

HAMPSHIRE COUNTY COUNCIL

Decision Report

Decision Maker:	Executive Member – Policy and Resources
Date:	26 January 2011
Title:	Project Appraisal: Redevelopment of Marchwood Household Waste Recycling Centre
Reference:	2287
Report From:	Director of Environment

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1. Executive Summary

1.1. The purpose of this paper is to seek approval to proceed with the redevelopment of the existing Marchwood Household Waste Recycling Centre (HWRC) located off Normandy Way, Marchwood, to either a split-level facility or an expanded single-level facility.

1.2. The proposal is to redevelop the existing Marchwood HWRC in order to:

- (i) resolve the problem of traffic congestion at peak periods of use, when cars queue out of the site;
- (ii) remove the health and safety issue of the need for steps to access the waste containers if the site is redeveloped into a split-level site; and
- (iii) increase the storage area for recyclable materials by construction of a new customer vehicle stacking lane and two large waste storage areas.

1.3. This paper seeks to:

- (i) provide a background to the existing Marchwood HWRC;
- (ii) consider the benefits of the redevelopment of the existing site;
- (iii) present the finances for the project and the impact on the HWRC capital budget; and
- (iv) highlight the potential benefits the redevelopment will have on the performance of both the site and the HWRC service overall.

HAMPSHIRE COUNTY COUNCIL

EXECUTIVE MEMBER – POLICY AND
RESOURCES

PROJECT
APPRAISAL

26 JANUARY 2011

PROJECT: REDEVELOPMENT OF MARCHWOOD HOUSEHOLD
WASTE RECYCLING CENTRE

COMMENCEMENT DATE: MARCH 2012
COMPLETION DATE: OCTOBER 2012

PLANNED YEAR OF START IN ACCORDANCE WITH CAPITAL
PROGRAMME: 2012/13

1. FINANCE (Client Department, Director of Property, Business and Regulatory Services [Estates Practice] and County Treasurer)

<u>Capital Expenditure</u>	Current Estimate (at 2010 prices) £'000	Capital Programme (at 2010 prices) £'000
Land to be purchased	Nil	Nil
Construction	1,250	1,250
Fees	100	100
	<hr/>	<hr/>
Less developers/ other contributions	Nil	Nil
	<hr/>	<hr/>
	1,350	1,350
	<hr/>	<hr/>
<u>Financial provision for total scheme</u>		<u>Total Cost</u>
1. From Capital Programme		
(a) Capital programme (as above)		1,350
(b) Other		Nil
		<hr/>
2. From other resources		n/a
(a)		
(b)		
(c)		
	TOTAL	<hr/>
		1,350
		<hr/>
<u>Value of land for this project in HCC ownership £</u>		
<u>Variations from capital programme</u>		
<u>Revenue implications</u>	£'000	% variation to Committee's budget
Net current expenditure		Nil
Capital charges		Nil
	<hr/>	<hr/>
TOTAL net expenditure	Nil	Nil
	<hr/>	<hr/>

- 1.1. The cost of this project will be met from the HWRC capital budget which has a current balance of £3.2 million. This capital programme provides funds for the redevelopment and relocation of the 24 HWRCs' location in Hampshire for which the County Council is responsible. A full review of the HWRC Service which will set the future direction of the service is currently being undertaken, and is due to be completed in April 2011.
- 1.2. The current cost estimates for the Marchwood HWRC redevelopment project, Options 1 and 2, are shown in the table below. The projected costs are based on estimates of maximum potential costs from the Feasibility Study Report provided by the County Council's Environment Department Engineering Consultancy (March 2010). The tender process will, in due course, provide more detailed and precise costs.

Split-level site costs - Option 1

Item	Cost
Construction Works Cost (incl. off site works, temporary site access and set up of temporary HWRC)	£1,155,000
Feasibility Design Fees	£20,000
Detailed Design Fees (incl. land survey and geotechnical fees)	£40,000
Site Supervision	£30,000
Statutory Undertakers' Diversions/Supplies/Fees	£10,000
Planning and Environmental Permit Fees	£7,000
Landscaping (incl. fees)	£20,000
Contamination Investigation/piling test	£18,000
New Site Furniture	£20,000
Miscellaneous Items ¹	£20,000
Fees for arranging temporary site	£10,000
Total Estimated Cost	£1,350,000

¹ Includes other County Council Fees, external Consultants' Fees and supplementary Work Orders (eg Site testing/services Trial Holes/Safety Audit/Transport Assessment).

