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BEaR Project - Additional Elements Approval Appendix A - Background Report

1. Introduction

1.1. General introduction

The Central Bedfordshire Energy and Recycling (BEaR) Projects primary aim is to achieve landfill diversion through the delivery of a long-term waste treatment solution, thus allowing Central Bedfordshire Council (CBC) to reduce the impact of escalating costs of sending waste to landfill on council budgets and achieve its future Landfill Allowance Trading Scheme (LATS) targets. In addition to this, as a secondary target, the Project team have investigated any additional infrastructure requirements that would assist the authority in delivering services. This background report provides the results of this investigation and along with the Executive report, recommends the inclusion of a number of additional elements within the scope of the BEaR Project procurement.

1.2. Purpose of this report

On the 6th April 2010, CBC's Executive committee noted the BEaR Project Business Case and gave approval for the Project to move into the procurement phase at the earliest possible date. In addition, the Executive approved the inclusion of a number of additional infrastructure elements within the scope of the contract to be tendered, subject to an affordability review and further report to Executive.

This document outlines the various elements that could be included within the Project scope and assesses the need, high level benefits and risks of delivering these via an integrated approach as part of the BEaR Project rather than individually. An overview of the financing options available to the Council is also provided as well as a detailed financial appraisal of each of the elements. A review of the evaluation process to be utilised for the procurement is provided, including a rationale for any amendments made following the outcome of this Executive decision. The report ends with a conclusion supporting the recommendations contained within the main Executive report.

1.3. Current status of the Project

Following Executive approval to proceed, the procurement of the residual treatment contract was initiated with the publication of a contract notice in the Official Journal of the European Union (OJEU). A successful Bidders Day then took place on the 7th June with around 40 companies attending. This subsequently led to 10 Pre-Qualification Questionnaires (PQQ's) being submitted by bidders by the 19th July 2010 deadline. These submissions are currently being assessed by the Project team with a target of notifying successful bidders in October 2010.

The OJEU notice and the PQQ documentation were deliberately worded to allow the future inclusion of additional elements within the contract. The contract scope does however need to be fully defined ahead of undertaking the dialogue stages of the procurement which are scheduled to begin in November 2010. A clear contract specification, outlining the requirements of the authority will be required at this point.

The strategy going forward should offer flexibility to the authority in dealing with its waste and, where possible, should consider the possible impact of new legislation. Self sufficiency is also important and should be reflected in the final strategy.

2. Additional elements proposed for inclusion

Following the withdrawal of Luton and Bedford Borough Council from the BEaR Project, CBC took the opportunity to review the future requirements of the authority and develop a strategy for delivering a standalone solution. The greater freedom of a single authority solution, coupled with the removal of the restrictions imposed under Private Finance Initiative (PFI), has enabled a number of options to be assessed.

If deemed to offer a benefit to the authority, the Project scope could be expanded to include elements of the wider waste service or even services outside waste, rather than focussing solely on residual waste treatment.

The following infrastructure/services have been investigated for inclusion in the final contract specification. Each of these options has undergone a financial appraisal with full detail being provided in Section 6.3.

2.1. Household Waste Recycling Centre (HWRC) redevelopment / relocation

Background

CBC currently has 4 HWRC's under its control (Leighton Buzzard, Ampthill, Biggleswade & Dunstable). The sites are operated by a contractor (Viridor) and are performing well under a performance based contract. The sites are open to the public 7 days a week, providing a disposal point for most types of household waste. No commercial waste is currently accepted at the sites (limited through a permit system). Under the Environmental Protection Act (51.1b) it is a statutory requirement for a Waste Disposal Authority such as CBC to provide disposal points for residents.

Table 1 details the amount of waste received at the sites in 2009/10 and compares this to the overall figures for material collected by the authority. The figures demonstrate that the HWRC sites are responsible for handling approximately 25% of the waste arising in Central Bedfordshire.

Table 1, HWRC tonnages 2009/10.

Waste Material	HWRC Tonnage	% of CBC Total
Residual	8,188	15.5%
Dry Recyclables	9,208	26.8%
Green Waste*	6,130	33.2%*
Rubble	4,969	100%
Total	28,497	25%

*Not including kitchen waste

Need

There has been a need for some time to re-locate the Dunstable HWRC as the existing facility requires substantial work. The site sits on an old landfill and suffers subsidence and regular flooding which is a concern for both the Council and the Environment Agency. The site is also space limited which typically stifles any increase in recycling rates due to the inability to site additional waste containers.

The other HWRC sites require refurbishment and modification to bring them up to best practice standards. Currently, all sites use electric/hydraulic compactors and 40 yard skips for most waste sources. These require frequent maintenance, leading to significant pass-through costs to the authority (approximately £46K per annum) as well as reducing site capacity and inconveniencing residents during down time. More significantly, the public have to walk up metal

stairways to put waste into skips, which raises health and safety and access concerns and is generally inconvenient for residents.

