



Report of the Cabinet Member for Housing Energy & Building Services

Cabinet – 16 November 2017

More Homes Pilot Scheme Milford Way and Parc Y Helyg Sites

Purpose:	To update Members on the completion of the first more homes pilot scheme at Milford Way and request approval for the second Pilot site at Parc Y Helyg to comply with FPR 7.
Policy Framework:	More Homes Strategy Council Constitution:- FPR procedure rules
Consultation:	Finance, Legal, Access to Services.
Recommendation(s):	It is recommended that Cabinet: 1) Note the progress and final costs from the first pilot scheme at Milford Way, Penderry and formally approve the financial implications in line with FPR7. 2) Approve the allocation of £500,000 for the scheme for Parc Y Helyg for the enabling works, the detail of which will be delegated to Director of Place, in line with the requirement of FPR7. 3) Confirm a further report is required to Cabinet to confirm which options should be progressed at Parc Y Helyg together with the final expected costs in line with FPR7
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1. Introduction

- 1.1 With construction of the first pilot project at Milford Way, Penderry nearing completion, it is logical to review progress and any “lessons-learned” so that the maximum benefit can be derived from the Pilot project allowing analysis to be undertaken to inform any future project delivery. This “gateway” report sets out the results of this financial analysis and identifies opportunities for their adoption into the forward programme to deliver further efficiencies and value for money.

2. Objectives of the Pilot Scheme

- 2.1 The fundamental need for more affordable homes in Swansea was set out in the Council’s More Homes Strategy. The Strategy also outlined the rationale for the proposed pilot schemes. Locations for the pilot schemes were confirmed by Cabinet in February 2016 as Milford Way and Parc Y Helyg.

This initial report only identified the principles of the two sites with the detail of the scheme being delegated to the Cabinet Member for Next Generation services and the Director of Place.

- 2.2 The pilot schemes are being funded directly by the HRA and as such the objectives of the pilots are to test a number of issues which in turn will help inform the longer term strategy. These include:

- Overall financial viability of directly developing new Council housing;
- The practical, organisational and capability issues that will need to be addressed as part of the ongoing More Council Homes programme;
- Specification options to balance the viability of the scheme with the affordability for the occupants and overall sustainability of the design.

This first scheme will result in the Authority being able to deliver 18 new Council homes for social rent within a relatively quick time.

One consideration was that the pilot schemes should be small. This was a prudent approach, as there was uncertainty over the costs of directly funding and building passivhaus standard homes for social rent, and the viability of directly funding council house new build. The purpose of the pilots was to expose and assess these risks and therefore, a smaller scheme would limit the implications if anything went awry.

3. Description of Scheme

3.1 The mix of new homes for each site was determined as:

- Milford Way – 10 no. 2-bedroom semi-detached homes and 8 no. 1-bedroom apartments
- Parc-y-Helyg – 8 no. 2-bedroom apartments and 8 no. 1-bedroom apartments.

3.2 A range of varying build-standards were considered for the pilot. These included building to Building Regulations standard, Building Regulations 'plus', Fabric First, Passivhaus and SOLCER. Cabinet in their report of the 17th September 2015, determined that the Milford Way pilot site would be built to Passivhaus 'certified' standard.

It followed that as speed of delivery was a priority they would be constructed in timber-frame. However, given that these were first direct builds for a generation and that the process for designing and constructing Passivhaus is less straightforward this did have an inevitable effect on the timescale for project completion. Initially it was expected that project completion and phased handover could take place between April and September 2017 and whilst the overall date is close to being achieved delays particular with the confirmation of layout and numbers, supply chain of the specialist products plus complications with arranging a phased handover on an "occupied site" has led to an impact on the timeline although all properties will be completed within about 4 weeks of the original overall completion date.

3.3 As the pilots are new Council homes for social rent they have been designed to meet statutory requirements for social housing. Welsh Government have also issued consultation to make Design Quality Requirements (DQR) mandatory, this standard which includes a commitment to Lifetime Homes, has also been included in the design.

4. Financial Implications

4.1 Financial Appraisal

As this is the first direct build project by the Council, it is important that a robust financial appraisal is carried out, which will inform any future phases of the More Homes programme, as well as measuring the scheme against the agreed objectives of testing;

- Overall financial viability of directly developing new Council housing;
- The practical, organisational and capability issues that will need to be addressed as part of the ongoing More Homes programme;

- Specification options to balance the viability of the scheme with the affordability for the occupants and overall sustainability of the design.

4.2 Financial Evaluation

A number of key questions need to be explored as part of this evaluation. These are as follows:

- 4.2.1 Has the Council been able to deliver new homes directly on a comparable basis with other homes built to the same standard and can the in house Corporate Building and Property services team demonstrate that it can be competitive in such a market place?
- 4.2.2 What choices exist when comparing the Passivhaus standard to alternative “high energy efficient” specifications and what is the indicative “extra over” cost and is this likely to be value for money in relation to potential benefits to tenants?
- 4.2.3 What opportunities may be taken to reduce the costs for any future schemes?

