in consultation with the appropriate Lead Councillor, be authorised to make minor changes to the proposals;
- (6) That no public inquiry be held into the proposals.

37. INFORMAL CONSULTATION RESULTS - PRIVATE HIRE VEHICLE USE OF KINGS ROAD OUTBOUND BUS LANE

Further to Minute 19 of the meeting held on 13 September 2023 the Sub-Committee received a report that provided feedback on the informal consultation that had been carried out throughout November 2023 on private hire vehicle use of the Kings Road outbound bus lane. A copy of the informal consultation introduction page, survey form and attached drawing that had been published on the Council's website was attached to the report at Appendix 1, feedback that had been received via the consultation page on the website was attached at Appendix 2 and a letter that had been submitted by Robert Williams, Chief Executive Officer of Reading Buses was attached to the report at Appendix 3.

The report stated that at the September 2023 meeting the Sub-Committee had agreed an amendment to the recommended action in the report requesting officers to carry out an informal consultation on the requested changes to the restriction, to ensure that key stakeholders were included in the consultation. Officers had arranged for the requested informal consultation to take place throughout November 2023 and the draft content had been shared with Ward Councillors for comment and the introduction page, survey form and attached drawing were published on the Council's website. Officers had notified

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stakeholders by email, which had included statutory consultees, for example emergency service providers, and other groups including public transport operators. A press release had also been issued.

The report included a table that provided the quantities of each selection in the feedback.

The report explained again that to pursue the requested alteration of access along the Kings Road outbound bus lane would require the following:

- Identification of funding;
- Statutory Consultation Creation and advertising of the proposed new Traffic Regulation Order (TRO);
- Implementation of the Decision Consideration of the consultation feedback;
- Signing Review Review and creation of signing specifications for the required changes along the route;
- Making the Order Seal and advertise the made TRO;
- Implementation of the Scheme Change the signing on street and updating exemptions on the enforcement camera software.

In the case of a trial, the statutory consultation would involve creation and advertising of an Experimental Traffic Regulation Order and Implementation of the Decision and Signing Review would follow the implementation stage. The old signing would need to be stored for the duration of the trial, which would be for a minimum of six months following the implementation, this was the consultation period.

The report set out the recommended options for consideration which were as follows:

- (a) Agree no change Retain the existing restriction;
- (b) Agree to pursue a proposed change of restriction to exclude non-Reading Borough Council licenced Hackney Carriage Vehicles;
- (c) Agree to pursue a proposed change of restriction to exclude non-Reading Borough Council licenced Hackney Carriage Vehicles and to permit use by Reading Borough Council licenced Private Hire Vehicles;
- (d) As per (c) above, but using an Experimental Traffic Regulation Order.

At the invitation of the Chair Kamran Saddiq, Chairman of the Reading Private Hire Association and Paul Seaward, Vice Chairman of the Reading Private Hire Association, addressed the Sub-Committee in favour of private hire vehicle use of the Kings Road outbound bus lane. At the invitation of the Chair Asif Rasheed, Chair of the Reading Taxi Association, and Peter Seymour, Reading Motorcycle Action Group, also addressed the Sub-Committee, they spoke against private hire vehicles using the bus lane.

The Sub-Committee discussed the report and Councillor Ennis moved a motion, seconded by Councillor Page, that option (c), as set out in paragraph 3.16 of the report and above, be agreed which the Sub-Committee unanimously supported.

Resolved -

(1) That the report be noted;

- (2) That the feedback received via the consultation page on the Council's website and the letter submitted by Robert Williams, Chief Executive Officer of Reading Buses, as set out in Appendices 2 and 3 attached to the report, be noted;
- (3) That having considered the proposed options in Section 3.16 of the report the proposed change of restriction to exclude non-Reading Borough Council licenced Hackney Carriage Vehicles and to permit use by Reading Borough Council licenced Private Hire Vehicles be pursued/agreed, option (c) as set out above and in the report, be agreed;
- (4) That subject to identifying the funding to progress the proposals, the following be agreed:
 - (i) That the Assistant Director of Legal and Democratic Services be authorised to undertake a statutory consultation for the proposed alterations in accordance with the Local Authorities Traffic Orders (Procedure) (England and Wales) Regulations 1996;
 - (ii) That, subject to no objections being received, the Assistant Director of Legal and Democratic Services be authorised to make the Traffic Regulation Order;
 - (iii) That any objection(s) received during the statutory consultation period be submitted to a future meeting of the Sub-Committee;
- (5) That no public inquiry be held into the proposals.

(Councillor Ayub declared an interest in the above item on the grounds that he owned a hackney carriage. He left the room and took no part in the discussion or decision making.)

38. WAITING RESTRICTION REVIEW PROGRAMME: PROPOSALS FOR STATUTORY CONSULTATION (2023B)

Further to Minute 21 of the meeting held on 13 September 2023, the Sub-Committee received a report that sought approval for officers to carry out statutory consultation for recommended new/alterations to waiting restrictions as part of the 2023B Waiting Restriction Review Programme. These proposals aimed to address the issues that had been raised in the initial list of requests which had been submitted to and agreed for investigation by the Sub-Committee at its meeting on 13 September 2023 (Minute 21 refers). The recommendations set out in the report had been shared with Ward Councillors and the recommendations and drawings, by Ward, were attached to the report at Appendix 1.

Resolved -

(1) That the report be noted;

- (2) That the Assistant Director of Legal and Democratic Services be authorised to undertake a statutory consultation for the 2023B programme in accordance with the Local Authorities Traffic Orders (Procedure) (England and Wales) Regulations 1996, for the proposals contained within in Appendix 1 attached to the report, subject to:
 - (i) Abbey Ward, Weldale Street Officer recommendation be agreed, namely to remove from the programme;
 - (ii) Caversham Ward, Westfield Road Officer recommendation be agreed, namely to remove from the programme;
 - (iii) Church and Katesgrove Wards, Northumberland Avenue Number
 2 Officer recommendation be agreed, namely to remove from the programme;
 - (iv) Coley Ward, Berkley Avenue Officer recommendation be agreed, namely to remove from the programme;
 - (v) Coley Ward, Pennyroyal Court Officer recommendation be agreed, namely to remove from the programme;
 - (vi) Emmer Green Ward, Jefferson Close/Wordsworth Court Officer recommendation be agreed, namely to remove from the programme
 - (vii) Katesgrove Ward, Edgehill Street Remove from the programme;
 - (viii) Park Ward, Liverpool Road Officer recommendation be agreed, namely to remove from the programme;
 - (ix) Thames Ward, Addison Road/Meadow Road Officer recommendation be agreed, namely to remove from the programme;
 - (x) Thames Ward, Elliot's Way Officer recommendation be agreed, namely that the proposal be pursued (proceed to statutory consultation) as part of the Waiting Restriction Review programme and that it follows the same development processes and timescales as the rest of the programme;
 - (xi) Tilehurst Ward, Fern Glen Officer recommendation be agreed, namely to remove from the programme;
 - (xii) Tilehurst Ward, Savernake Close Officer recommendation be agreed, namely to remove from the programme;
 - (xiii) Tilehurst Ward, The Meadway/Mayfair Officer recommendation be agreed, namely to remove from the programme;

- (3) That subject to no objections being received, the Assistant Director of Legal and Democratic Services be authorised to make the Traffic Regulation Order for the 2023B programme;
- (4) That any objection(s) received during the statutory advertisement be submitted to a future meeting of the Sub-Committee;
- (5) That no public inquiry be held into the proposals.

39. BSIP BUS LANES - STATUTORY CONSULTATION RESULTS

Further to Minute 7 of the meeting held on 14 June 2023, the Sub-Committee received a report providing information on the feedback from the Statutory Consultation relating to the six proposed Bus Service Improvement Plan (BSIP) bus lanes. A Traffic Modelling Summary was attached to the report at Appendix 1, the Bus Lanes that had been consulted on were attached at Appendix 2 and detailed consultation results were attached to the report at Appendix 3.

The report explained that an initial four week informal consultation had taken place from 19 May to 16 June 2023 that sought views on the initial bus lane proposals. A formal statutory consultation had followed, which had run from 9 November to 7 December 2023 and had included, where possible, scheme design changes following consideration of the informal consultation. A summary of the statutory consultation results were set out in a table included in the report.

Examination of the response had identified a large number of responses, 41, from RG1 that had been submitted within a short time frame. It was assumed that these had been collated from a large group and so had not been discounted. One of the main areas of feedback had been the use of the bus lanes by private hire vehicles and motorcycles. Of the 266 responses a total of 50 objections had been directly related to motorcycles not being permitted to use the proposed bus lanes. Whilst officers were not discounting the comments that had been raised, given that they did not object to the principle of the bus lanes, an alternative version of the results had been presented and had been set out in table in the report.

Due to the timescales associated with the grant funding of the BSIP schemes. Officers had not brought forward proposals to allow motorcycles, or private hire vehicles, as this would require a full policy review of all bus lanes within the Borough to ensure consistency. The consultation responses had raised a number of common themes, both positive and negative, and these were set out in the report.

The report stated that a detailed review of the consultation results had been carried out and whilst it had acknowledged the concerns that had been raised by consultees, particularly around the perception of increased congestion, without making significant changes to transport infrastructure and providing suitable transport alternatives, such as mass transit/public transport and Active Travel, car usage would continue to grow, generating greater levels of congestion. An assessment of each of the schemes had been

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carried out against key themes to demonstrate the recommendations and were set out in a table in the report.

Inflationary pressures had had a significant impact on the cost of the overall BSIP package since funding had been awarded, therefore whilst the recommendation was to deliver all six schemes this would be kept under review as procurement was carried out and costs were clarified. The report therefore recommended that the assessment of each of the schemes was used as a basis for prioritising scheme delivery.

In acknowledging the comments that had been received relating to the use of bus lanes by motorcycles, the report proposed that an experimental order should be made for each of the bus lanes subject to the Sub-Committee permitting their use by motorcycles. Officers were satisfied that collision risks were low and the inclusion of motorcycles in the bus lanes would not have a detrimental impact on bus movements.

The report explained that officers would carry out a further assessment during the period that the experimental order was in place and would submit a future recommendation to the Sub-Committee on whether the experimental order should be made permanent. There was currently no intention to permit the use of these bus lanes by any private hire vehicles or by any Taxis unregistered within the Borough. This would result in an increase in lane usage which might have a detrimental impact on bus movements and reduce the capacity and benefits that were intended by these schemes.

At the invitation of the Chair Peter Seymour, Reading Motorcycle Action Group, addressed the Sub-Committee.

The Sub-Committee discussed the report and agreed by a majority for officers to proceed with the construction of the bus lanes, subject to available funding.

Resolved -

- (1) That the report be noted;
- (2) That the recommendation to construct each of the schemes contained within the report, subject to available funding, be approved;
- (3) That an experimental Traffic Regulation Order, permitting motorcycle access to each of the bus lanes contained within the report be approved;
- (4) That the Assistant Director of Legal and Democratic Services be authorised to approve the proposed traffic restrictions for each of the schemes contained within the report, in accordance with the Local Authorities Traffic Orders Procedure (England and Wales) Regulations 1996;
- (5) That the Assistant Director of Legal and Democratic Services be authorised to make the Traffic Regulation Order and no public inquiry be held into the proposal.

40. EXCLUSION OF PRESS AND PUBLIC

Resolved -

That, pursuant to Section 100A of the Local Government Act 1972 (as amended) members of the press and public be excluded during consideration of item 41 below, as it was likely that there would be disclosure of exempt information as defined in Paragraphs 1 and 2 of Part 1 of Schedule 12A of that Act.

41. APPLICATIONS FOR DISCRETIONARY PARKING PERMITS

The Sub-Committee received a report giving details of the background to the decisions to refuse applications for Discretionary Parking Permits from four applicants, who had subsequently appealed against these decisions.

Resolved -

- (1) That with regard to application 1, a discretionary teachers parking permit be issued personal to the applicant;
- (2) That, with regard to application 2, discretionary visitor permit books be issued, personal to the applicant, subject to the standard scheme limits for the number of books that could be issued each year and charged at the standard rate;
- (3) That with regard to application 3, a temporary one-year first discretionary parking permit be issued personal to the applicant;
- (4) That the Executive Director for Economic Growth and Neighbourhood Services' decision to refuse application 4 be upheld.

(Exempt information as defined in Paragraphs 1 and 2).

(The meeting closed at 8.45 pm)

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Agenda Item 4

Minutes of the 108th AWE Local Liaison Committee Meeting

Brimpton Parish Council

West Bershire Council

Tadley Town Council

Baughurst Parish

Mortimer West End

Silchester Parish

Tidmarsh with Sulham Parish

Aldermaston Parish Council

Padworth Parish Council

Reading Borough Council

Holybrook Parish Council

Pamber Parish Council Shinfield Parish Council

West Berkshire Council

West Berkshire Council

Wokefield Parish Council

Mapledurham Parish

Wasing Parish

AWE

AWE

AWF

AWE

AWE AWE

AWE AWE

AWF

AWE

AWE

AWE

AWE

Aldermaston Parish Council

Basingstoke & Deane Borough Council

Theale Parish Council

Purley on Thames Parish Council

Chair

SMPC



Thursday 9th November 2023

AWE, Recreational Society, Aldermaston

Basingstoke & Deane Borough Council

Present:

Janine Mantle **Cllr Philip Bassil Dominic Boeck Cllr Mike Bound Cllr Graham Bridgman Cllr Avril Burdett Cllr Jonathan Chishick Cllr Colin Cooper Cllr Sophie Crawford Cllr Kevin Cross** Cllr John Durrant **Cllr Robert Jones Cllr Mark Keeping Cllr Jane Langford Cllr Clive Littlewood** Cllr George McGarvie **Cllr Ian Montgomery** Vicky Poole **Carolyn Richardson Cllr John Seto Cllr David Shirt Cllr Jo Slimin** Cllr Jim Thompson **Cllr Tim Whittaker Cllr Paul Woodley**

Nick Bolton Andy Burnett-Dale Chris Daniels Katie Davidson Scott Davies-Hearn Douglas Greenway Andrew Lowe Hannah Marsh Andrew McNaughton Liz Merrin James Platt Kavita Thandi Martin Wells

Regulators:

lan Rogers Gareth Lock Rob Green Office for Nuclear Regulation Office for Nuclear Regulation Environment Agency

Apologies

Apologies were received from: Stuart Coker, Malcolm Large, David Leeks, Jonah Maddocks, Helen Mclean, Susan Mullan and Jo Walker.

Actions from previous meetings

Action 106/01: Meeting to be arranged with Cllr Slimin to discuss AWE's relationship with Basingstoke & Deane Borough Council. (John Steele) Response: John and Cllr Slimin were to get in touch. Ongoing. John has now retired. Action closed.

Action 106/09: A visit to the Educational Collection will be arranged for LLC members in 2023. (Chris Daniels / Claire Lockwood / Suzanne Chenery)

Response: We hope to arrange for LLC members to visit the Educational Collection in October.

Response: This is not something we can actively offer to the general public, but we will arrange future visits for the LLC to see the Educational Collection. The LLC last saw the collection in 2022. Action closed.

Action 106/10: Discuss arrangements for a visit to the Educational Collection for members of the general public. (Chris Daniels / Claire Lockwood / Suzanne Chenery)

Response: Chris and Claire are looking into whether this will be possible as clearance is required from the MOD regarding visits to the Educational Collection by members of the public.

Response: A visit to AWE for the Aldermaston Historical Group has been arranged for 6 December. Action closed.

Actions from 107th LLC Meeting – 25th April 2023

Action 107/01: Check that the feedback from the survey was shown and sent separately from the minutes. (Claire Lockwood)

Response: Katie Davidson will send a survey out. Action closed.

Action 107/02: Cllr Keeping asked if sediment is sampled at South Road Sewer? Helen to provide an answer for the next meeting (Helen Maclean)

Response: We only sample water at the South Road Sewer monitoring location and do not collect sediment samples (although we do sample water and solids from Silchester Sewage works which is downstream).

We analyse the SRS water samples for gross alpha, beta and tritium (alpha spectrometry if the alpha result is above certain thresholds). The solid and liquid sewage samples are analysed for Plutonium, Uranium and tritium. Chemical analysis of SRS water samples is also undertaken which includes suspended sediment. Action closed.
Action 107/03: Cllr Thompson stated that some parishioners live near the Burghfield Brook and they have expressed concerns to where it enters as the brook is choked with vegetation and immature trees, they are concerned that this will slow the flow which could cause flooding to their properties. They have made representation and were told that it would be looked at in September. It looks like the brook is between two levies and has the capability to rise considerably before it overflows but the impact upstream is unknown. Helen to find a response to the question from the Flood Litigation team. (Helen Maclean)

Response: This was covered in the flood risk webinar- September 2023. Action closed.

Action 107/04: Helen to speak with David Ashworth regarding the working state of Burghfield Brook the flood mitigation system and report back at the next LLC meeting (Helen Maclean)

Response: This was covered in the flood risk webinar- September 2023. Action closed.

Action 107/05: Include Flood Risk as an agenda item at the next LLC Meeting (Suzanne Chenery)

Response: This was covered in the flood risk webinar- September 2023. Action closed.

Action 107/06: Jo to provide Cllr Keeping with more information regarding the rumour of an issue with Green Park disturbing the AWE monitoring system due to vibrations from this source. (Jo Walker) **Response:** There is no evidence of this. If anything changes, the LLC will be updated. Action closed.

Action 107/07: Jo to provide details on how much solar energy AWE require to run the selected operations on site. (Jo Walker)

Response: This was covered in the 9th November meeting agenda. Action closed.

Action 107/08: At the request of Cllr Shirt, Jo to update LLC members on what external sites AWE are considering using as solar power areas. (Jo Walker)

Response: This was covered in the 9th November meeting agenda. Action closed.

Action 107/09: Cllr Slimin and Cllr McGarvie requested an update on solar and how this will affect local residents at the next meeting (Andrew Lowe)

Response: This was covered in the 9th November meeting agenda. Action closed.

Action 107/10: A3 External Planning to be an agenda item at the next meeting. (Suzanne Chenery)

Response: This was covered in the 9th November meeting agenda. Action closed.

Action 107/11: Arrange a date for the LLC flood risk awareness session. (Jonah Maddocks)

Response: This was covered in the flood risk webinar- September 2023. Action closed.

Action 107/12: Check which schools are registered to take part in the Emergency Plan outside of West Berkshire and provide this information at the next LLC meeting. (Carolyn Richardson)

Response: This was covered in the 9th November meeting agenda. See information attached. Action closed.

Approval of the 107th meeting minutes

Questions arising from 107th meeting minutes:

The LLC members would like Councillor Mollie Lock's contribution to the LLC noted in the minutes. Mollie invested an extensive amount of time with the LLC and always particularly took an interest in school engagement. The LLC members and AWE would like to thank Mollie for her time and contribution to the LLC over the years.

Action 107/04 needs amending. 'Burghfield Brook' to be changed to 'flood mitigation system'.

Carolyn Richardson is recorded on the front page as councillor. She is an officer. This needs amending.

Introduction

Janine Mantle, Corporate Affairs Director, chaired the meeting and Chris Daniels, Senior Manager, Responsible Business, welcomed members to the 108th meeting.

Janine introduced Kavita Thandi and Katie Davidson who have joined AWE's Responsible Business team. Katie will be taking over from Suzanne Chenery who has been our Administrator. Janine thanked Suzanne for all her hard work and for being the chief point of contact for the LLC.

Chairman's update

Membership Changes

Stuart Frost (Basingstoke & Deane) replaced by Mike Bound

John Chapman (Purley on Thames) replaced by Jane Langford

Molly Lock (Stratfield Mortimer) replaced by Graham Bridgman who left West Berkshire Council

Vicky Poole - West Berkshire Council

Matt Shakespeare - West Berkshire Council

John Durrant - Silchester Parish Council

Organisation update including site operations.

- July incident

There was an incident on site over summer.

AWE's thoughts remain with the family, friends and colleagues of the Balfour Beatty worker who died tragically following a construction incident at the AWE Aldermaston site on 6 July 2023.

AWE continues to work with Balfour Beatty, Thames Valley Police, and the Office for Nuclear Regulation to support the ongoing investigation. The incident did not involve any of our nuclear installations or any nuclear materials and there was no risk to the public.

- Site exercise 4th Oct

On Wednesday 4 October, AWE carried out the Level 1 Exercise at Aldermaston, demonstrating their emergency response capabilities to the regulators as part of the LC/AC 11 and Radiation Emergency Preparedness and Public Information Regulations (REPPIR) requirements.

The exercise was observed by regulators from the Office for Nuclear Regulation, Defence Nuclear Safety Regulator, Defence Nuclear Security Regulator and overseen by a team of AWE's internal regulators and a representative from the MoD.

The exercise was assessed by the regulators to be an adequate (Green) demonstration of AWE's emergency arrangements.

- Employers Network for Equality & Inclusion (enei) Gold Award

AWE have been awarded the prestigious Employers Network for Equality & Inclusion (enei) Gold Award.

Out of 171 entries this year from organisations across the country, there were only 15 Gold Awards, meaning that AWE is in the top 10% in the country for ED&I, so this is an incredible achievement.

Best Companies Survey

AWE has been voted as the 17th Best Company to work for after completing the annual Best Companies colleague engagement survey. AWE is really proud of this result, and it shows we are a really good company to work for.

Our graduate and apprentice programmes are accepting applications now, so if you know anyone who may be interested, please give them a prompt.

Proposed Industrial Action

You may have seen or heard that one of AWE's Unions, Prospect, has rejected a pay offer and after balloting its members is proposing industrial action short of a strike.

Action short of a strike means pausing several voluntary activities and overtime, alongside arranging all their members to arrive at Main Gate at the same time on Monday 13 November.

Thames Valley Police has been informed about potential disruption and we will continue to work with them and relevant authorities to minimise the impact of any action on our local community."

We all want to avoid any industrial action and find an amicable solution. The company will continue to make every effort working with Prospect to find a satisfactory and swift resolution.

Questions arising:

Cllr Jane Langford: In relation to the Best Company Award, is that AWE or contractors?

Janine Mantle: AWE employees as contractors have their own different survey.

Cllr Jonathan Chiswick: Is adequate the best grade you can have or are their higher grades?

Ian Rogers: Any activity that we assess can only be graded as adequate or inadequate. Legislation only needs a grade of adequacy.

Dominic Boeck: In relation to the proposed strike action, which union is it?

Janine Mantle: It is Prospect. This union represents mainly office-based workers. The other union, Unite, represent generally the front-line workers.

Janine Mantle: There have been 3 questions raised since the last meeting.

1. Do you believe that AWE staff returning to site-based working is partly responsible for the traffic increase?

2. What is your current policy on car sharing and the use of public transport and is it effective?

3. Would AWE firemen still support the local community in the event of a fire off site? There is currently a shortage of recruits of on call firemen in Tadley.

Janine Mantle:

Question 1 response: Car sharing is hugely advertised and incentivised.

Question 2 response: local transport is limiting in the area.

Question 3 response: Will be addressed during the presentation.

All of these questions will be included within the presentation and will be checked at the end.

Cllr George McGarvie: In the past we have been able to see John Steele's transport plan and the metrics related to it. Is there a possibility of looking at numbers pre-covid vs now?

Action 108/01: AWE to report car sharing figures at the next meeting.

Cllr Avril Burdett: We would like to see the bus service from Basingstoke to Tadley more widely advertised as there are concerns over children's safety with the increase in traffic.

Action 108/02: AWE to advertise the use of public transport across the company.

Liz Merrin: We can ensure that the train and bus services are more widely advertised to staff.

Cllr George McGarvie: Is public transport incentivised?

Chris Daniels: It is something we will look into.

Cllr Jo Slimin: There has been a noticeable increase in traffic. It would be cheaper to catch a bus than to drive? A bus ticket from Basingstoke to Tadley costs only £2. There needs to be a promotion of the benefits of using public transport. People must be able to save money this way and keep money in their pocket.

Janine Mantle: This is very powerful. Janine suggested that the LLC create something to share with staff. An appeal from the community to use public transport more often. Perhaps create a video or a blog message to get the message across to staff.

Action 108/03: LLC members to put together a 'voice of the community' video to be shared with employees about the impact of using public transport. Team Responsible to lead on this in partnership with the Transport team.

Cllr David Shirt: There was a meeting with Andy Burnett- Dale (AWE) where it was discussed that there could be a possibility of sponsoring a bus from Baughurst to Aldermaston station. As it is not safe for cycling or walking.

Cllr Mike Bound: Are there any metrics on how many people come from Basingstoke on to site?

Chris Daniels: We do have access to that data but not to hand.

Clir Jane Langford: Back in the day we had a bullseye diagram given to us that was very useful. It had AWE in the middle and then where people came from.

Cllr Sophie Crawford: Nick Roberts is updating the transport plan and it would be useful he if could come and talk to us at the next meeting.

Action 108/04: Nick Roberts to attend the next meeting to discuss the new transport strategy.

Environment, Safety and Health Update

Nick Bolton

ESH&Q Service Delivery Lead

Nick gave an overview of performance in personal and process safety during the period, advising members that the OSHA TRI rate to the end of August 2023 was 0.324 per 200,000 hours worked. 15 injured parties required one or more days way from work to recover resulting in 435 working days lost. There was a total of 26 Recordable Injury Events that occurred in the 12 months to the end of August 2023. However, personal safety is overshadowed by the incident on 6th July.

Nick also explained that temporary lighting had been installed before the clocks went back to combat poor lighting in areas around site.

They are working with contractor companies to help reduce contractor worker injuries.

Nick discussed that the process safety performance remains at an acceptable risk level. There have been no process safety events raised during the period. Process safety training for supervisors remains an ongoing focus, increasing process safety knowledge across the organisation supporting supervisors who supervise in high hazard

environments. The Leadership Process Safety training in partnership with Cogent Skills continues to be delivered to leaders at AWE. The intention remains for this course to become a key course for all senior leaders at AWE.

The Process Safety Team is also continuing to develop virtual reality training that can be used to raise hazard awareness amongst staff at all levels of the organisation.

With regards to Waste Management, the controlled waste disposal for the financial year to end August 2023 target from the Environmental management System (EMS) is 99% for the financial year 22/23. The total waste diverted from landfill is 99.9%.

The Atmosphere & Trade Effluent Public Dose Assessment for Aldermaston Stream for the period for the period July 22 – June 23 calculated doses represent minute fractions of the dose constraint set by the Environment Agency of 500 μ Sv (0.5 mSv) per year for a nuclear site. The model concludes that there is no hazard to members of the public.

Questions arising:

Cllr Mark Keeping: How temporary is the lighting?

Nick Bolton: It is generator ran lighting. The staff report defective lighting in any areas around site. Some of the lighting is not cost effective to replace.

Cllr George McGarvie: If someone is removed from the workforce, how do you calculate this how many lost days?

Nick Bolton: This would need checking on how this is calculated when someone is removed from work or off for long periods of time. The count stops when an employee leaves the business.

Cllr Rob Jones: Why is there a general trend towards more incidents?

Nick Bolton: From 2020 there was a step up in events because we reported more. The criteria changed. AWE encouraged more reporting. So, this is down to more mere stringent reporting.

Cllr George McGarvie: Why are the number of reported accidents significantly lower? (Reference to slide 7)

Nick Bolton: There is not a drop off of reporting. There is a healthy reporting culture. All incidents are triaged and investigated. All incidents are reported. Due to reinforced AWE reporting processes on site. 34 is the updated figure of the number of Events Notified to the ONR by Calendar Year 2023 (end of August).

Cllr Dave Shirt: There has been an otter spotted on the Aldermaston stream last week.

Regulators Update

Ian Rogers, Lead Site Inspector Office for Nuclear Regulation

The ONR report was circulated prior to the meeting for the period 1 February to 30 September 2023.

Reporting period

The period covered by this report 1 February to 30 September 2023 is in response to an agreement at the last AWE Local Liaison Committee to move to a six-monthly schedule starting November 2023. Future reports will cover the period 1 April to 30 September and 1 October to 31 March to accommodate this revised schedule.

Inspections

During this period, ONR site, project and specialist inspectors made 12 separate visits to site for the purposes of conducting a broad range of inspection activities. As discussed at the last meeting, we have been working with AWE to encourage a more consolidated approach utilising the scheduled monthly site inspection weeks more effectively to reduce the burden to the ONR inspection teams. Consequently, except for March, July and September, these correspond to the monthly schedule of site inspection weeks.

The additional two visits March were to accommodate specific meetings with the AWE Executive team and Senior Leadership team that could not be accommodated during the site inspection week.

The visits conducted in June were in response to the preliminary enquires undertaken following the fatality in the Hub Construction Enclave. The significant majority of activities undertaken as part of the subsequent investigation have taken place on Thames Valley Police premises.

Routine Inspections

You will note that our inspection activities continue to cover a broad range of topics that represent the focus of our regulatory oversight throughout ONR's 2023/24 inspection programme for the AWE sites:

examination, maintenance, inspection and testing

management of operations including control and supervision

staff training, qualifications and experience

radioactive waste management

decommissioning

organisational capability, culture and organisational changes

conventional (non-nuclear) health and safety

assurance and governance

management of modifications to existing plant.

construction safety.

It is worth noting that construction safety will have a specific focus going forward with an ONR Site Inspector appointed to oversee construction activities across both sites.

In addition to the above

From the report you can also see that:

ONR attended the AWE Annual Review of Environment and Safety [AROES]. This provided the opportunity to discuss AWE's safety and environmental performance over the previous year, the identification and implementation of learning from operational experience, and the strategic focus for the coming years. Overall, ONR was content that AWE's assessment of their performance and their strategic focus aligned with ONR's assessment and expectations.

ONR and AWE have commenced a joint review into the circumstances that led to the Prohibition Notice served following shortfalls identified in AWE's confined space arrangements. The intent of this review is to understand the communications that took place between ONR and AWE and, the information available providing the basis of decisions made within the various governance forums.

ONR has also undertaken further activities to assess AWE's progress in delivering safety improvements. The outcomes from those activities continue to be encouraging with the site having made significant improvements over the last 12 months. There remain several areas that will continue to be subject to regulatory focus over the next 12 months, including organisational learning, internal assurance and conventional health and safety, particularly construction safety.

In addition, ONR has held a further 'Holding to Account' meeting with the Managing Director and key members of his executive team to reinforce the regulatory expectations regarding the start of high hazard decommissioning activities.

In addition, ONR continues to undertake a series of activities in support of the oversight and commissioning of significant programmes of work. The focus this reporting period includes decommissioning and construction activities.

In addition, ONR continues to be engaged in the assessment of proposals for organisational change. These include assuring nuclear safety and operational effectiveness.

ONR site inspectors continue to hold periodic meetings with the safety representatives within their operational areas, to support their function of representing employees and receiving information on matters affecting their health, safety, and welfare at work. Recent discussions have been very useful and demonstrate the clear commitment of the safety representatives to support safe working practices within their areas.

Update on Non-Routine Matters and Events

There were two events of note during the period:

On the 6 July, AWE notified ONR that an incident had occurred on the Hub Construction Enclave resulting in significant injuries to two workers. One of these workers was airlifted to hospital where he subsequently died from his injuries. In accordance with the 'death at work protocol' Thames Valley Police (TVP) are currently the lead agency for the ongoing investigation with ONR providing technical support and advice. ONR is not able to provide any further information at this stage.

On 30 August, AWE notified ONR of an attempt to conduct movement of fissile material by an operator whose training had expired. The discrepancy was identified before any material movement took place and the operator's

access to the system has been restricted pending recertification. All fissile movements were placed into abeyance until a full audit of operator training and certification had been conducted. ONR consider that the safety arrangements were sufficiently robust to identify the shortfall and prevent the material movement from taking place. ONR is satisfied that the checks conducted in response by AWE provide the assurance required for the continued safe movement of fissile material. ONR will not be taking any further formal action.

Formal Regulatory Activity

Two notices were served this period; both Legal Forms LP12: Notice to Leave Undisturbed. These were served to safeguard the integrity of the plant and equipment identified as integral to the investigation currently ongoing into the fatality on site.

These notices have now been lifted and ONR is overseeing the arrangements and activities to commence construction activities within the Hub Enclave. ONR's oversight of restart activities remains separate from the activities being undertaken as part of our ongoing investigation.

Ian explained discussions with trade unions have been extremely valuable.

Questions arising:

Cllr Rob Jones: Do you just do scheduled visits?

Ian Rogers: No, we do spot visits to site as well although we aren't there to catch people out.

Liz Merrin: As the incident was a construction accident is the ONR the best regulator to assess this?

Ian Rogers: ONR is the Office for Nuclear Regulation. It is the HSE equivalent on nuclear sites. We are the nuclear regulator. Although we do work alongside HSE for specific advice. AWE is on enhanced regulatory attention.

Cllr John Durrant: What was the timeline between the holding to account meetings?

Ian Rogers: Holding to account meetings gives sites options to improve before an improvement notice is served. First one was this time last year then the last one was April 2023.

Cllr George McGarvie: With regards to the movement of fissile materials, their competency was out of date. How was it assessed?

Ian Rogers: Regardless of what it is it needed addressing, he shouldn't have been moving fissile material. It was an administrative lapse. He shouldn't have been making the move. He was trained but hadn't been certified.

Cllr George McGarvie- 4/5 years ago there was a fire in an explosives building. One set of materials was done correctly. Another set done on the side to 'catch up on work'. There needs to be a level on context. How dangerous could this have been?

Ian Rogers: He was trained and fully competent. Aware of what he was doing. The authorisation was needed to sign him off. It would have been an authorised move had he been certified/authorised to make the move.

The explosives incident was that there was an issue with one of the chemicals, not that there were 2 processes happening alongside each other.

Clir Jane Langford: Was it an employee or contractor? It must be difficult to manage/control all the contractors/sub-contractors.

Ian Rogers: It was an AWE employee. However, contractors must work to AWE standards, policies and must be trained and supervised at the same level as AWE employees. Everyone should be the same. It shouldn't matter if they are a contractor.

Cllr Mark Keeping: A failure of management procedures. How many layers are there?

Ian Rogers: The move didn't happen. The 2nd layer arrangements picked it up. No further action was needed.

Cllr Dave Shirt: Would ONR have detected it? Or do you reply on AWE informing you? How many times haven't they told you?

Ian Rogers: We rely on AWE to report all incidents to ONR. AWE is very good at reporting incidents directly to ONR. There is a positive relationship between ONR and AWE. There are whistleblowing policies in place and any concerns raised would be investigated.

Cllr Avril Burdett: Avril explained that she knew someone who had recently joined AWE and they had mentioned all the training and safety briefings that they had been asked to do. This was a positive.

Dominic Boeck: As the ONR, are you regulating enough?

Ian Rogers: ONR can only make judgements on what they have seen/heard and been told about. We regulate appropriately for this site and with their business operational needs. After the fatality we need to focus on construction safety as a regulator. We will get a grip on this as the construction projects progress.

Janine Mantle: Thanked Ian for sharing ONR's best practice for community engagement.

Rob Green

Environment Agency (EA)

The Environment Agency report was circulated prior to the meeting for the period 14 April to 11 October 2023.

Rob explained that the EA is a nuclear regulation function. They look at nuclear discharges on nuclear sites and water discharges on nuclear sites. EA and ONR work with each other.

Rob refers to the report and explains there were no non compliances raised and recommendations will have been made. AWE must report data to the EA under their environmental permits. Rob discussed the compliance assessments the EA had carried out over the period.

Ventilation Management Arrangements:

We inspected AWE's ventilation management corporate arrangements as part of our ongoing assessment of evidence to inform future closure of a joint regulatory intervention between ONR and EA, raised in response to shortfalls in AWE's HEPA (high efficiency particulate air) filter and ventilation management arrangements. We did not identify any non-compliances with the permit during the inspection. AWE had made significant progress in improving its ventilation management across its nuclear sites.

Failure to report radioactive waste discharges data:

AWE reported to us that it had failed to report discharges of relatively small amounts of gaseous radioactive waste from the processing of samples of radioactive material, associated with nuclear forensics work undertaken at Aldermaston Site, between 2013 and 2023. We are in the process of investigating the circumstances surrounding this event and to establish whether compliance with the environmental permit has been challenged.

Radioactive Waste Discharges and Environmental Monitoring

We completed routine reviews of technical data provided by AWE in relation to its discharges of radioactive waste from its Aldermaston and Burghfield Sites, as well as data and information from its environmental monitoring programme.

While we noted that the data were broadly consistent with previous data submissions, AWE failed to provide some of its monitoring data to us within the timescales required by the environmental permits. We recorded 4 minor non-compliances as a result of this issue and sought improvements in AWE's management arrangements covering the reporting of monitoring data required by the environmental permits.

Questions arising:

Cllr John Durrant: How many visits are there?

Rob Green: One inspection a month

Cllr John Durrant: What is the process for a serious issue?

Rob Green: Any risk of something happening needs to be reported. If a non-compliance is found, then it is given a rating score of 1 to 4 (1= high risk and 4= no impact).

Cllr George McGarvie: In AWE's internal process they normally give a maximum discharge number. Were these discharges part of that or excluded?

Rob Green: AWE give figures 6 monthly. 6 monthly reports from Aldermaston and Burghfield are submitted. AWE failed to report discharges between 2013-2023 from a certain building. Nothing challenged permit limits.

George McGarvie: AWE didn't have a proper procedure regarding HEPA filters, is that cleared or ongoing? As this was lost during Covid.

Official

Rob Green: EA worked with the ONR, and the item is closed. Some issues were raised. 2 inspections took place. AWE have now made changes with regards to HEPA filters and the regulators are satisfied.

George McGarvie: We need to make sure questions and actions in this Committee are properly recorded and followed up. They cannot be left unaddressed, which is why I think HEPA needs to be raised again as it was an issue at a previous meeting.

Estate Services Update

Martin Wells

Group Leader Site Services

Protestor activity continues with the 'Women's Peace Camp' on the second weekend of each month. There is no other planned activity scheduled at this time.

There have been 2 community concerns raised.

Summary of concern	Outcome
1.Local resident heard the Site Under Cover alarm and were concerned that they might be at risk.	The resident was assured that it wasn't an incident that could present them with a hazard. They were satisfied with the response.
2.Local resident said their house was being fired upon	This coincided with an approved/authorised rabbit cull taking place on site in the evening. MDP investigated and found that safety protocols were being followed i.e., all shots were being fired from the direction of our fence line inwards. The resident was satisfied with the action and response.

Martin reinforced what the site undercover alarm means. It means it puts the whole site under control.

Questions arising:

Cllr Avril Burdett: Can a message be put on the front page of the Connect magazine to remind residents that there is no action needed with the site under cover alarm?

Janine Mantle: Yes, we will take that as an action.

Action 108/05: AWE to put a message about the site cover alarm on the front cover of Connect magazine to let residents know there is no action needed when they hear this alarm.

Andrew McNaughton

Executive Director Infrastructure, Fissile Programme

Infrastructure Investment Update

Andrew McNaughton: Andrew shared updates on infrastructure investment. In the year 2020, the Prime Minister decided that we needed a replacement warhead. Part of the reason AWE became an arm's length body in 2021 was in preparation for the investment to come. In the years since the end of the Cold War investments had been scaled back. Our existing facilities have been operating successfully and safely for decades, what we must do is prepare ourselves for decades to come.

The facilities that we have for manufacturing products need to be updated so we can achieve our programmes of work. We have to get to the position where we can continue to support the existing fleet and existing product whilst we develop and produce the product for the future, so we end up running in parallel.

We have a population of some of the most talented scientists and we must go about the science in a completely different way. Computational science and trials and tests are fundamental in how we can come up with a design for a replacement product. AWE needs to provide infrastructure to support this. New facilities that allow our scientists to carry out the research and development and validate the design characteristics of the new product. That is a significant investment that wouldn't be needed in previous times but is absolutely needed now.

Over the years in Aldermaston, development of facilities has been commissioned on a building-bybuilding process, like Orion, Gemini and the infrastructure in Burghfield. They have been managed separately from a construction point of view. Moving forward and for this significant investment, there is a need to view it all together. The government agrees and will ring-fence a solid amount to allow us to deliver the constructions needed across the whole site. A site construction plan has been developed for decades to come.

This will mean that, over time, a number of old buildings will be removed, along with the steam pipes as AWE looks to power the site in a completely different way. The Hub building is a good example of an enabling project. The Hub provides the opportunity to free up some existing buildings which are in a deteriorating state and be able to take those away and replace them with better use of space and of the site. The Hub is a facility we are building right now which will be a new home of science and engineering and where we can train apprentices.

Unlike other infrastructure programmes, where we are asked to give a single cost and single timeframe for when it is going to be delivered, we have applied for an envelope for funding. The Ministry of Defence has agreed a range we are going to spend and set out a schedule of how we are going to work with them to maintain that funding.

Images were shared of how the site may look in the future, along with how Burghfield has developed. The costs of the buildings are so significant because many of them will be unique, carrying out activities which means they must be very safe and secure and therefore they are complex. They are different to science labs which you would think would have more similarities, but they are different because of our commitments and our requirements. Our intent is to deliver a science pathway for the future which supports our scientists and using technology which is more modern to deliver our product in a more efficient way.

We already have a secure cell in Sheffield (part of Sheffield University) where we have some of the equipment we have been using here (in MMF) where we are going to be trialling the processes and training some of our employees.

The government is investing billions of pounds, which will provide opportunities for economic growth around the whole community, for education and for long term employment. New skills will be required because we will be using new processes and new techniques. Our apprentice programmes will be looking at completely different ways of working in the future. Our graduates who join the science community will be looking at completely new methodology for how we access the capability and the ongoing ability of our product. It's a huge opportunity for AWE.

Questions arising:

Clir John Durrant: The 20-year infrastructure plan implies you will have capacity for a lot more employment. What does that look like in terms of the community? As well as the site rebuild, you will need the infrastructure that supports that site and transport.

Andrew McNaughton: We can only give the view of the investment received inside the wire, and a sense of employment opportunities. There are career opportunities for every single trade used in construction and professional expertise involved in the delivery of those infrastructure.

Cllr George McGarvie: Very interested in the point made about unique goals and functions. Is there best practice in USA or France that we could look at and learn from?

Andrew McNaughton: The Americans are at the same stage as us and are going through a similar programme as we are. The relationship we have across the pond is very strong, so we have constant interaction with them. We also have joint programme with France, working together and sharing knowledge we have from building that facility. We are also learning from lots of other infrastructure programmes and taking best practice.

Cllr Dave Shirt: Clarified if MoD had agreed the funding, how much and over what period?

Andrew McNaughton: Not only MoD but Treasury have agreed as well.

Cllr Vicky Poole: Where does the education comes in in addition to apprenticeships and the work, we're doing with Sheffield University? Would AWE consider working with closer universities, like Reading and Oxford?

Andrew McNaughton: We referenced Sheffield as they have a particular facility for advanced manufacturing and the relationship there is looking at how we can take advanced manufacturing principals. We have already started engaging with Reading University and in conversations with their CEO.

Cllr John Durrant: Have we started working with artificial intelligence?

Andrew McNaughton: The use of AI and the use of virtual reality is being used in how we train people and how we bring people up to speed in their technique.

Cllr Avril Burdett: Is AWE meeting with Hampshire, alongside West Berkshire Council. A meeting with Hampshire was confirmed.

Cllr Mark Keeping: Suggested the oversight coming from the government in terms of value for money.

Andrew McNaughton: A governance process is in place, so the government has the right oversight as to how the infrastructure project is evolving. AWE will go back to the government regularly to confirm we are still operating within the boundaries, and we are providing value for money through competitive tendering.

Cllr Kevin Cross: What is the envelope boundary?

Andrew McNaughton: Is not at liberty to divulge.

Cllr Robert Jones: Does this comes from the defence budget? Andrew McNaughton confirmed it does.

Cllr Mike Bound: Does this mean there is a big increase in personnel onsite?

Andrew McNaughton: There will be an increase when we go through the construction process. We already have an increase onsite now with delivering the Hub so what we can expect is a constant level of employees.

Cllr Mike Bound: Would additional personnel be required within the facilities to operate them?

Andrew McNaughton: In the future, we will need to bring in parallel sets of operations and an increase within our manufacturing capabilities.

Cllr Mike Bound: There is limited ability to accommodate new residents in the local area.

Andrew McNaughton: We are hopeful that we will engage with the broader community you all represent. It is not only about new people coming into the area but also to encourage those who don't currently work here to apply.

Andy Burnett - Dale

Head of Estate Strategy and Planning

Andy's role is to look at what Andrew McNaughton has just been eliciting and what our master plan for the estate looks like internally. Not just the infrastructure but our people and heritage. He also has a secondary role to look at the planning externally. Our estate master plan has had the biggest review in 10 years to understand how that massive investment plan. I.e., how our people, our agenda for carbon, our agenda for energy, our agenda for biodiversity, translates into what our estate looks like. That manifests itself more publicly into a site development context plan. Andy explained he also has accountability of AWE's travel and transport plan which covers everything from how we encourage people to use public transport, or how we encourage car share. We have three key activities on now. One, a feasibility study to look at options to improve the cycleway from the Heathway roundabout down to the Aldermaston village. Second feasibility study is associated with how we improve foot traffic and cycleways between the Aldermaston site and Tadley. The third study we're conducting is how can we better utilise public transport including to Aldermaston train station, Newbury, Basingstoke, and Reading. This is all in place on the back of the Hub development.

Development applications from the local area are reviewed by AWE on the basis of whether they would impact AWE and our ability to deliver our mission. An update was provided on one development application which AWE and MOD have objected to in Burghfield Common. The planning inspector granted permission for the development after a public inquiry in June 2023. AWE is challenging this decision in the High Court and the hearing is scheduled for 23 to 25 January 2024.

Questions arising:

Cllr Jo Slimin: We have been working with Aldermaston, but they don't recall us coming to Tadley Town Council. The footpath goes through the traffic lights at the moment, and we are on one side of the road and West Berkshire is on the other.

Andy Burnett-Dale: We have recently employed Nick Roberts who we have brought in to permanently manage travel and transport and understand the impact this has.

Cllr Jo Slimin: There was a proposal put forward by some of the members of Tadley cycling group asking for a cycle route between Tadley and Basingstoke so people could be encouraged to cycle.

Andy Burnett-Dale: There is a plan to produce that on the river line which is the first item on the wish list from what they are going to be doing for the Thames Link.

Liz Merrin: Not sure how we change people's behaviour and get them to take a bus which seems highly unlikely.

Andy Burnett-Dale: This is my task as I don't want to make it too easy for people to drive but it is a behavioural change the business is approaching through their wider environmental agenda. Clir John Seto: I have ridden a lot and shared one must be a very confident rider to take some of the ways

around Theale. As part of your feasibility study, what things are being considered as there doesn't seem to be much scope with such narrow roads?

Andy Burnett-Dale: This is one of the harder options, but we have a duty to explore the possibilities as part of the feasibility study. Professional support and guidance is being provided, so options cannot be judged until we have their insights.

Cllr John Seto: Have there been discussions around running shuttle busses from train stations that meet the arrival and departure times of trains?

Andy Burnett-Dale: It may be considered as an option but can't give a definite answer yet. We should get the first output of the study in the new year.

Cllr Graham Bridgman: Flagged the possibility of a cycleway/footway between Burghfield and Mortimer as it may fit in with our plans which was noted.

Cllr Avril Burdett: Are you looking at the long-term closure of the bridge at Aldermaston Wharf?

Andy Burnett-Dale: There are detailed diversions being consulted on at the moment.

Cllr Vicky Poole: Love the development buildings and what is proposed for the site but conscious about green spaces, what's been proposed and how this fits into the plan?

Andy Burnett-Dale: As part of the 10-year review and the plan, there are dedicated, protected areas for tree planting, shrub land we are looking to protect. We are also protecting our runways and are excited that Aldermaston will be a greener site and have a consultee in conversation who has influenced the wider plan.

Carolyn Richardson

West Berkshire Council

Since the last meeting they issued the booklet which is required under REPPIR every three years updating the public with certain information. The data has come back and been analysed from the audit and has been submitted to the ONR as the regulator and are now reviewing and taking learnings forward. They have been meeting with the schools as, after a gap during COVID, they have been trying to re-engage head teachers and provide support. Focussing on ALDEX and some of the learnings that came from it, including people want more training, and some people didn't necessarily know what their roles are. There has been a decrease in training through COVID which will now be ramped up. A public version of the offsite emergency plan will be available. AWE is part of the tactical coordinating group to provide information on a radiation incident, so the process was in place, but we are going to formalise it. We are also reviewing the plan of communications. The scientific and technical advisory cell (STAC) plan is about any type of emergency we deal with and tends to focus on infectious diseases and was used a lot during COVID.

Whilst we have experts within the scientific and technical advisors within radiation, the chair is not normally a radiation expert, so we are wanting to put some information in that to steer them. There is a large project and so seven subgroups have been setup to target some of the actions and take them forward.

Questions arising:

Boeck: Shared that he was involved in Aldex 16 as a board member but not invited this time round.

Carolyn Richardson: This was in Burghfield site, and everyone received an invite to come.

Slimin: Asked about relationships with schools and how we have been engaging with schools. Can I ask if you work with schools in West Berkshire or all over?

Carolyn Richardson: Confirmed we have been working with schools from all over.

Slimin: How do we keep the numbers to contact people up to date?

Carolyn Richardson: There is a piece of work going on as landlines go through an automatic system to be updated, but we are working with the cabinet office about the emergency alert system.

Cllr Vicky Poole: I moved to Burghfield and received a pack through the door explaining what would happen in the event of a radiation incident but had been living there for several years prior to receiving this pack. Could new residents receive the pack as soon as they have moved in?

Carolyn Richardson: This could have been due to a change in the size of the detailed emergency planning zone (DEPZ). The number of estate agents makes this tricky, but it is available on our website.

Clir Robert Jones: Has been to a few of these meetings and thinks there is a fundamental disconnection between the safety concerns felt by communities and those felt by AWE.

Ian Rogers: Confirmed the reason for the regulator to attend these meetings is to provide that level of reassurance.

Janine Mantle: As we have some new members, at the next meeting we should do a general overview of how the big risks are managed.

Action 108/06: AWE to discuss the more general practical activities that go on around site. For example, what we do/ what we don't do. A lift the lid on AWE and eliminate the myths.

Carolyn Richardson: Added that one of the actions on her was to facilitate a training session on the plan and the site and are looking for a date in January to run this.

Cllr Dave Shirt: Shared that the biggest concern is with the convoys that go offsite, so can I ask that this is included in the update?

Janine Mantle: Confirmed this will be included.

Cllr Dave Shirt: Does the ONR's responsibility end when the truck leaves the site?

Ian Rogers: The ONR is the nuclear regulator for a nuclear licenced site with exception to a defence site or sites which come under direct Crown control. The Defence regulator Defence Nuclear Safety Regulator (DNSR) look after those activities which are exempt from civil legislation as ONR cannot enforce against it.

Janine Mantle: We will be inviting DNSR to the next meeting as part of this learning piece. Cllr Vicky Poole: When was the last time there was for a drill with the community to check the processes are followed and monitored?

Carolyn Richardson: We have spoken about this but the problem with setting of an alert, is making sure that it is a test. With the new text alert system, we have the opportunity to do a test, but would need to do it in a low population area to start with and will need to be appropriately managed.

Action 108/07: DNSR to be invited to the next meeting.

Action 108/08: Carolyn Richardson and Scott Hearn-Davies to feedback about a potential community DEPZ practice and share the information about the upcoming workshop in January 2024.

Katie Davidson

Responsible Business Specialist

Community update

Our Time to Give policy as all employees receive two days to go into the community and give their time to support the community as well as one day for a team volunteering session. We have a partnership with 65 local secondary schools within a 20-mile radius that doesn't include our primary schools and colleges.

We attend career fairs, workshops, run talks and primary STEM days. We have a good relationship with Queen Mary's College and are currently in talks to extend our sponsorship of their primary science centre where thousands of children can go for free science lessons.

Our Connect magazines are delivered to around 38,000 residents sent according to post codes. This year, we are taking around 266 apprentices which has increased from 80 in the year prior.

We also have our annual Give a Gift collection which employees from around the company donate and goes to several local charities including Trussell Trust Foundation, Cowshed and Barnardo's.

Questions arising:

Dominic Boeck: What is the retention rate for apprentices to which J. Mantle responded 100%.

Katie Davidson: Continued to talk about our primary science challenge and the prize of a Royal Institution show. Our Team Challenge had 25 teams take part from across AWE and raised over £14,00 for motor neuron disease.

Cllr Dave Shirt: Put on record his thanks for a litter pick in their area.

Action 108/09: AWE to consider their content with our external communications to the community.

Action 108/10: LLC to feedback the usefulness of the Connect magazine.

Action 108/11: AWE to send an electronic version of Connect magazine to the LLC members.

Andrew Lowe

Principal Energy Specialist

Solar Farm project

Andrew is responsible for AWE's energy management. Part of his role is to look at the changes to AWE's internal and external energy infrastructure. We are looking to develop two solar farms, one to the Aldermaston site and one to the Burghfield site in the next few years. We have started market engagement and cast the net our for opportunities in a five-mile radius. Sizes for Aldermaston is 20 mega-watts plus and Burghfield is 10 mega-watts plus. We have had around 30 landowners respond to our expression of interest, and we are now about to go through the tender development and tender process. We are looking to offset some of the impact from our infrastructure programmes by developing large scale solar assets to support our estate.

Questions arising:

Cllr Kevin Cross: Why we are looking for five miles?

Andrew Lowe: The intention isn't for it to be a reliable source as we know solar it intermittent so we will still rely on operator connections. This is to augment our current source of supply which is from the grid to accelerate our decarbonisation and mitigate the operational daily impacts of the new infrastructure. We are looking for 100 acres. AWE wants to be a net zero emissions (for scopes 1 &2) organisation by 2040 for our electricity and during this time. We are about to use a lot more energy so if we don't make active decisions now to press down on our emissions then what we will see in the short term is an increase. All new facilities will be using electric or air source, ground source, water source for heating – not using steam or doing any combustion.

Cllr Jo Slimin: Have we had the go ahead from the national grid?

Andrew Lowe: We are working through our grid applications at the moment because the extent of our energy demands is such that we might need to reinforce our supply, regardless.

Cllr Kevin Cross: What about the potential ban on turning farmland into solar farms and how that may impact the project?

Andrew Lowe: Not all interest has been from farm owner and there are other landowners interested.

Cllr Ian Montgomery: Are you looking for one site or multiple?

Andrew Lowe: We would be open to multiple but are definitely looking at one for Aldermaston and one for Burghfield.

Any other business (AOB)

Cllr Graham Bridgman: Mentioned an email sent into the LLC mailbox regarding footway/cycleway which he would like chased up. Katie Davidson will follow this up.

Cllr Avril Burdett: Would AWE firemen still support the local community in the event of a fire offsite? As there is shortage of firemen in Tadley.

Clir Paul Woodley: Shared that they have done so in the past.

Martin Wells: We have in the past and if asked, we would again if possible. We have requirements onsite to be able to operate so if we were to get a request to support a response, we would but this mean that we would need to stop our operations onsite to help. In the past 12 months we have supported in Burghfield with a traffic incident.

Cllr Avril Burdett: Do you support volunteers onsite to be on call firemen?

Martin Wells: We have asked them already.

Cllr Dave Shirt: asked about the police too, **Janine Mantle** explained police are constantly active and we need a certain level to maintain security, firefighters although always training, have more capacity to support.

Thompson: Mentioned the Burghfield Brook and said David Ashford gave a good brief on risk management and mentioned we are restricted on when we can do maintenance. As of October, they have done some maintenance and cut the grass but didn't attempt to remove any trees or other plants growing and we can't see the water level.

Janine Mantle: Action to ask if it will be cleared.

Action 108/12: AWE to provide a timeline for the Burghfield Brook.

Cllr Avril Burdett: Added an AOB asking with so many new members, are we able to arrange a windshield tour of site?

Action 108/13: AWE to organise a windshield for the LLC members.

Meeting closed.

