Achnaha aka KILCALMONELL Free Church
Clachan Kintyre

Response to Client Requirements

1. Immediate Essential Repairs:
Refer CDC Report for structural repairs

2 & 3. Preservation of key architectural features:
Refer Conservation Assessment & CRGP cost estimate

4. Windows:
The existing windows require to be overhauled with the aluminium opening lights replaced. The upper arched lights open using a pulley system.

With regard energy efficiency internal secondary glazing could be installed though this would prevent windows opening for natural ventilation. It may be sensible to leave 4 windows (2 each side) as opening, installing secondary glazing to the remainder. Alternatively blinds with thermal linings could be installed.

5. Removal of dwelling:
For costs see CRGP cost estimate.
Existing timber floor: part of this floor has been removed (5x8m approx) and replaced with concrete. (see 14)

6, 7 & 8. Options: See Scheme Designs sk 1-4.

9. Energy Efficiency:
See CRGP cost estimate for insulation to pitched roof. The vestry/rear building will require to comply with current Building Regulations.

10. Flood Protection:
The building is within SEPA's 200 year flood area. While there is no historic flooding of the area a mitigation scheme (using the existing stone boundary walls) may be required.

11. Off-street parking:
6 + 1 accessible parking spaces can be achieved – see 20.20.sk5.

12 & 13. Utilities:
The building will be re-wired and re-plumbed. Mains electricity, water and foul drainage are available on site. The electrical supply may be required to be upgraded depending on the choice of heating system.

14 & 15. Heating:
The building is in good condition generally.
Solid walls = heat store when warm and dry but not in wet/cold.
Insulation = little opportunity to insulate without major changes to fabric.

- Roof – exposed sarking is a feature. Insulation could be added between rafters and new lining added.
- Walls – lath & plaster & timber dado could be removed; 40mm wood wool insulation added (more can create condensation between stone and insulation). This would have a benefit but be expensive and HES might not agree with this intervention.
- Floor – 600mm solum at south end, concrete floor in living room: insulation would entail lifting floor so again expensive if Underfloor heating system is not installed.

Options:
Ground Source Heat Pump – cost effective renewable providing constant low grade heat all year round; sufficient land for coils.

- With limited ability to install insulation in main building and as there is likely to be a large open volume, either a large area of radiators (low grade heat + twice the number of radiators compared to fossil fuel heat source)
- Alternatively Underfloor heating pipe work installed in screed above a new highly insulated concrete slab removes the need for radiators.
- Pros – can be kept on all the time, preserves the building fabric and avoids big temperature fluctuations; cheap (in electricity/oil/gas terms) to run. No major hot water needs so 90% of output for heating.
- Cons– slow reacting so will not react quickly if there is a sudden steep temperature drop.

Air Source Heat Pump – Cheaper to install but much less effective in an un-insulated building (especially of this volume). Probably not suitable.

Photovoltaic Cells – These could run an electric radiator system in summer boosted by mains electricity in winter. May be allowed in garden (at the rear - still facing south); could be effective in keeping running costs low in conjunction with GSHP

Oil/gas – Low cost installation, high running cost; intermittent heating.

Electricity – High cost, radiators could be installed but large open volume may affect effectiveness.

Though there are pros and cons for each heat source, a grant funded GSHP would be a good choice and beneficial to preserving the building fabric.

16. Decoration:
See CRGP cost estimate

17. Other possible costs arising from various options:
Low cost platform lift – option 6 – see CRGP cost estimate.

18. Options:
The scheme design options are based on CVHC Brief and include various options for community consideration -drawings 20.20.sk1 - sk4.

The Hall could vary from a single open space with minimal additional facilities to a more complex Community Hub where smaller rooms could give regular revenue generation.

The overall height of the main space could allow both a large 3m+ high Hall at ground level with smaller multi-purpose rooms above for:

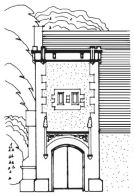
- Meetings
- Medical surgery
- Library/book swop
- Therapy room
- Business start-up
- Workshop, etc.
- Somewhere for young people to meet their peers
- Fitness area
- Local History exhibition area

While a more robust business case would be required, a wider community use may appeal to funders.

COST ESTIMATES

Downtakings and essential repairs are included in each estimate as is the cost of a GSHP and related work.

Each estimate than varies with the amount of work required in each scheme.



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