

**Balnagask RAAC
Options Appraisal**

Aberdeen City Council

August 2024

**ABERDEEN CITY
COUNCIL
BALNAGASK
RAAC- OPTIONS
APPRAISAL**

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1. Introduction

AtkinsRéalis (AR) have been appointed by Aberdeen City Council (ACC) to provide a review and appraisal of the options available to address the issues relating to the presence of Reinforced Autoclaved Aerated Concrete (RAAC) that has been identified as a potentially major safety issue within the Balnagask estate in Torry, Aberdeen.

ACC has identified that there are 504 affected properties within the estate, with a mix of tenure across these. ACC own 366 of the properties. The remaining 138 properties are either owner occupied or owned by private sector landlords, held as investment properties and rented out to tenants.

The Balnagask Estate was developed in the 1960s when ACC gave the go ahead for a large housing estate to be built at Balnagask. The estate was developed on land on the southern slopes of Torry Hill. The first phase of the housing scheme was completed in 1967 and the second phase in 1969. The properties were initially all within the ownership of ACC, but over time with changes in legislation, the tenure arrangements within the area were impacted as a result. In particular, the “Right to Buy” introduced in Scotland through the Tenants’ Rights, Etc. (Scotland) Act 1980 had a substantial impact on the tenure arrangements within the area. Over the period from the early 1980’s through to 2016 (when the “Right to Buy” was ended by further legislation), around 138 of the units were purchased. The properties are circa 60 years old.

As well as a mix of tenure types, the estate provides a mix of property types, including two-storey one-bedroom flats, and a mix of terraced houses. Along with the change in tenure, repair and maintenance obligations have also changed. Owners of the properties will have taken on these liabilities and where there is joint ownership around common walls and roofs this liability will be shared. Therefore, where there is ACC ownership and private ownership within a single building, then consideration will need to be given as to how this interaction between tenure types will work. The mix of tenure types across the units adds to the complexity of managing and mitigating the RAAC issue.



Figure 1: Balnagask Area Affected by RAAC

Given the complexities involved, ACC appointed various consultants to review “Technical Workstreams” to better understand the options available and to consider the most appropriate next steps and way forward. These have been undertaken by independent consultants in each of the individual fields considered. The Technical Workstreams are as follows:

- Structural Engineering Workstream
- Building Condition Surveying Workstream
- Energy Workstream
- Design Workstream

- Stakeholder and Community Workstream
- Commercial Workstream
- Legal Workstream
- Health and Safety Workstream

Each Technical Workstream involved in-depth review of areas that impacted on the relevant Workstream. Site visits were undertaken, surveys carried out and various workshops took place in order for full consideration to be given to each key element of the options appraisal.

All options considered the possibility of retention of the buildings with interventions to make the buildings safe, along with options to remove any threat to health and safety via demolition, followed by new build properties to replace the existing stock. Each Workstream reviewed the impact of these options on their technical merits relative to the Technical Workstream.

Upon conclusions of the technical review, two key areas were considered and scored, Societal and Capital Expenditure. Each key area utilised took cognisance of various items relevant to each and sought to provide an overall assessment of the most viable solution to the imminent health and safety RAAC issues.

Along with considerations for the mitigation of the impact of RAAC, the opportunity to enhance existing units to meet the Second Energy Efficiency Standard for Social Housing (ESSH2) requirements was also considered. Second Energy Efficiency Standard for Social Housing (ESSH2) looks to ensure that energy efficiency is significantly improved across housing to reduce fuel poverty and ensure use of sustainable heating sources. The current deadline set by the Scottish Government for meeting ESSH2 is December 2032. By this date, all social housing should meet an Energy Performance Certificate (EPC) Band B rating or be as energy efficient as practically possible. Additionally, no social housing below EPC Band D should be re-let from December 2025. Given this requirement, it is considered prudent to undertake ESSH2 upgrades in conjunction with RAAC mitigation works where possible.

This report seeks to demonstrate the process undertaken in reviewing and scoring the options available to ACC and provides an outline of next steps and recommendations that should be considered in full by ACC in order to reach the most suitable outcome, given existing health and safety risks, along with budgetary constraints.



2. Context, Background and Current Status

2.1 Rationale – Reason for Intervention

RAAC is a lightweight concrete which was widely used in construction between the 1950s and mid-1990s. RAAC is typically characterised by its aerated structure, which makes it much lighter than traditional concrete. RAAC is predominantly used in pre-cast panel form, especially in roofs, although it can also be found in other structural elements.

RAAC panels can suffer from structural weaknesses as they age. The material is inherently less robust than traditional concrete, making it more susceptible to damage and deterioration. Over time, RAAC panels can develop significant cracks and deflections, which weaken the overall structure and can lead to partial or complete collapses.

With RAAC present at Balnagask, damage and deterioration pose a risk to ACC tenants and private homeowners. The potential for debris to fall from roofs presents a significant health and safety hazard. As a landlord, ACC are responsible for preventing such incidents. RAAC compromises the structural integrity of the houses as it weakens over time, becoming brittle and less able to support loads. This degradation can lead to severe structural failures, including the collapse of roofs and walls. Consequently, ACC must intervene as soon as possible to mitigate these risks and ensure the safety of all residents.



Figure 2: 2018 Roof Slab Collapsing (SCOSS)

2.2 RAAC Background

Following the collapse of flat roof RAAC panels in 2018, the Standing Committee on Structural Safety (SCOSS) issued an alert in May 2019 targeting building owners, consultants and contractors. The Institution of Structural Engineers (IStructE) subsequently released the following documents, which have been utilised in the assessment of ACC Balnagask:

- Reinforced Autoclaved Aerated Concrete (RAAC) Panels - Investigation & Assessment - February 2022
- Reinforced Autoclaved Aerated Concrete (RAAC) - Investigation and Assessment - Further Guidance - April 2023

RAAC panels are generally 600mm wide, though this dimension can vary. Their length usually extends up to 6 metres. A characteristic feature of these panels is a chamfer along their edge, creating a distinctive V-shaped groove at 600mm intervals between the panels. The below images show typical RAAC panel construction.

Reinforced Autoclaved Aerated Concrete (RAAC)

Autoclaved aerated concrete (AAC) differs from conventional dense concrete in that it contains no coarse aggregate. Instead, it is produced in factories using fine aggregate, chemicals to create gas bubbles, and heat to cure the mixture. AAC is relatively weak and has a low capacity for bonding with embedded reinforcement. It is utilised primarily in two forms of structural elements: lightweight masonry blocks and structural units such as roof planks, wall panels, and floor units.

When reinforced (Reinforced AAC or RAAC) to create structural units, the reinforcement is protected against corrosion by applying a bituminous or cement latex coating before casting. After coating, the reinforcement mesh is placed into the formwork, and the liquid AAC mix is poured in.