Date of Next Meeting:

29th April 2024

9JOINT WASTE DISPOSAL BOARD 21 SEPTEMBER 2023 (9.30 - 11.41 am)

Present: <u>Bracknell Forest Council</u> Councillor Mary Temperton

> <u>Reading Borough Council</u> Councillor Karen Rowland (Chair) Councillor Liz Terry

Wokingham Borough Council Councillor Sarah Kerr Councillor Ian Shenton

Officers Oliver Burt, re3 Strategic Waste Manager Monika Bulmer, re3 Marketing & Communications Officer Sarah Innes, re3 Performance Officer Damian James, Bracknell Forest Council Claire Pike, Bracknell Forest Council Richard Bissit, Wokingham Borough Council Graham Rasdall-Lawes, Reading Borough Council

Apologies for absence were received from:

Councillor Helen Purnell, Bracknell Forest Council

43. Election of Chair

RESOLVED that Councillor Karen Rowland (Reading Borough Council) be appointed as Chair for the remainder of the municipal year 2023/24.

44. Appointment of Vice-Chair

RESOLVED that Councillor Ian Shenton (Wokingham Borough Council) be appointed as Vice-Chair for the remainder of the municipal year 2023/24.

45. **Declarations of Interest**

There were no declarations of interest.

46. Urgent Items of Business

There were no Urgent Items of Business.

47. Minutes of the Meeting of the Joint Waste Disposal Board

The minutes of the meeting held on 15 June 2023 were approved as a correct record, subject to the following amendment:

Councillor Kerr asked that an action regarding investigating a no-plastic solution for collecting soft plastics be added to the minutes of the previous meeting.

48. Presentation from Rory Brien, General Manager re3 Ltd

The Board received a presentation from Rory Brien, General Manager for re3 from FCC on issues currently pertinent to re3 business.

Waste composition analysis had shown the percentage of waste which could have been recycled which was in waste bins, and Rory explained there was approximately £5m total savings which could have been achieved by Councils if all waste had been placed in correct containers. Re-sampling was underway for waste composition analysis for this year, and the outcome of this would be applied to waste flow forecasts across the re3 Councils to see if the potential savings figures were still relevant, taking into account fluctuation in material recycling values. This year's resampling would take into account any materials in general waste which could have been collected under the FlexCollect scheme. The outcome of the resampling would allow Councils to identify any particular waste placed in the wrong bin which could be addressed through local communications and initiatives.

Rory commented on whether near zero landfill as achievable for the re3 district. At present, lots of the landfilled waste through re3 was bulky fly-tipped materials. New legislation diverted some materials to Energy for Waste, if the material was shredded and appropriately mixed with other material. FCC were investigating whether a new shredding facility within re3 or be using an existing FCC shredding facility would deliver additional savings to Councils. Rory also commented that as re3 managed some asbestos at its sites, it was not possible to achieve absolute zero landfill but there was the potential for 99% diversion.

Members noted that re3 were looking to build on the Reuse pop-up shops in October and were working with Sue Ryder to divert as many items as possible from disposal.

Rory presented on the prevalence of single-use vapes and the incorrect disposal of them. According to surveys, only 17% of single-vape users claimed to recycle them. 700 fires per year were linked to disposed batteries and vapes, which could start fires when damaged in the general waste collection process. In the year to date, there had been 8 fires across re3 sites linked to batteries of vapes within the waste. Although none of these fires had progressed to cause serious damage, the fire service had been called three times. Once a fire was extinguished, any material which was wet could no longer be reprocessed or sold. There were concerns about what would happen if there was a large incident at either Longshot Lane or Smallmead, and the potential disruption to service could be catastrophic. It was stressed that communications with the public needed to be increased on the subject, and the correct disposal of batteries and vapes should be promoted. FCC were investigated potential single-use vape drop-off points in public places such as universities, libraries and other suitable community sites.

Members thanked Rory for his presentation and the following points were noted arising from questions:

- Members were interested to find out how re3 authorities compared with other local authorities on the waste composition analysis. It was commented that the Local Government Association may have access to this data and officers agreed to investigate this further. (Action: Oliver Burt?)
- The drop-off units for single-use vapes were specially designed to minimise the danger of batteries exploding. The Government was exploring putting the responsibility on the producer for disposal of single-use vapes, but this was not yet in place. It was commented that the single-use vape market had taken off so quickly that the associated infrastructure for disposal had not yet caught up.
- The existing FCC shredding facility was in Oxfordshire. Proposals for an re3 shredding facility would include a traded service to other neighbouring

authorities and trade waste commercial organisations, and any costed proposals would be presented to re3 members for their consideration.

- There was already a kerbside bulky item collection, and there was not thought to be significant interest in a kerbside collection for wood specifically. Rory agreed to send the figures around wood in general waste bins which had been explored through compositional analysis. (Action: Rory Brien/Oliver Burt)
- Members requested that officers consider appropriate avenues for ongoing lobbying in terms of vape disposal responsibility. (Action: Oliver Burt)
- Members requested separate reports to come to a future meeting on the options and costs associated to single-use vapes, and the shredding facility proposition with options and costs. (Action: Oliver Burt)

49. **Progress Report**

Sarah Innes, re3 Monitoring and Performance Officer presented the Progress report.

The report included the usual review of performance statistics, including provisional recycling rate figures. The data for April to September 2023 compared to the same period in 2022 showed that recycling rates had gone up across all three Councils. Garden waste had also gone up, likely driven by the wet weather over the summer. Other recyclable tonnages had gone down, and the impacts of this would be addressed by the finance report.

Arising from questions, the following points were noted:

- There was no suggestion that additional funding from Government would be issued for DIY waste.
- Members queried the procurement process around the WEEE banks, and it
 was confirmed that no bids had been received in the initial round. There had
 been subsequent discussions with companies around the branding on the
 banks, and if an agreement on branding was achieved, officer planned to
 apply for a waiver from the corporate procurement rules to proceed with
 Material Focus. Members requested that officers conduct market testing
 based on the new branding arrangement before proceeding with the initial
 company, to ensure best value for money. (Action: Oliver Burt / Sarah
 Innes)
- Other neighbouring Councils were using the identified company to deliver their WEEE bank collections.
- Officers agreed to find out whether single-use vapes would be accepted in WEEE banks, and whether this would inundate the drop off points. (Action: Oliver Burt / Sarah Innes)
- The booking provider for the Recycling Centres had been asked about identifying demolition and DIY waste ahead of time to ascertain which items were chargeable and which were free of charge, and it was hoped that a technical solution could be found to monitor chargeable waste. A report would follow to the January Board meeting. (Action: Oliver Burt)

RESOLVED that

- 1 Members note the contents of this report;
- 2 Members approve the rescheduling of the AGM to be at the summer meeting of the re3 Board from 2024 onwards;

3 Members approve the Strategic Principles as described at 5.42 and listed at 5.44.

50. **Communications Report**

Monika Bulmer, Marketing and Communications officer, re3 presented the Communications report.

The work towards installation of the new recycling app provided by Scrapp was progressing, and the final stages of the data sharing agreement were being confirmed. It was hoped that the app would be received for testing and promotional materials by November 2023. Scrapp were working with the IT teams in each Council to ensure notification reminders and other locality specific elements would work smoothly. Residents would be able to access the existing app until January 2024. The virtual tours of the Recycling Centre and Materials Recycling Facility were progressing well and the final product was due shortly, and Monika agreed to share the product with Board members when available. (Action: Monika Bulmer)

Communications activity for the FlexCollect recycling trial were progressing well, and had received coverage in national media. Monika thanked all Board members for their promotional work. Officers had continued to engage with trial participants for their feedback, and had used the Next Door app and a Facebook group.

The PodBack service was going well and was being regularly promoted. Residents had been using the service to bring their coffee pods for recycling, and positive feedback had been received.

The amount of food waste had dropped, and Council communications teams had pushed food waste messaging through the summer. Further communications work on food waste was planned, including an opportunity to discuss food waste at New Directions college food courses.

Recycling Week was scheduled for 16 to 22 October 2023, and there would be enhanced communications from each Council during this time.

Material Recycling Facility tours had been scheduled for Board members in September and October. Other Council members were welcome to attend and were asked to contact Monika to book a place.

In response to questions, it was noted that Wokingham Borough Council had recently finished their new website, work on which had postponed work on the Scrapp app however now the website was live, officers were happy to promote the new app.

Members received and noted the report.

51. Environment Act Report

Oliver Burt, re Strategic Waste Manager and Project Director presented the Environment Act report.

The Board considered the potential local implications of the Deposit Return Scheme, including contractual implications and some access issues for residents.

DEFRA had released a statement on 20 September 2023 to rename the Consistency in Recycling project 'Simper Recycling' amongst other changes to the scheme, and

members were asked whether the proposed actions highlighted in the report remained relevant after this Government announcement.

In response to questions, the following points were noted:

- It was unlikely that compositional analysis of waste would be detailed enough to cross-reference the types of inappropriate material being put in bins, to see whether residents who put glass in their bin also put other recyclable materials in their bin.
- Colour separation for glass was not required, as the technology was in place to sort the colours at the material recycling facility.
- It was unlikely that the sale of glass would be sufficient to cover the kerbside collection cost, and if kerbside collection was mandated, it was not yet clear where the funding to do so would come from.
- While residents would not have another bin to contend with on the kerbside, there were challenges around how glass collection would be practically implemented and at present, the only option would be to run a separate glass collection due to the fact that paper and glass could not be mixed in the recycling process. It was possible to collect plastic, glass and cans in one collection, however this would incur additional costs through the reengineering at the plant.
- While the report as published proposed to lobby government, it was unlikely that any further detail would be released following the DEFRA statement. Instead, officers proposed to start to gather information and plan in anticipation of further details from the Government.
- Board members requested that any work done on the cost of glass collection should include the environmental cost of the collection, including increased emissions. (Action: Oliver Burt)
- There was no clarity on Extended Producer Responsibility yet, and members requested that officers write to appropriate government ministers to ask for clarity on plans for Extended Producer Responsibility. (Action: Oliver Burt)

In summary, the Board agreed that:

- 1 re3 officer should progress information gathering and lobby government wherever possible for further detail
- 2 local surveys should continue to take place as outline in 5.17 of the report

52. Exclusion of Public and Press

RESOLVED that pursuant to Regulation 4 of the Local Authorities (Executive Arrangements) (Access to Information) Regulations 2012 and having regard to the public interest, members of the public and press be excluded from the meeting for the consideration of items 12 and 13 which involves the likely disclosure of exempt information under the following category of Schedule 12A of the Local Government Act 1972:

(3) Information relating to the financial or business affairs of any particular person

53. Financial Management Report

Jayne Rowley, re3 Principal Finance Officer presented a report to brief the Board on the Partnership's current financial position.

Following discussion, it was **RESOLVED** that

- 1 Members note the Partnership's financial position as at the end of 2022/2023 as described at 5.1 and 5.2;
- 2 Members note the financial outlook for 2023/2024 as described at 5.5;
- 3 Members note the 1st draft budget for FY2024/2025 as described from 5.16;
- 4 Members approve the proposed date change from 31st October to 31st July as the date from which the preceding 12 months of booking system data will be used to apportion HWRC costs between the 3 Council;
- 5 Members endorse the steps, described at 5.13, to seek to address the current year financial outlook.

54. Data and Privacy Report

Oliver Burt re Strategic Waste Manager and Project Director presented a report on Data and Private report in light of a recent issue.

RESOLVED that:

- 1 Members note the contents of this report;
- 2 Members agree to receive a future report detailing the feedback and/or requirements from the referral of the re3 partnership to the Information Commissioners Office (ICO), as described at 5.14, with potential recommendations.

55. Date of the Next Board Meeting

11 January 2024 (Wokingham)7 March 2024 (Reading)13 June 2024 (Bracknell)19 September 2024 (Wokingham)

CHAIRMAN

JOINT WASTE DISPOSAL BOARD 11 JANUARY 2024 (9.35 - 11.20 am)

Present: Bracknell Forest Council Councillor Mary Temperton Councillor Helen Purnell

> <u>Reading Borough Council</u> Councillor Karen Rowland (Chair) Councillor Liz Terry

Wokingham Borough Council Councillor Lindsay Ferris Councillor Ian Shenton

Officers Oliver Burt, re3 Strategic Waste Manager Monika Bulmer, re3 Marketing & Communications Officer Sarah Innes, re3 Performance Officer Damian James, Bracknell Forest Council Jayne Rowley, re3 Finance Officer Claire Pike, Bracknell Forest Council Steve Brown, Wokingham Borough Council Richard Bisset, Wokingham Borough Council Kevin Gibbs, Bracknell Forest Council (online) Chris Wheeler, Reading Borough Council (online)

Apologies for absence were received from:

Keith Townsend, Reading Borough Council

56. **Declarations of Interest**

There were no declarations of interest.

57. Urgent Items of Business

There were no urgent items of business.

58. Minutes of the Meeting of the Joint Waste Disposal Board

The minutes of the meeting held on 21 September 2023 were accepted as a correct record.

59. **Progress report**

Sarah Innes, re3 Monitoring and Performance officer presented the current Progress report.

The updated current recycling rates for Quarter 1 to Quarter 3 2023/24 were 56.8% for Bracknell Forest, 50.7% for Reading and 56.4% for Wokingham, approximately 1% higher for each area than indicated in the report.

The legislation regarding disposal of DIY waste at recycling centres had been changed, with some waste which had previously been chargeable now required to be accepted free of charge. A new DIY module had been implemented as part of the booking system at the centres to identify which waste was chargeable. Members were asked to ratify their decision, necessitated outside of the Board meeting by the commencement date of the new legislation, to implement a charging scheme.

The flexible plastic trial collection had been running in Reading since September 2023, and re3 officers had been seeking data and learning from this. The interim report from FlexCollect was awaited and would be provided to members when available. Discussions were ongoing about the future funding arrangements for the service following the completion of the trial.

Councillor Shenton expressed his dissatisfaction with FlexCollect for poor budget management and their failure to engage with Wokingham Borough Council before deciding not to proceed with the project in Wokingham.

While funding for WEEE banks had been secured, there had not been any bids from companies through the procurement process. Using another provider or system would change the balance of risk from the project, and re3 were aware of the government's plans to consult on the requirement for Councils to arrange kerb-side collection of WEEE items and for retailers to provide drop off points. For this reason and until further details were available, it was proposed to bring this project to a close.

The annual satisfaction survey had been undertaken at the recycling centres and had indicated an improvement. The results would be shared with contractors to discuss further improvements to be made. Board members welcomed the high user satisfaction results and congratulated staff working at the sites.

Reading Borough Council had undertaken a corporate survey over the summer, which had included questions on whether residents had accessed recycling sites in the last 12 months. Officers had identified a few areas of the borough which may benefit from further promotion of waste and recycling services. It was noted that some residents had lobbied ward councillors to say that the booking system was difficult to use and that booking a slot had restricted their access to the site. It was proposed that Bracknell Forest and Wokingham may benefit from undertaking their own surveys for more granular data.

Following a period of disruption to the glass bank collection in September resulting in staff absences, the contractor had worked hard to rectify the situation and collections were now back to normal. It was queried whether there were any arrangements in place to deal with peak periods such as Christmas and New Year, and offices commented that while the contractor consulted with re3, it was always difficult to predict which glass banks would overflow during these peak period.

Further to discussion, it was **RESOLVED:**

- 1 That Members note the contents of this report
- 2 That Members ratify their decision to implement an amendment to the Recycling Centre Booking System, so that non-household waste can be identified and charged for, as described at 5.9 of the report
- 3 That Members approve the recommendation at 5.29 of the report for the WEEE bank project to come to an end.

60. Environment Act report

Oliver Burt, re3 Strategic Waste Manager and Programme Director presented the Environment Act report.

The Environment Act was passed in 2021 and had included Simpler Recycling, the detail of which had been released in October 2023. The funding arrangements were becoming more clear as time passed, and the report included detail on DEFRA's expectations of funding for Councils. Councils would not find out the final funding arrangements until the final year preceding the point of compliance. The report highlighted the five main options around glass collections.

Officers were least concerned about the flexible plastics requirement in the Simpler Recycling plans, as the pilot had demonstrated that there was a good chance of flexible plastic being added to current collections and processed through the existing recycling plant. There remained some caveats depending on glass collection arrangements and any further materials added to the collection requirement.

A draft response on WEEE collection proposals would be developed and submitted to government outside of Board meetings.

The Board was asked to establish a working party on Simpler Recycling disposal functions across Councils.

In response to questions, the following points were noted:

- It was commented that while the three authorities should work together on all plans for collection and recycling, the procurement processes should be key through.
- It was also noted that the specification of any new refuse collection vehicles should be decided as soon as possible to avoid delays to the collection process.
- It was proposed that the glass banks were currently working well and keeping them (even if for a limited period of time) should be considered to moderate any cost and supply-chain challenges.
- Board members recognised the variation in dates and the uncertainties around the political landscape and plans for the re3 contract.
- Board members asked officers to conduct further research into the options available to re3 for the remaining 8 years of the current contract.

The Chair asked each Council to nominate the most appropriate officers to sit on the working party to herself and Oliver Burt. An update report would be requested from each working party at each Board meeting for Board members to take into account all different contributors before making decisions. **(Action: All)**

Following discussion, it was **RESOLVED**

- 1 That Members note the contents of this report
- 2 That Members agree to establish a working party, as described from 5.40, and request reports from each working party at every JWDB meeting.

61. **Communications report**

Monika Bulmer, re3 Marketing and Communications Officer presented the Communications report.

Work was ongoing to help residents understand the changes to charging and booking arrangements for non-household waste.

The virtual tour project had been completed with three virtual tours now available to promote the recycling facilities to a broader audience.

Following a significant fire at an re3 site in October, re3 had reached out to media outlets to raise awareness of inappropriate disposal of batteries. Officers were pleased with how well the message had been picked up in the media.

The Scrapp app was in its final checks with each IT team, and it was hoped that a final launch date would be available soon. The current Recyclopedia app would remain in place during the transition period.

Work was ongoing to further promote foil recycling, and Monika was working with a metal packaging company to promote metal packaging recycling with a campaign scheduled for Spring 2024.

Day to day communication work had included adverts in resident magazines for Bracknell Forest and Wokingham, focussing on food waste recycling. Social media remained active and a monthly newsletter continued to keep residents updated on campaigns and seasonal updates.

In response to questions, the following points were noted:

- While it was important that all batteries were disposed of correctly the most dangerous batteries were lithium batteries which were often hidden in other items such as toys, clothing and greetings cards. Members requested that this distinction be made to residents who may not be aware.
- Members requested that a final conversion to the new Scrapp app be expediated to a suitable date (to be confirmed ASAP by officers) to prevent further delays. (Action: Monika Bulmer / Oliver Burt)

The report was noted.

62. Exclusion of Public and Press

RESOLVED that pursuant to Regulation 4 of the Local Authorities (Executive Arrangements) (Access to Information) Regulations 2012 and having regard to the public interest, members of the public and press be excluded from the meeting for the consideration of items 9 and 10 which involves the likely disclosure of exempt information under the following category of Schedule 12A of the Local Government Act 1972:

(3) Information relating to the financial or business affairs of any particular person

63. Financial management report

The Board received a report on the current financial management position.

Members requested further detail in a subsequent report around the impact of the cost of living and peaks of recycling rates through the year.

Members requested a further report on the proposals regarding a chargeable service at the recycling centres. (Action: Oliver Burt / Jayne Rowley)

Arising from discussion, it was **RESOLVED**:

- 1 That Members note the current financial outturn for re3 and the three Councils at detailed at 5.1 to 5.12.
- 2 That Members note the revised budget (excluding contract Indexation) as detailed at 5.13 to 5.16.
- 3 That Members note the Net cost of waste calculations for the last Financial Year (FY22-23) and the comparatives made between them 5.17 to 5.22.
- 4 That Members note the actions, agreed by the respective council waste teams and the re3 Project Team, as per Appendix 4.
- 5 That Members note the contents of the updated re3 Risk Register and request updates at alternate JWDB Meetings, as advised at 5.23 to 5.31.
- 6 That Members considered the recommendation at 5.37 and requested officers to bring a report back on the implementation of a chargeable service at the Recycling Centres for non-re3 residents as soon as practicably possible.

64. Strategic Development report

The Board received the re3 strategic development report.

Arising from discussion, it was **RESOLVED** that

- 1 Members note the contents of this report
- 2 Members request an update report on the next steps, described at 5.23 to 5.27.

65. Date of the Next Board Meeting

The next meeting was scheduled for 7 March 2024 at Reading Borough Council, and members requested a later start time of 10am.

CHAIRMAN

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Strategic Environment, Planning and Transport Committee



13 March 2024

Working better with you

Title	Draft Christchurch Conservation Area Appraisal
Purpose of the report	To make a decision
Report status	Public report
Report author	Mark Worringham, Planning Policy Manager
Lead Councillor	Councillor Micky Leng, Lead Councillor for Planning and Assets
Corporate priority	Healthy Environment
Recommendations	 That the Draft Christchurch Conservation Area Appraisal (Appendix 2) be approved for consultation.
	2. That the Assistant Director of Planning, Transport and Public Protection be authorised to make any minor amendments necessary to the Draft Christchurch Conservation Area Appraisal in consultation with the Lead Councillor for Planning and Assets, prior to the start of consultation on the draft document.
	3. That the Conservation Area Advisory Committee's 2023 Progress Update (Appendix 3) be noted.

1. Executive Summary

- 1.1. The Christchurch Conservation Area was designated on 19th November 1987 under the Town & Country Planning Act 1971 (as amended) and the most recent full conservation area appraisal was produced in 2010. Following discussions over the Council's approach to the historic environment, the Council agreed to support the setting up of a Reading Conservation Areas Advisory Committee (CAAC). One of the primary concerns of the CAAC was the length of time since many conservation area appraisals had been prepared and adopted. According to best practice appraisals should be updated every 5-10 years and many of these appraisals are now in need of review. It was subsequently agreed that the CAAC would lead on reviews of conservation area appraisals in consultation with local communities.
- 1.2. The Christchurch appraisal is the third review to be completed, following St Peters in 2018 and Castle Hill/Russell Street/Oxford Road in 2020. This report seeks approval of the draft review of the Christchurch Conservation Area Appraisal. Committee is asked to approve the draft appraisal for consultation between March and May 2024.
- 1.3. Appendix 2 contains a copy of the draft appraisal and associated documents including maps showing the proposed boundary extensions. The results of the consultation will feed into a revised appraisal to be adopted later in 2024.

2. Policy Context

2.1 Section 69 of the Planning (Listed Buildings and Conservation Areas) Act 1990 and the National Planning Policy Framework impose a duty on local planning authorities to review their existing conservation areas and designate as conservation areas any 'special areas of architectural or historic interest'.

2.2 Although not required by law, Historic England recommends that Conservation Area Appraisals are reviewed and updated regularly, every five to ten years. Conservation Area Appraisals are material considerations in the determination of relevant planning applications and are specifically referred to as a consideration in policy EN3 of the Local Plan. They can also form a key piece of evidence for the preparation of planning policy.

3. The Proposal

Current position

- 3.1 The Christchurch Conservation Area was originally designated on 19th November 1987. The most recent appraisal was prepared in 2010. That appraisal did not result in any boundary alteration from the original boundary defined in 1987.
- 3.2 The existing boundaries of the conservation area (along with the now proposed boundary extensions) are provided in the plan below.

Figure 1: Existing and proposed extended Christchurch Conservation Area boundary



- 3.3 The review and the updated appraisal is the result of a community-led project carried out by the CAAC, with assistance from RBC planning officers and interested local community representatives. The review made use of the Oxford Character Assessment Toolkit, which was recommended by officers of Historic England. This provided a methodology for preparing assessments of the character of the landscape and built environment of the area, but the methodology has been adapted to local circumstances by the CAAC. The appraisal has been updated partly as a result of that assessment.
- 3.4 The review has resulted in various recommendations for boundary extensions, namely:
- The addition of 1-81 (odd) and 70-72 Whitley Street, comprising mainly the shop units making up Whitley Street local centre the reason for this is due to the presence of buildings of architectural merit, including late Georgian and well-preserved Victorian buildings bordering the site of a spring used to supply water to the Abbey;
- The addition of the mainly terraced properties at 114-128 (even) Whitley Street and 2-34 (even) Basingstoke Road, Victorian terraces associated with the southward expansion of Reading and featuring characteristic patterned brickwork;
- The addition of Reading Hindu Temple on Whitley Street (a significant early 20th Ceapntury building, formerly Whitley Hall) and properties to the rear known as Prospect Cottages which are mid 19th century buildings surviving from an hilltop cluster of buildings and garden land and which now have a distinct courtyard character;
- The addition of 2-40 (even) and 1-27 (odd) Milman Road, a mix including a number of significant larger 19th Century buildings;
- The addition of 1-11 Glebe Road (odd) and 23-25 (odd) and 12 Christchurch Gardens, an area which features two significant buildings designed by local architects of note, with remaining buildings included to ensure a comprehensive boundary that incorporates the setting of Christchurch; and
- The addition of 8-26 (even) and 11 Cintra Avenue as well as the green to the east and 32-34 Christchurch Road, an area which includes the gatehouse to the now demolished Cintra Lodge and an area of green space once part of the grounds of Cintra Lodge that is important to the setting of surrounding properties.
- 3.5 The updated appraisal identifies issues and vulnerabilities (page 10), including:
 - Traffic noise and pollution;
 - Loss of original architectural details;
 - Inappropriate modern materials and details;
 - Street clutter;
 - Waste and litter;
 - Requirements of traffic management and public amenities;
 - Utilities work;
 - Maintenance of buildings and gardens; and
 - The condition of the replica Whitely Pump.
- 3.6 Recommended measures (within the Action Plan, section 8) include:
 - Implement the boundary extension (as shown in Figure 1);
 - Address poorly maintained buildings;
 - An Article 4 direction to prevent loss of original features;
 - Address trade bins, domestic bins and fly tipping; and
 - Address signage, street clutter, cables and aerials.
- 3.7 CAAC will manage the action plan but responsibility for some of these actions can only rest with RBC. Other actions can be undertaken by local volunteer organisations and community groups (e.g. CAAC) with limited support from council officers.

- 3.8 A consultation exercise on the review of the Conservation Area, carried out by the CAAC in 2022, attracted 30 responses. However, the proposed boundary extension has changed significantly since that consultation was carried out
- 3.9 Committee is recommended to approve the Draft Christchurch Conservation Area Appraisal (Appendix 2) for further consultation.

Other options considered

- 3.10 The two alternative options considered are;
 - Not to progress the draft conservation area appraisal; and
 - To undertake a lighter-touch review of the appraisal that does not result in an extension.
- 3.11 To not progress the appraisal at this stage would fail to capitalise on the good work done by volunteers of the CAAC, and would mean that the appraisal for the conservation area is somewhat out of date and is of less use for decision making on planning applications, as well as failing to take the opportunity to protect the character and interest of a wider area not currently falling within the conservation area.
- 3.12 The lighter touch review could pick up on some of the recent changes in the area but would not be able to include any substantive changes to the boundary, meaning that the significant heritage interest outside the conservation area boundary would have no recognition in planning documents, or statutory protection.

CAAC Progress Update 2023

3.13 Alongside the work in preparing the Conservation Area Appraisal, the CAAC has produced a Progress Update for 2023 that is also available on its website. This is attached as Appendix 3. Committee is asked to note the update.

4. Contribution to Strategic Aims

- 4.1. The Christchurch CAA, through setting out the way Reading will develop to 2036, will contribute to the following priorities in the Corporate Plan 2022/25 (2024/25 refresh):
 - Healthy environment: through retaining and potentially enhancing the quality of the built environment within the conservation area, in addition to retaining valuable trees and green areas; and
 - Thriving communities: through empowering local communities to engage with their local areas and contribute to securing their future protection and enhancement.

5. Environmental and Climate Implications

- 5.1. There are a variety of ways in which the appraisal, in particular the effect of extending the conservation area, could have environmental and climate implications.
- 5.2. Bringing more buildings within the conservation area exercises greater control over demolition, which in turn makes it more likely that buildings will be reused rather than demolished and redeveloped, albeit that this will be a matter to consider site by site through the planning application process.
- 5.3. Extending the conservation area, and providing an updated appraisal, will give further protection to the trees within the area, which play an important role in terms of air quality and adapting to climate change.
- 5.4. The inclusion of new areas within the extended conservation area could have implications in terms of the ability of those premises to make physical alterations to improve their environmental performance without needing planning permission. In particular, there are greater restrictions on solar panels and equipment, wind turbines, air source heat pumps and flues associated with biomass heating or combined heat and power where they would face the highway or be closer to the highway than the existing building. This would need

to be addressed on a site by site basis through the planning application process, taking account of policies in the Local Plan.

6. Community Engagement

- 6.1. The Council's consultation process for planning policy, as set out in the adopted Statement of Community Involvement (SCI, adopted March 2014), is that the widest and most intensive community involvement should take place at the earliest possible stage, to allow the community a genuine chance to influence the document. Although the SCI deals mainly with development plan documents, the general principles are useful for documents such as a Conservation Area Appraisal. Community involvement exercises have been undertaken by the Conservation Area Advisory Committee as part of undertaking the review. Details of community involvement on the initial stages are set out in Appendix 1 of the appraisal document. These included a public consultation event on 16 July 2022, a questionnaire at the event and online and a letter to addresses within the proposed extension.
- 6.2. A formal consultation led by the Council is expected to begin in late March and will last for a period of eight weeks until late May. Responses received will be considered in preparing a final draft appraisal for adoption. The draft Christchurch Conservation Area Appraisal consultation will be based around making the document available for comment.

7. Equality Implications

7.1. It is not expected that there will be any significant adverse impacts on specific groups due to race, gender, disability, sexual orientation, age or religious belief. An equality scoping assessment is included in Appendix 1 of this report.

8. Other Relevant Considerations

8.1 There are none.

9. Legal Implications

- 9.1. The proposed extensions to the conservation area, once agreed, will benefit from the controls set out within the Planning (Listed Buildings and Conservation Areas) Act 1990. The legislation would control the demolition of buildings as well as ensure a closer control over new development in the area.
- 9.2. The following would apply:
 - a. In the exercise of planning powers the Secretary of State and planning authorities are under a duty to pay special attention to the desirability of preserving and enhancing the character or appearance of the area;
 - b. the demolition of buildings within the conservation area now requires planning permission;
 - c. "Permitted Development" rights are more restricted in Conservation Areas, and Article 4 Directions restricting "permitted development" rights in Conservation Areas do not (as is the case elsewhere) have to be referred to the Secretary of State for consent;
 - d. more controls exist in relation to works to any trees, not necessarily just TPO trees;
 - e. more exacting standards of advertisement control should be applied to advertisements in the Conservation Area, so long as the authorities are sensitive to the needs of businesses within the Conservation Area;
 - f. development proposals within conservation areas should either make a positive contribution to the preservation of the character or appearance of the area, or leave the character or appearance unharmed.

10. Financial Implications

- 10.1. Existing budgets are sufficient for the publication of the final documents and to notify occupiers affected. The bulk of the work on the draft has been undertaken by CAAC members on a voluntary basis.
- 10.2. Consultation exercises can be resource intensive. However, the Council's consultation process is based mainly on electronic communication, which helps to minimise resource costs.

1. Revenue Implications

10.3. There are no significant revenue implications.

2. Capital Implications

10.4. There are no significant capital implications.

3. Value for Money (VFM)

10.5. The preparation of an updated appraisal will ensure that developments are appropriate to the area, that significant effects are mitigated and that there are no harmful effects to the historic environment within the Conservation Area. Production of an updated appraisal is in line with best practice, therefore represents good value for money, particularly given that it was largely produced on a voluntary basis.

4. Risk Assessment

10.6. There are no direct financial risks associated with the report.

11. Timetable for Implementation

11.1. The expectation is that, subject to the results of consultation on the draft, a final version of the Christchurch Conservation Area Appraisal will be adopted later in 2024.

12. Background Papers

12.1. There are none.

Appendices

- 1. Equality Impact Assessment
- 2. Draft Christchurch Conservation Area Appraisal
- 3. CAAC 2023 Progress Update

Provide basic details

Name of proposal/activity/policy to be assessed:

Draft Christchurch Conservation Area Appraisal

Directorate: DEGNS - Directorate of Economic Growth and Neighbourhood Services

Service: Planning, Transport and Public Protection

Name: Mark Worringham

Job Title: Planning Policy Manager

Date of assessment: 15/01/2024

Scope your proposal

What is the aim of your policy or new service? To update the existing Christchurch Conservation Area Appraisal

Who will benefit from this proposal and how?

The Council will benefit from having an up to date appraisal for use as a material consideration in planning decisions. Stakeholders, including members of the public and the development industry, will benefit from more certainty.

What outcomes will the change achieve and for whom?

Adoption of an updated appraisal and boundary extension will contribute to the protection and management of heritage assets.

Who are the main stakeholders and what do they want? Developers/landowners, the public and community groups. All parties want an updated appraisal so as to best protect and enhance the historic environment in the area.

Assess whether an EIA is Relevant

How does your proposal relate to eliminating discrimination; promoting equality of opportunity; promoting good community relations?

Do you have evidence or reason to believe that some (racial, disability, g	jender, sexuality, age
and religious belief) groups may be affected differently than others? (Thi	nk about your
monitoring information, research, national data/reports etc)	
Yes 🛛 No 🗌	

Is there already public concern about potentially discriminatory practices/impact or could there be? Think about your complaints, consultation, feedback. Yes No

If the answer is **Yes** to any of the above you need to do an Equality Impact Assessment.

If No you MUST complete this statement

N/A

Assess the Impact of the Proposal

Your assessment must include:

- Consultation
- Collection and Assessment of Data
- Judgement about whether the impact is negative or positive

Consultation

Relevant groups/experts	How were/will the views of these groups be obtained	Date when contacted
Residents	Public event (July 2022) Questionnaire at the event and online Letters to those within proposed extension.	2022

Collect and Assess your Data

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No specific impacts are identified.						
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Whitley Street into the conservation ar	ea for the fire	st time.	This w	ill have s	ome implicati	ons for
what alterations can be undertaken to	the exterior	of the b	uilding	without r	equiring plan	ning
permission.			0		1 01	0
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2. Negative impact identified but	there is a ju	STITIAD	ie reas	on		凶
	Page	Ö				

You must give due regard or weight but this does not necessarily mean that the equality duty overrides other clearly conflicting statutory duties that you must comply with.

Reason

The extension of the conservation area is being undertaken for a justifiable reason that is set out within the appraisal document itself, and in line with the need to preserve and enhance the character or appearance of the area. There is still a route to make alterations through the planning application process where the need for the alterations can be weighted against the impact on the conservation area, as well as other considerations.

3. Negative impact identified or uncertain

What action will you take to eliminate or reduce the impact? Set out your actions and timescale?

How will you monitor for adverse impact in the future?

Adverse impacts can be addressed on a case by case basis through the planning application process.

Signed (completing officer)	Mark Worringham	Date:	15 th January 2024	
Signed (Lead Officer)	Mark Worringham	Date:	15 th January 2024	

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Christchurch Conservation Area Draft Conservation Area Appraisal

A community-led Conservation Area Appraisal

Reading Conservation Area Advisory Committee on behalf of Reading Borough Council

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To be added

Initial Statement

Reading has fifteen Conservation Areas. Each Conservation Area (CA) has an individual Conservation Area Appraisal (CAA).

Historic England (HE) recommends that appraisals should be undertaken for each Conservation Area and that these should be reviewed every five years to ensure that they reflect the up-to-date situation and are continuing to do the job they are designed for – to protect 'the character or appearance of an area which it is desirable to preserve or enhance'.

Reading Conservation Area Advisory Committee (CAAC) is an independent community led body set up in 2016 to advise Reading Borough Council when reviewing Conservation Area Appraisals or policies for the preservation and enhancement of CAs, heritage sites or other features of historic importance.

The Christ Church Conservation Area was formally designated on 13 November 1987, following a period of public consultation. It was last appraised by the Council's external consultants, The Conservation Studio of Cirencester, in September 2010. Their report was formally adopted by the Council at that time and, as many of that report's findings and recommendations have been found to remain relevant today, they have been carried forward in this Appraisal where appropriate.

This Appraisal has been prepared by the Reading CAAC, using an adaptation of the Oxford Character Assessment Toolkit, an approach to carrying out appraisals recommended by Historic England.

The Appraisal is preceded by a one page summary of the CA. The first part of the appraisal comprises a Statement of Special Interest, which summarises the key qualities and features which give the area its character and which justify the special protection afforded by a conservation area. This is followed by a more detailed analysis of each of the key elements and areas.

An action plan sets out recommendations for the future management of the area to maintain its special character.

The appendices document the consultation process, archaeology and historic development of the area, and there are photographic appendices for listed buildings, buildings of townscape merit, views and trees and green spaces.

The existing boundaries of the CA have been reviewed and all of the areas currently included merit retention.

An extension is proposed to include:

- Weymouth, St Leonards and Brighton Terraces, with the Derby Cottages and Peacock Cottage in between, on the west side of Basingstoke Road/Whitley Street;
- the east side of Whitley Street Nos 1-81 and the former Wellington Arms (now Gregg's), on the west side;
- Whitley Hall Methodist Church (now Reading Hindu Temple) and the properties to the rear comprising Prospect Cottages and Nos 8 and 12 Boults Walk;
- 2-40 Milman Road (north side) and 1-9, 17-27 & 31 Milman Road (south side);

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- an additional extension to the south and east will include the houses at Nos 1-11 Glebe Road, together with 23, 25 and 12 Christchurch Gardens;
- an extension to include and 32 and 34 Christchurch Road and 8-26 Cintra Avenue (west side), 11 Cintra Avenue and area of green space (east side).

An extension including the following areas was originally considered but rejected for the reasons stated:

- Swainstone Terrace, Basingstoke Road, as it was not as well-detailed as the three terraces to the north and has deteriorated over time;
- terraces of cottages dating from the first half of the nineteenth century that were formerly Grade III listed, between the Wellington Arms (now Gregg's) and Whitley Hall Methodist Church (now Reading Hindu Temple) on Whitley Street west, because of the significant loss of character and detailing;
- a set of 1950s houses at 114-124 Kendrick Road between Whitley Crescent and the boundary of the Kendrick CA because, although 114 Kendrick Road is locally listed and this group would bridge the gap between the Kendrick and Christchurch CAs they were not considered to have sufficient special interest.

Consideration was also given to the areas below:

- In the southern corner of Vicarage Road and Christchurch Gardens is a gated community in which there are two early 20th century cottages and a converted coach house and stables forming a third dwelling, together with other more modern houses built on a former paddock for the horses. The gated community has not been included in the extended CA as it is not visible from the road and does not impact on the CA though it may be considered for inclusion in a future re-appraisal.
- Other streets including Warwick Road were not considered to merit inclusion at this review.

We are grateful to Reading Borough Libraries, Berkshire Record Office and Reading Museum for their assistance with producing this revised appraisal and permission to reproduce images and maps as noted in the text.

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Statement of Special Interest

SS1 Introduction and Summary

This section summarises those elements which create the area's character and justify its designation as a Conservation Area (CA) to assist key decisions on its development and enhancement. Later sections of this appraisal provide fuller details can be found. The key characteristics are:

- The area lies to the south of the ancient town, on a spur of high ground having commanding views to the North, South and West.
- It is a suburb of Reading developed from the late Georgian era as a semi-rural, healthy alternative to the town, which still suffered from the diseases of the period and was rapidly running out of space for housing both artisans and business people as the population increased rapidly.
- A selling point for much of the area until 1887, when boundary changes were made and Whitley was included in Reading, was that a large part was situated in the old Whitley manor outside the Reading Borough and so benefitted from not having to pay Reading rates.
- The eastern section of the CA is loosely centred on an iconic Victorian church with tower and spire and fine townscape views, particularly northwards along the avenue of Kendrick Road.
- At the western edge of the CA is a historic road junction for routes south to Basingstoke and east to Shinfield. During the first half of the nineteenth century the west side of Whitley Street was gradually developed as Spring Gardens. In the later nineteenth century the demolition of Highgrove allowed new development on the east side of the street.
- In the second half of the nineteenth century development continued southwards along Basingstoke Road and Whitley Street and west along Milman Road.
- Whitley Hall Methodist Church was built in the Edwardian period to replace the Spring Gardens Mission Hall.
- The CA has significant elements from each period of architectural quality and sociohistorical value.
- The Christchurch CA complements the adjoining CAs of Kendrick and The Mount.
- The Christchurch CA is predominantly a residential area. Places of worship, schools, shops and services support a much wider area.
- It includes seven Historic England listings of buildings and structures and 23 Buildings or Groups of Buildings of Townscape Merit.
- The CA breaks down into six sub-areas of distinctive character:
- the Georgian group of houses on the north side of Christchurch Road;
- the Victorian parish church, former vicarage, large villas and houses along Christchurch Road and the immediate setting on the east side of Glebe Road and north-east and south-east sides of Christchurch Gardens;
- the Whitley Street/Basingstoke Road and Milman Road mainly Victorian terraces and houses, the Hindu Temple (formerly Whitley Methodist Hall) and properties to the rear;
- the Whitley Street buildings, now predominantly retail with residential above, and the Whitley Pump roundabout;

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- the area bounded by Christchurch Road, Christchurch Gardens, Glebe Road and Whitley Street;
- the gatehouse to the now demolished Cintra Lodge, the green space that was once part of the grounds, 11 Cintra Avenue and the twentieth century architect designed houses on the west side of Cintra Avenue.

SS2 Significance and Key Positive Features

A hilltop Conservation Area beside the country lane along a ridge leading to Shinfield, now A327 and extending along the north/south road from Whitley Street to Basingstoke Road, now B3031. The streets demonstrate the pattern of development of this suburb of Reading and include representative examples of the work of Reading architects, brickwork and styles of architecture from the late Georgian to the early twentieth century.

- A group of south-facing Grade II listed houses on Christchurch Road (Nos 1-33) originally known as Whitley Crescent. All properties date from the first half of the nineteenth century apart from 3 Christchurch Road which was added in the late Victorian period.
- Victorian and Edwardian Villas situated in Glebe Road, Christchurch Gardens and Christchurch Road show the creative polychrome brickwork characteristic of Reading together with Arts and Crafts influences of the period. The red brick is relieved by yellow Coalbrookdale brick, silver sand faced brick and blue engineering brick laid in patterns and expressing structural elements such as arches. Together they have significant group value and townscape merit.
- Five large late-Victorian villas in the north-east part of the Conservation Area. These are particularly characteristic of nineteenth century Reading brick and terracotta work from the local kilns in Elgar Road and Tilehurst. They were developed on land owned by William Poulton, who owned the Waterloo brick kiln nearby, and are essays in his products: 117/119 Kendrick Road, now part of the Hillingdon Prince Hotel; a pair of semi-detached houses on the corner at 35-37 Christchurch Road; a substantial mansion 'Hillingdon' in which Poulton himself lived, which is now the main frontage of the Hotel at 39 Christchurch Road with original coach house at the rear 'The Stables'. A later Arts and Crafts house 'Mullingar' at 41 Christchurch Road is of striking detail and was built in the early twentieth century for Poulton's son next to Hillingdon. All of these buildings have townscape merit.
- The Grade II* listed mid-Victorian parish church, Christ Church, by Henry Woodyer, with a striking spire on the highest point and with a fine interior. It has a Grade II listed war memorial cross by W R Howell in the front garden, erected in 1920.
- A nineteenth century house at 34 Christchurch Road, originally the gatehouse to Cintra Lodge, which was once the home to the Sutton family.
- Two nineteenth century houses by Alfred Waterhouse: the former Vicarage and Somerleaze - both now part of the Abbey Junior School and Early Years Centre. They show the Puginesque asymmetry of the time and the virtuoso local brickwork. Part of the land of the Grade 2 listed former Vicarage was used to build a new Vicarage in the 1970s.
- A Methodist Church, 'Whitley Hall' at 112 Whitley Street, of early twentieth century build in a distinctive red brick Edwardian Baroque, now the Reading Hindu Temple.
- The 1897, William Ravenscroft designed, former public house, 'Wellington Arms' at 70-72 Whitley Street, now renovated as apartments and a Gregg's shop but retaining its original external features.

- 65-71 Whitley Street, two pairs of semi-detached red brick three-storey houses dating from the first half of the nineteenth century formerly known as Conduit Crescent and adjacent to the north side of the ancient Conduit (or Spring), now sealed under a house in Highgrove Street.
- 73-81 Whitley Street, a continuation of Conduit Crescent, a terrace of five houses, also now shops, of later nineteenth century build of red and grey brick with cream brick detail around the windows.
- 1-63 Whitley Street is now a largely a parade of shops some of which were originally built as residential properties in the late Victorian era.
- Three terraced blocks built in the late Victorian period along the west side of Whitley Street and Basingstoke Road and which are similar in style and form. Between St Leonards Terrace and Weymouth Terrace are semi-detached Derby Cottages and Peacock Cottage.
- Highclere, 9 Milman Road, built at the end of the nineteenth century for John Swain, rope and brush maker.
- The Whitley Pump roundabout has a landmark three-quarter size replica of the original Victorian pump at its centre and is surrounded by a replica trough. There is a plaque on the kerb near 79 Whitley Street commemorating its unveiling in 1999.
- Nos 1-9 (odd) Glebe Road, an eclectic group of late C20 houses built on land attached to Whitley Glebe, and two late C20 houses, Nos 23 and 25, in Christchurch Gardens are included for completeness.
- Two distinctive houses bordering Christchurch Gardens: 'Whitley Glebe' at 11 Glebe Road, designed and occupied by local architect Montague Wheeler and 'Abbey Gardens' at 12 Christchurch Road, designed by local architect Joseph Morris and presently occupied by the Abbey Junior School.

SS3 Issues and vulnerabilities

- Loss of original architectural details;
- Many of the unlisted, and some of the listed, buildings in the CA have been adversely affected by the use of inappropriate modern materials or details. Common faults include:
 - the replacement of original timber sash windows with uPVC or aluminium;
 - the loss of original panelled front doors and their replacement with stained hardwood, uPVC or aluminium doors;
 - the loss of flanking quadrants from one of the Whitley Crescent houses;
 - loss of chimney stacks and clay pots;
 - the replacement of clay tile or Welsh slate roofs with modern materials
 - painting over original decorative brickwork.
- Street clutter;
- Waste and litter;
- Traffic noise and pollution detract from the character and environmental quality of the main streets;
- Historic streetscape and local distinctiveness are under threat from the requirements of traffic management and public amenities;
- Utilities work does not always re-instate road and pavement surfaces like for like;
- The maintenance of buildings and their gardens of high streetscape value is often poor, usually because of their use as flats or HMOs, some with gardens roughly cleared for car parking;

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• The condition of the replica Whitley Pump is deteriorating and requires its trough to be re-faced.

SS4 Recommended measures

In order to address the issues and vulnerabilities set out above, Section 8, The Conservation Area Action Plan, sets out in tabular form a series of measures with timescales which should be undertaken to ameliorate these issues.



SS5 The 2024 Boundary and Character Area Adjustments

Existing and proposed extended Christchurch Conservation Area

Extension to the west

The view at the west end of Christchurch Road is closed by Reading Hindu Temple (built as a Whitley Methodist Church). From here roads lead downhill south towards Basingstoke and Winchester and north to Reading town centre. The road junction, where there was once a pond and later a pump for the rest and refreshment of travellers and animals on their way to or from Reading, now has a roundabout and a replica of the Whitley Pump.

• Weymouth, St Leonards and Brighton Terraces, with the Derby Cottages and Peacock Cottage in between, on the west side of Basingstoke Road/Whitley

Page 10 Page 90 **Street.** These properties just beyond the brow of the hill going south are good examples of late nineteenth century ribbon development with good quality patterned and/or polychrome brickwork.

• The east side of Whitley Street Nos 1-81 and the former Wellington Arms (now Gregg's), on the west side. The Wellington Arms is an 1897 public house by a notable local architect that replaced an earlier building. The east side of Whitley Street has a slightly curving parade of shops, many of which were originally built as residential properties. Two of the properties date from the early nineteenth century and the others from the second half of the nineteenth century when the land became available for development with the sale of the Highgrove estate in 1892. The properties have good quality patterned and/or polychrome brickwork and some retain original ground floor residential entrances.



Former Wellington Arms 70 Whitley Street



Whitley Street looking north

- Whitley Hall Methodist Church (now Reading Hindu Temple) and the properties to the rear comprising Prospect Cottages and Nos 8 and 12 Boults Walk. Whitley Methodist Hall was built at the beginning of the twentieth century to replace the Spring Gardens Mission Hall and serve a growing population in the area. This significant building was saved when acquired for the Hindu Temple and retains may original interior features. The properties at the rear are much older and are date from the mid nineteenth century when the area was still semi-rural.
- East end of Milman Road (2-40 Milman Road (north side) and 1-9, 17-27 & 31 Milman Road (south side)). Milman Road developed in stages from the midnineteenth century onwards. There are many substantial terraced, semi-detached and detached properties. The most significant property is No 9, Highclere, which was built for John Swain, rope and brush maker, in 1895.



Highclere, 9 Milman Road

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Extension to the south east

This small extension includes properties that contribute to the setting of Christ Church.

- The east side of Glebe Road. The east side of Glebe Road was excluded from the 2010 CA. It was felt that the 11 Glebe Road on the corner with Christchurch Gardens, by local architect Montague Wheeler, was a significant building in its own right and worthy of inclusion described by Pevsner as '...free Cotswold seventeenth century style, otherwise barely seen in Reading'.
- This property and the more modern properties on this side of the road should be included as they contribute to protecting the views of Christchurch.



Christchurch from Glebe Road

• **12 Christchurch Gardens**. This property was designed by Morris & Stallwood and is the last of a group of large villas on the south side of the road of which only some low walls topped by railings survive.

Extension to the east

• 32 and 34 Christchurch Road and 8-26 Cintra Avenue (west side), 11 Cintra Avenue and area of green space (east side). To the east of the Abbey Junior School at 30 Christchurch Road (originally Somerleaze) are two houses one of which (No 34) is the original gatehouse to Cintra Lodge. Cintra Lodge was a large stucco mid-Victorian Italianate House and the detailing of the gatehouse reflects this. After the death of Martin Hope Sutton of Suttons Seeds, some of the land around Cintra Lodge became available for building and Cintra Avenue was laid out. Cintra Avenue is arguably the handsomest road of its era in Reading.

Changes to character areas have been made, new character areas established to reflect the boundary extensions and the areas renumbered as follows:

- Character Area 1 has been renumbered Character Area 2 and now incorporates the east side of Glebe Road and the eastern portion of Christchurch Gardens so important to the setting of Christ Church;
- Character Area 2 has been renumbered Character Area 1 but remains unchanged;
- Character Area 3 has been renumbered Character Area 5 but remains unchanged.

Properties within the boundary extension have been included in three new character areas 3, 4 and 6.

The numbering sequence reflects the age of the majority of properties within that character area.

Conservation Area Appraisal

1. Introduction

1.1 Policy context

The purpose of an Appraisal document is to ensure that the special interest justifying designation of the Conservation Area (CA) is clearly defined and analysed in a written statement of its character and appearance. This provides a sound basis, defensible on appeal, for development plan policies and development control decisions, and also forms the basis for further work on design guidance and enhancement proposals.

This Appraisal describes and defines the particular historical and architectural character and interest of the Christ Church CA, highlighting those features of its character and appearance that should be preserved or enhanced and identifying negative features that detract from the area's character and appearance, and issues that may affect it in future.

The CAA has been produced within current national and local planning policy guidelines. The NPPF states that 'When considering the designation of conservation areas, local planning authorities should ensure that an area justifies such status because of its special architectural or historic interest, and that the concept of conservation is not devalued through the designation of areas that lack special interest.'

Sustainable development

The government has outlined a presumption in favour of sustainable development with economic, social and environmental objectives. In relation to the environmental objective the NPPF states:

"...to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.'

New development in conservation areas

In relation to new development in conservation areas the NPPF states:

"Local planning authorities should look for opportunities for new development within conservation areas and World Heritage Sites, and within the setting of heritage assets to enhance or better reveal their significance. Proposals that preserve those elements of the setting that make a positive contribution to the asset (or which better reveal its significance) should be treated favourably."

In order to accurately make these judgements clear, evidence must be laid out detailing the importance of the historical, heritage and cultural significance of the conservation area and its assets.

Local Plan

Reading adopted a new Local Plan in November 2019 which set out policies for the protection of Reading's historic environment including designated heritage assets such as

conservation areas and non-designated heritage assets. A partial update to the plan commenced in 2023.

This Appraisal cannot hope to mention every building or feature within the CA that might be of value. Any omission should not be taken to imply that it is not of any interest or value to the character of the area.

1.2 Public consultation

This Appraisal is in a format recommended by Historic England. It has been prepared by the Reading CAAC and includes a management plan and photographic appendices. In this CA, there are many local residents to consult with and also local businesses. Consultation has been aimed at engaging with residents, businesses and other stakeholders in the area to help define what is of special significance and worthy of protection and/or enhancement.

2. Landscape setting

The Christ Church CA is located on the west end of the southern heights above the historic core of the Borough. The land therefore slopes downwards from the ridge along Whitley Street and Kendrick Road to the north, Basingstoke Road and Northumberland Avenue to the south and down to the River Kennet to the west. There are thus considerable views in these directions and features such as the church spire, the Hillingdon Prince Hotel and the Whitley Pump replica are amongst the most prominent in the district.

The geology of the ridge with clay over gravel beds has produced natural features such as ponds and springs within the conservation area.



Map 2: Landscape map of the extended conservation area

3. Brief History of the Area

The area was wooded in medieval times forming a corner of the manors of Whitley to the east and Reading. Farming took place on the lower levels initially with a lane south-eastwards towards Shinfield. A water supply existed as a spring in the gravel (the Conduit), said to be the water supply for Reading Abbey from the twelfth century. The King's Head pond was just to the south of this. The area on the north corner of Christchurch Road by the roundabout was where an isolation hospital was located during the plague years of the seventeenth century. The area on the south corner of Christchurch Road by the roundabout was the location for the Civil War defences at Harrison's Barn. Brick kilns were established along the Kennet riverside at least from the seventeenth century, from which the area's construction materials were derived.

In the early nineteenth century, development took place slowly, with the construction of Whitley Crescent, together with a few other contemporary houses. The next area of development was the Spring Gardens area, now largely demolished and replaced by the 1970s Whitley Street estate. A diagonal road through Spring Gardens led to Grove Road, now Milman Road which was developed in a piecemeal fashion throughout the second half of the nineteenth century.

After the 1840s the healthy contrast to the old town caused a number of large residences or mansions to be built; these were Highgrove, Whitley Rise, Whitley Grove, Cintra Lodge and Sutherlands. Cintra Lodge and Sutherlands were large stucco buildings of an indeterminate mid-Victorian Italianate style and all have now been replaced.

Page 17 Page 97 The southern road from Reading (now Basingstoke Road) led to development in medieval times down the hill, creating farmland at the lower level. In the twentieth century this farm land was gradually sold for extensive housing development. The Basingstoke Road has in turn been by-passed by a road on the flood plain, the A33 Relief Road, reducing southbound traffic considerably.

The parish church was built in 1861, consecrated in 1862 and completed in 1876, attracting more development in the surrounding area progressively along what was once known as Southern Hill.

The properties on the east side of Whitley Street, with the exception of Conduit Crescent, date from the later nineteenth century. They were built in groups as can be seen from the subtle variations in architecture and brickwork.

Infill properties were built on the gardens of larger properties in the twentieth century, particularly on Milman Road.

4. Spatial Analysis

4.1 Key characteristics and plan form

The historic development of the conservation area focussed around the roads leading to the east, south and north of the gravel ridge to the south of Reading town centre. From the seventeenth century until the early nineteenth century it was a semi-rural location with market gardens, cottages and larger houses and facilities for those travelling into and out of Reading.

Progressive urbanisation in the nineteenth century took place along major routes and away from them as plots of land became available. This influenced the shape of the area as it is today and the architectural styles of the character areas described in this conservation area appraisal.

