Appendix A - Net Present Value (NPV) Analysis 2013-14

Using the data in Savills stock condition survey and whole stock NPV analysis carried out in 2012/13, a further analysis was carried out specifically for the Beechtrees flats.
To evidence the void levels, data was extracted from the QL housing Management system, for a period of 6 years from 2008 to 2013. The results in the table below shows a comparison of the number of days void and the number of changes in tenancy a property has had in the 6 year period from 2008 to 2013. The figures for 2013-14 have been extrapolated from a half years data to a full year.

add_1	Property Type	2008-9 days void	2008-9 Void Instances	2009-10 days void	2009-10 Void Instances	2010-11 days void	2010-11 Void Instances	2011-12 days void	2011-12 Void Instances	2012-13 days void	2012-13 Void Instances	2013-14 days void extrapolated	2013-14 Void Instances
124 Beechtrees	FLAT	0		0		0		0		0		0	
126 Beechtrees	FLAT	14	1	0	1	0		0		15	1	0	
128 Beechtrees	FLAT	21	1	0		0		0		36	1	0	
130 Beechtrees	FLAT	0		0		0		0		0		0	
132 Beechtrees	FLAT	0		21	1	14	1	0		0		0	
134 Beechtrees	FLAT	0		0		0		0		0		0	
136 Beechtrees	BSIT	14	1	42	1	0		0		0		0	
138 Beechtrees	BSIT	7	1	0		21	1	0		35	1	14	2
140 Beechtrees	FLAT	0		21	1	0		0		0		0	
142 Beechtrees	FLAT	14	1	70	1	14	1	0		0		0	
144 Beechtrees	FLAT	0		0		14	1	0		0		0	
146 Beechtrees	FLAT	0		0		0		0		0		0	
148 Beechtrees	FLAT	0		0		0		0		0		0	
150 Beechtrees	FLAT	0		0		0		0		0		0	
152 Beechtrees	FLAT	0		0		7	1	0		43	1	0	
154 Beechtrees	FLAT	21	1	0		0		0		0		42	2
156 Beechtrees	FLAT	0		0		0		0		0		0	
158 Beechtrees	FLAT	0		0		0		0		0		184	2
160 Beechtrees	BSIT	0		0		0		0		0		0	
162 Beechtrees	BSIT	0		0		0		0		0		0	
164 Beechtrees	FLAT	0		0		0		0		0		0	
166 Beechtrees	FLAT	0		0		0		0		43	1	72	2
168 Beechtrees	FLAT	0		42	1	0		37	2	22	1	0	
170 Beechtrees	FLAT	0		0		14	2	0		0		0	
172 Beechtrees	BSIT	0		28	1	35	2	0		44	2	36	6
174 Beechtrees	BSIT	6	1	21	2	28	1	31	3	5	5	2	2
176 Beechtrees	FLAT	0		0		14	1	0		22	1	0	
180 Beechtrees	FLAT	28	1	0		0		0		0		0	
182 Beechtrees	FLAT	14	1	0		0		27	1	1	1	72	2
184 Beechtrees	BSIT	28	1	14	1	28	2	0		1	1	58	2
186 Beechtrees	BSIT	28	2	0		0		0		120	1	2	2
188 Beechtrees	FLAT	0		0		0		0		0		0	
190 Beechtrees	FLAT	7	1	0		0		0		44	2	0	
192 Beechtrees	FLAT	0		14	1	0		0		0		0	
193 Beechtrees	FLAT	0		0		0		0		0		0	
194 Beechtrees	FLAT	34	2	0		0		0		0		72	2
195 Beechtrees	FLAT	0		21	1	0		0		0		0	
197 Beechtrees	FLAT	0		65	1	11	1	0		0		0	
199 Beechtrees	FLAT	21	1	0		35	1	0		85	1	0	
211 Beechtrees	FLAT	49	1	0		0		0		0		0	
213 Beechtrees	FLAT	0		0		35	1	0		22	1	30	2
215 Beechtrees	FLAT	13	1	42	1	0		0		37	2	0	
217 Beechtrees	FLAT	34	2	21	1	21	1	0		1	1	0	
229 Beechtrees	FLAT	21	1	14	1	14	1	51	2	0		0	
231 Beechtrees	FLAT	49	1	0		14	1	29	1	0		0	
233 Beechtrees	FLAT	49	1	0		7	1	0		29	1	86	2
235 Beechtrees	FLAT	0		0		14	1	15	1	29	1	0	
42 Beechtrees	FLAT	0		0		0		15	1	0		0	
44 Beechtrees	FLAT	14	1	21	2	0		36	1	1	1	0	
46 Beechtrees	FLAT	0		0		7	1	0		64	1	0	
48 Beechtrees	FLAT	0		0		0		0		0		0	
60 Beechtrees	FLAT	0	2	91	2	0		0		0		100	2
62 Beechtrees	FLAT	0		0		0		0		51	1	0	
66 Beechtrees	FLAT	0		0		0		0		0		0	
		486		548		347		241		750		770	
			26		20		22		12		29		30

