# Manchester City Council Report for Information

**Report to:** Environment and Climate Change Scrutiny Committee – 9 March

2023

**Subject:** Bereavement Services – Approach to Environmental

Sustainability

**Report of:** Strategic Director (Neighbourhoods)

## **Summary**

This report provides an update on progress on the management of the delivery of cemetery and crematorium services, describing how the activities contribute to carbon reduction, biodiversity, and sustainability.

## Recommendations

The Environment and Climate Change Scrutiny Committee is recommended to consider and make comments on the content of the report.

Wards Affected: All

**Environmental Impact Assessment** - the impact of the issues addressed in this report on achieving the zero-carbon target for the city

The Manchester Climate Change Framework 2020-25 is the city's high-level strategy for tackling climate change. It sets out how Manchester will 'play its full part in limiting the impacts of climate change', a commitment in the Our Manchester Strategy 2016-25. The Framework' key aims are to be: 'cleaner, litter- free city, which recycles more' and '...play its full part in limiting the impacts of climate change and create a healthy, green, socially just city where everyone can thrive.'

**Financial Consequences –** No consequences arising from this report.

**Financial Consequences –** No consequences arising from this report.

#### **Contact Officers:**

Name: Barrie Jones

Position: Business Units Lead – Bereavement Services, Retail & Wholesale

Markets, Pest Control

Telephone: 07887 541143

E-mail: barrie.jones@manchester.gov.uk

Name: Diane Murphy

Position: Bereavement Services Manager

Telephone: 07994 977741

E-mail: diane.murphy@manchester.gov.uk

# **Background documents (available for public inspection):**

The following documents disclose important facts on which the report is based and have been relied upon in preparing the report. Copies of the background documents are available up to 4 years after the date of the meeting. If you would like a copy please contact one of the contact officers above.

## **Green Flag Plans:**

Philips Park Cem 2020-25 plan Dec2021.pdf
Blackley Cem 2021-26 plan Dec2021.pdf
Gorton 2019-2024 plan v1.0 Dec2022 .pdf
Southern plan 2021-26 Dec2021.pdf

## **Biodiversity Reports:**

Biodiversity Update Blackley Update 2017.pdf
Biodiversity update Gorton Update 2017.pdf
Biodiversity Update . Philips Park 2017.pdf
Biodiversity Southern Cemetery Update 2017.pdf

## 1.0 Introduction

1.1 The purpose of this report is to provide an update on the management of the cemetery and crematorium services describing how the services activities contribute to carbon reduction, biodiversity, and sustainability.

## 2.0 Background

- 2.1 The Bereavement Services portfolio includes five cemeteries and one crematorium including Blackley, Gorton, Philips Park, Southern and Manchester General cemeteries along with Blackley Crematorium. It should be noted that Manchester Crematorium, located adjacent to Southern cemetery, is a privately owned crematorium and not within the portfolio.
- 2.2 Each year approximately 2,800 funeral services take place comprising of 1,600 burials and 1,200 cremations. In addition to this a number of smaller services take place in relation to the strewing of cremated remains and the installation of memorial tributes and features. It is estimated that cemeteries attract in the region of 500,000 visitors each year.
- 2.3 The overall cemetery infrastructure consists of 105 hectares which is predominantly green space within the City's neighbourhoods. There are in excess of 160,000 graves and over 480,000 burials have taken place since the first cemetery opened in 1837. There is 52km of roads & pathways, in addition to 18 buildings of which 11 are Grade II listed.
- 2.4 The cemetery infrastructure is a valuable green asset, containing in excess of 4,700 trees, woodland area and a range of gardens and features. Over recent years the service promotes these open spaces as local green assets for communities, whilst still retaining respect and dignity for funeral corteges and visitors to graves and memorials.
- 2.5 The crematorium in Blackley, which has three chapels and is a Grade II listed building opened in 1959. Since opening over 78,000 cremations have taken place, with a broad range of memorial features and gardens within the cemetery grounds. Although the 20-year-old cremators complied with current emissions legislation and have operated with Mercury Abatement Filtration Plant since 2009, they had exceeded their anticipate lifespan, were vulnerable to potential faults and have recently been replaced with new ones featuring the latest technology to minimise emissions and improve efficiency and reliability.
- 2.6 The cemetery and crematorium operation sites are managed by the Infrastructure team and the Customer Care team.
- 2.7 The Infrastructure team consists of 1 Operational Manager, 4 Assistant Managers and 28 generic operational staff, split across the North and South of the city. The infrastructure team are responsible for the burials and cremations, grave digging, grounds maintenance, horticulture, general maintenance, family engagement, partnership working with funeral directors,