Whitley Villa and Whitley Crescent on Christchurch Road are the main group of listed houses in the area face south and until 1887 the boundary of the borough ran along the rear of the properties.

Opposite on the south side are a late nineteenth century mix of detached and semi-detached villas with polychrome brickwork stretching through Glebe Road and back to the parallel Christchurch Gardens.

Christ Church and its war memorial (both listed) facing down Kendrick Avenue is the outstanding feature of this area. The plot of land was donated by Sir William Milman.

Beyond the church are two substantial houses by Waterhouse, the former Vicarage (also listed) and Somerleaze. The road continues east leading to the former gatehouse to Cintra Lodge and Cintra Avenue which was developed before the Second World War on land formerly belonging to Cintra Lodge

To the north, after Kendrick Road, are the brick and terracotta houses built for local brickmaker William Poulton, then a distinctive house built a little later and, beyond Sutherland Avenue, are a few Edwardian houses.

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The east side of Whitley Street is mainly a late Victorian development of retail and residential properties. The slightly varying architecture and brickwork indicate the progressive development of the site.

Whitley Methodist Hall in Edwardian Baroque style dates from 1905 and closes the view down Christchurch Road.

The presence of the spring and King's Head Pond, later replaced by the Whitley Pump in the 1860s has been commemorated on the roundabout at the road junction, where a threequarters replica pump and troughs has been erected and floral displays maintained.

The whole area within the boundary, except for properties east of Vicarage Road and south of Christchurch Road, is covered by an Article 4 direction which removes normal rights to convert a house (C3 use) into a small house in Multiple occupation (C4 use).



Map 3: Buildings by age

4.2 Views

Views into, within and out of the CA contribute to its special character.

4.2.1 Views into the area

These views contribute to the sense of arrival when approaching the CA. Photographs of each of the views can be found in Appendix V.

- Upwards along Kendrick Road, through the aisle of mature trees, rises centrally Woodyer's handsome tower and spire. As one approaches, the nave and chancel come into view with the war memorial in front.
- Westwards along Christchurch Road from opposite Cintra Avenue, the view is closed off by Whitley Villa and Whitley Crescent's late Georgian houses, the Whitley Pump and then Whitley Hall.
- Along Whitley Street from the junction in front of the Pheasant public house, the view takes in the shopfronts of the C19 houses on the left, the Whitley Pump roundabout and the former Wellington Arms, the Whitley Hall and the cottages on the right.
- Approaching the CA from Northumberland Avenue the spire of Christ Church dominates the skyline.
- Going east along Milman Road the spire of Christchurch can be seen ahead.
- The spire of Christ Church is a landmark that can be seen from many vantage points around Reading.



Example – view south along Whitley Street



Map 4: Views into the Christchurch Conservation Area

4.2.2 Views within the area

Views within the area are more enclosed but are enhanced by the landscape setting. Photographs of each of the views can be found in Appendix V.

- From Kendrick Road looking south to Christ Church
- Looking east along Christchurch Road from the top of Highgrove Street past the Georgian buildings on the left, the Victorian villas on the right and the towering spire of Christ Church in the background and vice versa towards Whitley Pump and Reading Hindu Temple
- From the Whitley Pump roundabout to the north of the buildings that include shopfronts along Whitley Street and vice versa towards Whitley Pump
- From the Whitley Pump roundabout to the south along the terrace buildings past Milman Road and Christchurch Gardens and vice versa towards the shopfronts
- Westwards along Christchurch Gardens, the two mansions; the Whitley Glebe and the former Judges Lodgings (No 12) and the row of houses of ornate brickwork, closed off by the three Victorian Terraces: Brighton, St Leonards and Weymouth Terrace with three intermediate cottages.
- North along Glebe Road towards Joseph Huntley's house on Whitley Crescent
- North along Vicarage Road towards Hillingdon (now Best Western Sure Hotel)



Example – view west along Christchurch Road



Map 5: Views within the Christchurch Conservation Area

4.2.3 Views out of the area

There are a limited number of good views out of the area but the view south to open countryside and north into the centre are timeless. Photographs of each of the views can be found in Appendix V.

- There are good views northwards from the top of plane-tree-lined Kendrick Road towards the town centre panorama and Kendrick View, once owned by the Mitford's on London Road.
- From Whitley Street, the view down Mount Pleasant, look at the wide spread of the town centre.
- Eastwards from the CA can be seen the full extent of Christchurch Road, taking in the avenue of pine trees in Cintra Avenue, The Mount CA frontage, and on to the Redlands CA and the entrance to the University of Reading's Whiteknights campus.
- From Christchurch Gardens south the view down Northumberland Avenue to the hills beyond.



View east along Christchurch Road towards The Mount



Map 6 Views out of the Christchurch Conservation Area

4.5 Trees and green spaces

- There are a number of trees which generally make a significant contribution to this urban CA's special character and sense of identity (see Appendix VI). However, some have been self-seeded or unwisely sited, such as in front of No 10 Christchurch Road, obscuring and obstructing the frontage rather than enhancing its setting and potentially affecting stability through tree root caused movement. TPOs should be thought through carefully and removal of badly sited trees facilitated. Trees at present protected by TPOs are marked on the map as are other significant or groups of trees.
- The green space on the east side of Cintra Avenue has been included within the boundary extension but there are no other green spaces or areas within the CA except for Christ Church churchyard, a small patch of green at the top of Kendrick Road and the Whitley Pump roundabout. However, there are many green areas with trees, hedges, lawns and shrubs in the gardens of properties in the CA.
- Adjacent to the CA and visible from properties within the boundary there is a green area on Whitley Street next to Gregg's and more significantly Cintra Park on Cintra Avenue.



Trees on the corner of Christchurch Road and Whitley Street



Map 7: Trees and green spaces within the Conservation Area



Cintra Avenue green space at the junction with Christchurch Road

5. Buildings and Public Realm

5.1 Key positive characteristics

The CA includes a Grade II* listed church, Christ Church, the centrepiece of the CA with its commanding spire on the high point of south-east Reading. It has a significant interior and contains memorials and stained glass to original residents. It has well-kept grounds and a Grade II listed memorial cross and original stone boundary wall on the road frontage, which includes an Edwardian wall letter box.

The Georgian terrace of Whitley Crescent and Villa on a gentle curve, fashioned for viewing the town in the northern direction, is a fine feature alongside the main road, before the church is reached. It has a good range of surviving details.

Christchurch Gardens, Glebe Road and Christchurch Road display rows of 1890s villas in classic polychrome Reading brickwork. The road is wide and the leafy front and side gardens lend an attractive domestic note. The south side of the Gardens apart from No 12 lies outside the CA and has been mostly redeveloped to provide the Telephone Exchange entrance at No 2 and a retirement housing block (Nos 6-10 with a warden's house at No 4). The north-east side of the Gardens, together with the east side of Glebe Road, include some modern housing but shielding foliage has succeeded in preserving the effect in front of many of the properties. The houses on the main road are of plainer brickwork with Gothic doorways.

75-81 Whitley Street has fine examples of polychrome brickwork as do the terraces along the eastern side of Whitley Street/Basingstoke Road. Brighton Terrace has an interesting string course of tiles with a vitruvian wave pattern.

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Brighton Terrace, Whitley Street – polychrome brickwork and vitruvian wave string course

The six large brick and terracotta houses built for the Poulton family anchor and frame the aspect of Christ Church spire on the road junction. The materials and art work are important examples of William Poulton's Waterloo Brick and Tile Works at its peak in 1897 showing the contrast between grey brick and orange terracotta work. Hillingdon in particular is a fantastic showcase of the potential of the brickmaker's art.



Hillingdon, now Sure Hotel

The two buildings of the Abbey Junior School (the former Somerleaze now called Kensington House) and the Early Years Centre (the former Vicarage) are contrasting works of Waterhouse showing the asymmetry of the Gothic revival interpreted in local materials. The Abbey Junior School building on the site in Christchurch Road has been extended twice in this century, the first not at all in keeping with the character of the area and the second more recent one was an attempt to match the Waterhouse styling.

Reading Hindu Temple (formerly Whitley Methodist Hall) by architects Cooper & Howell, is an example of spectacular Edwardian Baroque architecture at a prominent position on the junction with Whitley Street and Christchurch Road.

Behind the Hindu Temple are four properties that remain from a group of houses from the first half of the nineteenth century within land owned by John Boult at the junction of Christchurch Road and Whitley Street.

On Milman Road imposing Highclere built for John Swain, local rope and brush maker, stands out with a mixture of red and grey brick, and stone. It has stone lintels, window surrounds and quoins with a decorative stonework lintel with the initial 'JS' above the front door and decorative stonework on the two bay windows.

Greggs bakery with apartments above is a fine example of a sympathetic conversion of a former public house, The Wellington Arms. The Victorian design was by local architect William Ravenscroft for brewers H & G Simonds.

Lesser features which still enhance the CAs include:

- Boundary wall of flint and stone around the church
- The wall letter box in the boundary wall of the church.
- The terracotta balustrade of Hillingdon and engraved name in gate pier;
- Iron railings in front and behind houses in Whitley Crescent and at Whitley Villa;
- Boundary pillars along parts of Christchurch Road

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Hillingdon, 39 Christchurch Road

5.2 Historic shopfronts

Whitley Street is the only location in the CA that has shopfronts and all the shops have residential accommodation above. No historic shopfronts remain although some retain original residential entrances from Whitley Street.



Residential entrances on Whitley Street

The Victorian terraced houses at 1-63, Georgian semi-detached houses at 65-71 and late Victorian 73-81 Whitley Street were in most cases gradually modified to incorporate shop fronts during the early/mid twentieth century although a couple of shops have reverted to entirely residential.

The front gardens were adopted by Reading Borough Council at various dates up to the 1930s.



Adoption by Reading Corporation in 1934

The former Wellington Arms (No 70) on the west side of Whitley Street was sympathetically converted for residential and retail.

5.3 Materials, styles and features

The predominant material in the CA is polychrome brickwork manufactured in local brickworks such as the Waterloo Kiln on Elgar Road.

The CA contains buildings from the early nineteenth century onwards, showing the contrast between Georgian materials and methods and those of the late nineteenth century and into the twentieth century.

There is little late twentieth century redevelopment. Rear extensions to the hotel in Kendrick Road, though modern, and the apartment building next door, Sheringham Court named after the earlier Sheringham Hotel at 117-119 Kendrick Road, have been executed in materials which carefully match the style of the Poulton buildings surrounding it.

Two undistinguished twentieth century houses were built on the western corner of Christchurch Gardens (Nos 1 and 1A) on part of the site of a former Reading tramways substation. 85 Whitley Street is a large late twentieth century bungalow within an earlier 1930s garden wall associated with the former substation. The new Vicarage is mid-twentieth century design as is the house at 32 Christchurch Road.



5.4 Buildings listed by Historic England and Buildings of Townscape Merit

Map 8: Listed buildings and buildings of townscape merit

There are Georgian buildings and a high Victorian church with associated former Vicarage and war memorial, all listed; there are structures and buildings of townscape merit within the extended CA as well as undesignated heritage assets.

5.4.1 Listed Buildings

There are seven listing entries in the CA. The buildings and structures are all identified on Map 8 and are also listed in Annex III where images are provided along with a short summary and link to the Historic England listing entry.

- Whitley Villa 1 Christchurch Road
- 3-9 Christchurch Road
- 11-25 Christchurch Road
- 27-33 Christchurch Road
- Christ Church
- Christ Church War Memorial
- Former Christ Church Vicarage



Christchurch old vicarage, 2 Vicarage Road with Christ Church spire behind

5.4.2 Buildings of Townscape Merit

There are 23 buildings or groups of buildings of townscape merit. These are identified on Map 8 and listed with a short description in Annex IV.

Character Area 1:

None

Character Area 2:

- Somerleaze, Abbey Junior School, Christchurch Road
- Mullingar, 41 Christchurch Road
- Hillingdon, 39 Christchurch Road
- 35-37 Christchurch Road
- 117-119 Kendrick Road
- Whitley Glebe, 11 Glebe Road.
- 12 Christchurch Gardens

Character Area 3:

- Reading Hindu Temple (formerly Whitley Methodist Hall
- Highclere, 9 Milman Road
- Brighton Terrace, Whitley Street
- St Leonard's Terrace, Basingstoke Road
- Weymouth Terrace, Basingstoke Road
- Derby Cottages and Peacock Cottage, Basingstoke Road

Character Area 4:

- Former Wellington Arms, 70 72 Whitley Street
- 65-71 Whitley Street. These two pairs of semi-detached houses are some of the oldest in the area and date from at least the 1830s
- 73-81 Whitley Street
- Whitley Pump roundabout replica

Character Area 5:

- 2 -14 Christchurch Road
- Christchurch Gardens (north)
- Victorian and Edwardian Villas along Glebe Road

Character Area 6:

- Cintra Lodge, 34 Christchurch Road
- 26 Cintra Avenue, was the home of Professor H Hopkins, the inventor of the endoscope.

5.5 Public Realm - floorscape, street lighting, street furniture and local detail

Road and footway surfaces are modern, i.e. tarmac, concrete paving and brick products, and there are many perhaps excessive pieces of street furniture such as posts for traffic signs. Maintenance of roads and footpaths is poor in parts, particularly the roadway in Vicarage Road and pavements along Christchurch Road north side; potholes do not add to the ambience of the CA nor do the traffic calming additions to Kendrick Road. The street signage does not fully reflect the location of the CA and the red writing used on some of the signs is not easy to read.

The roads in the CA form part of the bus and busy road transport network which require much of this to be in place for road safety.

There are cast iron street signs on Vicarage Road and Whitley Street and Basingstoke Road at the junction with Milman Road.

A major blot on the streetscape is the Christchurch Gardens bus shelter on the east side of Whitley Street. The shelter is poorly maintained and often covered in graffiti. A telephone box has recently been removed from this location. Sadly it was similarly neglected despite having been the location of the box from which Mick Jagger used to make phone calls when visiting Marianne Faithfull in Milman Road.

6. Character Areas

The CA divides into six character areas defined according to the predominant age, style of architecture and rationale for development. The areas are numbered according to age with character area 1 being the oldest.



Map 9: Character Areas (inclusive of proposed area extensions)

6.1 The Georgian group of houses in Christchurch Road

The Georgian terrace of Whitley Crescent and Whitley Villa on a gentle curve, fashioned for viewing the town to the north, is a fine feature alongside the main road, before reaching the church. It has good surviving details with only a minority being lost or defaced. The western block, the first to be built (excluding No 3), is a plain three-storey stucco block. The centre block is brick-faced two-storey. The eastern block is in the worst condition; four-storey, stucco, with arched ground floor windows. No 3 was added in the late Victorian period, although a structure can be seen on earlier maps. All houses have basement/cellar floors.

6.2 Christ Church, Vicarages and larger Victorian houses

This character area is predominantly of late Victorian properties centred around Grade II* listed Christ Church. It has a commanding spire on the high point of south-east Reading and can be seen in views from other parts of Reading and Caversham. Pevsner says 'An exceptionally rewarding High Victorian Church and very typical of Woodyer.' It has a significant interior and contains memorials and glass to original residents. It has well-kept grounds and a memorial cross Grade II listed and stone boundary wall on the road frontage.



Christ Church spire (Evelyn Williams)

Two high status houses adjacent to the church, the Vicarage and Somerleaze, are contrasting works of Waterhouse showing the asymmetry of the Gothic revival interpreted in local materials. On the corner of Vicarage Road and Christchurch Road is the new 1970s-built Vicarage that was erected on land previously part of the old Vicarage property.

The six large brick and terracotta houses built for William Poulton and his son, Francis, flank the view of Christchurch spire up the long tree-lined Kendrick Road on the east side. The materials and art work are important examples of the Reading Waterloo Brick and Tile Works at its peak in 1897 showing the contrast between grey brick and orange terracotta work. The original residents were notable in socio-economic history terms for their role in the development of Reading.

Continuing along Christchurch Road is Mullingar an Elizabethan Revival/Arts & Crafts property in a large garden, then four Edwardian houses on the north side.

Modern houses on Glebe Road and 23 & 25 Christchurch Gardens, have been included in this character area because of their location around Christ Church and their importance to its setting.

The Edwardian 11 Glebe Road was described by Pevsner '…free Cotswold seventeenth century style, otherwise barely seen in Reading'.

The Victorian red brick 12 Christchurch Gardens is the last of the villas on the south side of Christchurch Gardens. The properties predated the development of those to the north.

6.3 Victorian Terraces and houses Whitley Street/Basingstoke Road and Milman Road

Looking west from Christchurch Road the view is stopped by the Edwardian Reading Hindu Temple (formerly the Whitley Methodist Hall). The plot of land extending behind the temple comprises older mid nineteenth century properties surviving from this cluster of houses, garden ground and land at the top of the hill originally owned by John Boult.

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Three very distinctive late Victorian terrace blocks (Brighton, St Leonards and Weymouth Terraces) run from the Whitley Pump roundabout past Milman Road to Swainstone Road. Derby Cottages and Peacock Cottage sit between St Leonards Terrace and Weymouth Terrace opposite the junction with Christchurch Gardens and were also built in the same period.



L to R Weymouth Terrace, Derby Cottages, Peacock Cottage and St Leonard's Terrace

St Leonards Terrace, 2-16 Basingstoke Road, is covered by an Article 4 direction recognising the importance of its grey patterned brickwork.

Milman Road, with Whitley Street to the north and Basingstoke Road, to the south is comprised of mainly terraced properties with some significant detached and semi-detached properties on the south side. The tall terraces on the north side of the road were built as three blocks in the third quarter of the nineteenth century. The most significant property is the house, Highclere, built for John Swain, rope and brush manufacturer, in 1897. Milman Road was first known as Grove Road but the name was changed to commemorate Sir William Milman, nephew of Sir Henry Hart Milman dean of St Paul's, who gave the land for Christ Church in 1861.



6.4 The Whitley Street buildings and the Whitley Pump roundabout

Conduit Crescent, 65-71 and 73-81 Whitley Street before they became shops c1905

This buildings in this cluster represent three phases of nineteenth century development but have been grouped together due to their location around this historically important road junction. From here the road east went to Shinfield, south to Basingstoke and Winchester and of course north into Reading.

Until the late nineteenth century the east side of Whitley Street was part of the Highgrove Estate that only became available for development in the 1890s when it was sold.

The oldest buildings are two pairs of semi-detached late Georgian villas (65-71 Whitley Street) that appear on the 1834 Commissioner's map of Reading. A ghost Conduit Crescent sign is visible above the fascia board of Nos 69-71.

Next to these four buildings are a group of 5 Victorian houses at 73-81 Whitley Street. These were the last properties on Whitley Street to become retail or business premises. The front gardens of these properties had been taken over by extended shop premises by at least the 1930s.

Between the two groups of houses there was an alleyway through an arch leading to the conduit. The conduit was fed by a spring that supplied water locally and was thought to have been channelled through pipes to supply Reading Abbey.



Conduit Crescent C 1910. Lantern slide from Reading Museum. Mr Cox on his bicycle. Note archway through to conduit. Museum object number REDMG: 1931.435.62

North of 73 Whitley Street is a row of Victorian properties built in six architecturally similar groups. Those furthest north were built first and were business or retail premises for fruiterers, tobacconists, butchers and bakers. Further south the properties appear to have started out as a mix of residential and businesses with occupations in the 1901 census including clerk, police officer, and commercial traveller. Most of the shopfronts are modern and many of the original residential entrances have been removed or obscured.

The former Wellington Arms at 70 Whitley Street was built in 1897 to designs by local architect William Ravenscroft. The Victorian building was a replacement for an older public house on the site and can be linked with the contemporary development of the west side of the street.

The landmark replica of the Victorian Whitley Pump on the roundabout links Whitley Street and Christchurch Road and is a focus for this part of the CA. The troughs were used to provide water to animals travelling to and from the market in Reading and a place to rest.

6.5 The Victorian villas

The plot of land bounded by Christchurch Gardens, the west side of Glebe Road and the south side of Christchurch Road was the last in the western part of the CA to be available for development.



2 (R) to 10 Christchurch Road c1905 with the original Whitley Pump

The rows of 1890s and early twentieth century villas have classic bright polychrome Reading brickwork and detailing. Christchurch Gardens is wide and the leafy front and side gardens lend an attractive domestic note. The houses on the south side of Christchurch Road are of plainer brickwork with Gothic doorways.



Christchurch Gardens

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6.6 Cintra Avenue

Beyond Somerleaze, on the south side of Christchurch Road, are a modern house at 32 Christchurch Road and the former gatehouse to Cintra Lodge at 34 Christchurch Road, which is largely in its original condition.

Cintra Avenue part of the Sutton Estate until the death of Martin Hope Sutton in 1903. He had purchased Cintra Lodge, a large stucco Mid-Victorian Italianate house of 1851. The first three houses were built in 1905. In Cintra Avenue these consisted of the present numbers 24, (Herrenden), 22/20 (semi-detached houses) and 16 (Collingwood). These are large and elegant Arts and Crafts houses, probably by W R Howell who lived (and died in 1940) at no 24. They are identified and related by their dentilled stacks and curious chimney pots. Nos 16, 20,22 retain timber windows and upper leaded lights but no 24 has lost these. They all have "mock Tudor" gables with Collier's tiled roofs.



Cintra Avenue

The remaining houses (on the West side) were added by the 1920's and are similar though of lesser detail. The house on the corner, , No 26, dating from 1923 is a striking building having key views from Cintra Park. It was the home of Professor H Hopkins, the inventor of the endoscope, after whom Hopkins Ward is named in the Royal Berkshire Hospital.

Page **40** Page 120 Cintra Avenue is arguably the handsomest road of its era in Reading. The key heritage assets are the arts and crafts details of the houses, the green space opposite and the association with the Sutton family.

7. Negative features, issues and opportunities for enhancement

7.1 Loss of original architectural features and detail

The listed houses in Christchurch Road have suffered variously from unsympathetic removals, replacements and additions. Replacement front doors with integral fanlights have replaced six-panelled Georgian doors with fanlights over, leading to some absurdities of double fanlight doorways. One has a modern uPVC door with oval glass.

A veranda and its canopy were removed in 2018 at No 25 Christchurch Road during refurbishment. An ornamental original iron gatepost has been replaced with a brick pier at No 15 Christchurch Road. Flanking quadrants to a doorway have been removed. Period doors have been allowed to rot, railings have been broken and not repaired, houses subdivided for letting have been left unrepaired.

Elsewhere gardens have been cleared and boundary walls removed for car parking on rough ground.

A large chimney stack was removed from the top of 117-119 Kendrick Road in 2016 and chimney stacks have been removed over time from properties on the south side of Christchurch Road. This has had a negative impact on the historic roofscape.

The original gates and railings are in poor condition at No 2 Christchurch Road. This is a landmark building on the corner of Whitley Street and Christchurch Road which by its position now creates a strong negative impression of the neighbourhood and the CA.

A brick wall on the front boundary of No 3 Christchurch Road has been painted an out of character dark blue colour.

An extension of the Abbey Junior School building (formerly Somerleaze) at Christchurch Road completed in 2019 does not fit well with the character of the original Waterhouse building.

Boundary gates and walls are missing variously between 4 and 10 Christchurch Road and also variously between 118 and 122 Kendrick Road and between 45 and 47 Christchurch Road.

Vicarage Road school garage/ coach house wall patching is insensitive to its listed status.



Negative features within the Conservation Area

The management plan (Appendix 2) sets out to remedy some of these issues and most importantly proposes an Article 4 direction to remove permitted development rights to prevent further damage to the special character of the area. Without this the CA is likely to become a CA at risk as is currently the case for the Russell Street, Castle Hill, Oxford Road CA.

7.2 Neglect and opportunities for enhancement

The condition of some of the Georgian/pre 1850 listed buildings of Whitley Crescent is a cause for concern. Original features have been lost or removed and at least one window has been replaced with UPVC within the last few years. Statutory enforcement powers should be used to undo these losses.

For unlisted buildings it is recommended that an Article 4 direction is considered to remove permitted development rights within the CA or parts thereof and prevent further erosion of the special character and appearance of the area.

Selected examples and opportunities are highlighted below.

- 25 Christchurch Road is a listed building. During renovation works the canopy mentioned in the listing description which was in poor repair was removed.
- 27-33 Christchurch Road are listed buildings in a deteriorating condition particularly 27, 31 and 33.
- 2 Christchurch Road is a landmark detached building, once a doctor's surgery and now converted to flats. Maintenance of the property is poor and railings and gateposts are deteriorating. The grounds and car park are untidy.
- 85 Whitley Street is a modern house on the southern portion of Whitley Street. The grounds are poorly maintained and often accumulate rubbish. A wall and gate pier

were damaged by a tree and has been partially unsympathetically repaired with brickwork that does not match the original.

- Sheringham Court and 35-37 Christchurch Road. Although the fabric of these buildings is good the grounds and management of bins are poor.
- The troughs of the Whitley Pump replica (now over 20 years old) are deteriorating
- The front and rear gardens of flats are often neglected

7.3 Advertising and shop signage

Signs outside the Hillingdon Prince Hotel, now the Sure Hotel, on both the Christchurch Road (illuminated) and Kendrick Road forecourts are out of character with the CA.

The former Wellington Arms converted to flats and a Greggs bakery in the 2010s has subtle interior signage, in keeping with a heritage building, however the view approaching from the north is marred by long standing illuminated advertising.



The shopfront of the tanning salon is obscured by film covering the windows.

Illuminated advertising on the upper northern elevation of the former Wellington Arms



Film covered shop windows at 79 Whitley Street

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7.4 Tree loss

There is no evident tree loss in the public parts of the extended CA and, in Kendrick Road, new additional trees have been planted in recent years by the Council. As a whole the CA and surrounding area is very green and verdant despite the inner suburb location.

7.5 Street furniture and surfacing

Many posts and standards have been erected when one post could perform more than one role. Pavements are often in poor repair and to minimum aesthetic standards.

Telecommunication cabinets are regularly daubed with graffiti.

The bus shelter at the junction of Whitley Street and Milman Road is often painted with graffiti and is poorly maintained.

The view down Kendrick Road has been affected in early 2021 by introduction of traffic calming measures including speed cushions and particularly built-out kerbs.

7.6 Rubbish and bins

Multiple wheelie bins are left exposed on frontages particularly at HMOs and flats, including: Sheringham Court in Kendrick Road, where the bins are left overloaded for much of the time; 35-37 Christchurch Road, the latter also having a generally untidy frontage on both the Christchurch Road and Kendrick Road entrances and 2 Christchurch Road. 85 Whitley Street has a bus shelter outside which is a general source of untidiness and rubbish in spite of there being a litter bin provided.

The terraced houses along Whitley Street/ Basingstoke Road are intermittently plagued by overflowing bins and refuse in the front gardens and on the street.

Whitley Street is a busy street of shops and takeaways and regularly overflowing and unsightly trade bins on the pavement give a poor impression of the area.



Trade bins on Whitley Street

7.7 Development pressure and changing skyline

There is one undeveloped site where the house at 108 Whitley Street previously stood next to the Hindu Temple. Though it is fenced off, it has been left for wild trees, etc. to grow for a few years. Some of the larger houses in the CA occupy areas attractive to developers.

A major development is taking place at the rear of Whitley Crescent between Kendrick Road and Highgrove Street to convert a former builder's yard to erect 8 dwellings. This is a particular worry for the safety, security and integrity of the rear of the listed properties along Christchurch Road, in particular the wall at the rear of Whitley Villa and railings, walls and gates at the rear of some of the Whitley Crescent properties, which are on or near the boundary with the development.

As the Station Hill development draws to completion the skyline viewed from Whitley Street into the town centre is evolving which is not necessarily entirely negative. Tall towers are appearing on the skyline beyond The Pheasant public house. The Blade has long been visible from the top of Highgrove Street and a reminder of the times when water from the conduit was supplied to Reading Abbey.

7.8 Traffic noise and pollution

The main A327 road and the local B3031 run through the CA as does Kendrick Road bringing traffic to and from the town. All these roads are on Reading Buses bus routes and are very busy during the normal working day especially when Abbey School senior and junior students are arriving or leaving. The hospital is nearby and so many emergency vehicles pass through.

This, and the traffic calming measures in Kendrick Road, leads to severe road congestion at busy times in the morning and afternoon and significantly increases air pollution in the area as a result.

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8. Action Plan

Table 1 – All Conservation Areas

Policies, attitudes and actions which need to be applied to all of Reading's Conservation Areas if the town's remaining historic character is to be protected and enhanced as it should be. These apply to the Christchurch Conservation Area as fully as they do to all, particularly with regard to the careful protection of architectural detail in any building alterations. It is acknowledged that these proposals have resource implications, especially for Reading Borough Council, at a time when resources are stretched and limited.

Table 1: Actions for all conservation areas

ISSUE	ACTION	WHO
Loss of original architectural features and details (see 7.1). Insensitive change and development not requiring planning permission, permitted	Guidance: Provide guidance document on 'approved' methods for common small scale alterations	RBC and CAAC
	Awareness: Provide householder information on the added value of 'period detail' and detail on economic alternatives for energy efficiency savings	
	Material prepared by other planning authorities could be used as a model for preparing written guidance	
Loss or change to original boundary features.	Awareness: Provide householder information document on the added value and visual importance of boundary walls and railings	RBC and CAAC
	Policy : Article 4 directions could be implemented as resources allow (see Table 2 for further recommendations on what this should cover in this CA)	
Insensitive development undertaken without permission (see 7.2 e.g. window replacement in listed buildings)	Guidance: Provision of property owner guidance on legal requirements for alterations/development/tree works in conservation areas.	RBC and CAAC
	Enforcement: Legal enforcement by RBC to secure reversal of changes	RBC

ISSUE	ACTION	WHO
Redevelopment within or adjoining the Conservation Area should respect the general height, massing and alignment of existing buildings and use a palette of materials which reflect its existing character.	Guidance, Policy: Supplementary Design guidance planning document for development in historic areas.Support: Use CAAC to gain informed comment on planning applications affecting Conservation Areas	RBC and CAAC

Table 2 – Christchurch Conservation Area

Policies and actions which are specific to this Conservation Area, to retain and enhance its important contribution to the life of Reading as a whole. They may require some limited revenue resources, which it is recommended should be given high priority, but little or no public capital expenditure.

Table 2: Actions for Christchurch Conservation Area

ISSUE	ACTION	WHO
Boundary extensions should be implemented as proposed in this revised appraisal.	Policy: Boundary extension to be implemented.	RBC
Poorly maintained properties including listed buildings.	 Identification & Enforcement: RBC should use the powers that it has to enforce maintenance of properties especially those that are listed. Guidance: Property owners may not be aware of grants and other assistance that could be available for maintenance and improvements. 	CAAC can identify and inform RBC to use the processes that are available to it subject to resources. RBC/RCS/CAAC

ISSUE	ACTION	WHO
Loss of original features of properties and alterations that have had a negative impact on the character and appearance of the CA as described within the body of the appraisal but which may have been allowed under permitted development rights.	 Policy: An Article 4 direction should be considered to remove permitted development rights in order to protect the character and appearance of the CA. This would require planning permission to be obtained before these works could be undertaken in the future. Action: Draft wording of suitable Article 4 for agreement with RBC. 	CAAC/RBC
Trade bins on Whitley Street	Guidance: RBC, CAAC and local groups to work with businesses on Whitley Street to look at alternative solutions for trade refuse.	CAAC and local groups can identify and inform RBC to use the processes that are available to it subject to resources.
Overflowing domestic bins and fly tipping	Identification & Awareness: This problem is a Reading wide issue which can only be solved by RBC.	RBC must implement an innovative solution to the problem which is a blight on the borough and cannot just be solved by enforcement.
Redundant signage and street clutter in the CA.	Training/Awareness: RBC staff should take into account existing signage when new signage is proposed for roads, pavements or information.	Traffic Department, planning department and CAAC.
	Similarly for utilities companies.	
	Existing superfluous and redundant signage should be removed and damage made good using CIL funding for the area.	RBC councillors and officers/ utilities companies to approve and allocate funding.
Redundant signage and street	Identification: Remove and replace.	CAAC to survey to identify.
clutter in the CA.		RBC councillors and officers to approve and allocate funding.

ISSUE	ACTION	WHO
Redundant wires, cabling, television aerials etc to domestic properties	Identification: Remove	Residents to survey to identify and

Appendix 1 Public Consultations

1. The initial public consultation was held on 16 July 2022 at Christ Church, Christchurch Road.

CHRISTCHURCH CONSERVATION AREA



Saturday 16 July 2022 at 2pm

Christ Church, Christchurch Road, Reading, RG2 7AR

Reading Conservation Area Advisory Committee (CAAC) have been undertaking a community-led review of the Christchurch Conservation Area appraisal.

We would like your views on our proposals so far, which include boundary changes and a management plan to conserve and enhance the character and appearance of the area.

Refreshments will be available after the meeting.

CAAC works with Reading Borough Council to promote the preservation and enhancement of Reading's heritage, particularly but not limited to the protection and good management of conservation areas.

We would like to thank Christ Church for providing the venue for this event and Katesgrove Community Association for funding the printing costs of this flyer.





Katesgrove Community Association

www.readingcaac.org www.christchurchreading.org.uk www.katesgrove.org.uk

Notice of the initial consultation

2. We are grateful to Christ Church for hosting the event and Katesgrove Community Association for funding the flyers. We would like to thank everyone who attended the event: residents, councillors and CAAC members who shared information and asked questions.

3. A questionnaire was issued at the 16 July 2022 Launch event and was also available online (surveymonkey).



The Christchurch Conservation Area was first designated in 1987 and was last reviewed in 2010.

The conservation area appraisal describes and defines the special historical and architectural character and interest of the Christchurch CA. It highlights those features of its character and appearance that should be preserved or enhanced. It also identifies negative features that detract from the area's character and appearance, and issues that may affect it in future.

 Do you agree that the designation of conservation areas is important to protecting the special character of Reading? Please tick the box that applies. 	Strongly agree Agree Neither agree nor disagree Disagree	
	Strongly disagree	
2. Do you agree with the proposed boundary extensions? Please tick the box that applies. If other please comment in the box below.	Yes No Other	

Questionnaire page 1

Space for comments on Question 2

3. Do you agree that current appearance of some of the properties is the biggest challenge to the character and appearance of the conservation area?	Strongly agree Agree	
Please tick the box that applies.	Neither agree nor disagree Disagree	
	Strongly disagree	
	Nog	
4. Do you agree with our recommendation that an Article 4 designation is required to protect the original exterior appearance of properties, for	No	
example brickwork, chimneys, garden walls, windows and doors, in the	Other	

Please tick the box that applies. If other please comment in the box below.

Christchurch Conservation Area?

Questionnaire page 2

Page **52** Page 132 Space for comments on Question 4

5. Are you satisfied with the appearance and cleanliness of the streets and public realm in the conservation area?	Very satisfied Satisfied	
Please tick the box that applies.	Neither satisfied nor dissatisfied Dissatisfied	
	Very dissatisfied	
6. Do you live in or own property in the conservation area?	Yes	
Please tick the box that applies.		

Questionnaire page 3

Page **53** Page 133 7.Do you work in the conservation area? Please tick the box that applies.

Yes	
No	

8. If have any further comments please use the space below or email chair.readingcaac@gmail.com.

 9. How interested are you in the work of Reading Conservation Area Advisory Committee?
 Very

 9. How interested are you in the work of Reading Conservation Area Advisory Committee?
 Slightly

 Please tick the box that applies.
 Not at all

Thank you for responding to this questionnaire. www.readingcaac.org @CaacReading

Questionnaire page 4

3. Two copies of the draft appraisal were placed in Whitley Library and the Central Library following the 16 July event along with questionnaires.

4. In advance of the 16 July 2022 event properties in the proposed extension areas were sent a letter from Lead Councillor for Planning and Assets, Councillor Micky Leng.

5. 30 responses to the questionnaire were received either at the launch event or online. There were no responses from the copies in the libraries. Feedback from the questionnaire was collated and is summarised below:

- Respondents generally approved of the proposed boundary extensions. The rationale for the modern houses on Glebe Road and Kendrick Road were questioned. There were several suggestions for further extensions which informed a walkabout of the area with planning officers. This resulted in the exclusion of some of the properties originally proposed for inclusion and the inclusion of other areas (see Section SS5).
- Despite general dismay at the state of the public realm and some properties in the area the condemnation was not universal.

General points raised which might apply to all conservation areas:

- The benefits and obligations of conservation area status need to be further explained.
- There is some trepidation as to the benefits v costs to residents of an Article 4 covering the area. This, despite the fact that it is currently covered by the University Area HMO Article 4 and that Brighton Terrace, proposed for inclusion is covered by an Article 4 for patterned brickwork.
- The implications for responses to climate change such as heat pumps and solar panels, that would require a planning application if an Article 4 were adopted.
- The difference between listed buildings, buildings of townscape merit and any other property within the conservation area needs to be further explained.
- The powers of and potential for financial support from Reading Borough Council and Reading CAAC in relation to management of the area need to be further explained.

6. Properties in the newly proposed extension areas were sent a letter from Lead Councillor for Planning and Assets, Councillor Micky Leng in August 2023.

7. The revised appraisal was endorsed for formal public consultation by the Strategic Planning and Environment Committee on 13 March 2024.

Appendix 2 Archaeology and historical development of the area

Archaeology

Paleolithic and Neolithic tools and implements have been found within the CA in Glebe Road and south of Christchurch and Christchurch Gardens. Just south at Whitley Park Farm Bronze or Iron Age burial urns including cremated remains were found in an old gravel pit. Two Roman coin hoards were found in Milman Road at the end of the nineteenth century.

The hilltop position on a ridge and the associated geology was important in determining early settlement and communications patterns in the area. These influences persist today.

Historical Development

The CA lies just to the north of Whitley Park which was in the possession of Reading Abbey from the twelfth century. It is also highly likely that a water supply from the spring and conduit house at the top of Whitley Street supplied the Abbey.

The area was largely agricultural until the nineteenth century with roadside hostelries and some market gardening supplying the centre of Reading.

In 1546 after Reading Abbey was dissolved the hill top spring and some buildings on the hill were specifically excluded from land transferred to William Grey and retained by the King: *...barne and close called the Conduit Close, in the tenure of Richard Hame, in the parish of St Giles 13s 4d a year forasmuch as the conduit house wherein the spring's head is, that serveth the king's house in Reading, is within the said close.'*

The first map that covers part of the area is Speed's map of 1611.



John Speed's map of Reading 1611 – the basic street plan is retained today

Christchurch CA lies just behind the southernmost point of Speed's map. Skelton states that the map was probably sketched from a higher ground to the south east of the town . John Speed on his visit to map Reading, may have strode out from the town centre and walking up London Street and Silver Street, or Southampton Street to the top of Whitley Street, where all Reading would be laid out before him: the three parish churches, Greyfriars, the Kennet and its mills, Holybrook and of course the Abbey. He may have stood next to the spring and the conduit (top of Highgrove Street).

There are several mentions in Reading Corporation records in the early seventeenth century of arrangements for funding and managing 'pest houses' at Conduit Close for people who had been infected with plague.

The next map available for some of the area is a plan of the civil war siege defences of 1643. This shows Harrison's Barn surrounded by a moat at the junction of Christchurch Road and Whitley Street with the pond (later King's Head Pond) in front of it. There is another structure marked by a single line which may be the conduit house and a Lunette looking south down the hill of Basingstoke Road.



Extract from Burts engraving of a contemporary map of the Civil War defences of Reading in 1643. South is at the top of the map and Harrisons Barn stood at the corner of what is now Christchurch Road and Whitley Street.



Extract from Plan of Crown Fields and Orts 1721 (copy) Courtesy of Royal Berkshire Archives ref: R/AT 5/1

Page **58** Page 138 A plan from the 1720s covers the area north of Christchurch Road (to Farnham), marked as Mr Perran's land along the road, Dr Aubery's 'piece at the conduit' (5) and the Conduit Piddle (6) and Upper Crown Fields just to the north.

In 1813 there was very little development on the hill at the top of Whitley Street but over the next 30 years development spread to the east and west of Whitley Street and along Christchurch Road. The Whitley turnpike marked on the 1813 map (below) as just south of what is now The Pheasant. It later moved past the pond to a spot on Basingstoke Road opposite the King's Head public house which no longer exists.



1813 map of Reading - Before Queens Road, South Street, Station Road and the coming of the railway and before Queen Victoria Street. None the less the major streets are still recognisable.

The 1834 Commissioner's map shows the beginnings of the development of Spring Gardens and housing along Christchurch Road. The area between London Street and Whitley Street and at the top of Southampton Street is also becoming more built up. There are brick kilns down by the River Kennet.



1834 Commissioners map of Reading - By this time the first houses on Whitley Crescent and Conduit Crescent have been built. Highgrove House (or its predecessor) is east of the junction with Southampton Street and Mount Pleasant.

The map dates from the same era as Mary Mitford's Belford Regis which describes approaching Belford (Reading) from the south.

It was in this vein that in 1835 Mary Mitford wrote of reaching the junction of Christchurch Road and Whitley Street on the journey into fictional Belford Regis (Reading) in 1835:

"About this point, where one road, skirting the great pond and edged by small houses, diverges from the great southern entrance, and where two streets meeting or parting lead by separate ways down the steep hill to the centre of town, stands a handsome mansion surrounded by orchards and pleasure-grounds; across which is perhaps seen the best view of Belford, with its long ranges of modern buildings in the outskirts, mingled with picturesque old streets; the venerable towers of Ste Stephen's and St Nicholas'; the light and tapering spire of St John's; the huge monastic ruins of the abbey, the massive walls of the county gaol; the great river winding along like a thread of silver; trees and gardens mingling amongst all; and the whole landscape enriched and enlightened by the dropping elms of the foreground, adding an illusive beauty to the picture, by breaking the too formal outline, and veiling just exactly those parts which most require concealment.

Nobody can look at Belford from this point, without feeling that it is a very English and charming scene; and the impression does not diminish on further acquaintance."

Mary Russell Mitford, Belford Regis or Sketches of a Country Town, 1835.

In 1841 the St Giles tithe apportionment map provides additional detail. Some of the properties marked opposite the junction with Whitley Crescent were acquired and demolished to build the Whitley Methodist Hall; others are still in existence. Whitley Crescent, Conduit Crescent and houses on the west side of Whitley Street as well as the location of the beer shop that later became the Wellington Arms can all be identified.



Extract from St Giles parish tithe apportionment map 1841 courtesy Berkshire Record Office ref: D/D1/96/1

The 1841 census and in 1842 Snare's Post Office Directory, which includes a map of Reading, begin to give a fuller picture of the people and businesses in the area.



1842 map of Reading from Snare's Post Office Directory. The dotted line marks the Reading borough boundary.

By 1842 Whitley Street and Spring Gardens comprised a mix of residential properties, shops and traders' premises. Most of the land between Whitley Street and Silver Street and what is marked as 'Victoria Street' (later Kendrick Road) was part of J J Blandy's Highgrove estate.

Whitley Crescent was outside the borough boundary and four houses were advertised there in 1825 as 'genteel cottages...situate on an exceedingly healthy spot, commanding one of the finest views in or near the borough.'

Along Christchurch Road, to the east, larger detached villas were built around the middle of the nineteenth century. One of these was Cintra Lodge which was sold by Reading Borough and demolished in 1957 with five modern (c1960) houses being built on the site. A large green space remains with tall fir trees that gives the Avenue its name and great amenity.

The first houses on Milman Road, originally known as Grove Road can be seen on the Board of Health map of 1853. There are larger detached and semi-detached houses on the

Page **62** Page 142 southern side and tall terraces on the northern side. The most significant property on Milman Road today, No 9 Highclere, was built for John Swain in the late nineteenth century in the garden of his original home next door. That property was converted into today's Nos 5 & 7.

The foundation stone of Christ Church was laid on 6 July 1861 and the church was completed the next year, although the tower steeple was not added until 1875. The architect was Henry Woodyer. The church was a chapel of ease for St Giles to cope with the increasing number of parishioners in the area and southwards in Whitley. The land was given by Sir William Milman, nephew of dean of St Paul's and former parish priest at St Mary's Minster, Sir Henry Hart Milman.

In 1874 the boundary of Reading Borough was beaten by the Mayor and members of the Corporation who set out on their perambulation from Watlington House preceded by the mace bearer. The press report describes how after they had crossed Kendrick Road they '...proceeded along the back of Whitley Crescent to the spot where at the last perambulation King's Head Pond was situated, and through which the mace had to be passed. Since then the pond has been filled up and the corner considerably improved.'

By 1887 the whole area of the CA was within the borough boundary.

In 1892 the Highgrove Estate was sold and made available for development around Highgrove Street. This included development on the remainder of Conduit Crescent beyond Conduit Close.

In 1898 the parcel of land between Christchurch Road and Christchurch Gardens was sold. This resulted in large residential properties being built in the area especially fronting Christchurch Road and Christchurch Gardens and along Glebe Road. Many of these remain as single family houses.



Christchurch Conservation Area and surrounding development before the First World War. Extract from OS map surveyed 1909 to 1910 published 1913, National Library of Scotland

In the 1950s the east side of Glebe Road was developed on land belonging to Whitley Glebe when the house was sold.

In modern times the main development affecting the area was the redevelopment of Spring Gardens in the 1970s which included the demolition of properties on Whitley Street to the north of the Wellington Arms. On the south side of Christchurch Gardens large Victorian detached properties were replaced by the BT complex and Christchurch Court.

Transport

From the first half of the eighteenth century turnpike roads from Reading passed through the CA going east to Shinfield along Christchurch Road and south to Basingstoke and Winchester. The turnpike gate was originally at the top of Silver Street and c1800 moved further south just past Christchurch Gardens. The toll gate here closed in 1870 and the road became free to use.

Christchurch Road had good public transport communications with Reading town centre by horse bus in the late nineteenth century, followed by trams and trolley buses. The only vestige of these former modes of public transport is the substation adjacent to 85 Whitley Street which supplied power to the trams.

In modern times the A33 Relief Road has reduced traffic from the M4 passing through the CA, but it is still a very busy area.
Historic Associations

At the junction of two major routes in and out of Reading also made it a notable location. It was approximately the top of the hill by the roundabout that Mary Mitford described in 'Belford Regis' in 1835, just as it was being developed with residential properties:

Then the turnpike-gate, with its civil keeper – then another public-house - then the clear bright pond on the top of the hill, and then the rows of small tenements, with here and there a more ambitious single cottage standing in its own pretty garden, which form the usual gradation from the country to the town.

It has also been home to many prominent families and notable residents of Reading.



Plaque to Joseph Huntley at 21 Christchurch Road

- William Silver Darter, twice Mayor of Reading
- Joseph Huntley founder of Huntley's Biscuits which became Huntley and Palmers, marked by a plaque on the house at 21 Christchurch Road
- William Poulton (brickmaker) and son Francis
- John Swain
- Members of the Sutton family of Suttons Seeds
- Samuel Wheeler, the builder
- Montagu Wheeler, the architect
- The Wilkins family who were filmed in the UK's first fly on the wall documentary, 'The Family' in the 1970s

References:

Daphne Barnes-Phillips, The Top of Whitley Revisited (2013), Corridor Press.

Dennis Wood, Views from the Hill: The Story of Whitley (2017), Scallop Shell Press

Directories, newspapers and Reading local history publications.

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Appendix 3 Listed buildings

Table 3: Listed buildings in Character Area 1

Address of building	HE listing number	Image 1	Image 2	Brief description mainly derived from listing entry
1 Christchurch	1113437	the second se		Grade II
Road, Whitley Villa	https://historicengl and.org.uk/listing/t he-list/list- entry/1113437			Early C19. 2 storeys red brick with grey brick headers. Slate roof with brick end chimneys, gable ends treated with parapets between chimneys. Fleur-de-lys railings and gates. Whitley Villa ghost sign on west elevation. (image Evelyn Williams)
3-9 Christchurch	1154854		None	Grade II
Road https://historicengl and.org.uk/listing/t he-list/list- entry/1154854		Nos 5-9 before 1840. Built as part of Whitley Crescent. Altered. Stucco 3 storey and basement terrace, Nos 7 and 9 with band over ground floor. 1 range of glazing bar sashes each originally.		
				No 3 second half of nineteenth century to match with 5-9
				(image Dennis Wood)

Christchurch Conservation Area Appraisal (Draft, March 2024)

Address of building	HE listing number	Image 1	Image 2	Brief description mainly derived from listing entry
11-25 Christchurch	1321966			Grade II
Road	https://historicengl and.org.uk/listing/t			Built as part of Whitley Crescent before 1840.
	he-list/list- entry/1321966	2 storeys and basement. Brick with slate roof. Glazing bar sash windows.		
			Constant Colores Lationer	Canopy originally extended over 15-25.
			The second se	(image Dennis Wood)
				Plaque to Joseph Huntley on 21 Christchurch Road, unveiled in 2022.
				(image Evelyn Williams)
27-33 Christchurch	1154859		None	Grade II
Road	https://historicengl and.org.uk/listing/t he-list/list- entry/1154859			Circa 1840. Built as part of Whitley Crescent. A good stucco terrace of 2 bay 3 storeys and basement houses. String at 1st floor level, eaves, hipped slate roof. (image John Missenden)

Table 4: Listed buildings in Character Area 2

Address of building	HE listing number	Image 1	Image 2	Brief description mainly derived from listing entry
Christ Church, Christchurch Road	1113441 https://historicengl and.org.uk/listing/t he-list/list- entry/1113441		None	Grade II* Church of England 1861-2 by Henry Woodyer. Enlarged 1874. An extremely good and large High Victorian Church and one of Reading's landmarks. Early English style. North-west tower porch capped by steeple. Built in coursed Pennant sandstone rubble with ashlar quoins and dressings. Tower and steeple are the main features, completed 1875 (though carving unfinished). (image Evelyn Williams)
Christ Church War Memorial, Christchurch Road	1453033 https://historicengl and.org.uk/listing/t he-list/list- entry/1453033			Grade II First World War memorial erected in 1920 and was paid for by public subscription. The architect was W R Howell. Group value with Christ Church. (image Dennis Wood)

Christchurch Conservation Area Appraisal (Draft, March 2024)

Address of building	HE listing number	Image 1	Image 2	Brief description mainly derived from listing entry
Christchurch (old) Vicarage, 2 Vicarage Road	1113601 https://historicengl and.org.uk/listing/t he-list/list- entry/1113601			Grade II Designed by Alfred Waterhouse. 2 and 3 storeys of grey brick with quoins and dressings of red brick. Old tile roof with gables. Toothed brick eaves and verges. Red brick chimneys, large chimney to east with grey tumbling brick. (image Evelyn Williams)

Appendix 4 Buildings of townscape merit

All properties in Character Area 1 are listed

Table 5: Buildings of townscape merit within Character Area 2

Address of building	Image 1	Image 2	Comment
Somerleaze, Abbey Junior School, Christchurch Road			This house was built for William Silver Darter, twice Mayor of Reading 1850 - 51 and 1851 – 1852. His 'Reminiscences of an Octagenarian' are an important contribution to the social and political history of Reading in the first half of the nineteenth century. The architect is thought to have been Alfred Waterhouse. The school has added extensions in recent years. (image John Missenden/Dennis Wood)
41 Christchurch Road, Mullingar			This picturesque house in Arts & Crafts style was built for Francis Poulton. William Poulton lived there in later life with his son. (image John Missenden/Dennis Wood)
39 Christchurch Road, Hillingdon		None	Hillingdon, including the coach house/stables now Sure Hotel by Best Western. This large and flamboyant example of Reading brick was built for local brickmaker William Poulton. He lived here while serving as Reading Mayor 1899-1900. (image John Missenden)

Address of building	Image 1	Image 2	Comment
35-37 Christchurch Road			This pair of properties on the corner of Christchurch Road and Kendrick Road were built for William Poulton at the end of the nineteenth century. (image John Missenden)
117-119 Kendrick Road		None	These semi-detached properties date from the late nineteenth century and have been significantly extended to provide hotel accommodation. (image John Missenden)
11 Glebe Road, Whitley Glebe			Architect Montagu Wheeler designed this house for himself and lived there from 1900-1916. Pevsner describes this as '…free Cotswold seventeenth century style, otherwise barely seen in Reading'. (image John Missenden/Dennis Wood)

Address of building	Image 1	Image 2	Comment
12 Christchurch Gardens (Upper Cross/ Burge House/ Abbey Gardens (Abbey Juniors)).		None	(Upper Cross / Burge House/ Abbey Gardens (Abbey Juniors)) The architects of this house were Morris & Stallwood. Most recently it has been part of Abbey Junior School and previously lodgings for the Crown Court judge when visiting Reading. (image Dennis Wood)

Table 6: Buildings of townscape merit within Character Area 3

Address of building	Image 1	lmage 2	Comment
Hindu Temple (previously Whitley Methodist Hall)		THIS STOLEN - LOOP - LO	Whitley Methodist Hall was designed in Edwardian Baroque style by Cooper and Howell, a partnership between J O Cooper and W R Howell that practised between 1891 and 1905. The interior of the building retains the first floor gallery. (image Evelyn Williams)

Address of building	Image 1	lmage 2	Comment
9 Milman Road			Whitley Methodist Hall was designed in Edwardian Baroque style by Cooper and Howell, a partnership between J O Cooper and W R Howell that practised between 1891 and 1905. The interior of the building retains the first floor gallery. (image Evelyn Williams)
Brighton Terrace			Built in 1883, this three storey terrace in polychrome brickwork with a tile string course was owned by Samuel Gostage at the end of the ninteenth century but the architect is unknown. (image Dennis Wood/Evelyn Williams)

Address of building	Image 1	Image 2	Comment
St Leonards Terrace		None	Built in 1888, this three storey terrace is covered by an Article 4 direction to protect its polychrome brickwork. The architect is unknown. (image John Missenden)
Weymouth Terrace		None	Compared with the other two seaside locations on the west side of Whitley Street/ Basingstoke Road, Weymouth is smaller in scale but has the best preserved paths and railings of all three. A plaque has the date '1892' and initials 'O' and 'D'. The architect is unknown but the 'relieving arch' pattern is reminiscent of that at 75-81 Whitley Street. (image Dennis Wood)
Peacock Cottage and 20-22 Basingstoke Road		None	These three cottages with a range of buildings behind Peacock Cottage built c1887 are less grand than the three terraces and sit immediately opposite the junction with Christchurch Gardens. (image Dennis Wood)

Table 7: Buildings of townscape merit within Character Area 4

Address of building	Image 1	Image 2	Comment
Wellington Arms, 70 Whitley Street		None	The present building dates from 1897 and was designed by local architect W Ravenscroft. It was for many years a Simonds public house. The pub closed in the 2010s and was sympathetically converted to apartments with a retail unit (Greggs) below. (image Dennis Wood)
65-71 Whitley Street, Conduit Crescent		None	These two pairs of semi-detached houses are some of the oldest in the area and date from at least the 1830s. Just above the fascia board is a ghost sign 'Conduit Crescent' which was the name given to this part of the street and the corner to the south which was developed much later. (image Evelyn Williams)
73-81 Whitley Street (continuation of Conduit Crescent)			These properties were built on part of Conduit Crescent in the 1890s. Local architect Joseph Morris may have designed them as they were built by the People's Investment Company, of which he was Chairman. (image Evelyn Williams)

Address of building	Image 1	Image 2	Comment
Whitley Pump		<complex-block></complex-block>	This three-quarters replica of the 1860s pump and drinking trough at the junction of Whitley Street and Christchurch Road was unveiled by Councillor Trish Thomas in May 1999. There is a kerbside plaque on the east side of Whitley Street commemorating the unveiling (replaced in May 2023). (image Evelyn Williams)

Table 8: Buildings of townscape merit within Character Area 5

Address of building	Image 1	lmage 2	Comment
2 Christchurch Road			This property together with nos 4-14 was built around the same time as those on Glebe Road and Christchurch Gardens. No 2 is a detached property, for many years operating as a doctors surgery (image Evelyn Williams)

Address of building	Image 1	Image 2	Comment
4-14 Christchurch Road			These properties were built around the same time as those on Glebe Road and Christchurch Gardens. Semi-detached houses with patterned grey and red brickwork. (image John Missenden)
Christchurch Gardens (north)		None	Victorian and Edwardian Villas along Christchurch Gardens. This plot of land was developed at the end of the nineteenth century at the same time as 2-14 Christchurch Road. The houses are substantial semi-detached and detached properties with patterned red, grey and cream brickwork. (image Evelyn Williams)
Glebe Road (west)			Victorian and Edwardian Villas along Glebe Road. This plot of land was developed at the end of the nineteenth century at the same time as 2-14 Christchurch Road. The houses are substantial semi-detached and detached properties with patterned grey and cream brickwork. (image John Missenden/Evelyn Williams)

Table 9: Buildings of townscape merit within Character Area 6

Address of building	Image 1	Image 2	Comment
Cintra Lodge gatehouse, 34 Christchurch Road		None	The gatehouse is all that remains of Cintra Lodge. The house was built in the early 1850s and later acquired by Martin Hope Sutton of Suttons Seeds in 1857. The estate was sold on his death in 1903 and was in educational and government use for most of the subsequent years until its demolition in the 1950s. (image Dennis Wood)
26 Cintra Avenue		None	This corner house, dating from 1923 is a striking building having key views from Cintra Park. It was the home of Professor H Hopkins, the inventor of the Endoscope, after whom Hopkins Ward is named in the Royal Berkshire Hospital. (image Google Earth)

Appendix 5 Conservation Area Views

Table 10: Views into the Conservation Area

Location of view	Image
Upwards along Kendrick Road, through the aisle of mature trees, rises centrally Woodyer's handsome tower and spire. As one approaches, the nave and chancel come into view with the war memorial in front. (image Evelyn Williams)	
Westwards along Christchurch Road from opposite Cintra Avenue, the view is closed off by Whitley Villa and Whitley Crescent's late Georgian houses, the Whitley Pump and then Whitley Hall. (image Dennis Wood)	
Along Whitley Street from the junction in front of the Pheasant public house, the view takes in the shopfronts of the C19 houses on the left, the Whitley Pump roundabout and the former Wellington Arms, the Whitley Hall and the cottages on the right. (image Dennis Wood)	

Location of view	Image
Approaching the CA from Northumberland Avenue the spire of Christ Church dominates the skyline. (image Evelyn Williams)	
East along Milman Road towards Christ Church (image Evelyn Williams)	

The spire of Christ Church is a landmark that can be seen from many vantage points around Reading.

