

Report to: Environment Committee, 14th March 2023

Report of: Corporate Director – Operations, Homes and Communities

Subject: STRATEGIC REVIEW OF ASTWOOD CEMETERY AND CREMATORIUM

1. Recommendation

That the Committee

- 1.1 Note the contents of this report, and in particular the work undertaken to date to review the future operating opportunities at Astwood Cemetery and Crematorium.**
- 1.2 Approve funding of up to £100,000 to be taken from the Bereavement Reserve, to undertake technical feasibility work in respect of the Astwood Cemetery and Crematorium.**
- 1.3 Note that a further report will be presented to this Committee on completion of this work, including a 'future operating model' options appraisal for consideration.**

2. Background

- 2.1 The Astwood site in Worcester was opened for burials in 1850, with the first cremation being held in 1960. Astwood contains around 55,000 burial plots as well as cremated remains sockets. The gardens, grounds, and facilities for the bereaved to remember their loved ones are an integral part of the site and in 2022 Astwood received its first Green Flag Award. A map showing the extent of the Astwood site is included at **Appendix 1**.
- 2.2 The service undertakes circa 1700 cremations and 100 burials each year, including at St Johns Cemetery. It also leases around 80 new memorial options each year with a further 40-50 renewals.
- 2.3 At Astwood, cremation is provided through 3 gas cremators (Major HDEU90) which were manufactured and installed in 1997 by Autoveyer Furnace System (Leicester), who are no longer in operation.
- 2.4 The cremators are situated at the rear of the Astwood Crematorium building which also includes a dedicated single chapel that can seat 105 people. Office, mess space and an external storage compound is also provided at the building from which the Bereavement Services Team are based.

- 2.5 63 formal car parking spaces are also provided at Astwood (2 of these being disabled bays only) although there are occasions (larger funeral services) when vehicles will also park on the network of access roads running through the site.
- 2.6 In respect of burial space, it is estimated (based on current demand) that Astwood Cemetery has between 10 – 15 years remaining, with St Johns Cemetery around 3 years remaining. A report on the future of St Johns Cemetery will be presented to this Committee during 2023/24.
- 2.7 The table at **Appendix 2** illustrates the number of burials (Astwood and St Johns) and cremations undertaken since 2011/12. Overall, the number of burials and cremations have decreased over the last 10 years, and this is predominantly due to 2 factors.
- 2.8 The first factor is that the service is generally receiving less requests for burials year on year. There are 3 anomalies through the period presented, which are linked to a high death rate in 2015, increase in demand as a result of the temporary closure of Cheltenham Crematorium in 2017, and a high death rate linked to Wave 1 of the COVID-19 Pandemic in 2020.
- 2.9 Secondly, in respect of cremations, up until December 2018 Astwood Crematorium was the only site operating within the Districts of Worcester City, Wychavon and Malvern and therefore served as the primary crematorium for families and funeral directors from across South Worcestershire.
- 2.10 The opening of The Vale Crematorium at Fladbury in 2018 has had a noticeable impact on demand for cremations and we are aware that funeral directors operating in and around that area are directing families to this new site where it is geographically more convenient for families and logistically sensible for funeral directors. It should be noted however, that demand at Astwood for cremations was temporarily inflated as a result of the temporary closure of Cheltenham Crematorium in 2017, so the impact of Fladbury is not easy to extrapolate from the simple comparison of annual cremation numbers.
- 2.11 Like burials, there was also a marked increase in demand for cremations linked to Wave 1 of the COVID-19 Pandemic in 2020. As indicated above, numbers have since reduced but cremation clearly remains the most popular form of funeral with on average, over 95% of total funerals managed in this way each year since 2011/12.
- 2.12 The declining number of cremations has resulted in reduced income to the Council and annual budgets have been re-set to reflect this change. There is, therefore, reduced capacity for investment at the same time as a growing need to improve the facility and the offer provided at the crematorium if the Council is to continue to maintain a service to the standards which residents will expect.
- 2.13 In addition to the challenges outline above, there are also technical and legislative pressures which require a development of the asset and the facilities. These are outlined in the next section.

