



Council name	COTSWOLD DISTRICT COUNCIL
Name and date of Committee	COUNCIL OCTOBER 2022
Report Number	AGENDA ITEM 9
Subject	OPTIONS FOR RENOVATION OF ROOFS AT COTSWOLD DISTRICT COUNCIL'S OFFICES AT TRINITY ROAD, CIRENCESTER
Wards affected	Watermoor
Accountable member	Cllr Lisa Spivey – Cabinet Member for Corporate Services Email: lisa.spivey@cotswold.gov.uk
Accountable officer	Claire Locke Group Manager Tel: 01285 623427 Email: claire.locke@publicagroup.uk
Summary/Purpose	To consider high level options for improvement of roofs at the Cotswold District Council's Offices at Trinity Road, Cirencester
Annexes	Annex A- Photographs showing existing roof system and glazed curtains Annex B - High level timeline showing co-dependent agile working and roof replacement project timelines
Recommendation(s)	That Council agrees that based on the high level option appraisal, the options at 2.2 of this report for glazing replacement and recovering to flat roofs are pursued to provide a more sustainable solution. A further report will be brought back to Council once works have been tendered, seeking allocation of budget to fund the repairs and improvements.
Corporate priorities	<ul style="list-style-type: none">● Delivering our services to the highest standards● Responding to the challenges presented by the climate crisis
Key Decision	YES
Exempt	NO
Consultees/	Agile working project team



Consultation	Head of Climate Action Group Finance Director – Publica Group Ltd Portfolio Holders and Local Management Team
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1. BACKGROUND

- 1.1. The Council owns the freehold of the Council offices at Trinity Road and is therefore responsible for maintaining this asset.
- 1.2. In December 2021 the Council took a decision to retain the offices but reduce the Councils footprint, freeing up space for tenants. As part of this decision process Cabinet agreed to allocate funding of up to £13,000 from the Council Priorities Fund earmarked reserve to fund a feasibility study to assess options for roof repairs or replacement.
- 1.3. The report in December highlighted that a recent building condition survey of the Trinity Road Offices has identified building repairs of £1,240,000 which need to be carried out over the next 3-5 years.
- 1.4. On 7th March 2022, as a next step following the December decision, Cabinet agreed to changes to the Council offices to facilitate agile working and improve the energy efficiency of the building. This work has since progressed to a detailed design and specification stage.
- 1.5. Whilst not directly linked to the agile working project, one key dependency for the project and releasing space for tenants is a decision on repairs and improvements to the roofs which have some known defects and regularly suffer leaks despite numerous attempts to carry out patch repairs.
- 1.6. Officers need to establish what roofing work will be carried out so the timing of office moves and introducing tenants can be deconflicted (see alignment of project plans in Annex B) with any need to move staff or tenants out of areas while invasive roofing works such as the removal and replacement of atrium glass panels takes place. However, the roof condition is not directly part of the agile working project. However, to deliver against the Councils Investment Strategy and maximise the income generated from tenants the building must be in good condition structurally and create a pleasant working environment to attract tenants.
- 1.7. When the Agile working business case was considered in March a sum of £300,000 was included for the adhoc essential repairs and improvements, to prevent water ingress and allow space to be let to tenants in an acceptable condition. This is the minimum position, whereas this report provides alternative options which would require more upfront investment.
- 1.8. The Council could choose to continue to allocate funding as part of its routine building repairs and maintenance budget for adhoc repairs. However, this report sets out options for more extensive replacement and renovation to provide a more permanent solution to ongoing issues with condition.