Table 11: Views within the Conservation Area

Location of view	Image
From Kendrick Road looking southwards to Christ Church (image John Missenden)	

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Location of view	Image
Looking east along Christchurch Road from the top of Highgrove Street past the Georgian buildings on the left, the Victorian villas on the right and the towering spire of Christ Church in the background.\ (image Evelyn Williams)	
Looking west along Christchurch Road from the top of Kendrick Road past the Georgian buildings on the right, the Victorian villas on the left and towards Whitley Pump and Reading Hindu Temple (image Evelyn Williams)	
From the Whitley Pump roundabout to the north of the buildings that include shopfronts along Whitley Street. (image Evelyn Williams)	
From the Whitley Pump roundabout to the south along the terrace buildings past Milman Road and Christchurch Gardens. (image Dennis Wood)	

Location of view	Image
Westwards along Christchurch Gardens, the two mansions; the Whitley Glebe and the former Judges Lodgings (No 12) and the row of houses of ornate brickwork, closed off by the three Victorian Terraces: Brighton, St Leonards and Weymouth Terrace with three intermediate cottages. (image Evelyn Williams)	
North along Glebe Road towards Joseph Huntley's house on Whitley Crescent. (image Dennis Wood)	
North along Vicarage Road towards Hillingdon (now Best Western Sure Hotel) (image Evelyn Williams)	

Table 12: Views out of the Conservation Area

Location of view	Image
There are good views northwards from the top of plane-tree-lined Kendrick Road towards the town centre panorama and Kendrick View, once owned by the Mitford's on London Road.	
View from Christchurch tower before the traffic calming was put in place.	×
(image Dennis Wood)	
(image Evelyn Williams)	
From Whitley Street, the views down the two routes northwards towards the town, Southampton Street and Mount Pleasant, look at the wide spread of the town centre. The Minster Church, St Giles' and St Laurence's can be seen. (image Dennis Wood)	

Location of view	Image
Eastwards from the CA can be seen the full extent of Christchurch Road, taking in the avenue of pine trees in Cintra Avenue, The Mount CA frontage, and on to the Redlands CA and the entrance to the University of Reading's Whiteknights campus. (image Evelyn Williams)	
From Christchurch Gardens down Northumberland Avenue to the hills beyond (even better in the top deck of the No 5 bus). (image Evelyn Williams)	

Appendix 6 Conservation Area Trees

Location of Tree	Details	TPO number if applicable
12 Christchurch Gardens	6 trees, 1 group	63/05
1 Christchurch Road	1 tree	10/15
30 Christchurch Road	2 trees	84/004
35/37 Christchurch Road	5 trees	35/37 (Variation for TPO 334)
39 Christchurch Road	3 trees	79/06
4 Vicarage Road	1 tree	50/07
11 Glebe Road	4 trees, 1 group	78/08
9 Milman Road	1 tree	174/07

Table 13: Details of trees with a Tree Preservation order within the Conservation Area

Table 14: Details of trees with a Tree Preservation order adjacent to the Conservation Area

Location of Tree	Details	TPO number if applicable
11 Basingstoke Road (Telephone Exchange)	6 trees, 1 group, 1 woodland	65/05
118 Kendrick Road	1 tree	4/17
5 Sutherland Avenue	1 tree	2/23
43 Christchurch Road	1 tree	89/06
51 Christchurch Road	10 trees	155/01
11, 12, 14, 15 & 16 Lancaster Close	8 trees	152/01

Table 15: Other significant trees

Location of tree	Image
5 Christchurch Gardens	1 Albert
(image John Missenden)	

Location of tree	Image
2 Christchurch Road (image Evelyn Williams)	
5 Christchurch Road (image Evelyn Williams)	
Trees on each side of Kendrick Road (image Evelyn Williams)	



Progress Update and Achievements Year to 31 December 2023

1. SUMMARY OF PROGRESS

1.1 Reading CAAC continues to progress its primary objective of updating the appraisals for Reading's conservation areas. Progress this year has unfortunately been slower than we would have liked. Christchurch Conservation Area appraisal review was delivered to Reading Borough Council (RBC) planning officers for consideration and formal stages of the adoption process in August.

1.2 Consideration of planning applications that have heritage impact also represents a significant part of our role in the conservation and enhancement of Reading's heritage. We commented on planning applications/listed building consents/advertising consents for 24 (2022 - 24) buildings or sites.

1.3 Reading's High Streets Heritage Action Zone project (HSHAZ) is now approaching its conclusion. The programme continues until 31 March 2024 and it has been good to see some of the physical and public realm improvements coming to fruition.

1.4 We submitted three (2022 - five) nominations for additions to Reading's <u>List of Locally Important</u> <u>Buildings</u> one of which (The Restoration public house) was added to the local list at the end of the year. We supported the nomination of Reading Bridge by Caversham and District Residents' Association and it was added to the list in time for its 100 year anniversary on 3 October.

1.5 We met on three occasions during 2023. All our meetings are now held as hybrid meetings. Although most are ordinary business meetings we were very pleased to host speakers from Heritage Declares at our meeting in February.

1.6 In the Autumn we began a serious look at the future of CAAC, now seven years old, and ways in which our organisation could meet challenges in governance, membership numbers and skills and better reflects the diversity of Reading's residents.

1.7 We are grateful for the support that we receive from Reading Borough Council, the outgoing Conservation and Urban Design Officer and incoming Conservation Officer, planning and other officers in furthering our objectives.

2. CONSERVATION AREA (CA) APPRAISALS

2.1 The review of the Christchurch Conservation Area (CA) in south Reading was delivered to officers in August 2023. We expect that the appraisal document will go to the Strategic Environment, Planning and Transport Committee in March 2024 in advance of the start of the formal consultation public consultation process.

2.2 Work on the Eldon Square appraisal review continues slowly.

2.3 Reading has 15 CAs. Since the foundation of CAAC, updated appraisal reviews have been adopted by RBC for two: St Peter's and Russell Street/Castle Hill/Oxford Road. Significant work had begun on the two town centre appraisals, Market Place/London Street and St Mary's Butts/Castle Hill, but these were parked because of the Historic Area Appraisal, undertaken as part of the HSHAZ. Nine appraisal reviews have not started.

3. PLANNING APPLICATIONS

3.1 RBC planning department consult us on any planning applications within CAs or affecting listed buildings in the Borough. We also review the lists of planning applications for other proposals which are of interest. We are unable to comment on every proposal on which we are consulted and prioritise those that are of particular concern to our members or where we think we can make a difference.

3.2 The applications we commented on during 2021 and 2022 which remained undecided as at the time of writing last year's report as well as those we commented on during 2023 are listed below. Where the application is marked (*) we were supportive of the proposal. Applications marked (**) had some positive features but improvements were required which meant that we could not support it as it stood.

2021

• 201081 Dukesbridge House – disposed of 6 December 2023

2022

- 210537 Whitley Library (**) withdrawn 18 April 2023
- 220409 & 220410 Caversham Park undecided (new plans submitted during 2023)
- 220567 109b Oxford Road (*) refused 30 March 2023
- 220922 71-73 Caversham Road (Drews) granted subject to legal agreement 29 March 2023 planning applications committee
- 221232 1-15 Queen Victoria Street & 145-148 Friar Street (*) GRANTED 24 May 2023
- 221235 138-144 Friar Street (*) GRANTED 24 May 2023

2023

- 210639 Eaton Court undecided
- 220933 35-39 Friar Street (updated plans) undecided
- 221364 Central Club, London Street granted subject to legal agreement 19 July 2023 planning applications committee
- 221393 81 Hamilton Road withdrawn 21 April 2023
- 221806 & 221807 27-33 Christchurch Road refused 5 January 2024
- 221857 20 Belle Vue Road withdrawn 5 February 2023
- 221860 205 Oxford Road (advertisement consent) consented 13 February 2023

- 221880 23-24 Market Place granted subject to legal agreement 6 December 2023 planning applications committee
- 221916 & 221917 Oracle (redevelopment of Debenhams/Vue cinema blocks) undecided
- 230014 & 230015 183a Oxford Road granted & consented 17 March 2023
- 230075 & 230076 32 St Mary's Butts (**) granted & consented 7 March 2023
- 230107 & 230108 10 Gun Street undecided
- 2300228 & 230381 St Mary's Service Area granted 21 July 2023
- 230259 & 230260 207 Oxford Road granted & consented 13 April 2023
- 230319 & 230320 101 Oxford Road granted subject to legal agreement 6 September 2023 planning applications committee
- 230454 20 Belle Vue Road refused 1 June 2023 and appeal made
- 230462 & 230937 161 Oxford Road withdrawn 10 August 2023
- 230479 & 230480 13-17 London Road refused 8 September 2023
- 230640 & 230641 33 London Street undecided
- 230816 Christchurch Green information board consented 13 July 2023
- 231139 185a Oxford Road (**) undecided
- 231257 2-4 Church Street, Caversham (**) undecided
- 231423 advertising on Broad Street undecided
- 231431 & 231432 101 Oxford Road (**) undecided

4. HIGH STREETS HERITAGE ACTION ZONES (HSHAZ)

4.1 The end of 2022 and beginning of 2023 saw a rush of planning applications, listed building consents and advertising consents related to Reading's High Streets Heritage Action Zone (<u>HSHAZ</u>) project.

4.2 This was the last full year of this four year project based on RBC's successful funding application in 2019. We are now seeing good progress being made on improvements to buildings along Oxford Road, St Mary's Butts and Castle Street. Works were completed on the Simeon monument, Queen Victoria's statue, the Harrinson Testimonial Cross and the Zinzan tomb in the course of the year. The monuments are all prominent features of Reading's public realm.

4.3 The project also includes a community engagement strand and a Cultural Programme.

4.4 We are represented on the HSHAZ project steering group by vice-chair Richard Bennett who also represents Reading Civic Society.

4.5 Historic England's (HE) review of <u>Listed Building</u> descriptions in Reading town centre is now drawing to a close. We are pleased to have contributed and been consulted on the updated listings which are significantly improved.

5. PUBLIC CONSULTATIONS

5.1 As frequent users of Reading Central Library, particularly the local studies section, and the Civic Offices we contributed in July to the consultation on Reading Borough Council's plans to move the Central Library to the same site.

5.2 In July we also contributed to the Oxford Road waste management survey.

6. PLANNING POLICY

6.1 As the year drew to a close the consultation on Reading Borough Council's Local Plan partial update was launched and we will be commenting by the 31 January deadline.

7. LOCAL LISTINGS

7.1 We submitted local listing applications for the following during 2023:

- 64 Tilehurst Road (coach house originally attached to locally listed 62 Tilehurst Road)
- The TGWU signage on 89 Southampton Street
- The Restoration public house 928 Oxford Road added to the local list in December 2023

7.2 We supported Caversham and District Residents' Association nomination of Reading Bridge which was added to the local list in October 2023.

8. OTHER ACTIVITIES

8.1 On 14 May 2023 we participated in the inaugural Reading Walks Festival organised by the Reading Economic Development Agency REDA with a walk around the Eldon Square Conservation Area. You can read about the festival and see some images, including of our walk, here: <u>https://www.visit-reading.com/ideas-and-inspiration/reading-walks-festival</u>.

8.2 We contributed to the survey of monuments and memorials carried out by Reading Civic Society a year or so ago that prioritised cleaning and other works required. A programme of work starting in 2023 included the Spanish Civil War memorial, the Henry 1 cross and Maiwand Lion in the Forbury Gardens and the Edward VII statue by the station.

8.3 We have had positive conversations with Reading's Economic and Development Agency (<u>REDA</u>) covering public realm improvements in the town centre and the need for heritage and craft skills training in Reading which could also contribute to green skills to address the climate emergency.

8.4 We attend Reading Art & Heritage Forum and in November contributed to the survey of how our activities aligned with the 'intentions' of RBC's Culture and Heritage Strategy Statement of Intent which was agreed in January 2023.

9. PRIORITIES FOR 2024

9.1 To expedite the review of a list of less complex CA appraisals to be agreed with RBC.

9.2 Over and above work on appraisals, the main priority for 2024 must be to address the challenges we face going forward as a sustainable organisation into the future. We have held meetings with councillors and officers which have proved positive in supporting our activities and clearing some of the barriers that we felt we were facing. We have also taken a look at and consulted with CAACs in other areas.

Most importantly, new members on the committee are required who have an interest in the built environment of their local area or across Reading and can play an active role in meeting our objectives working with Reading Borough Council. In return membership of the committee for an individual or representative of an organisation provides a forum for mutual support and the sharing of knowledge and expertise.

9.3 The last few months of HSHAZ will no doubt be intensive for us but we hope to see the final results of some of the building rescue and public realm improvements as well as the cultural programme.

Evelyn Williams Reading CAAC Chair 29 January 2024

Strategic Environment, Planning and Transport Committee



13 March 2024

Title	Air Quality Action Plan Review
Purpose of the report	To make a decision
Report status	Public report
Report author	Ross Jarvis, Principal Air Quality Project Officer
Lead councillor	Councillor Ennis, Lead Councillor for Climate Strategy and Transport
Corporate priority	Healthy Environment
Recommendations	 The Committee is asked: 1. To approve the Air Quality Action Plan for adoption following the conclusion of the consultation. 2. To approve the Air Quality Action Plan being sent to Defra for their approval to allow formal adoption.

1. Executive summary

- 1.1. Reading's air quality (NO₂) is improving; however, we still have some locations which are above the UK and World Health Organization (WHO) air quality limits. The Draft Air Quality Action Plan (AQAP) attached at Appendix 4 will target these locations but not just for compliance with UK or WHO standards, but to push further to improve air quality across the whole of Reading.
- 1.2. The Action Plan identifies the areas where we need to work together with business, the public and across Council departments such as Transport, Planning, Public Health and Sustainability to improve air quality. The actions identified (see table 5 of AQAP in appendix 4) are those that officers plan to work towards implementing over the next five years to benefit people's quality of life, the environment and improve the community we live in by having cleaner air.
- 1.3. The review of the AQAP was started in 2020 but delayed due to the impact of covid on travel behaviour. The Draft AQAP was presented at SEPT in November 2023 and approved for consultation.
- 1.4. The public consultation found there to be strong approval for the majority of actions (see appendix 1 for summary of responses) but low confidence in them being effective at addressing air pollution. In response some minor changes have been made to the actions, including, where the data is available, better quantification of the impact individual measures will have on air quality.
- 1.5. The purpose of this report is to present the AQAP to the Committee to be approved for adoption after considering comments received during consultation.

2. Policy context

- 2.1. The Council's new Corporate Plan has established three themes for the years 2022/25. These themes are:
 - Healthy Environment
 - Thriving Communities

- Inclusive Economy
- 2.2. These themes are underpinned by "Our Foundations" explaining the ways we work at the Council:
 - People first
 - Digital transformation
 - Building self-reliance
 - Getting the best value
 - Collaborating with others
- 2.3. Full details of the Council's Corporate Plan and the projects which will deliver these priorities are published on the <u>Council's website</u>. These priorities and the Corporate Plan demonstrate how the Council meets its legal obligation to be efficient, effective and economical.
- 2.4. The Environment Act 1995 requires Local Authorities to review and assess local air quality and to take action to improve air quality where exceedances of objective levels are identified. To this end Reading have declared an Air Quality Management Area and put in place an AQAP. Guidance recommends updating AQAPs every five years. The current action plan was adopted in 2016. Reading Borough Council is now fulfilling its statutory duty by updating its AQAP. These actions are linked to wider objectives including health and wellbeing, the climate emergency and social inequalities.

3. The Proposal

Current Position

- 3.1. The previous AQAP focused on actions to reduce Nitrogen Dioxide (NO₂) to achieve compliance with national objectives. As a result, our monitoring network shows there have been considerable improvements in NO₂ levels. For example, in 2016 there were exceedances of the annual average objective ($40\mu g/m^3$) at 18 different locations, in 2022 there was an exceedance at only 1 location. The maximum annual average level for NO₂ in 2016 was $50\mu g/m^3$, in 2022 it was $43\mu g/m^3$.
- 3.2. The new AQAP continues to focus on reducing NO₂ to achieve compliance but combines this with actions targeting $PM_{2.5}$. This is to align with the increasing evidence around $PM_{2.5}$ being the most harmful to health and the policy changes that have followed.
- 3.3. The AQAP was presented at SEPT in November 2023 and approved for consultation. The public consultation ran from 6 December 2023 to 17 January 2024.
- 3.4. 217 responses were received to the consultation. A summary of the responses to the consultation survey is attached in appendix 1.
- 3.5. 65% of respondents agreed air quality is an important issue, compared with 21% who disagree. Only 14% of respondents thought that the AQAP would effectively address air pollution, 37% did not think it would address air pollution, with 47% being unsure.
- 3.6. To interrogate the reasons why people did not think the AQAP would be effective, the comments received in relation to this have been categorised. There were a range of reasons given (See graph in appendix 2 for the full range of responses) the most common being that tougher action such as a Clean Air Zone is needed. Other popular reasons were: Bus, Park & Ride and Trains are too expensive, needs more emphasis on cycling and walking, needs more support for low emission vehicles.
- 3.7. Proposed actions from the AQAP are split into three broad categories (Cleaner Transport, Policy and Guidance Development, Public Health and Awareness) and responses to the consultation under each are looked at below.
 - Cleaner Transport The largest percentage of responses were in strong agreement (between 63-31% across the actions) with 14 of the 17 proposed transport related actions which are aligned to the emerging Reading Transport Page 172

Strategy. Opinions on the proposed actions to introduce more 20mph zones, differential emission-based parking rates, reprioritising road space away from cars, were more polarised, with the actions still having a strong agreement from a large percentage, but an equally large percentage in strong disagreement with the plan.

- **Policy and Guidance Development –** The responses show strong agreement (between 41-23%) or agreement (29-20%) across our proposed policy related actions.
- **Public Health and Awareness** Most people strongly agreed (69-25%) or agreed (30-19%) with the actions within this category. There was a higher level of ambivalence to some of these actions (29-17% Neither agree or disagree). This may be because people see that these actions do not have a direct impact on improving air quality, however raising public awareness of the issue is considered to be a critical function of the AQAP.
- 3.8. The consultation asked if there are any other measures that people would like to see in the action plan, and if so, what would they be. Comments received for this have been categorised (see appendix 3).
- 3.9. Many suggestions were received regarding additions to the plan. Almost all the suggested ideas are already being addressed by suggested actions in the plan or are outside the scope of Reading Borough Council's control.
- 3.10. A written response was received by Reading Friends of the Earth. They suggested improved monitoring of PM2.5; more detailed analysis of the impact of improving air quality on long-term and short-term health; and to use this information to make the case for better transport integrating the arguments on clean air, climate change and congestion.
- 3.11. In addition to responses from the public, Defra also sent their appraisal of the Draft AQAP. They accepted the draft on the basis that their commentary is considered and incorporated into the Final AQAP. Specifically, more quantification of the measures' impacts are required for a Final AQAP to be considered acceptable, so that the AQAP clearly demonstrates how and when the measures contribute toward compliance. This would also enable a cost benefit analysis to be carried out.
- 3.12. Defra also asked for a definitive estimated year of compliance to be provided both with and without measures to demonstrate when this will be achieved.

Options Proposed

- 3.13. Most of the responses received to the consultation agreed with the proposed actions, therefore it is not proposed to make many changes.
- 3.14. There was some polarisation of views amongst the public for a limited number of transport related schemes. These schemes taken from the Reading Transport Strategy (RTS) aim to promote the development of a sustainable transport system in Reading. Objectives from the RTS such as promoting a clean green Reading with improved air quality for all; supporting healthy lifestyles; and connecting people and places by promoting the use of sustainable alternatives to the private car align with the aim of the AQAP.
- 3.15. Almost all the measures that members of the public have suggested for inclusion in the AQAP are already included. Suggestions that had not been included that it is now proposed to add to the list of actions are:
- 3.16. Tree Planting and Greening Align with Tree Strategy, maximise tree planting and greening in 'tree corridors' along the Air Quality Management Area (AQMA) considering the choice of species to maximise the tolerance to and pollution trapping potential.
- 3.17. RBC Fleet It is proposed to add an action to show that RBC intend to lead by example by continuing to upgrade the RBC fleet to low emission vehicles in line with the vehicle

replacement programme removing tail pipe emissions from the fleet, thereby helping to improve air quality.

- 3.18. It is proposed to remove the Cross Thames Travel Scheme (Measure no. RDAQ10) from the list of actions. Although popular with respondents to the consultation (55% strongly agree) it is unlikely to be achievable in the lifespan of the AQAP (2024 to 2029).
- 3.19. Reading Friends of the Earth suggested a health impact analysis of actions on public health. This is similar to a project that an air quality grant bid was submitted to Defra in November for. The suggestion links in with the proposals to increase PM_{2.5} monitoring, undertake health promotion work with the NHS and implement an air alert service for residents, (measure nos. RDAQ27, RDAQ29 and RDAQ31) although it is acknowledged that it is not obvious from the current description. This will be made clearer in the final version.
- 3.20. Following the appraisal response of the AQAP from Defra, efforts are being made to quantify each actions impact on NO₂ in line with the recommendation. However, it is apparent that this will not be possible for some of the transport schemes due to the early stage that they are at in their development. Officers have proposed to use what data there is to quantify measures as accurately as possible for now and to add in additional data as schemes are developed.
- 3.21. Defra have been asked if this approach is acceptable, they have responded by saying that they appreciate that it may be difficult for LAs to quantify all measures and that we should use what information is available and update the plan when further data becomes available.
- 3.22. We will also follow the other recommendation from Defra, to estimate the year of compliance. This is expected to be during the lifespan of the action plan.
- 3.23. When NO₂ compliance has been achieved for three consecutive years LAs are required to revoke their AQMA. This would mean that we would no longer be required to have an air quality action plan, although there is still a requirement for an air quality strategy.

Alternative Option

3.24. There is no alternative option, the AQAP is a statutory requirement when an AQMA is in place.

4. Contribution to strategic aims

- 4.1. The development and delivery of the AQAP will help to deliver the following service priorities in the Council's Corporate Plan:
 - **Healthy Environment** Air pollution is associated with a number of adverse health impacts. It is recognised as a contributing factor in the onset of heart disease, lung conditions and cancer. The actions taken under the proposal would help to improve air quality which would directly contributing to the service priority from the Council's Corporate Plan
 - Thriving Communities Poor air quality disproportionately affects the most vulnerable adults and children. Those living in more deprived areas also tend to be exposed to higher levels of air pollution, therefore by improving air quality the proposal will help to tackle these inequalities in our society.

5. Environmental and climate implications

5.1. All the actions within the AQAP aim to improve local air quality. The main pollutants of concern for local air quality are Nitrogen Dioxide and Particulate Matter (PM₁₀ and PM_{2.5}), from sources of combustion. Measures to lower these pollutants, such as those encouraging active travel, or less/better burning of solid fuels simultaneously also lower Carbon emissions. In so doing these projects help the Council work towards the target of being zero carbon by 2030.

5.2. A Climate Impact Assessment has been completed in respect of this report. It suggests a 'net medium positive' impact arising from the adoption of the AQAP.

6. Community engagement

6.1. The consultation process as laid out in the Local Air Quality Management guidance was followed to ensure that all stakeholders were able to comment on the proposed plan prior to adoption. This included steering group members, statutory consultees and the public.

7. Equality impact assessment

- 7.1. Under the Equality Act 2010, Section 149, a public authority must, in the exercise of its functions, have due regard to the need to:
 - Eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under this Act.
 - Advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it.
 - Foster good relations between persons who share a relevant protected characteristic and persons who do not share it.
- 7.2. The strategy has been developed in line with these requirements and the delivery of individual elements of the strategy be subject to further Equality Impact Assessments (EIA) as they are developed.

8. Legal implications

8.1. The Environment Act 1995 requires Local Authorities to review and assess local air quality and to take action to improve air quality where exceedances of objective levels are identified. Reading Borough Council is fulfilling its statutory duty by updating its AQAP.

9. Financial implications

9.1. The development of the draft AQAP used consultancy management support (Phlorum) paid for through grant funding. The redrafting work was £5000, which is being covered by a combination of remaining grant funding and the Environmental Protection and Nuisance team budget.

10. Timetable for implementation

10.1. Following Council approval being given at SEPT the AQAP must be sent to Defra for final approval before it can be formally adopted.

11. Background papers

11.1. There are none.

Appendices

- 1. Summary Report of Consultation Responses
- 2. Graph Showing the Reasons Given for Why the AQAP Will Not Effectively Address Air Pollution
- 3. Graph Showing the Additional Measures People Would Like to See Included in the AQAP
- 4. Reading Air Quality Action Plan 2024-2029

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Air Quality Action Plan 2024-2029 consultation

https://consult.reading.gov.uk/dens/air-quality-action-plan-2024-2029-consultation

This report was created on Wednesday 24 January 2024 at 11:10

The activity ran from 06/12/2023 to 17/01/2024

Responses to this survey: 217

1: What is your name?

Name

There were 187 responses to this part of the question.

2: What is your email address?

Email

There were 180 responses to this part of the question.

3: What is your organisation?

Organisation

There were 98 responses to this part of the question.

4: To what extent do you agree or disagree that poor Air Quality is an importance issue in the borough?

Importance of Air Quality

There were 214 responses to this part of the question.



Option	Total	Percent
Strongly agree	101	46.54%
Tend to agree	37	17.05%
Neither agree or disagree	31	14.29%
Tend to disagree	32	14.75%
Strongly disagree	13	5.99%
Not Answered	3	1.38%

5: Do you think the Council's Air Quality Action Plan will effectively address air pollution in the borough?

Effectiveness of AQAP

There were 213 responses to this part of the question.



Option	Total	Percent
Yes	31	14.29%
Not Sure	102	47.00%
No	80	36.87%
Not Answered	4	1.84%

If you answered no to the above, please provide a reason for this response

There were 101 responses to this part of the question.

6: To what extent do you agree or disagree with the proposed actions within the Air Quality Action Plan for Cleaner Transport?

Cleaner Transport actions - Vehicle speed reduction 20mph zones

Strongly agee Tend to agree Neither agree or disagree Tend to disagree Strongly disagree Not Answered 0 10 20 30 40 50 60 70 80

There were 215 responses to this part of the question.

Option	Total	Percent
Strongly agree	62	28.57%
Tend to agree	35	16.13%
Neither agree or disagree	19	8.76%
Tend to disagree	32	14.75%
Strongly disagree	67	30.88%
Not Answered	2	0.92%
Cleaner Transport actions - Differential emission-based parking rates



Option	Total	Percent
Strongly agree	49	22.58%
Tend to agree	41	18.89%
Neither agree or disagree	23	10.60%
Tend to disagree	29	13.36%
Strongly disagree	74	34.10%
Not Answered	1	0.46%

Cleaner Transport actions - Reading Buses investment programme



Option	Total	Percent
Strongly agree	107	49.31%
Tend to agree	57	26.27%
Neither agree or disagree	26	11.98%
Tend to disagree	13	5.99%
Strongly disagree	12	5.53%
Not Answered	2	0.92%

Cleaner Transport actions - Implementation of EV Infrastructure Strategy



Option	Total	Percent
Strongly agree	82	37.79%
Tend to agree	52	23.96%
Neither agree or disagree	35	16.13%
Tend to disagree	16	7.37%
Strongly disagree	31	14.29%
Not Answered	1	0.46%

Cleaner Transport actions - Improve taxi fleet emissions



Option	Total	Percent
Strongly agree	97	44.70%
Tend to agree	56	25.81%
Neither agree or disagree	46	21.20%
Tend to disagree	9	4.15%
Strongly disagree	8	3.69%
Not Answered	1	0.46%

Cleaner Transport actions - Encourage introduction of more School Streets



Option	Total	Percent
Strongly agree	70	32.26%
Tend to agree	32	14.75%
Neither agree or disagree	47	21.66%
Tend to disagree	34	15.67%
Strongly disagree	32	14.75%
Not Answered	2	0.92%

Cleaner Transport actions - Promote active and low emission travel options



Option	Total	Percent
Strongly agree	107	49.31%
Tend to agree	43	19.82%
Neither agree or disagree	27	12.44%
Tend to disagree	17	7.83%
Strongly disagree	22	10.14%
Not Answered	1	0.46%

Cleaner Transport actions - Reprioritise road space away from cars on strategic highway



Option	Total	Percent
Strongly agree	61	28.11%
Tend to agree	28	12.90%
Neither agree or disagree	26	11.98%
Tend to disagree	26	11.98%
Strongly disagree	74	34.10%
Not Answered	2	0.92%

Cleaner Transport actions - Build a new bridge across the Thames



Option	Total	Percent
Strongly agree	120	55.30%
Tend to agree	37	17.05%
Neither agree or disagree	20	9.22%
Tend to disagree	10	4.61%
Strongly disagree	28	12.90%
Not Answered	2	0.92%

Cleaner Transport actions - Connecting neighbourhoods by introducing more sustainable travel routes between areas



Option	Total	Percent
Strongly agree	94	43.32%
Tend to agree	48	22.12%
Neither agree or disagree	41	18.89%
Tend to disagree	16	7.37%
Strongly disagree	14	6.45%
Not Answered	4	1.84%

Cleaner Transport actions - Discounted bus fares for young people



Option	Total	Percent
Strongly agree	87	40.09%
Tend to agree	52	23.96%
Neither agree or disagree	52	23.96%
Tend to disagree	11	5.07%
Strongly disagree	14	6.45%
Not Answered	1	0.46%

Cleaner Transport actions - Charge HGVs using Reading as a rat run



Option	Total	Percent
Strongly agree	137	63.13%
Tend to agree	26	11.98%
Neither agree or disagree	27	12.44%
Tend to disagree	14	6.45%
Strongly disagree	12	5.53%
Not Answered	1	0.46%

Cleaner Transport actions - Bus rapid transit schemes



Option	Total	Percent
Strongly agree	70	32.26%
Tend to agree	58	26.73%
Neither agree or disagree	53	24.42%
Tend to disagree	14	6.45%
Strongly disagree	20	9.22%
Not Answered	2	0.92%

Not Answered

Cleaner Transport actions - Park and Ride expansions



There were 215 responses to this part of the question.

Option	Total	Percent
Strongly agree	58	26.73%
Tend to agree	58	26.73%
Neither agree or disagree	56	25.81%
Tend to disagree	21	9.68%
Strongly disagree	22	10.14%
Not Answered	2	0.92%

Cleaner Transport actions - New pedestrian and cycling routes



Option	Total	Percent
Strongly agree	91	41.94%
Tend to agree	40	18.43%
Neither agree or disagree	22	10.14%
Tend to disagree	27	12.44%
Strongly disagree	34	15.67%
Not Answered	3	1.38%

Cleaner Transport actions - Consolidation centres with last mile deliveries by zero emission vehicles



Option	Total	Percent
Strongly agree	68	31.34%
Tend to agree	50	23.04%
Neither agree or disagree	54	24.88%
Tend to disagree	14	6.45%
Strongly disagree	28	12.90%
Not Answered	3	1.38%

7: To what extent do you agree or disagree with the proposed actions within the Air Quality Action Plan for Policy and Guidance Development?

Policy and guidance development actions - Air quality planning guidance for construction and operational developments



Option	Total	Percent
Strongly agree	69	31.80%
Tend to agree	57	26.27%
Neither agree or disagree	53	24.42%
Tend to disagree	17	7.83%
Strongly disagree	16	7.37%
Not Answered	5	2.30%

Policy and guidance development actions - Expansion of Smoke Control Area



Option	Total	Percent
Strongly agree	73	33.64%
Tend to agree	55	25.35%
Neither agree or disagree	40	18.43%
Tend to disagree	22	10.14%
Strongly disagree	25	11.52%
Not Answered	2	0.92%

Policy and guidance development actions - Use of wood burning enforcement powers



Option	Total	Percent
Strongly agree	73	33.64%
Tend to agree	43	19.82%
Neither agree or disagree	42	19.35%
Tend to disagree	22	10.14%
Strongly disagree	35	16.13%
Not Answered	2	0.92%

Policy and guidance development actions - Retrofit of buildings to reduce emissions



Option	Total	Percent
Strongly agree	88	40.55%
Tend to agree	64	29.49%
Neither agree or disagree	37	17.05%
Tend to disagree	14	6.45%
Strongly disagree	12	5.53%
Not Answered	2	0.92%

Policy and guidance development actions - Encourage uptake of fine particulate filters in commercial kitchen extraction systems



Option	Total	Percent
Strongly agree	89	41.01%
Tend to agree	64	29.49%
Neither agree or disagree	45	20.74%
Tend to disagree	8	3.69%
Strongly disagree	9	4.15%
Not Answered	2	0.92%

Policy and guidance development actions - Develop a non-road mobile machinery emissions policy



Option	Total	Percent
Strongly agree	50	23.04%
Tend to agree	44	20.28%
Neither agree or disagree	87	40.09%
Tend to disagree	16	7.37%
Strongly disagree	16	7.37%
Not Answered	4	1.84%

8: To what extent do you agree or disagree with the proposed actions within the Air Quality Action Plan for Public Health and Awareness?

Public health and awareness actions - Introduce a pollution alert service



Option	Total	Percent
Strongly agree	70	32.26%
Tend to agree	52	23.96%
Neither agree or disagree	44	20.28%
Tend to disagree	25	11.52%
Strongly disagree	23	10.60%
Not Answered	3	1.38%

Public health and awareness actions - Undertake awareness events at schools



Option	Total	Percent
Strongly agree	69	31.80%
Tend to agree	74	34.10%
Neither agree or disagree	37	17.05%
Tend to disagree	17	7.83%
Strongly disagree	17	7.83%
Not Answered	3	1.38%

Public health and awareness actions - Undertake awareness and health promotion work with the NHS



Option	Total	Percent
Strongly agree	67	30.88%
Tend to agree	65	29.95%
Neither agree or disagree	48	22.12%
Tend to disagree	21	9.68%
Strongly disagree	14	6.45%
Not Answered	2	0.92%

Public health and awareness actions - Mobility as a service (MaaS) scheme



Option	Total	Percent
Strongly agree	36	16.59%
Tend to agree	58	26.73%
Neither agree or disagree	89	41.01%
Tend to disagree	11	5.07%
Strongly disagree	17	7.83%
Not Answered	6	2.76%

Public health and awareness actions - Increase PM2.5 monitoring to improve understanding of levels and sources



Option	Total	Percent
Strongly agree	84	38.71%
Tend to agree	47	21.66%
Neither agree or disagree	53	24.42%
Tend to disagree	15	6.91%
Strongly disagree	15	6.91%
Not Answered	3	1.38%

Public health and awareness actions - Smoke Control Area awareness campaign



Option	Total	Percent
Strongly agree	65	29.95%
Tend to agree	66	30.41%
Neither agree or disagree	44	20.28%
Tend to disagree	21	9.68%
Strongly disagree	18	8.29%
Not Answered	3	1.38%

Public health and awareness actions - Bonfire/garden waste awareness campaign



Option	Total	Percent
Strongly agree	77	35.48%
Tend to agree	52	23.96%
Neither agree or disagree	42	19.35%
Tend to disagree	27	12.44%
Strongly disagree	18	8.29%
Not Answered	1	0.46%

Public health and awareness actions - Engagement in National Clean Air Day



Option	Total	Percent
Strongly agree	57	26.27%
Tend to agree	41	18.89%
Neither agree or disagree	64	29.49%
Tend to disagree	24	11.06%
Strongly disagree	29	13.36%
Not Answered	2	0.92%

Public health and awareness actions - Indoor air quality awareness campaign



Option	Total	Percent
Strongly agree	62	28.57%
Tend to agree	62	28.57%
Neither agree or disagree	52	23.96%
Tend to disagree	18	8.29%
Strongly disagree	21	9.68%
Not Answered	2	0.92%

9: Are there any specific air pollution sources you are concerned about near your home?

Your Ward



Option	Total	Percent
Peppard	1	0.46%
Thames	5	2.30%
Mapledurham	2	0.92%
Caversham	41	18.89%
Battle	7	3.23%
Kentwood	1	0.46%
Norcot	3	1.38%
Tilehurst	6	2.76%
Abbey	7	3.23%

Reading Borough Council

Southcote	8	3.69%
Minster	1	0.46%
Katesgrove	5	2.30%
Redlands	8	3.69%
Park	6	2.76%
Whitley	9	4.15%
Church	2	0.92%
Not Answered	105	48.39%

Air pollution source of concern

10: Are there any other measures that you would like to see included in the Air Quality Action Plan?

Would you like to see any other measures included?



There were 190 responses to this part of the question.

Option	Total	Percent
Yes	116	53.46%
No	74	34.10%
Not Answered	27	12.44%

If you answered yes, please provide the measure you would like to see included

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Reading Borough Council

Reading Borough Council

Air Quality Action Plan

In fulfilment of Part IV of the Environment Act 1995

Local Air Quality Management

2024 - 2029





Reading Borough Council Air Quality Action Plan – 2024 - 2029

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Information	Reading Borough Council Details
Local Authority Officer	Ross Jarvis
Department	Environmental Protection & Nuisance
Address	Reading Borough Council Civic Offices Bridge Street Reading RG1 2LU
Telephone	0118 937 2314
E-mail	Ross.Jarvis@reading.gov.uk
Report Reference Number	Draft Air Quality Action Plan (2024- 2029) – <i>Consultation Document</i>
Date	21 st November 2023

Forward

Foreword from Cllr John Ennis, Lead Councillor for Climate Strategy and Transport

We are very pleased to present the updated Air Quality Action Plan (AQAP) for Reading that sets out our vision for delivering air quality improvements across our borough over the next five years.

During the challenging times of the Covid-19 pandemic we had periods in the lockdowns where we experienced a slowdown in traffic numbers that resulted in noticeable environmental benefits. We saw temporary improvements in air quality across Reading during this period, and this coincidentally showed us the level of actions needed to reduce pollution.

The Reading AQAP was initially drafted during the Covid-19 pandemic (2020 and 2021) and has since been reviewed and updated. During this period, we have looked at the current situation around air quality, evaluated options to improve it and have explored future opportunities for improving local air quality for our residents, visitors, businesses and the environment.

Improving air quality goes hand in hand with the Council's major policy areas, including health and social inequality, the Climate Emergency Strategy, the Reading Transport Strategy and Reading's 2050 Vision. We will drive the change in partnership with all communities across Reading by focusing on three themes:

- Healthy environment
- Thriving communities
- Inclusive economy

Reading's air quality is improving, however, we still have some locations in the borough which are above the UK and World Health Organization (WHO) air quality limits. This Action Plan will target these locations but not just for compliance with UK or WHO standards, but to push further to improve air quality for the sake of residents' health across the whole of Reading.

This Action Plan identifies the areas where we need to work together to improve air quality. With your support, these actions will help to benefit people's quality of life, the environment and improve the communities we all live in by having cleaner air.

Executive Summary

This Air Quality Action Plan (AQAP) has been produced as part of our statutory duties required by the Local Air Quality Management framework. It outlines the action we will take to improve air quality in Reading between 2024 and 2029.

This action plan replaces the previous action plan which ran from 2016 to 2020. Since 2016, we have made substantial progress in our attempts to enable improvements in air quality. Projects delivered through the past action plan include:

- Construction of Green Park Station, which formally opened in May 2023. The new railway station offers a sustainable travel alternative to private vehicle use, connecting the Green Park business area, Select Car Leasing (Madejski) Stadium and the Green Park Village residential area to the Great Western Railway line.
- Commencement of the Southern Bus Rapid Transit (BRT) corridor, offering a sustainable travel option connecting the south of Reading to central Reading which will be largely unaffected by local road congestion.
- Introduction of Park & Ride schemes at Thames Valley Park, Winnersh Triangle and Mereoak, to reduce the number of car trips to central Reading, thereby reducing congestion and emissions.
- Provision of the National Cycle Network 422, offering a safer east-west crosstown route, to encourage and prioritise active travel.
- Construction of Christchurch Bridge in September 2015, which offers a link to pedestrians and cyclists exclusively, connecting central Reading to Caversham's riverside areas, to further encourage and prioritise active travel.
- Reading's bus fleet has received substantial investment in recent years, enabling the retrofitting of buses with newer, cleaner exhaust engines. 100% of Reading's bus fleet now comprises hybrid, natural gas or Euro 6 diesel engines, making the fleet one of the cleanest in the UK.
- In 2020, Reading Borough Council introduced a taxi emissions policy and reduced taxi licensing fees for ultra-low emission and electric vehicle drivers, by 25% and 50%, respectively. This will encourage the uptake of low- or -zero-

emission taxis, reducing the air quality impacts these have on the local road network.

The above list of projects is not inclusive of all the successful measures undertaken by Reading Borough Council in recent years, but the list serves to highlight some of the key achievements made to improving air quality across Reading.

The previous AQAP focussed on actions to reduce nitrogen dioxide (NO₂) emissions, with the intention of achieving compliance with national objectives. This new AQAP continues these ambitions, but also places considerable emphasis on targeting PM_{2.5} emission reductions. This is to align with the increasing evidence around PM_{2.5} being extremely harmful to health, and the changes to national policy that have followed as a result.

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. Reading Borough Council is committed to reducing the exposure of people in Reading to poor air quality in order to improve health.

We have developed actions that can be considered under six broad topics:

• Policy guidance and development control

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

- Promoting low emission plant
- Promoting low emission transport
- Public information
- Transport planning and infrastructure
- Traffic management

Our priorities are to tackle emissions from local transport sources that impact on key locations and communities by developing policies and infrastructure plans to enable the prioritisation of sustainable and active travel modes.

Policy is to be developed to tackle domestic wood burning in Reading along with local planning guidance to better manage and control development emissions. Other initiatives include setting up a service for alerting and protecting vulnerable individuals during air pollution episodes and developing and implementing an Electric Vehicle Infrastructure Strategy.

In this AQAP we outline how we plan to effectively tackle air quality issues within our control. However, we recognise that there are a large number of air quality policy areas that are outside of our influence (such as vehicle emissions standards), but for which we may have useful evidence, and so we will continue to work with regional and central government on policies and issues beyond Reading's direct influence.

Responsibilities and Commitment

This AQAP was prepared by the Phlorum Limited and the Principal Air Quality Project Officer of Reading Borough Council with the support and agreement of the following officers and departments:

- Assistant Director, Planning, Transport & Public Protection: James Crosbie.
- Regulatory Services Public Protection Manager: Matt Golledge.
- Regulatory Services Community Protection Manager: Catherine Lewis.
- Public Health and Wellbeing Team Public Health Consultant: Martin White.
- Transport Transport Programme Manager: Chris Maddocks.
- Transport Project Manager: James Clements.

- Transport Senior Transport Planner: James Turner.
- Head of Climate Strategy: Peter Moore.
- Sustainability Manager: Ben Burfoot.
- Public Health: David Munday.
- Planning Planning Policy Manager: Mark Worringham.

This AQAP has been approved by:

Keith Townsend – Executive Director for Economic Growth & Neighbourhood Services

Ruth McEwan – Lead Councillor Education and Public Health

John Ennis – Lead Councillor for Climate Strategy & Transport

This AQAP has been signed off by a Director of Public Health.

John Ashton – Interim Director for Public health

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This AQAP will be subject to an annual review, appraisal of progress and reporting to the Strategic Environment, Planning and Transport Committee. Progress each year will be reported in the Annual Status Reports (ASRs) produced by Reading Borough Council, as part of our statutory Local Air Quality Management duties.

If you have any comments on this AQAP please send them to Ross Jarvis at:

Address: Reading Borough Council, Civic Offices, Bridge Street, Reading, RG1 2LU Telephone: 0118 937 2314

Email: <u>Ross.Jarvis@reading.gov.uk</u>

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Introduction

This report outlines the actions that Reading Borough Council will deliver between 2024-2028 in order to reduce concentrations of air pollutants and exposure to air pollution; thereby positively impacting on the health and quality of life of residents and visitors to the borough of Reading.

It has been developed in recognition of the legal requirement on the local authority to work towards Air Quality Strategy (AQS) objectives under Part IV of the Environment Act 1995 and relevant regulations made under that part and to meet the requirements of the Local Air Quality Management (LAQM) statutory process.

This Plan will be reviewed every five years at the latest and progress on measures set out within this Plan will be reported on annually within Reading Borough Council's air quality ASR (Annual Status Report).

Summary of Current Air Quality in Reading

Please refer to the latest ASR from Reading Borough Council for full details of air quality monitoring and information.

1.1 Reading Air Quality Management Area

The current Reading Air Quality Management Area (AQMA), shown in Figure 1, extends out from the central Inner Distribution Road (IDR) zone along the main arterial roads and along some rail routes passing through Reading. The AQMA was declared due to exceedances of the annual mean UK Air Quality Strategy (AQS) Objective for nitrogen dioxide (NO₂) in 2009. Full details of the UK's air quality standards and objectives are provided in Appendix C, for reference.



Figure 1 – Reading Air Quality Management Area

© Google Earth imagery.

1.2 Air Quality Monitoring

Reading Borough Council monitors for NO₂, particulates with diameters of 10 microns or less (PM_{10}), particulates with diameters of 2.5 microns or less ($PM_{2.5}$) and ozone (O_3) at a number of locations across the borough.

There are four automatic air quality monitoring stations (AQMS) in Reading [monitoring pollutants]:

- Reading AURN⁴ Urban Background AQMS [NO₂; PM₁₀; PM_{2.5}; O₃]
- RD1 Roadside AQMS [NO₂; PM₁₀]
- RD3 Roadside AQMS [NO₂; PM₁₀]
- RD4 Roadside AQMS [NO₂; PM₁₀]

Reading also has a network of non-automatic NO₂ diffusion tubes monitoring concentrations at 56 locations. The majority of monitoring locations in Reading are at the roadside, with only 1 site at an urban background location (the Reading AURN AQMS).

1.2.1 2019 and 2022 Monitoring Results

Due to the influence of the Covid-19 lockdowns during 2020/21, baseline air quality information presented in this AQAP is based on pre-Covid-19 data from 2019, and post-Covid-19 data from 2022.

Monitoring results from the 2020 ASR for NO₂, covering the 2019 data period, saw the number of non-compliant locations reduce to 5 from 15 locations (in 2018), with regard to the annual mean air quality objective (AQO). The data also identified a further 8 sites that were within 10% of the AQO risk threshold.

The key locations of non-compliance/ elevated concentrations in 2019 were:

London Road

Kings Road

Castle Hill

- Prospect Street
- Caversham Road/ A329
- George Street

Oxford Road

- Caversham Road (A4155)
- Station Hill and Friar Street

⁴ AURN – Automatic Urban and Rural Network AQMS operated by Defra.

No locations were in exceedance of the NO₂ 1-hour mean AQO and there were no exceedances of any AQOs for PM_{10} . There was no exceedance of the 20 μ g/m³ $PM_{2.5}$ annual mean concentration target limit either.

Figure 2, below, displays the locations of diffusion tubes which were at least within 10% of the annual mean AQO for NO₂ in 2019.



Figure 2 – Locations where NO₂ concentrations were above 36 μ g/m³ in 2019.

Note: An additional site, DT 24 on Oxford Road to the west, was also within 10% of the AQO.

Contains ordnance survey data © Crown copyright and database 2021.

Monitoring results from the 2023 ASR for NO₂, covering the 2022 data period, saw the number of non-compliant locations reduce to just 1 from the 5 locations in 2019, with regard to the annual mean air quality objective (AQO). The data also identified a further 3 diffusion tube sites that were within 10% of the AQO risk threshold.

The key locations of non-compliance/ elevated concentrations in 2022 were:

Caversham Road/ A329
Friar Street

No locations were in exceedance of the NO₂ 1-hour mean AQO and there were no exceedances of any AQOs for PM_{10} . There was no exceedance of the 20 μ g/m³ $PM_{2.5}$ annual mean concentration target limit either.

Figure 3, below, displays the locations of diffusion tubes which were at least within 10% of the annual mean AQO for NO_2 in 2022.



Figure 3 – Locations where NO₂ concentrations were above 36 μ g/m³ in 2022.

Contains ordnance survey data © Crown copyright and database 2021.

1.2.2 Long term air quality trends in Reading

The Influence of Covid-19

The reduction in annual mean NO₂ exceedance areas between 2019 and 2022, as displayed in Figure 2 and Figure 3, suggests that air quality in Reading has improved over time.

It is acknowledged that the Covid-19 lockdowns and tiered restrictions impacted on our way of life and day to day activities, including; how and where we travelled, business operations, leisure activities and reduced use of public transport systems.

The associated lockdown periods showed how traffic influenced local pollution levels and signalled the level of reductions that could drive toward improved air quality. During the Covid-19 lockdown, levels of NO₂ dropped by between 20-30% across the country⁵ – primarily from a significant reduction in private vehicle use.

It is difficult to anticipate what the future impact on local and national pollutant emissions are likely to be in the wake of the pandemic. However, it is quite probable that 2022 represents the first year of a post pandemic era – a "new normal". This AQAP shall be continually reviewed and will be updated, if necessary, as more postpandemic data is gathered in the future.

Figure 4, below, shows monthly mean NO₂ concentrations at Reading's AURN urban background monitoring site, between 2017 and 2022. The data have been deseasonalised and de-weathered using software packages available in R (v 4.3.1)⁶ and *Openair*⁷, to reduce the influence of seasonal variability and meteorology on the

⁵ The Air Quality Expert Group (AQEG) issued a rapid review in June 2020 on the estimation of changes in air pollution emissions, concentrations, and exposure during the COVID-19 outbreak in the UK. The document acknowledges that there is some evidence to suggest that nitrogen dioxide (NO2), particulate matter (PM) and ozone (O3) may increase susceptibility to respiratory infections or worsen disease prognosis, although it recognises that there are still insufficient studies or mixed evidence for specific combinations of endpoints, infection types, age groups or pollutants.

⁶ R Core Team (2023). _R: A Language and Environment for Statistical Computing_. R Foundation for Statistical Computing, Vienna, Austria. https://www.R-project.org/.

⁷ Carslaw, DC. and Ropkins, K. (2012). Openair – an R package for air quality data analysis.

time series data. The subsequent trends seen in the data, after normalisation, better correlate with how air quality has actually changed over time.

Figure 4 – De-seasonalised monthly mean NO₂ concentrations at Reading's AURN monitoring site.



Figure 4 very clearly shows the influence of the Covid-19 pandemic on local air quality. The main local source of pollution within Reading is road transport emissions, and a Covid-19 study⁸ undertaken on behalf of the Council strongly suggested that the key cause of this air quality improvement was the reduction in vehicle trips on the local road network.

⁸ Reading Borough Council and Phlorum Limited. (2020). Reading AQAP-Covid Data Review

Barring the brief plateau in NO₂ concentrations at the time of the 2021 winter lockdown, concentrations have since increased to near pre-pandemic levels, likely due to the return of vehicles on the local road network.

NO2 trends within and outside of Reading's IDR

Figure 5, below, displays trends in NO₂ concentrations at all of Reading's roadside monitoring sites (both AQMSs and diffusion tubes) between 2017 and 2022. Three coloured trendlines are also presented, representing the average (mean) trends for the monitoring sites in, on and outside of the IDR – these trendlines exclude monitoring data from 2020 and 2021, to limit the influence of the Covid-19 pandemic on the observed trends.





Evidently, air quality has improved significantly since 2017 with regards to NO₂, even after discounting the influence of the pandemic on air quality trends.

The greatest rate of improvement has occurred at monitoring sites within the IDR, in Reading's Town Centre. In 2017, the highest NO₂ concentrations were identified in central Reading, but since then, concentrations have reduced at an average (mean) rate of 2.7 μ g/m³ per year.

Concentrations outside of the IDR have consistently remained below those identified in central Reading, improving at an average rate of 2.1 μ g/m³ per year.

At the few monitoring sites located directly on the IDR, NO₂ concentrations have been improving since 2017, but at a slower rate of approximately 1.9 µg/m³ per year. Because of this, in 2022, annual mean roadside concentrations appear to be worse on the IDR than elsewhere in Reading, on average.

Long-term trends in Particulate Matter concentrations

The above data solely discusses trends with regards to NO₂, the pollutant for which Reading's AQMA was declared. However, increasing pressure is being placed on local authorities to consider how to manage particulate emissions within their boroughs.

As previously mentioned, concentrations of PM₁₀ and PM_{2.5} have consistently remained well below the UK's AQOs at all monitoring sites. Historically, PM₁₀ concentrations have declined gradually over time. However, the rate of improvement has decreased since 2016, to such an extent that concentrations at Reading's urban background AQMS have actually been on the rise in recent years.

This is demonstrated in Figure 6, below, which displays monthly mean deseasonalised PM₁₀ concentrations at the urban background AQMS. Although the rate of increase is very gradual, and concentrations remain well below AQOs, Reading Borough Council acknowledges the need to address the apparent worsening within its AQAP measures.

Regarding PM_{2.5}, there is no clearly discernible trend in either direction, but it is apparent that PM_{2.5} concentrations are not improving. Again, although the rate of increase is very gradual, and concentrations remain well below AQOs, Reading Borough Council acknowledges the need to address the apparent worsening within its AQAP measures. For this reason, alongside increasing pressures from the Reading Borough Council Air Quality Arage 241n – 2024 - 2029

Government for Local Authorities to reduce $PM_{2.5}$ emissions across their boroughs, this AQAP places considerable weight to the consideration of measures to improve local PM concentrations. Measures to address PM_{10} should inherently address $PM_{2.5}$ also, as the two are inextricably linked.



Figure 6 - De-seasonalised monthly mean PM₁₀ concentrations at Reading's AURN monitoring site.

