Appendix A

Business Plan
Chargeable 'Opt-in' Garden Waste Collection
September 2009

1.0 Rationale for providing the Service – Joint Municipal Waste Management Strategy (JMWMS)

1.1 The Joint Municipal Waste Management Strategy (JMWMS) 2009 sets the Partnership a target of 43% recycling/composting by 2014. As a signatory to the JMWMS 2009, Redditch Borough Council has committed to play its part and increase its recycling/composting rate (NI 192) to help achieve this**.** This can be done through:

- Increasing the range of materials which are recycled through green bins
- The introduction of a chargeable garden waste collection service
- Recycling street sweepings
- Increasing the amount of re-use within the Borough – e.g. through bulky collection service

1.2 There is a national target of 45% by 2015 that we would hope to meet, however in accordance with Principle 4 we will not compromise the environmental and economic performance of schemes just to meet notional, non statutory targets.

1.3 Currently, the majority of residual waste collected in Worcestershire is landfilled. The Partnership needs to reduce the amount of biodegradable waste to landfill in order to meet Landfill Allowance Trading Scheme limits in future years. Whilst the majority of residual waste collected in Redditch is disposed of through an energy from waste facility in Warwickshire, there is a need to consider Redditch's arrangements in a county wide context. Each tonne of waste diverted from this disposal route frees up capacity for waste from other Worcestershire authorities.

1.4 A chargeable garden waste collection falls outside the 'Core Service' and therefore costs should be recovered in line with JMWMS 2009 Policy 3.

1.5 In addition, 20% of residents surveyed said that they would be prepared to pay for a collection of garden waste (JMWMS consultation, May 2009) and given the current economic climate, there is potential for income generation. Other Worcestershire authorities have found that there is a demand for the service.

2.0 Current Waste Collection Policies

2.1 The council currently accepts small amounts of light garden waste in grey bins.

2.2 Orange sacks were introduced at the start of the AWC service so that residents had a way of disposing of occasional amounts of extra waste. Council policy is to collect a maximum of two orange sacks per household along with grey bin collections. In 2008/09 approximately 5,000 orange sacks were collected. A survey of collection crews has found that approximately 70% orange sacks contain garden waste during summer months and around 20% during winter months. Waste collected in this way is mixed into the residual waste stream and is not composted.

3.0 Home Composting

3.1 This remains as our preferred way of dealing with garden waste and in recent years a large number of compost bins have been sold. Residents will still be encouraged to deal with garden waste at home. However, the Partnership has now agreed that there needs to be an option of collecting garden waste for composting for the reasons outlined above.

4.0 Quantities of Garden Waste

4.1 Waste Composition Analysis has shown that 7% of the waste collected in the Borough through the household waste collection service is garden waste – this is approximately 1,330 tonnes per annum. The introduction of a chargeable garden waste collection would divert some of this waste from the disposal route.

5.0 Garden waste at the Household Waste Site

5.1 In 2008/09 **2,124** tonnes of garden waste were taken by residents to the Household waste site which involves residents using their own vehicles to transport small amounts of waste. WCC do not currently keep records of visits to the site, however if we estimate that each load weighs 50kg, then this equates to over 42,000 separate visits.

6.0 Predicted diversion and changes to waste collection policies

6.1 The introduction of a garden waste collection service will result in some of the garden waste which is currently disposed of in grey bins, orange sacks and at the HWS being reduced. The start of the new service would require the council to consider making changes to waste collection policies across the Borough or in areas where the garden waste collection service is offered as below:

- Stop sale of orange sacks
- Ban garden waste from grey bins

6.2 Subsequently this would mean a new statutory notice being issued and the development of a new service standard (appendix 2).

7.0 Coverage of the new service

7.1 Modelling has shown that the garden waste collection service should be to at least 20% of suitable households (approximately 32,000) in order to help meet the county wide targets outlined above.