4.3 Total Cost for Milford Way

As the scheme is nearing completion, final costs are now fixed and no more anomalies are expected so this report can outline the final costs for Milford way with a summary shown in **Appendix A**.

The total cost for the project included all fees and charges now stand at £2,762,324 or £153k per unit. These costs are estimates by CB&PS and have not yet been fully charged to the ledger.

However, the site has been difficult to develop in terms of external works, which, at £646,379, represent a high proportion of the total cost. This is as a result of a number of reasons including the layout and extensive drainage works required to comply with Welsh Water restrictions in the area.

It is normal when reviewing costs and evaluating comparison to refer to “build costs” only as external works, services and ground works will always be site specific and can vary considerably.

As such, the build cost equates to £1,876,594 with a cost per unit of £104k.

4.4 Benchmarking

In terms of benchmarking, it is quite difficult to draw comparisons on a like for like basis. This is because even where Passivhaus schemes have been completed they have mainly been outside Wales, meaning that they are not required to comply with DQR and WHQS requirements.

In addition, there is the added cost of sprinkler systems also installed in Wales which isn't applicable elsewhere in the UK. However to enable a like for like comparison the following adjustments have been made for "abnormal costs".

- **Sprinkler costs (£54,484):-** these have been adjusted where the comparator costs are UK based since there are only required in Wales.
- **Additional costs for drainage attenuation (£78,003):-** (when comparing overall scheme).

4.5 Evaluation of delivery costs of Passivhaus against other such providers

This evaluation looks at comparing the Council's costs of delivering the scheme to a Passivhaus standard and how these compare with others. However, there are limited direct examples where people would share the data but this is sufficient to provide a meaningful analysis.

Example 1: after adjusting to reflect the above "Sprinkler" costs, the Council total cost divided by total area of dwellings equates to £1,772/m² Comparison with a large English based RSL who has built 9 PH scheme, confirm their overall average build cost at £1,809/m² although costs on their most recent scheme have risen to over £1,900/².

Example 2: at the start of the project BRE were engaged to carry out some high level analysis of the options prior to PH being the selected route. They captured significant data from across the UK around average build costs (house only) at £1,553/m² for a flat and £1,245/m² for a Semi-detached house.

The Council comparable rates for Flats are £1,511/m² and £1,196/m² for semi-detached houses, so again appear to be in the right "ballpark". The calculations for these cost comparisons can be found in **Appendix B**.

This limited analysis would seem to show that the Council can demonstrated that it has delivered its first pilot properties at a comparable rate to those undertaking properties to a Passivhaus standard. This is encouraging and the first build has been a significant learning curve for all. However, this is a small one off pilot and caution would need to be expressed in terms of scaling up to much larger projects.

In addition there are many "lessons learnt" which are being explored for the next scheme such as better local supply chain engagement and specification changes which will allow future costs to be reduced

4.6 Passivhaus V's "Traditional"

Analysis of the construction costs for Milford Way compared to BRE data, SPONS (a nationally recognised Contractor's pricing book) and Welsh Government costs indicate a 10% to 12% price difference on "build cost" between Passivhaus and traditional building costs to meet minimum building regulations. As the external works would be the same regardless of the specification the difference when expressed as a % of total costs equates to in the region of 7 to 8%

However the Council has made it clear that it is looking at its long term strategy and to build to a standard above building regulations so that it better meets its policy of tackling fuel poverty and future generation's obligations. As such it has always indicated a minimum standard would not be acceptable and to this end, the next scheme for Parc Y Helyg will be seeking to compare the Passivhaus standard with a "fabric first" high energy efficient property which will be referred to as a 'Swansea Standard'.

To best make this analysis as there is little evidence to compare with it is intended, to twin tack the costing of the two options of "Passivhaus" and "Swansea standard". Whilst works are planned to commence in the spring it will be practical in the meantime to progress the infrastructure and drainage works at Parc Y Helyg to maintain progress with the scheme.

As explained above, it is very difficult to establish accurate comparisons on a "like for like" basis, particularly for a scheme constructed to Passivhaus in Wales, due to the varying requirements and regulations.

In addition, the analysis gives enough confidence to show that the extra over costs of Passivhaus would be in the region of 10 - 12% of build cost. This is comparable with other providers but it is clear that this differential can possibly be reduced to below 10%.

Following a review of the design and scope of works at Milford Way opportunities have been identified to the design that will generate saving of £25 - £30/m² on the buildings costs which equates to around a 2% or £29k reduction in the Passivhaus cost on Milford Way (**Appendix C**).

