
FINAL OUTTURN REPORT CREMATORIUM REFURBISHMENT AND NEW CHAPEL SCHEME

Responsible Cabinet Member – Councillor Mandy Porter

Responsible Director – Dave Winstanley

SUMMARY REPORT

Purpose of the Report

1. To report the final outturn of the project in accordance with the Financial Procedure Rules.

Summary

2. The Crematorium Refurbishment and New Chapel project was initiated because the cremators and the associated facilities had reached the end of the expected design life and the facilities were not to modern standards resulting in issues in the delivery of the service.
3. Project feasibility first commenced in 2010 and was then revisited in 2015. Numerous options were then developed and presented to Cabinet in 2019. Cabinet agreed to replace the cremators, redevelop the existing chapel into a bereavement service office and a new chapel to be built within West Cemetery.
4. During the construction period of the project the construction industry has experienced unprecedented circumstances in terms of inflation, material availability and resource availability as a combined result of Covid, Brexit and the Ukraine war. This is now recognised as a strategic risk by the council and measures have been put in place in the programme moving forward to try and mitigate the risks associated with these circumstances.
5. The project was split into two phases:
 - (a) Phase 1 - focussed on the existing crematorium building including the renewal of the cremators and re-modelling of internal space, whilst ensuring the crematorium service could continue throughout the refurbishment works.
 - (b) Phase 2 - included the construction of a new chapel building to accommodate an increase in capacity and extensive external works including a car park.
6. The Project has delivered much needed new facilities for Darlington, including new, more environmentally friendly cremators, a modern chapel that can comfortably seat 120 mourners in a bright, respectful space, a new bereavement office and burial capacity for the next ten years.

7. Para 43 of the Financial Procedure Rules requires that the final outturn of all schemes with a value in excess of £1 million be reported to Cabinet.
8. The majority of the Council's capital programme is being managed to time, quality and cost with only a small number of projects exceeding set tolerances. There are currently 43 live construction projects on the Council's capital programme with a projected outturn of £167.3M against an approved budget of £167.5M.
9. The report reviews the actual cost, which was 9.2% over budget, timeliness and the delays experienced and the quality of the project identifying lessons learned on all aspects of the project; to ensure a continuous review of capital planning, management, and reporting, with regard to best practice, experience and opportunities for improving the Council's capital and asset management processes.

Recommendation

10. It is recommended that:-

- (i) Members note the content of the report and the lessons learned for future capital projects.
- (ii) The project overspend be funded from prudential borrowing.

Reasons

11. The recommendations are supported by the following reasons:-

- (a) To comply with the Council's Financial Procedure Rules.
- (b) To ensure a continuous review of capital planning, management and reporting, with regard to best practice, experience and opportunities for improving the Council's capital and asset management processes.

Brian Robson – Head of Capital Projects

Background Papers

Cabinet report 8th October 2019

Cabinet report 9th March 2021

Cabinet report 5th July 2022

Brian Robson: Extension 6608

S17 Crime and Disorder	There is no impact on crime and disorder as a result of this report.
Health and Well Being	No direct impacts.
Carbon Impact and Climate Change	Provision of new cremators and associated equipment to abate mercury emissions as well as ensuring any installation provides the opportunity to future-proof subsequent legislation as well as minimise carbon impacts. Provision to be able to abate NOx) a collective term for various oxides of Nitrogen which is a pollutant by-product of the combustion process having similar adverse effects to that of mercury).
Diversity	No direct impacts.
Wards Affected	The crematorium is located within West Cemetery in Hummersknott Ward; however residents will use the facility from all Wards.
Groups Affected	There are no proposals that impact on specific groups.
Budget and Policy Framework	The project overspend does not impact on the budget and policy framework.
Key Decision	This is not a Key Decision.
Urgent Decision	This is not an Urgent Decision.
Council Plan	There is no impact on the Council Plan as a result of this report.
Efficiency	By upgrading existing equipment, the overall efficiency of the cremators and associated equipment has been improved.
Impact on Looked After Children and Care Leavers	This report has no impact on Looked After Children or Care Leavers.

MAIN REPORT

Information and Analysis

12. The Crematorium refurbishment and new Chapel scheme addressed a number of issues with the existing West Cemetery crematorium service and has improved the facilities. The project included:
- (a) the renewal of cremators, which were operating well beyond their operational life and were not abating for mercury.
 - (b) The existing 3no. cremators were replaced with 2no. more efficient barometric cremators with mercury abatement equipment.
 - (c) The internal refurbishment included re-modelling the existing chapel area to provide improved office space for crematorium staff and provide a new customer contact area.
 - (d) The works also moved the separate 'Book of Remembrance' room to a more prominent position at the front of the building to accommodate a larger service area to the rear.
 - (e) A larger service area was required to allow for the transfer of coffins from the new chapel to the crematorium building.
 - (f) The scheme also provided a new chapel building with a capacity to accommodate 120no. mourners
 - (g) A larger car park with improved external areas.
 - (h) Additional areas were laid out for future burials with drainage installed, those areas are currently being monitored for levels of ground water.
 - (i) The new chapel includes improved accommodation for mourners with the provision of an internal waiting room and externally a covered Porte Cochere area.
 - (j) A funeral directors' private room has been provided for staff where they can wash and change.
 - (k) The new external areas include an improved garden of remembrance, covered and open floral tribute areas.
 - (l) Extensive landscaping was also carried out as part of the scheme with areas around the new chapel and the southern boundary receiving a range of trees, plants, wildflowers, and shrubs.
 - (m) A new fence line was added towards the southern boundary of the site and a land drain was installed to help reduce flood risk to neighbouring properties.