1.2.3 AQMA Retention

The Reading AQMA is to be retained in its current form. The reasons for this are two-fold:

- Exceedances of the annual mean AQO for NO₂ are still present within the existing AQMA boundaries; and
- Reading Borough Council are intent on producing an AQAP which targets air quality improvements across the entire borough, not just exceedance areas.

Reading Borough Council's Air Quality Priorities

1.3 Public Health Context

Poor air quality is the largest environmental risk to public health in the UK. Air pollution can cause, complicate, or exacerbate many adverse health conditions. It usually manifests in respiratory or cardiac symptoms and can lead to chronic health issues. Recent studies show that poor air quality can affect every organ in the body and even cause damage to cognitive performance. Exposure to poor air quality is directly related to diseases such as cancer, asthma, strokes, heart disease, diabetes, obesity and dementia.

Health effects of pollutants can impact on people's health in the short-term or long term, as shown in Figure 7⁹.



Figure 7 - Health effects of air pollution (Public Health England).

⁹ This figure forms part of the Guidance "Health Matters: air pollution", which was published by Public England on their website on 14th November 2018.

The AQMA in Reading covers the centre and main arterial roads in and out of town. This area covers approximately 37,652 households, which equates to approximately 88,859 people. Now that the number of exceedances of the objective for NO₂ has significantly reduced, we estimate that approximately only 20 households (50 people) are exposed to levels above the objective in their homes. However, the majority of people living within the AQMA still live near to roads where levels of NO₂ and particulates are elevated to levels that can still cause or exacerbate health conditions.

According to the World Health Organisation (WHO), air pollution is associated with 7 million premature deaths worldwide every year, of which 4.2 million are attributed to exposure to outdoor air pollution. The WHO estimate that 99% of people in the world breathe air containing health impacting levels of air pollutants¹⁰.

With this in mind, and despite some emphasis being placed on reducing emissions on Reading's IDR (where air quality is poorest), several actions listed within this AQAP to improve air quality have been designed to improve on the current situation across the whole of the borough.

1.3.1 Health Inequalities

Air pollution can affect people from different ethnicities, ages, and social groups. It is likely to have greater impacts on those who experience high amounts of exposure and those who have greater susceptibility. The most vulnerable are those with preexisting health conditions, children, or the elderly.

Several studies are also showing a strong correlation between poor air quality and inequality issues. A 2019¹¹ research study, led by academics at the Air Quality Management Resource Centre at the University of the West of England, Bristol, found that social inequalities in traffic-related pollution exposure are 'clearer and stronger' than ever before. The study found that while young children, young adults,

¹⁰ WHO (2023). Air Quality and Health. <u>https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/exposure-air-pollution</u>

¹¹ Barnes et al (2019) Emissions vs exposure: Increasing injustice from road traffic-related air pollution in the United Kingdom.

and households in poverty have the highest levels of exposure to air pollution, it is the richer households who are more responsible for it.

In December 2020, Ella Adoo-Kissi-Debrah became the first person to officially have air pollution listed as a cause of death on her death certificate. Ella lived near a major circular road in southeast London and died in 2013 when she was 9 years old. At the inquiry into Ella's death, the coroner Philip Barlow cited that;

"Air pollution was a significant contributory factor to both the induction and exacerbation of her asthma" and "that the cumulative effect of continuously breathing in toxic air caused her fatal asthma attack".

A recent study from the Office for National Statistics¹² also shows a strong positive correlation between the proportion of population in the UK that falls into the Black, Asian and Minority Ethnicity (BAME) category and the exposure of NO₂ measured over a period of 10 years across several areas in England.

Reading's Public Health department not only aims to improve health, but also reduce health inequalities by using an evidence-based approach to make recommendations on the delivery of health and wellbeing services. As such, this Action Plan will support work underway within the public health arena.

1.4 Planning and Policy Context

1.4.1 National Policy

National Planning Policy Framework

The National Planning Policy Framework (NPPF)¹³, which was revised in July 2021, sets out the Government's planning policy for England. At its heart is an intention to promote more sustainable development. The planning system should play an active role in guiding development to sustainable solutions and air quality is a material planning consideration.

¹² The ONS acknowledges air pollution is one of many factors that may be driving disproportionate outcomes for black, Asian and minority ethnic (BAME) people – Ethnicity is strongly correlated with pollution exposure in England, with ethnic minorities more likely to live in polluted areas.

¹³ Department for Communities and Local Government (DCLG), (2021), National Planning Policy Framework.

A core principle in the NPPF that relates to air quality effects from development is that planning should "contribute to conserve and enhance the natural and local environment". In achieving this, it states in paragraph 174 that:

"Planning policies and decisions should contribute to and enhance the natural and local environment by: [...]

preventing new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality [...]".

Regarding compliance with relevant limit values and national objectives for pollutants the NPPF, paragraph 186 states:

"Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas. Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement. So far as possible these opportunities should be considered at the plan-making stage, to ensure a strategic approach and limit the need for issues to be reconsidered when determining individual applications. Planning decisions should ensure that any new development in Air Quality Management Areas and Clean Air Zones is consistent with the local air quality action plan."

Climate Change and Decarbonisation

The UK Government has committed to cutting greenhouse gas emissions by at least 68 percent by 2030 and is to end support for the fossil fuel sector overseas. Commitments to cutting greenhouse gas emissions will also benefit local air quality by bringing forward plans for decarbonising various sectors including transport, as well as industry, energy and domestic sources of emissions.

The Climate Change Act 2008 sets up a framework for the UK to achieve its longterm goals of reducing greenhouse gas emissions and to ensure steps are taken towards adapting to the impact of climate change. The Act saw the UK tasked with reducing emissions by at least 80% by 2050.

The government set out it's "Road to Zero" Strategy¹⁴ for cleaning up road transport emission and published the Transport Decarbonisation Plan (TDP) *Decarbonising transport: a better, greener Britain*¹⁵ in July 2021. The TDP outlines the Government's current position on transport emissions, including highlighting current policies and strategies in place to decarbonise the transport sector. The TDP sets out to ban the sale of diesel and petrol cars and light goods vehicles from 2030, followed by the requirement for all new cars and vans to be fully zero emission at the tailpipe by 2035. Additionally, the Government have published a consultation on ending the sale of all non-zero emission Heavy Goods Vehicles (HGVs) from 2040, with lighter HGVs from 2035¹⁶.

Statutory Obligations to Reduce PM_{2.5}

PM_{2.5} is becoming more focal to the UK's air quality ambitions. In 2019, the UK's Clean Air Strategy¹⁷ proposed the introduction of new, ambitious, long-term air quality targets for PM_{2.5}. In 2021, the Environment Bill¹⁸ committed the Secretary of State to setting new Air Quality Objectives for PM_{2.5}.

Subsequently, the 2023 Air Quality Strategy¹⁹ stipulates two new legally-binding long-term targets to reduce concentrations of fine particulate matter, $PM_{2.5}$. The two new targets are an annual mean concentration of 10 µg/m³ or below and a reduction in average population exposure by 35% by 2040, compared to a 2018 baseline.

¹⁴UK Govt Department for Transport (2018)

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/739460/road-to-zero.pdf

¹⁵ DfT (2021), Decarbonising transport: a better, greener Britain. Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1002285/decarbonising-transport-a-bettergreener-britain.pdf

¹⁶ DfT (2021) Heavy goods vehicles: ending the sale of new non-zero emission models. Available at: <u>https://www.gov.uk/government/consultations/heavy-goods-vehicles-ending-the-sale-of-new-non-zero-emission-models</u>

¹⁷ Defra (2019). Clean Air Strategy 2019. Accessible at <u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/770715/clean-air-strategy-2019.pdf</u>

¹⁹ Defra (2023). Air Quality Strategy – Framework for Local Authority Delivery. Accessible at <u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1180706/Air_Quality_Strategy_Web.pdf</u>

¹⁸ Uk Govt (2021). Environment Act 2021

These targets will help drive reductions in the worst PM_{2.5} hotspots across the country, whilst ensuring nationwide action to improve air quality for everyone.

The Environmental Improvement Plan 2023²⁰, which supplements the Air Quality Strategy, sets out the delivery plan to achieve the targeted pollutant reductions, which has been reviewed accordingly during the production of this AQAP. The Improvement Plan also sets an additional interim long-term target for PM_{2.5}, of $12 \ \mu g/m^3$, to be achieved by January 2028.

The Government's Air Quality Strategy stipulates that all local authorities must take sufficient action to reduce $PM_{2.5}$ emissions from sources within their control. In circumstances where the extent of measures from local authorities are deemed insufficient, the Government will consider implementing statutory duties on local authorities. Reading can confirm that $PM_{2.5}$ has been given considerable weight throughout this AQAP.

Reading acknowledges that the Environment Bill, Air Quality Strategy and Environmental Improvement Plan target reductions in all pollutants, not solely PM_{2.5}. The measures set out within this Action Plan are designed to reduce emissions of several key pollutants, across all sectors within the control of the Council.

Along with the commitment to set targets on air quality for the UK, the new Bill also promises the creation of a new independent Office for Environmental Protection to scrutinise environmental policy and law, investigate complaints, and take enforcement action against public authorities, if necessary, to uphold current and future environmental standards.

1.4.2 Local Policy

Reading has key plans, strategies, and policies that the AQAP will compliment and support.

Reading Local Plan

²⁰ Govt (2023). Environmental Improvement Plan 2023. Accessible at

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1168372/environmental-improvement-plan-2023.pdf

The Reading Local Plan²¹ guides development in Reading up to 2036 and will therefore play a key role in how the town evolves, with core objectives for sustainable growth. The Local Plan seeks to deliver new homes and employment space in Reading, alongside critical infrastructure to accommodate forecast housing demands and job creation, and to ensure the town remains an attractive place to work, live and study.

Local Plan <u>Policy EN15: Air Quality</u> is of direct relevance to air pollution in the planning context:

"Development should have regard to the need to improve air quality and reduce the effects of poor air quality.

i. Development that would detrimentally affect air quality will not be permitted unless the effect is to be mitigated. The following criteria should be taken into account:

• Whether the proposal, including when combined with the cumulative effect of other developments already permitted, would worsen air quality;

• Whether the development is within, or accessed via, an Air Quality Management Area; and

• Whether it can be demonstrated that a local worsening in air quality that would not detrimentally affect human health or the environment would be offset by an overall improvement in air quality, for instance through reduction in the need to travel.

Where a development would introduce sensitive uses (such as residential, schools and nurseries, hospitals, care facilities) into, or intensify such uses within, an Air Quality Management Area, detrimental effects on that use will be mitigated. Mitigation measures should be detailed in any planning application. If there

ii.

²¹ Reading Borough Council (2019). Reading Borough Local Plan – Adopted November 2019.

are significant detrimental effects that cannot be mitigated, the application should be refused.

iii. Where required, planning obligations will be used to secure contributions to measures to tackle poor air quality or for air quality monitoring."

This policy aims to ensure that increased development within Reading does not lead to a net increase in emissions as well as ensuring any increased exposure within the poorest areas of air quality is accompanied by appropriate mitigation.

In addition to this are several policies of indirect relevance to air quality, including:

- CC3: Adaption to Climate Change
- TR1: Achieving the Transport Strategy
- TR2: Major Transport Projects
- TR4: Cycle Routes and Facilities; and
- TR5: Car and Cycle Parking and Electric Vehicle Charging.

Reading 2050 Vision

The Reading 2050 Vision is an ambitious description of what Reading can be, with three themes central to Reading's long-term success as a smart and sustainable city. These three themes are:

- A green tech city
- A city of culture and diversity
- A city of rivers and parks

The report envisages a place where low carbon living will be the norm, and where the built environment, technology and innovation have combined to create a smart, dynamic and sustainable city, with a high quality of life and equal opportunity for all.

Climate Emergency Declaration and Strategy 2020-2025

Reading Borough Council declared a climate emergency in February 2019 which highlighted its commitment to playing a full role and leading by example in achieving a carbon neutral Reading by 2030. The Reading Climate Emergency Strategy 2020-25 sets out the actions required during the five-year period to work towards the objective of a net zero carbon Reading by 2030, the target adopted in the climate emergency declaration. There are several actions within the strategy that will help drive down local emissions:

- T13: Develop a zero-emission vehicle strategy for the Borough
- T14: Decarbonise the Council Vehicle Fleet
- T15: Increase Public Electric Vehicle Charging Points
- T16: Increase Zero Emission Vehicles Uptake
- T18: Planning Policy for EV Charging in new properties
- T19: Reduce emissions from the Taxi Fleet; and
- T20: Improve Electric Vehicle Charging Infrastructure

Reading Transport Strategy 2040 (Local Transport Plan)

As demonstrated in Chapter 2 of this AQAP, nitrogen dioxide concentrations have generally improved across Reading in recent years. Nonetheless, some areas of Central Reading are still in, or close to, exceedance of legal objectives, specifically at locations close to busy and congested roads. Many of Reading Borough Council's actions therefore revolve around improvements to Reading's local transport network.

The Reading Transport Strategy will help to deliver both the Reading 2050 and Reading Local Plan visions, through an ambitious programme of measures to enable and encourage sustainable travel choices in the town by 2040, with the intent that future transport strategies will continue to support the Reading 2050 vision in the longer term.

Strategic objectives have been developed (see Figure 8, below) as the guiding principles running through this strategy to ensure and set out how Reading will measure success in delivering the vision for transport in Reading.



Figure 8 – Reading Transport Strategy Objectives

The Local Transport Strategy sets out 32 strategic policies and proposes over 40 schemes and initiatives to achieve the above objectives. Most of these prospective schemes and initiatives will offer benefits to local air quality, at least indirectly. Some of these initiatives are discussed in further detail within Section 5 of this AQAP.

Carbon Plan 2020-25

The Carbon Plan sets out policy and targets on corporate energy and water management and identifies actions to achieve these within the time period 2020-2025. The plan includes actions which relate to reducing and decarbonising Reading's own buildings and services, including transport which accounts for 15% of CO₂ emissions (2018/19) for the authority.

Berkshire West Health and Wellbeing Strategy 2021-2030

Reading's Health and Wellbeing Strategy sets out the areas the Council will focus on to improve and protect the health and wellbeing of people who live in Reading and those who visit. The strategy and associated action plan cover a wide range of topics, including a vision that all residents will benefit from a healthy environment, a
'<u>Health in All Policies'</u> approach to reduce health inequalities, the benefit to mental and physical health of increased physical activity levels through active travel and a recognition of the benefits of greater social connectedness through improved access to transport.

Corporate Plan

The Corporate Plan sets out how the Council will enable Reading to realise its full potential and ensure that everyone who lives and works in Reading can share the benefits of its success.

The Council has listened to what residents, businesses and partners have said about their experience of Reading, and their hopes and aspirations for the town. In this year's residents survey, the Council heard that residents are satisfied with how it runs services in Reading but would like to see more action taken on affordable housing, levels of crime, road conditions, congestion and climate change. Through public consultation on major change initiatives – such as the new Local Transport Plan and the Climate Emergency Strategy – the Council knows it has the support of residents and partners to make the required changes. The Council will drive the necessary change in Reading by focussing on the following three themes:

- Healthy environment
- Thriving communities
- Inclusive economy

1.5 Source Apportionment

The AQAP measures presented in this report are intended to be targeted towards the predominant sources of emissions within Reading Borough Council's administrative area.

A source apportionment exercise was carried out by Reading Borough Council in 2023, using data from 2022/2023 (post-Covid), where possible.

The Influence of Covid-19 on Air Quality

We appreciate that Covid-19 has had a substantial influence on air quality across the UK (see Figure 4) and there is still uncertainty regarding how long-lasting some of its effects could be. It is widely accepted that one of the key influences for the improved

air quality conditions observed during the pandemic was a reduction in vehicle flows. The Department for Transport (DfT) has provided regional traffic statistics for the borough of Reading²², which have been used to demonstrate how the number of vehicle trips has changed during and since the pandemic, as shown in Figure 9.



Figure 9 – Annual average vehicle flows in Reading as a proportion of the 2018 baseline

The data clearly demonstrates that the pandemic had a disproportionately greater effect on car trips than on trips made by other vehicles (light goods vehicles, heavy goods vehicles and buses). In 2022, trips by other vehicles returned to pre-Covid levels. Car and taxi trips have increased but remain considerably below pre-Covid levels, which could explain why air quality was considerably better in 2022, than 2019. Whether car trip volumes will continue to increase, or whether the pandemic will have long-lasting effects on travel behaviours (e.g. a permanence to 'working from home' trends), will become apparent in future years.

In the unlikely event that air quality worsens in subsequent years, this source apportionment exercise should be reviewed to determine whether any associated conclusions remain relevant.

²² DfT (2023). Road Traffic Statistics. Accessible at https://roadtraffic.dft.gov.uk/#6/55.250/-1.000/basemap-regions-countpoints

Sources of Pollution

Pollutants can arise from an amalgamation of local sources, as well as sources imported from other regions, cities (e.g. London) and land masses (e.g. Europe). Vehicle emissions will arise from the combustion of fossil fuels in vehicle engines and their subsequent release to atmosphere via tailpipe exhausts. The most significant pollutants released by cars and other vehicles are oxides of nitrogen (NO_x) and particulate matter (PM₁₀ and PM_{2.5}).

Other (background) sources might include emissions from commercial operations, domestic heating, industry, energy production, airports and railways, or even from secondary chemical reactions in the atmosphere.

1.5.1 Nitrogen Oxides (NOx)

A source apportionment study provides information on the sources of pollutants, to assist in identifying which sectors should be targeted to deliver the most effective emissions reduction strategy to deliver compliance with Air Quality Objectives. As discussed in Section 2.2.1, most of Reading is currently compliant with all Air Quality Objectives, but there remain some areas where NO₂ concentrations are unacceptably high.

Transport is responsible for more than two thirds of all NO_X emissions and accounts for a significant proportion (around 10% or more) of the total emissions of other pollutants. Road transport, in particular, continues to account for a significant proportion of emissions of all the main air pollutants.

Figure 10, below, displays the average weekly temporal variability in NO₂ concentrations at Reading's RD1 Automatic Monitor, located adjacent to the A329 Caversham Road, throughout 2022. The data highlights significant NO₂ peaks specifically during the morning and evening 'rush-hour' periods from Monday to Friday. This corroborates our understanding that road transport emissions are a substantial source of NO_x pollution near Reading's arterial road network.

Concentrations reduce at the weekends, likely due to an overall reduction in vehicle movements. This is a trend that was comparably identifiable before the Covid-19 pandemic.



Figure 10 – Weekly variability in NO₂ concentrations at RD1 in 2022.

NOx Source Apportionment

Acknowledging the above evidence, the NO_X source apportionment focuses on the local vehicle fleet. Traffic data were obtained from the DfT and Reading Borough Council's own traffic count data, and fleet emissions data were obtained from Defra's latest Emissions Factor Toolkit (EFT v12.0.1) and Reading's own bus fleet and taxi data. Locations with both suitable traffic data and monitoring data were used for analysis.

According to manually counted traffic data, cars, taxis and light good vehicles (LGVs) comprise over 90% of all vehicle trips on almost all of Reading's road network.

As such, it is no surprise that the bulk of traffic emissions at roadside locations are from cars, taxis and LGVs. Figure 11 shows that on Caversham Road, 66% of the total NO_X concentration is attributable to vehicle traffic, 48% is attributable to cars (primarily diesel cars and taxis), 8% to diesel LGVs, 9% to HGVs and 1% to buses.

Figure 11 – NOX Concentration Source Apportionment for the Caversham Road exceedance location (#DT43)



Caversham Road

For context, at the Caversham Road diffusion tube (the only AQO exceedance location in 2022), where an NO₂ concentration of 43.3 μ g/m³ was recorded, over 20 μ g/m³ of the annual mean NO₂ concentration arises from car and taxi traffic, approximately 3 μ g/m³ from diesel LGVs, 4 μ g/m³ from HGVs and approximately 0.3 μ g/m³ from buses.

According to the above data, the key issue from an air quality perspective is associated with the volume of diesel cars and taxis on the road network. Therefore, any measures to reduce the number of diesel car and taxi trips and associated congestion issues are likely to enable air quality improvements and encourage Reading towards being fully compliant with all Air Quality Objectives. HGV emissions are also a considerable contributor to local air pollution at this location. Reading's Transport Strategy acknowledges that a uniquely large proportion of vehicle trips along Reading's IDR are HGVs, likely due to the convenience of this road network for cross-Thames travel. At other locations across Reading, such as B3345 George Street and A4155 Castle Hill, the contribution of HGVs to local NO_X concentrations is over 5% less than the contribution of HGVs on the IDR.

It is worth acknowledging that approximately a third of NO_X concentrations are generated from non-vehicular sources. Defra provides estimated background concentrations of the UKAQS pollutants at the UK Air Information Resource (UK-AIR) website²³. These estimates are produced using detailed modelling tools and are presented as concentrations at central 1km² National Grid square locations across the UK. UK-AIR estimates that approximately 6% of NO_X is generated from domestic, institutional or commercial combustion heating, with a similar proportion generated from railway freight movements. The majority of background emissions are from regional rural sources.

It is acknowledged that Defra's UK-AIR background data is collected for 1km² grid squares, so is not necessarily site specific. In the case of the Caversham Road diffusion tube, the estimate background concentration is likely to be close to this value, but the tube's proximity to the railway means the proportion of railway freight emissions could be slightly higher than the estimated value. Reading Borough Council are intent on investigating the air quality impacts of Reading's railways further in the coming years.

1.5.2 Particulate Matter

Exhaust emissions and brake and tyre wear are likely to constitute a notable proportion of PM emissions (potentially up to 20%) close to Reading's arterial road

²³ Defra: UK-AIR. www.uk-air.defra.gov.uk

network, so measures to reduce vehicular NO_X emissions should inherently help enable PM reductions also.

However, unlike NO_X, a considerable proportion of PM is produced from nonvehicular sources. Defra's UK-AIR estimates that approximately 20% of Reading's PM_{2.5} concentrations are from naturally occurring sources (e.g. sea spray and pollen), almost 20% is from domestic, institutional or commercial combustion heating, and the vast majority is from transboundary sources (i.e. Europe) or formed through secondary reactions in the atmosphere.

The notion that the primary sources of PM differ to those of NO_x is corroborated by comparing Figure 4 to Figure 6, where long term trends in NO₂ concentrations differ to that of PM.

One possible cause of the recent plateauing of PM concentrations (increases, in some cases) is from recent increases in domestic solid fuel burning. Since 2011, Defra estimates that PM_{2.5} emissions from domestic wood burning have increased by over 124%, with a recent UK-wide survey identifying that 1 in 13 homes burned wood²⁴. Public Health England approximate that solid fuel burning could now account for over 30% of local PM emissions²⁵.

Temporal variability in PM concentrations at Reading's urban background automatic monitor show regular peaks in the evenings, which are exacerbated in winter and at weekends (see Figure 12, below). Given the 'sharpness' of this peak, its prominence compared to the same peak in summer months, and the fact that the peak continues well beyond the weekday afternoon traffic 'rush-hour', the source of the peak is likely to be arising at least partly from localised domestic and commercial solid fuel combustion sources.

²⁴ Defra (2023). National Statistics: Emissions of air pollutants in the UK – Particulate Matter (PM10 and PM2.5).

²⁵ PHE (2019). Review of Intervention to Improve Outdoor Air Quality and Public Health.



Figure 12 – Weekday variability in PM concentrations at Reading AURN in 2022.

As such, Reading Borough Council intend to place considerable weight to reducing this emission source.

1.6 Required Reduction in Emissions

Within Reading, there is currently one location identified as being in exceedance of any of the legal UK Air Quality Objectives. This is at Diffusion Tube #43, on

Caversham Road, where a 2022 annual mean NO₂ concentration of 43.3 μ g/m³ was recorded, 8.25% above the annual mean AQS.

Following the calculation processes prescribed in LAQM.TG(22)²⁶, a road NO_X concentration reduction of over 7.61 μ g/m³ (or over 3.3 μ g/m³ for NO₂) would be required to achieve compliance at this location, which represents approximately a 15% reduction in road NO_X or NO₂ emissions.

Following the NO₂ projection methodology provided within LAQM.TG(22), Diffusion Tube #43 on Caversham Road is predicted to achieve compliance with the 40 μ g/m³ annual mean NO₂ AQS by 2025, even without the intervention of the Air Quality Action Plan measures presented in this report. It is highly likely that all AQSs for all pollutants will be achieved during this AQAP's life cycle, possibly within the first year. However, Reading Borough Council will remain intent on reducing pollutant concentrations to the maximum possible extent throughout and long after this AQAP's life cycle, aligning with the Council's long-term vision for the borough.

1.7 Key Priorities

AQAP policy options will include direct policy interventions, infrastructure schemes, education or enabling options, to support Readings ambitious plans and UK strategies going forward. As such, policy options will include strategies to encourage or accelerate the uptake of low to zero emission vehicles, non-diesel vehicles, increase modal shift and discourage vehicle usage in certain areas where people live or go to school. Active travel and health options are also prioritised in the AQAP, alongside measures to reduce particulate matter concentrations.

As based on the conclusions of the above, the areas prioritised for action include:

 Priority 1 – reduce road NO_X & PM emissions throughout Reading, with emphasis placed on reducing emissions on Reading's Inner Distribution Road (IDR);

²⁶ Defra. (2022). Part IV of the Environment Act 1995, Environment (Northern Ireland) Order 2002 Part III, Local Air Quality Management, Technical Guidance LAQM. TG(22). London: Defra.

- Priority 2 reduce exposures of individuals and locations where vulnerable people (children, elderly and those with cardiovascular disease) live, work or visit;
- Priority 3 encourage, enable and support people and businesses to shift from high polluting to zero emission transport or energy options;
- Priority 4 inform and educate people on the financial, environmental and health benefits of active travel, modal shift and reducing emissions through our daily lives;
- Priority 5 inform, educate and enforce compliance (where necessary) on domestic wood burning regulations, to reduce local PM_{2.5} emissions; and
- Priority 6 improve our monitoring network and planning requirements to support other projects and ensure new developments align with the aims of this AQAP.

Development and Implementation of Reading Borough Council's AQAP

1.8 Consultation and Stakeholder Engagement

In developing/updating this AQAP, we have worked with other local authorities, agencies, businesses and the local community to improve local air quality. Schedule 11 of the Environment Act 1995 requires local authorities to consult the bodies listed in Table 4.1.In addition, we have undertaken the following stakeholder engagement:

- Public Consultation
- Website
- Social Media

The response to our consultation stakeholder engagement is given in Appendix A: Response to Consultation.

Table 4.1 – Consultation Undertaken

Consultee	Consultation Undertaken
The Secretary of State	Yes
The Environment Agency	Yes
The highways authority	Yes
All neighbouring local authorities	Yes
Other public authorities as appropriate, such as Public Health officials	Yes
Bodies representing local business interests and other organisations as appropriate	Yes

1.9 Steering Group

Reading Council established an internal Air Quality Steering Group (AQSG) in 2020 to develop and evaluate the draft AQAP measures. When the work was recommenced on the AQAP in 2023 some of the officers had changed, this is signified by the year in brackets after each name in the below list.

The AQSG was composed of Reading Council members and officers:

- Former Deputy Leader of the Council: Cllr Tony Page (2020).
- Former Chair of Strategic Environment, Planning and Transport Committee: Cllr Paul Gittings (2020).
- Former Deputy Director of Planning, Transport and Regulatory Services: Giorgio Framalicco (2020).
- Regulatory Services Principal Air Quality Project Officer: Ross Jarvis (2020, 2023).
- Assistant Director, Planning, Transport & Public Protection: James Crosbie (2023).
- Regulatory Services Public Protection Manager: Matt Golledge (2023).
- Regulatory Services Community Protection Manager: Catherine Lewis (2020, 2023).
- Public Health and Wellbeing Team Public Health Consultant Martin White (2023).
- Transport Transport Programme Manager: Chris Maddocks (2020, 2023).
- Transport Project Manager: James Clements (2020, 2023).
- Transport Senior Transport Planner: James Turner (2020, 2023).
- Head of Climate Strategy: Peter Moore (2020, 2023).
- Sustainability Manager: Ben Burfoot (2020, 2023).
- Public Health: David Munday (2020).
- Planning Planning Policy Manager: Mark Worringham (2023).

• Planning – Senior Planning Policy Officer: Sarah Burr (2023).

AQAP Measures

Table 5.1, Table 5.2 and Table 5.3 shows the Reading Borough Council AQAP measures. It contains:

- a list of the actions that form part of the plan
- the responsible individual and departments/organisations who will deliver this action
- estimated cost of implementing each action (overall cost and cost to the local authority)
- expected benefit in terms of pollutant emission and/or concentration reduction
- the timescale for implementation
- how progress will be monitored

NB: Please see future ASRs for regular annual updates on implementation of these measures.

1.10 Travel Measures

Reading Borough Council are committed to implementing as many measures as possible to encourage and facilitate a shift from private petrol/ diesel vehicle use to more active and sustainable travel modes.

Reading's Transport Strategy 2040 discusses an abundance of ambitious schemes and initiatives to achieve this goal, which will inherently allow for significant improvements in air quality across the borough.

A few examples of proposed measures likely to be implemented in the next 5 years are listed below:

 Reading's bus fleet is one of the cleanest emitters in the country, with approximately 100% of the fleet comprising hybrid, gas or Euro 6 diesel vehicles. With this in mind, Reading Borough Council are placing heavy emphasis on improving the attractiveness and accessibility of bus travel across Reading. To this end, they are proposing the following measures:

- Enable more direct routes between neighbourhoods with poor bus use statistics, key mobility hubs and employment areas;
- Introduction of Bus Rapid Transit (BRT) facilities across four key routes and expansion of Park and Ride sites, connecting the outskirts of the borough to Central Reading via highly efficient transport modes.
- Introduce a Mobility as a Service (MaaS) scheme, which would enable travellers to reach destinations confidently and conveniently, without the need for private vehicles, utilising a user-friendly transport services mobile app; and
- Offer discounted fares for young people to discourage private vehicle school trips, which account for approximately 25% of 'rush-hour' car trips.
- In 2020, taxi licensing fees were reduced by 25% for drivers of ultra-low emission vehicles, and 50% for drivers of electric vehicles. By 2028, Reading is targeting for all taxis to be electric or ultra-low emission vehicles. As is demonstrated by the source apportionment exercise within this AQAP, diesel vehicles (of which the vast majority of taxis are) are responsible for a substantial proportion of NO_x emissions. Targeting the taxi fleet should enable substantial reduction in NO₂ concentrations on Reading's arterial road network.
- Cycle infrastructure improvements are being delivered through Active Travel Schemes on the Shinfield Road and on the Bath Road/Castle Hill. Further schemes are planned for future Active Travel Funding rounds.

By 2040, Reading Borough Council are targeting a 15.4% mode share reduction in car trips to, from and through the town centre, relative to a 2022 baseline. The mode share reduction expected during the life cycle of this AQAP has not been estimated, but assuming the modal shift occurs at a roughly linear rate, by 2029 the annual mean NO₂ concentrations on Reading's worst affected roads (e.g. Caversham Road) could reduce by up to 4 μ g/m³ because of the proposed transport measures alone.

1.11 Other measures

It cannot be argued that targeting measures to improve the transport sector's environmental impacts, such as those listed above, will have the most significant contributions to local air quality improvements, especially with regards to NO₂. However, there are a considerable number of alternative measures which can also allow for such benefits, especially with regards to reducing other pollutants, such as PM_{2.5}.

A few examples of proposed measures are listed below:

- In the coming years, Reading proposes to introduce planning guidance for new developments, supporting developers to minimise the air quality impacts of developments through strategic emissions mitigation plans.
- Reading Borough Council have recently consulted on the prospect of expanding Reading's existing Smoke Control Area (04/09/2023 16/10/2023) to encompass the entire borough. Properties and business within Smoke Control Areas are encouraged to avoid the burning of solid fuels (i.e. wood and coal) through chimneys. Legal prohibitions are based on specific fuel types associated with significant smoke generation, limiting fuel sales and purchases to 'Ready to Burn' / 'Smokeless' fuels, unless alternatives are burned within Defra exempt appliances. Reading Borough Council are also obtaining funding to enable the introduction of better enforcement measures to ensure better compliance with fuel burning regulations. Noting the apparent evening wintertime PM concentration peaks shown in Figure 12, it is likely that this measure will reduce PM emissions noticeably across the borough.
- There is also significant value in providing the public with sufficient information to enable them to make informed decisions on matters of health and air quality. To this end, Reading Borough Council are committed to providing several air quality resources to the public, such as:
 - AirAlert air quality alerts are delivered to the public via text or email on days where pollution levels are recorded as being particularly high and potentially harmful to health;

- The council will work with GPs and Health Practitioners to better educate health patients on the risks of air quality, especially where the patient is identified as having, or being at risk of having, respiratory or cardiovascular illnesses;
- Air quality awareness campaigns will continue to be rolled out into schools, to encourage an interest and understanding of the potential issues and solutions from an early age; and
- Resources will be made available to Reading's residents, enabling them to better understand the potential air quality impacts of wood burning/ bonfires/ indoor air quality.

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure ^(a)	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
RDAQ1_ Transport	Vehicle access/ speed management (road/ bridge access)	Traffic management	Reduction of speed limits, 20mph zones	2023	TBC	RBC	RBC(CIL)/DF T	No	Funded/par tially funded/ not funded	<£1m	Implementation /Planning	Very minor benefits to PM on a select few kilometres of residential roads	No. of roads made 20mph		Smoother driving leading to a reduction of PM from tyre and brake wear. The scheme is likely to be limited to a handful of residential streets.
RDAQ2_ Transport	Parking standards – diesel/ EV differential parking rates	Traffic Management	Emission based parking or permit charges	2024	2026	RBC	RBC	No	Not funded	< £100k	Planning	Alongside RDAQ5, reductions in NO2 concentrations of up to 2 µg/m ³ estimated ^(b)	Implementation of scheme/ reduction of higher rate vehicles over time		Encourages uptake of cleaner vehicles
RDAQ3_ Transport	Reading Buses investment programme and support	Vehicle Fleet Efficiency	Public Transport Improvement	2024	2029	RBC/Reading Buses	Defra/ JAQU/DFT	Yes	Not funded	£1m-10m	Planning	Reductions in NO ₂ concentrations along heavily used bus routes of up to 0.3 µg/m ^{3 (c)}	Buses decarbonised	ZEBRA funding bid submitted	
RDAQ4_ Transport	Neighbourhood and Highway Management	Traffic Management	UTC, Congestion management, traffic reduction	2024	2029	RBC	RBC/DFT	No	Not funded	< £100k	Planning	To be quantified at a later date, once further details become available			

Table 5.1 – Air Quality Action Plan Measures: Cleaner Transport

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure ^(a)	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
RDAQ5_ Transport	Implementation of EV Infrastructure Strategy	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	2024	2025	RBC	RBC/DFT/Pri vate investment	No	Part funded	£10k - £50k	Implementation	Alongside RDAQ2, reductions in NO2 concentrations of up to 2 µg/m ³ estimated ^(b)	Policy adoption		Facilitating and encouraging EV vehicle uptake rates
RDAQ6_ Transport	Improve taxi fleet emissions	Promoting low emission transport	Taxi licensing conditions	2024	2029	RBC	RBC	No	Not funded	£10k - £20k	Planning	On Caversham Road, NO ₂ reductions of up to 6 µg/m ³ are considered possible ^(d)	Hackneys all EVs by 2029, key milestones achieved on way	Emissions policy in place for hackney fleet	
RDAQ7_ Transport	School Streets	Promoting Travel Alternatives	Other	2024	2027	RBC/Schools	RBC/DFT/Sc hools	No	Part funded	< £10k	Implementation	Via RDAQ7 and RDAQ12, reductions in NO2 of 0.1 - 0.2 µg/m ³ estimated ^(e) , more on the school streets themselves	New schemes investigated, new school streets implemented	4 schools streets implemented covering 7 schools.	
RDAQ8_ Transport	Continue to promote active and low emission travel options	Promoting Travel Alternatives	All	2024	2029	RBC	RBC/DFT	No	Part funded	£50-£100k per annum	Implementation	Via RDAQ8 and RDAQ16, reductions in NO ₂ concentrations of up to 0.3 µg/m ³ estimated ^(f)		Numbers of people walking and cycling	

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure ^(a)	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
RDAQ9_ Transport	Multi-modal enhancements (Traffic corridor, IDR, Oxford Rd)	Traffic Management	Strategic highway improvements, Re-prioritising road space away from cars, inc Access management, Selective vehicle priority, bus priority, high vehicle occupancy lane	2024	2029	RBC	RBC/DFT	No	Part funded	£10-£15m (BSIP)	Implementation	Minimal impacts expected initially, with modal shift benefits likely cancelled out by slight increases in congestion of other vehicle types ^(g)	Implementation of schemes		To improve wider connectivity with the outskirts of Reading, while reducing traffic congestion.
RDAQ11 _Transpo rt	Healthy Streets and Quiet Neighbourhoods	Traffic Management	Strategic highway improvements, Re-prioritising road space away from cars, inc Access management, Selective vehicle priority, bus priority, high vehicle occupancy lane	2025	2029	RBC	RBC/DFT	No	No funding	<1m	Planning	To be quantified at a later date, once further details become available	Investigation of potential schemes, implementation of schemes		Plan is to enable more direct routes between neighbourhoods, key mobility hubs and employment areas, hopefully via sustainable transport improvements, to reduce through travel on the IDR.
RDAQ12 _Transpo rt	Concessionary and Discounted Travel for Students	Promoting Low Emission Transport	School Travel Plans	2023	2025	RBC/DFT	DFT	No	Funded	<100k	Implementation	Via RDAQ7 and RDAQ12, reductions in NO ₂ of 0.1 - 0.2 µg/m ³	% Increase use of buses		Discounted bus fares for young people, to discourage parents

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure ^(a)	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
												estimated ^(e) , more on the school streets themselves			driving kids to schools
RDAQ13 _Transpo rt	Travel demand management charges	Traffic Management	Other	2024	2029	RBC	RBC/DFT	No	Unfunded	£100-£1m	planning	To be quantified once further feasibility studies have been carried out	Investigation of schemes, implementation of scheme.		Vehicles travelling <u>through</u> Reading ('rat-runs') without the need to be <u>in</u> Reading to be charged.
RDAQ14 _Transpo rt	Bus Rapid Transit Schemes	Traffic Management	Strategic highway improvements, Re-prioritising road space away from cars, inc Access management, Selective vehicle priority, bus priority, high vehicle occupancy lane	2024	2029	RBC	RBC/DFT	No	Part funded	£10-£15m (BSIP)	Implementation	Minimal impacts expected initially, with modal shift benefits likely cancelled out by slight increases in congestion of other vehicle types ^(g)	Implementation of schemes, % increase use of buses		Bus Rapid Transit Schemes from the South, Southeast, Southwest, East and West, to connect Central Reading to the wider town.
RDAQ15 _Transpo rt	Park and Ride Expansions	Alternatives to Private Vehicle Use	Bus based Park & Ride	2024	2029	RBC	RBC/DfT	No	Part Funded	£500k	Implementation	Associated air quality improvements likely to occur after the life cycle of this AQAP, so shall	Number of extra parking spacing, number of extra people using the buses		

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure ^(a)	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
												be quantified at a later date			
RDAQ16 _Transpo rt	New pedestrian and cycling routes	Transport planning and Infrastructure	Cycle network/ Other	2024	2029	RBC	RBC/DFT	No	Part funded	£1-£5m (Active Travel England Tranche Funding))	Implementation	Via RDAQ8 and RDAQ16, reductions in NO2 concentrations of up to 0.3 µg/m ³ estimated ^(f)	Completion of cycling routes, % increase in cycling		In line with Local Cycling and Walking Infrastructure Plan
RDAQ17 _Transpo rt	Freight and Delivery. Investigate Introduction of last mile, low emission delivery	Freight and Delivery Management	Delivery and Service Plans	2024	2029	RBC	RBC/DFT	No	Not funded	<100K	Planning	To be quantified once feasibility studies have been carried out	Investigation of schemes		Such as encouraging 'last- mile' deliveries to be made by zero- emission vehicles
RDAQ18 _Transpo rt	Council Fleet Electrification	Promoting Low Emission Transport	Low Emisson Vehicles	2024	2029	RBC	RBC	No	Not funded	100k-1m	Implementation	4000kg NOx per annum	Number of vehicles replaced by EV/ULEV, Reduction of NOx emissions.		

(a) The estimated emissions reductions listed within this table are 'high level' approximations, based on broad and ambitious assumptions. At this stage, detailed information is not available for the majority of these measures. As such, a simple emissions-based review has been conducted, assuming a direct relationship between total emissions and concentrations, utilising Defra's latest NOx to NO2 conversion tool, where appropriate.

(b) High level estimate based on expected modal shift from diesel/ petrol cars to electric cars, as predicted within Reading Borough Council's Electric Vehicle Charging Strategy 2023.

(c) With ZEBRA funding, Reading Borough Council are targeting an initial fleet of 24 electric buses, with further fleet improvements expected in the future.

- (d) Reading Borough Council undertook a Feasibility Study in 2018 for the full modal shift of the local taxi fleet to electric vehicles. The Feasibility Study reported that 20% of vehicles on Caversham Road were taxis. The estimated improvements along Caversham Road listed in this table were obtained from the 2018 Feasibility Study, so assumes all taxis will be electric before the end of this AQAP life cycle. Note: as recent taxi fleet data could not be obtained, it was assumed that the number of ULEV taxis in 2018 has not increased between then and 2022.
- (e) Reading Transport Strategy 2040 highlights that current school street schemes have reduced car trips to and from schools by over 50%. The Strategy also acknowledges that up to 25% of peak hour trips are associated with school travel on some key road links. Assuming reductions of this proportion would occur on key links such as Caversham Road, George Street, Castle Hill or London Road, it is reasonable to expect the pollutant reductions listed in the table.

(f) Based on Reading Transport Strategy modal shift targets.

(g) Reading's Bus Service Improvement Plan highlights that although the overall ambition of the plan is to encourage a modal shift from private vehicles to public transportation, there could be some additional congestion on major road links initially.

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure ^(h)	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
RDAQ20 _Policy	Air quality planning guidance for construction sites and operational developments	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2024	2026	RBC	RBC	No	Not funded	< £10k	Planning	No pollutant concentration reductions expected, but this will act to minimise incremental pollutant increases from new development emissions	Implementation of guidance/ policy document		Government may phase out SPDs therefore we need to consider how best to achieve this aim.
RDAQ21 _Policy	Wood burning policy and expansion of Smoke Control Area	Policy Guidance and Development Control	Other	2024	2024	RBC	RBC	No	Not funded	< £10k	Implementation	PM emissions reductions of 10%	Expansion of SCA, Implementation of policy	Public consultation process undertaken	
RDAQ22 _Policy	Use of Wood Burning Enforcement Powers	Policy Guidance and Development Control	Other	2024	ongoing	RBC	RBC/Defra	No	Not funded	<100k	Planning	PM emissions reductions of 10%	Number of enforcement actions taken		Resourcing
RDAQ23 _Policy	Retrofitting Buildings to support Net Zero Ambitions	Policy Guidance and Development Control	Other	2024	ongoing	RBC	RBC/DESNZ	No	Part funded	100k-1m	Implementation	NO ₂ background emission reductions of 5%	Number of retrofitting measures completed, % decarbonised		In line with ambitions of Reading Climate Action Network. This should reduce the need to rely on gas boilers and solid fuel burning

Table 5.2 – Air Quality Action Plan Measures: Policy and Guidance Development

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure ^(h)	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
RDAQ24 _Policy	Encourage commercial cooking establishments to incorporate fine particulate filtration systems in their vents	Policy Guidance and Development Control	Other	2025	ongoing	RBC	RBC	No	Not funded	<10k	Planning	Minor regional benefits to PM	Number of businesses reached, percentage of businesses with filtrations systems		
RDAQ25 _Policy	Develop a Non- Road Mobile Machinery Emissions Policy	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2025	2026	RBC	RBC	No	Not funded	<10k	Planning	Minor regional benefits to PM	Implementation of policy		London have stringent NRMM policies in place to ensure heavy construction vehicles use as low-emission technologies as practically possible, which could be replicated in Reading
RDAQ26 _Policy	Tree Planting and greening	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2024	ongoing	RBC	RBC	No	Not funded	<10k	Implementation	Minor local benefits	Number of trees planted		Align with Tree Strategy, maximise tree planting and greening in 'tree corridors' along the AQMA giving careful consideration to the choice of species to maximise the tolerance to and pollution trapping potential

(h) Quantifications of the expected air quality improvements from the measures listed within this table was not possible, due either to the measures being at an early planning stage, or to limited evidence on how these measures affect concentrations.

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
RDAQ27 _Public	airAlert service (pollution warning service)	Public information	Via other mechanisms	2024	2024	RBC	RBC/Defra	no	Not funded	£5k CAPEX, £5k OPEX	Planning	No direct influence on pollutant concentrations, but provides the public with the opportunity to better protect themselves from pollution spikes	Implementation, number of subscriptions.	Part of AQ grant bid	Ongoing cost of running service. Link with RDAQ29 & RDAQ31
RDAQ28 _Public	School awareness events	Promoting Travel Alternatives	Other	2023	2027	RBC/Design Nature/Univers ity of Reading/ Stantec	AQ Grant	yes	Funded	£100k- £300k	Implementation	No direct influence on pollutant concentrations, but increases awareness	Number of school/pupils reached	AQ grant secured. Programme in development.	
RDAQ29 _Public	Health promotion work with NHS	Public information	Other	2024	2029	RBC/NHS/PHE		no	Not funded	£100k- £200k	Planning	No direct influence on pollutant concentrations, but increases awareness	Number of people/ patients reached		Link with better monitoring of PM2.5 (RQAQ31) develop stats on local health impact, increase understanding
RDAQ30 _Public	Mobility as a Service (MaaS) scheme	Public Information	Via other mechanisms	2023	2027	RBC		no	Not funded		Planning	Minor regional benefits to NO ₂ and PM by encouraging public transport use	% increase in public transport		Enable travellers to reach destinations confidently and conveniently, without the need for private vehicles, utilising a user- friendly transport

Table 5.3 – Air Quality Action Plan Measures: Public Health and Awareness

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
															services mobile app
RDAQ31 _Public	Increase PM _{2.5} Monitoring to help understanding of levels and sources in Reading	Public Information	Other	2024	2028	RBC/Defra/EA	RBC/EA	no	Not funded	100k-500k	Planning	No direct influence on pollutant concentrations, but enables greater understanding to better target measures in the future	Number of monitoring locations	AQ grant application submitted, EA planning to install monitoring station	Carry out monitoring of PM _{2.5} at more locations in Reading, to better understand current situation and trends.
RDAQ32 _Public	Smoke Control Area Awareness Campaign	Public Information	Other	2023	2025	RBC/Defra	RBC	no	Not funded	<10K	Planning	No direct influence on pollutant concentrations, but improves awareness	Publicity measures taken, surveys.	Information on RBC website	Develop and deliver awareness campaign to educate residents of the adverse air quality impacts of solid fuel burning. Materials re- published every winter for maximum impact.
RDAQ33 _Public	Bonfire/ garden waste fire awareness campaign	Public Information	Other	2024	2027	RBC	RBC	no	Not funded	<10K	Planning	No direct influence on pollutant concentrations, but improves awareness	Publicity measures taken, letters sent.		Develop and deliver awareness campaign to educate residents of the adverse air quality impacts of burning garden waste/ bonfires. Materials re- published every autumn for maximum impact.

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
RDAQ34 _Public	Engagement in National Clean Air Day	Public information	Other	2024	ongoing	RBC	RBC	no	Not funded	<10k	Planning	No direct influence on pollutant concentrations, but improves awareness	Events held locally, Publicity of campaign.		Encourage schools to be engaged in the topic of air quality. Awareness raising for residents.
RDAQ35 _Public	Indoor Air Quality Awareness Campaign	Public Information	Other	2025	ongoing	RBC	RBC	no	Not funded	<10k	Planning	No direct influence on pollutant concentrations, but improves awareness	Publicity measures taken, surveys.		Knowledge of the importance of indoor air quality is starting to pick up traction, but public awareness remains limited. No targets or legislation in place.

1.12 Cost Benefit Analysis

Defra highlighted that the AQAP should consider including a Cost Benefit Analysis (CBA), if practicable. Given the uncertainties surrounding the costs of some of the measures, and of the expected pollutant reductions in others, carrying out a CBA on the available data might lead to misinterpretations regarding which measures are likely to be most/ least favourable. As such, it might be more appropriate to consider the undertaking of the CBA at a later date, when more information is available and concrete.

In the meantime, it is worth drawing upon a few of the measures which are, at this stage, considered to be both affordable and highly beneficial, from an air quality perspective:

- Reading's Electric Vehicle Infrastructure Strategy will help to enable the efficient modal shift from high to ultra-low polluting vehicles across the borough. Subsequent reductions in annual mean NO₂ concentrations could be as much as $2 \mu g/m^3$ on Reading's most polluted roads.
- Through taxi licensing conditions, Reading Borough Council are targeting a local taxi fleet of ULEVs only by 2029. Noting that Caversham Road is a significant link road for taxi trips, substantial air quality improvements could occur as a result of this scheme.
- Particulate matter emissions will be targeted primarily through the introduction of stringent wood burning policy and expansion of the associated smoke control zone. Through these policy ٠ interventions, it is expected that the long-term patterns in particulate matter concentrations will return to downward trends.

Appendix A: Response to Consultation

Table A.1 – Summary of Responses to Consultation and Stakeholder Engagement on the AQAP

Consultee	Category	Response
Defra	Statutory	Yes
Environment Agency	Statutory	No
Highways Authority	Statutory	Yes
All Neighbouring Local Authoritieis	Statutory	Yes
Bodies representing local businesses and other organisations as appropriate	Statutory	Responses received from several organisations including Reading Friends of the Earth, Cycling UK, REDA

Consultee	Category	Response
		Public consultation ran from 06/12/2023 to 17/01/2024. Details can be found
Residents		at: https://consult.reading.gov.uk/dens/air-quality-action-plan-2024-2029-
		consultation/

Appendix B: Reasons for Not Pursuing Action Plan Measures

 Table B.1 – Action Plan Measures Not Pursued and the Reasons for that Decision

Action category	Action description	Reason action is not being pursued (including Stakeholder views)
Traffic Management	Cross-Thames Travel Scheme	The scheme will not be completed during the lifecycle of the action plan.

Appendix C: Current UK Air Quality Standards and Objectives

Part IV of the Environment Act 1995 requires the Secretary of State to publish a national Air Quality Strategy and gave Local Authorities statutory duties to implement the system of LAQM.

The 2008 Ambient Air Quality Directive (ED/2008/50/EC) sets legally binding limits for concentrations in outdoor air for major air pollutants that impact public health such as particulate matter (PM₁₀ and PM_{2.5}) and nitrogen dioxide (NO₂), to be met before 2010. These directive air quality limits were transposed into UK law and are set out in the Air Quality Strategy as provided in Table C.

Table C: UK Air Quality Standards and Objectives

Pollutant	Averaging Period	Air Quality Standard (AQS) (µg/m³)	Air Quality Objective (AQO)
Nitrogen dioxide (NO2)	1 hour	200	200 μg/m ³ not to be exceeded more than 18 times a year
	Annual	40	40 µg/m³
Particulate Matter (PM ₁₀)	24 hour	50	50 μg/m ³ not to be exceeded more than 35 times a year
	Annual	40	40 µg/m ³

Particulate Matter (PM _{2.5})	Annual	20	20 µg/m ³
			1

The objectives adopted in the UK are based on the Air Quality (England) Regulations 2000, as amended, for the purpose of Local Air Quality Management. These Air Quality Regulations have been adopted into UK law from the limit values required by European Union Daughter Directives on air quality.

The UKAQS for PM_{2.5} was amended as part of The Environment (Miscellaneous Amendments) (EU Exit) Regulations 2020.

The LAQM process requires all local authorities to regularly review and assess air quality in their areas, and to determine whether 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.

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
AQS	Air Quality Strategy
AQO	Air Quality Objective
ASR	Air Quality Annual Status Report
Defra	Department for Environment, Food and Rural Affairs
EU	European Union
WHO	World Health Organisation
LAQM	Local Air Quality Management
NO ₂	Nitrogen Dioxide
NOx	Nitrogen Oxides
PM10	Airborne particulate matter with an aerodynamic diameter of 10µm (micrometres or microns) or less
PM2.5	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less

O3	Ozone
BRT Corridor	Bus Rapid Transit Corridor
IDR	Reading's Inner Distribution Road which surrounds central Reading
AURN	Defra's Automatic Urban and Rural Network of monitoring stations
AQMS	Air Quality Monitoring Station
NPPF	National Planning Policy Framework
TDP	Reading's Transport Decarbonisation Plan
DfT	Department for Transport
LGV	Light Goods Vehicle – goods vehicles weighing less than 3.5 tonnes.
HGV	Heavy Goods Vehicle – goods vehicles weighing greater than 3.5 tonnes.
UK-AIR	Defra's UK Air Information Resource
AQSG	Reading's Air Quality Steering Group
EV	Electric Vehicle

Strategic Environment, Planning and Transport Committee



13 March 2024

Title	Strategic Transport Schemes Update	
Purpose of the report	To note the report for information	
Report status	Public report	
Report author	Chris Maddocks, Strategic Transport Manager	
Lead Councillor	Cllr John Ennis, Lead Councillor for Climate Strategy and Transport	
Corporate priority	Healthy Environment	
Recommendations	The Committee is asked to:1. Note the progress made on delivery of the current programme of strategic transport schemes as summarised in this report.	

1. Executive Summary

- 1.1. The purpose of this report is to provide an overview of the latest progress with the delivery of the programme of strategic transport schemes and initiatives in Reading. This programme includes major enhancements to public transport and active travel facilities, aimed at encouraging more healthy lifestyles and helping to address the Climate Emergency and improve air quality in the borough.
- 1.2. The current programme includes the following schemes and initiatives:
 - Bus Service Improvement Plan Programme
 - South Reading Bus Rapid Transit
 - Reading West Station Upgrade
 - Tilehurst Station Upgrade
 - Shinfield Road Active Travel Scheme
 - Bath Road Active Travel Scheme
 - School Streets Programme
 - Active Travel Behavioural Change Programme

2. Policy Context

2.1. The Council's current Local Transport Plan (LTP) sets the transport strategy for Reading up to 2026. Development of a new LTP, the Reading Transport Strategy 2040, has progressed with the core principles of the strategy linked to wider objectives including health and wellbeing, economic growth and social inequalities, improved air quality and the Climate Emergency. The strategic transport schemes included within this report are fully aligned with both the existing and new LTP, with the delivery of each individual scheme a key component of achieving the overall vision and objectives of the strategy.

2.2. The LTP sets the context and overarching vision for future transport provision in Reading, with sub-strategies providing more detailed implementation plans for specific topics. These form the basis for preparing funding proposals to deliver key elements of each sub-strategy, including the Bus Service Improvement Plan, Local Cycling & Walking Infrastructure Plan, Electric Vehicle Charging Infrastructure Plan and the Public Rights of Way Improvement Plan.

3. The Proposal

Bus Service Improvement Plan Programme

- 3.1. The Council adopted its Bus Service Improvement Plan (BSIP) in October 2021, setting out plans to enhance services and encourage more people to travel by bus in Reading. The BSIP was fully aligned with the objectives of the National Bus Strategy 'Bus Back Better'. Following a thorough review and detailed discussions with officials from the Department for Transport (DfT), the Council was awarded £26.263m grant funding in January 2023, which was the third highest funding award (per head of population) in the country.
- 3.2. As required by Government, the Council subsequently developed an Enhanced Partnership (EP) agreement with all local bus operators; and convened an EP Board with the major operators to oversee the development and delivery of the BSIP programme. Essentially the EP agreement sets out our commitment to deliver, in partnership with the operators, the schemes that the Council has been awarded grant funding for from Government.
- 3.3. The BSIP programme includes a range of both capital and revenue measures, with the funding award consisting of £15.939m capital and £10.324m revenue grant funding. The key elements of the programme are set out below:

Capital schemes:

- Phase 5 of the South Reading BRT (Bus Rapid Transit) scheme.
- Programme of new bus lanes on key routes in the Borough.
- Improvements to passenger facilities at Mereoak Park & Ride site.
- Package of town centre public transport enhancements, bus signal priority measures and improvements for passengers at bus stops.