Extended Single-level site costs - Option 2 a and b

Item	Cost
Construction Works Cost (incl. off site works, temporary site access and set up of temporary HWRC)	£464,000
Feasibility Design Fees	£10,000
Detailed Design Fees (incl. land survey and geotechnical fees)	£40,000
Site Supervision	£30,000
Statutory Undertakers' Diversions/Supplies/Fees	£10,000
Planning and Environmental Permit Fees	£7,000
Landscaping (incl. fees)	£15,000
Contamination Investigation	£10,000
New Site Furniture	£50,000
Miscellaneous Items ¹	£20,000
Total Estimated Cost	£656,000

¹ Includes other County Council Fees, external Consultants' Fees and supplementary Work Orders (eg Site testing/services Trial Holes/Safety Audit/Transport Assessment).

2. EXECUTIVE SUMMARY

2.1 The purpose of this paper is to gain approval to proceed with the redevelopment of the existing Marchwood HWRC located off Normandy Way, Marchwood, to either a split-level facility or an expanded single-level facility.

3. Contextual Information

3.1 There are 26 HWRCs in Hampshire of which 8 are modern split level sites that have been redeveloped in the last few years. Of the remaining 18 sites 11 are single level sites and 7 are older split-level sites. Current Health and Safety Executive (HSE) guidance is that removal of the need to use steps by the public to access waste containers at sites represents best practice and should be adopted where practicable. Development of split-level sites clearly represents a more expensive option and will limit the amount of redevelopments deliverable with the available capital funding.

3.2 A full review of the HWRC Service is currently underway, to progress its long-term forward strategy and development, and will include the required funding proposal to deliver this service for Hampshire residents.

3.3 The Marchwood HWRC is a large single-level site located next to the site of the former Marchwood incinerator. It was built on 'made ground' over a former landfill site.

3.4 The site was landfilled in its history with a mixture of wastes, which leaves the ground both contaminated and unstable and requires an engineered solution to enable development to take place.

3.5 The existing HWRC site was constructed in the early 1990s and in 2009/10 it was the fifth busiest site of the 26 HWRCs in Hampshire. It received just over 13,800 tonnes of household waste, of which 70% was recycled.

3.6 The Marchwood HWRC site has permanent planning permission and is provided by the County Council and operated by Hopkins Recycling Limited, an appointed private contractor.

3.7 The County Council owns the land upon which the former Marchwood incinerator and the existing Marchwood HWRC stand so there are no land ownership issues affecting the proposed development. Part of the former incinerator land is currently leased to Veolia Environmental Services for its Waste Transfer Station.

- 3.8 The redevelopment of the remainder of the former incinerator site is subject to a separate feasibility study that takes into account the redevelopment of the existing HWRC on a portion of the site. The outcome of this work will be presented at a future date.
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4. STATEMENT OF NEED/JUSTIFICATION FOR PROJECT
(Client Department)

- 4.1 The County Council, as Waste Disposal Authority, has a legal obligation to make arrangements for 'places to be provided at which persons in its area may deposit their household waste and for the disposal of waste so deposited' (Environmental Protection Act 1990 Section 51 (1) (b)).
- 4.2 In Hampshire this responsibility is delivered through the provision of 26 HWRCs. Of these, 24 sites are provided by the County Council, and the two unitary authorities of Southampton City Council and Portsmouth City Council provide one each.
- 4.3 Due to the popularity of the Marchwood HWRC and the increase in recycling generally, problems caused by traffic congestion have become more frequent and severe. There have been instances where the queue of traffic waiting to enter the site has tailed back onto Normandy Way and has started to block through traffic, causing delay and inconvenience to other road users. The provision of a new 'on-site' customer vehicle stacking lane, in combination with measures to increase the operational efficiency of the site itself, are the proposed solutions offered by both the split-level and single-level redevelopment options.
- 4.4 The health and safety issue associated with customers having to use steps to access the waste containers will only be fully removed by construction of a split-level site, where customers access the bins from an upper level with walkways between bins. The split-level design ensures easy and safe access to the bins for customers, allowing them to tip waste into the bins over a metal safety barrier at a suitable height. The bins will all be serviced from the lower level, therefore keeping the customers and servicing vehicles separate at all times.
- 4.5 A key feature of the design for redeveloping the HWRC is to achieve the objective of all container servicing being carried out separately from the public area, allowing customers to use the facility without disruption as all the bins can then be serviced whilst the site remains fully operational. This is much easier to achieve in a split-level site as all servicing can occur from the lower areas, leaving the upper area dedicated to customers. This is much