Technical and Legislative Pressures

- 2.14 The Local Government Act 1972 designates District Councils as 'burial authorities' and further sets out that burial authorities *may* provide and maintain cemeteries whether in or outside their area.
- 2.15 The bulk of statutory obligations placed on a burial authority relate to the management, repair and improvement to existing sites as well as the recording and safe storage of a number of records relating to burials, deeds of existing rights, and exhumations.
- 2.16 There is therefore no statutory duty placed on a burial authority to provide new or replacement burial grounds or crematoria. Provision of cemetery and/or crematoria is therefore a matter for local and commercial decision.
- 2.17 There are also several significant regulatory implications of managing a crematorium site; an outline summary is provided in the sections below.

Astwood Cremators

- 2.18 Astwood Crematorium is serviced by three gas fired cremators (Major HDEU90) manufactured and installed in 1997 by Autoveyer Furnace Systems (Leicester) who are a company no longer operating. Research undertaken indicates that Astwood may be one of only a very small number of sites now utilising these cremators within the UK.
- 2.19 One of the operating challenges that presents itself is that although the Astwood Cremators have been well serviced and maintained, are functioning well and meet all relevant criteria for an 'existing' site, there is now only a single company within the UK offering support for these machines, exacerbated by a potential single point of failure through our machines being looked after by a very experienced engineer approaching retirement. This individual is also able to write the bespoke operating software for the machines which have recently been upgraded.
- 2.20 The most significant operating challenge, however, is the fact that it is generally accepted within the industry that cremators have a maximum 20–25-year life if serviced and maintained satisfactorily. The Astwood cremators have therefore exceeded expectations in terms of their expected performance life and the risks of mechanical failure are significantly increasing. It is currently estimated that they will need to be replaced before 2027.
- 2.21 Operating past 2027 with the existing cremators (if permitted by regulation) will significantly increase the risk around costs and downtime. There is also a strong suggestion within the trade that the current review of the DEFRA statutory guidance note (5/2(12)) for crematoria, will result in 'all' cremators needing to be fitted with mercury abatement at some point during 2027.

Mercury Abatement

- 2.22 In 2005, the Department of Environment, Food and Rural Affairs (DEFRA) issued a requirement for 50% of all cremations in the UK to be treated to ensure the removal of a range of identified toxic elements typically emitted from the main crematorium flue (including mercury, various dioxins and hydrogen chloride) by 31 December 2012.

- 2.23 These toxins come from the cremation of both the cadaver (in the case of mercury particularly but not exclusively, from the incineration of amalgam fillings) and as a result of chemicals present in the materials used to manufacture the coffin.
- 2.24 In 2006, the Cremation Abatement of Mercury Emissions Organisation (CAMEO) was set up by the Federation of Burial and Cremation Authorities with a specific remit to share the best available independent knowledge on all aspects of abatement with the various cremation authorities. This enables the collection of statistical data on the number of cremation authorities who are abating in the UK and provides this information to DEFRA to demonstrate that the minimum 50% level of abatement is being met.
- 2.25 In addition, CAMEO was tasked with the administration of the UK-wide burden sharing scheme. In simple terms, this meant that from 1 January 2013, should an authority wish to join, a levy is charged on all unabated cremations. This is then distributed to all those facilities that have invested in compliant abatement equipment on a per cremation basis.
- 2.26 The Council at this time opted to set up a burden sharing scheme with Cardiff Council which remains in operation. Typically based on cremation numbers the Council pays circa £30,000 per annum to Cardiff Council.
- 2.27 In 2018 the Council commissioned a project to investigate the feasibility of installing mercury abatement at Astwood. It was concluded at that time, that there was not enough room within the existing building or wider development footprint to install mercury abatement and the costs were also deemed prohibitive.
- 2.28 The current DEFRA statutory guidance note (5/2(12)) for crematoria states that all new crematoria (not existing processes on 1 October 2006) are required to fit abatement plant to remove mercury and dioxins, and the stack height should be calculated at a suitable height for the release of abated gases which require sufficient dispersion and dilution in the atmosphere to ensure that they ground at harmless concentrations.
- 2.29 Further clarity is required from Worcestershire Regulatory Services about whether a replacement crematorium at Astwood fitted with new cremators would be regarded as 'new crematoria', as if this was the case then it would require any redevelopment to incorporate this additional abatement technology and to end the CAMEO agreement with Cardiff Council.
- 2.30 The DEFRA statutory guidance note (5/2/(12)) is currently under review and there is a strong suggestion from within the trade that all replacement and new cremators will, from a set date (between now and 2027), be required to be fitted with mercury abatement.
- 2.31 The emerging guidance is likely to include an exemption from this requirement (for a defined period) where retrofitting of abatement is not technically possible due to limitations of space combined with the inability to expand, e.g., because development is restricted due to it being a listed building or building an extension would require exhumation. Such an exemption is likely to be underpinned by a requirement to undertake additional local air quality monitoring.