- as well as community engagement. To further support the service and to ensure continuity a new Grade 7 post has been created as part of the succession planning programme.
- 2.8 Bespoke training is available to officers. Three officers have completed or are part way through the Institute of Cemetery and Crematorium Management Diploma and another 2 officers are currently working towards their L3 work based diploma in horticulture via an apprenticeship scheme.
- 2.9 The Customer Care team consists of 1 Operational Manager, 1 Assistant Manager, 7.5 Customer Care Officers. The team work across Blackley and Southern cemetery offices. The team deal directly with bereaved families, funeral directors, grave owners, and extended families of the deceased as well as visitors to the cemeteries.
- 2.10 Officers are trained to deal with burial and cremation booking and all associated documentation and legal processes, including legal grave ownership transfers, grave and memorial sales, complaints and maintaining legal and financial records. Like the Infrastructure team, 2 of the Customer Care team are studying for the Institute of Cemetery and Crematorium Management Diploma.
- 2.11 Bereavement Services is also supported by the Cemeteries Friends Groups, who are instrumental in the work required to gain and attain Green Flag and Britain in Bloom status, as well as delivering projects that improve the various sites.
- 2.12 Bereavement Services also engage with Community Payback who under supervision support the service to deliver projects such as painting, litter picking and some grounds maintenance.

## 3.0 Strategy and approach

3.1 Bereavement Services are committed to supporting the climate change agenda and protecting/enhancing biodiversity within its service portfolio. This is not only driven by the internal service plan but also by attaining national, external accreditations such as Green Flag Awards, Britain/Northwest in Bloom, Cemetery of the Year, Association of Public Service Excellence (APSE) and Institute of Cemetery & Crematoria Management (ICCM). Current attainments include:

## Blackley:

- Green Flag
- Northwest in Bloom Level 5 Gold Outstanding
- ICCM Charter for the Bereaved Gold Standard Award

# Gorton:

Green Flag

• Northwest in Bloom – Level 4 Silver Thriving (this is a first-year application)

## **Philips Park:**

- Green Flag
- Northwest in Bloom Level 5 Gold Outstanding (this is a first- year application)
- ICCM Cemetery of the Year 2012 & 2022

#### Southern:

- Green Flag
- Northwest in Bloom Level 4 Silver Thriving (this is a first-year application)
- 3.2 Each cemetery has a Friends Group who play a role in the management and maintenance of the cemeteries, bringing with them priorities led by local communities.
- 3.3 Blackley, Southern, Gorton and Philips Park cemeteries have all retained Green Flag Awards for several years. Although Manchester General is a 'closed' cemetery, work is underway with the Philips Park Friends Group to apply for a Green Flag Award in December 2023.
- 3.4 There are key criteria to gaining and retaining these awards with annual audits and inspections done by independent assessors. Criteria includes environmental management, biodiversity, and sustainability. More information can be found in the links to the Green Flag Plans for each cemetery.
- 3.5 The cremators at Blackley, which had been in operation for 25 years, have recently been replaced. An important element of this project was to maximise the latest technology available on the market to improve efficiency and minimise emissions from the cremation process, whilst at the same time future proofing the service by leaving options available to complement the cremators with potential greener options that may be available for installation in the future.

## 4.0 Cremator Replacement Project

- 4.1 In June 2022 Bereavement Services, supported by Capital Programmes and Procurement successfully completed the replacement of the three, end-of-life gas-fired cremators with two modern gas-fired cremators and abatement systems.
- 4.2 The cremators and associated equipment were supplied and installed by Facultatieve Technologies UK (FT).
- 4.3 Emissions were an important consideration, from an ecological perspective and in-line with the Council's declared emissions reduction targets.

- 4.4 Notwithstanding the newer technologies, the modern, well controlled gas-fired cremators installed, with abatement technology to reduce emissions, are far more efficient than the old-style cremators and provide significant reductions in associated carbon emissions. Based on the current number of cremations per year, historical energy usage figures and manufacturers data, it is estimated that a carbon emission saving of around 30 to 50% is likely,
- 4.5 It should be noted that emissions associated with the cremator electricity consumption (though only a small percentage of the total) will diminish as the electricity grid becomes more de-carbonised.
- 4.6 It is estimated CO2 emission saving is 60 to 100 tonnes per year and over a 20-year lifetime 1,200 to 2,000 tonnes.
- 4.7 Current mercury emission reduction legislation requires a minimum of 50% of cremations to be abated through filtration plant. The new cremators, however, now provide 100% abatement, to future proof against further, stricter UK Government requirements and to minimise pollution in accordance with the Council's aims.
- 4.8 Previously due to performance issues with the old cremators, abatements had to be purchased, through the burden sharing scheme, to achieve the 50% legislative target. As the new cremators provide 100% abatement anything above 50% can be 'sold' providing an additional source of income generated by eco efficiency. Income received from abatements will be ring-fenced to support further carbon reduction initiatives in the cemeteries.
- 4.9 Whilst Nitrogen Oxide (NOx) emission reduction is not a statutory requirement in the UK, the service opted to install NOx (NO2) abatement plant as part of the replacement project. NOx gases are products of combustion which are pollutants known to affect health and the environment. Based on the current numbers of cremations per year it is estimated that around 700kg of NOx emissions will be saved per annum (around 14 tonnes over a 20-year lifespan). Currently there is no legislation in relation to NOx emissions, however, this is due to change soon, meaning the cremators have future proofed the service ahead of these changes.
- 4.10 Lower carbon alternatives to gas-fired cremators have very recently started to become available in the UK bereavement market. This includes alkaline hydrolysis (water) cremators and electric (combustion) cremators. Both these options are in the early stages of development and as such were not feasible for Blackley, due to timescale pressures to replace to the old cremators and the relative newness in the UK market. In the case of alkaline hydrolysis, there is still a lack of water authority discharge approvals and general acceptance of this method.
- 4.11 It may be feasible to add a new, lower carbon cremator in the future to further reduce emissions from the crematorium, but this would be subject to an appropriate product becoming available on the market.