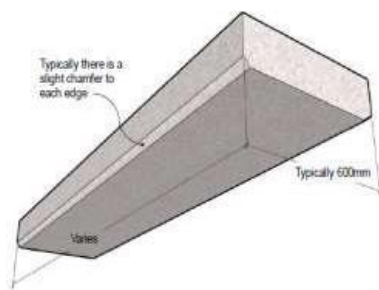


Figure 3: RAAC Panel drawing detail



Figure 4: RAAC lump sample

2.3 Condition of RAAC at Balnagask

To determine the condition of RAAC at Balnagask, Fairhurst (Structural Engineers) were instructed to carry out an intrusive inspection of the RAAC panels. This inspection was carried out in line with guidance provided by The Institution of Structural Engineers (IStructE) in their document Reinforced Autoclaved Aerated Concrete (RAAC) Investigation and Assessment - Further Guidance published in April 2023. The inspection focused on examining several risk factors, including:

- End bearing
- Anchorage reinforcement
- Cut panels
- Cracking
- Builder's work/building modifications
- Water ingress
- Deflection
- Potential for adverse loading

During the intrusive and visual surveys, the following areas of concern were identified:

- End bearing less than 75mm on internal supports
- Excessive cracking of slab panels
- Excessive deflection
- Historic water ingress (prior to roof replacement contracts)
- Builder's works/building modifications



Figure 5: Typical RAAC Panel Condition observed from surveys

Defects were classified using the IStructE Risk Assessment approach. Red items are classified as high risk, amber as medium risk and green as low risk.

| Risk Factors | Assessment |
|--|--|
| End bearing | External wall supports all exceeded 75mm bearing |
| | Internal wall supports ranged between 40mm - 60mm bearing, with 1No. panel noted to be as low as 10mm – This slab is RED CRITICAL and was propped. |
| Anchorage/longitudinal reinforcement | Anchorage reinforcement missing to at least 1No. panel |
| Cut panels | None |
| Cracking | Transverse cracking found along full length of panel and within 500mm of the support. Spalling and corrosion of rebar also observed |
| Builder's works / building modifications | Damaged units from cable conduits and SVPs |
| Water ingress | Dampness has been noted to underside of panels |
| Deflection measurements | Up to span / 133, but with major cracking and spalling |
| Adverse or changes in loading | Replacement roofing systems with additional insulation |

Fairhurst have classified the RAAC defects at Balnagask as follows:

End Bearing

The central support wall, being only 100mm wide, did not meet the required 75mm minimum bearing as per IStructE guidance. Despite this, inspections confirmed the presence of both longitudinal and transverse bars at the slab bearings along the central wall. One slab in an unoccupied property was found to have a bearing of 10mm, classified as RED Critical, and was temporarily propped. This element of the properties was assigned a Red High Risk classification in the Risk Assessment. It should be noted that the missing reinforcement may not be in every property.

Cracking

All slabs in both occupied and void properties exhibited transverse cracking. This defect was assigned a RED High Risk classification.

Deflection

Deflections were generally consistent across all inspected slabs. This defect was assigned a RED High Risk classification.

Builder's Works/Modifications

All inspected properties showed evidence of service penetrations or modifications by builders. This defect was also assigned a RED High Risk classification.



Fairhurst carried out inspections to over 100 properties and the findings are the condition of the RAAC slabs are similar throughout the development. Given the number of properties inspected, there is no reason to believe that uninspected properties will show any meaningful improvement on general condition of RAAC panels.

2.4 Work Undertaken to date

Surveys

Over 100 properties have now been surveyed by independent structural engineers. These surveys confirmed the condition of RAAC within the roofs of homes in the Balnagask area.

This subsequently led to the proposal of options to mitigate or remove the RAAC risk in the affected properties.

Using guidance published by the Institution of Structural Engineers (IStructE) the surveys identified a high-risk to health and safety and structural integrity. This is due to a number of risk factors, including:

- **End bearing:** There is limited internal wall width, leading to the end bearing length being below current guidance.
- **Cracking:** All of the roof panels in the inspected homes exhibit cracking.
- **Deflection:** All of the roof panels in the inspected homes are sagging

In order to carry out a full evaluation of the current situation, a number of Technical Workstreams have been established to review the technical options across various scenarios. This work has included input from Structural Engineers, Building Surveyors, Architects, Health and Safety Consultants, Solicitors, Quantity Surveyors and General Practice Surveyors. This work has focused on the technical aspects of the various options considered.

Societal Impact Assessment

In order to provide a method to assess the societal impact of the options presented, AR aligned with the principles contained within The Green Book (2022) on the Quality Adjusted Life Year, which is a measure of the state of health of a person or group in which the benefits – in terms of length of life – are adjusted to reflect the quality of life. This involves reviewing the impact key stakeholders believe each option would have on their household and community and calculate the change in Quality of Life accordingly. Various workshops have been undertaken to review and assess the societal impact of the options and to provide an overall scored comparison based on these key metrics.

Commercial Impact Assessment

A feasibility review of the options for intervention has been undertaken to understand the likely initial capital expenditure required. Along with a review of the initial capital expenditure of each option, AR have also assessed lifecycle costs, rental income impacts, and other financial implications such as debt charges etc. This provides details of the likely impact on ACC budgets overall, and the Housing Revenue Account (HRA) in particular, both immediately and in the longer term. A 60-year review has been undertaken across each option, with a calculation of Net Present Value applied to demonstrate the cost of each option across the whole 60-year lifecycle in today's monetary terms. This allows a direct comparison across each option.



Public Engagement

An extensive engagement programme has been undertaken through a mix of online surveys and drop-in sessions with residents and affected parties to gauge their views on the various options.

ACC has engaged with key stakeholders including:

- Residents living in RAAC affected homes.
- Residents who have recently moved from RAAC affected homes.
- Private landlords of RAAC affected homes.
- The local community.
- All council tenants across the city.

Key stakeholders will be given the opportunity to inform the Council on how each viable option may impact residents, the local community and the future HRA spend.

This extensive exercise has allowed a detailed review of all options, and the findings are considered within this report.

A statement of Community Involvement has been prepared and covers three stages of engagement. The first stage involved issuing an information pack. The information pack and cover letter were delivered to all residents living in, or who have lived in RAAC-affected homes, and the local community (within a 30m radius of RAAC affected homes). The cover letter set out the contents of the information pack, key engagement dates, and how residents can provide feedback on the impact the viable options may have on their household, community and wider HRA account.

The information pack included an A5 booklet providing information on the three viable options and the one non-viable option. For the three viable options, information was presented on the works to be done, as well as advantages and disadvantages of each option. Information was also provided on indicative cost and timeline. Information was written in plain English, jargon-free and designed in an engaging format.

Drop-in sessions were arranged to allow in person discussions. The drop-in sessions gave key stakeholders the opportunity to meet the Council Officers and project team to have 1-1 support and conversations around costs, programme and strengthen their overall understanding on the options. They were also able to meet with the Council's community team and health and wellbeing team.

Engagement boards were displayed on the information for each option, along with advantages, disadvantages, indicative costs and programme timeline.

Key stakeholders were encouraged to fill out the surveys to note their concerns and the impact each of the options would have on their household and community.

The drop-in sessions were held in various locations to enable all three key stakeholder groups to attend, including residents living in homes affected by RAAC, the local community, the wider Torry community and council tenants across Aberdeen City Council.

Four sessions were undertaken:

- Session 1: Thursday 18 July 10am-1pm at Balnagask Community Centre, 6 Balnagask Road AB11 8HX
- Session 2: Thursday 18 July 4pm-7pm at Marischal College (Main Entrance), Broad Street, AB10 1AB
- Session 3: Saturday 20 July 10am-1pm at Greyhope Community Hub, Tullos Circle, AB11 8HD
- Session 4: Monday 22 July 4pm-7pm at The Bridge Centre, 258 North Balnagask Road, AB11 8LQ

Surveys were made available to key stakeholders online. There were three parts of the survey including feedback on options, equalities and demographics.



Options survey questions: provided key stakeholders with the opportunity to provide both quantitative and qualitative responses on the impact each option would have on their household, local community and general housing programme.

Equalities survey questions: provided key stakeholders with the opportunity to inform on how the options would affect circumstances including age, disability, pregnancy and maternity.

Demographic survey questions: provided key stakeholders with the opportunity to set out information around tenancy and background.

The survey opened on Friday 12th July 2024 and closed on Friday 2nd August 2024. 244 key stakeholders provided feedback, 75 owned their own home, 46 were part of the wider community, 40 were council tenants living in a property affected by RAAC, 8 private tenants living in a property affected by RAAC, 28 were residents or business owners in the local community near properties affected by RAAC, 29 were Council tenants (living out with a property affected by RAAC). There was a total of 18 key stakeholders who did not answer this question.

Of the residents who live in RAAC-affected homes, 80% have lived in their property for more than 10 years.

The survey results are detailed within Appendix 4.6.