Average Days Void	523.67
Average Void Instances	23.17
Days Void per Dwelling	9.70
Void Instances per Dwelling	0.43

In the financial year 2013/14, it can be seen that 770 days rent are projected to be lost due to being void over 30 instances or changes in tenancy to 13 dwellings which equates to 24% of the dwellings having a change of tenancy in that year. 100% of the void properties, or 13 dwellings had 2 or more tenancy changes in that year. This is considerably greater than in most of the previous 5 years. This has an effect on rental income and the level of annual repairs needed for the blocks.

From the bottom of the table above it can be seen that the average days void per year for the period is 523.67 days, with the average instances per year being 23.17. This equates to 9.7 days void per property and 0.43 instances per property per year.

As a comparison the figures for the same period for all of the housing stock can be seen below.

2008-9 days void	2008-9 Void Instances	2009-10 days void	2009-10 Void Instances	2010-11 days void	2010-11 Void Instances	2011-12 days void	2011-12 Void Instances	2012-13 days void	2012-13 Void Instances	2013-14 days void Exstrapolated	2013-14 Void Instances
31,165		36,897		29,682		27,792		37,016		73,974	
	709		725		800		748		846		1,146

Average Days Void	39,421.00
Average Void Instances	829.00
Days Void per Dwelling	6.36
Void Instances per Dwelling	0.13

As can be seen there are on average 39,421 days lost as void across 829 changes of tenancy. Which gives an overall average for all stock of 6.36 days void per property, and 0.13 instances per property.

This is considerably better than the average for the Beechtrees flats on there own.

A discounted cash flow analysis has been carried out for this possible option based upon the following assumptions;

There is no Initial cost as such, as this option spreads the investment over the 30 years based upon the requirements specified in the stock condition survey.
The inflated cost for this is £3,008,911 or £55,721 per dwelling.
Rate of inflation 3.2%
Discounted cash flow rate 6%
Annual management and Repair cost per dwelling £2,356
Starting rent for 2 bedroom flat from £70.96
Starting rent for 1 bedroom flat from £62.66
The second and third cycle renewals have been accounted for over the 30 years for Kitchens, Boilers, Heating distribution, Communal doors and Communal Decoration.
The Void days where assumed to be those in the 2013-14 column in the void days table above.

The results of the NPV analysis can be seen in the summary below.

|	Total	Per Unit
NPV	-£763,711	-£14,143
STOCK CONDITION INFLATED	£3,008,911	£55,721
MANAGEMENT & REPAIRS INFLATED	£6,253,658	£115,808
RENT INFLATED	£8,060,592	£149,270

The total inflated expenditure over the 30 years including repairs and management costs taken from the NPV analysis spreadsheet is £9,262,569 or £171,529 per dwelling. As can be seen from the table above the expenditure exceeds the income of £8,060,592 by £1,201,977 or £22,259 per property.

The NPV value in the table above shows that in today's money each flat has a negative worth of -£14,143. This is based on the total expenditure on repairs, programmed works (stock Condition Survey) and management fees and the total income from the rent, all of this is inflated and then discounted down for the 30 year period.