5.0 Lessons learnt and next steps

- 5.1 As indicated above, it has proved difficult to obtain comparator data for the purpose of this exercise but there is enough confidence to provide a recommended way forward in this report. Notwithstanding this, an approach has been made to Welsh Government officials to look at this as an opportunity for more Local Authorities in the housebuilding world to try to establish a series of benchmark data that can be collected on a consistent basis. This would enable Local Authorities and Welsh Government to make decisions based on reliable financial information.

In addition, a number of areas have been highlighted where there are opportunities to review the process, specification or delivery methodology, which could have a positive impact both on costs and outcomes. These are detailed in **Appendix D** and are summarised as follows:

- i. Site selection
- ii. Timescale for delivery
- iii. Decision to proceed with Passivhaus house.
- iv. Design issue.
- v. Restricted supply chain procurement due to Passivhaus standard.
- vi. Enhanced specification choices.
- vii. Supplementary heating
- viii. Pilot scheme experience/Knowledge gained.
- ix. Review external works
- x. All costs “cost comparison” benchmark data

5.2 Where these opportunities are linked to the costs of the delivery of Milford Way, these are being reviewed in order to try and assess the potential benefit and reduction that these could make for Parc Y Helyg.

5.3 It is intended to commence the infrastructure and drainage works at Parc y Helyg prior to Christmas, while the comparative costs of the building construction are prepared. This will ensure the planned Business Plan spend will be maintained with a view of commencing building construction works on the site, as per the agreed selected construction method.

6.0 Procurement

6.1 The decision to progress with the Passivhaus standard has meant that local suppliers who did not have Passivhaus accreditation could not tender for the work with the major products coming from Europe. Many of the components were also “supply and fix” further reducing the opportunity to tender locally. In addition, legalities emerging as a result of using International and National companies and the need for “upfront payments” resulted in lengthy delays and impacts on site program.

When procuring materials the usual wording would be equal and approved, but as we had to meet the Passivhaus standard, we could not include this wording, which would have allowed others to tender for the work.

6.2 We are reviewing the process and specification for Parc Y Helyg to maximise the opportunities for the supply chain which would have the benefits locally but also potentially reduce costs by opening up to a wider range of suppliers.

7.0 Innovation Housing Fund Bid

The Council has submitted an application to Welsh Government's Innovation Fund Bid for a grant towards the Milford Way scheme for 2017/18 and intends to do the same for Parc y Helyg, which if successful will be payable for the financial year 2018/19. Any update to this will be reported at the appropriate time.

The Innovative Housing Programme will initially be funded by £20m over the next two years, which will contribute to the 20,000 affordable homes target the Welsh Government aims to provide over the term of government. The innovative homes, which will help to significantly reduce or eliminate fuel bills, will inform the Welsh Government about the type of homes it should support in the future. WG have indicated that they will fund up to 58% of the scheme costs, plus 100% of innovation costs attributed to the innovative elements within the design.

8.0 Funding

8.1 Capital - Milford Way

Funding has been allocated within the HRA Capital Budget and Programme, allowance of £10m for More Homes Schemes over the period 2016/17 to 2020/21.

The final outturn costs for Milford Way is £2,762,324 including all construction costs, design and planning fees. This is the final cost estimated by CB&PS but these costs have not yet been charged to the ledger.

8.2 Capital - Parc y Helyg

Work is still progressing to finalise details and specification for Parc y Helyg (in line with the chosen specification outlined in paragraph 4.6). The indicative budget for the scheme based on Passivhaus is £2,975,548 and this figure reflects extensive infrastructure works to the site, including major retaining walls, diversion of existing high level power cables, drainage attenuation and adjustment to ground levels due to sloping site.

A full FPR7 report will be bought forward for the scheme when costs are completed; however, a sum of £500,000 needs to be available to fund enabling works, as detailed above, on site prior to the construction method being agreed.

8.3 Revenue

Whilst maintenance costs will be met from the existing Housing Revenue Account budget, the actual costs, particularly over the longer term are unknown as it depends on a number of factors in terms of extent of repairs

or replacement versus the fact that there would be limited requirements over the initial years of a new build property.

It is believed by sourcing more “local” products this differential can be reduced on the next scheme if the lessons learnt in this report are followed.

9.0 Equality and Engagement Implications

An EIA screening form has been completed and reviewed (**Appendix E**). The agreed outcome was that a full EIA report was not required as there are no equalities and engagement implications at this time. Any developments will be subject to normal planning procedures.

10.0 Legal Implications

All external goods and services will be procured in line with Contract Procedure Rules and European procurement regulations as appropriate.

Background Papers: None

Appendices:

Appendix A: Cost Breakdown

Appendix B: Cost Comparison

Appendix C: Potential Cost Saving for Parc Y Helyg

Appendix D: Opportunities/Lessons learnt

Appendix E: Equality Impact Assessment Screening Form