This was seen as being the first stage of engagement and the Statement of Community Involvement outlines the further steps to be taken.



2.5 Qualifications, Assumptions and Exclusions

As part of the Options Appraisal, ACC's brief was to assess the options presented to help mitigate RAAC defects within the affected property and technically appraise the options on their viability, taking cognisance of the deliverability, technicality, societal and budgetary impact.

This report includes a technical, commercial, lifecycle and societal evaluation based on the proposed viable options.

Societal Evaluation – Assumptions, qualifications and exclusions

Assumptions

When scoring the societal piece, AR aligned with the principles of the contained within The Green Book (2022) on the Quality Adjusted Life Year, which is a measure of the state of health of a person or group in which the benefits – in terms of length of life – are adjusted to reflect the quality of life. This involves reviewing the impact key stakeholders believe each option would have on their household and community and calculate the change in Quality of Life accordingly.

Qualification

Use of methodology principles set out by The Green Book (2022) on the Quality Adjusted Life Year.

Specific Exclusions – Societal Evaluation

A list of further consequential costs that have not been included comprise of, but is not restricted to:

- Cost on loss of council housing (though value adjusted to include RAAC)
- Housing waiting list demand and associated costs
- Cost of providing temporary accommodation once works are completed
- Loss of rent due to long term vacant properties (this is allowed for within the commercial review)
- Potential homelessness amongst residents living in RAAC affected homes
- Potential costs associated to increase in anti-social behaviour and crime
- Opportunity costs related to not having properties available for let and potential costs from housing waiting lists
- Costs for securing empty properties, both short-term and long-term.

Commercial Evaluation - Assumptions, qualifications and exclusions

Assumptions

Financial model utilised in the commercial evaluation allows for the following items and basis as noted:

- Capital costs as detailed in AR Feasibility Report
- Inflation allowances based on Retail Price Index (RPI) of 1.5%
- Void rate of 2.5%
- Bad debt rate of 5%
- Rent yearly increase based on RPI plus 1.5% (3% per annum overall)
- Capital Grant of £78k per unit allowed currently (only applicable to new build units)
- Capital Grant receipt allowed for in line with phased handover of units
- Management costs based on per unit basis
- Management costs yearly increase based on RPI
- Management costs commence in line with phased handover of units
- Maintenance costs commence 1 year post phased handover of units to allow for Making Good Defects Period



- Maintenance costs yearly increase based on RPI
- Maintenance costs are based on lifecycle cost allowances along with standard planned and statutory maintenance requirements
- Residual value based on an allowance of £10k per unit including RPI allowance and included as income at end of 60yr lifecycle
- As residual value has been utilised there is no final maintenance allowed post year 60
- Scoring applied to NPV with lowest NPV utilising 5% discount rate over 60 years obtaining full marks
- Scoring is based on 100 marks awarded to the lowest NPV with a pro rata score awarded based on difference between NPV at 5% over 60 years
- Management Cost based on managing housing units only with no allowance for managing any commercial units
- Any management costs for amenity spaces are excluded within this model
- Loss of rent allowance has been included where units are not occupied in each model
- Option 3b allows for full demolition and rebuild of units at year 30 of the 60-year review, including adjustments for loss of rent, full debt charge etc. The cost of this does not form part of the initial construction cost allowance
- Options 4a and 4b include the following allowances for third party costs:
 - Cost to purchase private units – an allowance has been made to cover cost of purchase (assuming adjustment for RAAC) and cost for loss of home payments
 - 5% allowance on cost to purchase total to cover Land and Building Transaction Tax costs
 - £5k per unit legal fees allowance
 - £10k per unit disturbance costs allowance. Both 3b and 4b allow for 367nr units to be rebuilt - this is based on utilising existing plot layouts and size availability for new build 3- and 4-bedroom houses
- Each model contains debt charge allowance based on the following:
 - 2024-25 4.35% (Estimated)
 - 2025-26 3.82% (Estimated)
 - 2026-27 3.77% (Estimated)
 - 2027-28 3.78% (Estimated)
 - 2028-29 3.84% (Estimated)
 - Then from 2029-30 onwards 3.84%

Qualifications

60-year study periods for life cycle costs

Use of methodology principles set out by The Green Book (2022)

Specific Exclusions

A list of further consequential costs not included comprise of, but is not restricted to:

- Opportunity costs for other actions excluded and impact on wider Housing Revenue Account (HRA)
- Not accounting for impact on supply and demand of council house types across city
- Decant costs not included as properties assumed empty prior to any works

There has been no request to consider any insurance options for the buildings, and this is a specific exclusion. The structural engineer's report that has been used was commissioned by Aberdeen City Council and AR have not undertaken their own surveys to verify the information. It was agreed with ACC to rely on this report and its findings to formulate the options appraisal.



An economic appraisal that covered the wider impact on the city over a number of years of needing to resolve the RAAC issue was excluded from the Brief.

In addition, there are additional assumptions, qualifications and exclusions that specifically apply to a number of the individual reports included within the appendices. Please refer to these appendices for further details.

Within this report there is reference to the second Energy Efficiency Standard for Social Housing (ESSH2). This standard looks to ensure that energy efficiency is significantly improved across housing to reduce fuel poverty and ensure use of sustainable heating sources. At the end of 2023 the Scottish Government opened consultation on seeking Social Housing Net Zero Standard (SHNZS) in Scotland as an amendment to ESSH2. While the consultation has closed there is no formal update on the outcome. Therefore, for the purposes of this report, ESSH2 is used as the benchmark for future upgrade works to Social Housing. Where possible, works to meet ESSH2 requirements have been allowed for in conjunction with RAAC mitigation works in order to minimise disruption to tenants that would be witnessed by undertaking the required works at separate times.



3. Methodology and Approach

3.1 Options Generation and Longlist Appraisal

The longlist options generation was conducted by ACC and considered by Committee in July 2024. Following this review, a shortlist of options was directed by ACC. These options were reviewed and analysed, taking into account items such as buildability, commercial impact, societal impact, etc. Each Technical Workstream reviewed the options presented to determine suitability. The following option was deemed non-viable at the committee meeting in July 2024:

Option 1 – Adding timber runners to extend the bearing length at the support walls – Non-Viable

Independent Structural Engineers have advised that adding timber runners to extend the bearing length at the support walls does not resolve the RAAC risk factors such as cracking and deflection. This option involves cutting out plasterboard on either side of the load-bearing wall and inserting more timber to increase the bearing distance. It is noted, however, that this proposal still leaves the RAAC panels categorised as high-risk, as extending the central support bearing distance does not improve or mitigate the cracking and deflection observed in all RAAC roof slabs. Additionally, an extra cost allowance would be required for a new robust roof membrane, and annual inspections would be necessary as the RAAC panels would remain in place. The mitigation provided by this option would only last a short time compared to other options before further interventions would be necessary. Therefore, this option is not considered viable, and the RAAC panels would still be categorized as high-risk, leading to its exclusion from the shortlist of options.

Removing Option 1 as non-viable, the remaining shortlist options appraised by this report are:

Option 2 – Install a support timber frame under existing RAAC roof panels

Installing a support timber frame under existing RAAC roof panels involves placing a timber frame beneath the RAAC roof panels to support their weight. This includes installing a new timber support grillage frame, removing and disposing of existing lowered ceilings and installing a new roof covering where required. This will be placed tightly to the underside of the existing RAAC roof panels.

Option 3

For the purposes of a more detailed review of options, Option 3 has been split into two distinct options. One option involves removing and replacing the RAAC panels with a new roof structure. The second option involves further EESSH2 upgrade works to be undertaken concurrently with the works to remove and replace the RAAC panels.

