

Birmingham City Council

Report to the Cabinet Member Transport and Environment and the Cabinet Member Finance and Resources

11 August 2020



Subject: BIRMINGHAM CLEAN AIR ZONE (CAZ):
IMPLEMENTATION OF MAIN CAZ INFRASTRUCTURE –
CIVIL ENGINEERING AND CAMERAS SOLUTION - FULL
BUSINESS CASE (FBC)

Report of: Acting Director Inclusive Growth and Interim Chief
Finance Officer

**Relevant Cabinet
Member(s)** Councillor Waseem Zaffar – Transport and Environment
Councillor Tristan Chatfield – Finance and Resources

Relevant O & S Chair(s): Councillor Liz Clements – Sustainability and Transport
Councillor Sir Albert Bore – Resources

Report author: Nicholas Richards – Transport Delivery Specialist
Tel: 0121 675 7325
Email: Nicholas.richards@birmingham.gov.uk

Are specific wards affected?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No – All wards affected
If yes, name(s) of ward(s) WITHIN CAZ: Newtown, Soho & Jewellery Quarter, Ladywood, CAZ BOUNDARY: Balsall Heath West, Lozells And Edgbaston.		
Is this a key decision?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
If relevant, add Forward Plan Reference:		
Is the decision eligible for call-in?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Does the report contain confidential or exempt information?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Exempt Appendix F Exempt information paragraph 3. Information relating to the financial or business affairs of any particular person (including the Council)		

1. Executive Summary

- 1.1. Further to the Council receiving approval from Government on the 6th April 2020 to delay the implementation of the CAZ until no earlier than January 2021, activities associated with delivery of the CAZ were scaled back to reflect the need to redeploy staff elsewhere to support the COVID 19 response. In addition, many contractors and suppliers furloughed their workforce, reducing the ability to engage on contractual matters or undertake physical works due to the social distancing guidance issued by Government. Notwithstanding this position, the Council has remained committed to delivery of the CAZ and recognises the scheme as the best long-term solution to addressing the illegal levels of air pollution found in the city and affecting its most vulnerable residents on a daily basis. In addition, the Council is still subject to a Ministerial Direction mandating the implementation of the CAZ to achieve the target 2021 compliance date to accord with UK legislation and EU directives on air quality.
- 1.2. On 11th December 2018, Cabinet approved an overarching Full Business Case (FBC) for the Birmingham CAZ.
- 1.3. The 11th December Cabinet report delegated:
 - 1.3.1 Authority to the relevant portfolio holders jointly with the Corporate Director, Economy (now Acting Director Inclusive Growth) and the Corporate Director, Finance and Governance (now Interim Chief Finance Officer) to approve relevant follow on FBCs for sub-packages of work up to a value of £10.00m, subject to confirmation of funding; and
 - 1.3.2 Approval and award of the works contracts to the Corporate Director, Economy (now Acting Director, Inclusive Growth), the Director of Commissioning and Procurement (now Assistant Director, Development and Commercial), the Corporate Director of Finance and Governance (or their delegate) (now Interim Chief Finance Officer) and the City Solicitor (or their delegate).
- 1.4. Funding of £14.215m has been received from the Joint Air Quality Unit (JAQU) as recorded in the Clean Air Zone Grant Acceptance report to the Cabinet Member for Transport and Environment, jointly with the Chief Finance Officer and Director Inclusive Growth dated 28th March 2019
- 1.5. In the context of the national COVID 19 lockdown being eased, this report now seeks approval to the FBC for the CAZ Infrastructure, Civil Engineering and Cameras Solution, at an estimated capital cost of £9.218m and ongoing operational costs of £0.657m, as detailed in Appendix A.
- 1.6. Following a change of responsibilities from the Joint Air Quality Unit (JAQU) to the Council, the CAZ Programme is required to include a case management functionality within the ANPR Cameras and IT back office solution. An options appraisal and risk assessment of the procurement routes available to the Programme determined that a modification to the Council's existing contract with Siemens as a suitable option. However, it should be noted that circumstances surrounding the change prevent any zero risk options from being available. Details

of the risks associated with the contract modification are detailed paragraph 6.3 of this report.