13. The approved budget of the scheme was £6,801,000. However, the final outturn for the scheme is £7,429,607, which represents a 9.2% overspend. The project also took longer to complete than originally forecast. The project commenced on 22nd March 2021 with a planned a completion date of 31st March 2022. The scheme completed on site on 30th March 2023 and the end of 'defects' date will be 30th March 2024.
14. The construction industry has experienced unprecedented circumstances in terms of inflation, material availability and resource availability as a combined result of Covid, Brexit and the Ukraine war. This is recognised as a strategic risk in the Councils risk management process (Strategic Risk 34). These issues are across all sectors, both private and public and in a recent report to Audit Committee it was reported that some projects developed prior to these issues developing to the levels they have, may not have built in contingencies into the budget or programme to absorb this. Future project budgets will have increased inflation projections built in linked to the proposed start and finish dates and increased contingency factors. It is anticipated that as inflation reduces so too will the level of risk.
15. The following sections of the report reviews the actual cost, timeliness and quality including lessons learned to ensure a continuous review of capital planning, management and reporting, with regard to best practice, experience and opportunities for improving the Council's capital and asset management processes.

Project Delivery Arrangements

16. The Project delivery arrangements for the project were as follows:-
 - (a) Project management was undertaken internally by the Capital Projects Office staff.
 - (b) Align Property Services were commissioned to undertake Design and Turner and Townsend were employed to produce the Bill of Quantities.
 - (c) Specialist consultants were engaged to design and install the new cremators, catafalque equipment, audio/visual installations and loose furniture.
 - (d) Building Services managed the construction of the project through a series of sub-contracted packages and delivery of some aspects of the project internally.
17. The Crematorium Services Manager and Crematorium support staff provided valuable support and insight to assist development and delivery of the project.

Cost

18. The table below summarises the project budget and final outturn.

Approved Project Budget	Final Out Turn Cost	Variance (%)	Variance (Value)
£6,801,000	£7,429,607	+9.2%	+£628,607

19. The increase in final cost was due to a number of issues. The main contributory factor being the prolongation of the planned contract programme by 12 months, which meant the scheme's on-site management costs increased significantly (i.e., costs for main contractor and sub-contractors). Further explanation of the delays that contributed to the cost increases are provided in later sections of this report.
20. Other issues which contributed to an increase in costs, included.
 - (a) The price and availability of materials increased dramatically during the course of the works, this impacted on both time and cost. For example,
 - (i) timber increased in price by 10-15% every month over a 7-month period.
 - (ii) Insulation which was heavily used in the make-up of the Chapels external walls and roof. This increased in cost by 18-20% during 2022.
 - (iii) Plywood sheeting was £23.04 per sheet in 2020, and more recently has been priced at £37.08.
 - (b) Due to the volatility on material prices during the construction phase some suppliers would not hold their prices for the usual acceptance period and would also not commit to long lead in times due to the market conditions. This meant that at the time of ordering some material prices had increased.
 - (c) As an indication the Building Cost Information Service identified that tender price inflation increases were 12.54% between Quarter one 2020 and Quarter two 2023.
 - (d) The project commenced during one of the most challenging periods in the construction industry as evidenced by the number of contractors going into liquidation. In the North East; Tolent a medium sized contractor based in Gateshead collapsed as did the Metnor Group, which was another medium sized contractor based in Newcastle. A survey conducted earlier this year indicated that out of 1,380 administrations in 2022, a significant contribution of 208 were from the Construction industry alone. This represented a 56% increase in the numbers from 2021.
 - (e) Staff turnover on the project was high, with some unfortunate circumstances that meant handover to new staff was not as thorough as it should have been. This resulted in a series of costs not being accounted for until the final accounts were going through reconciliation processes. This reconciliation identified the overspend position, which had previously not been identified or reported until very late in the project.

Quality

21. The project aimed to provide a much-improved crematorium service offer and there is no doubt the scheme has achieved this. The new Chapel has created a modern welcoming feel and the quality of the internal accommodation is excellent. The external areas also have a quality feel, and the overall site feels open, well laid out and complementary to the existing cemetery site.
22. The audio-visual system in the new chapel is a substantial upgrade from the previous provision and allows services to be broadcast to external areas and to wider audiences through the internet.
23. The car park has helped to draw vehicles away from other areas of the cemetery and improved the overall operation of the cemetery site.
24. We have received positive feedback from service users and funeral directors and in particular on the internal areas of the Chapel and how it operates.