The investment against rent graph below, includes all income and expenditure elements mentioned in the paragraph above, and displays them in a bar graph for each of the 30 years. As can be seen, the expenditure in red is generally greater than the income in green. It also clearly demonstrates that the costs have been inflated, as the rental income in green, rises with a steady gradient.
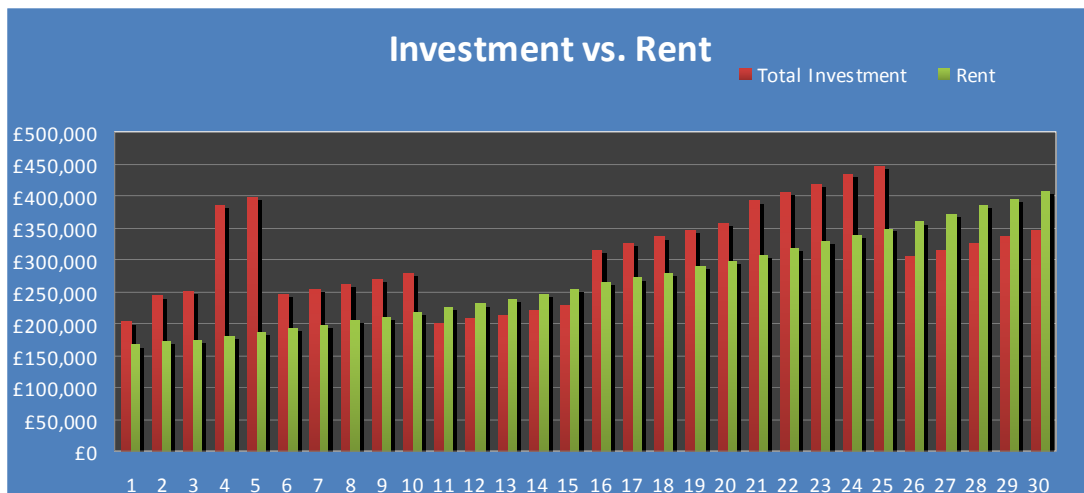
Using the data from the above graph to populate the Repayment Period graph below, it can be seen that if investment and income where to continue as predicted, the flats would become cost neutral in approximately year 49 to 50.
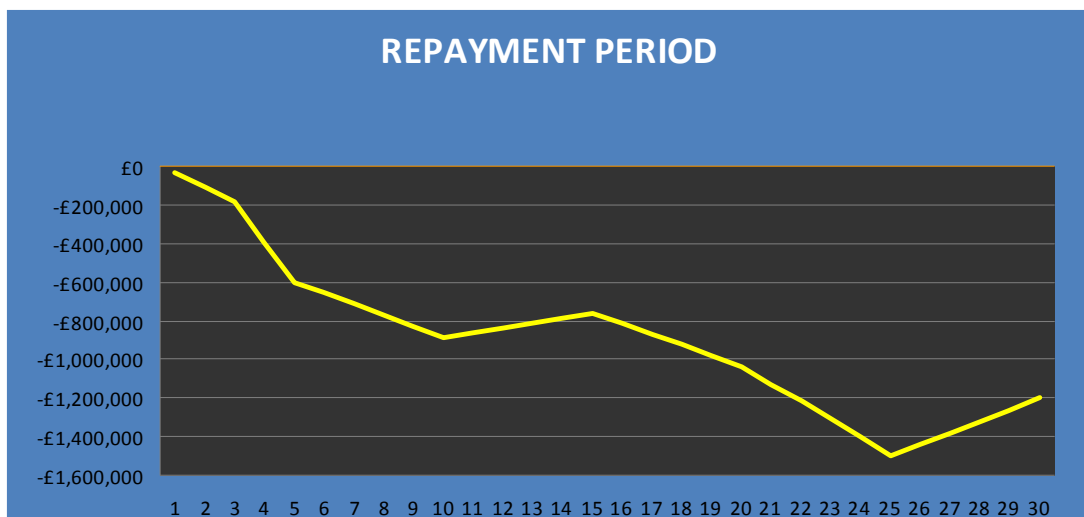
It has to be remembered that this would only be an elemental replacement when predicted failure has occurred, and would not be improving the amenity of the properties or the surrounding area, as could happen with other options. For instance it would not include for thermal upgrades like insulated render, or for the installation of gas mains to allow for the

changing of the inefficient electric storage heaters to a much more efficient traditional wet gas central heating system.

Due to this more random form of investment, it would be assumed that the level of repairs would continue at the present level, in part due to the assumed void levels which would be expected to continue at these high levels. Anecdotal evidence for this, from 'Voids and Allocations' is that they have had 7 void properties in the flats on Beechtrees during November 2013 alone.

This method of investment is not looking at enhancing the amenity of the properties, or rejuvenating the area, or targeting specific reasons for vacancy levels, it is purely designed to maintain the properties at their current existing condition and standard.

Although potentially a viable option for maintaining the stock at their existing levels, it does nothing for correcting the underlying problems within the area, or improving them to raise the standard of Amenity, Fitness or Quality expected by our residents.