

REPORT TO: Education Committee – 24th October, 2005

REPORT ON: Whitfield Primary School – Demonstration House
Contract Nr. 04-643

REPORT BY: Director of Education and City Architectural Services Officer

REPORT NO: 634-2005

1.0 PURPOSE OF REPORT

1.1 To obtain approval to proceed with the Demonstration House project.

2.0 RECOMMENDATIONS

2.1 That approval be given for :-

- a) the City Architectural Services Officer to proceed with the procurement and construction of the house
- b) the Director of Education to lease the house to SCARF for a period of three years

3.0 FINANCIAL IMPLICATIONS

3.1 The Depute Chief Executive (Finance) has stated that expenditure of £30,000 can be funded from the following sources :-

Education Department's Capital Plan 2005/2006	£10,000
Repairs and Renewals Fund	£10,000
External funding from SUST	£10,000

3.2 In addition to standard upgrades of kitchen, bathroom, roof and electrics further energy efficiency savings and installations using renewable energy sources will be introduced. These costs will be met from donations of labour and materials from the commercial sector.

4.0 LOCAL AGENDA 21 IMPLICATIONS

4.1 This project will impact positively on all of the Local Agenda 21 implications where they apply.

5.0 EQUAL OPPORTUNITIES IMPLICATIONS

5.1 None.

6.0 DESCRIPTION OF PROJECT

6.1 The Demonstration House will be an exemplar building for sustainable construction and will be the embodiment of the Dundee Sun City campaign. It will embrace the use of sustainable products, waste minimisation and renewable energy sources.

6.2 The janitor's house at Whitfield Primary School is a single storey flat roofed house built circa 1960 with all the inherent problems of a typical building of that era. The insulation is inadequate and there is evidence of cold-bridging in several areas. This has been demonstrated by the use of infra-red technology provided by a local company. It is considered that the development of an existing house (as opposed to a new build) is appropriate as the majority of the housing stock in Dundee is existing and the methods and technologies can be applied to most houses quite simply. The technologies and materials to be used are all available on the open market - none of it is futuristic or under research.

- 6.3 The principle of the project is to refurbish the house as standard, that is with a new kitchen, bathroom, windows and improvement works to the roof. In addition to this a sun-space will be constructed around the south and east elevations to collect and store heat and the insulation standards will be upgraded throughout. Several proven types of renewable energy technologies will also be employed including solar heating and photovoltaic panels, a wind turbine, a wood-burning stove and geothermal heat pumps.
- 6.4 Once complete the house will be open for three years and available to the citizens of Dundee and other surrounding areas as a demonstration house. Displays and other information will be on show explaining how the various technologies work and meters will measure their effectiveness. A major aim of the project is to educate young people and it is expected that schoolchildren from Dundee, Angus, Fife and Perthshire will visit the house as part of their curriculum.
- 6.5 Meetings have already been held with contractors and suppliers with a view to obtaining donations of labour and materials free of charge and the response has been very positive and as a result it is anticipated that all the costs of the project will be met from donors with the exception of a balance of around £30,000 which can be funded from a grant from SUST, Education Department Capital and the Council's Repairs and Renewals fund.
- 6.6 SCARF, who are partners with the Council in Dundee Sun City have offered to occupy the house during the three years of business. This will mean that the Council will not need to incur expense in keeping the house open for inspection. In addition SCARF have agreed to pay utilities costs and also an economic rent to the Council for this period.
- 6.7 Media coverage of the project is expected to be substantial with BBC Scotland already showing interest.

7.0 **CONSULTATIONS**

- 7.1 The Chief Executive, Depute Chief Executives (Finance and Support Services) and the Director of Education have been consulted in the preparation of this report.

8.0 **BACKGROUND PAPERS**

- 8.1 None.

Anne Wilson

Director of Education

John T P Porter

City Architectural Services Officer

5th October, 2005

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