Option3a – Removal of RAAC panels and replace roof

Independent Structural Engineers have advised that removing RAAC panels and replacing the roof is the most effective solution to address the risk factors associated with RAAC within retaining existing buildings, such as cracking and deflection. This option involves the complete removal of the existing RAAC panels and the installation of a new roof structure. By eliminating the RAAC panels entirely, this proposal fully mitigates the risk of cracking and deflection observed in all RAAC roof slabs as the RAAC panels will be removed completely. Replacing the roof also ensures a long-term solution with no need for the frequent inspections required if the RAAC panels were to remain.



Option 3b – Removal of RAAC panels and replace roof and EESSH2 works

In addition to replacing the RAAC panels in line with Option 3a above, there is the opportunity to undertake upgrade works internally to allow the units to meet EESSH2 requirements. This option minimises the disruption to tenants that would be witnessed if the works were undertaken at separate times.

Option 4a – Demolition Only

The option of demolishing the houses affected by RAAC and landscaping over the area is a viable technical solution as it completely removes all RAAC, thereby resolving the associated risk factors such as cracking and deflection. This option allows for purchasing existing private units and associated cost, along with an allowance for landscaping to be undertaken to vacant plots whilst retaining existing hard standing areas and road areas within the estate.

Option 4b: Demolition and building new homes

Independent Structural Engineers have advised that demolishing the existing buildings and constructing new homes is an effective solution to address the issues associated with RAAC. This option involves the complete demolition of the current structures and the construction of new homes built to modern standards, tailored to meet projected housing needs. The new homes will fully comply with sustainability requirements, ensuring long-term energy efficiency and reduced environmental impact. The allowance for the number of homes that can be built under this option is based on utilising the existing housing estate layout and road structures and replacing the existing units with a mix of 3 and 4-bedroom units. The area of existing units has been measured and a general layout of the new housing units utilised to assess the maximum number of new units that can be constructed in these areas.

3.2 ACC Strategic Objectives

All options have taken into account ACC's Local Housing Strategy. The Local Housing Strategy is as follows:

To reflect the city's core vision in the Local Outcome Improvement Plan (LOIP), "A place where all people can prosper", the local housing strategy sets out our strategic vision and priorities for the future delivery of housing and housing related services. It identifies the specific commitments made by the council and its key partners to deliver the strategic outcomes within the local housing strategy. The vision for the local housing strategy is: People in Aberdeen live in good quality sustainable homes, which they can afford and that meet their needs. The local housing strategy is supported by a comprehensive assessment of housing need and demand.

The local housing strategy aims to deliver 6 overarching strategic outcomes:

1. There is an adequate supply of housing across all tenures, and homes are the right size, type and location that people want to live in with access to suitable services and facilities.
2. Homelessness is prevented and alleviated.
3. People are supported to live, as far as is reasonably practicable, independently at home or in a homely setting in their community.
4. Consumer knowledge, management standards and property condition is improved in the private rented sector.
5. Fuel poverty is reduced which contributes to meeting climate change targets.
6. The quality of housing of all tenures is improved across the city.

The local housing strategy recognises its' role in enhancing economic growth and social mobility. It links with Community Planning and Health and Social Care Partnership priorities and strategies to strengthen communities, improve health, reduce inequalities and support independent living.

Within the Aberdeen City Locality Plan for Torry 2017-2027 is Our Place, which includes Priority 4 and 5.



Environment and Facilities

The Council will work together to improve access to community services, greenspaces and promote our local heritage by making sure our community is safe, clean and we can move around easily.

The Council will achieve this together:

- The Council will work together to create different ways to get around our community and access services.
- The Council will reduce traffic congestion, improve air quality, decrease litter and promote recycling and up cycling.
- The Council will identify and support opportunities for community ownership and improve and maintain local parks, allotments and local heritage sites.

What the Council will achieve together:

- Reduced waste in the community.
- More local residents are satisfied with ways to get around the community and access services.
- Local spaces are used and enjoyed by the whole community.

Housing

The Council will work together to improve access to affordable, fit for purpose and well-maintained housing which will be long lasting.

How the Council will achieve this together:

The Council will work together with tenants to improve access for residents in Torry to high quality homes through providing local-based housing support and services for local tenants.

What the Council will achieve together:

Improve number of longer lasting tenancies, customer satisfaction and quality of new and existing housing stock.

It is clear that the options considered will need to reflect the strategic objectives outlined above.

3.3 Selecting the Preferred Option

In selecting the preferred option, full consideration needs to be given to not only the societal impact in the local and wider area, but also the commercial impact on ACC budgets both in the short and long term. This is particularly key in considering the HRA and impact on capital and revenue, and the impact across the wider city. To this end, both the societal impact and commercial impact have been scored separately to determine which options are best aligned to these key areas.



4. Workstreams

4.1 Workstream Overview

A number of Technical Workstreams have been undertaken to help better understand the options that are open for ACC to consider the most appropriate next steps and way forward. These have been undertaken by independent professionals in each of the individual fields considered.

4.2 Structural Engineering Workstream

Aberdeen City Council appointed Fairhurst to review the technical aspects once the problem of RAAC had been identified within the roofs of the properties in Balnagask. Fairhurst have assessed the condition of the roof panels and have worked through a number of potential solutions. The options and outcomes are fully discussed in Appendix A1.

4.3 Building Condition Surveying Workstream

As part of the technical workstream, comprehensive surveys were executed to evaluate the present condition of the properties. These surveys uniformly identified the existence of Reinforced Autoclaved Aerated Concrete (RAAC) panels in the roofing structure. Given the inherent risk of abrupt failure associated with RAAC, it is strongly advised that a certified structural engineer be instructed to evaluate their current condition, potential repairs, and/or replacement of these panels. Given that we have not had access to pertinent asbestos surveys or reports, it is strongly recommended that refurbishment and demolition (R&D) surveys be conducted. These surveys are crucial to determine the presence of asbestos within the properties, especially as the majority were found to contain Artex ceilings, which may contain asbestos. This work will only be undertaken on Council owned properties. Extra caution is advised in determining whether any asbestos may have been historically encapsulated. This is a significant consideration for the safety and health of the occupants and the broader public. Moreover, the condition surveys highlighted fire safety and health concerns related to ceilings and intermediary floors containing polystyrene beading. This material has potentially been used as insulation or soundproofing between floors. In general, the properties were deemed to be in a satisfactory condition for their age excluding the RAAC problem. However, it was observed that all properties require redecoration and maintenance work, both internally and externally. While the properties are currently serviceable, future upgrades should be anticipated. It was also noted that the windows and flat roof coverings are approaching the end of their expected lifespan. This underscores the need for proactive maintenance and potential replacement planning. Full existing survey condition reports, EPCs and Home Reports for selected property types can be found in Appendix A2.

4.4 Energy Workstream

This workstream will focus on the likely carbon impact associated for each of the proposed options, which is detailed in Appendix C. The main decision factor for the option will be embodied carbon, however some consideration has also been given for the potential to carry out retrofit interventions to the properties. This is to comply with ACC's statutory obligation to meet the Energy Efficiency Standard for Social Housing 2 (ESSH2), which requires all social housing stock to have an Energy Performance Certificate (EPC) rating of B or above (a SAP score of 81). This is also an opportunity to improve thermal performance and tenant comfort, address any associated issues such as damp and mould, and ultimately reduce energy usage and bills for tenants, which in turn can help to alleviate fuel poverty.

It is an important factor that the properties meet the targets of ESSH2. The Scottish Government have set an initial target of 2032 for all social housing to meet these requirements. While this may be reviewed or changed pending



future decisions by the Scottish Government, the appraisal must be based on this standard at this time. Currently this is being reviewed by Scottish Government so final standards may change.

4.5 Design Workstream

As part of the overall technical workstream, a pre-feasibility report was commissioned to look into how the site could be re-developed if a decision was taken to demolish the estate. This approach looked at a phased development, over a number of years to create a new community in line with current planning policy and building standards for high quality housing. Whilst this type of development will incur a high capital cost, it can be phased over a number of years and will provide homes with a lifecycle expectancy in excess of 60 years. The overall site, including the properties held in private ownership, extends to 11.5 Ha. For the purposes of this high-level feasibility report, it was assumed that all the properties are demolished. A similar range of mix of unit types has been used. However, should this option be taken forward into a more detailed design development, then the exact housing mix can be reviewed and amended in line with the Council's housing requirements at the time.