harder to achieve with an expanded single-level site as some form of barrier, eg fence, would have to be used to separate the public from the waste bins.

4.6 Targets and Outcomes

- (i) Increase the 'on-site' car stacking capacity from 6 vehicles to 34, an additional 28 over and above what the existing layout can provide.
- (ii) Increase the car parking spaces to 26, including 2 disabled parking bays.
- (iii) Increase the number of waste containers.
- (iv) Increase the waste storage area by creating two new storage areas, one at either end of the waste containers.
- (v) Remove the health and safety issue of customers using steps to access the waste containers if a split-level site is provided.
- (vi) Remove the need for the site to temporarily close for bin servicing if a split-level site is provided.
- (vii) Help increase the annual recycling rate at the site from the current 70% to a notional target of 75%.

5. IMPROVEMENT PROPOSAL (Client Department)

National/County Network and Policies

- 5.1 Recycling facilities are one of the most widely-used public services that benefit Hampshire householders, with more than 4.3 million people using the facilities each year. Furthermore, the importance of HWRCs is likely to continue well into the future.
- 5.2 The redevelopment of Marchwood HWRC supports one of the County Council's three Corporate Strategy priorities – Enhancing our quality of place. It also supports the County Council's Environment Department Aim number 2 – Helping everyone waste less – to reduce waste, minimise landfill and promote conservation of material resources, and Aim 3 of the Local Transport Plan 2006-2011 to 'reduce the impact and effect of congestion'.

Details of Scheme and Design Standards

- 5.3 There are two development options put forward in this report. The first, Option 1, is to construct a new split-level site within the County Council's landholding, and the second, Option 2, is to extend the single-level site.
- 5.4 Within Option 2 there are two further options:
2a) single-level site using 40 cubic yard bins and step; and
2b) single-level site using 20 cubic yard bins.
- 5.5 The construction phase of either the single-level or split-level options would not be expected to have any specific risks in addition to that of a normal construction project.
- 5.6 The construction period would be approximately four months for the single-level extension and eight months for the split-level site.

Option 1 – New split-level site

- 5.7 This proposal is to construct a new split-level HWRC. As the existing site is built over a former landfill, a raised site with driven piles to support the retaining structures is thought to be the most appropriate solution, as this minimises the amount of excavation into the made ground over the former landfill site and therefore reduces the cost of the disposal of contaminated excavated material. The existing access from the highway would be retained to serve the new site.
- 5.8 The proposed split-level HWRC layout, shown in drawing RJ509007/GA01 attached to this report, incorporates parking for 26 vehicles, including two bays for disabled drivers and a stacking capacity for up to another 24 before queues would extend out onto Normandy Way. This is an additional 28 vehicles over and above what the existing layout can provide. From traffic modelling this shows that, in theory, the capacity of the site has been increased by 80%.
- 5.9 The proposed new site will have seven double bin bays and two large upper level waste storage areas. The servicing vehicles will have a separate entrance and exit into the lower servicing area from the entrance road.
- 5.10 A temporary alternative site will need to be provided during construction of the split-level site. A contingency sum of £50,000 has been included in the cost estimate to allow for this. This could be delivered on the site of the former incinerator building to reduce the potential cost of a temporary facility.