- 2.32 The challenge with installing mercury abatement at Astwood, is the development footprint available has previously been deemed insufficient to be able to design in the increased ductwork and cooling equipment required, whilst also maintaining space for the existing core operations.
- 2.33 It is clear therefore that the council needs to fully understand the re-development and operating opportunities at Astwood having regard to existing and emerging statutory guidance around environmental performance.

3. Pre-Application Planning Advice

- 3.1 Given the challenges already identified with future use of Astwood for cremation, advice has been sought from the Council's Planning Service on the sorts of implications that the Council would need to consider if submitting a planning application for an alternative site. Initial planning advice has confirmed that any such application would need to meet a sequential series of tests to justify why a move away from a site that already benefits from planning permission for crematoria (Astwood) is required.
- 3.2 Therefore, several key questions, some of which have been set out below, require further detailed investigation in order to present an options appraisal report to this Committee on future operating models:
- What are the minimum number of cremators required to meet current and future demand at Astwood?
 - Can the existing Worcester Crematorium building accommodate the required number of replacement cremators with enhanced abatement technology without negatively impacting the existing use of the building?
 - Would Worcester Crematorium be able to utilise the proposed exemption for retrofitting abatement?
 - What is the total redevelopment footprint across Astwood Cemetery and Crematorium, and would that be sufficient for redevelopment of a new operation utilising multiple areas of the site?
 - If redevelopment was required at Astwood, would local air quality be impacted?
 - What would the financial impact be of closing Worcester Crematorium for cremator replacement or crematorium redevelopment versus continuing to operate whilst developing a new facility at another location?
 - Would moving to a new location provide a better service, meet increasing demand, or significantly improve the cost effectiveness of delivering the service (best value)?
 - If moving to a new location, what level of resource would be required to ensure Astwood continues to provide a high-quality burial, memorials and grounds maintenance service?

4. Preferred Option

- 4.1 To fully understand whether the continued use of Astwood for cremations is feasible then a programme of work is required to be undertaken and led by a specialist project resource working alongside Council staff and various appointed specialist contractors where required.

- 4.2 This resource will need to be procured, as the Council has done for other complex and technically demanding programmes such as the Future High Streets Fund delivery programme, and therefore this report seeks approval for funding to recruit that support. The skill set of this resource needs to be able to include property and development appraisal work, planning and regulatory negotiations, financing models and capital and revenue detailed cost planning, as well as operational implications.
- 4.3 As noted in the report, there is a significant time pressure. Procuring a dedicated resource will enable the project to proceed on a timelier basis, conscious of some of the operating challenges currently faced through age of equipment and the pressure on existing resources to focus on developing the existing service to maintain demand.

5. Alternative Options Considered

- 5.1 For the reasons set out in this report, the alternative options of doing nothing or alternatively of progressing with identification and feasibility of an alternative location are not recommended at this stage.
- 5.2 Within the Council's workforce there is neither the capacity nor the specialist capability to undertake this further work and therefore the option of completing a full assessment of Astwood through existing 'in-house' resource has been discounted.