The detailed report shown in Appendix A3 demonstrates that a new high-quality community can be developed on the site and how the new development will adhere to both the current national and local planning guidelines. The sketch layouts show an option of how the area can be re-developed, bringing in new green and blue infrastructure and creating the sense of community that is important to create a modern vibrant environment.

4.6 Stakeholder and Community Workstream

To ensure that there was sufficient stakeholder and community engagement, ACC commissioned a survey and drop-in sessions with affected stakeholders in July 2024 to consider the impact of the shortlisted options. The Statement of Community Involvement in Appendix D1 sets out how and when the Council engaged with key stakeholders.

The Survey Results in Appendix D2 outlines the theory behind the survey questions and summarises data analysis of the quantitative responses.

In addition to the multiple-choice questions of the survey, there was an opportunity for stakeholders to voice concerns and comments on the impact the options will have on their households and community. The Survey Results, Qualitative Responses in Appendix D3 sections the qualitative responses under identified protective characteristic groups, each viable option, and the key stakeholders' groupings.

Lastly, the Qualitative appraisal in Appendix D4 outlines how the results of the stakeholder and community engagement have been appraised for each option, including a breakdown of the societal scoring for each option.

4.7 Commercial Workstream

Project Outline:

The purpose of this commercial feasibility estimate is to give an indication of the capital cost to ACC and the Net Present Value (NPV) for the proposed options to address the RAAC issue within their existing residential estate.

Benchmark against similar projects:

When pricing the document, we have used available 'live' cost information from similar type projects, where available. It should be highlighted that appropriate allowances have been made for elements of the works which are not yet developed.

Risk allowances:



The Design Development and Risk Contingency has been included at 15% to reflect the low level of project information available at this stage. We envisage the majority of contingency will be utilised for Design Development – changes relating to design intent including, but not limited to, impact of condition surveys, etc. The residual contingency value is likely to be used to account for potential changes which may come to light during the construction stage. This will be managed via a change control process.

Key Inputs into the **NPV**:

- Maintenance cycle
- Loss of rent
- Inflation
- Annual rental growth
- Finance costs
- Legal costs
- Professional fees
- Where relevant, EESSH2 works
- Where relevant, third-party purchase and associated costs

Note this list is not exhaustive, and further assumptions and clarifications can be found in the Commercial report in Appendix B.

4.8 Legal Workstream

As part of considering the options for the overall area, it is imperative to understand the legal framework that can be used to address the key issues. With around a third of the properties now being in private ownership, it is important to establish what has been included within title documentation around owners' responsibilities for repairs, particularly where there are joint or common areas such as roofs and walls. While it is not possible to check all the titles at this time, a sample of different addresses and house types have been checked by an independent third-party law firm. An instruction was provided to examine the title deeds to ten properties within the Estate, which were selected by AR on a sample basis.

The more detailed findings can be found in Appendix F to this report, but as a general comment, the firm advised that the title provisions were uniform and consistent across the various properties. The firm evidenced that a disciplined approach was taken by the Council's solicitors (and those of its statutory predecessors) when conveying the individual properties for the first time. However, when dealing with any given property, it will still be prudent and often necessary to specifically check the actual title deeds to that property.

4.9 Health and Safety Workstream

AtkinsRéalis Health & Safety Services have conducted a review of the proposed options for mitigating the risk from RAAC within the housing at Balnagask, Aberdeen. This review consisted of; an appraisal of existing available information provided by Aberdeen City Council with a review of the four options explored, discussions with Fairhurst (Structural Engineers) on potential methodology, and consideration of the potential health and safety risks and implications of each option. A summary of the main considerations is outlined in Appendix E.



5. Options Appraisal

5.1 Introduction

Advantages and Disadvantages

Below are the advantages and disadvantages for each viable short-listed option. This is not an exhaustive list but takes into consideration key factors of societal, technical and commercial advantages and disadvantages. Note that in order to assess the options for these key factors, it was essential to split Option 3 into Option 3a without EESSH2 works, and Option 3b with EESSH2 Works. As such, advantages and disadvantages have been detailed for the following options:

- Option 1: Extend end bearing was deemed non-viable This was discounted earlier in the process see 3.1
- Option 2: Install a support timber frame under existing RAAC roof panels
- Option 3a: Removal of RAAC panels and replace roof
- Option 3b: Removal of RAAC panels and replace roof and EESSH2 works
- Option 4a: Demolition only
- Option 4b: Demolition and build new homes

Societal Background including Place-Based Analysis

Place-based analysis has been undertaken in assessing the societal impact of each option. This has included considering impact on key stakeholders, including residents living in RAAC affected homes, the local community (within 30m from RAAC affected homes), and the wider community of council tenants across Aberdeen City Council. For each viable option, its assessment assumes council tenants will have vacated their properties and focuses on the impact of the proposed option to the local community and council tenants returning to RAAC affected homes. For residents vacating their RAAC affected homes, there will be displacement and loss of existing community. There will also be unintended consequences for the wider community such as empty properties, resulting in a potential increase in crime rates and anti-social behaviour. The societal evaluation was based on the results from the surveys carried out.

Commercial Background

The commercial assessment of each viable option included analysis of capital costs as well as modelling the NPV over 60 years at 5% to understand the ongoing impact on the Council's finances, particularly in relation to the HRA.

5.2 Option 2 Assessment

The key advantages are as follows:

- This is a cost-effective short-term solution that can be delivered quickly without too much disruption internally to the home. Depending on available funding, this work can be programmed in quickly, and the works to make the houses low risk in terms of RAAC can be undertaken.
- This will allow tenants to be moved back into the properties quicker and assist the Council with their requirements of reducing the Housing Waiting List and provide housing for those who need it.
- There will be limited wider impact to the residents and wider community in terms of construction works.
- There will be staggered displacement of residents, however this is likely to be short-term.
- The costs of the full upgrade works to replace the roof and undertake the requirements to meet EESSH2 standards will be deferred, giving the Council more opportunity to review budgets and plan funding for this work.



- This option does not reduce the quantity of available units from ACC Housing register and reduces void periods.
- The Built Environment community of Balnagask is not fundamentally altered.

The key disadvantages are as follows:

- RAAC is still prevalent within each property and while this becomes a low risk, the risk remains and there will be a need for an ongoing inspection regime to ensure that the risk of RAAC is continually monitored.
- From a tenant's point of view, the property still contains RAAC. If there is further deterioration in the status of the RAAC units within the property, tenants will likely need to move out again.
- The continued presence will have a deleterious impact upon tenants' mental wellbeing.
- Given that the homes have been vacated for health and safety reasons, new tenants moving in may potentially need to relocate again. Additionally, there is a chance that people will not want to move into a property with RAAC, which may result in many of the properties remaining void.
- The roof system proposed ensures the properties move to low risk from a RAAC perspective, this is only a temporary solution given the age of the roof panels.
- The EESSH2 requirements mean that by 2032, these properties will be required to meet the EPC B standards. This means that the properties will require a comprehensive upgrade and tenants will be required to move out while this work is done. It is likely that the roof will need to be permanently upgraded or replaced at this time.
- In particular for tenants, this means that they are likely to be moved again which is not a desirable outcome. For the Council, they will need to look at moving tenants around the existing housing stock. It may be that until all the works are completed to bring the properties up to EESSH2 standards that these properties could only be considered as "temporary accommodation".
- The costs of the full upgrade are only postponed, and it means that temporary costs are incurred up-front to carry out the repair works. The costs of the major refurbishment will still be required within future Council programme moving forward.
- As a result of undertaking the construction works, it is highly likely that further damage to property will occur, and consequential repairs / cost will manifest.
- The Council will need to ensure properties are secure during the time they are empty, limiting opportunity for anti-social behaviour, vandalism and other crime taking place. The estate will temporarily lose around 60% of the occupants, resulting in the area having a different feel for those who remain with large swathes of streets having empty homes.