2. Recommendations

- 2.1 Approves the FBC and the capital expenditure for the implementation of the CAZ Infrastructure – Civil Engineering and Cameras Solution as detailed in Appendix A, including the designs and locations of the signage, poles and cameras as detailed in Appendix C, at an estimated capital cost of up to £9.218m funded from the £14.215m Clean Air Zone Implementation Fund grant, already received by the Council;
- 2.2 Delegates authority to the Assistant Director Transport and Connectivity to re-allocate funding in relation to the projects covered in this report and detailed in Appendix A, within the overall approved budget;
- 2.3 Approves the estimated annual revenue expenditure of £0.657m, funded from the CAZ gross revenue income, for the operational costs of the CAZ infrastructure and camera solution as detailed in Appendix A;
- 2.4 Notes that the CAZ programme has been progressing since approval of the overarching FBC by Cabinet in December 2018 and that several work streams are underway or have been completed. This includes Early Contractor Involvement (ECI), detailed design, and surveys to enable accurate cost estimates to be undertaken, as approved under the overarching FBC to Cabinet on 11th December 2018, and as detailed in Appendix A, Section D2 Procurement Implications and Contract Strategy;
- 2.5 Notes that whilst Early Contractor Involvement (ECI) and detailed design activity is complete, the negotiations with the originally appointed civil engineering contractor were unsuccessful and the contract was terminated prior to site works commencing. As a result, a series of smaller work packages were created and the work re-tendered via the Council's Highways and Infrastructure Works Framework Agreement 2014 - 2020;
- 2.6 Notes that all procurement activity has been undertaken in accordance with procurement protocols to ensure value for money has been achieved and Appendix F contains exempt information detailing a breakdown of current estimated contract values and a detailed summary of contracts awarded and their tender values. The current position is as follows:
 - 2.6.1 The procurement of five of the eight smaller work packages has taken place and contracts have been awarded in line with existing Scheme of Delegations in an effort to achieve the original 'go live' date of 1st January 2020, noting that these work packages were awarded prior to approval of this FBC.
 - 2.6.2 Three larger civil engineering works contracts have recently been let in the period during which this report has been in production, as was necessary to meet the programme requirements. The related works have progressed in line with the terms of the contract tendered and will be formalised

through the delegation in 1.3.2 following approval of this FBC at Appendix A;

2.6.3 The award of the remaining three contracts for further work packages in Appendix A, Section D2, will be progressed in line with the delegations in paragraph 1.3.2. via the delegated procurement route.

2.7 Notes that Capita Birmingham Ltd were appointed by the Council to deliver the Automatic Number Plate Recognition (ANPR) and Back Office IT Solution as per the standing agreement at that time, but that as a consequence of the partial termination of their relationship with the Council, the contract with Siemens has been novated to the Council and is therefore now managed directly by Council officers;

2.8 Notes that significant unilateral changes made by JAQU to its deliverables now require further work to be undertaken by the Council in order to establish a complete end-to-end back office IT solution to enable effective CAZ enforcement, and it is proposed that the Council will modify its existing contract with its supplier, Siemens to accommodate the additional scope . An up to date description of the end-to-end enforcement solution is detailed in Appendix A;

2.9 Notes that in order to mitigate the risk of challenge to the existing Siemens contract modification, the Council published a voluntary ex ante transparency (VEAT) notice on 17th June 2020 to which no formal challenges were received from the market.

2.10 Authorises the Interim City Solicitor to execute and complete all necessary legal documents, including agreements with JAQU, to give effect to the above recommendations.

3. Background

3.1 The original Birmingham CAZ target go-live date of January 2020 was initially delayed until summer 2020 in July 2019. This was a result of JAQU's failure to provide the Vehicle Compliance Checker within the required timeline which is a fundamental tool for CAZ enforcement. Further delay has been incurred firstly through changes that JAQU have brought about to the owners of key components of the back-office system, placing a greater burden on the Council, but also through the more recent impacts of COVID-19. Following dialogue between the Council and Government, on the 6th April 2020 the Council received written confirmation from Government that they accepted the delay to the CAZ, and expected it would not go-live until January 2021 at the earliest. This report is written in the context of these delays and seeks the key approvals required to progress the CAZ Infrastructure – Civil Engineering and Cameras Solution to ensure delivery of an enforceable CAZ.

Civil Engineering Works

3.2 The implementation of the CAZ requires several infrastructure projects to be undertaken to enable the achievement of successful delivery and ongoing enforcement. These projects are detailed in Appendix A and include the implementation of a signage package to indicate the entrances and exits to the CAZ, advance signage warning of the CAZ, installation of a series of Automatic

Number Plate Recognition (ANPR) cameras to record details of those vehicles using the CAZ, and the development of a back-office IT function. The IT systems and ANPR camera network together form a complete 'camera solution' required for an enforceable CAZ.