8.0 Climate Change Impacts

8.1 The Strategic Environmental Assessment which forms part of the JMWMS, states that "*options which have area wide green waste collections secure more benefits overall than other options because of increased tonnages of waste recycled, principally biodegradable waste*" (SEA p.38). (note – currently checking with ERM consultants that collection vehicles have been included in assessment)

8.2 There would be an impact on climate change indicator NI185 as mileage undertaken as part of the waste collection service would increase. Some estimates on the increase in mileage and carbon emissions is provided in the table below. Redditch Borough Council's current target for overall reduction is 2% year on year. To counter the increased emissions, reductions would be required elsewhere,

	Estimated mileage undertaken	Miles per gallon	Total no. gallons used	Resultant CO2 kg/ tonnes
Pilot area based on	1620	5	324	6858kg or 0.69 tonnes
Borough wide	8100	5	1620	34,288kg or 34.3 tonnes

NOTE: Figures are based on one RCV working for one day per week for 30 weeks

8.3 The total carbon produced last year from the council's vehicle fleet was 590,385kg or 590.39 tonnes. The Borough wide service could result in an estimated increase of 5.7% on the total carbon emissions from the council's fleet.

8.4 Round sizes on a garden waste collection would be larger as they would need to cover a wider area, however they would be based on existing geographical rounds to ensure that rounds were as efficient as possible in terms of transport distances.

8.5 It is difficult to assess the impact of the service on climate change indicator NI186. Relevant issues will include that whilst there is an increase in Redditch Borough Council's fleet, there is potentially a reduction in the number of visits to the Household Waste Site. Whilst Redditch Borough Council's waste currently goes to an energy from waste facility, diverting biodegradable waste from this route could provide capacity for other Worcestershire waste to be diverted from landfill.

8.6 The introduction of a garden waste collection service has been in other authorities to increase the overall the tonnage of waste collected. Waste that is currently disposed of in other ways – e.g. home composted or on bonfires etc is diverted to the collection instead. However, this is reduced when the collection is chargeable.

8.7 Providing a material which can be used as a soil conditioner locally may decrease the use of chemical fertilizer on agricultural ground which is a highly intensive/polluting manufacturing process. This is positive but unquantifiable.

8.8 There may be sideline benefits relating to public attitude in terms of changing their own behaviour at home and at work if they are given the opportunity to recycle more leading to additional sustainable behaviours. However, there is a potential risk that a garden waste collection will reduce the amount of home composting.

9.0 Type of Service

9.1 Having examined best practice amongst other authorities locally and nationally, the proposed service will be:

Service type	Rationale
Brown 240 litre Wheeled Bin	• Health and Safety – easily manoeuvred by residents and crews. • Consistency with Partner authorities • Adequate capacity
Alternate Weekly Collection	• Allows increased coverage • Proven to be cost effective, efficient and practical • Provides adequate capacity to most residents
'Curtilage' edge of property* collection and return	• Bins less likely to go missing • Council liability for missing bins reduced • Reduces number of days that bins are on streets (particularly if collection day is different to existing waste collection
Seasonal 9 monthly service (March – November)	• In other authorities it has been shown that the amount of garden waste dramatically reduces in winter months • Type of garden waste changes to larger items which are unsuitable for a wheeled bin collection

*where a property does not front onto a road, a designated collection point may be given instead.

10.0 Method of introducing the new service

10.1 Approximately 32,000 properties which potentially could be provided with a garden waste collection service. If 20% of residents took up the new service, as indicated through the consultation earlier this year, then this would mean around 6,200 households.

10.2 There are two options for introducing the service, both of which would allow full cost recovery but with a number of advantages and risks as outlined below:

Options for service introduction	Advantages	Risks
Full scale Borough Wide collection from March 2010	• Service provided to all residents • Increased recycling/composting rate • Potential increased income generation	• Deliverability in short timescale • Limited staff resources and impacts on other priorities • Impacts of shared services including new senior management structure • Procurement of bins etc. • Difficult to withdraw service if proves to be uneconomic or performs poorly

Options for service introduction	Advantages	Risks
Smaller scale pilot in targeted area from March 2010 followed by Borough wide roll out in 2011/12	• Allows us to assess take up, administration and publicity requirements, operational impacts, costs and service standard • Allows service to be modified before full roll out • Allows us to withdraw the service if necessary following evaluation • Procurement of bins will be easier due to smaller numbers • Publicity and administration (booking system) more manageable in targeted area • Allows development of a garden waste collection service across BDC and RBC	• Public dissatisfaction that they are not provided the service • May be a need to modify existing service standards – e.g. orange sacks – within the targeted area • Recycling/composting rate will be lower for 2010/11 • Income generation will be limited for 2010/11

10.3 Having looked at these options, it is recommended that a smaller scale pilot in targeted area from March 2010 followed by Borough wide roll out in 2011/12 is adopted. This approach will reduce risks, is achievable and allows the development of a larger scale shared service in the longer term. It also ensures that progress is made and valuable lessons can be learned.