Non-Viable Conclusion:

This option only provides a temporary solution. The roof panels have a finite life span, and thus a roof replacement will be required in the future, along with the EESSH2 upgrade works. This would lead to significant disruption to tenants again, and thus was not considered a viable option for the commercial assessment.

5.3 Option 3a Assessment

The key advantages are as follows:

- The properties will be free of RAAC, eliminating the need for ongoing inspections and alleviating tenants' concerns about the presence of RAAC in their homes.
- Removing RAAC is a permanent solution, and tenants can move into the properties, confident that there is unlikely to be a need for a move later.
- The works to be undertaken will be both internal and external to the property. However, this may prove to be a challenge around common areas such as roofs and party walls.
- The built environment of the community will not fundamentally change, although the displacement will be longer as tenants move back in, and the properties are re-occupied.



The key disadvantages are as follows:

- The costs are significant to carry out these works and will only address the removal of RAAC. The significant repair costs will not address any building fabric costs or improvements. For properties that are more than 50 years old, it is a large cost to be funded by existing Council budgets, but does not provide an increase the properties' market value or increase in rents for ACC. The large impact on the HRA will impact other Council services across the city.
- The disruptive nature of the works means that the properties cannot be occupied until all the works are carried out. The EESSH2 works are not carried out until a later date so there will be further significant cost to the Council and disruption to the tenants, potentially needing to move out again at a later date.
- This Option will take longer, and it means the properties are empty for longer than Option 2, with the issues of anti-social behaviour, vandalism and security needing to be managed for a longer period.
- Where there are adjacent and neighbouring third-party owners, there will be significant interface issues, likely requiring legal agreements to engage with them to undertake the works. If they are unwilling or unable to participate, then works will be delayed or not undertaken. From the Council's point of view, this may lead to a long-term void.
- This option may be unaffordable or undesirable to the homeowners and the third-party owners.
- The properties will take longer to be available putting pressure on the other housing stock within the city.

Non-Viable Conclusion:

This option only provides a temporary solution. The EESSH2 upgrade works will still need to be carried out at a later date. This would lead to significant disruption to tenants again along with significant cost to the Council, and thus was not considered a viable option for the commercial assessment.

5.4 Option 3b Assessment

The key advantages are as follows:

- The properties will be free of RAAC, eliminating the need for ongoing inspections and alleviating tenants' concerns about the presence of RAAC in their homes.
- Removing RAAC is a permanent solution, and tenants can move into the properties, confident that there is unlikely to be a need for a move later.
- There is the option to carry out the requirements to bring these properties up to EESSH2 standards at the same time. This will provide the properties with a comprehensive upgrade and provide a long-term solution to assist housing needs for tenants in Aberdeen and benefit from economies of scale / efficiencies of concurrent works.
- The works to be undertaken will be both internal and external to the property. However, this may prove to be a challenge around common areas such as roofs and party walls.
- The built environment of the community will not fundamentally change, although the displacement will be longer as tenants move back in, and the properties are re-occupied.

The key disadvantages are as follows:

- The costs are significant, much more so than in Option 3a to carry out the RAAC removal works and EESSH2 upgrade works. This will be funded from within the existing Council budget, and thus the costs will have an impact on the HRA and the other Council services across the city.
- The disruptive nature of the works means that the properties cannot be occupied until all the works are carried out. It is likely that the best approach is to carry out the EESSH2 works at the same time to ensure the properties meet the medium-term requirements, thus prolonging the programme.
- This Option will take longer, and it means the properties are empty for longer than Option 2, with the issues of anti-social behaviour, vandalism and security needing to be managed for a longer period.



- Where there are adjacent and neighbouring third-party owners, there will be significant interface issues, likely requiring legal agreements to engage with them to undertake the works. If they are unwilling or unable to participate, then works will be delayed or not undertaken. From the Council's point of view, this may lead to a long-term void.
- This option maybe unaffordable or undesirable to the homeowners and the third-party owners.
- The properties will take longer to be available, putting pressure on the other housing stock within the city.

5.5 Option 4a Assessment

The key advantages are as follows:

- This is a cost-effective solution that removes the issue of RAAC from these properties. In addition, the removal of properties reduces ongoing maintenance costs and resource and removes requirement for further upgrading to meet EESSH2 standards.
- Although there is still a cost associated with this option, it will not impact ACC budget as much as other shortlisted options. Thus ACC will be able to utilise their financial resources for other priorities within the Council, including upgrading other housing stock or providing other new homes across the city.
- Furthermore, this option provides additional landscape amenity and mitigates potential anti-social issues that may arise from part-derelict communities.

The key disadvantages are as follows:

- The Council will need to find a suitable alternative finish to the site in agreement with the local community as well as engaging statutory authorities such as planning and building control.
- Secondly, there will be a loss of a large number of homes out of the Council's portfolio. This may restrict the ability to find suitable housing for those people on the current Housing Waiting List.
- Thirdly, there will be a loss of both rental income from the Council which will impact the HRA budget. Additionally, there will be a loss of Council Tax revenue.
- Fourthly, the whole community will be changed completely. Services, shops and businesses that rely on the local community are likely to be adversely affected. There will be people left on the fringes and there will be challenges where there is private ownership and Council ownership to reach agreement on next steps forward. Once the demolished properties are removed, Balnagask will see the entire community dramatically changed.
- Fifthly, for those properties where there is private ownership, an agreement on purchasing their property will require to be negotiated. This will take time and can have the impact of delaying the whole process.
- While this negotiation process is ongoing, there will be an ongoing management and maintenance liability to prevent dereliction, anti-social behaviour and a general decline in the area for those residents who remain.
- Finally, for the owners and private renters who will be displaced, consideration will need to be given as to how their lives are impacted and how this can be mitigated.

5.6 Option 4b Assessment

The key advantages are as follows:

- This Option enables the Council to provide modern standard homes that meet current building standards and will have a lifetime similar to all other new build properties.
- Secondly, the older homes which are closer to the end of their economic life are replaced with new homes.
- Thirdly, the design of the new properties will meet the current ACC policies relating to Place Making and Regeneration, providing an opportunity to create a modern vibrant environment for people to live in. The mix of unit types can be changed to reflect the current requirements of the Council's Housing Waiting List.
- Finally, this option will positively contribute to the regeneration of the wider the area in and around Balnagask and the Torry area in line with broader Council policies and initiatives.



The key disadvantages are as follows:

- Firstly, on top of the demolition costs, there is the high capital cost of the new build properties. This is highlighted in the commercial appraisal which shows this to be by far the most expensive option.
- Secondly, as with Option 4a, for those properties where there is private ownership, an agreement on purchasing their property will require to be negotiated. This will take time and can have the impact of delaying the whole process.
- While this process is ongoing, there will be an ongoing management and maintenance liability to prevent dereliction, anti-social behaviour and a general decline in the area for those residents who remain.
- Thirdly, the need to engage with design consultants and statutory colleagues to develop a masterplan for a new estate will incur time and cost which will delay the process. It will likely be several years before the new housing is completed.
- Fourthly, and certainly in the short-medium term, the whole community will be changed with services, schools, shops and businesses that rely on the local community being adversely affected. There will be people left on the fringes of the demolished properties who will see their entire community change dramatically.
- Finally, for the owners and private renters who will be displaced, consideration will need to be given as to how their lives are impacted and how this can be mitigated.