Revenue initiatives:

- Introduction of a multi-operator fares discount scheme.
- Programme of bus service enhancements including for Route 9, Buzz 42 and park & ride services.
- Comms and engagement programme to publicise the enhancements delivered through the BSIP programme.
- Development of initial proposals for future bus priority measures in the borough.
- Management of the EP arrangements and programme delivery support.
- 3.4. Delivery of the BSIP programme commenced with the launch of the Reading All-Bus ticket discount scheme in March 2023. This sets a daily cap for travel within Reading to ensure no one pays more than a set fare for unlimited travel undertaken in a day. The offer includes travel on services operated by Reading Buses, Thames Travel, Arriva and Thames Valley Buses. In addition, tap-on tap-off contactless payment on all the main operators has been introduced from 1 November 2023, with an introductory offer of £3
for all-day travel until 31 December 2023 which is funded by the BSIP grant. The All-Bus ticket scheme has proved extremely popular to date, with over 1.4m tickets sold up to mid-December, saving residents in Reading over £1.9m in fares as a result. The all-day discount scheme also complements the Government's national £2 single fare scheme.

- 3.5. Enhancements to bus services have been progressed, with the new Buzz 9 services commencing on 2 January 2024, including services between the town centre and Whitley Wood as normal, with the additional BSIP funded services to Green Park Station and the business park. This will ensure that local residents can fully benefit from the new station facility which was delivered by the Council and opened in May 2023. In addition, a competitive procurement process has been undertaken for the operation of the enhanced Buzz 42 services that are currently fully funded by special ringfenced private sector contributions secured through the planning process. The BSIP funded enhancements will provide an improved service connecting the significant residential developments at Kenavon Drive, the town centre, new Rivermead leisure centre and the forthcoming secondary school on Richfield Avenue. Buzz 42 tenders have been assessed with the contract recently being awarded to Reading Buses.
- 3.6. Development of the programme of capital schemes is being progressed, including approval being granted from the Council's Traffic Management Sub-Committee in January 2024 to proceed with delivery of the full programme of bus lanes for the Oxford Road (x2), Bath Road, Southampton Street and London Road (x2), following the undertaking of a statutory consultation on the designs of each scheme. To ensure the maximum number of people use the inbound bus lane on London Road between Liverpool Street and Cemetery Junction, we are working with Wokingham Borough Council and Reading Buses with a view to reinstating Monday to Friday park and ride services from Winnersh Triangle into Reading, in addition to the existing Saturday services. The first scheme to be delivered will be the outbound bus lane on Oxford Road, between the junctions with Zinzan Street and George Street, with construction works due to commence on site imminently. In addition, a planning application has been submitted to Wokingham for the passenger waiting shelter enhancements at Mereoak Park & Ride site and delivery of the programme of bus stop passenger enhancements is on-going.

South Reading Bus Rapid Transit

- 3.7. The South Reading Bus Rapid Transit (BRT) scheme is a series of bus priority measures on the A33 growth corridor, with the overall vision of creating a dedicated fast-track public transport priority route between Mereoak Park & Ride and Reading town centre. The current scheme which is being delivered in phases as external funding is secured, has the potential to become a guided-bus, tram or autonomous shared vehicle system in the future.
- 3.8. The first four phases of the scheme have been delivered with over £15m external funding secured from the Local Growth Fund and fettered developer contributions secured through the planning process. Phase 4 was constructed last year, which includes an outbound bus lane between Rose Kiln Lane and Lindisfarne Way (Kennet Island), and the upgrade of the traffic signals to an intelligent Microprocessor Optimised Vehicle Actuation (MOVA) method of control at the Bennet Road gyratory to improve traffic flows on this key corridor.
- 3.9. Funding for phase 5 of the scheme has been secured as part of the overall BSIP grant as set out above. This phase of works will link up existing outbound bus lanes delivered through previous phases through the construction of an additional lane over the River Kennet, between the junctions with Rose Kiln Lane (South) and Kennet Island. This will complete the outbound section of the scheme, which would enable future funding bids to focus on delivery of the remaining inbound sections, which could logically be split into four distinct phases depending on the level of funding available through individual funding opportunities. The future potential adaption of the scheme into a guided bus or tram

system would require further investment in the necessary infrastructure and vehicles at that time.

3.10. The detailed design for phase 5 of the scheme is complete and a competitive procurement process has been undertaken and contractor appointed to deliver the next phase of works, with construction due to start on-site in March.

Reading West Station Upgrade

- 3.11. A Masterplan setting out a vision for significant enhancements to Reading West Station and the wider interchange has been prepared by the Council, in partnership with GWR and Network Rail. This includes enhanced passenger facilities, security improvements and enhancements to both the Oxford Road and Tilehurst Road station entrances.
- 3.12. External funding of over £4.5m has been secured to deliver the first phase of the Masterplan works, which includes grant funding from the Local Growth Fund, developer contributions secured through the planning process and funding directly from Great Western Railway (GWR). The current phase of works includes provision of a new station building on the Oxford Road with associated interchange works, increased cycle parking and a new ticket barrier at the Tilehurst Road station entrance. The scheme will provide safety and security improvements at both entrances through enhanced CCTV coverage and lighting, which have been designed with input from the British Transport Police.
- 3.13. Construction of the highway alterations and interchange improvements on the Oxford Road to accommodate the new station building are complete and subsequently GWR's contractors took possession of the southern footway for construction of the new passenger building. Works for the new building are substantially complete by GWR and the footway has been reopened and traffic management measures removed. The new station building and gateline facilities at the Tilehurst Road entrance will be opened once the railway industry sign-off process has been completed by GWR and Network Rail, which is anticipated imminently.
- 3.14. The current scheme includes passive provision for accessibility enhancements within the new station building, however Network Rail's position is that lifts cannot be delivered at the station until a full platform rebuild is undertaken to deliver the necessary minimum platform widths to meet accessibility requirements. Therefore, the Council will continue to work with railway partners including Network Rail to seek opportunities to secure funding for these key elements of the overall Masterplan for the station.

Tilehurst Station Upgrade

- 3.15. The Council is working with Network Rail and GWR to develop a series of proposals to upgrade passenger facilities at Tilehurst Station, and funding is being sought to develop an agreed Masterplan. This would include enhancements within the station and for the wider interchange, including improved access arrangements to/from the station.
- 3.16. Network Rail has secured £4m funding from Government for the first phase of works to deliver accessibility improvements through the installation of lifts at the station. They will be installed within the existing station footbridge which had been designed with passive provision for lifts. When complete, these works will provide step free access to all platforms at the station.
- 3.17. Network Rail has undertaken a mailshot to local residents informing them of the planned works and held a public drop-in session at the station on Tuesday 30 January. A contractor has been appointed to undertake the works, which will be initially focused on piling and installation of the lift shafts.

Shinfield Road Active Travel Scheme

- 3.18. Delivery of the Council's Local Cycling and Walking Infrastructure Plan (LCWIP) is being undertaken in phases as external funding is secured. The Shinfield Road active travel scheme is a key element of this plan, which will provide segregated cycle facilities and pedestrian improvements on a key route between residential areas in south Reading, the University of Reading, Royal Berkshire Hospital and the town centre.
- 3.19. External funding of £1.4m has been secured to deliver the scheme, including grant funding from Active Travel England. An initial consultation on the concept designs for the scheme was undertaken in autumn 2021, which included a public drop-in event held at the University of Reading. Feedback from this consultation was incorporated into the final detailed designs and the statutory consultation on the required Traffic Regulation Orders (TROs) to implement double yellow line parking restrictions along the route was approved by the Council's Traffic Management Sub-Committee in March 2022.
- 3.20. Construction of the scheme is being undertaken by the Council's in-house Highways team, with a degree of sub-contracting which is being managed by the Highways department. Construction works commenced at the University / Christchurch Green end of the route in October 2022 on the outbound section between Chancellor's Way and Pepper Lane junction and then continued on the opposite side to complete the section from Pepper Lane through to Christchurch Green. Following completion of this section, work commenced in the summer of 2023 on the other side of the Pepper Lane junction on the section next to Leighton Park School. This section included the longest continuous and uninterrupted cycle track. In addition, traffic restrictions in the form of double yellow lines have been installed along the entire route between Christchurch Green and Shinfield Rise to address a longstanding issue of parking on the section next to the University of Reading which was causing obstruction to general traffic.

Bath Road Active Travel Scheme

- 3.21. The active travel scheme on Bath Road is another key element of the Council's LCWIP, which will provide a segregated cycle route and pedestrian improvements on this key route between residential areas in west Reading and the town centre.
- 3.22. External funding of £2.5m has been secured to deliver the scheme, including grant funding from Active Travel England. An initial consultation on the concept designs for the scheme was undertaken in summer 2022, which included a public drop-in event held at the Reading Association for the Blind on Carey Street. The detailed scheme designs have been prepared to incorporate feedback received through this consultation, including elements of the scheme that require a TRO statutory consultation which was approved by the Council's Traffic Management Sub-Committee in March 2023.
- 3.23. A competitive procurement process is currently being undertaken to appoint a contractor to deliver the scheme, with construction works due to commence on-site in the summer.

School Streets Programme

- 3.24. The Council launched a School Street application process and guidance in spring 2020, after securing £175k revenue grant funding from Government. To date, School Street schemes have been implemented at Park Lane Primary Junior School (Downing Road and Lambourne Close), Wilson Primary School (Wilson Road), Thameside Primary School (Harley Road) and most recently on Crescent Road in east Reading. The scheme on Crescent Road is a joint scheme for Maiden Erleigh School in Reading, UTC Reading and Alfred Sutton Primary School.
- 3.25. The School Street schemes have been initially established as trials under an Experimental Traffic Regulation Order (ETRO), which includes a 6-month statutory consultation period to provide the opportunity for comments and objections to the scheme to be submitted to the Council. The Council's Traffic Management Sub-Committee provided approval for the schemes at Park Lane Junior, Wilson and Thameside Primary

schools to be made permanent in June 2022, and the Crescent Road scheme in June 2023.

3.26. Applications to establish new School Street schemes are being encouraged with recent activities focused on potential schemes for Civitas Academy (Great Knollys Street) and Geoffrey Field Junior, Geoffrey Field Infant and Christ the King (Exbourne Road). In addition, monitoring of the existing schemes to identify any improvements which can be made to help encourage walking and cycling for children, parents and carers is being undertaken.

Active Travel Behavioural Change Programme

- 3.27. The Council has secured over £370k revenue grant funding from Government to deliver an active travel behavioural change programme, aimed at supporting a shift in travel behaviour to walking, cycling and scooting. This programme complements the segregated cycle routes and enhanced pedestrian facilities being delivered through the active travel capital schemes on Shinfield Road and Bath Road.
- 3.28. Delivery of this programme of initiatives is on-going, including the provision of adult cycle training and cycle maintenance courses in addition to the training being provided to children in schools through the Bikeability programme. The Council is working in partnership with Sustrans to deliver behavioural change initiatives through a dedicated officer as a joint Sustrans resource in partnership with Bracknell Forest Council. Activities undertaken to date include provision of led rides and walks, supporting schools with the delivery of Modeshift STARS travel planning activities, and working with partners to support events including Reading Cycle Festival and the Sustrans Big Walk and Wheel.
- 3.29. In conclusion, this report provides the Committee with an overview of the latest position with the delivery of individual schemes and initiatives which make up the programme of strategic transport schemes in Reading. The Committee will be kept informed of the latest developments through regular progress reports to future meetings.

4. Contribution to Strategic Aims

- 4.1. The Council's new Corporate Plan has established three themes for the years 2022/25. These themes are:
 - Healthy Environment
 - Thriving Communities
 - Inclusive Economy
- 4.2. These themes are underpinned by "Our Foundations" explaining the ways we work at the Council:
 - People first
 - Digital transformation
 - Building self-reliance
 - Getting the best value
 - Collaborating with others
- 4.3. Full details of the Council's Corporate Plan and the projects which will deliver these priorities are published on the <u>Council's website</u>. These priorities and the Corporate Plan demonstrate how the Council meets its legal obligation to be efficient, effective and economical.
- 4.4. The delivery of the programme of strategic transport schemes will help to deliver the three service priorities in the Council's Corporate Plan of Healthy Environment, Thriving Communities and Inclusive Economy by providing high-quality, affordable transport

options which will help to reduce congestion, improve air quality and help to encourage more healthy lifestyles.

5. Environmental and Climate Implications

- 5.1. The Council declared a Climate Emergency at its meeting on 26 February 2019 (Minute 48 refers). Transport is the biggest greenhouse gas emitting sector in the UK accounting for around 27% of total carbon emissions. As set out in our Climate Emergency Strategy this figure is lower in Reading with transport accounting for around 20% of carbon emissions, however significant investment in sustainable transport solutions is vital in order to respond to the Climate Emergency declared by the Council in February 2019.
- 5.2. The Climate Impact Assessment tool has been used to assess the full programme of works as set out within this report, resulting in an overall Net Medium Positive impact. This is due to the programme being focused on encouraging the use of sustainable transport, walking and cycling as attractive alternatives to the private car. The programme will enhance facilities to encourage more use of sustainable transport and active travel options, and therefore reduce the use of the private car and resulting congestion, carbon emissions and other air quality issues. There are inevitably emissions associated with the construction of these major schemes, however we are working to reduce these short-term impacts in order to achieve the longer-term modal switch benefits.
- 5.3. In addition, the delivery of the major transport schemes as set out within this report form a vital part of our overall transport and climate emergency strategies, which has achieved considerable success in recent years including bus usage in Reading being the second highest in the country outside of London, having increased by 23% since 2010, and around 35% of trips into Reading town centre being made by pedestrians and cyclists.

6. Community Engagement

- 6.1. The schemes included within the current major transport scheme programme have and will be communicated to the local community through public exhibitions, consultations and Council meetings.
- 6.2. Statutory consultation will be conducted in accordance with appropriate legislation, including Traffic Regulation Orders as appropriate. Notices will be advertised in the local printed newspaper and will be erected on lamp columns within the affected area.

7. Equality Implications

- 7.1. Under the Equality Act 2010, Section 149, a public authority must, in the exercise of its functions, have due regard to the need to:
 - Eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under this Act.
 - Advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it.
 - Foster good relations between persons who share a relevant protected characteristic and persons who do not share it.
- 7.2. The Council, and where appropriate partner delivery organisations, have carried out an equality impact assessment scoping exercise on all of the projects included within the current major transport scheme programme.

8. Other Relevant Considerations

8.1. There are none.

9. Legal Implications

9.1. The creation of and changes to existing Traffic Regulation Orders will require Cemex advertisement and consultation, under the Road Traffic Regulation Act 1984 and in accordance with the Local Authorities Traffic Orders (Procedure) (England and Wales) Regulations 1996. These procedures have been and will continue to be completed at the relevant time.

10. Financial Implications

- 10.1. The capital schemes included within the strategic transport schemes programme are included in the Council's Capital Programme which includes the funding profile for each scheme. This programme of works is funded by external grants and funding contributions which have been secured from various external sources as set out within the report. Both the capital and revenue schemes and initiatives within this programme are monitored regularly as part of the Council's internal budget monitoring processes.
- 10.2. Specific grant conditions are attached to the individual external grants which have been secured to fund the delivery of the programme of schemes and initiatives as set out within this report. These conditions relate to both the type of works that the grants can be used to fund and the timescales within which the funding needs to be spent. Failure to meet these conditions may result in the Council being required to repay the grant funding, either in part or in full.

11. Timetable for Implementation

11.1. The latest timetables for implementation of the individual schemes and initiatives which make up the full programme are set out within the report.

12. Background Papers

12.1. There are none.

Agenda Item 10

Strategic Environment, Planning and Transport Committee



13 March 2024

Working better with you

Title	Electric Vehicle Charging Infrastructure Strategy – Final for Adoption					
Purpose of the report	To make a decision					
Report status	Public report					
Report author	Chris Maddocks, Strategic Transport Manager					
Lead Councillor	Cllr John Ennis, Lead Councillor for Climate Strategy and Transport					
Corporate priority	Healthy Environment					
Recommendations	 The Committee is asked to: Note the additions and updates that have been made to the Electric Vehicle Charging Infrastructure Strategy to reflect feedback received from the public consultation. Approve the adoption of the Electric Vehicle Charging Infrastructure Strategy for Reading (Appendix A) 					

1. Executive Summary

1.1. The purpose of this report is to provide an overview of the additions and updates that have been made to the draft Electric Vehicle Charging Infrastructure Strategy following the public consultation, which was undertaken between 8 August and 18 September 2023, and to seek approval for the Council to adopt the final strategy.

2. Policy Context

- 2.1. The Department for Transport (DfT) published the Transport Decarbonisation Plan 'Decarbonising Transport: A Better, Greener Britain' in July 2021 to set the pathway and key principles underpinning the approach to delivering net zero transport in the UK by 2050.
- 2.2. This was followed by the publication of 'Taking Charge: The Electric Vehicle Infrastructure Strategy' in March 2022. The Strategy sets out Government's vision and action plan for the rollout of electric vehicle charging infrastructure in the UK, ahead of the dates to end the sale of new petrol and diesel vehicles by 2035 and for all new cars and vans to be fully zero emission at the tailpipe by the same date.
- 2.3. The transition to electric vehicles will help to achieve a range of Council strategies and objectives including those within the Climate Emergency Strategy, the Local Transport Plan (LTP) and the Air Quality Action Plan. It is a key element of achieving the vision within the LTP to promote a sustainable transport system in Reading that creates an attractive, green and vibrant town with neighbourhoods that promote healthy choices and wellbeing.

3. The Proposal

3.1. The key focus of the Council's emerging Local Transport Plan (The Reading Transport Strategy 2040) is to promote sustainable alternatives to the private car, such as public transport, walking and cycling; as this will be fundamental to achieving our overall vision and wider objectives relating to health and wellbeing, reducing inequalities and sustainable economic growth. However, the transition to electric vehicles will also play an important role in achieving the carbon and air quality elements of the Strategy and it is acknowledged that it is not possible for every car journey to be replaced by a more sustainable mode; for instance people may need to drive on occasions due to reasons relating to work, family, safety, gender or equality. It should be noted that this transition alone will not achieve the overall objectives of the wider transport strategy as electric vehicles still produce particulates which lead to poor local air quality, do not reduce traffic congestion nor encourage more active travel with the associated health and wellbeing benefits.

- 3.2. The Electric Vehicle Charging Infrastructure Strategy will become a sub-strategy to the Local Transport Plan. The overarching aim of the Strategy is to accelerate the transition to Electric Vehicles for necessary travel in Reading in the context of wider Local Transport Plan aspirations to reduce the need to travel, reduce carbon emissions, improve air quality and promote sustainable and active travel.
- 3.3. The Strategy sets out the current position of electric vehicle take-up in Reading as well as setting the future pathway to support increased uptake of electric vehicles for residents, visitors and local businesses. The Strategy includes reference to the charging infrastructure needs of all electric vehicles, including electric buses, car clubs, e-bikes and e-scooters.
- 3.4. A public consultation on the Draft Strategy was undertaken for six weeks between 8 August and 18 September 2023. The Council received 64 responses through the consultation, including from residents and local groups such as Caversham and District Resident's Association (CADRA), alongside key industry bodies including the Energy Savings Trust (EST). Whilst this was a relatively low level of response overall, the feedback received has proved to be immensely valuable with key feedback from the consultation set out below:
 - Over 82% of respondents either agreed or strongly agreed with the aims and objectives of the Draft Strategy.
 - 48% of respondents do not currently own an EV (electric vehicle), 31% do own an EV and 21% are actively considering purchasing an EV.
 - Of the respondents who currently own an EV, only 26% can currently charge their vehicle at home and a further 8% plan to install charging facilities at home imminently.
 - Of the respondents that do not currently own an EV, 47% said the lower costs of EVs would encourage them to purchase one, 36% said more charging points near their home was a key factor and 34% said more charge points throughout the country would encourage them to purchase an EV.
 - 71% of respondents said they would like to see more charge points installed in residential areas and local neighbourhoods, 65% in retail parks, 55% in leisure centres, and 41% would like to see more charge points installed on the major road network.
 - The most popular response for the distance charge points should be located within people's homes was within 100 meters which was selected by 36% of respondents.
- 3.5. The Draft Strategy document has subsequently been updated to reflect the main themes of feedback received through the consultation, with the key changes including:
 - Factual updates throughout the document to reflect the latest data relating to growth in EV uptake.
 - Updated to reflect the recent Government announcement that the timescales to end the sale of new petrol and diesel vehicles will change to 2035 from the previous policy of 2030.

- The objectives of the strategy have been condensed and more closely aligned with the delivery plan.
- Strengthened statements on social inclusion and the provision of fair and equitable charging rates for on-street residential charging.
- Updates to reflect feedback on issues relating to considering conservation areas and avoiding removing trees where possible to implement on-street EV charging facilities.
- Updated considerations for the procurement of charging infrastructure including the need to ensure future proofing, reliability and quality of service is built into any future procurements.
- Strengthened statements on the potential for hydrogen powered vehicles, including the challenges of generating truly green hydrogen and the need for hydrogen fuel stations.
- Updates to reflect the recent change in categorisation of EV charger by speed of charger.
- Approximate costings for each element of the Strategy have been added to the delivery plan to give an indication of the level of investment required to deliver the strategy.
- 3.6. Development of the Strategy has involved engagement with suppliers of electric vehicle charge point infrastructure to ensure it is based on the latest available information in this rapidly evolving market. The Strategy takes into account the latest projections for electric vehicle uptake, and therefore the requirements for different types of charging infrastructure, to ensure that a lack of charge points is not a barrier to the future take-up of electric vehicles.
- 3.7. The Strategy acknowledges the role the Council has in providing local leadership in this area to set an example for residents and local businesses to follow, however it also highlights the key areas which are outside of the control of the Council. External funding has previously been secured to implement a range of charge points in the town, including rapid charge points at Mereoak and Winnersh Park & Ride sites, fast charge points in some Council owned car parks and slow charge points in a number of residential streets throughout the borough. It is considered that the further provision of charge points for residents living in streets without off-street parking is a particularly important role for the Council moving forward. Therefore, further installations of charge points in streets without off-street parking is a particularly important role for the Council moving is included as a key action within the Strategy.
- 3.8. The Council is committed to ensuring our in-house vehicle fleet is transitioned to electric and good progress is being made in this area, with our current fleet including 7 electric small vans, 6 electric refuse collection vehicles, 2 electric pool cars and an electric litter collection vehicle. In addition, work is currently being progressed to upgrade the power supply into the depot at Bennet Road to ensure further charging infrastructure can be provided to cater for future electric vehicles in the fleet.
- 3.9. In addition to the Strategy for the borough, officers are working with colleagues from the other Berkshire authorities to identify how delivery of charge points can be coordinated across the County. Options being considered to ensure charging infrastructure is delivered in the most joined-up and cost-effective way include the possibility of joint bidding opportunities, sharing resources where appropriate and exploring the potential advantages of pursuing a pan-Berkshire supplier arrangement (for instance for the procurement of more strategically located rapid charging infrastructure). This could be achieved through a 'concession framework' to procure an operator(s) to provide charging facilities on appropriate highway land across the County, with associated revenue income.
- 3.10. In conclusion, the Electric Vehicle Charging Infrastructure Strategy sets out the context and Council's ambitions to provide the infrastructure required to enable a rapid transition Page 297

to electric vehicles in Reading, in line with our wider climate and transport ambitions. The Draft Strategy has been updated to reflect feedback received through the public consultation and therefore the Committee is asked to approve adoption of the final strategy.

4. Contribution to Strategic Aims

- 4.1. The Council's new Corporate Plan has established three themes for the years 2022/25. These themes are:
 - Healthy Environment
 - Thriving Communities
 - Inclusive Economy
- 4.2. These themes are underpinned by "Our Foundations" explaining the ways we work at the Council:
 - People first
 - Digital transformation
 - Building self-reliance
 - Getting the best value
 - Collaborating with others
- 4.3. Full details of the Council's Corporate Plan and the projects which will deliver these priorities are published on the <u>Council's website</u>. These priorities and the Corporate Plan demonstrate how the Council meets its legal obligation to be efficient, effective and economical.
- 4.4. The delivery of the Electric Vehicle Charging Infrastructure Strategy will help to deliver the three service priorities in the Council's Corporate Plan, particularly the creation of a healthy environment. This will be achieved by increasing usage of electric vehicles which have a significantly reduced impact on carbon emissions than diesel and petrol equivalents.

5. Environmental and Climate Implications

- 5.1. The Council declared a Climate Emergency at its meeting on 26 February 2019 (Minute 48 refers). Transport is the biggest greenhouse gas emitting sector in the UK accounting for around 27% of total carbon emissions. As set out in our Climate Emergency Strategy this figure is lower in Reading with transport accounting for around 20% of carbon emissions, however significant investment in sustainable transport solutions is vital in order to respond to the Climate Emergency declared by the Council in February 2019.
- 5.2. A Climate Impact Assessment has been completed which suggests a 'net medium positive' impact arising from adoption of the strategy. In order to achieve the Council's sustainable transport vision and meet our climate change goals, we will need to reduce car use both within and through the borough by providing attractive and viable alternatives through prioritising and promoting public transport and active travel schemes. However, our Transport Strategy recognises that private vehicle use, car and van trips, will remain for many the most appropriate mode of transport. Therefore, by encouraging the adoption of electric vehicles for the trips that still need to be made they can be made to be more sustainable with a lower impact on the environment and climate change as well as reducing the impact of poor air quality in Reading.
- 5.3. A key driver to the successful adoption of electric vehicles is the ability to adequately charge vehicles. For some the natural choice will be through home charging in an off-street setting, but this will not be available for many, and Reading has a particularly high proportion of homes that do not have off-street parking. Our Electric Vehicle Charging Infrastructure Strategy will provide a framework for a network of charging points across the borough and to remove barriers to EV ownership and help achieve our targets from our Climate emergency Strategy of increasing uptake of zero emission vehicles.

6. Community Engagement

6.1. As set out within the report, a public consultation on the draft strategy was undertaken for six weeks between 8 August and 18 September 2023 and the final strategy has been updated to reflect the key themes of feedback received through the consultation.

7. Equality Implications

- 7.1. Under the Equality Act 2010, Section 149, a public authority must, in the exercise of its functions, have due regard to the need to:
 - Eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under this Act.
 - Advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it.
 - Foster good relations between persons who share a relevant protected characteristic and persons who do not share it.
- 7.2. The strategy has been developed in line with these requirements and the delivery of individual elements of the strategy be subject to further Equality Impact Assessments (EIA) as they are developed.

8. Other Relevant Considerations

8.1. There are none.

9. Legal Implications

9.1. There is no current statutory requirement for the Council to produce an Electric Vehicle Charging Infrastructure Strategy, however it is anticipated that the new Local Transport Plan guidance being prepared by the Department for Transport may place this duty on Local Transport Authorities.

10. Financial Implications

- 10.1. Development of the Electric Vehicle Charging Infrastructure Strategy has been funded by existing transport budgets, including revenue grant funding.
- 10.2. Delivery of the Strategy will be subject to securing funding to enable individual elements of the overall Strategy to be implemented. The Council has recently bid to Government for £866k capital grant funding to deliver residential charge points through the Local Electric Vehicle Infrastructure fund, and £1.08m to deliver electric vehicle charging facilities at Reading Buses' depot through the Zero Emission Bus Regional Area fund (in addition to £3.66m for electric buses). If successful this external funding will help to deliver a significant element of the Strategy, however we will continue to seek further funding opportunities to deliver further elements of the strategy such as rapid charging facilities and charge points in Council owned car parks.

11. Timetable for Implementation

11.1. The delivery of individual schemes included within the strategy will be subject to future funding being secured.

12. Background Papers

12.1. There are none.

Appendices

A. Electric Vehicle Charging Infrastructure Strategy (March 2024)

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Reading Transport Strategy 2040 Sub-Strategy:

Electric Vehicle Charging Infrastructure Strategy

Draft for Consultation - March 2024





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This document is available in accessible formats on request by email to transport@reading.gov.uk

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Foreword, by Councillor John Ennis

FOREWORD

Our new draft Electric Vehicle (EV) Charging Infrastructure Strategy has been developed as a sub-strategy to the emerging Reading Transport Strategy 2040, which aims to deliver a sustainable transport system in Reading to create an attractive, green and vibrant town. This EV Strategy is also an important element in achieving the aims and objectives of Reading's Climate Emergency Strategy, including our ambitions to create a net zero carbon town.

Central Government plans to ban the sale of new petrol and diesel cars in the UK by 2035 (80% EVs by 2030), and over the past few years there has been a significant growth in the proportion of new EV sales across the country, including in Reading. This growth is set to increase as we experience volatility with fluctuating petrol and diesel prices, EVs becoming a more affordable option as technology advances, and as residents look to make more environmentally conscious choices.

As a major hub for employment, leisure, retail and key services, Reading attracts many visitors. One impact of this success is high levels of traffic congestion as people travel to and through Reading by private car. This is despite us having an extensive bus network in the borough and a major rail hub at Reading Station. As a result of congestion, Reading also suffers with air pollution and a large part of the town centre and key corridors in the borough are covered by an Air Quality Management Area (AQMA).

This poses considerable health risks to residents and visitors, particularly younger or older members of the community and those with underlying health conditions. The further uptake of electric vehicles to replace petrol or diesel vehicles will have a positive impact on air quality, and therefore on the health and wellbeing of everyone in Reading.



We are aware that EVs still emit fine particulate pollution and do not address congestion. Therefore, increasing the uptake of EVs is only part of the answer, and a reduction in private vehicle usage is still needed. However, as we note in the Reading Transport Strategy 2040 and Climate Emergency Strategy, even after reducing demand and encouraging modal shift to other modes, there will still be a significant need for motorised transport for necessary journeys. As electricity supply is decarbonised, replacing fossil fuel-based vehicles with EVs will be a key element and one of the most important contributors to a net zero carbon Reading.

One of the significant barriers to adopting EVs is the ability for people to charge their vehicle, particularly if they do not have a driveway

to install charging facilities at home. The Council has a key role in facilitating the roll-out of charging infrastructure, and this strategy has been developed to bring forward measures to tackle this issue, particularly to address any gaps in provision which are not adequately catered for by the private sector. In addition, we are aware of the issue of a lack of capacity in the overall power network. Whilst this is not within the Council's control, we are working with suppliers including Southern Electric Power Distribution as a matter of urgency to ensure sufficient supply is available to facilitate the transition to EVs and encourage wider adoption of EVs across the borough.

It is recognised that EV charging is a rapidly changing area, therefore this strategy will be regularly reviewed as technology advances and new national policies and funding streams are brought forward. This strategy is currently in draft form, and we welcome all feedback received through the public consultation to help shape the final strategy. This will ensure that we are best placed to deliver the wider benefits that the transition to EVs will bring to our town.



Councillor John Ennis Lead Councillor for Climate Strategy and Transport Reading Borough Council



Executive Summary

EXECUTIVE SUMMARY

The Electric Vehicle Charging Infrastructure (EVCI) Strategy forms part of the Reading Transport Strategy 2040, which aims to address environmental, air quality, and health and wellbeing issues associated with our transport choices. This EVCI Strategy sets out the background to the delivery of electric vehicle (EV) charging infrastructure, including the policy context and the existing charging infrastructure in Reading. It then sets out the options available to the Council to deliver infrastructure to encourage EV take up, both in terms of the types of charging technology to be installed and the funding options and opportunities available to deliver it. Finally, a delivery plan sets out how we plan to deliver the necessary charging infrastructure in the short, medium and long term.

The strategy is built around five key objectives. The first is to build a Reading wide approach, working with residents and stakeholders to facilitate and encourage the increased use of EVs as an alternative to necessary petrol and diesel car trips. The second objective is to deliver a safe, reliable and equitable charging network. The third is seeking to provide renewable energy sources for EV charging and the fourth is to embrace and deliver innovation that benefits Reading's residents. The fifth objective is for the Council to lead by example with the electrification of its own fleet.

The policy context that the strategy is set within includes the Road to Zero, the Transport Decarbonisation Plan, the Government's clean air strategy and climate change policy at a national level. Whilst the Government has revised its ban on new internal combustion engine cars to 2035 (80% of cars sold to be EVs by 2030), the policy sets out a strong commitment to electrification of vehicles being key to meeting the UK's carbon targets.



At a local level, encouraging take up of electric vehicles is key to Reading's Climate Emergency declaration, and aligns with the Reading Transport Strategy 2040 and Reading Local Plan. EVs also deliver on Reading's Air Quality Action Plan where they significantly reduce NOx emissions, although not particulate emissions, and supports the Reading Corporate Plan. Reading has a range of charging infrastructure already in place with around 116 charge points, which are a mixture of Council delivered on-street residential and car park chargers, and commercially delivered charging facilities including rapid and ultra-rapid chargers. The Council has also implemented EV charging at its main offices and at its Bennet Road depot.

The strategy sets growth predictions for EVs in Reading and the likely demand for charge points. This indicates that there could be around 10,000 EVs in 2030 owned by residents who rely on parking on-street, which equates to the need for around 3,000 resident on-street charge points to provide equitable charging for all residents. The strategy also sets out a prediction of the need for around 200 to 250 destination charge points within the Council's car parks. The Council will also support the electrification of buses, taxis and car club vehicles in the borough through the provision of suitable charging infrastructure.

There are a number of different options for EV charging infrastructure that are summarised in this strategy, from slow / trickle chargers for on-street charging, through to ultra-rapid chargers for in-journey charging. The Council's main focus will be on delivering slow to standard chargers (3.5kW to ~ 7kW) on residential streets and destination charging at car parks, and may also consider rapid chargers in strategic locations. High-cost ultra-rapid chargers are expected to continue to be delivered commercially by companies such lonity and Gridserve, and the Council will support the delivery of these facilities.

The strategy sets out the main options for funding EV infrastructure in Reading, including 'Ownership and Lease' options, and public private partnerships to include private sector match funding and concession frameworks. Overall, it is considered that a concession framework is the preferred option for delivering of the majority of charge points in Reading. This will leverage the significant private sector investment required to deliver the numbers of charge points needed over the next few years, and through combining this with public sector funds Reading will be able to deliver equitable schemes in terms of coverage and tariffs.

The strategy concludes with a delivery plan which sets out how Reading will deliver against the five objectives of the strategy over the short, medium and long term. Delivery will focus on working with residents, businesses and other stakeholders to deliver infrastructure that meets residents and visitors needs and delivers a sustainable future for Reading.



Introduction

1. INTRODUCTION

Electric Future for Reading

- 1.1 The Reading Electric Vehicle (EV) Charging Infrastructure Strategy forms part of the Reading Transport Strategy 2040, which aims to address environmental, air quality, and health and wellbeing issues associated with our transport choices. The transport strategy vision is to promote a sustainable transport system in Reading that creates an attractive, green and vibrant town with neighbourhoods that promote healthy choices and wellbeing. Through the Reading Transport Strategy, we are committed to providing transport options that enhance quality of life, reduce emissions and improve air quality. The EV Charging Infrastructure Strategy also supports the wider objectives contained within the Reading Climate Emergency Strategy and Air Quality Action Plan (AQAP). The Climate Emergency Strategy seeks to achieve net zero carbon dioxide emissions in Reading, whilst the AQAP aims to address areas of poor air quality (NOx and particulates) in the borough.
- **1.2** In order to achieve our sustainable transport vision and meet the wider environmental goals, we aim to reduce car use (both within and through the borough) by providing attractive and viable alternatives through enhanced public transport and active travel options. However, it is recognised that private vehicle use, car and van trips, will remain for many the most appropriate mode of transport. Therefore, by encouraging the adoption of electric vehicles for essential trips, they can be made to be more sustainable with a lower impact on the environment and climate change.
- **1.3** A key driver to the successful adoption of electric vehicles is the ability to adequately charge vehicles. For some the natural choice will be through home charging in an off-street setting, but this will not be available for many as Reading has a particularly high proportion of homes (approximately 45%), such as Victorian terraced housing, that do not have off-street parking in the borough.





- 1.4 A range of charging infrastructure options will therefore be required to complement home charging and provide options when this is not available, including destination and workplace charging as well as 'on-route' charging. Having comprehensive, accessible, equitable and efficient charging infrastructure is essential in enabling the rapid adoption of electric vehicles and is the key focus of this strategy.
- 1.5 However, the transition to electric private cars will only partially address wider objectives relating to the environment, health and wellbeing, and the economy. Around 85% of fine particulate pollution from vehicles does not come from exhausts but from wear and tear on tyres, brakes and road surfaces, with the particles being lifted back into the air through vehicle movement. In addition, reducing single/low occupancy road travel will be required to achieve improvements in air quality and levels of congestion as this will not be addressed by the transition to electric vehicles. A further core element of this strategy is therefore the provision of charging infrastructure for electric buses, car clubs, taxis, e-bikes and e-scooters* to help promote these sustainable forms of travel. *It should be noted that the use of e-scooters is currently illegal on the public highway, except through a Government approved e-scooter public hire scheme. The use of privately owned e-scooters on the public highway is therefore subject to Government bringing forward a change in legislation to allow their use.

Reading Electric Vehicle Charging Infrastructure Strategy: Aims and Objectives

1.6 The purpose of the Reading EV Charging Infrastructure Strategy is to set out the current position and to light the future pathway supporting the uptake of electric vehicles for the residents, visitors and businesses of Reading.

Electric Vehicle Charging Infrastructure Strategy Aim:

Our EV Charging Infrastructure Strategy aims to support and accelerate the transition to Electric Vehicles for necessary travel in Reading in the context of wider Local Transport Plan aspirations to reduce the need to travel, reduce carbon emissions, improve air quality and promote sustainable and active travel.

- 1.7 The EV Charging Infrastructure Strategy is part of a wider suite of policies to drive towards a cleaner and greener Reading. The strategy is therefore put forward to enable and encourage the uptake of more sustainable transport cross Reading in tandem with promoting and enabling modal shift, active travel opportunities and cleaner carbon reduced travel options for all communities, businesses and visitors to Reading.
- 1.8 Reading's EV Charging Infrastructure Strategy will also play a significant role in driving toward a carbon neutral Reading.



1.9 The objectives of Reading's EV Charging Infrastructure Strategy are set out below:

Objectives	Details
Objective 1	Reading will develop a Reading-wide approach to facilitate and encourage the growth in use of electric and zero emission vehicles by Reading's residents, businesses, and visitors. This will be developed to include buses, taxis, car-clubs e-bikes and e-scooters and will be developed through engagement with residents, businesses, and other stakeholders including companies who are commercially installing charge points in Reading.
Objective 2	Reading will deliver a reliable and well-maintained public EV charging point infrastructure in line with projections, and as amended through monitoring, to facilitate the move to electric vehicles. Deliver and implement through a policy for appropriate, safe, equitable and disability aware accessible provision across the borough.
Objective 3	Reading will seek to provide renewable energy sources for charging points on Council land or highway, working with cross Council smart energy initiatives such as linking to other infrastructure projects such as heat networks.
Objective 4	Reading will innovate and respond flexibly to fast-paced and changing technologies within the EV sector and changes in EV take up including seeking to enable residents to benefit from Vehicle to Grid technologies as they come forward.
Objective 5	Reading will lead by example by using EV technology as much as possible to further reduce the environmental impact of our day-to-day operations. This will also include working with Reading Buses and Readibus to support them in their electrification plans.



Strategy Framework and Scope

Strategy Framework

1.10 The Reading EV Charging Infrastructure Strategy has been developed to:

- Provide a framework which links across Reading's current policy areas as well as national policies and strategies.
- Be focused but not inflexible to the evolving and growing EV market and other zero emission transport opportunities in the UK market.
- Be inclusive and seek to enable opportunities for all communities (economic, social and those with disabilities) and businesses across Reading and inter-connect with other authorities and business partners across the region.

Scope of EV Charging Infrastructure Strategy

1.11 The scope of the strategy is to:

- 1. Provide an understanding of the current and emerging market of electric vehicles (EVs) and infrastructure.
- 2. Map out current and future demand for EVs and infrastructure.
- 3. Set out an options appraisal of the types of infrastructure options available, requirements to install and potential installation locations.
- 4. Identify potential investment/funding opportunities and market opportunities to support the ramping up of infrastructure.
- 5. Identify potential external partnership opportunities, such as park and ride with partner authorities, private sector investment.
- 6. Consider the Council's own fleet requirements as well as specific transport sectors such as taxi's/private hire vehicles (PHVs), buses and businesses vehicles.
- 7. Recommend a delivery plan to target the ramping up of EV infrastructure.
- **1.12** The strategy focusses on EV charging for cars, car-based vans, and taxis (hackney carriage and private hire vehicles), however it does include current EV and low carbon initiatives for buses, micro-mobility (e-scooters and e-bikes) and large/heavy goods vehicles and other service vehicles.
- **1.13** The strategy also looks at other developing technologies such as hydrogen and include modal shift opportunities such as enabling EV car clubs and linking to potential future policy areas such as clean air or zero emission zones.



Terms

- 1.14 In this document we use the terms 'Infrastructure' or 'Electric Vehicle Charge Points' (EVCPs), these are terms for the electric charging devices for vehicles to recharge through an electric cable connection. We recognise that there are trials of wireless EV charging which may become a viable alternative in the future and we will evolve our strategy as required for new technologies.
- 1.15 Electric vehicles (EVs), sometimes referred to as Ultra Low Emission Vehicles (ULEVs), or 'plug-in' vehicles including pure Battery Electric Vehicles (BEVs) and Plug-in Hybrids (PHEVs), all require charging from the electrical distribution network which will continue to have associated carbon emissions far into the future even though the vehicles travel with zero tailpipe emissions. ULEVs also include other zero emission (at tailpipe) vehicles such as hydrogen Fuel Cell Vehicles (FCEVs) which generate their own electricity on-board from a fuel such as hydrogen, and do not need to plug in to the electricity grid to recharge. Hybrids (HEVs) which do not plug in have a much smaller battery which is recharged while driving (regenerative). HEVs can drive in electric mode for only a few miles at the most.

Strategy Delivery

Delivery

- **1.16** This strategy includes an Action Plan with key objectives to direct and deliver future infrastructure needs of Reading. The action plan identifies specific actions regarding the objectives and both the immediate actions as well as the longer-term tasks.
- 1.17 It is acknowledged that the delivery of EVCPs requires a significant level of resourcing and funding either from public funds (local or national) or private sector funds or more likely a combination of both. It is also recognised that local authority budgets are already constrained and future spending more uncertain against the backdrop of the impact from the Covid pandemic. Local authorities will need to take careful consideration to ensure investment in EVCPs delivers good value for money whilst also not becoming obsolete within its expected timeframe.
- 1.18 Local authorities also need to define the role they will play in the delivery of EVCPs compared to private providers, home charging and other options available. This strategy and the commitments outlined in the action plan will take account of these issues working with stakeholders and suppliers to provide the Council with a coherent plan for the whole of the borough. It will also look to capitalise on existing budget as well as future Government grants and funding opportunities whilst developing partnerships with the private sector to deliver an EV charging network for Reading.
- **1.19** The EV Charging Infrastructure Strategy traverses across a wide area of Council policy areas from environment and energy, climate change, air quality to planning and transport, health and wellbeing and will be fully consulted with each as well as external stakeholders to ensure we have developed the right policy and measures for Reading.



Stakeholder Engagement and Consultation

1.20 The EV Charging Infrastructure Strategy will require further stakeholder engagement and consultation before policies and actions are put in place. Key delivery and partner stakeholders are identified in this document, however these and other stakeholders will need to be consulted further following the publication of the draft EV Charging Infrastructure Strategy.

Social Inclusion

- 1.21 While many areas of Reading are affluent, and likely to be among the first to see early mass adoption of EVs, there are also areas where income is low. Lower income households are often disproportionately affected by poor air quality and are also the sector of society least able to adopt EVs early.
- **1.22** While the Council is limited in the actions it can take to support low-income households with the direct purchase of EVs, action can be taken to be mindful of equitable access to EV charging and EVs wherever possible. Electric car clubs and the chargers needed to power them are identified as a valuable measure to help improve social inclusion within the EV Charging Infrastructure Strategy and this will be a key priority moving forward.
- **1.23** Access to on-street charging is underway in Reading to enable EV drivers access to local charging locations where people have no off-street parking. The Council is also supporting the introduction of low emission buses into Reading Buses fleet through the Air Quality Action Plan as well as introducing policies for cleaner taxis to improve air quality across all areas of Reading.



Policy Context

2. POLICY CONTEXT

National Policy

Road to Zero

- 2.1 In 2018, the government launched a 'Road to Zero Strategy' and has since confirmed that new petrol and diesel cars and vans will not be allowed to be sold in the UK from 2030 (subsequently revised to 2035). The strategy sets out plans and targets to enable a massive expansion of charging infrastructure across the country, reduce emissions from the vehicles already on the UK's roads, and drive the uptake of zero emission cars and vans.
- **2.2** The main objective of the Road to Zero strategy is to put the UK at the forefront of the design and manufacturing of zero emission vehicles. The policies identified the government's long-term ambitions as:
 - Reduce emissions from the vehicles already on our roads.
 - Drive the uptake of the cleanest new vehicles.
 - Reduce emissions from heavy goods vehicles and road freight.
 - Put the UK at the forefront of the design and manufacturing of zero emission vehicles.
 - Support the development of one of the best electric vehicle infrastructures in the world.
 - Support local action.



Transport Decarbonisation Plan

- **2.3** The UK Government (Govt.) has published the Transport Decarbonisation Plan (TDP) Decarbonising transport: a better, greener Britain¹ in July 2021. The TDP outlines the Government's current position of transport emissions, including highlighting current policies and strategies in place to decarbonise the transport sector. The TDP targets:
 - Increasing cycling and walking
 - Zero emission buses and coaches
 - Decarbonising our railways
 - A zero-emission fleet of cars, vans, motorcycles, and scooters
 - Accelerating maritime decarbonisation
 - Accelerating aviation decarbonisation
- **2.4** The TDP strategic priorities are:
 - Priority 1: Accelerating modal shift to public and active transport
 - Priority 2: Decarbonisation of road vehicles
 - Priority 3: Decarbonising how we get our goods
 - Priority 4: Place-based solutions
 - Priority 5: UK as a hub for green transport, technology, and innovation
 - Priority 6: Reducing carbon in a global economy
- **2.5** Govt. announced a commitment to end the sale of new petrol and diesel vehicles, and that all new cars and vans will be required to be fully zero emission at the tailpipe by 2035. As a result, the Govt. also published the Transitioning to zero emission cars and vans: 2035 delivery plan².
- 2.6 Additionally, Govt. have published a consultation on ending the sale of all non-zero emission heavy goods vehicles from 2040, with lighter heavy

 $^{\rm 2}$ DfT, 2021- Transitioning to zero emission cars and vans: 2035 delivery plan

¹ DfT (2021), Decarbonising transport: a better, greener Britain. Available at: <u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1002285/decarbonising-transport-a-better-greener-britain.pdf</u>



goods vehicles from 2035^{3.}

National Infrastructure Commission's National Infrastructure Assessment

- 2.7 The National Infrastructure Commission was set up to address the problems with long term infrastructure planning in the UK. This first National Infrastructure Assessment builds on the analysis in the Commission's interim report, Congestion, Capacity, Carbon: Priorities for national infrastructure, to set out a long-term vision for high quality, good value, sustainable economic infrastructure for the UK, and a clear plan to achieve it.
- **2.8** The relevant core principles include:
 - Half of the UK's power provided by renewables by 2030
 - £43 billion of stable long-term transport funding for regional cities
 - Preparing for 100 per cent electric vehicle sales by 2030

Automated and Electric Vehicles Act 2018

- **2.9** This legislation is part of the Government's industrial strategy to promote the development and deployment of both automated and electric vehicles and is in line with policies on climate change. The purpose of this legislation is both to amend the existing compulsory third party insurance framework by extending it to cover the use of automated vehicles and deal with electric and hydrogen powered vehicle charging infrastructure.
- 2.10 Part 1 of this Act relates to motor insurance for automated vehicles (i.e., vehicles that can drive themselves without human intervention) and determines liability where an accident caused by an automated vehicle occurs.
- 2.11 Part 2 of this Act relates to electric vehicle charging. It is intended to address incompatibility of charge points by requiring standard connectors for vehicles.
- 2.12 It also improves access to charge points by requiring that they be accessible without membership, certain information is made available on charge points and there is a common method of payment.

The Government's Clean Air Strategy 2019

2.13 The Government's Clean Air strategy, which was published in January 2019, set out plans to meet ambitious legally binding international targets to reduce emissions of the five most damaging air pollutants by 2020 and 2030. This strategy outlines the government's ambitions relating to reducing air pollution, making air healthier to breathe, protecting nature and boosting the economy. The strategy sets out a clear direction for

³ DfT (2021) Heavy goods vehicles: ending the sale of new non-zero emission models. Available at: <u>https://www.gov.uk/government/consultations/heavy-goods-vehicles-ending-the-sale-of-new-non-zero-emission-models</u>



future air quality policies and goals. Emissions from road transport have been in the spotlight because of their impact on local air quality, but the government is committed to cutting air pollution from all forms of transport.

Climate Change Policy

- 2.14 The Climate Change Act 2008 sets up a framework for the UK to achieve its long-term goals of reducing greenhouse gas emissions and to ensure steps are taken towards adapting to the impact of climate change. The Act saw the UK set a legally binding target of reducing emissions by at least 80% by 2050. The legislative framework enabled the target to be amended and a more ambitious target of achieving a 100% reduction in emissions (compared to 1990 levels), otherwise known as 'net zero', was adopted in law by the Government in 2019.
- 2.15 In April 2021, the UK Govt. announced that it will build on its Nationally Determined Contributions (NDC) commitments to 2030, by setting ambitious climate change targets into law to reduce emissions by 78% by 2035 compared to 1990 levels.
- 2.16 In line with the recommendation from the independent Climate Change Committee, this sixth Carbon Budget (Carbon Budget 6) limits the volume of greenhouse gases emitted over a 5-year period from 2033 to 2037, taking the UK more than three-quarters of the way to reaching the net zero by 2050.
- 2.17 The 26th UN Climate Change Conference of the Parties (COP26)⁴ was held in Glasgow in late 2021. COP26 produced key goals for countries to target net zero carbon emissions by the mid-century and keep global warming under 2 degrees (centigrade). Countries will be updating their plans for reducing emissions and as part of that, a key target for countries is to 'speed up the switch to electric vehicles'⁵.
- **2.18** The 27th UN Climate Change Conference of the Parties (COP27) held in Sharm el-Sheikh, reached agreement on an outcome that established a funding mechanism to compensate vulnerable nations for 'loss and damage' from climate-induced disasters.

Accessibility

- 2.19 Accessibility standards have been developed for EV charge-points across the UK by the Department for Transports Office for Zero Emission Vehicles (OZEV), in partnership with British Standards Institute (BSI) and Motability⁶. The standards have been developed to allow disabled drivers to easily identify which models are suitable for their needs.
- **2.20** Although not policy yet, the standards industry with:
 - guidance on how to make individual charge-points more accessible; and
 - guidance on aspects such as kerb height, adequate space between bollards and charge-points being of a height suitable for wheelchair users.

⁴ UN Climate Change Conference of the Parties (COP26) <u>https://ukcop26.org/</u>

⁵ COP26 (2021) <u>https://ukcop26.org/cop26-goals/</u>

⁶ PAS 1899:2022 <u>https://www.bsigroup.com/en-GB/standards/pas-1899/</u>



Local Policy

Climate Emergency Declaration

2.21 Reading Borough Council declared a climate emergency in February 2019 which highlighted its commitment to playing a full role and leading by example in achieving a carbon neutral Reading.

Climate Emergency Strategy 2020-2025

2.22 The Reading Climate Emergency Strategy 2020-25 sets out the actions required during the five-year period to work towards the objective of a net zero carbon, resilient Reading, the target adopted in the climate emergency declaration. There are several actions from this document that relate to this strategy:

T13: Develop a zero-emission vehicle strategy for the Borough
T14: Decarbonise the Council Vehicle Fleet
T15: Increase Public Electric Vehicle Charging Points
T16: Increase Zero Emission Vehicles Uptake
T18: Planning Policy for EV Charging in new properties
T19: Reduce emissions from the Taxi Fleet
T20: Improve Electric Vehicle Charging Infrastructure

Air Quality Action Plan

- 2.23 Reading currently has a single Air Quality Management Area AQMA declared due to exceedances of the annual air quality objective for nitrogen dioxide (NO₂). The AQMA is not borough wide but does cover the central Reading area and the main arterial routes into Reading. The improvement of air quality is therefore a key driver for the EV Infrastructure Strategy.
- 2.24 The current Air Quality Action Plan (AQAP) sets out policies and measures to address air quality issues in the AQMA and across the borough. The AQAP also provides interventions that are required for meeting the national *Air quality plan for the achievement of EU air quality limit values for*



nitrogen dioxide (NO_2) *in the* UK^7 . The following actions relate to this strategy:

- Work towards the electrification of the vehicle fleet;
- Introduction of charging points into car parks and as part of new developments;
- Replacement of Council fleet vehicles with electric vehicles where feasible.
- 2.25 The forthcoming update of the AQAP will also look to encourage and develop policy areas and schemes that can support the strategy.

Carbon Plan 2020-25

- 2.26 The Carbon Plan sets out policy and targets on the Council's corporate energy and water management and identifies actions to achieve these within the time period 2020-2025. The plan includes actions to ensure the authority is compliant with relevant legislation (such as Energy Performance in Buildings legislation) and national reporting requirements (such as Greenhouse Gas Protocols). The Plan will assist the Council in making energy and water management an integral part of its decision-making processes, to ensure efficient use of these resources today and in the future.
- **2.27** Crucially, the implementation of the Plan will:
 - Contribute to the Corporate Plan aim to 'Build a Council fit for the future' by improving the efficiency of our operations and minimising costs
 - Deliver many of the Council's commitments as set out in the Reading Climate Emergency Strategy 2020-25
 - Enable the Council to lead by example as we encourage Reading businesses, organisations, and residents to reduce their own environmental impacts.

2.28 The Carbon Plan includes actions which relate to this electric vehicle strategy:

- Rationalisation of the Council's vehicle fleet
- Electrify the Council's Light Commercial Vehicle (LCV) fleet
- Installation of charging units at the Council's Bennet Road depot
- Electrify the Council's fleet of pool cars
- Electrify the Council's Heavy goods vehicle (HGV) fleet

⁷ Defra (2018) <u>https://uk-air.defra.gov.uk/library/assets/documents/no2ten/Reading_FINAL.pdf</u>



• Electrify the Council's Refuse Collection Vehicle fleet

Reading Transport Strategy 2040

- **2.29** The Reading Transport Strategy 2040 (RTS) sets out a plan for developing the town's transport network to 2040 and beyond. The RTS has several policies in place that related to this strategy which are:
 - Policy RTS10 | Taxis and Private Hire
 - 10.2: We will work with taxi and private hire services, offering support and incentives to encourage a shift towards the use of cleaner vehicles.
 - o 10.3: We will require all taxis operating in Reading to be electric or hybrid vehicles.
 - Policy RTS24 | Freight and Sustainable Distribution
 - 24.3: We will work with operators to explore and support more sustainable delivery methods, such as cargo bikes and electric micro-vehicles, for the last mile delivery.

Reading Local Plan

- 2.30 The Local Plan for Reading is a document that contains the policies for how Reading will develop up to 2036 which is currently being updated to extend to 2041. The document identifies the amount of development that will take place, the areas and sites where development is expected to be accommodated, and where it will be restricted, and sets out policies for how planning applications will be decided. The Local Plan includes a policy which relates to this strategy:
 - TR5: Car and Cycle Parking and Electric Vehicle Charging.
- 2.31 The above policy states that development should provide car parking and cycle parking that is appropriate to the accessibility of locations within the Borough to sustainable transport facilities, particularly public transport. Development should make the following provision for electric vehicle charging points:
 - All new houses with dedicated off-street parking should provide charging points;
 - Within communal car parks for residential or non-residential developments of at least 10 spaces, 10% of spaces should provide an active charging point.