11.0 Pilot Area

11.1 It is proposed that the pilot area would include Hunt End, Callow Hill, Walkwood (part) Headless Cross (part) Crabbs Cross (part) and Webheath (part) which would total 4676 properties. This area of the town has been selected as it contains a higher level of traditional housing with larger gardens, which would hopefully result in an improved level of take up.

11.2 It is important to match existing collection rounds to the proposed garden waste rounds as this will allow effective customer liaison and service administration; these areas are currently domestic waste collection rounds 1,2 3 and four. A list of streets to be included in the pilot is listed at Appendix C.

12.0 Service Delivery Options

12.1 Three options have been identified to provide the service as detailed below:

- **Option one** - To provide the service during Saturdays using employed staff at premium rates and using owned vehicles,

- **Option two** - To provide the service during Monday to Friday using employed staff at standard pay rates and using hired vehicles

- **Option three** - To provide the service using Bromsgrove District Council staff at standard pay rates and BDC vehicles utilising week day capacity available due to four day working week.

12.2 It is important to note that efficiency reduces as the service is not provided to every property as with the AWC service**.**

12.3 All of the options are based on the providing the service on a standard 7.5 hour day and to a pilot area of 4676 properties.

10% Customer take up – 468 Properties	**Option one**	**Option two**	**Option three***
Day of service	Saturdays	Mon- Fri	week day capacity available due to four day working week
Staff – 1 driver, 1 loader	employed staff at premium rates	employed staff at standard pay rates	Bromsgrove District Council staff at standard pay rates
Vehicle**	owned vehicles	hired vehicles	BDC vehicles
Bins collected	200-220 per day	200-220 per day	200-220 per day
Cost of pilot area	£25,348	£22,268	£20,177
Whole town cost	£178,899	£157,165	£142,407
Cost per customer	**£54.50**	**£48.00**	**£43.50**

15% Customer take up – 70 properties	**Option one**	**Option two**	**Option three***
Day of service	Saturdays	Mon- Fri	week day capacity available due to four day working week
Staff – 1 driver, 1 loader	employed staff at premium rates	employed staff at standard pay rates	Bromsgrove District Council staff at standard pay rates
Vehicle**	owned vehicles	hired vehicles	BDC vehicles
Bins collected	250 -270 per day	250 -270 per day	250 -270 per day
Cost of pilot area	£29,343	£25,778	£21,503
Whole town cost	£207,098	£181,938	£151,761
Cost per customer	**£42.00**	**£37.00**	**£31.00**

20% Customer take up – 935 properties	**Option one**	**Option two**	**Option three***
Day of service	Saturdays	Mon- Fri	week day capacity available due to four day working week
Length of day	7.5	7.5	7.5
Staff – 1 driver, 1 loader	employed staff at premium rates	employed staff at standard pay rates	Bromsgrove District Council staff at standard pay rates

Vehicle**	owned vehicles	hired vehicles	BDC vehicles
Round Size	280-300 per day	280-300 per day	280-300 per day
Cost of pilot area	£34,228	£30,070	£26,686
Whole town cost	£241,572	£212,224	£188,342
Cost per customer	**£37.00**	**£32.50**	**£29.00**

***Notes – Option 3**

- Subject to confirmation that BDC is able to operate the service using standard staffing pay rates.
- Factors in the cost of 40 minutes additional travel time between Bromsgrove and Redditch for each day for each vehicle used otherwise it would reduce the number of bins collected in a 7.5 hour day by 18.
- Increase in the fuel consumption for each round per day of 17.5 litres
- Would require bin lifters currently fitted to Bromsgrove District Council vehicles to be compatible with the type of wheeled bins provided for Redditch residents which are of a different design to those currently provided for Bromsgrove residents. Lifters are available which can easily reconfigured to accommodate different types of bins otherwise it would take approximately 2 fitter hours to exchange a bin lifter per two occasions at a cost of £30.00 excluding oncosts.

13.0 Customer take up and pricing

13.1 It is difficult to accurately predict the level of customer take up that can be expected, which is why we need to consider a number of take up options. With a higher level of customer take up, the cost per customer can be reduced. If we predict a level of customer take up which is not achieved, there is a risk that cost recovery will not be possible. We have to strike a balance between a charge which will be acceptable and encourage people to take up the service, against reducing the risk of non recovery of costs.