2.0 PROPOSALS FOR REPAIR AND REPLACEMENT

- 2.1 A study has been carried out and options with estimated costs for improvements considered. The following is proposed:



Flat roof areas: Due to long term leak issues, and significant patch repairs over a period of fifteen years to the current membrane system, it is proposed that a liquid pour system be applied. The application of this system would provide a fully sealed membrane surface, whilst retaining the previous surface and all existing and compliant insulation. The advantage of this system is that no plant or equipment would need to be disturbed, quick application and the work would have no business disruption. This application would prevent further possibility of damage to the roof and considerable cost savings against removal and replacement of existing

Pitched roof to Atriums: Proposed works to the east and west atriums is to remove the existing redundant solar weathervane system (which appears like blinds on top of glazed panels and was installed to prevent solar glare and overheating in the Atriums) and to replace all the glazing panels with composite roofing panels to match the adjacent existing pitch (See photos i and ii in Annex A) . This would replace the failed glazing units and provide a long term improved and maintenance free roof covering. This would improve thermal comfort for those working in the atrium areas. Lighting to both atriums would undergo design and alterations to ensure industry compliant levels are achieved based upon the proposed business use of the space. There would still be natural light from the windows below the pitched roof and the glazed curtain walling.

Glazed curtain walling: There glazed walls are present in the atrium at the Council chamber end of the building and in the Bistro (see photo iii in Annex A). Proposed works are to replace failed glazing panels & refurbish frame sections and seals where required to all curtain walling sections to the west bistro area, both atriums & section adjacent to east atrium. This would provide a long term watertight envelope to the building and reduce energy loss. Replacement panels would be of improved quality and energy specification. Details of energy savings would be set out in the future report.

- 2.2 As stated in the December Cabinet and Council reports, a recent building condition survey of the Trinity Road Offices has identified building repairs of £1,240,000 which need to be carried out over the next 3-5 years. There have been long standing issues with the roofs at Trinity Road and leaks frequently occur. There has been significant expenditure over time (£118,000 in the last 10 years) in repairing the roofs and the Condition Survey identified the need to invest a further £235,000 within the next 3 years as a number of atrium and curtain glazed panels have failed and flat roofs are repeatedly leaking. The Energy Audit identifies an estimated cost of £168,000 (including contractor and professional fees) for works to replace the East side glazed atrium with an insulated panel roof.
- 2.3 The costs for each option are shown in the table below. All costs indicated are QS cost estimates and are not tendered costs. Once the options for repair/replacement have been agreed a procurement will be undertaken to obtain actual build costs:



Works Cost Estimate	Total
Kingspan pitched roofing	£69,375
Alumasc Flat roofing	£75,000
Glazed Curtain walling	£95,500
Drainage	£4,500
access & roof covering system equipment	£62,000
removal of weather vane system	£23,500
Prelims / overheads & profits	£106,000
TOTAL works cost estimate	£435,875
Project / design fees estimate	£16,046
Other project costs (statutory fees)	£4,000
risk allowance estimate (Construction risks 15%)	£68,000
VAT Assessment	Reclaimable so not included
Total Project cost	£523,921

3. FINANCIAL IMPLICATIONS

- 3.1 Included in the Agile working business case was a sum of £300,000 for urgent repairs for adhoc panel replacement not a full roof replacement. The additional cost over and above this for the more extensive works proposed in this report is £224,000. Based on an interest rate of 3.2% and a 50 year period the annual revenue impact would be £4623 for this additional sum.
- 3.2 The additional revenue impacts of that borrowing will be added as pressure to the MTFs currently work-in-progress. This means that this additional capital will need to be generated from savings in other areas.
- 3.4 Due to the volatility in the construction market currently, with fluctuating material and labour costs, a further report will be brought back to Cabinet and Council for agreement once procurement has been undertaken. The figures contained in this report are therefore a guide only to help determine the options which will be pursued.



3.4 Summary of options

For comparison the base item prices are shown below, these do not include access & roof covering system, prelims and profit, VAT etc as set out in the table above but these would be in addition to all these items mostly as a percentage. This just generates a greater saving from undertaking more extensive works now. This allows consideration of higher investment now against the longer term savings against future capital programmes.