6. Implications

6.1 Financial and Budgetary Implications

The report seeks approval for £100,000 of funding to cover the potential costs of specialist advice and project management.

A Crematorium Reserve has been created as a sinking fund to ensure that there will be a source of funding to support the costs of cremator development and/or replacement. The Crematorium Reserve has an anticipated balance of £426,482 as of 31 March 2023, of which £126,482 is agreed for release as part of the budget for 2023/24, leaving a balance of £300,000.

Replacement of cremators will be of capital sum and can therefore be funded through the capital programme and the reserve retained for revenue purposes. It may also be appropriate to capitalise any revenue costs that result in the value of the asset increasing.

6.2 Legal and Governance Implications

The report has set out (para 2.) the designation of District Council's as burial authorities and clarified that this designation comes with no statutory obligation to provide new or replacement burial grounds or cremation facilities. More detailed legal implications will be reported as the project progresses.

The project will be managed in accordance with the Council's project management procedures and Member oversight will be provided through regular reports to the Major Programmes Member Reference Group.

Because of the significant financial value of the project and its asset management implications, the relevant Committee with responsibility for decision-making on the project will be the Policy and Resources Committee.

6.3 Risk Implications

A detailed risk register will be produced for the project as it progresses, and this will be reported to Members through the governance processes identified above. The costs of developing and delivering a new crematorium will be significant, and costs will obviously be higher if a new site need to be identified and acquired. It is highly likely therefore that remaining at Astwood (replacement or redevelopment)_will result in a lower capital cost to the Council resulting in a lower annual revenue impact of repayment.

The additional work required to fully understand the redevelopment opportunities at Astwood will therefore enable the Council to fully understand its future options and enable a detailed business case to be undertaken on those options, taking into account the risk referred to above relating to the Council's finances.

Astwood Crematorium, alongside other local crematoria, played a significant role in the COVID-19 Pandemic when death rate increased sharply during 2020 and the number of cremations and services offered needed to be increased. The risk around civil emergency therefore, although not being a decisive factor around the future operating model, will require the Council to keep its emergency planning partners updated if crematoria capacity through a Worcester City facility is reduced or suspended through a replacement or redevelopment programme.

6.3 Corporate/Policy Implications

The Worcester City Plan 2022 – 2027 has as one of its themes '*Enhancing and sustaining our beautiful city for future generations*'. This theme includes a number of environmental, sustainability, air quality, and green space aspirations that will relate to this project moving forward.

6.4 Equality Implications

There are no equality implications identified at this stage.

Future site and service provision provided by the Council will continue to consider accessibility in to and around the site and furthermore remain flexible in order to meet the needs of those communities with specific cultural and religious requirements. The design and siting of any facilities will be subject to detailed equality impact assessment work.

Communication and engagement will be undertaken with relevant stakeholders as part of this project as it progresses through its various stages.

6.5 Human Resources Implications

There are no human resource implications associated with this report.

6.6 Health and Safety Implications

There are no health and safety implications associated with this report.

6.7 Social, Environmental and Economic Implications

These are set out in the report.

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Background Papers: N/A

Appendix 1 – Site Map of Astwood Cemetery and Crematorium



Appendix 2 – Table of Burial and Cremation Numbers 2011/12 - 2021/22

Year	No of Burials	% Increase / Decrease on Previous Year	No of Cremations	% Increase / Decrease on Previous Year
2011/2012	111	- 15%	1966	- 4%
2012/2013	112	+ 1%	1914	- 3%
2013/2014	96	- 14%	2000	+ 4%
2014/2015	94	- 2%	2082	+ 4%
2015/2016	124	+ 32%	1928	- 7%
2016/2017	102	- 18%	2021	+ 5%
2017/2018	117	+ 15%	2317	+ 15%
2018/2019	85	- 27%	1737	- 25%
2019/2020	99	+ 16%	1713	- 1%
2020/2021	127	+ 28%	2136	+ 25%
2021/2022	91	- 28%	1633	- 24%