- 3.3 On 28th March 2019 the Council accepted funding of £14.215m from the Joint Air Quality Unit (JAQU) to implement the CAZ by 1st January 2020 and £9.218m of this funding has been allocated for the infrastructure and IT development works covered in this report and detailed in Appendix A.
- 3.4 Cabinet on the 25th June 2019 approved the draft CAZ Charging Order, which detailed a number of temporary and permanent exemptions to the CAZ charge, which will be collated through local and national exemption lists. The systems for collating local exemption lists are within the scope of this report.
- 3.5 In June 2019 a contractor was appointed through the Council's Highways and Infrastructure Works Framework Agreement to undertake Early Contractor Involvement (ECI) activities including investigatory works and detail design to ensure the positions of the cameras could be confirmed to allow the camera solution to be developed. The ECI work was stage 1 of a 2-stage contract (design and build). In the event that an Agreed Target Price could not be agreed for Stage 2, the terms of the appointment included a break clause between Stage 1 and Stage 2, allowing for Stage 2 work to be tendered via the Council's Highways and Infrastructure Works Framework Agreement. In order to achieve the original deadline date of summer 2019, work was required to commence shortly after the receipt of funding for several of the work packages. This action was necessary to maintain the target go live date at that time, and whilst spend related to the recent civil engineering works has not followed approval of this FBC, it has been done in accordance with procurement protocols to ensure value for money has been achieved.
- 3.6 Negotiations with the contractor undertaking ECI works did not secure an Agreed Target Price for Stage 2. This resulted in the work being re-tendered via the Council's Highways and Infrastructure Works Framework Agreement, in-line with the approved procurement strategy. In the context of these complex negotiations, delivery pressures to achieve air quality compliance within the shortest possible time, and an incorrect reliance on approvals contained within the original December 2018 FBC, a specific FBC approving the designs (including locations for the signage, poles and cameras) and associated expenditure for these works was overlooked. These procurements were, however, undertaken in line with the correct procurement protocols and fair competition and value for money were achieved. A weekly reports improvement panel has been established since April 2020 within the Transport and Connectivity division of service to avoid future issues of this nature, while the CAZ Project Board has been overhauled in respect of attendance, with greater focus provided to governance matters.
- 3.7 In order to ensure best value for the works whilst utilising the existing Council's Highways and Infrastructure Framework Agreement, the civil engineering work has been divided into smaller work packages. Five of these work packages are

now complete, three have been tendered but not formally awarded, and a further three remain to be let. Those work packages without a formal contract award have proceeded under the terms of the contract that was tendered and will be formalised through the delegation in 1.3.2 following approval of the FBC in Appendix A.

ANPR Cameras and IT Back Office Solution

- 3.8 The Council's relationship with Capita Birmingham Ltd has been re-evaluated and as a consequence a number of contracts have been novated to amend parties to some contracts procured by Capita. This now means that the Council has a more direct role in the management of those contracts, and in this case specifically the contract through which the ANPR camera and IT solution will be delivered. The ANPR camera and IT solution was not procured in accordance with the Public Contract Regulations 2015 (PCR2015), however, the Council has a responsibility to ensure that any future procurements are managed in accordance with the procurement regulations.
- 3.9 Additional work for the back-office system is required to be undertaken by the Council following a change in the deliverables expected from JAQU. This work is required to ensure a complete end-to-end CAZ solution is in place and is included in the scope of works detailed in Appendix A. Given that the ANPR cameras and IT solution was not procured in accordance with PCR2015, a VEAT notice was issued to the market to notify it of the proposed modification of the existing ANPR Camera and IT solution contract, prior to the modification taking place. This necessary action was taken to mitigate against the risk of a procurement challenge.
- 3.10 Following publication of the VEAT Notice on 17th June 2020 no procurement challenges were raised by the market.

4. Options considered and recommended options

- 4.1 The options appraisal for the CAZ was included in the FBC approved by Cabinet on 11th December 2018. The FBC concluded that a Class D CAZ was the preferred option. This included the requirements for the signage and ANPR camera solution to enforce the zone.
- 4.2 This FBC identifies the final designs and locations of the signage, poles and cameras as detailed in Appendix C that are required to implement the CAZ in line with the Cabinet decision of the 11th December 2018.
- 4.3 No further options were considered.

5. Consultation

- 5.1 No consultation is required on the contents of this report.

6. Risk Management

- 6.1 COVID 19 restrictions have had an impact on the programme through contractors being unable to both engage due to furloughing, and progress some works under the current restrictions relating to social distancing. This is likely to continue for the foreseeable future, though the CAZ team are in regular dialogue with contractors

to identify where works can be undertaken safely. Whilst there is potential for cost increases it is deemed that these can be contained within the existing funding envelope.