Reading Corporate Plan 2022-25

- **2.32** The Council's Corporate Plan, Investing in Reading's Future, outlines the visions and priorities for Reading in the form of a three-year strategic plan for the period 2022-25 (annual update March 2023).
- 2.33 The plan outlines the vision of "to help Reading realise its potential and to ensure that everyone who lives and works here can share the benefits of its success."
- 2.34 The Corporate Plan has a series of major change projects under three themes to set out how it will achieve the vision for Reading:
 - Healthy environment
 - Thriving communities
 - Inclusive growth

Taxi Fleet Policy

- 2.35 Reading Borough Council have proposed new emissions policy for black cabs which will remove older polluting vehicles from Reading's roads and incentivise owners to replace them with newer taxis.
- **2.36** The schedule for the introduction of Taxi emissions policy is set out in Table 2.1.

Table 2.1: Taxi Fleet Policy

Date	Proposed Standard
23 Oct 2019	Vehicle Age policy 15 years for all vehicles, 100% electric 20-year Vehicle Age Policy
23 Oct 2019 (Currently paused)	All Replacement vehicles will be a min of Euro 5b and less than 8 years old. This rule will apply regardless of whether the vehicle is new to fleet or an existing vehicle.
1 Oct 2021 (Currently paused)	1 Oct 2021 Vehicle Age Policy 14 years for vehicles up to and including Euro 5a (vehicles registered later than 1/10/07 only)
1 Oct 2022 (Currently paused)	Vehicle Age Policy 13 years for vehicles up to and including Euro 5a (vehicles registered later than 1/10/09 only)
1 Oct 2023	Vehicle Age Policy 12 years for vehicles up to and including Euro 5a (vehicles registered later than 1/10/11 only)
1 Oct 2025	All Replacement vehicles are minimum ULEV and less than 8 years old. This rule will apply regardless of whether the vehicle is new to fleet or an existing vehicle.
1 Oct 2028	All vehicles to be minimum ULEV

2.37 The Taxi fleet policy was paused due to the impact of Covid on the trade, hence only the 1st phase policy (15-year age policy) is in place.



EV Infrastructure in Reading

3. EV CHARGING INFRASTRUCTURE IN READING

Local Context

3.1 Reading is an urbanised generally affluent authority in Berkshire. Incomes in Reading are generally high, especially in the outer areas, however there are areas of income deprivation, particularly in the Whitley, Tilehurst and Lower Caversham areas.

Figure 3.1: Wards within Reading





- **3.2** Parts of the Reading borough have relatively high levels of health and disability deprivation, particularly in the town centre, Whitley, Coley and West Reading. There are high levels of vehicle congestion on roads around the town centre and along key corridors in Reading. This causes low environmental quality and high levels of air pollution, negatively affecting people's mental and physical health.
- **3.3** It is estimated that 35% of the country's drivers have no off-street parking which is mainly in urbanised areas and an evaluation of Reading has identified that this is around 45% of the town's drivers. As such this will significantly influence the uptake of EVs in Reading unless sufficient on street charging is provided.

Current Level of EV Uptake

- 3.4 Despite the rise in the number of licensed ULEV cars on UK roads, as a proportion of the total number of cars licensed, ULEVs still represent a tiny share. In 2021 around 58.0% of licensed cars were petrol, 36.9% diesel and 5.0% were either a plug-in-hybrid, battery electric (BEV), range-extended electric (REV), or fuel cell electric cars (FEVs).
- **3.5** ULEVs are however on a significant upward trajectory in numbers as the latest Department for Transport figures in Table 3.1 show the number of electric vehicles in the UK is increasingly rapidly. The number of plug-in battery electric vehicles (BEVs) in the UK has risen from roughly 10,000 in 2012, to nearly 1m in 2022. A similar trend is occurring in Reading where registered BEVs in 2012 went from 5 plug-in vehicles to over 1,300 by the third quarter of 2022 Industry figures suggest that 12.5% of all new car registrations in the UK during 2022 were pure-electric, a further 7.9% plug-in hybrids, 13% mild-hybrid petrol and 5% mild hybrid diesel.

	2012 Q3	2013 Q3	2014 Q3	2015 Q3	2016 Q3	2017 Q3	2018 Q3	2019 Q3	2020 Q3	2021 Q3	2022 Q3
Reading	9	16	29	50	92	162	242	361	581	888	1,308
UK	10,026	12,741	22,468	47,260	83,875	129,006	182,289	243,992	372,136	643,543	991,419

Table 3.1: Numbers of EVs in Reading and UK (2012 - 2022)

3.6 There is a clear and evident increase in electric vehicle ownership in the borough as highlighted by the graph (Figure 3.2) below. This increase is likely to continue given the policies being implemented by central government and local government.



3.7 It is evident that advances in electric vehicle technology are also making EVs a more affordable and practical option for many. The ranges of EVs are increasing to comparable ranges of petrol and diesel vehicles with prices of vehicles and leasing options for EV also reducing.

Figure 3.2: EV Ownership in Reading (2012 - 2022)



Projected EV Uptake

3.8 EV uptake for residents of Reading has been projected to 2040 based on the DfT's Web-based Transport Analysis Guidance (TAG) and this is shown for Reading in Figure 3.3 In addition this figure also shows the Commission for Climate Change projections of what they believe the take up of EVs should be to meet our 2050 climate goals. Reading's TAG projection tracks the Commission for Climate Change estimates up to around 2030, but then diverges indicating that a far greater take up of EVs will be required.



Figure 3.3: Projected Number of EVs for Reading



3.9 Figure 3.4 shows the estimated number of resident's EVs that we are expecting to be parked on street based on approximately 45% of dwellings not having off-street parking. This simply assumes that the EV growth is evenly distributed across the town and hence growth may be less in the early years as EVs remain expensive and are generally being purchased by the more affluent who are more likely to have off-street parking for home charging. However, EV prices are falling and more used EVs are coming onto the market and the desire of individuals to reduce their carbon footprint is not necessarily linked to affluence and hence this provides a good basis for projecting on street charging needs.




Figure 3.4: Projected Number of On-Street EVs

EV Infrastructure in Reading

3.10 There are currently 116 publicly usable electric vehicle charging points available within the borough of Reading⁸ as shown in the Table 3.2 below. 21 of these charge points were installed by Reading Borough Council in their car parks.

Table 3.2: Number of EVCPs across UK and Reading

	Jan-20	Apr-20	Jul-20	Oct-20	Jan-21	Apr-21	Jul-21	Oct-21	Jan-22	Apr-22	July-22	Oct-22	Jan-23	Apr-23
Reading	34	50	50	51	57	58	59	62	64	96	101	115	111	116
United	16,505	17,947	18,265	19,487	20,775	22,790	24,374	25,927	28,375	30,290	32,011	34,637	37,055	40,150

⁸ DfT, Electric vehicle charging device statistics: April 2021 - <u>Electric vehicle charging device statistics: April 2021 - GOV.UK (www.gov.uk)</u>



3.11 Table 3.3 below sets out the location of public charge points available within the borough. These are a mix of slow, fast and rapid chargers⁹. Note that the table also includes 34 EV charge points associated with the Reading Rail Station car park, where 160 charge points are planned to be installed by Network Rail. Charge Point Operators (CPOs) provide the charge points and charge for their use through contact-less charging, membership fees or are part of the EV ownership fees, such as Tesla¹⁰.

Location	No. of CP	Charge Connector	Power	Provider	Location Type
Rose Kiln Lane	2	3-pin	3kW	POD Point	Other
Bridge Street	3	Type 2, CCS, CHAdeMO	22kW	Equans EV Solutions	On-street
Henley Road	3	Type 2, CHAdeMO, CCS	43-50kW	Equans EV Solutions	Service station
Cavendish Road	4	CHAdeMO, CCS	50kW	InstaVolt Ltd	Retail car park
Reading Rail Station	34	Type 2	11kW	APCOA	Public car park
Rose Kiln Lane	2	Type 2	7-22kW	BP Pulse	NHS property
Unit 250 Longwater Avenue	2	Туре 2	3.7kW	BP Pulse	Other
1 Station Hill	2	Type 2	7-22kW	BP Pulse	Other
500 Basingstoke Road	2	CHAdeMO	50kW	BP Pulse	Private home
387 Basingstoke Road	2	CHAdeMO	50kW	BP Pulse	Retail car park
St. Bartholomews Road	2	Type 2	3.7kW	CityEV/Joju Ltd	On-street
The Oracle Shopping Centre	12	Type 2	22kW	POD Point	Retail car park
Oldfield Retail Park	4	Type 2	7kW	POD Point	Retail car park
Tesco Extra - Reading West	4	Туре 2	7kW	POD Point	Retail car park
Tesco Extra - Reading	4	Type 2	7kW	POD Point	Retail car park
24 Robert Cort Industrial Estate	2	Type 2	22kW	POD Point	Workplace car park

Table 3.3: Location of Public EVCPs in Reading (2023)

⁹ NCR Database and Open Charge Map <u>https://www.gov.uk/guidance/find-and-use-data-on-public-electric-vehicle-chargepoints</u>, <u>https://openchargemap.org/site</u> ¹⁰ Tesla charge points are not shown as publicly accessible charge points as these are reserved for Tesla owners only.



Location	No. of CP	Charge Connector	Power	Provider	Location Type
Chester Street Car Park	2	Type 2	7kW	Mer	Public car park
Thames Promenade Car Park	2	Type 2	7kW	Mer	Public car park
Kensington Road Car Park	2	Type 2	22kW	Mer	Public car park
585 Basingstoke Road	3	Type 2, CCS, CHAdeMO	43-50kW	Shell Recharge	Service station
Friar Street	4	Type 2	22kW	Drax Energy Solutions Limited	Hotel / Accommodation
Shell, Shinfield Rd	3	Type 2, CHAdeMO, CCS	43-50kW	Equans EV Solutions	Service station
Chatham Street	8	Type 2	22kW	EB Charging	Public car park
Wantage Road	3	Type 2	1.3-7kW	CityEV/Joju Ltd	On-street
Anstey Road	1	Type 2	1.3-7kW	CityEV/Joju Ltd	On-street
East Street	1	Type 2	1.3-7kW	CityEV/Joju Ltd	On-street
Caversham Road	1	Type 2	1.3-7kW	CityEV/Joju Ltd	On-street
Coventry Road	2	Type 2	1.3-7kW	CityEV/Joju Ltd	On-street
Filey Road	1	Type 2	1.3-7kW	CityEV/Joju Ltd	On-street
Manchester Road	2	Type 2	1.3-7kW	CityEV/Joju Ltd	On-street

- **3.12** Many of Readings charge points are on residential streets, such as the CityEV units. These units are using the existing electrical supply to lamp posts, the charge points have been installed and are operational on Coventry Road, Filey Road, Manchester Road, St Bartholemews Road, East Street, Anstey Road Caversham Road and Wantage Road. The locations were selected following the Council's 'Go Electric' public consultation where Reading residents who either owned an electric vehicle or had an interest in buying one in the future.
- **3.13** Many EVCP sites are at commercial, or retail locations and are used as "destination charging" locations. These sites are often Slow to Fast EVCP sites. Rapid charge sites in Reading located in Henley Road and Basingstoke Road are commercial refuelling stations which indicates a shift in the market of major fuel providers entering the electric charging market and providing "en-route charging" facilities.



3.14 EV charge point usage is being monitored and there has been a solid growth in the use of the EV chargers in the car parks as shown in Figure 3.5, however this is not reflected in the same way for the CityEV lamp columns on street. Initial higher usage dropped after February 2021 when they switched from being free to being paid for chargers and it is likely that those originally using them were not local residents, but instead specifically parking there for a free charge. Since charging was introduced, around a third of the chargers are regularly used indicating a local resident with an EV, or hardly used at all, reflecting that there are no EVs on the street. Hence, whilst the lamp column infrastructure is under-utilised at present, this should not be seen as a reflection that significant investment in on-street chargers is not required.



Figure 3.5: EV Charge Point Usage – Reading Car Parks

3.15 These initial figures would seem to indicate that actual demand in Reading is substantially lower than that estimated as projected EV uptake for the onstreet charging however, with only a limited number of on-street charging, there is not the critical mass that would give people the confidence to purchase an EV and rely on the infrastructure and this is expected to change with a substantial investment in EV charging provision set out in this strategy.



Figure 3.6: Location of Public EVCPs in Reading (2021)





Other EVCP sites near Reading

- **3.16** EVCP infrastructure is also available to EV drivers in the vicinity of Reading and provide locations for "en-route charging" such as at Motorway Services or "destination charging" such as at a Park and Ride facility.
- **3.17** These facilities provide EV drivers with the opportunity to recharge when visiting Reading and/or for residents and businesses to recharge if en-route to other destinations. Table 3.4 provides locations of nearby EVCPs for en-route or destination charging.



Table 3.4: Location of EVCPs near Reading (2021)

Location	No. of CPs	Charge Connector	Power	Туре	Provider
M4 Moto Services Burghfield (East)	2	CCS, CHAdeMO, Type 2	43kW- 50kW	Rapid	Ecotricity/Gridserve
M4 Moto Services Burghfield (West)	2	CCS, CHAdeMO, Type 2	43kW- 50kW	Rapid	Ecotricity/Gridserve
Mereoak Park & Ride (A33)	2	CCS, CHAdeMO, Type 2	43kW- 50kW	Rapid	Charge Your Car
Winnersh Triangle Park & Ride (A2320(M))	2	CCS, CHAdeMO, Type 2	43kW- 50kW	Rapid	Charge Your Car
Green Park	4	Tesla	120kW	Rapid	Tesla
Thames Valley Park	4	Туре 2	7kW	Slow	POD Point
IKEA Reading Car Park	5	CCS, CHAdeMO, Type 2	43-50kW	Rapid	Ecotricity/Gridserve

Infrastructure Demand

Requests for Charge Points

- **3.18** In order to identify potential charge point locations where there is already demand for infrastructure, Reading Borough Council invited residents to suggest a location for an EV charging point online. The map (Figure 3.7) below shows the locations of 152 suggestions received to date (May 2023).
- **3.19** In addition to charge points, Reading Borough Council has also offered to install either slot-drain in the pavement or cable covers that enable residents to connect a cable to a home charge point and charge vehicles on street. Take up has been very low with only 4 installed to date. At present dedicated parking bays are not being installed for residents requesting this infrastructure.



Figure 3.7 - EVCP Location Request Map



Infrastructure Requirements

- **3.20** EV charging Infrastructure will need to be implemented to address the following growth in EV demand:
 - Residents of Reading Slow to Fast charging on-street for those who cannot install home chargers.



- Commuters and Visitors to Reading Rapid and ultra rapid charging at charging stations and slow to rapid charging at public and private car parks, workplaces, retail, entertainment venues etc reflecting typical duration of stay.
- Businesses providing local services, e.g. taxi services and delivery services
- **3.21** Section 4 sets out the infrastructure options appraisal including future technologies that may affect how we charge EVs. This infrastructure forecast reflects the expansion of current EV charging infrastructure, and the aim of the strategy is to continue monitoring EV growth, technologies, and use of charge points to be adaptable to future uncertainty.

Local Residents

3.22 Figure 3.8 below shows an estimated forecast number of on-street chargers (and / or ducting provision in kerbs for home charging) required to meet the growth in demand for EVs. It assumed that these will be slow / fast lamp column chargers or similar on-street chargers and there will need to be one charger per 3 vehicles. It is not proposed to provide dedicated parking bays, but instead, by providing a large number of chargers there is much greater flexibility to park near one on the street. The requirement for one charger per 3 vehicles is based on an average annual vehicle milage of 7,500 miles¹¹ and the average daily milage that will need to be topped up (about 20 miles). This indicates that Reading should be providing around 3,000 on street chargers by around 2030 to enable EV growth. As set out above, the growth in EVs may be lower on-street in the early years with a higher proportion purchased by households with off-street parking and monitoring of demand to balance the supply of chargers will be a key element of the strategy delivery.



A particular challenge is large parts of Reading being a Victorian town with lots of terraced homes with on street parking only. Where charging infrastructure is provided on the street, the highest priority location for the infrastructure will be within the road where this is feasible (such as the example shown in the photo). This will ensure that obstructions are not created for pedestrians on footways which can often be narrow.

¹¹ NTS0901: Annual mileage of cars by ownership, fuel type and trip purpose: England, 2002 onwards



Figure 3.8 - Predicted Requirement of On-street EV Chargers



3.23 Council owned car parks also provide an option for EV charging. Parking is free overnight, and this provides the opportunity for residents to use the car park to charge rather than use an on-street charger and car parks are covered below. Figure 3.9 shows the car park EV usage within Reading by the estimated use type, where overnight charging is assumed to be usage by residents. This would indicate that the car parks are used as charging hub for residents when parking is free overnight, and this usage is similar to visitor usage during the day. At present, there is not an on-street charging alternative for people living locally to the car parks and it may be that when this is introduced that car park usage will fall. However, it also indicates that people will use a local hub for charging and that this could be an option where it is difficult to provide on-street parking.







Commuters and Visitors to Reading and commercial users

We consider that there are two types of infrastructure requirements:

• Rapid and Ultra-rapid EV chargers which will be required to provide a full charge to a vehicle which is in-transit on a longer journey or has visited Reading from some distance and requires a full charge in a reasonable time. Also, taxi's and delivery vehicles may benefit from this type of charger if they need a top up during the day with minimum delay to their business. There is an expectation that existing fuel suppliers such as BP and Shell will install rapid and ultra-rapid chargers at charge hubs in Reading. The role of the Council may be to install some rapid / ultra-rapid charge hubs where the market is not going to provide them, such as providing for the electrification of taxis.



• Charging for local visitors such as 7KW chargers in car parks where vehicles may need an additional top up for the journey to the car park. Reading Borough Council (RBC)'s primary focus to meet this demand will be in the provision of EV charging infrastructure in the Council owed car parks. Analysis has been undertaken of the current car park use where 7KW EV charging has been installed and Figure 3.10 shows the projected requirement for charge points in the car parks. This figure reflects that it is likely that most cars visiting the car parks will have charged at home and the journey to and from the car park will be well within the capacity of the battery. As with on-street charging, keeping supply and demand under review will be key to delivery of the strategy. Also, greater investment will be required for car parks that act as overnight on-street charging for residents and where increased investment in on-street charging still leads to their use.

Figure 3.10: Projected number of Car Park Charge Points (RBC Operated Car Parks)



It is expected that workplaces will also continue to provide charging for their employees and visitors.



Regional Context

Geographical and Population Context

3.24 As shown in the map (Figure 3.11), Reading neighbours with Wokingham, South Oxfordshire and West Berkshire local authorities. Despite the geographical size difference between the boroughs, figures from the ONS Mid-Year Estimates for 2019¹² in Table 3.5 show that they have similar population sizes.

Figure 3.11: Local Authority Map



Table 3.5: Population estimates (2021)

Local Authority	Population Estimate (2021)
Reading	174,200
Wokingham	177,500
South Oxfordshire	149,100
West Berkshire	161,400

Ownership and Access to Private Vehicles

3.25 Car ownership ratios differ across local authority areas dependent on a number of factors some of those include:

- socio-economic status;
- access to quality and frequent public transport systems;

https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/populationestimatesforukenglandandwalesscotlandandnorthernireland and the state of the state o

¹² ONS Mid-Year Estimates for 2019 -



- cycle and walking infrastructure; and
- on and off-street parking availability, as well as parking constraints or fiscal measures to limit parking.
- **3.26** Differences in car usage are evolving with more urbanised populations favouring private car ownership less, with leasing or car-club options being a more economic option to owning, taxing, parking and running a vehicle.
- **3.27** Data from the (pre-Covid) 2019 National Travel Survey (NTS)¹³ showed trip rates for urban (conurbations) and rural towns for car/van drivers during 2018/19 were at 296 and 460 trips respectively. The data show that cars/vans are used over 55% more in rural areas than in urban conurbations such as Reading.
- **3.28** Reading is a more urbanised authority than the other neighbouring authorities, hence private vehicle ownership and usage is lower, due to some of the aforementioned factors.

Numbers of EVs

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3.29 Table 3.6 and Figure 3.12 below show the number of plug-in vehicles licensed at the end of quarter 3, from 2012 to 2020, in Reading, Wokingham, South Oxfordshire and West Berkshire¹⁴. The data shows that Reading currently has fewer EV registrations than its neighbouring boroughs.

Local Authority	2012 Q3	2013 Q3	2014 Q3	2015 Q3	2016 Q3	2017 Q3	2018 Q3	2019 Q3	2020 Q3	2021 Q3	2022 Q3
Reading	9	16	29	50	92	162	242	361	581	888	1,308
Wokingham	22	49	83	122	201	346	529	803	1,122	1,788	2,839
South Oxfordshire	14	17	50	105	199	346	553	827	1,102	1,673	2,443
West Berkshire	34	93	239	748	1,913	1,375	1,118	971	1,194	1,659	2,424

Table 3.6: Registered EVs across Reading, Wokingham, South Oxfordshire and West Berkshire (2012 – 2022)

¹³ DfT (2020) <u>https://www.gov.uk/government/collections/national-travel-survey-statistics</u> and <u>https://www.gov.uk/government/statistics/national-travel-survey-2019</u> ¹⁴ DfT and DVLA (Table 0132) <u>https://www.gov.uk/government/statistical-data-sets/vehicle-licensing-statistics-data-tables#ultra-low-emission-vehicles</u>





Figure 3.12: Registered EVs across Reading, Wokingham, South Oxfordshire and West Berkshire (2012 – 2022)

- **3.30** When comparing the ratio of EVs versus all vehicles registered in these authorities, to date Reading is slightly behind the other authorities. There is an apparent anomaly in the West Berkshire graph, but the numbers are correct as per the DfT/DVLA statistics and the reason for the high uptake peaking in 2016 is not known but could, for example, be a vehicle leasing company registering all its EVs in a West Berks location for a period of time.
- **3.31** Table 3.7 presents the percentage of total vehicles that are plug in (EV) since 2012, included in this table are data from a similar sized urban local authority (Brighton and Hove) for comparison.



	-								-	•	
١۵	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
L A	Q3										
Reading	0.01%	0.02%	0.04%	0.07%	0.12%	0.21%	0.32%	0.47%	0.76%	1.16%	1.69%
Wokingham	0.02%	0.03%	0.06%	0.08%	0.13%	0.25%	0.42%	0.66%	0.95%	1.55%	2.45%
South Oxfordshire	0.01%	0.02%	0.04%	0.10%	0.18%	0.31%	0.49%	0.72%	0.96%	1.45%	2.09%
West Berkshire	0.04%	0.10%	0.25%	0.76%	1.92%	1.36%	1.10%	0.93%	1.15%	1.57%	2.27%
*Brighton and Hove	0.02%	0.03%	0.05%	0.09%	0.16%	0.24%	0.40%	0.50%	0.76%	1.18%	1.86%

Table 3.7: Percentage EVs across Reading, Wokingham, South Oxfordshire, West Berkshire and Brighton* (2012 – 2022)

Note: *Brighton and Hove data has been included to demonstrate ratios of EVs in a similar urban authority.

3.32 The current (2022 Q3) percentage of EVs in Reading is comparable to other urbanised authorities such as Brighton and Hove, indicating that private vehicle ownership is lower due to aforementioned urbanisation factors (see para. 3.25).

Numbers of Charge Points

3.33 Table 3.8 below shows the number of charging devices (EVCPs) within Reading and its neighbouring boroughs. West Berkshire has the highest total devices per 100,000 population, with almost double the numbers of Reading, Wokingham and South Oxfordshire.

Table 3.8: EVCPs per 100,000 population

Local Authority	Total devices (January 2023)	Per 100,000 Population
Reading	116	64.1
Wokingham	112	62.9
South Oxfordshire	74	49.3
West Berkshire	143	88.3



Reading's Own Fleet and Infrastructure Plans

- **3.34** The Council currently operates two electric cars and seven electric vans, with the remainder of the fleet currently petrol/diesel powered. It is, however, a very modern fleet with high emission standards and plans electrify the fleet are a part of the Council's Fleet Replacement Programme.
- **3.35** In addition, the Council now has six electric Refuse Collection Vehicle (eRCV) with the required charging infrastructure. These vehicles are being evaluated on an on-going basis and plans are being prepared to fully transfer the fleet of refuse collection vehicles to electric operation. The Council is also testing other vehicle types as they come on to the market and has one electric compact sweeper vehicle, with additional vehicles to be integrated into the Council's fleet as existing models approach the end of their lifetime and replacement from 2024 onwards.



- **3.36** Ongoing monitoring is enabling the balance of the fleet between cost, reliability and any operational limitations to be understood. Battery technology is also progressing rapidly and will be taken into account where vehicle range impacts on operations. The switch to electric is expected to follow the Council's fleet replacement programme over time, however, this will be reviewed to minimise carbon, e.g. upgrading diesel vehicles to make the best of embedded carbon, prior to replacement with electric vehicles.
- **3.37** There are 5 charging points for fleet vehicles to charge at the Council's offices at Bridge Street and a further 6 load balancing units at Bennett Road. These units are for Council fleet vehicle use only, as set out in Table 3.9 below.

Table 3.9: Reading Council EVCPs

Street Location	EV Charge Connector	Charge Power Rating	Туре	Provider
LG Car Park Civic Offices 1and 2	Type 2	7kW	Fast	Swarco
LG Car Park Civic Offices 3 and 4	Type 2	7kW	Fast	Swarco
Bennett Road Depot 1 and 2	Type 2	7kW	Fast	Mer
Bennett Road Depot 3 and 4	Type 2	3.7-22kW	Slow- Fast	Mer
Bennett Road Depot 5 and 6	Type 2	3.7-22kW	Slow- Fast	Mer



Sustainable Transport Options

Buses

3.38 Electric buses are operating across the UK and Reading Buses is looking to introduce electric buses as part of their fleet replacement programme. Currently Reading buses are improving the fleet emissions through the provision of funding to upgrade their older bus fleet in conjunction with funding sourced through the AQAP.

Micro Mobility (e-Bikes and e-Scooters)

- **3.39** E-bikes are seeing a significant growth in popularity and hence Reading needs to consider provision of charging infrastructure. Electric ranges on e-bikes are generally good and hence most charging is expected to be at home or potentially at an office with little need for on-street parking. Provision would be required for occasional charging in the town centre for cyclists who have forgotten to charge, and for cyclists undertaking longer distance journeys. How charging infrastructure relates to the Sustrans strategic cycle network will be a key consideration.
- 3.40 The provision of charging infrastructure for e-bikes will also be important for delivery and cargo bikes for current and future logistics.
- **3.41** E-scooters are currently illegal on the public highway unless they are part of an official hire scheme. However, it is expected that the government will legalise e-scooters and hence consideration of public charging provision will be considered. As with e-bikes, it is expected that most charging will be at home or in the workplace with limited demand for public charging.

Taxis

- **3.42** There are currently 13 zero emission/EV Taxis (Hackney Carriage) and no zero emission/EV registered Private Hire Vehicles (PHVs) operating in Reading out of a fleet of 568 (Taxis and PHVs). The 2021 Energy Saving Trust (EST) research¹⁵ showed that 95% of Taxi drivers would switch to EV with two in five planning to switch within the next 5 years, however many consider cost of electric vehicles as a major barrier to purchase or lease.
- **3.43** The EST research also identified that average taxi mileages reported were low: 81% stated their typical daily mileage was 100 miles or less. Usage patterns of both forms of taxi mean that access to Rapid and Ultra-Rapid charging would be important in the transition to EV Taxis. This will be important in allowing drivers to maximise their productive work time, and that charging infrastructure at company premises, and close to popular routes or ranks are beneficial to supporting the EV taxi business case.

¹⁵ Energy Savings Trust (2021) Reading Taxi research



Car Clubs

- **3.44** Reading currently have no operating electric vehicle car club cars. Co-wheels operates in Reading and is a car-club which uses both new and existing vehicles as part of its fleet. Co-wheels is also one of the first UK car clubs to introduce electric cars.
- **3.45** Co-wheels currently host 7 locations in Reading including:
 - Cemetery Junction, Oxford Road, Rectory Road, Sherfield Hall Reception, UoR Whiteknights campus, Cardiff Road and Filbert Street (Huntley Wharf).
- **3.46** The introduction of an EV car club scheme at key locations across Reading would increase access to zero emission vehicles for a variety of residents, students, business operators and visitors to Reading.



Infrastructure Options Appraisal

4. CHARGING INFRASTRUCTURE OPTIONS APPRAISAL

Charge Point Infrastructure Overview

- **4.1** There are a variety of EVCP's with different power outputs and physical design. It is beneficial to make up the charging network of different types of charge points, to ensure the needs of all users are best met. This includes charging infrastructure operating at different speeds (residential 5.5kW, trip-destination 7-22kW, and rapid charging >50kW) to provide for a range of needs.
- **4.2** This section provides information on charging solutions for both on and off-street, exploring the different types of charging infrastructure and their associated design considerations. Table 4.1 sets-out the EVCP information with regard to power rating, supply (AC or DC), connectors, usage and EV compatibility.

Table 4.1: EVCP Information

Charger	Slow	Fast	Rapid	Ultra-Rapid
Power Rating	3 – 5 kW	7 – 22kW	Up to 50kW	50-350kW
Electrical Supply Type	AC	Usually AC, DC available	Usually DC.	DC
		at higher rates	AC also available	
Charging time	6 to 8 hours	4 to 6 hours	25 to 40 minutes (80%)	10 to 15 mins
Connector	Type 1 or Type 2	Type 1 or Type 2	CHAdeMO / CCS	CHAdeMO
	Mode 2 or Mode 3	Mode 3	Type 2 (AC)	CCS
Best Use	Residential or	Home / workplace /	Destinations / long	Long distance trips
	overnight charging	destinations	distance trips	
EV Compatibility	All	All	Most BEVs and very few	Most new BEVs. Few
			PHEVs	BEVs at top end.
Typical cost of public	Approx 5-7k (lamp	Approx £7-10k	Approx £20-25k plus	Approx £25-60k plus
charger	column charger)		power upgrade costs	power upgrade costs

4.3 Appendix 1 sets out the different types of chargers and provides further detail on their application and best use, including residential slow/trickle chargers; pop-up chargers; fast, rapid and ultra rapid chargers.



Key Developments and Emerging Technologies

- 4.4 Delivering an electric vehicle charging network that meets the needs of residents, businesses, and visitors will require incorporating emerging technologies and charging options as they develop, to ensure the infrastructure continues to be fit for purpose and meets the needs and demands of users.
- 4.5 With advances in technology, some of which we are already witnessing, the charging needs and demands of those within Reading may change. For example, we are already seeing emerging on-street charging technologies such as retractable charging units and smaller units attached onto existing street furniture.

Hydrogen

- **4.6** Hydrogen fuel cell electric vehicles (FCEV) convert hydrogen gas to electricity and can have a significant range of up to 400 miles between charging and only emit water at the tail pipe. However currently FCEVs are approximately twice the price of a similarly sized BEV, with operational costs also greater. Typical hydrogen consumption is approximately 1 kg per 100 km, with each kilo of hydrogen currently £10-15. Conversely, a BEV would typically require approximately £3 of charge to cover the same distance.
- **4.7** Hydrogen is currently being trialled for buses and heavy goods vehicles. Buses in London and Aberdeen have started using hydrogen buses on routes within their cities, as these buses are capable of ranges up to 250 miles between recharges.

Standards and Regulations

Following the Minimum Standards

- 4.8 As a minimum, parties should pay particular attention to:
 - BS 1899
 - BS 7671,7 especially s722
 - Electrical Safety Regulations
 - Electricity Safety, Quality and Continuity
 - Regulations 2002
 - BS EN 61851 on the EV conductive charging system



- EMC Regulations11
- 4.9 Plugs, socket types and wall boxes are covered in the standards. Parties should ensure compliance where appropriate with:
 - BS EN 60309-2
 - BS EN 60309-4
 - BS EN 62196-2

Grid Demand and Preparing for the Future

Energy demand

- **4.10** Following the Government's initial announcement in July 2017 of plans to ban sales of "all new conventional petrol and diesel cars and vans" from 2040 (subsequently amended to 2035), concerns were raised by the energy industry that this policy would require significantly more capacity in the power sector and present challenges for balancing the electricity grid.
- **4.11** National Grids (NG's) analysis estimated that by 2046 peak demand as a result of EVs charging would be 30 GW. By contrast, the most likely scenario in NG's analysis saw peak demand from electric vehicles alone being around 5 GW, about an 8% increase on today's peak demand value. This is because NG believe the switch to EVs will not be as extreme, and consumer behaviour will change to avoid charging at peak times, therefore resulting in a less significant increase to peak demand¹⁶.

Smart Charging and Vehicle to Grid

- **4.12** With the wider proliferation of electric vehicles adding demand to the grid, smart charging can reduce charging at peak times, and the batteries in the vehicles could become an asset to National Grid, as they have the potential to be used for grid balancing.
- **4.13** 'Smart' use of the electricity system involves using power at times when demand (and therefore prices) is low. Consumers can benefit from cheaper power, and operators benefit from an easier to balance system and avoiding all cars being charged simultaneously, such as at the end of rush hour.

¹⁶ National Grid, Our Energy Insights, Electric vehicle announcement and what the papers say, August 2017.



4.14 The concept of 'Vehicle to Grid' (V2G), is that when supply is low and demand high, EVs connected to the grid to charge can instead release power back into the grid. Owners of the vehicles can then be paid for this balancing service in a similar way to electricity storage unit operators. In theory, if a vehicle is needed to be charged for a certain time the owner could register that time and this would override the use of the car as a power source. Some suppliers have been developing V2G offers for their customers, though availability is currently limited.

Future EV Market

4.15 The number of electric vehicles across the UK is expected to quickly increase over the next decade, especially due to the ban of new internal combustion engine cars and vans in 2030. It is then expected, by 2050, for almost all vehicles to be electric.

Cars and vans

- 4.16 The current market projections show at least 200,000 new electric vehicles (BEVs) were registered in the UK in 2021. The increase in recent years has also been influenced by the 1% Benefit in Kind (BIK) company car tax in 2021/22, which increased to 2% in April 2022 and will remain at 2% until 2025. At the end of Q2 2020 plug-in-hybrid, battery electric, range-extended electric or fuel cell electric cars accounted for 10.9% of all newly registered cars. A year earlier this was just 2.2%.¹⁷
- **4.17** The EV car market has now more models available to consumers with all major manufacturers joining the EV market with BEV and PHEV ranges, these include: Tesla, Nissan, VW, Mercedes, Jaguar, Peugeot, Kia, Mazda, Ford, Honda, Vauxhall, Hyundai, MG, Renault, Polestar and Volvo. In addition, we are seeing new manufacturers to the UK, such as BYD, the second largest EV manufacturer globally, joining the UK market which will further increase competition and drive down prices.
- 4.18 Although EV prices at the lower end of the market range between £20k to £30k, the costs are expected to reduce further with mass market production of vehicles and falling battery prices, and new models now starting to appear in the market between £15k to £20k.

Buses

- **4.19** The decarbonisation of buses is a key ambition of both UK Government and bus operators alike. The Confederation of Passenger Transport (CPT) aims for all buses to be ultra-low or zero emission by 2025. However, they also note that the range of EVs is not suitable for longer or more rural applications and that other options, such as hydrogen Fuel Cell EVs (FCEVs), may offer potential.
- 4.20 Electric buses are operating across the UK and Reading Buses is looking to introduce electric buses as part of their fleet replacement programme. The

¹⁷ House of Commons (June 2021), Research briefings - Electric vehicles and infrastructure.



Council, in partnership with Reading Buses has submitted a bid for the Governments Zero Emission Bus Regional Area (ZEBRA) funding opportunity for the provision of Zero Emission Buses throughout Reading.

Micro Mobility (E-Bikes and E-Scooters)

4.21 It is anticipated that demand for e-scooters and e-bikes will significantly increase in the future, particularly if the use of e-scooters is legalised, therefore sufficient charging infrastructure will need to be provided to facilitate and encourage usage of these sustainable modes.

Heavy Goods Vehicles

- **4.22** Zero-emissions technologies exist across the freight / heavy goods vehicle sector. Whilst the technologies are more advanced for smaller vehicles, electrification has also been proven for larger heavy goods vehicles, with hydrogen also seen as a viable alternative. Further development has been supported by funding the Low Emissions Freight and Logistics Trial (£20 million)¹⁸ and Integrated Delivery Programme (IDP) 14 (£18.1 million specifically for heavy goods vehicles)¹⁹.
- **4.23** Low emission goods vehicles are also eligible for the low-emission vehicle plug-in grant, with the current grant covering 20% of the purchase price, up to a maximum of £16,000.

Rail Freight

4.24 Network Rail set forward their Traction Decarbonisation Network Strategy (TDNS) within the Environmental Sustainability Strategy (2020 – 2050)²⁰. The TDNS will set-out the investment for electrification of the rail network, and opportunities for further decarbonising rail freight. A further shift in moving freight onto rail and commuter services will assist in driving down local carbon emissions.

Taxis

4.25 There were 4,202 electric taxis registered at Q4 2020. Most electric taxis (4,047) within the UK had been registered in England. London represents the region with the greatest number of electric taxi registrations, at 2,715. A significant number have also been registered in the East (647) and the South East (442).

¹⁸ Department for Transport, Decarbonising Transport: Setting the Challenge, March 2020

¹⁹ Department for Transport, Road to Zero, July 2018

²⁰ Network Rail (2020) https://www.networkrail.co.uk/wp-content/uploads/2020/09/NR-Environmental-Strategy-FINAL-web.pdf



4.26 The low-emission vehicle plug-in grant applies to taxis. There are two models included, the LEVC TX and the Dynamo Taxi, both of which are produced in Coventry. The grant will pay for 20% of the purchase price for these vehicles, up to a maximum of £7,500. Meanwhile, private hire vehicles can be eligible for a plug-in grant provided they meet the scheme requirements which include being wheelchair accessible.

Electric Motorcycles

4.27 Electric motorcycles will be capable of using EVCP infrastructure, however it is likely this market will remain small until the phasing out of internal combustion engine motorbikes is bought forward by Government. Electric mopeds are likely to become popular in the near-term, however these are only to be chargeable on Home/ Slow/Trickle Charging (5.5kW) EVCPs.

Future Proofing

- **4.28** Future proofing the EV charging network is essential for the following reasons:
 - Less expenditure needed in the future to replace obsolete or unused EV infrastructure
 - Public confidence in EV infrastructure decreases if it is not being replaced regularly.
 - Having a practical and robust network will be important if emergency and essential services become dependent on charging infrastructure.
 - Prevents issues of waste management when infrastructure 'false starts' and lead to working assets being removed and scrapped.
- **4.29** Charge points can be procured, installed, maintained, and operated in the knowledge that they are resilient to unforeseen technical, market, behaviour, and regulatory changes. Technical and physical interoperability, interchangeability and adaptability supports the purchase and rollout of infrastructure in a way that allows providers or investors to gradually build their provisions without unreasonable risk of costly false starts or of needing to replace equipment before the end of its life.
- **4.30** Outlined below are ways in which Reading can make sure the charging network and associated infrastructure are implemented and designed for long-term use:

Smart Charging

4.31 Smart EV charging refers to a system where an electric vehicle and a charging device share a data connection, and the charging device shares a data connection with a charging operator. As opposed to traditional charging devices that are not connected to the cloud, smart charging allows the charging station owner to monitor, manage, and restrict the use of their devices remotely to optimize energy consumption.

4.32 A key feature of a smarter energy system is the ability to minimise peak demand and network congestion, allowing the use of cheaper, low carbon



generation to be maximised. The current electricity system has been designed to meet a peak in demand between 17:00 and 20:30. For the rest of the day there can be large amounts of underused generation and network capacity. Generation during these off-peak periods is usually cleaner and cheaper. EVs can support the transition to a smarter energy system by, for example, charging overnight (during the off-peak) reducing the need for investment in infrastructure, but also providing power back to the grid via 'Vehicle2Grid' technology. This makes it cheaper for people to charge and integrates EVs into the electricity system in an affordable way.

Charge Point Design and Placement

4.33 When designing charge point locations and identifying potential sites on and off-street, consideration will be given to the following:

- Driver and pedestrian safety
 - Adequate lighting where necessary.
 - Placing charge points on the carriageway where appropriate to keep the footway clear for pedestrians (whilst taking account of e.g. cycle lanes).
 - Avoiding trip hazards from trailing cables.
 - Not positioning charge points too close to busy junctions or crossings.
- Inclusivity
 - Interoperability Ensuring charge points can be used by all vehicle makes and models.
 - Ensuring drivers do not need to sign up to a specific network for membership in order to charge.
 - Design in accordance with BSI PAS 1899, Electric Vehicles Accessible charging Specification
- Coherence
 - Easy to use interfaces and payment methods.
 - Clear signing directing drivers to charge points.
 - Clear signing for length of stay/marked parking bays.
- Attractiveness
 - Charge point may need to blend into existing surroundings e.g. heritage sites/conservation areas.
 - Infrastructure should not clutter the streetscape.



- Reliability
 - 24-hour access to charge points.
 - Efficient maintenance and repair of the infrastructure to reduce downtime.
- Grid Capacity
 - Adequate electricity network capacity.
 - Collaboration with SSE over grid strengthening to facilitate EV charging growth and optimise charging locations.
- **4.34** Both technology and behaviour change will result in changing infrastructure needs; therefore, all parties should plan for the future projected demand instead of for the present situation only. This would mean finding a suitable balance between providing enough infrastructure to service the current and expected demand and shielding against over-procuring. When installing public charge points, laying passive cabling at the same of the time will enable the installation of additional charge points at the same location in the future, as and when demand increases. Having said that, installing modular infrastructure, which can easily be updated without having to replace the entire unit is vital. EV range will increase and charging times will fall as vehicle, charge point, and battery technology all improve. Consumer charging behaviour may also change, emphasising the importance of futureproofing.

Coordination and Involvement of Different Organisations

- **4.35** In order to future proof the EVCP network, Reading must have a clear understanding of the challenges and constraints faced by the different actors involved with the existing and future infrastructure. Installing a considerable number of charging stations to achieve a significant uptake of EVs will demand a mid/long-term planning strategy as well as the coordination and involvement of various entities working together to make Reading's network a success story.
 - As private developers bear the cost of installing charging infrastructure on-site, they perceive EVCPs as an amenity rather than a direct source of revenue. Therefore, building owners may try to meet their customers' demands at the lowest price point possible. In the long run, developers are at risk of having to incur even greater expenses to retrofit the units or, worst of all, not being able to afford the cost of those at all. Many building owners do not plan for EV-charging needs in the mid/long term future, increasing the risks of not having an adequate electrical grid able to support the energy requirements to install EVCPs.
 - By setting clear standards in our planning policy requirements for charging infrastructure in new developments costly retrofitting can be avoided. Reading will enforce the new building regulations (part S) adopted in 2022 requiring all new dwellings to have EV charging provision.



- Charge-point operators are likely to play a key role in managing EVCPs and in offering a wide range of charging options best suited for public buildings' needs. Open-charging protocols, standards and charger interoperability will be key to unlocking a healthy range of operators, EVCPs network and energy providers as well as energy-management providers.
- Distribution operators and utility companies should be consulted on nearly all projects that exceed approximately 10 kW to study the implications for power-distribution equipment. Early planning and adoption of charge-management and building-energy-management solutions are likely to save important sums of money in feeder upgrades and demand charges to fleet and commercial customers.
- **4.36** Short-sighted decisions made today over electrical and civil infrastructure and the capacity and technology of charging solutions could cause EV-infrastructure costs to increase to hundreds of billions of pounds in the future. Added to the costs of electricity peak demand charges and grid upgrades, the impact of this additional investment could stall the progress of fleet electrification as well as affordable, unhindered access to EV charging.

Planning Support

4.37 Infrastructure providers also need support to get installations in the ground, with some EVCPs taking 2 years to get through the planning and installation system. Planning policy at local level maybe beneficial and assist in fast tracking installations. New residential developments are required to provide access to an electric vehicle charge point for each associated parking space ²¹.

²¹ Approved Document S: Infrastructure for the charging of electric vehicles (publishing,service,gov.uk)



Funding Options and Opportunities

5. FUNDING OPTIONS AND OPPORTUNITIES

Infrastructure Funding Business Models

5.1 This section provides a summary of the different approaches that are available for the delivery of public EV charging infrastructure. There are a variety of infrastructure funding business models available, each with its own costs, revenue projections and associated risks and uncertainties. These will be investigated further to develop each option as part of the delivery of this strategy, including working with Southern Electric Power Distribution to understand the power upgrade requirements and associated costs to enable the delivery of this charging infrastructure.

Ownership and Lease Options

Own and Operate

5.2 Own and Operate is becoming a commonly used approach where a contracting local authority or other public body publishes a tender, inviting suppliers to submit a competitive offer to provide and install the charge point equipment, and manage the network for a set period of time. The capital costs are funded by the local authority, potentially with a capital contribution from a central or devolved government grant. Following procurement, the charging infrastructure is owned by the authority, which receives all revenue and typically pays a monthly fee to a supplier for operation and maintenance.



5.3 Table 5.1 sets-out the Own and Operate option advantages and disadvantages.

Table 5.1: Own and Operate option

Advantages	Disadvantages
 Local authority retains full ownership of the charging network and collects revenues Local authority can determine locations, irrespective of commercial viability, ensuring equity of access for residents and businesses. Easier procurement route as more familiar and requires less involvement from legal, procurement and property teams. Likely to be a quicker process, leading to faster network growth. National procurement frameworks available to streamline process and ensure confidence in suppliers. 	 Limited central government and local authority funds available Use of public funds comes with accountability to taxpayer and therefore political risk Requirement for local authority to cover costs for ongoing operation, maintenance and upgrade Local authority may become the owners of low value or redundant equipment as charging infrastructure market and technology is developing rapidly Local authority carries the risks of unexpected costs and the reputational risk if the network is unreliable Charge point operator less incentivised to repair faults, although a service level agreement (CSLA) should be in place Missed KPIs/SLAs may be more difficult to enforce.

Leasing

- 5.4 A leasing model is similar to an own and operate model, however some risks can be transferred as the Council leases the charger equipment and backoffice software for an ongoing hire fee from a charge point operator, typically for a minimum period of 5 years.
- 5.5 This period of lease removes or significantly lowers the upfront capital costs required and, in most cases, reduces the maintenance liabilities of the chargers. However, non-warranty repairs following accidental damage and vandalism are often chargeable to the authority and all equipment must be returned at the end of lease in a reasonable condition.



- **5.6** The ongoing costs are higher, but they are fixed (excluding damage repairs) which provides budget certainty; however, these costs are applicable regardless of network usage and if charge points aren't utilised this can become a heavily subsidised provision.
- 5.7 Table 5.2 sets-out the Lease option advantages and disadvantages.

Table 5.2: Lease option

	Advantages	Disadvantages
•	The Council retains all revenues	The Council carries the risk of lower revenue
•	The Council has the option to choose	generation than anticipated
	locations, regardless of commercial viability,	 The whole life cost of the chargers is much
	to ensure equity of access for residents	higher due to ongoing leasing costs
•	Lower or zero capital costs, dependant on	 The Council will never own the charging
	initial hire fees being applicable	equipment
•	Equipment is removed and returned if it	• Equipment must be removed and returned at
	becomes redundant	the end of the lease period
•	Hardware and software fault repairs included	• The Council will still be required to meet the cost
		of accidental damage and vandalism
		Significant revenue costs for Council

Private Public Partnerships

Private Sector Match-Funding Partnership

- **5.8** To date, most central government grant schemes for charging infrastructure cover 75% of the eligible capital costs. The remaining 25% can be covered by the local authority but in some cases, EV charge point operators have provided this match-funding. Where central government funding is not available, private sector funding could be matched directly against local authority capital.
- 5.9 Table 5.3 sets-out the Private Sector Match-Funding Partnership option advantages and disadvantages.



Table 5.3: Private Sector Match-Funding Partnership option

Advantages	Disadvantages
Reduces the up-front financial burden that local authorities face when installing charging infrastructure	Reduced income from the charge points for authorities Reduced control over where charge points are located for authorities
	• There will also need to be agreement on equipment ownership and/or
	upgrades throughout and at the end of the contract

Concession Framework

- 5.10 A concession model is an agreement where a charge-point operator will offer to install charging equipment on Council owned land or the public highway, free of charge. This model is low risk, but low reward, often these agreements provide a small, guaranteed income or 'rent' to the Council in return for allowing the equipment to be installed which is paid regardless of how high or low the usage of the chargers is, however the Council is never liable for any costs associated with the chargers.
- 5.11 Under a concession model, the operator will only offer to install chargers in high demand locations where they are confident that the chargers will return their initial investment costs quickly and provide them with an ongoing profit.
- **5.12** Concession model agreements are typically long term, requiring a 10-30 year contract which enables the supplier a better chance of recouping their costs and maximising profitability over the duration of the term. Under this type of agreement, the Council would act as a facilitator/landlord rather than having an active involvement in the operation and delivery of the charger network. The cost to the end user is often set at the sole discretion of the supplier and expansion of the network or addition of new chargers is also at the supplier's sole discretion. The Council are limited in their ability to expand the provision as the supplier will usually only consider this where usage is extremely high and the opportunity is commercially attractive, although the Council may be able to pay both the capital and ongoing costs to provide a charger in a specific location. These agreements typically include exclusivity clauses, so the Council is unable to add additional chargers from another supplier.
- 5.13 Table 5.4 sets-out the Concession Framework option advantages and disadvantages.



Table 5.4: Concession Framework option

Advantages	Disadvantages
Some income shared/rent paid by concessionaire to the Council	Lower income potential compared to other models
Charge point operator is responsible for maintenance	• Low usage on some or all chargers may make the operator reluctant to
• Reduced risk to the Council in terms of income not meeting ongoing maintenance	spend money on repairs and maintenance
and operation costs	Concessionaire likely to only be interested in profitable sites or where
Some contract renewal terms require the concessionaire to update and refresh	cross-subsidisation can occur resulting in reduced LA control over
equipment and software	locations
Council can put its own investment in to help ensure that the scheme is	• Long contract terms tie the Council in beyond the foreseeable future and
delivered equitably in terms of locations and tariffs.	restrict the Council's ability to react to demand or capitalise on
No capital costs	increased usage

National Funding Options

Office for Zero Emission Vehicles

5.14 Currently OZEV funding, administered via the Energy Saving Trust, is the key source of government funding available for the installation of EVCPs.

5.15 OZEV is a team working across government to support the early market for ULEV (ultra-low emission vehicle). The OZEV funding is available for eligible projects and Councils must secure a minimum of 25% of capital funds via sources other than OZEV funding, which makes available 75% of the capital costs.

Department for Environment, Food & Rural Affairs (Defra)

5.16 Defra operates an Air Quality Grant Programme which provides funding to eligible local authorities to help improve air quality. The scheme helps local authorities to make air quality improvements and to meet their statutory duties under the Environment Act 1995. Although the grant can no longer be used specifically for charging infrastructure, it has awarded over £70 million in funding to a variety of projects since it started in 1997.

Local Electric Vehicle Infrastructure (LEVI) Fund

5.17 The Local Electric Vehicle Infrastructure (LEVI) Fund is a new government funding stream for local authorities which aims to deliver a step change in the deployment of local EV charging infrastructure across England. It is comprised of capital funding to support investment in charging infrastructure, and capability funding to ensure local authorities have the resource to plan for and deliver charge points. The Fund's two main objectives are to deliver a step-change in the deployment of local, primarily low power, on-street charging infrastructure across England and accelerate the commercialisation of, and investment in, the local charging infrastructure sector. Reading Borough Council will use its LEVI Fund to deliver the objectives as set out in our EV

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Charging Infrastructure Strategy. In addition, the On-street Residential Charging Scheme (ORCS) fund is available for projects up to £200k.

Influencing and Encouraging Infrastructure

Reading Borough Leading by Example

5.18 Potential EV owners are often reluctant to purchase an electric vehicle without the confidence that there is sufficient charging infrastructure in place locally. Similarly, electric vehicle infrastructure operators can be reluctant to install new charge points without confidence that they will have adequate usage. Subsequently, it is often questioned whether demand for charge points should come before the supply, or whether supply should lead demand. In order to influence and encourage infrastructure, the Council proposes to take the lead and use a 'supply leading demand' approach to the public charging network working with EV infrastructure suppliers. However, it should be noted that the Council is heavily reliant on Government policy and funding for the implementation of charging infrastructure.

Trials

- 5.19 Local authorities can undergo electric vehicle trials to help influence and encourage infrastructure. Reading Borough Council are undertaking a trial to allow residents to enter into a licence agreement with the Council to privately charge their EVs parked on the public highway.
- **5.20** The EV Charging Licence includes a range of criteria and conditions to reduce the risk to the public and the applicant. The licence will allow alternate solutions to trial. The includes free installation of slot drain and cable cover options for getting the cable safely from the property boundary to a vehicle parked on street. Reading had 68 initial requests, however only 4 have gone forward to date for the slot drain type and there is now a request for cable cover. The low take up could be due to homeowners not having a dedicated parking space immediately outside their homes and this will be explored further in the trial. Home owners will be able to still have the opportunity for slot drain and cable covers to be installed after the trial, but these will be at cost to the homeowner.

Policy - Residential Developments

- 5.21 Following its Road to Zero strategy commitment and consultation during summer 2019 on changing building regulations (Part S), the new building regulations came into force in England as of June 2022.
 - Every new residential building with an associated car parking space must have a charge point. This also applies to buildings undergoing a material change of use to create a dwelling
 - Every residential building undergoing major renovation with more than 10 car parking spaces to have one EV charge point per dwelling along with a cable route for electric vehicle charge points in every car parking space.



Reallocating Parking

5.22 As the number of on-street electric vehicle charge points increases over time, a number of existing parking bays will need to be converted to electric vehicle charging bays. Currently, people are often not able to use the existing lamp column charge points due to non-electric vehicles blocking the available parking. In the future, the Council will consider introducing bays with traffic regulation orders for existing and future lamp column charge points. Subsequently, when new electric vehicle charging bays are created, it is important to ensure that they do not reduce the provision of essential parking spaces such as disabled bays, loading bays, doctors' bays and ambulance bays.

Partnership with Key Stakeholders

5.23 Key stakeholders need to be engaged and involved in delivering Reading's EV Charging Infrastructure Strategy to support and work in partnership with the Council. Key stakeholders can contribute to and benefit from infrastructure being available for their businesses, customers, staff and local residents.

5.24 Stakeholders can contribute to the provision of or sharing of EV infrastructure or EV services, such as:

- Shared business EVCPs for evening residential charging;
- Hub-sharing: Taxi rank by day/residential EVCP by night;
- Shared spaces for EV car clubs; and/or
- Provision of private sector land for EVCP infrastructure.

Major Employers and Local Businesses

5.25 The Council will work with stakeholder businesses to identify locations where infrastructure can benefit business users and residents.

NHS Trust

5.26 The NHS Carbon Footprint programme, which relates to carbon emissions under NHS direct control, are targeting net zero by 2040 and have the ambition for an interim 80% reduction by 2028-2032²². NHS Trusts operate significant fleets of vehicles in the UK internally and in wider supply chain and in partnership with the NHS's national carbon commitments, there are opportunities to support the NHS in greening their fleet locally.

²² NHS, 2020 <u>https://www.england.nhs.uk/greenernhs/a-net-zero-nhs/</u> (October 2020)



University of Reading

- 5.27 The University of Reading (UoR) currently have four EVCP locations on campus and operate only a small fleet of vehicles of which two are BEV.
- **5.28** UoR sustainability policies cover:
 - Ban on student vehicles as part of Student contracts; and
 - Support for Co-wheels car club.
- **5.29** UoR are supportive of installing further EVCPs and increasing on-campus car club access for students and staff. UoR are involved in developing the Innovation Valley Science Park and are to investigate the opportunity that this site can become an EV charging destination for Reading buses to encourage sustainable travel between campuses and Reading.