Time

25. The table below summarises the project timeline.

Original Planned Project Completion Date	Revised Approved Project Completion Date	Actual Completion Date	Schedule Variation (days)
31 st March 2022	19 th July 2022	30 th March 2023	-178 days from the revised completion date

26. The programme was set for a 12 month build programme. On review there was insufficient contingency built into the programme and a series of issues that have contributed delay:
27. There are a number of issues that have contributed to the project delay, some of the more significant are outlined below.
 - (a) On commencement reports from the public of a possible presence of Great Crested Newts. Following DNA sampling which returned a positive result for one of three wet areas tested in the adjacent allotment site. This resulted in a delay to the new Chapel works whilst the investigations were completed.
 - (b) The original steelwork contractor appointed indicated they could not meet the required programme due to global steel supply issues, which meant an alternative contractor needed to be procured resulting in a delay to the programme.

- (c) Discrepancies between the scheme drawings and Bills of Quantities also caused delays to the site works.
- (d) Issues were encountered with sub-contractors not performing whilst working on site – this had a knock-on effect e.g. waiting for roof works to be completed, which then held up the scaffolding company and in turn ground workers. Whilst contracts had protection for the Council against individual suppliers the knock-on impact on time could not be recovered.
- (e) A further delay was encountered due to the impact of Covid-19.
- (f) Due to a shortage of resources in certain areas (i.e. Heating Engineers) arising from the conditions of the construction market this caused a delay to the main overarching programme in a number of areas.
- (g) A delay from a utility provider for a cable installation caused delay.
- (h) High winds and inclement weather also caused delay.

Lessons Learned

- 28. The Asset Management and Capital Programme Review Board (AM&CPRB or AMG) has specific roles defined in the Council's Constitution. The Board shall maintain a continuous review of capital planning, management and reporting, with regard to best practice, experience and opportunities for improving the Council's capital and asset management.
- 29. The majority of the Council's capital programme is being managed to time, quality and cost with only a small number of projects exceeding set tolerances. Post project reviews are undertaken on schemes that go well and where there are issues to ensure systems continue to be developed and plans put in place to improve project delivery. There are currently 43 live construction projects on the Council's capital programme with a projected outturn of £167.3M against an approved budget of £167.5M.
- 30. The key findings and lessons learned from this project are summarised below:
 - (a) Cost management within Building Services was over a number of systems and the turnover of staff on the project resulted in issues in terms of cost capture and reporting.
 - (i) Action - This is now being addressed through a review of Building Services. The overall structure and process are being reviewed taking into account the challenges of recruiting staff and integration into a new service area.
 - (b) The Contracts Manager for the scheme left during the early stages of the build and this increased pressure on resources for the management of specialist sub-contractors on site.
 - (i) Action – An assessment on resources will take place as part of the review of building services and the programme.

- (c) Both within the Council and the wider team a number of staff changes meant information was not always issued in a timely fashion and time was spent going back over information.
 - (i) Action – Handover procedures are to be reviewed as part of the Building Services review.
- (d) Having a third-party consultant pull together the Bills of Quantities for the scheme outside of the main design team appointment caused issues and inconsistencies.
 - (i) Action – Any Bills of Quantities will remain the responsibility of the design team going forward, to ensure there is ownership and consistency.
- (e) Some of the design drawings and details lacked the information for the contractor to interpret the requirements resulting on significant time expended seeking clarifications.
 - (i) More early contractor involvement will be included in future schemes as part of the building services review, where the design and delivery teams have now moved under a single Assistant Director.
- (f) The project was due to start in 2020. However, this was paused during Covid as there were anticipated increased levels of deaths and the crematorium was operating at increased levels. Commencing a project at this time was a risk the Council were not prepared to take and the project was delayed a year. Whilst the project budget was revised to take into account some inflation levels that were known at the time. It did not take into account for inflation that hit the construction sector as a result of the Ukraine war and other global issues.
 - (i) The Council now recognises this as Strategic Risk 34 in the Corporate Risk Register. Whilst not being able to predict the unprecedented impact the Ukraine war has had on the construction sector an additional review prior to commitment to the scheme with increased inflation and time contingencies may have assisted with the cost and time pressures experienced.

Financial Implications

- 31. The outturn for the project was an overspend on budget of £628,607. It is proposed that this will be funded through prudential borrowing, over the life of the cremators which is 20 years. The estimated annual cost of the borrowing will be approximately £52,000.

Procurement

- 32. The works were delivered primarily internally by the Building Services team with support from specialist sub-contractors and suppliers.

Contract Management

- 33.** In terms of contract management, the main contract was delivered in spirit of a JCT form contract as internal services areas are unable to formally contract with each other within DBC. Variations encountered during the on-site works phase were dealt with by the use of Architects Instructions with cost elements assessed by the independently appointed Quantity Surveyor.

Health & Safety

- 34.** The Principal Designer role for the scheme was procured externally and the services were provided by Todd Milburn Partnership Limited by competitive tender. There were no reportable accidents during the construction phase.

Risk Log

- 35.** The risk log for the scheme was regularly reviewed and risks which could be transferred were included in the tender documentation.

Communications

- 36.** The communications strategy for the scheme was developed with the Crematorium Services staff to highlight when temporary restrictions on the site would be in place. This seemed to work well with minimal overall disruption encountered to the site.