6. High Level Programme Assessment

High level programmes have been developed for all viable options. Note the following clarifications:

General:

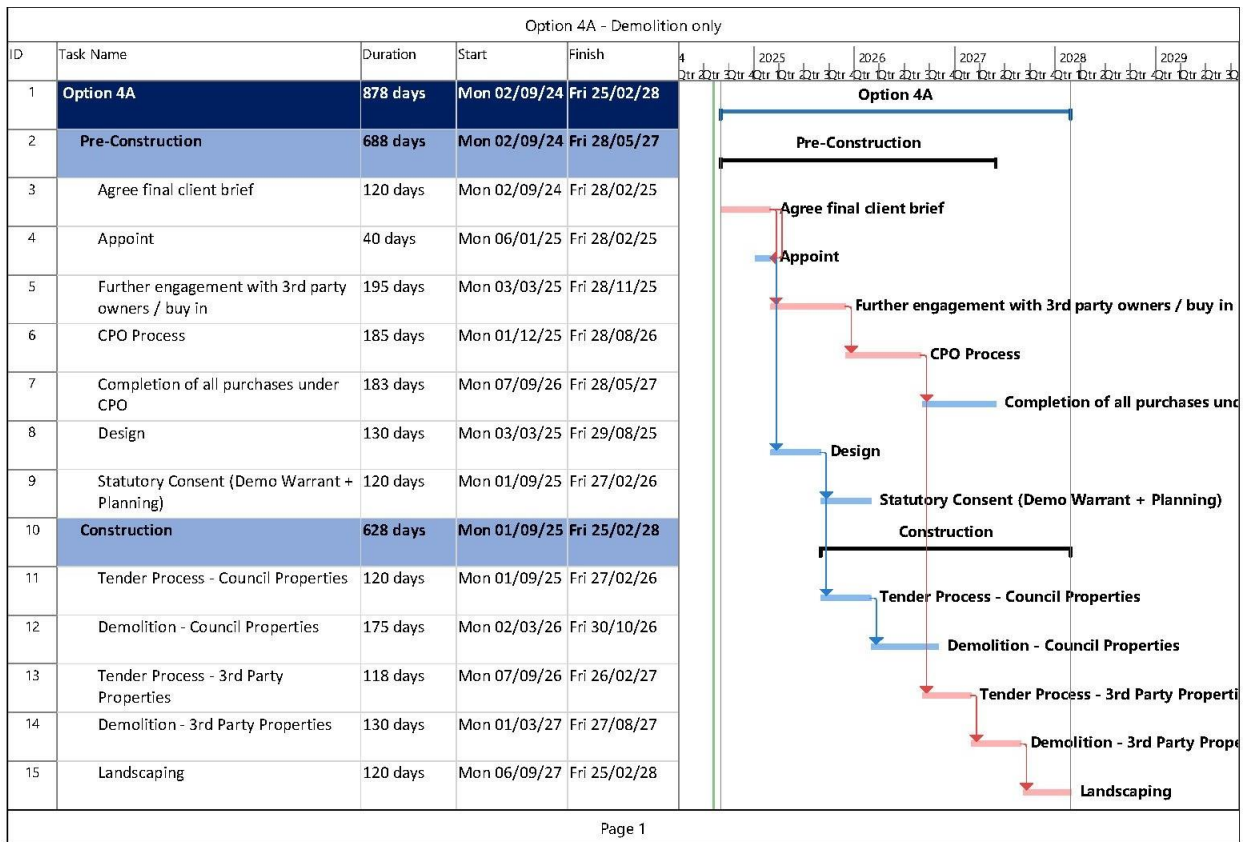
- Dates and durations are indicative and subject to change. Following selection of preferred options, there will be a detailed review of required tasks, resources and respective timescales. The programme will be expanded and updated accordingly.
- To simplify tasks and their durations, start dates have been shown as the beginning of the month and finish dates have been shown as the end of the month.
- Tasks have generally been assumed to be consecutive, with start dates dependent on their predecessor's conclusion. A more detailed review of the preferred option could result in greater overlapping of tasks and thus shorter overall duration.
- For all options, a more thorough understanding of the limitations around third-party ownership will be required to develop and detail the programme.

Specific:

- For Option 3b, it was assumed that the RAAC remedial works and the EESSH2 works would be undertaken concurrently, with a slightly longer construction duration overall than Option 3a.
- For Option 4a, it was assumed that demolition can progress in two stages, first as demolition of the council properties which have already been voided, and second as demolition of the third-party properties once legal processes have concluded.
- For Option 4b, it was assumed that demolition would form part of a longer-term project, and as such was not phased. In addition, phased demolition and accompanying new build could be phased depending on the agreed outcome.



6.2 Option 4a Programme



7. Risk Summary

The project has a number of key risks that will require to be considered no matter what option is chosen. Throughout the project there will be reputational risk if whatever actions taken, and decisions made, are not seen to be properly explained and carried through in an orderly and professional manner. It is accepted that this is a high-profile issue that will face strong scrutiny at all points in the process with local, national and online social media holding in what is happening.

It is likely that as part of the process, a communication strategy should be put in place from day one and constantly reviewed.

In the short term, the two major risks that will need to be managed are as follows:

Firstly, with all the Council tenants being moved out by the end of the year, ensuring the estate is secure and anti-social behaviour does not develop is a key issue. Large areas of the estate will be empty, and this is likely to cause issues. The longer the properties lie empty, the more likely the issue is to increase. There will still be people living in and around the estate, so their safety and security will need to be taken into consideration.

Secondly there will be the interaction with the third-party owners, private tenants and owner occupiers. This will be a key ongoing interface and will need to be managed appropriately. An action plan for managing this key interface will need to be put in place. Again, this will be scrutinised potentially in the public eye, and we will need strict protocols in place for engagement.

In the medium term, whatever option is chosen will require a detailed Risk Assessment and Risk register prepared for the chosen option.

8. Scoring

8.1 Introduction

The scoring has been split into two distinct sections, societal and commercial. The societal element has been collated from the results of the engagement plan and the survey results. The survey results have assisted in informing the way forward. The commercial element has been prepared, taking account of current costs on each of the preferred options and NPV at 5% inflation per annum to discount future costs to return a value at today's money.

8.2 Scoring Matrices

Societal Scoring Matrix

The societal evaluation considers the impact of each option on the immediate community as well as the broader impacts across the wider community in the city.

The Strategic Objectives were agreed with ACC in evaluating the societal impacts, which is detailed in Appendix G.

Commercial Scoring Matrix

The commercial scoring matrix has only considered three options. Option 2 and option 3a have been discounted from scoring as these are only considered to be temporary solutions that would require further Council commitment to future costs to complete the works following commitment to the temporary works. This would mean a future commitment to costs further down the line which would impact the budgets. There would be a significant element of double costs to move back to the properties to undertake permanent solutions. While this relates to the scoring, there will be further costs incurred at a later date to manage the disruption to tenants if there is a need to move out and be re-housed temporarily.

The commercial evaluation assessed the capital costs and modelled the NPV over a 60 year period based on 5%, which is detailed in Appendix G.

9. Conclusion & Recommendations:

9.1 Conclusions

In conclusion, the programme's goal is not only to address any public safety concerns and structural issues posed by RAAC panels, but also to enhance the overall living standards and sustainability of the Balnagask properties. The council's commitment to a thorough and transparent decision-making process will be key to achieving a solution that is safe, cost-effective, and aligned with the community's long-term interests.

Upon reviewing the remaining three shortlisted options, according to the Commercial scoring, none of the options yield a positive NPV over the 60-year review period. Option 4a has the lowest capital expenditure. This option would permit in the short-term demolition of the units and potentially enable the development of various Council and other types of affordable housing in the medium term, subject to the availability of funding sources. It is noted that Option 4a did not receive a score within the Commercial scoring, as no income is generated through demolition alone, resulting in a consistently negative cash flow.

