

10<sup>th</sup> July 2007

## NEWHALL PRIMARY SCHOOL FEASIBILITY STUDY

### 1. Background

Located on the North side of the Black Isle Newhall Primary School with its adjacent playing fields has , for many years, been an important and attractive part of the village of Newhall, With the construction of a new school nearby , the existing building is now vacant.

In February 2006 the Highland Small Communities Housing Trust commissioned David Somerville Architects to undertake a feasibility study in to the possible use of the existing for affordable housing.

Consultants engaged for preparation of the report are

KWA Engineers Athole Court Dingwall IV15 9SH  
Torrance Partnership Quantity Surveyors 165 High Street Invergordon IV18 0DL  
David Somerville Architect Balchraggan Studio Abriachan IV3 8LB

Drawings attached to this report are

- 00 location plan
- 01 site plan
- 01A site services
- 02 existing school proposed ground floor plans
- 03 existing school upper floor proposed plans
- 04 existing school proposed south east and north east elevations
- 05 existing school south west and north west elevations
- 06 existing school existing plans
- 07 existing school existing south east and north east elevations
- 08 existing school existing south west and north west elevations
- 09 new houses general north elevation
- 10 plans and elevations of 3person and 5 person house

### 2. Report

#### 2.1 Roads and Access

Following meetings with Highland Council Roads Department an access to the Newhall / Resolis public road was agreed with its point of access at the west end of the existing playground. This was required to maintain visibility splays towards the east.

The road is laid out with a 3.5 metre width with passing places. A turning head for large service vehicles has been included to bring the road layout up to adoptable standards. At detailed

planning stage and in consultation with Albyn housing association we recommend that the possibility of avoiding large vehicles from entering the site by removing the turning area could be discussed in relation to road adoption, servicing issues and safety concerns.

Parking provision is made for 22 cars being 2 cars per dwelling as requested by THC Roads Department

## 2.2 Site Layout and Landscaping

The site layout is largely determined by the position of the existing school and the road access. 6 new houses are set out in a semi terraced layout with access to the rear by paths between and behind the garden areas. Parking is located on paved areas interspersed with trees to the North side of the houses. Some rebuilding of existing stone walls will be necessary to maximise sightlines at the road junction. A detached path will give access from the site to the East of the village. Native tree planting is shown on the grassed area between the public road and the new site access road. The site area is 0.59 hectares in total

## 2.3 Site Servicing

### Water

Scottish Water have indicated in their letter dated 16<sup>th</sup> May 2006 that sufficient capacity existed at that time to service this development ( **see Appendix A**)

Confirmation of supply will only be issued on submission of water supply application following full planning consent being achieved.

### Foul Sewage Treatment and Disposal

Currently the existing school is served by a septic tank located in the field to the south of the school. This septic tank has not worked well over many years probably because of lack of porosity in the subsoil. Porosity tests were carried out for effluent and SUDS purposes and this confirmed that subsoil conditions would not permit discharge of effluent to ground.

SEPA have indicated in their letter dated 15<sup>th</sup> May 2006 (**see Appendix B**) that a treatment plant providing secondary and tertiary would be required to allow consent to be issued for discharge to the Newhall Burn. The sewage treatment includes Klargest secondary treatment and reed bed tertiary treatment prior to discharge. (**see engineer's report Appendix F**) It should be noted that this will require right of access over the ground to the south of the school for both installation and maintenance of the sewage treatment plant and equipment. The issue of right of access for these purposes is currently being investigated by the Highland Small Communities Housing Trust.

Scottish Water have at present a treatment plant serving houses within the Newhall area lying 60m to the East of the school site. It would be technically possible to link in to this treatment plant and this possibility was raised with Scottish Water. Their response to this request is included as **Appendix C**. From this it appears that progress with this issue would require the involvement of the developer and might follow on from a successful outcome of this study and the assistance of Albyn Housing Society.

### Surface Water Treatment and Disposal

The proposal for surface water disposal is included within the engineer's report and is shown on the site services plan. This proposal would also require right of access over ground to the south of the school site.

### **Electricity**

A copy of the plant location and proposed cable routes received from Scottish and Southern Energy for the supply of electricity is included as **Appendix D**.

### **Telephones**

A map showing location of BT plant in the vicinity is included as **Appendix E** and cable routes are shown on the service drawing.

## **2.4 House Types and Design**

### **Existing School**

The toilet block, staff room extension and timber lean to north extension are to be removed retained more or less as existing. The remaining area is converted to provide

- 1 no 6 person 4 bedroom house area 104m<sup>2</sup>
- 1 no 5 person 3 bedroom house area 92 m<sup>2</sup>
- 2 no 2person 1 bedroom studio houses area area 57.8m<sup>2</sup>

each house has a garden in varying sizes  
a glazed canopy is included to provide shelter to front door areas.

### **New Houses**

The proposals for new houses include the following house types

- 3 no 3 Person 2 bedroom houses area 65.5m<sup>2</sup>
- 2 no 5 person 3 bedroom houses area 97m<sup>2</sup>

a garden is attached to each house

## **2.5 Construction and Materials**

### **Existing School**

The report on a survey undertaken by Alder Timber Preservation is included as **Appendix F**  
This report indicates that the roof and walls are generally in good condition with limited areas of decay from minor water ingress. In view of the intended life of the building ,removal of all slates, minor repairs to sarking and laying of breathing roof membrane has been included within the costings.. The walls are in generally good condition but will require pointing and making good where areas of the building are removed. Existing windows are not capable of adaption to meet current energy standards and will require renewal in a similar style to the existing windows.

The range of materials and construction types in included within the draft specification (**see Appendix H**)

### **Engineers report**

KWA Engineers submitted specifications for foundations , structure, suds and drainage based on trial pit and percolation tests and this report is attached as **Appendix G**

## 2.6 Heating

Gas is not available in this area. Electric low tariff heating has been included but in view of recent changes to the technical standards it is recommended that the following options be considered at development stage.

1. Ground sourced heat pumps (either individual or shared)
2. Underfloor heating to ground floor of all dwellings – normal radiators upstairs
3. Insulation thickness increased from 200 mm to 300mm in roof and from 150mm to 250mm in walls
4. TJI joists to be used for walls and roof timbers
5. Solar panels to be integrated in to the heating system

## 2.6 Planning Consultation

Discussions with the previous planning officer indicated general approval for the proposals. Following various amendments revised plans have been submitted to the planning Officer for comments and this response is now awaited.

## 2.7 Costs

The total cost of the project is estimated to be £1,274,000. The cost per m2 is £1490

This includes £38,000 for the effluent treatment plant and discharge to the burn. The optional cost of connecting to Scottish Water plant is not known.

The total amount of external works is approximately 29% of the total cost which is high and relates to the high cost of servicing and the high ratio of paved area per dwelling , large garden areas and landscaping costs

The Quantity Surveyor emphasises that the above costs are preliminary and more time would be required to define costs more clearly

## 3.0 Conclusion

The school and playground area at Newhall offer a good opportunity for development. The existing school building converts well to affordable accommodation and the playground allows for sensitive development within the village envelope.

The cost of roads and servicing make this an expensive site to develop and it may be that further investigation will be necessary at development stage to identify cost options for servicing and roads provision.

## 4.0 Recommendation

That HSCHT proceed to development stage with this project