6.2 A significant risk to the programme has been through uncertainty brought about by the changing requirements of JAQU, specifically on which party would provide which function within the end-to-end back office solution. Whilst the Council has actively engaged in workshops to support JAQU there has been difficulty in determining exactly what is required of the Council's contractors. The Council continues to engage with JAQU proactively and positively to remove uncertainty wherever possible.

6.3 In reference to paragraphs 2.9 and 3.10 and the publication of the VEAT Notice, the Council undertook an options appraisal of the potential procurement options available to the CAZ and concluded that a modification to the existing contract the Council has with Siemens had the least risk of all options; however, there remains a level of risk with this option.

Whilst the market has not raised any formal procurement challenges with the Council during the 10 days standstill period following the publication of the VEAT Notice on 17th June 2020, there is a small risk that a supplier could still challenge the grounds set out in the Notice. Appendix F explains further the timescales for raising a procurement challenge and potential award for damages.

6.4 Another key risk to delivery has been the timely engagement of contractors to in turn ensure the necessary works are completed on time. This has been mitigated through immediate engagement of contractors and the use of a smaller work packages ahead of this FBC approval. The measures introduced to avoid similar governance issues in the future have been provided above.

6.5 Ongoing risks are being monitored as part of the wider CAZ programme through the existing bi-weekly progress meetings, Technical Board and Brum Breathes Programme Board. Mitigating actions are agreed and enacted through these meetings, with key issues escalated to the Brum Breathes Executive Board.

6.6 In addition, specific construction risks are dealt with through regular construction board meetings and where necessary are escalated to the Brum Breathes Programme Board.

7. Compliance Issues

7.1. How are the recommended decisions consistent with the City Council's priorities, plans and strategies?

7.1.1 Birmingham is one of the first cities to implement a CAZ, and the very first to operate a Charging CAZ type D. It is at the forefront of change in this area and will set the bar for future cities who wish to tackle air quality for their citizens. The implementation of the ANPR cameras and signs will enable the CAZ to be enforced and allow the wider CAZ outcomes and

benefits to be realised which are consistent with the City Council's Plan 2018-2022 (2019 update):

Birmingham is an entrepreneurial city to learn, work and invest in.

- The Clean Air Zone and associated grant funds encourage investment in compliant methods of transportation.

Birmingham is a fulfilling city to age well in.

- Improving air quality will have a direct impact on the health and wellbeing of citizens and visitors to the city centre. People are encouraged and financially incentivised to use public transport or upgrade their vehicles rather than commuting in non-compliant vehicles.

Birmingham is a great city to live in.

- The CAZ will directly improve air quality in the city centre. This is a further step on the way to a clean and sustainable city.

Birmingham is a city that takes a leading role in tackling climate change

- The scheme supports the Additional Climate Change Commitments agreed by Cabinet on 30th July 2019 following the motion on Climate Emergency being passed by full City Council on the 11th June 2019, including the aspiration for the City Council to be net zero-carbon by 2030.

7.1.2 Where appropriate organisations are certified signatories to the Birmingham Business Charter for Social Responsibility (BBC4SR) and have provided an action plan of activities to be carried out during the contract period. The action plan will form part of the conditions of contract and will be managed and monitored as part of the contract management plan taking into consideration the spend in aggregate to realise Social Value where appropriate. It should be noted that the action plan will be reviewed annually during the life of the contract to ensure targets remain current and viable.

7.2 Legal Implications

7.2.1 The Council is required to take measures to improve air quality pursuant to a mandate from Government under the Air Quality Standard Regulations 2010.

7.2.2 Government issued a Ministerial Direction in December 2017 which required the Council to submit a Business Case to the Government by 15th September 2018 for measures to deliver compliance with legal Nitrogen Dioxide (NO₂) limits in the shortest possible time. The full extent of the legal implications of non-compliance of air-quality standards for the City Council were detailed in the Cabinet Report (Tackling Air Quality in Birmingham – Clean Air Zone) approved on the 26th June 2018.

7.2.3 The CAZ will be introduced pursuant to the Transport Act 2000. A Charging Order has been produced, which will be finalised, signed and in force prior

to go-live. It is this order that will provide the legal basis for charging non-compliant vehicle users once the CAZ is active.

- 7.2.4 Under the Local Government Act 1972 Section 111 the Council has power to do anything that is calculated to facilitate the discharge of any of its functions.

7.3 Financial Implications

- 7.3.1 The figures referred to below remain within the funding envelope permitted by the grant award from JAQU of £14.215m.

Capital Costs

- 7.3.2 The total capital cost for the Main CAZ Infrastructure – Civil Engineering and Cameras Solution work covered by this report is estimated at £9.218m. This includes the installation of the required regulatory, advanced warning, and advisory signs (as required by JAQU) and the ANPR cameras including connection to the power supply as per Table 1 below. Works also include the requisite back office functionality to deal with charge settlement, case management and collation of local exemption lists as detailed in Appendix A. This is being funded from the CAZ Implementation Grant and funding has already been received.