- 5.11 A landscaping scheme approved by the Planning Authority will be implemented as part of the scheme.
- 5.12 **Cost:** The estimated total project cost for Option 1, including design and construction, all surveys, fees and ancillaries, is £1,350,000.
- 5.13 **Pros:** The design of the split-level site minimises conflict between the public and servicing vehicles, and removes the potential for accidents involving the public using steps to gain access to the bins. For these reasons the HSE recommends that, wherever possible, all HWRCs should be designed as split-level sites.
- 5.14 **Cons:** It is the most expensive option and would require a temporary HWRC to be in operation during the construction phase. It will be necessary for there to be limited excavation into and disposal of contaminated ground, for piling and for any other ground strengthening measures required for the retaining wall foundation design.

Option 2 – Extended single-level site

- 5.15 This proposal is to construct an extended single-level HWRC within the County Council's existing land holding, with a similar layout to that shown for Option 1. The proposed single-level HWRC layout is shown in drawing number R.J509007/GA02, also attached to the report.
- 5.16 Access from the highway and off-highway vehicle stacking lane for this option are as for Option 1. A similar landscaping scheme will be applied.
- 5.17 Phased construction of a new single-level proposal will mean that use of a temporary site will not be necessary for this option and therefore no contingency sum for a temporary site has been included.
- 5.18 **Cost:** The total estimated project cost for Options 2a and 2b (extended single level site with 40 cubic yard and 20 cubic yard bins) including design and construction, all surveys, fees and ancillaries is £656,000.
- 5.19 **Pros:** Cheaper overall project costs and no need for a temporary site during construction.
- 5.20 **Cons:** Does not address the health and safety issues of customers using steps and the danger of the proximity of customers and bin servicing vehicles operating in the same area.

- 5.21 There are health and safety issues with the two options for the single-level site which are shown below.
- 5.22 **Option 2a** – Extended single-level site with 40 cubic yard bins.
The single-level site options are contrary to the HSE advice on the preferred design of an HWRC. Steps will be required for the public to access the 40 cubic yard bins, and these are a health and safety hazard for customers carrying large items in wet or icy conditions and for elderly or disabled customers.
- 5.23 There is a greater risk of accidents occurring between the public and the servicing vehicles if all activity takes place on a single-level. Further health and safety issues arise on the single-level site options if a container slips off the servicing vehicle. The retaining walls of a split-level site will restrict movement of the fallen container and therefore prevent injury to customers or staff, but this will not be the case for the single level option.
- 5.24 **Option 2b** – Extended single-level site with 20 cubic yard bins.
The issues mentioned for Option 2a also apply to this option. In addition, the larger number of smaller capacity bins required to provide the same service as Option 2a will result in more frequent bin changes, increasing the risk of conflict between the public and the servicing vehicles. Steps are still required for the public to use these bins.
- 5.25 Some waste streams, such as metals and green waste, cannot realistically be collected in 20 cubic yard bins with the result that some 40 cubic yard bins and steps will still be required.
- 5.26 For health and safety reasons, construction of a new split-level HWRC is recommended. This type of site design also follows HSE guidance. Construction of an extended single level site (Options 2a and 2b) does not alleviate the HSE's concerns for health and safety on HWRCs. Use of the smaller 20 cubic yard bins will result in more frequent servicing and therefore greater risk of conflict between the public and servicing vehicles.
- 5.27 It is considered that the operational costs for the single level site (Options 2a and 2b) will be greater than those for the split-level site (Option 1) for the following reasons:
- (i) repair and maintenance of access steps, damaged during bin servicing;
 - (ii) increased staff numbers required to assist customers carrying heavy items up the steps and to supervise the use of packer bins;

- (iii) almost full-time use of a dedicated servicing vehicle (or possibly more than one) if the 20 cubic yard bins are used on the site, as they become full more regularly than the larger bins;
- (iv) increased electricity usage for the packer bins; and
- (v) use of the packer bins will also result in increased maintenance costs for machinery and may result in repair or replacement costs as vandalism is a recognised problem at all HWRCs.