4.12 Excess energy generated during the cremation process is captured and utilised to reduce the overall energy usage throughout the cremation buildings. With the current cost of living and fuel poverty this is one method of reusing energy.

#### 5.0 Carbon reduction initiatives within the cemeteries

- 5.1 In addition to the work undertaken at the crematorium the service has introduced a number of initiatives to reduce its carbon footprint over recent years. This includes:
  - Electric vehicles 1 buggy/coffin carrier, 2 x fully battery-operated vehicles
  - Electric bicycles 2 cycles to enable operational staff to move around the cemeteries. These bicycles are available for staff to travel to and from work
  - Electric plant 4 x ornamental mowers, battery strimmer's, battery hedge cutters
  - LED lighting in both memorial chapels at Blackley and Southern, with a further review being undertaken in the crematorium
- There are also plans, currently in the development stage, to make improvements to the offices at Blackley. As well as providing a more customer focused office space these improvements will significantly improve the carbon efficiency of the building.
- 5.3 With over 4,700 trees across the various sites there is a significant absorption of CO2. A typical tree can absorb around 21 kilograms of CO2 per year. Over a lifetime of 100 years, one tree could absorb as much as 2.1 metric tonnes of CO2, ensuring our cemeteries support the Council's carbon reduction aims.

## 6.0 Biodiversity and sustainability initiatives within the cemeteries

- 6.1 Several years ago, the service commissioned the Greater Manchester Ecology Unit to produce biodiversity plans for each of the cemeteries. These reports were reviewed and updated in 2021 and have been instrumental in the increased planting of trees, introduction of wildflower meadows, planting of hedgerows, placing of bird boxes and other wildlife boxes. Updates on the recommended actions are detailed in the Green Flag Plans.
- In 2010 the Meadow Burial area was opened in Southern Cemetery and the Woodland Burial area was opened in Blackley Cemetery. The Meadow offers an environmentally friendly alternative to traditional burials, in a secluded area, in a peaceful place within the cemetery. The area is managed to encourage native wildlife, plants, and wildflowers. The Meadows is surrounded by trees and shrubbery, with minimal maintenance, allowing the area to grow naturally.
- 6.3 The Woodland Burial area is managed in the same way as the Meadow area, and includes several birdboxes, built with children from the local community. Memorials and headstones are not permitted on the graves but are marked with small, discreet numbered stones, embedded in the ground to enable identification.

- 6.4 Recycled materials from grounds maintenance activities are used where possible for making pathways and bedding plants are grown in peat free materials.
- 6.5 During 2020-21 the Council planted a significant number of trees across the city as part of its Carbon reduction strategy. Over 50 of these trees were planted in the cemeteries. This included a Beacon Oak in each cemetery, planted in a prime location and dedicated to the people of Manchester, those who worked, volunteered, and died during the Covid Pandemic. Each tree has a bespoke stone identifying its location.
- 6.6 As described earlier in the report the cemetery infrastructure covers a total are of 105 hectares. A significant challenge is finding the correct balance between the expectation of the bereaved when attending funeral services and visiting graves, remembrance gardens and other memorial features against the need to protect and enhance biodiversity, reduce herbicide usage, and create more natural areas with reduced maintenance.
- 6.7 The introduction of differential mowing, where mowing is concentrated on some areas with the surrounding area being allowed to grow naturally, has resulted in an increase in wildflowers and a reduction in maintenance, resources, and fuel pollution.
- 6.8 The service is continually looking for ways to reduce the use of herbicides, which are only used within the cemeteries for control of vegetation around memorial headstones and in selected areas. Waste materials such as chipped bark and leaf mulch is used as a suppressant around memorial stones to reduce the extent and volume of herbicide treatments.
- 6.9 Each year a weed programme is carried out throughout the spring and summer months, to control weed growth and to create well maintained, attractive environments. This programme also contributes to preventing surface damage and trip hazards within the hard surfaced areas, reducing the risk of expensive litigation claims.
- 6.10 Reducing environmental impact is a high priority for the Council and the city. Bereavement Services have adapted a weed management approach to reduce negative effect on the environment and improve the natural biodiversity in the cemeteries, whilst maintaining cemetery grounds to an acceptable standard for the bereaved and visitors.
- 6.11 Glyphosate is used as part of the weed treatment programme but is kept to a minimum and is mainly used around headstones and public areas. The use of all herbicides is kept to a minimum with alternative methods used where possible. A previous exercise, where no herbicides were used resulted in a significant number of complaints from grave owners. Benchmarking with other LA's has established that others use the same methods, on the basis that there is not currently a viable alternative.