Table 1

Scheme Element	Project Budget (£m)
Detailed Design	0.799
Signage	2.133
Camera Solutions	3.087
IT Back Office Solution	1.555
Project Management	1.644
Total Expected Costs	9.218

- 7.3.3 A detailed breakdown of specific existing contract values is included in Appendix F which provides more granular detail on the current cost allocations in Table 1.
- 7.3.4 In the event that the allocated budget of £9.218m is not sufficient, any shortfall will be met from the programme risk allocation agreed as part of the CAZ FBC approved in December 2018. In addition, in line with the terms and conditions of the grant funding, should these projects be completed within the allocated budget, the remaining funds will be carried forward alongside the programme risk allocation to fund any increased costs as required, helping to ensure delivery of the wider CAZ programme.
- 7.3.5 Additional works to the back office IT solution must be undertaken by the Council as a result of a change in JAQU deliverables. These are detailed in

Appendix A, and the costs and financial risks associated with this option detailed in Exempt Appendix F. The estimated cost associated with this work is included in the total capital costs in Table 1 above.

Revenue Implications

- 7.3.6 The estimated combined annual revenue cost of operating the CAZ infrastructure and IT solution work covered by this report is £0.657m, which will be funded by the CAZ operational income. This is a decrease of £0.373m from the £1.030m estimated for operation and maintenance in the FBC approved in December 2018 due to the receipt of more accurate costs from the Council's suppliers. These costs are outlined below, and further detailed in Appendix A.
- 7.3.7 As part of the Council's obligations under the Highway Maintenance and Management Private Finance Initiative (HMMPFI) contract, Birmingham Highways Limited have been formally notified of the proposed changes to the highway inventory resulting from the introduction of the CAZ signs. This change amounts to £0.007m per year in additional ongoing maintenance costs that will be funded from CAZ operating income.
- 7.3.8 The operating costs, including those required to maintain the CAZ infrastructure, have been previously detailed in the overall CAZ programme FBC that was agreed by Cabinet on 11th December 2018. The estimated cost for camera and systems maintenance is £1.350m over 3 years (£0.450m per year), which will be funded from CAZ operating income.
- 7.3.9 The IT back office solution will be supported through a service level agreement with the Council's in-house IT team at an estimated ongoing cost of £0.200m per year, which will be funded from CAZ operating income.

7.4 Procurement Implications

7.4.1 Please refer to Appendix A, Section D2: Procurement Implications and Contract Strategy.

7.5 Human Resource Implications

7.5.1 The project will be resourced by the Council's Transport Projects staff, ICTDS, and contractors from existing framework agreements.

7.6 Public Sector Equality Duty

7.6.1 An Integrated Impact Assessment (IIA) was undertaken as part of the CAZ feasibility study. The IIA assessed the economic and health impacts of the introduction of a Charging CAZ. Consequently, it identified certain economically vulnerable groups which will be supported through exemptions to the CAZ charge and a series of financial incentive packages.

7.6.2 As with the IIA, an Equality Impact Assessment (EQUA210) was undertaken which also formed the basis for the proposed exemptions to charging. It is relevant to this report as the collations of a local whitelist through which the exemptions can be administered is within the remit of the ANPR camera solution.

7.6.3 The EIA has been reviewed and updated in December 2019 to ensure it remains current and aligned to CAZ initiatives.

8. Appendices

8.1 List of Appendices accompanying this report:

Appendix A – Birmingham Clean Air Zone Civils Works and Camera Solution Full Business Case

Appendix B – Equality Impact Assessment

Appendix C – Location Plans showing Cameras and Sign location.

Appendix D - Risk Register

Appendix E – Indicative Programme

Exempt Appendix F – Exempt Information

9. Background Documents

- 9.1 Tackling Air Quality in Birmingham - Clean Air Zone – Submission of Business Case to Government, Cabinet Report 10th Sept 2018. CMIS Reference 005425/2018.
- 9.2 Birmingham Clean Air Zone Submission of Full Business Case and Request to Proceed with Implementation, Cabinet Report 11th December 2018. CMIS Reference 005939/2018.
- 9.3 Clean Air Zone Grant Acceptance, Cabinet Member Report dated 28th March 2019. CMIS Reference 006463/2019.
- 9.4 Clean Air Zone: Charging Order and Indicative Allocation of Net Proceeds, Cabinet Report 25th June 2019. CMIS Reference 006457/2019.