Operators of Sustainable Transport Options

5.30 The Council will work with operators of sustainable transport options including buses, car clubs, e-scooter and e-bike hire schemes to ensure sufficient provision of electric charging infrastructure is in place for these modes of travel.

Scottish & Southern Energy (SSE)

5.31 The Council will work with SSE to ensure there is sufficient capacity in the electricity grid to enable the provision of the required amount of electric vehicle charging infrastructure within the borough.

Neighbouring Local Authorities and Highways England

5.32 The Council will work with neighbouring local authorities and Highways England to ensure the provision of strategic electric vehicle charging infrastructure is co-ordinated across the wider region.

Owners and Operators of Existing Combustion Engine Infrastructure

5.33 The Council will work with owners/ operators of existing combustion engine infrastructure, such as petrol stations and car parks, regarding the potential to convert this existing usage into charging for electric vehicles.



Future Partnerships

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5.34 The Council will continue to develop future partnerships as joint working will be key to implementing the Strategy. Stakeholder engagement is a key component in the Action Plan presented in Section 7 of this strategy.
Conclusion

6. CONCLUSION

Current Status of EV Charging in Reading

- **6.1** Reading currently has a comparable number of EV charging infrastructure to other similar urban authorities in the UK. However, as demand for EVCPs will inevitably increase as we approach key dates in the future, there is a need to consider a pathway to support the uptake of EVs through the wider provision of charging infrastructure.
- **6.2** Reading has policies that target carbon reductions and has an integrated transport infrastructure which supports modal shift toward public and low carbon active transport modes. This EV Charging Infrastructure Strategy supports these policy areas and provides appropriate provision that enables equitable access to EV infrastructure and support bids and schemes such as bus fleet improvements, EV car clubs, EV taxis, micromobility options (e-bikes and e-scooters) and on-street charging.

Projected Requirements for EV Charging

- **6.3** Reading has a higher-than-average number of properties with no off-street provision for EV home charging, particularly Victorian terraced housing. To help address this the Council has already successfully installed an initial set of lamp column chargers, and is trialling slot drain and cable cover options to allow for on-street parking from home wall boxes. The strategy supports a significant investment in charging for residents to provide equity in charging for residents across the borough and enable rapid take up of EVs with around 3,000 on-street chargers proposed to take Reading to around 2030.
- **6.4** The Council has developed a strategy that shows its commitment to working with transport operators, businesses, energy suppliers and EV charging suppliers to support the delivery of EV charging infrastructure for operators and visitors to Reading. It is estimated that around 200 chargers will be required in the Council's car parks and other infrastructure will need to be defined for taxis, buses and to meet rapid charging requirements of through traffic and visitors and delivery vehicles.

Future Developments

- 6.5 The Reading Transport Strategy 2040 aims to deliver equitable access to zero-carbon transport options and this EV infrastructure forms a key part of that wider strategy.
- 6.6 The Council will lead, support and enable access to EV infrastructure. However, as the EV market evolves and more commercial companies enter the market, the Council does not necessarily need to provide all of these assets. The Council is therefore seeking to deliver a 'concession framework' entering into agreements with operators to provide charging facilities at key locations throughout the borough as the main mechanism for EV infrastructure provision. Reading is looking to have a financial stake within these concessions to deliver fair and equitable infrastructure.
- 6.7 The Council will also look to develop the best fit business model and policies which enable EVCPs to be installed and used for domestic charging (on and offstreet), destination charging and en-route charging. Supporting policy to fast-track EVCP installations would benefit and encourage operators to deliver infrastructure to match demand of EV take up in the future.
- **6.8** The provision of charging infrastructure for electric buses, car clubs, taxis, e-bikes and e-scooters also forms a core element of this strategy and will help to promote these sustainable forms of travel. For instance the provision of rapid chargers for car club and taxi use at strategic locations.
- 6.9 Reading will seek to form partnerships in both the public and private sectors to develop and install infrastructure where needed. It should also work with large public bodies (i.e. NHS), Universities and other local authorities to identify demand and joint opportunities. Commercial operators are installing infrastructure in and around Reading and as the EV market increases and competition grows, these operators will be supportive of policy and engagement with the Council to assist in installing more EVCPs.
- 6.10 The Electric Vehicle Charging Infrastructure Delivery Plan, as included at section 7 of this strategy, sets out the strategy objectives and actions to be taken forward to enable the core aims and objectives of this strategy to be achieved. An important element of the delivery of this plan will be to ensure, as far as is possible, that charging infrastructure does not become outdated and therefore creates legacy issues where it has been installed.
- 6.11 This strategy is a live document and will be updated regularly to reflect the latest and newest developments in the uptake of electric vehicles and changing charging and vehicle technologies. Progress will be monitored alongside delivery of the wider Reading Transport Strategy 2040 and the Reading Climate Emergency Strategy, including the objective to achieve net-zero carbon.

Infrastructure Delivery Plan

7. CHARGING INFRASTRUCTURE DELIVERY PLAN

7.1 This section details the objectives that Reading Borough Council have set and provides guidance on how these objectives are to be achieved. Five key objections that Reading are setting out to achieve through the Infrastructure Delivery Plan are provided the following Tables 7.1 and 7.2.

Table 7.1: Five Key Objectives

Objectives	Details
Objective 1	Reading will develop a Reading-wide approach to facilitate and encourage the growth in use of electric and zero emission vehicles by Reading's residents, businesses, and visitors. This will be developed to include buses, taxis, car-clubs e-bikes and e-scooters and will be developed through engagement with residents, businesses, and other stakeholders including companies who are commercially installing charge points in Reading.
Objective 2	Reading will deliver a reliable and well-maintained public EV charging point infrastructure in line with projections, and as amended through monitoring, to facilitate the move to electric vehicles. Deliver and implement through a policy for appropriate, safe, equitable and disability aware accessible provision across the borough.
Objective 3	Reading will seek to provide renewable energy sources for charging points on Council land or highway, working with cross Council smart energy initiatives such as linking to other infrastructure projects such as heat networks.
Objective 4	Reading will innovate and respond flexibly to fast-paced and changing technologies within the EV sector and changes in EV take up including seeking to enable residents to benefit from Vehicle to Grid technologies as they come forward.
Objective 5	Reading will lead by example by using EV technology as much as possible to further reduce the environmental impact of our day-to-day operations. This will also include working with Reading Buses and Readibus to support them in their electrification plans.

Delivery Plan

- 7.2 Table 7.2 sets out the Infrastructure Delivery Plan linking the five "Objectives" to "Actions", with "Time scales" for delivery (Short term: <2 years, Medium: 2-5 years, Long term: 5+ years) and provides "Immediate Recommended Actions" to kick start the process.
- 7.3 The Delivery Plan sets out a pathway to developing policies and further actions to be taken forward. These policy areas will be developed following public engagement and consultation.

Table 7.2:	Infrastructure	Delivery	/ Plan
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Objective	Actions	Timescale	Immediate Recommended Actions
 Reading will develop a Reading-wide approach to facilitate and encourage the growth in use of electric and zero emission vehicles by Reading's residents, businesses, and visitors. This will be developed to include buses, taxis, car-clubs e-bikes and e-scooters and will be developed through engagement with residents, businesses, and other stakeholders including companies who are commercially installing charge points in Reading. 	 1.1 Residential Reading will: Install charge points in areas without off street parking to facilitate uptake of EVs for residents living in these areas. Provide a balance of commercially viable and more community centred options to deliver equality in charging provision Provide a balance of residential and fast charging strategy. Install charging points in clusters of 2 or 3 to ensure points are accessible for residents. Consult with residents and respond to local demand by considering these locations for charging points if suitable, especially if residents do not have access to off-street parking. Explore potential for local amenities such as community halls, parks and business parks within proximity to residential areas in which charge points could be installed to enable overnight charging where on-street charge points are not suitable Understand demand on housing estates and consider the provision of charging infrastructure where appropriate 	Short-term	 Reading will: Undertake a review of potential charge point locations taking account of on and off street parking, socio-economics, power constraints and charge point design and placement considerations. Explore options for suitable charge point suppliers and understand the different charging/delivery models that are available. Tender for a suitable supplier to install appropriate infrastructure in residential areas. Target of 2,500 – 3,000 on-street chargers to be delivered by 2026. Install infrastructure at suitable identified residential locations. Engage with eligible residents (tenants and owners of rented flats) about The Electric Vehicle Homecharge Scheme (EVHS) that provides grant funding of up to 75% towards the cost of installing electric vehicle charge points at domestic properties across the UK. Create a timescale to review on-street parking as this will be necessary alongside EVCP delivery.

 Ensure that charging units are included for consideration at the planning stage as part of all new housing developments and all housing re- developments 	Med-term	 Seek to secure Govt EV infrastructure funding (EG LEVI – Local Electric Vehicle Infrastructure Fund) Reading will: Investigate planning restrictions due to high number of conservation areas and listed buildings limiting on-street parking solutions. Engage with planning to improve the installation of charging points in new developments.
 1.2 Businesses Reading will: Provide public charge points for drivers who need to recharge during the day without returning to a depot or home (e.g. businesses or taxi/private hire drivers) Explore the potential for private car parks to install rapid charge points for workers or customers Promote business fleet decarbonisation - Educate and inform businesses about the long-term benefits of decarbonisation. Consider incentives such as introducing tax breaks (business rates) for businesses fulfilling decarbonisation targets 	Short-term	 Identify priority locations to target Reading will: Carry out a survey of business to identify where they have charging points and their policies for installing them. Carry out a mapping exercise to identify parking sites and business park opportunities. Develop a strategy that engages specifically with business owners / charge point operators (CPOs) Investigate grid implications and charging strategy for potential locations for rapid charge points and whether they would be adequate for an EV taxi scheme.
	Med-term	 Reading will: Engage with key stakeholders including Reading Chamber of Commerce, UoR, NHS, Reading Buses, Taxi Association. Promote vehicle schemes and tax incentives with businesses. Identify priority locations to target
 <u>1.3 Visitors/Destination Charging</u> Reading will: Install charge points in Council car parks 	Short-term	 Reading will: Carry out a mapping exercise that builds on current RBC owned car park provision and usage, include separating EV charging during the day and locations where local residents

 Ensure charge points are installed in high visibility, high footfall areas without compromising road or footway space Identify opportunities for charge points near leisure centres, near Park and Rides, supermarkets and places of work Develop sites with a minimum capacity of two vehicles per site Review opportunities to power charge points in car parks through solar powered canopies 		 use free parking overnight to charge. Initial evaluation shows a target of 150 -200 fast car park chargers being required by 2040. Engage with operators of private car parks to understand their EV charging usage (where provided) and their strategies for expansion. Engage with commercial EV rapid charge hub operators (EG Shell, BP at traditional garage forecourts) to understand what is likely to be delivered commercially in the town. Develop a strategy and seek to secure Govt EV infrastructure funding (EG LEVI – Local
		Electric Vehicle Infrastructure Fund)
	Med-term	Reading will:
		 Explore options for suitable CPOs and understand the different charging/delivery models that are available Identify priority locations to target
1.4 En-route/Strategic Route Charging	Short-term	Reading will:
 Reading will: Partner or support the opportunities to install enroute charging hubs on corridors into Reading 	Short term	 Develop a Berkshire-wide strategy that engages specifically with business/ charge point operators
Partner or support the opportunities to install en-	Med-term	Reading will:
route charging hubs with neighbouring authorities such as on motorway services, new employment and education destination sites or other authority Park and Ride locations.		 Work with owners/ operators of existing combustion engine infrastructure, such as petrol stations and car parks, regarding the potential to convert this existing usage into charging for electric vehicles. Engage with neighbour authorities and Highways England, motorway service station operators/CPOs on strategic network
		locations to be developed
1.5 Charging Infrastructure for Other Sustainable Modes	Short-term	Reading will:
Reading will:	Short term	 Engage with hus operators to review husiness
 Explore and develop opportunities for electric 		case to install EVCPS for buses in Reading.
charging infrastructure for sustainable modes of		 Engage with car club operators to prepare
travel.		business case to install EVCPS for car clubs.

 Deliver electric charging infrastructure for sustainable modes of travel. 		 Engage with taxi drivers to prepare business case to install EVCPS for taxis. Review opportunities to install EVCPs the use of e-scooters and e-bikes. Review opportunities to install EVCPs the use of electric motorbikes.
	Med-term	 Reading will: Secure funding for and deliver infrastructure requirements to encourage the use of buses. Secure funding for and deliver infrastructure requirements to encourage the use of car clubs. Secure funding for and deliver infrastructure requirements to encourage the use of taxis. Secure funding for and deliver infrastructure requirements to encourage the use of taxis. Secure funding for and deliver infrastructure requirements to encourage the use of escooters and e-bikes. Secure funding for and deliver infrastructure requirements to encourage the use of escooters and e-bikes. Secure funding for and deliver infrastructure requirements to encourage the use of electric motorbikes.

Object	ive	Actions	Timescale	Immediate Recommended Actions
2. Readin reliable mainta chargir infrast with pr as ame monito facilita electric Deliver	ng will deliver a e and well- ained public EV ng point ructure in line rojections, and ended through oring, to te the move to c vehicles. r and implement	I deliver a well- public EV intReading will:Prioritise residents without access to off-street parking, those in high density dwelling areas, and those that already own an electric vehicle.re in line tions, and d through to e move to icles. implement olicy forReading will: Prioritise residents without access to off-street parking, those in high density dwelling areas, and those that already own an electric vehicle.Review on-street charging partnership and funding optionsRequire charging infrastructure for new housing developments, through planning policies.Install an even spread of fast and residential charging points throughout the borough where footway space is sufficient.		 Reading will: Build on initial forecasting work undertaken for this strategy to develop a town wide delivery plan. Map out opportunity areas where EV charging can be provided. Engage with car club operators to review business case to install EVCPS for car clubs (see objective 2).
approp equital aware provisi boroug	oriate, safe, ble and disability accessible on across the gh.	 Support EV car-club opportunities across Reading esp. in low-income areas. Design in accordance with BSI PAS 1899 for accessible EV charging. 	Med-term	 Reading will: Review funding model options and EVCP market operators to determine potential delivery partners for on-street charging options.
Object	ive	Actions	Timescale	Immediate Recommended Actions
3. Readin provide energy chargir Counci highwa cross C energy as linki infrasti such as	ng will seek to e renewable / sources for ng points on il land or ay, working with Council smart / initiatives such ing to other ructure projects s heat networks.	 Reading will: Explore solar charging hubs as a resolution to grid capacity implications. Consider energy storage and charging hubs for Evs and hydrogen refueling. 	Long-term	 Reading will: Review options and opportunities for solar charging hubs. Review options and opportunities for refuelling hubs.

	Objective	Actions	Timescale	Immediate Recommended Actions
4.	Reading will innovate and respond flexibly to fast-paced and changing technologies within the EV sector and changes in EV take up including seeking to enable residents to benefit from Vehicle to Grid technologies as they come forward.	 Ensure charge point infrastructure and designs are futureproofed. Once charge points are installed, monitor usage data to ensure locations are suitable and charge points are being used. Install active and passive charging points in new developments to account for future growth and uptake. Embed capacity for EV infrastructure into other Highways and Transport projects and programmes and ensure these are aligned with the EV objectives as far as possible, to encourage and support further expansion. Ensure partnership infrastructure agreements include flexibility to be upgraded and not left redundant. 	Short-term Med- term	 Reading will: Analyse usage data from charge points in designated monitoring sites to gain an understanding of charging patterns - Create a projection of how many EV charge points will need to be installed each year based on this data. Understand electricity and gas grid constraints for future development. Reading will: Work with DNO and electricity suppliers to target grid reinforcement areas for future (equitable) access to EVCPs.
	Objective	Actions	Timescale	Immediate Recommended Actions
5.	Reading will lead by example by using EV technology as much as possible to further reduce the environmental impact of our day-to-day operations. This will also include working with Reading Buses and Readibus to support them in their electrification plans.	 Install additional charge points in car parks and on all Council owned sites for use by Council staff and visitors Install additional charge points in car parks and on all Council owned sites for use by Council staff and visitors Understand the challenges faced by Reading Borough Council employees in the purchase of EVs Identify further locations to install EV charge points to benefit Reading Borough Council workers Explore grid implications of providing charge points for both Council fleet and workers private vehicles Undertake analysis into travel patterns for fleet vehicles to understand which vehicles should be prioritized for electrification 	Med-term	 Reading will: Support EV upgrades across Council vehicle fleet Provide information on EVs and EVCP availability for staff Engage with and encourage feedback from Reading Borough Council staff/workforce Discuss barriers to EV purchase with Council staff Review options to provide a salary sacrifice scheme for staff to purchase an electric vehicle
		prioritized for electrification	Long-term	 Keading will: Develop policy to ensure no new internal combustion engine vehicles are purchased as part of the fleet

5.2 Engagement and Promotion	Med-term	Reading will:
Reading will:		 Provide information on benefits of EVs and
 Engage and promote the benefits of low and zero 		funding available for vehicles and charge
emission travel options with the public		points

Cost of Delivery Plan

7.4 The future cost of infrastructure delivery is uncertain as it is dependent on both the take up of EVs and how people choose to charge them. Home charging and on-street charging are likely to be a key driver for ownership and charging, although there is evidence from the US that a number of EV owners rely entirely on the ultra-rapid charging network and this 'fuel station' type model may prevail. Only approximately 3% of cars on the UK's roads are currently EVs and this means that any insights based on current data are very much biased towards early adopters and hence forward projections are difficult. Reading's strategy is based around RBC delivering the on-street charging and destination charging in their car parks. Rapid / Ultra-rapid charging is being delivered in Reading by the commercial sector. The below cost estimates to around 2030 represent a broad estimate of demand as set out in this strategy and should be seen as an expected order of cost rather than a detailed budget.

Type of Charger	Number of Chargers / Channels	Approx Cost	Funding Sources
Residential On-Street – Slow	3,000	£10m – £15m	Government funding (LEVI grant) / Council funding / Private sector (Concessionaire investment)
Car Park - Standard	250	£1.5m - £2m	Government funding (LEVI grant) / Council funding / Private sector (Concessionaire investment)
Pavement Channels	150	£1m	Government funding (LEVI grant) / Council funding / Resident payments
Bus Charger	-	£2m	Government funding (LEVI grant) / Council funding / Bus Company funding
TOTAL	3,400	£14.5m – £20m	

Note: Costs include cost of supply and installation of chargers, with reasonable electrical connection costs. Ongoing management and maintenance is expected to be covered by revenue.

Appendix 1 - Types of Public Car Charge Points

	About	How do they work	Design Considerations
Residential Lamp Column Slow/Trickle Charging (up to 5.5kW)	Most charging occurs at home, in residential areas. Lamp post chargers are a different approach to the majority of the existing electric vehicle chargers. Primarily, they are intended to address the challenge of charging electric vehicles when owners do not have access to off-street parking.	Lamp post chargers tap into the existing power network created for street lighting and are either integrated into the lamp column or are attached to it; making them a less expensive alternative to floor- mounted units. As they piggyback on an existing power grid, they are limited in the power they can supply but are sufficient for overnight charging. Integrating these charging units into existing street furniture means that there is no additional street clutter. These units can be accessed using a standard Type 2 charging cable and are typically Pay-As-You-Go.	Consider whether lamp column infrastructure is appropriate for the chosen location. Ensure lamp columns are positioned adjacent to the carriageway or ideally on carriageway build outs, to avoid trailing cables and ensuring the footway is kept clear and footway space is maximised for pedestrians. If a lamp column is back of footway, allow adequate footway widths for bollard at front of footway. To optimise use, two or three lamp column chargers may be installed at each location to ensure residents are always able to access a charging point. Locations for consideration should be resident led, in areas of existing demand and where there is likely to be future demand. Ensure columns are practical for the installation of the infrastructure – columns must adhere to a prescribed standard of earthing, increasing the fuse size to cope with the extra energy usage, and metering an otherwise unmetered energy supply. Steel lamp columns are required; concrete or heritage columns are often unsuitable. Adequate space is necessary, and no existing electrical infrastructure or utility covers within 2.5m of the kerb. Does not require a marked/dedicated EV bay - if the lamp column charge point is located within a CPZ, the local parking controls will apply and anyone can use the parking space. The Council may need to introduce EV charging bays with Traffic Regulation Order's (TROS) to control access to these charge points.

	About	How do they work	Design Considerations
Popup chargers (3- 7kW) 8 hours +	Popup chargers are generally used for residential charging. By being fully retractable, their design is pedestrian- friendly. They have characteristics of both lamp column and fast chargers and are deployed as hubs.	Popup chargers are designed to sit flush to the pavement when not in use, minimising the impact of street clutter on the landscape. These units can be accessed using a standard Type 2 charging cable and are app operated. They are typically Pay-As-You-Go.	Hidden when not in use, reducing the risk of vandalism and street clutter. Ensure hubs are positioned at the front of the pavement, to avoid trailing cables and ensuring the footway is kept clear for pedestrians. Each on-street charging hub typically comprises 6 charging bays/sockets for dependability (minimum 4). Require a marked/dedicated EV bay. In terms of installation, they have the same criteria as fast chargers with the added complication of needing to be placed underground.
Standard/Fast (7- 22kW) 6-8 hours	Fast 7kW-22kW chargers are suitable for the vast majority of electric vehicle users. Standard chargers are usually installed in public on-street locations, with high visibility and high footfall, or in off-street locations, such as car parks, where users can leave their vehicle for three to four hours.	Floor-mounted charging points require dedicated EV parking bays, with signing indicating length of stay restrictions. Having marked bays ensures electric vehicle owners can access charging points and emphasise that bays are dedicated. EVs must be plugged in and actively charging to use the parking bays. Some networks prefer drivers to use an RFID card and others a smart phone app, while some allow access using either. Charge points have set charges which tend to be a connection fee, price per time, price per energy consumed, or a combination of the above; most charging points offer Pay As You Go.	Install on carriageway build outs to avoid impinging on pedestrian footway space Ensure sufficient pavement space and distance from trees and existing electrical street furniture Consider which charge point networks to introduce. Consider the impact that the charging point will have on the street scene. Consider the spread of charge points across the borough The visibility of charging points is key to increasing public awareness. Consider the balance of on-street and off-street charging points Minimise impact on parking bays – consider flank walls and areas without significant parking stress. Consider sites that are not expected to change in the next 5-8 years. Install infrastructure on public highway to ensure footways are kept clear. Ensure adequate power supply Ensure viable access for the installation team

	About	How do they work	Design Considerations
Rapid/ Ultra Chargers (AC, 43kW; DC, 50- 350kW; Tesla Supercharger V3, 250kW) 80% in 30 -45 mins	Rapid chargers can recharge a vehicle in minutes rather than hours. They are vital to long distance travel and for commercial vehicles such as taxis, which will need to top-up during the day. Rapids are ideal for off-street locations near arterial roads, service stations and car parks, due to their size.	Rapid chargers work in the same way as a standard floor mounted charger but charge at a more accelerated rate. The standard rapid charging speed is currently 50kW, which can charge a vehicle to 80% full in 30-45 minutes, although some companies offer Ultra-Fast charging speeds of up to 150kW. They usually use a tethered cable equipped with a non-removable connector.	Consider the impact that the charging point will have on the street scene, especially due to the size of rapid charging points Consider locations based on whether they are in an appropriate position to service fleets and commercial delivery vehicles, for example, close to major road networks bringing traffic in and out of the borough. Consider whether a rapid charging hub, normally consisting of 5 or more charging points, can be implemented. Consider whether there is sufficient space for a feeder pillar or substation, if required Consider the available power capacity from the local grid and whether it can support a rapid charging point
		Other types of chargers	
Trailing cables	It is generally considered that Council's ca being a trip hazard, however cable protect	nnot condone the trailing of cables fro ting mats and gullies have been propo	m private properties across the footway to vehicles due to it sed to mitigate these risks.

	About	How do they work	Design Considerations
E-Charge Point	E-charge points are small wallboxes that can be wall mounted or be free standing as an option for E-bike charging. They are ideal for being convienient and requireing low infrastreucture space to install. Some models also have a charging point for singular vehicles.	Charge points are connected to a 230v / 400v power supply and can be placed near cycle infrastructure (such as bike stands) to provide an easy access point to charge bikes directs from the grid. Cables are not supplied so users would need to carry their respective charging cable to use the charging service. Has multiple charge points to allow for different cable types to connect allowing greater accessibility. Some models also allows for EV charging at points as well	Users required to carry own charge cables, may be unlikely to use as a result. Designed to be installed on buildings, although free standing option May not be suitable for E-scooters. While weatherproof, would likely need to be stored in bike sheds to make more identifiable and to provide protection to bikes in weather. Risk of vandalism through damage to unit. Consider impact on street scene.
E-Charge towers	Similar to e-Charge points but includes the option of a cabinet which contains charger cables.	Works The same as Charge points but with the option to provide a cabinet to supply cables needed for charging.	Could potentially be installed on lighting column to reduce amount of footway required for install. May not be suitable for E-scooters While weatherproof, providing shelter to bikes should be considered. Risk of vandalism through theft of cables and damaged to unit Consider impact on street scene.

Appendix 2 - Types of e-Bike and e-Scooter Charge Points

	About	How do they work	Design Considerations
Charging Stand	E-bike charging stands are suitable for locations where E-bike users will be spending a longer amount of time such as University, Libraries etc where they will need to secure their back for a longer period of time. They act as a safe place to store and Charge bikes.	A power supply to the location of the stand is required which can be directly under or discreetly leading to the unit. Key locked doors provide access to the cables and power connection which can be locked after connecting to prevent theft.	Adequate power supply would need to be provided. Locating the stands would be best near Leisure facilities and areas where users should or would expect a more lengthy visit. While weatherproof, providing shelter to bikes should be considered. Risk of vandalism through theft of keys and damaged to locking mechanism. Consider impact on street scene. May not be suitable for E-scooters. Use by traditional bike users will limit capabilities.
E-Bike Charging dock	Charging docks are Similar to charging stands but differ in being used for e- bike hire services and therefore tend to have more secure locking. Some models have connections which allow for charging and locking at a single point where as others (Shown below) have more secure locking with cables provided.	Similar to the above, thar connected discreetly or directly to a power supply and will typically have an electronic locking system instead of a typical bike lock. For e-bikes a contactless reader would "hire" the bike out and release the lock but for personal bikes would provide secure locking and charging, likely at a cost. They can even be used by non- e-bike users for secure locking.	Not suitable for e-scooters, would require more infrastructure put in place to provide power to lock mechanism. Use by traditional bike users will limit capabilities. Some models offer the ability to provide extra power using solar energy to offset use of DNO power.

	About	How do they work	Design Considerations
Storage and charging lockers	The most secure of the charging options as this provides the most physical security and fire security of all options. It provided protection in case of fire from damaged batteries while containing charging and bike lock facilities inside with a secure locking door for further security.	Works as above but with the added benefit of having a securely lockable door and being self-contained in case of fire to provide protection to others. They are available for both e-scooters and e-bikes but they require different infrastructure for charging and locking.	Takes up a large amount of space for limited storage space. Use by traditional bike users will limit capabilities
Solar stand	The most efficient option, Powered entirely by solar energy the freestanding units can be placed anywhere.	Powered entirely by solar energy they require no power input and are freestanding so can be moved freely to new locations if the existing location is not popular with e-Cycling	Storage capacity may limit effectiveness of charging. No locking mechanisms so cyclists would be unlikely to leave bikes for extended periods of time due to risk of theft. Important not to install in shaded areas. No groundworks required to install.

	About	How do they work	Design Considerations
Shared Dock	Shared docks would provide the benefits of a Scooter dock and E-bike dock at the same time. Allowing for all users to access them while limiting access to traditional cycle users (In most designs)	These work the exact same as the e-bike docks but will the provision to allow e-scooters to charge as well. They are typically owned by companies running e-scooter trials and as such they would also offer the e-bike service.	Run as a service rather than a charging station. May be able to be run independently as a charger station but locking may be incompatible with standard locking mechanics. Some models offer the ability to provide extra power using solar energy to offset use of DNO power. Traditional bike users would be unable to use (In most designs)
E-Scooter Dock	e-scooter docks are designed mainly for companies who are currently running e-scooter trials. They offer security and charging which is ideal for keeping footways clear tidy	As above, e-scooter docks will be connected either directly or discreetly to a power supply and users will lock the e- scooter into the dock and begin charging either by manually connecting a cable or automatically when the scooter docks (Model dependant)	Would currently be hire only service due to use of personal e-scooter in public still being illegal. Compatibility to charge other scooters may not be available at this time as well as a result of the afore mention ban. Some models offer the ability to provide extra power using solar energy to offset use of DNO power. Many companies prefer swappable batteries for e- scooters over charging.

Strategic Transport Reading Borough Council Civic Offices, Bridge Street Reading RG1 2LU

Email: transport@reading.gov.uk

Website: <u>https://www.reading.gov.uk</u>



Strategic Environment, Planning and Transport Committee



13 March 2023

Title Electric Vehicle (EV) C	Electric Vehicle (EV) Charging in Reading Tender	
Purpose of the reportTo note the report for in	To note the report for information	
Report status Public report	Public report	
Report author Sam Shean, Highways	Sam Shean, Highways & Traffic Services Manager	
Lead CouncillorCouncillor John Ennis, Transport	Councillor John Ennis, Lead Councillor for Climate Strategy & Transport	
Corporate priority Healthy Environment		
Recommendations1. That the Committee qualified and exper (EV) Charging prog2. That the Committee line with the Counc a draft of which apr	e note the intention to tender for a suitably ienced partner to roll out an Electric Vehicle ramme within Reading e note that any planned installation will be in il's agreed Electric Vehicle Charging Strategy, pears elsewhere on the agenda	

1. Executive Summary

- 1.1. To inform & update the Strategic Environment Planning & Transport Committee of the intention to tender for a suitably qualified and experienced partner to roll out an Electric Vehicle (EV) Charging programme within Reading.
- 1.2. To inform the Committee that any planned installation will be in line with the outcome of Reading's Electric Vehicle Charging Strategy that is currently being considered by this Committee.

2. Policy Context

- 2.1 The Department for Transport (DfT) published the Transport Decarbonisation Plan 'Decarbonising Transport: A Better, Greener Britain' in July 2021 to set the pathway and key principles underpinning the approach to delivering net zero transport in the UK by 2050.
- 2.2. This was followed by the publication of 'Taking Charge: The Electric Vehicle Infrastructure Strategy' in March 2022. The Strategy sets out Government's vision and action plan for the rollout of electric vehicle charging infrastructure in the UK, ahead of the dates to end the sale of new petrol and diesel vehicles by 2035 and for all new cars and vans to be fully zero emission at the tailpipe by 2035.
- 2.3. The transition to electric vehicles will help to achieve a number of Council strategies and objectives including those within the Corporate Plan, the Climate Emergency Strategy he Local Transport Plan (LTP) and the Air Quality Action Plan. It is a core element of the LTP vision to promote a sustainable transport system in Reading that creates an attractive, green and vibrant town with neighbourhoods that promote healthy choices and wellbeing.

3 The Proposal

- 3.1 The Council recognised the move to electric vehicles (EVs) would result in the need to charge electric and hybrid vehicles on the public highway and has already installed 15 lamp column and 6 other public 22kW EV charge points Boroughwide.
- 3.2 The Reading Electric Vehicle Charging Strategy incorporates a Charging Infrastructure delivery plan to be presented at this Committee meeting.

(Link to previous EV Charging Strategy report June 2023 for information, refers) <u>https://democracy.reading.gov.uk/documents/s27658/08%20EVCI%20Strategy%20-</u> %20SEPT%20Committee%2029%20June%202023.pdf .

- 3.3 The Council propose to go out to tender using the Oxford Framework Portal which is recognised as the appropriate facility where suitably qualified, approved and experienced contractors are available to return tenders. The proposal is to use a concession-based contract with the successful tenderer owning the above and below ground infrastructure and being responsible for its operation and maintenance for the duration of the contract. All assets then revert back to Council ownership at the end of the contract.
- 3.4 The tender will call for experienced contractors to deliver a range of EV Charging solutions including lower energy power charging on-street from either a streetlighting column or bespoke charging bollard to various fast to rapid charging solutions within the Council's car parks and on other Council land with potential charging speeds of 5 to 350kw.
- 3.5 Tenderers will be required to secure suitable funding themselves and to deliver the installation programme over a 2-year period. The project will not require the Council's own funding.
- 3.6 Tenderers will be required to enter a contract with the Council that includes the successful contractor maintaining at their own cost all apparatus installed, as well as proposing a long-term revenue share or equivalent option for the Council to consider.
- 3.7 A long term contract of up to 15-years will be entered into to secure financial stability for both the Council and the successful tenderer, which is industry standard.
- 3.8 Tenderers will be required to demonstrate social value and a strong commitment to carbon reduction principles within their tender submissions to assist the Council in our Carbon Net Zero pledge.
- 3.9 The Council will agree the delivery programme to ensure that the Council's priorities are being met including enhancing opportunities in socially deprived areas of Reading and to achieve best available price kwh for residents using the charging points.
- 3.10 Any contract award will include the final approved Reading EV Charging Strategy requirements.
- 3.11 Funding for the EV Charging project will be part LEVI Grant funding (£860k) secured by Reading Borough Council and part partner funded by either their own private funding or through the Charging Infrastructure Investment Fund (CIIF). This is a 50:50 Government / private sector fund of over £400m of investment capital being made available to speed up the deployment of public EV chargers.
- 3.12 It is anticipated that the potential income over the lifetime of this contract falls below the level where Committee approval is required in accordance with the Council's Procurement thresholds. However, a report will be brought back to this Committee in advance of tender award to report the outcome and to seek, if necessary, Committee approval should the potential income exceed expectation and meets the current Committee Approval threshold for authority to award the contract.

Contribution to Strategic Aims

4.1 Reading Borough Council's vision is:

To help Reading realise its potential – and to ensure that everyone who lives and works here can share the benefits of its success.

- 4.2 The Council's new Corporate Plan has established three themes for the years 2022/25. These themes are:
 - Healthy Environment
 - Thriving Communities
 - Inclusive Economy
- 4.3 These themes are underpinned by "Our Foundations" explaining the ways we work at the Council:
 - People first
 - Digital transformation
 - Building self-reliance
 - Getting the best value
 - Collaborating with others
- 4.4 Full details of the Council's Corporate Plan and the projects which will deliver these priorities are published on the <u>Council's website</u>. These priorities and the Corporate Plan demonstrate how the Council meets its legal obligation to be efficient, effective and economical.

5 Environmental and Climate Implications

- 5.1 The Council declared a Climate Emergency at its meeting on 26 February 2019 (Minute 48 refers). Transport is the biggest greenhouse gas emitting sector in the UK accounting for around 27% of total carbon emissions. As set out in the Reading Climate Emergency Strategy this figure is lower in Reading with transport accounting for around 20% of carbon emissions, however significant investment in sustainable transport solutions is vital in order to respond to the Climate Emergency.
- 5.2 A Climate Impact Assessment has been completed which suggests a 'net medium positive' impact arising from adoption of the EV Charging Programme, in the context of the wider EV Charging Strategy. In order to achieve the Council's sustainable transport vision and meet our climate change goals, we will need to reduce car use both within and through the Borough by providing attractive and viable alternatives through prioritising and promoting public transport and active travel schemes. However, our Transport Strategy recognises that private vehicle use, car and van trips, will remain for many the most appropriate mode of transport. Therefore, by encouraging the adoption of electric vehicles for the trips that still need to be made they can be made to be more sustainable with a lower impact on the environment and climate change as well as reducing the impact of poor air quality in Reading.
- 5.3 A key driver to the successful adoption of electric vehicles is the ability to adequately charge vehicles. For some the natural choice will be through home charging in an off-street setting, but this will not be available for many, and Reading has a particularly high proportion of homes that do not have off-street parking. The Council's Electric Vehicle Charging Infrastructure Strategy will provide a framework for a network of charging points across the borough and to remove barriers to EV ownership and help achieve our targets from the Reading Climate Emergency Strategy of increasing uptake of zero emission vehicles.
- 5.4 Tenderers will be required to submit an Environmental Implications proposal which will form part of the quality element of the tender evaluation. A social value quality submission will also be included to ensure that the most deprived Wards in Reading benefit.

- 5.5 Tenderers will be required to submit Carbon reduction and improved sustainability targets. The intent is to reduce the amount of carbon used to produce the materials at source, using recycled materials, lower temperature materials, reducing the uncontrolled waste in the environment to reduce pollution of the natural environment, use of electric vehicles and plant, use of cold applied materials with lower carbon emission, as well as how they will achieve their carbon reduction targets.
- 5.6 The Reading Climate Emergency Strategy, which was endorsed by the Council in November 2020, highlights the importance of adapting to climate impacts as well as reducing the emissions which are driving climate change. The Council will regularly review design standards, in conjunction with industry bodies, to take into account the extreme weather events (both extreme heat and extreme cold) to ensure sustainability of the public highway network.

6 Community Engagement

6.1 As set out in the June 2023 Strategic Environment Planning & Transport committee report, a public consultation was undertaken to seek feedback on the draft Electric Vehicle Charging Infrastructure Strategy as part of the proposed statutory consultation to be undertaken on the Council's new Local Transport Plan, the Reading Transport Strategy 2040

7 Equality Implications

- 7.1 Under the Equality Act 2010, Section 149, a public authority must, in the exercise of its functions, have due regard to the need to—
 - eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under this Act;
 - advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it;
 - foster good relations between persons who share a relevant protected characteristic and persons who do not share it.
- 7.2 The EV Strategy is being developed in line with these requirements and the delivery of individual elements of the strategy will be subject to further Equality Impact Assessments (EIA) as they are developed. The EV Charging Tender is the mechanism to deliver key elements of this Strategy.

8 Other Relevant Considerations

8.1 There are none.

9 Legal Implications

- 9.1 The Borough Council, as Highway Authority, has a duty under the Highways Act 1980 to ensure, so far as is reasonably practicable, that safe passage along a highway.
- 9.2 There is no current statutory requirement for the Council to produce an Electric Vehicle Charging Infrastructure Strategy, however it is anticipated that the new Local Transport Plan guidance being prepared by the Department for Transport may place this duty on Local Transport Authorities.

10 Financial Implications

- 10.1 The delivery of EV Charging will be funded by the successful tenderer using Grant funding that is currently available, as well as Grant funding that the Council may secure from the LEVI Fund as necessary.
- 10.2 Maintenance of any EV charging apparatus installed within Reading will be carried out by the successful tenderer at their own cost.
- 10.3 The successful tenderer will be required to propose and pay an annual apparatus rental fee for each EV device installed on the public highway for the duration of the contract. Page 382

10.4 The successful tenderer will be required to propose and share profits made from the sale of energy over the lifetime of the contract.

11. Timetable for Implementation

- 11.1 The tender is due to go out early in the new financial year 2024/2025 with the award of the contract to follow the adoption on the Council's adoption of the EV Charging Strategy.
- 11.2 It is anticipated that the successful tenderer / partner will commence delivery of on-street EV Charging apparatus in Autumn 2024 and it may take up to 2-years to fully roll out the delivery programme.

11 Background Papers

11.1 There are none.

Appendices

There are none.

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Agenda Item 12

Strategic Environment, Planning and Transport Committee



13 March 2024

Working better with you

Title	Electric Vehicle (EV) Charging Across Public Highway Licence – Trial Outcome		
Purpose of the report	To make a decision		
Report status	Public report		
Report author	Sam Shean, Highways & Traffic Services Manager		
Lead Councillor	Councillor John Ennis, Lead Councillor for Climate Strategy & Transport		
Corporate priority	Healthy Environment		
Recommendations	 That the Committee note the outcome of the trial of Electric Vehicle Charging on or across the public highway. That the Assistant Director of Environmental & Commercial Services be authorised to enter into 'Electric Vehicle Charging Across the Public Highway' licences with applicants under the terms of the licence, as described in this report. 		

1. **Executive Summary**

- 1.1. To report to Committee the outcome of the Electric Vehicle (EV) Charging on the public highway trial that commenced in April 2021 and that the Assistant Director of Environmental & Commercial Services be authorised to enter into 'Electric Vehicle Charging Across the Public Highway' licences with applicants under the terms of the licence.
- 1.2. Encouraging private vehicle owners to move from higher polluting petrol and diesel vehicles to electric will contribute to the ambitions set out within the Reading Climate Change Strategy. However, many residents have to use on street parking which presents a challenge in relation to charging infrastructure.
- 1.3. This report informs the committee that officers will enter into licence agreements with property owners and occupiers to facilitate safe private charging of electric vehicles on or across the public highway.

2. **Policy Context**

- 2.1. In November 2020, the Council adopted the Reading Climate Change Strategy. The strategy focuses on reducing Reading's carbon footprint by, among other activities, reducing transport emissions by encouraging walking, cycling, public transport and a switch to electric vehicles.
- 2.2. The Council also has a duty under the Highways Act 1980 to provide a public highway network as safe as reasonably practical having due regard to financial constraints and statutory duties.

3. The Proposal

3.1. The Council's Medium Term Financial Strategy is informed by and supports delivery of the Council's Corporate Plan priorities including its commitment to address the climate change emergency and seeks to ensure that the Council is "fit for the future", with sound finances that allow the Council's future funding challenges and spending pressures to be met in as sustainable a way as possible.

- 3.2. The underpinning rationale of the Medium-Term Financial Strategy is to deliver a balanced and affordable budget that ensures the Council's finances are sustainable in both the short (one year) and medium term (three years). The Strategy is also informed by the Council's Vision: "to ensure that Reading realises its potential and that everyone who lives and works in Reading can share in the benefits of its success", as well as its Corporate Plan priorities:
 - Securing the economic success of Reading.
 - Improving access to decent housing to meet local needs.
 - Protecting and enhancing the life outcomes of vulnerable adults and children.
- 3.3. The Council declared a Climate Emergency and has set an ambitious target of net zero carbon emissions by 2030. Reading has also declared an Air Quality Management Area (AQMA) based on the exceedance of the air quality objective for NO₂.
- 3.4. As part of the Council's carbon and air pollution reduction ambitions, the Council has improved its own vehicle fleet and where possible is opting to replace older polluting vehicles with electric vehicles. Encouraging private vehicle owners to move from higher polluting petrol and diesel vehicles to electric will contribute to the ambitions set out within the Reading Climate Change Strategy.

Current Position

- 3.5. The Council recognised the move to electric vehicles (EVs) would result in the need to charge electric and hybrid vehicles on the public highway and has already installed 15 lamp column and 6 other public 22kW EV charge points Boroughwide with additional sites to be installed when funding is successfully secured.
- 3.6. The Council also recognised that suitable on-street EV charging points are not always available due to the nature of Reading's urban environment and high number of narrow terraced streets/roads in the road network, where no off-street parking is possible.
- 3.7. Residents in these streets/roads will have no alternative but to charge their electric vehicles from their property while parked on the public highway until suitable and sufficient on-street charging points are installed boroughwide.
- 3.8. Benchmarking has shown that several Councils have licences in place to facilitate the charging of EVs on the public highway.
- 3.9. The trial looked at a range of options to safely charge electric vehicles from private properties to the electric vehicle parked on the public highway.
- 3.10. The trial enabled residents to enter into a licence agreement with the Council to privately charge their EV parked on the public highway.
- 3.11. The Council was approached by 71 residents requesting information on EV Charging on or across the highway.
- 3.12. Of the 71 expressions of interest and / or applications received to date, 8 No. properties have entered into a 'Electric Vehicle Charging Licence' with the Council using the following solutions, (Appendix 1 refers):
 - 2 opted for the 'cable protector' solution.
 - 2 opted for the 'drainage channel' solution.
 - 4 opted for the 'Kerbo channel' slot drain solution.
- 3.13. The main reasons for the remaining applicants / enquiries not progressing at this stage was that they were in the process of purchasing an electric vehicle and were not in a Page 386

position to proceed, and that the licence does not secure the parking space in front of their house to guarantee that they can charge their vehicle overnight.

- 3.14. The EV Charging Licence includes a range of criteria and conditions to reduce the risk to the public and the applicant (Appendix 2 refers).
- 3.15. The cost of the licence will be borne by the applicant, with the Highway fee for the application set to match the vehicle crossing application fee, which is currently £ 75, (reviewed annually as part of the 'fees & charges' review).
- 3.16. The cost of the channel installation and / or cable protector option will initially be bourne by the LEVI fund, as part of the on-street EV Charging rollout scheme delivery programme. Once the delivery programme is completed all new applications will be required to cover the cost of installation themselves and no extension to cover the installation costs will be possible from that point.
- 3.17. It is anticipated that the channel installation option would cost approx. £ 1,250 per site and that the EV on-street charging delivery programme will take up to 2-years to complete.
- 3.18. A report on the progress of the EV Charging installation programme will be brought back to this Committee on an annual basis and will also report on the uptake of the channel installation and / or cable protector solutions.

Other Options Considered

3.19. The EV Charging across the public highway licence will be available to residents and will sit alongside any future on-street vehicle charging solutions brought forward by the Council.

4. Contribution to Strategic Aims

- 4.1. Reading Borough Council's vision is: To help Reading realise its potential and to ensure that everyone who lives and works here can share the benefits of its success.
- 4.2. The EV Charging across the public highway licence will contribute to the Council's Corporate Plan 2022 2025.
- 4.3. The Council's new Corporate Plan has established three themes for the years 2022/25. These themes are:
 - Healthy Environment
 - Thriving Communities
 - Inclusive Economy
- 4.4. These themes are underpinned by "Our Foundations" explaining the ways we work at the Council:
 - People first
 - Digital transformation
 - Building self-reliance
 - Getting the best value
 - Collaborating with others
- 4.5. Full details of the Council's Corporate Plan and the projects which will deliver these priorities are published on the <u>Council's website</u>. These priorities and the Corporate Plan demonstrate how the Council meets its legal obligation to be efficient, effective and economical.

5. Environmental and Climate Implications

5.1. The Council declared a Climate Emergency at its meeting on 26 February 2019 (Minute 48 refers), and as such recognises the need to minimise the climate impacts of its decisions.

- 5.2. The EV charging across the highway will encourage residents to switch to hybrid or fully electric vehicles that will ultimately lead to lower carbon emissions boroughwide and support the Council's net zero carbon emissions ambition.
- 5.3. A climate impact assessment has been conducted which suggests a 'net low positive' impact. Highway maintenance, including the installation of channel kerb EV charging solutions is an energy intensive activity and some carbon emissions from the process are inevitable, but a number of steps are being taken to mitigate these impacts as far as possible. There will be an overall decrease in the amount of carbon using EV compared with using older polluting vehicles.
- 5.4. The Reading Climate Emergency Strategy, which was endorsed by the Council in November 2020, highlights the importance of adapting to climate impacts as well as reducing the emissions which are driving climate change.

6. Community Engagement

- 6.1. The Council published an EV strategy which encouraged residents and the public to have an input into the final policy. The public and residents are able to request a licence for installation of EV charging facilities across the public highway to charge their EV / Hybrid vehicle.
- 6.2. This report along with the EV Charging across the highway licence application with conditions will be available on the Council's website following Housing, Neighbourhoods & Leisure Committee approval processes.

7. Equality Implications

- 7.1. Under the Equality Act 2010, Section 149, a public authority must, in the exercise of its functions, have due regard to the need to—
 - eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under this Act;
 - advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it;
 - foster good relations between persons who share a relevant protected characteristic and persons who do not share it.
- 7.2. The Electric Vehicle Charging License is part of procedures to maintain the Council's existing public highway network. There is no overall change to service delivery at this time only how those service requirements are met. Should any future updates/ amendments be required, which result in service delivery changes, an equality impact assessment will be carried out.

8. Other Relevant Considerations

8.1. There are none.

9. Legal Implications

9.1. The Council, as Highway Authority, has a duty under the Highways Act 1980 to carry out highway maintenance and maintain highway structures.

10. Financial Implications

10.1 The proposed Electric Vehicle Charging licence will be fully funded by the applicant, as part of their EV Charging Licence application.

11. Timetable for Implementation

11.1. Applications will be processed as received going forward.

12. Background Papers

12.1. There are none.

Appendices.

- **1.** Appendix 1 EV Charging Solutions.
- **2.** Appendix 2 EV Charging Application and Conditions

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Appendix 1: Typical solutions for Options 1 and 2

Option 1 Mobility Cable Protection Covers

A typical solution as shown below is being proposed for the trial which requires mobility access to be part of the cable protection cover. The wheelchair ramp is an add-on item which provides wheelchair access by connecting the ramp to the existing cable protectors to provide a gradual slope and slip-resistant surface to ensure a safe crossing.



3 channel cable protector: <u>https://www.theramppeople.co.uk/heavy-duty-cable-protector-trp-pcp4m-3-channels</u>

Wheelchair ramp: https://www.theramppeople.co.uk/rubber-wheelchair-ramp-for-cable-protectors

Cable protector and the ramp may be sold as two separate items.

Please note that this is an indicative example. Other providers are available.

Option 2 Footway channel strip

Typical slot drain solution involves insertion of slot drain into the pavement to allow cables to run

from the charging point to the vehicle without presenting a trip hazard.



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HIGHWAYS ACT 1980

SECTION 178 LICENCE APPLICATION PACK

CONSENT TO RUN PRIVATE EV CHARGING CABLE OVER THE PUBLIC HIGHWAY

All Correspondence to:

Reading Borough Council Highways Department 19 Bennet Road Reading Berkshire RG2 0QX

Tel: 0118 9373787

Ref: Ref: <u>ReADING BOROUGH COUNCIL</u> HIGHWAYS ACT 1980 SECTION 178 LICENCE APPLICATION
REQUIREMENTS:
1. <u>DETAILS OF LICENSEE</u>
Contact Name:
Address & Postcode:
Daytime Telephone Number: Out of Hours telephone Number: E mail
2. <u>DETAILS OF THE SITE</u>
Site Location:
Company Name (if applicable) and Address of Landowner :
3. <u>DETAILS OF THE PROPOSED OPTION</u>

There are two options to choose from - 1) Footway channel and 2) Protective cover

Description of the proposed option:

Proposed Start Date: _____



FOR EVERY APPLICATION YOU MUST ALSO PROVIDE THE FOLLOWING:

4. SITE SKETCH

Provide a copy of the A4/A3 sized location plan sketch clearly showing the proposed route of the EV charging cable along with a photograph of the proposed cable location.

5. INDEMNITY AND INSURANCE COVER

All persons wanting to carry out work on or in the public highway within the Borough of Reading <u>must</u> carry a valid public/ third party liability insurance cover of no less than **£2 Million**. Proof of valid/ third party liability must accompany each application.

This insurance cover must indemnify the Council against any claim in respect of injury, damage or loss arising from the works. This insurance cover must be maintained from the commencement of the licence and must be renewed for the licence to remain valid.

6. <u>LICENCE FEE</u>

The one-off fee for this licence application is currently free for the trial period and no further charges will be applicable.

7. <u>DECLARATION</u>

Carefully read and fully complete the declaration on the next page. This should be completed by the licensee.

Classification: OFFICIAL



DECLARATION

To be completed by the licensee

I hereby apply for permission to run EV charging cable at the following location :

Address:

I have read and understood the Notes for Guidance and Schedule of Conditions sections of this application and that the information I have provided is correct to the best of my knowledge.

I understand that it is a criminal offence to commence any works on the Highway until this fully completed application has been approved and permission has been granted, in writing, by the Street Authority.

I understand that I must follow the New Roads & Street Works Act 1991 and related codes of practice and that failure to do so could result in charges being made or legal action being taken against me or my company.

Signature: _____

BLOCK CAPITALS: _____

Date: _____


SCHEDULE OF CONDITIONS SUBJECT TO WHICH THE LICENCE IS GRANTED

Standard Conditions

- 1. If opted for option (1) footway channel, the Highways team will carry out the construction of channel. All other necessary equipment including cables, connections, and necessary arrangements to enable charging of the EV will need to be carried out by the applicant themselves.
- 2. The Licence does not give the Licensee the right to reserve the public parking space on the public Highway.
- 3. The Licensee or person working on their behalf must ensure at all times that no damage occurs to the public structures including any apparatus belonging to any statutory undertaker and access to their plant must be allowed at all times.
- 4. The Licensee shall indemnify the council against any claim in respect of injury, damage loss or third-party claim with respect to the deposit or excavation.
- 5. The minimum amount of insurance cover will be £2,000,000 (two million pounds) in respect of any one claim and an unlimited number of claims.
- 6. While charging the EV, the Licensee shall ensure to minimise obstruction to vehicular and pedestrian traffic.
- 7. The Council has the right to withdraw the licence issued if any of these conditions are not adhered to.



HIGHWAYS ACT 1980 SECTION 178

Application for consent to run private EV charging cable over the public highway

Notes for Guidance

- 1. The EV Cable shall comply with the requirements of the Council's Assistant Director of Environmental & Commercial Services or duly authorised officer (as the case may be) shall be of such a design as may be approved by the Council, and must be kept in good repair and condition at the Licensee's expense.
- 2. The area so permitted to be used must be solely for the purposes of charging an electric vehicle.
- 3. The licensee must complete the installation of the EV Charging Cable within 2 years from the date of the licence.
- 4. The Licensee shall keep the private equipment on the public highway to which this licence relates in a safe and tidy condition.
- Where a cable protection cover is to be used to protect the EV charging cable, 'Ramp' and 'Ramp ahead' signs shall be used. The cable protection covers shall have following specification 5.1 Colour: fully and/or mixed high visibility colour / markings
 S.2 Material: Plastic/Hard rubber material suitable for outdoor use (UV resistant standard)
 Surface: Anti-slip surface
 4 Length: Full footway width (but no wider than the footway)
- 6. The Licensee shall produce a risk assessment taking in account the consideration for safety during laying, maintenance, and removal of the cable. The Council may ask for this to be produced prior to granting the Licence.
- 7. The site shall be signed and guarded at all times during the operational use.
- 8. The Licence does not give permission to close any part of the highway unless upon written consent from the Council.
- 9. Access to the apparatus owned, used or maintained by Statutory Undertakers shall be provided when required.
- 10. The Licensee shall not excavate or remove any soil / surface material from the part of the highway to which this licence relates or otherwise do anything which would interfere with the support given to the rest of the highway.
- 11. The Licensee shall remove the EV Charging cable from the public highway for the use of the highway if required to do so to permit works or the use of the highway by:
 - 12.1 the Council or
 - 12.2 any statutory undertaker as defined by s329(1) Highways Act 1980 or
 - 12.3 12.3 telecommunications provider as defined bys405 Communications Act 2003
- 12. The Licensee shall make no claim of charge against the Council in the event of damage to the EV Charging Cable in any way from whatever cause.
- 13. The Licensee shall indemnify the Council against all actions, proceedings, claims, demands and liability that may at any time be taken, made or incurred in consequence of the EV Charging Cable and maintain adequate public liability insurance (minimum £5 million cover) and produce evidence thereof on the granting of this licence and from time to time thereafter as requested by the Council.

- 14. The Licensee shall accept the liability for any damage caused to the highway and street furniture resulting from the operational use of the EV charging. The damage repair shall be carried out to the Council's design standard at the expense of the Licensee.
- 15. The Licence hereby granted shall be annexed to the premises mentioned in the preamble above and shall remain in force until withdrawn by the Council under Section 178 Highways Act 1980 or surrendered to the Council by the Licensee.
- 16. The Licensee shall pay to the Council on the granting of this License the appropriate fee to be agreed as part of the application process.
- 17. The Licence Agreement does not supersede the Planning Permission requirements or absolve the Licensee from obtaining one where it is required.

The Licensee's attention is draw to the Highways Act 1980 section 178 (failure to comply with the terms of permission).

The conditions above may be periodically reviewed and subject to change following consultation and Committee approval. Any breach of the conditions may result in formal action being taken and the Licence revoked.

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