6.12 Manchester's approach to reducing the use of Glyphosate, across all operational services, including Bereavement Services, was recognised by the Pesticide Action Network (PAN) as being an example for other Council's to follow.

## 7.0 Community Involvement

- 7.1 All the cemeteries have Friends Groups, which consist of representatives from the local community, local councillors, local agencies, and representatives from Bereavement Services. The groups have been instrumental in identifying, developing, and implementing improvement projects, including the creation of wildflower gardens, bulb planting, creation of new garden areas, volunteer clean up days and nature trails. Friends of Southern Cemetery have planted a poppy field in the cemetery to remember the fallen this blooms each year.
- 7.2 Bereavement Services staff play an active role with the Friends Groups, often in their own time. Activities include maintenance of benches, improving, maintaining, and creating new spaces as well as attending meetings where decisions on new projects are collectively made. This has promoted ownership, mutual respect, and pride within the service.
- 7.3 'Children Grieve Too' brings activities into the cemeteries for bereaved children. The projects have been driven by the Friends Groups and as well as providing a physical space for children and their families it also offers support and signposting to specialised bereavement services. Nature trails have been introduced, including the 'Teddy Paws Trail' in Philips Park, with hidden animal carvings and themed rubbing posts, giving young people the opportunity to learn about biodiversity and connecting with nature. More recently the Manchester Little Library was introduced alongside the 'Children Grieve Too' project, see images in appendix 1.
- 7.4 Every November each of the cemeteries hold a Remembrance Service. Working with the Friends Groups they bring together stakeholders and local communities to remember those who have fallen. The Armed Forces, Police, Firefighters, NHS and members from the local community attend, along with officers from Bereavement Services.
- 7.5 Gorton Cemetery welcomes local school children who are supported to identify war graves, learning about the fallen and placing poppies on the graves as a mark of respect. These include children from Sacred Heart RC Primary and Wright Robinson College. In excess of 1,000 people attended services across four of the cemeteries see images in appendix 1.

## 8.0 Waste and Recycling

8.1 The service actively uses ways to recycle. In 2023/24 there will be a full review of waste and recycling, including plastic waste used on floral tributes and flowers. It is proposed to undertake an awareness raising campaign to discourage the use of plastic wrapping and encourage the use of more ecofriendly products.

8.2 The service has a very close working relationship with Funeral Directors and meet on a regular basis. In 2023/24 further work will be undertaken with Funeral Directors to promote the use of biodegradable funerals and cremations.

## 9.0 Next steps

- 9.1 Review approach to managing waste and recycling, by reviewing current provision and measuring the level of recycling the service undertakes each year. Work closely with Keep Manchester Tidy colleagues to identify projects and volunteering opportunities.
- 9.2 Reduce the use of herbicides by increasing differential mowing and the use of alternative methods of weed control.
- 9.3 Increase the bio-diversity methods across the cemeteries by increasing the wildflower area, continued planting and diversifying hedgerows to include more species such as hawthorn, holly, blackthorn, which will assist in the acoustic dampening and air quality filters. Continue planting new trees/replacing damaged ones.
- 9.4 Continue to regularly review plant and machinery and replace with electric alternatives where feasible.
- 9.5 Support the various Friends Groups to sustain, grow and develop. Encourage new people to join the groups.
- 9.6 Support the existing Friends Groups at Philips Park to deliver the project at Manchester General Cemetery to gain Green Flag status.
- 9.7 Review the developments in the cremation industry to consider alternative methods such as alkaline hydrolysis and electric cremators. Liaise with other local authorities and peer groups to review other methods.
- 9.8 Seek to measure the carbon baseline for the service and set future reduction targets relative to the Council's overall targets.

## 10.0 Appendices

Appendix 1 – Project examples