5.28 The operational efficiency of modern split-level sites is well established, based on the experience of similar HWRC redevelopment/relocation schemes in Hampshire. Operational efficiency of the single level Options 2a and 2b would be compromised in the following ways:

- (i) throughput is generally much slower as customers have to climb steps and therefore have further to walk between bins;
- (ii) increased frequency of servicing with smaller bins may result in delays, causing longer queuing times for customers;
- (iii) use of packer bins is only an efficient option for a site handling only up to approximately 3,000 tonnes per annum (based on information obtained from Norfolk County Council which has experience of using packer bins at its HWRCs), whereas the Marchwood site currently receives around 13,800 tonnes per annum;
- (iv) a power cut would result in complete loss of use of the packer bins;
- (v) fewer customers can use the packer bins at any one time, which may result in delays to throughput. Similarly, delays will be caused when customers have to wait while compaction is taking place;
- (vi) concerns have been raised by other local authorities regarding the reliability of the packer bins and the fact that repair work may take several days;
- (vii) regular cleaning behind the ramming shaft of packer bins is required, resulting in temporary loss of use of each bin; and
- (viii) packer bins require more space than regular bins.

- 5.29 All specifications within the design for the proposed redevelopment of Marchwood HWRC will be in accordance with Hampshire County Council standards and policy documents, as well as being in accordance with British Standards.

Environmental Impact

- 5.30 The material collected at all the HWRCs in Hampshire represents approximately 25% of the total household waste collected across the county but it contributes to over 40% of all the household waste recycling in Hampshire. The sites play a vital role in helping the County Council to maximise landfill diversion of household waste.
- 5.31 The proposed redeveloped site is considered to meet planning policies in terms of its environmental impact. The proposed design will include a landscape plan to ensure the site continues to be suitably screened in addition to ensuring that no wildlife habitats are damaged or disturbed by the development.

Land Requirements

- 5.32 The area of additional land required to redevelop the Marchwood HWRC is wholly owned by the County Council. It is currently leased to Veolia Environmental Services for use as a temporary Waste Transfer Station which has planning permission until July 2011.

Statutory Procedures

- 5.33 The proposed redevelopment of the Marchwood HWRC will require a new planning consent. The planning application will be submitted to Hampshire County Council, as the Waste Planning Authority, and will be considered by the Regulatory Committee.
- 5.34 Before the new HWRC can become operational it will need to be granted an Environmental Permit from the Environment Agency.

Public Consultation

- 5.35 A communications campaign will be developed to keep local residents informed about the progress of the proposed redevelopment of Marchwood HWRC.
- 5.36 Initial consultation will take place through Marchwood Parish Council and the local Member to ensure that their views are taken into account in the development of the scheme. The aim will be to reach all potential site users through both written and digital media, taking advantage of Local Authority web pages and news letters as well as the more traditional press releases, leaflet distribution on site and signage.

Local Member's View

- 5.37 The local Member, Councillor David Harrison, supports the scheme. In addition, Marchwood Parish Council was presented with the options and supports the recommended split-level design outlined in the report.

Maintenance Implications

- 5.38 There are no maintenance implications with any of the options outlined in this report. .

Sustainability

- 5.39 The design and construction of the proposed redevelopment of the Marchwood HWRC will aim to maximise the opportunity to incorporate the principles of sustainable development.
- 5.40 The tenderers for the construction contract will be asked to submit prices for using recycled materials where these are available, and where they meet the British Standards specification.
- 5.41 The new HWRC will be specifically designed to enable additional recycling facilities to be provided.

6. ALTERNATIVES CONSIDERED
(Client Department)

- 6.1 The option not to redevelop the existing HWRC has been considered and rejected. Redeveloping the site will enable the key objectives of improving health and safety at the site, reducing traffic congestion, expanding the operational area and increasing recycling performance to be achieved.
- 6.2 A third single-level design, with raised gantries to simulate a split-level site with ramps for the public to access the bins, has been considered and rejected. The length of ramp required to achieve an appropriate gradient cannot be achieved with the space available for redevelopment.
- 6.3 A fourth single-level design utilising automated packer bins to reduce the need for steps has been considered and rejected. The increased cost of bins, increased maintenance and the potential health and safety concerns added to the reduced throughput make this option undeliverable.