	Estimated costs over the next 10 years	or recommended option as detailed above in points 2.1 and 2.3
Flat roof:		
Patch Repair	£120,000	
Strip and recover	£175,000	
Recover Existing		£75,000
Glazed Roof:		
Adhoc replacement	£400,000	
Strip and recover [Kingspan pitched roofing £69,375 and removal of weather vane system £23,500]		£92,875
Glazed curtain walling:		
Adhoc replacement	0	
Replace failed glazing panels & refurbish frame sections and seals where required to all curtain walling sections		£95,500
All other project costs as listed at 3.2		£260,546
TOTAL	£695,000	£523,921

4.0 CONCLUSION

Whilst undertaking more extensive works at this stage would increase the upfront capital investment, there would be capital savings longer term. It would also reduce repeated disturbance to Members, staff and tenants. Any future disturbance to tenants would



potentially impact on lease income generated as tenants would seek rent free periods if they were required to move out of the atrium whilst individual ceiling panels are replaced. The proposal here is that roof replacement would be undertaken before new tenants move in.

5.0 LEGAL IMPLICATIONS

- 5.1 The Council needs to ensure the structure and condition of the building is suitable for staff, Members and tenants.

6. RISK ASSESSMENT

- 6.1 As a result of a changing economic picture, post Brexit, following the impacts of the Covid 19 Pandemic and global issues, build costs are quite volatile. The last 12 months has seen material & labour costs rise steeply and the availability of materials also makes construction challenging. There is continuing uncertainty regarding these factors which present considerable risks to the Council. This is being mitigated by taking a decision to allocate funding once tendered costs have been obtained.
- 6.2 Due to the health and safety implications of removing overhead glazed panels and glazed curtains above work areas affected areas will need to be vacated during certain work. This will be aligned with the Agile working project to minimise disturbance to staff. Staff and Members will be given early notice of when works will be taking place and those affected will be offered alternative workspace during the period of panel replacement.

7. EQUALITIES IMPACT

- 7.1 Not applicable to this decision.

8. CLIMATE AND ECOLOGICAL EMERGENCIES IMPLICATIONS

- 8.1 The Council has firm commitments to carbon reduction which are embedded in its Council Priorities, Climate Emergency declaration, Climate Strategy and the Motion adopted in September 2019 regarding carbon zero developments.
- 8.2 Approximately 32% of the Council's emitted CO₂ results from the Trinity Road offices. The Council is progressing with decarbonisation of its estate and recently successfully completed major improvements to the carbon impact of Cirencester and Bourton on the Water Leisure Centres through the Public Sector Decarbonisation Scheme funding.
- 8.3 The Council has already agreed to progress with some carbon reduction measures to Trinity Road offices. However, energy modelling suggested insulating the atrium roofs would cost £168,000 and have a payback period of 80 years. Options to improve the carbon footprint of the building have therefore been further explored through the roof feasibility study.



8.4 Energy Improvements:

Pitched roof: The proposed replacement composite panels would demonstrate a 87% reduction in heat loss energy across each atrium of the roof. The current heat loss from each atrium glazed roof is approx 245 watts with the new panels reducing this to 31.5 watts of energy loss

Flat roof: The flat roof repair would not demonstrate any significant energy savings due to no further increases in insulation being provided. In order to increase the levels of insulation and reduce heat loss, substantial costs from removal of existing covering, plant removal, and incidental repairs upon removal would be incurred whilst also increasing business disruption. The flat roof area only forms a minimal area of roof space from which heat energy is lost.