14.0 Additional Pricing band options

14.1 The costs shown in the tables above show the charge per customer in order to recover costs fully. However, we have been asked to provide a model showing the impact of providing the service for a number of charges per customer, and these have been detailed in the tables below. It can be seen that full cost recovery does not occur until we have achieved 15% customer take up, using Option 3.

10% Customer take up	**Option one**	**Option two**	**Option three***
@ £25.00 customer charge	Pilot area = under recovery of £13,673 Whole town = under recovery of £97,664	Pilot area = under recovery of £10,595 Whole town = under recovery of £75,678	Pilot area = under recovery of £8,502 Whole town = under recovery of £60,728
@ £30.00 customer charge	Pilot area = under recovery of £11,338 Whole town = under recovery of £80,985	Pilot area = under recovery of £8,258 Whole town = under recovery of £58,985	Pilot area = under recovery of £6,167 Whole town = under recovery of £44,050
@ £35.00 customer charge	Pilot area = under recovery of £9,003 Whole town = under recovery of £64,307	Pilot area = under recovery of £5,923 Whole town = under recovery of £42,307	Pilot area = under recovery of £3,832 Whole town = under recovery of £27,371

15% Customer take up	Option one	Option two	Option three*
@ £25.00 customer charge	Pilot area = under recovery of £11,818 Whole town = under recovery of £84,414	Pilot area = under recovery of £8,253 Whole town = under recovery of £58,950	Pilot area = under recovery of £3,978 Whole town = under recovery of £28,414
@ £30.00 customer charge	Pilot area = under recovery of £8,313 Whole town = under recovery of £59,378	Pilot area = under recovery of £4,748 Whole town = under recovery of £33,914	Pilot area = under recovery of £473 Whole town = under recovery of £3,378
@ £35.00 customer charge	Pilot area = under recovery of £4,808 Whole town = under recovery of £34,342	Pilot area = under recovery of £1,234 Whole town = under recovery of £8,878	Pilot area = surplus of **£3,832** Whole town = surplus of **£27,371**

20% Customer take up	Option one	Option two	Option three*
@ £25.00 customer charge	Pilot area = under recovery of £10,853 Whole town = under recovery of £77,521	Pilot area = under recovery of £6,695 Whole town = under recovery of £47,821	Pilot area = under recovery of £3,311 Whole town = under recovery of £23,650
@ £30.00 customer charge	Pilot area = under recovery of £6,178 Whole town = under recovery of £44,128	Pilot area = under recovery of £2,020 Whole town = under recovery of £14,428	Pilot area = surplus of **£1,364** Whole town = surplus of **£9,742**
@ £35.00 customer charge	Pilot area = under recovery of £1,503 Whole town = under recovery of £10,735	Pilot area = surplus **£2,655** Whole town = surplus of **£18,964**	Pilot area = surplus of **£6,039** Whole town = surplus of **£43,135**

15.0 Set up costs

15.1 Set up costs include the cost of purchasing 240lt brown wheeled bins. Each wheeled bin currently costs £20.00. For example, the cost of purchasing bins so that up to 10% of residents in the pilot area can take part is £9,400.

15.2 There will be some publicity required and it is estimated that we would need a budget of £5,000 to provide publicity materials to the pilot area. This would be prioritised from within existing budgets.

15.3 Administration systems will need to be set up and it is anticipated that this could be done within existing resources using existing software systems.

15.4 There are currently funds available within the waste management service which may be able to reallocated to fund set up costs of the service.

15.5 The Council would need to decide if the set up costs should be passed onto the customer as a one off fee as has been done in Worcester City.

16.0 Conclusions

- The provision of an 'opt in' chargeable garden waste collection service supports the JMWMS commitment to achieve higher recycling/composting performance and the Strategic Environmental Assessment indicates that this is a good option.
- Existing waste collection policies would need to be reviewed if a collection were to be introduced.
- Some waste which is currently disposed of would be diverted to composting
- There would be an impact on climate change indicator NI 185.
- The introduction of a pilot service during 2010/11 will allow us to mitigate risks associated with the introduction of the new service.
- The pilot area should be in a compact area of the town which is likely to attract the highest % of customer take up.
- The number of customers taking up the service is critical in determining the right charge per customer to ensure cost recovery.
- Option 1 is the most expensive as staffing costs are based on premium rates.
- Option 2 is the mid range price and does not incur additional transport miles (vehicles moving from BDC to RBC).
- Option 3 is the most cost effective but incurs additional transport miles.