- 6.4 The option to relocate the Marchwood HWRC to provide a new purpose-built 'split-level' facility has been considered and rejected. A recent site search concluded that no suitable and available land was identified. However, the County Council owns the land on which the existing HWRC is located and the land adjacent to it, which is proposed to be used for this redevelopment.
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7. Recommendations

- 7.1. That the Project Appraisal to carry out works to expand and improve the existing Household Waste Recycling Centre located off Normandy Way, Marchwood, at an estimated cost of £1.35 million, be approved.
- 7.2. That it be considered which redevelopment option should be taken forward from a choice of either:
- (i) Option 1: provision of a new split-level site; or
 - (ii) Option 2: provision of an extended single-level site (comprising Options 2a or 2b).
- 7.3. That the necessary planning application be made to develop land adjacent to the existing site and the proposed redevelopment works be carried out on the granting of a satisfactory planning permission.

CORPORATE OR LEGAL INFORMATION:**Links to the Corporate Strategy**

Hampshire safer and more secure for all:	no
Corporate Improvement plan link number (if appropriate):	
Maximising well-being:	no
Corporate Improvement plan link number (if appropriate):	
Enhancing our quality of place:	yes
Corporate Improvement plan link number (if appropriate):	

Other Significant Links

Links to previous Member decisions:		
<u>Title</u>	<u>Reference</u>	<u>Date</u>
Direct links to specific legislation or Government Directives		
<u>Title</u>		<u>Date</u>
Environmental Protection Act 1990 (section 51 (1) (b))		1990

Section 100 D - Local Government Act 1972 - background documents

The following documents discuss facts or matters on which this report, or an important part of it, is based and have been relied upon to a material extent in the preparation of this report. (NB: the list excludes published works and any documents which disclose exempt or confidential information as defined in the Act.)

<u>Document</u>	<u>Location</u>
Marchwood HWRC Redevelopment Feasibility Study 2010	HN05 Correspondence files EIIC West

IMPACT ASSESSMENTS:

1. Equalities Impact Assessment:

- 1.1. The proposed redevelopment of Marchwood HWRC has 30 customer parking spaces, two of which are designated for disabled drivers. These spaces are located close to, and within sight of, the site staff hut to ensure that if help is requested it can easily be provided.
- 1.2. An 'Accessibility Audit' was undertaken across the HWRC network in 2004 and a variety of issues were raised with the aim of improving access to the site for the benefit of all customers. The design of the redeveloped Marchwood HWRC has taken these findings into account with the aim of safeguarding the health and safety of all customers using the site.
- 1.3. Assessment of the Race Relations (Amendment) Act has been considered in the development of this proposal. No adverse impact has been identified in terms of race, creed or gender.

2. Impact on Crime and Disorder:

- 2.1. The preliminary design for the proposed redevelopment of Marchwood HWRC features a 2.4 metre high boundary fence and entrance gates. The site will be fully staffed during opening hours and the entrance gates will be locked when the site is closed.
- 2.2. There will be an information sign at the entrance to the site giving details of an emergency contact telephone number in the event of vandalism or any similar event needing to be reported.
- 2.3. Automatic Number Plate Recognition (ANPR) will be in operation at the site. ANPR supports trade waste controls by identifying unusually frequent site users who are likely to be traders illegally attempting to enter the site by using non-commercial vehicles such as cars.

3. Climate Change:

- (a) How does what is being proposed impact on our carbon footprint / energy consumption?

The Waste and Resources Action Programme estimated that current UK recycling saves between 10-15 million tonnes of CO₂ equivalent greenhouse gases a year. This is equivalent to taking 3.5 million cars off the road.

As part of the HWRC Service Provision Review work is being undertaken on the carbon impact of the HWRC network and the output will be used to develop an action plan. This will aim to reduce the carbon impact of the HWRC Service.

- (b) How does what is being proposed consider the need to adapt to climate change, and be resilient to its longer term impacts?

The redeveloped Marchwood HWRC will help increase the annual recycling rate at the site from the current 70% to a target of 75%. Increased recycling will help Hampshire by reducing the amount of waste that goes to landfill, cutting down on energy use and combating climate change.

A work package assessing the impact of the HWRC Service on climate change as well as ensuring it is climate change resilient is being completed as a part of the HWRC Service Provision Review. The outputs from this work will be implemented in 2011/12 across the HWRC network.