Option 3b is not commercially viable due to the high capital costs and large negative result in the NPV. However, the decision-making process within the Council will need to consider the impact of removing 366 Council houses from the portfolio, if there is demand for these units, and whether the capital resource can be best spent elsewhere within the Council. Regarding the requirements to upgrade the Council Housing stock across the city, this location is likely to necessitate significant expenditure. It should be noted that these properties were constructed in the 1960s, making them approximately 60 years old. The Council will need to evaluate whether investing substantial sums of money now and in the future represents a prudent use of their capital. This type of assessment will need to be carefully considered.

Option 4b to demolish and provide new build units, while attractive as an option, is not considered to be financially viable given the significant capital costs involved and the likely impact this will have on the Council budgets across a wide range of services and projects at a time where there is extreme pressure on the Council budget. This is not considered to be viable in the short term unless the Council have the funding available. It is potentially part of the solution to look at the medium-term option of future re-development of the area to include new housing through some direct provision, partnership working and other Social Housing providers being sold sites to undertake their own development.

We are not aware of the wider Council policies, requirements and priorities which will need to be taken into account when deciding the next steps and preferred option. We would note that from a health and safety perspective and to limit the risk to tenants and ACC liability, the immediate removal of tenants and demolition of the units appears to be the most logical solution. This takes into account that, whilst Option 3b allows for works to mitigate RAAC issues, the capital expenditure for this intervention on 60-year-old properties does not represent best value, nor does it align to ACC's strategic objectives. The Housing Revenue Account (HRA) is under considerable stress due to the recent and ongoing demands of maintaining, upgrading, and renewing the current housing stock across the city. Therefore, in terms of costs and impacts on the Council's budget, Option 4a has the least commercial impact in the short term, provided it aligns with the broader Council policies, requirements, and priorities. It is crucial that the needs of the tenants and their housing requirements are integral to this review and a key consideration in the decision-making process. Ensuring that tenants are adequately housed and their needs are met should be a priority, alongside financial and strategic considerations.

9.2 Recommendations

Through assessing each option against ACC Strategic Objectives via engagement with the community and key stakeholders, and as documented within this Paper, it is evident that all Options have a deleterious impact upon the financial resources of ACC. All dwellings have lifespans and those constructed at the time of Balnagask have exceeded their initial life expectancy. Although RAAC is evident, with housing stock of this age, significant maintenance and investment is required with the addition of new energy requirements proposed under the ESSH2 proposals to ensure such stock is able to be rented. Any further investment in the current stock will need to take account of the remaining lifespan of these units and the potential need for further costly intervention to either maintain or replace this stock in the coming decades.

The key driver is safety and the duty ACC have to their citizens, which in this instance is the safety and wellbeing of their Council Tenants. It is evident that the majority of Council Tenants have been vacated and are in the process of being vacated and re-homed, demonstrating that ACC is actively addressing this objective.

ACC have a responsibility to manage the budget within ever increasing financial demands and via reduced resources. As a consequence, the obligation is consideration of which option is the optimum use of capital.

ACC have advised that there is already significant pressure on the HRA in future budgets, although capital is identified for future maintenance of void properties. With all options, ACC are prioritising the safe refuge of Council Tenants. With all Council Tenants rehomed, this will displace a significant portion of the population of Balnagask. As such, there is concern of ever increasing societal and security issues which are currently arising. The least costly option is demolition as this would have the least impact to ACC capital budget and therefore least impact upon the service delivery duties across the city. It is clear that in the short- to mid-term, this would have an impact to Balnagask and the wider communities of Torry and surrounding areas. However, currently without an alternative route of funding the other options, whilst not addressing the societal issues remains a viable alternative to re-development.

It is recommended that the Council consider the next steps at Balnagask within the wider context of the current Council house stock across the city, the demand for this type of property and how it can best spend its limited resources. As part of making this decision, we would recommend that the Council consider what best to do with the units at Balnagask given their age and condition within the context of the broader and competing priorities that they have.

To maintain the units and ensure they have an extended economic life means undertaking both the replacement of the roofs and the ESSH2 works at Balnagask, which will require expenditure in excess of £60m.

Provided that Option 4a and Option 4b are in line with the Council's broader policies and Strategic objectives, the least impact on the HRA would be to demolish the affected housing and to work through a plan to bring new high quality affordable housing to Balnagask that is in line with the Council's requirements to provide high quality social housing that meet current standards and Housing for Varying Needs.

Despite the loss of Council house units and the need to purchase properties from private owners, demolition appears to be a more suitable option as it will allow the Council to focus on other priorities and allow the Council to consider the medium- to long-term future of the Balnagask area and the requirements for new housing. There is still a continuing need for social housing to be provided within the city and the recent developments that have been undertaken across the city to provide new Council housing at Tillydrone, Kaimhill, Summerhill and Cloverhill provide new high-quality accommodation that is in line with Housing for Varying Needs and Gold standards. By looking at a medium-term strategy for the site, the Council can look at current and future likely housing need, modern design criteria for the homes and the overall estate, and consider future funding options and partnership arrangements.

9.3 Further Considerations & Next Steps

Once the outcome of The Council Committee is known, there will be a requirement for a more detailed review of the preferred option supported by a detailed action plan and programme. Our recommendation is provided in Section 9.2 of the report.

There is likely to be a requirement for further consultation to go along with this to provide the key stakeholders with further rationale behind the decision taken and the likely timescales.

The primary driver for demolition being the preferred option is the budgetary impact upon the Council's finances and the consequential impact to the wider citizens of Aberdeen, loss of services and reduction in amenities across the city. Option 4a does not address the societal objectives. It is therefore recommended that a greater focus on a mid- to long-term, triple bottom line sustainable solution is developed through the provision of new social and affordable housing in the area. A masterplan will need to be prepared to establish what replaces the existing house units within the area. This should consider the future housing needs for both the local area and for Council / affordable housing in Aberdeen. A medium-term plan to regenerate with new modern housing that meets both the needs of Council Tenants and potentially that of private owners and other partnership organisations can provide a good outcome.

Consideration could be given to looking at partnership arrangements for further housing development with joint venture partners for providing some mixed tenure accommodation. This would be considered as part of the master planning exercise.

The Council should scenario plan each option in terms of budget and time for delivery to provide a clearer understanding on the consequential impact.

A specific strategy should be developed for private owners. This should be developed in consultation with the Council's Legal & Procurement department as well as specialist legal support. There are clear sensitivities associated with such owners, so prior to any consultation, it is recommended that this is fully developed.

For this approach, a full detailed masterplan should be considered that will involve the Council and a full design team of architects, engineers, landscape architects, and quantity surveyors to provide a comprehensive plan that covers both the short term and longer terms options for the site. This can be brought back for future consideration for the Council including fully costed options for short-term works and those in the medium term. A more detailed review of the potential approach to the use of CPO powers as a last resort should also be included to ensure that there is a detailed plan that can be fully considered by Committee.

AR are not privy to ACC's future capital commitments or the broader strategic objectives and policies. Ensuring the future redevelopment of the area is in line with these broader objectives will be a key part of the next steps.

APPENDICES

A – Technical Documents

A1 – Engineer Appraisal Report

A2 – Building Surveying-Fabric Assessment of Void Properties & EPCs

A3 – Architectural Assessment Report

B – Commercial Documents

B1 – Commercial Report including Capital Costs and Net Present Value

C – Energy Documents

C1 – Carbon Assessment Report and Modelling

D – Stakeholder & Community Engagement Documents

D1 – Statement of Community Involvement

D2 – Survey Results

D3 – Survey Results, Qualitative responses

D4 – Qualitative Appraisal of Options

E – Health & Safety Documents

E1 – H&S Report

F – Legal Documents

F1 – Guidance Note on CPO / Legal Obligations

F2 – Site Layout indicating Tenure

G – Scoring Matrices

G1 – Societal and Commercial Scoring Matrices



AtkinsRéalis



AtkinsRéalis PPS Limited

2 Atlantic Square
York Street
Glasgow
G2 8NJ

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