Curtain Glazing: any energy improvements would be marginal based upon the number of new glazed panels and their u-value efficiency. A full replacement of the system to both east atrium and the bistro area would be the only viable solution to significant improve energy savings

9. ALTERNATIVE OPTIONS

9.1 The Council could decide to select any of the different options, as set out below.

9.2 **Pitched roof:** An alternative option to changing all the atrium glazing panels to composite panels would be to change only the failed glazed units. This would reduce costs, but the risk of continual roof failings and ongoing maintenance costs due to age would remain. However, the glazed ceiling and wall system is now 20 years old. It is not just the glazing that is failing but also the seals, gaskets and drainage system. The various components to the roof are therefore, continuing to fail with continual water ingress into the building causing internal damage and longer term structural repairs. Replacing individual panels now will only be a temporary fix, with more replacement and investment needed year on year. Due to the health and safety requirements, including internal netting which is required for panel replacement, the costs will be much higher over time if a few panels are replaced at a time when they fail rather than a whole roof replacement with composite materials. It will also result in repeated disturbance to staff working in these areas each time panels need to be replaced. High level estimated cost for this option is £10 - 12,000 per unit including associated installation, frame refurbishment & access costs. Eight panels currently need replacement so costs would be around £96,000 but with further costs in the next few years.



9.3 Flat roof:

Option 2 - Reroof: the existing sarnafil membrane roof construction could be removed in its entirety and a similar system installed. This would benefit from improved insulation qualities, materials and installation techniques. However, this would be a major construction project, as the flat roof areas house the external plant such as Air handling units. Cranes would need to be brought in to remove all the plant, before the roof covering could be removed and replaced. The building would not be able to be used whilst the plant was removed. The costs of this are very significant and disproportionate for the benefits that would be gained. There is also a risk that other roof sections would be damaged in the process. Most of the buildings heat loss is through the glazed panels, so it is recommended this is the focus for attention.

Reroof - High level estimated cost for this option is £175,000 in year 1 with ongoing costs thereafter.

Option 3 - Patch repair: The Council could also continue to patch repair the roof but this is likely to result in unpredictable costs, repeated roof failings and internal ceiling damage, with water coming through ceilings during heavy rain. Leaks can be difficult to trace and patch repairs are not always effective or long lasting. As set out in 3.1, there have been some historic costs in terms of patch repairs but as the roof gets older the number of leaks is likely to increase.

Patch repair - whilst it is difficult to estimate the annual cost of this, a sum of £20,000 should be budgeted, however a point will be reached when patch repairs are no longer viable.

Glazed Curtain walling: No alternative options are available for the refurbishment of these sections. Their removal and replacement with a masonry construction would be costly and significantly reduce the natural light to the building and is therefore not considered in detail.

10. BACKGROUND PAPERS

10.1 None

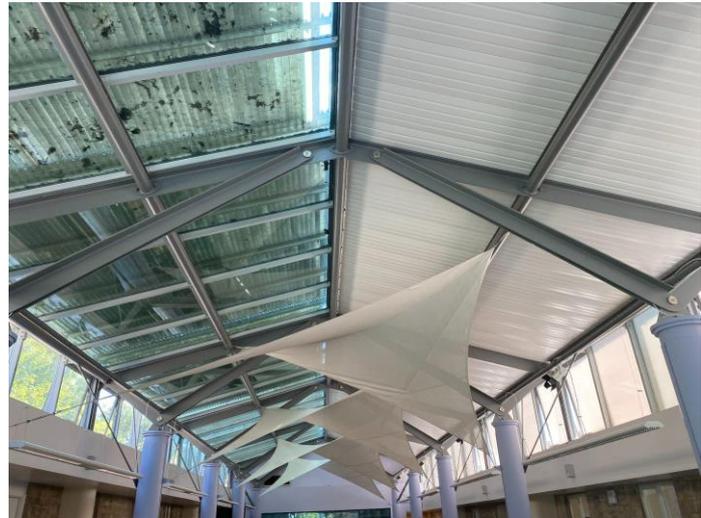
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Annex A - Photographs



Photograph (i)



Photograph (ii)

Showing existing glazed panels to the left side and white kingspan panels to the right.



Photograph (iii) - Glazed curtain walls (Bistro)



Photograph (iv) failed panels marked red