Modern HWRC sites are often set out on two levels, with the public and their vehicles being at ground or elevated level and the waste containers and heavy vehicles being at a lower level. Prior to Local Government Review (LGR), the Bedford HWRC was re-developed to become a split-level site with no stairs used by residents, significantly reducing the risk of accidents. Shared compaction equipment can also be used if the site is designed appropriately, reducing the business impact and associated cost of any equipment breakdown.

Additional benefits of upgrading the sites include:

- Enhancing recycling and composting performance;
- Improving site accessibility (especially for people with disabilities);
- Improving on-site lighting (ensuring Health & Safety in winter months);
- Improving site security;
- Improving site navigation and parking; and
- Providing a better overall customer experience.

Proposal

If included within the scope of the contract it is proposed that the successful contract would:

- Relocate the Dunstable HWRC to a more suitable site and build to current best practice standards. There is a site in the South of the CBC area (Thorn Turn) in the ownership of the authority which was identified in the Issues and Options Waste Site Allocations Plan as a potential site for HWRC development. It is a substantial site that would be large enough to meet the demands of the Dunstable area in terms of HWRC provision;
- Re-develop / modernise remaining sites, bringing them up to best practice standards. This would most likely be undertaken one site at a time during the early life of the contract to reduce service disruption; and
- Operate and maintain the sites for the duration of the tendered contract ensuring performance remains a top priority.

2.2. Salt Storage Facility

Background

CBC currently utilises salt storage facilities at the Highways depot in Bedford. This storage is limited in capacity and open to the elements. As well as the physical ability to provide capacity to store gritting salt, sites must have adequate provision to prevent surface water run off from entering the water course.

Need

Following the issues faced by authorities in the UK during the severe 2009/10 winter new government regulations are likely to come into place forcing local authorities to provide capacity for set levels of gritting salt. Gritting salt should be kept undercover to prevent surface run off into the water course and any reduction in spreading efficiency. As well as enough capacity to store sufficient quantities of gritting salt under cover, the authority would benefit from the storage being spatially distributed in such a way to maximise the efficiency and ability of the gritting crews to deliver the service.

CBC therefore needs to provide adequate storage provision at strategic locations to ensure efficient and compliant service delivery in the future.

Proposal

An ideal situation would see salt storage delivered at strategic locations throughout Central Bedfordshire to enable gritters to work in the most efficient way possible. More than one facility is therefore required to provide adequate coverage. It is proposed that the salt storage be linked with the re-development of the HWRC sites. By co-locating salt storage at two of the HWRC's, significant savings could be made through expansion of the existing sites rather than acquiring and developing new sites. The draining requirements of the two uses are also similar as both

require the prevention of run off to the water course, therefore additional savings could be achieved through the co-use of this type of engineering.

For the purposes of the financial modelling the costs of the salt storage facilities have been included within the HWRC costs provision.

2.3. Waste Transfer Station (WTS)

Background

CBC currently sends both recyclable materials and residual waste to be bulked at Elstow WTS (expiry 2021) and Luton WTS (SLA to 2013). Bulking waste into larger vehicles for onward transport to the point of disposal serves a number of purposes:

- Reduces transport impact on environment;
- Reduces transport impact on road network;
- Extends life of collection vehicles; and
- Reduces collection vehicle “down time” (i.e. time spent travelling to and from disposal points).

The LGR saw the management of the Elstow Bulking Station / MRF contract fall to Bedford Borough Council due to its geographical location. The current contract with Shanks runs to 2021 and requires a throughput of a minimum of 52,000t of controlled waste per annum. If the authorities (together) deliver less waste than this they still have to pay for 52,000t. The facility currently bulks residual waste and transports it to landfill in Northamptonshire with recyclable material being bulked and transported to Milton Keynes for sorting.

Need

Following expiry of the current WTS contracts and possibly before, the authority will have a requirement for a WTS to bulk waste before being transported for treatment. The future requirements for waste bulking facilities are heavily dependant on the solution delivered by the BEaR Project for the treatment of residual waste. If the WTS element is included within the scope of the Project, bidders will be required to deliver bulking facilities as part of an integrated solution thus ensuring that the requirements for the WTS align with the other infrastructure being delivered.

The following waste streams could require bulking in the future:

- **Residual Waste** - If a residual waste treatment facility is delivered for CBC within its borders, the authority may not require any bulking facility for residual waste, although this will be fully assessed as part of a bidders wider proposal once the location of any proposed treatment solution is known. For example, a small scale WTS to bulk residual waste in the south of the area may prove beneficial to deliver waste to a facility in the north or vice versa.
- **Organic Waste** – If a bespoke organic waste treatment solution is not delivered or is not centrally located, the bidder may propose that this waste is also bulked for transportation. This would save transportation costs and vehicle down time. This is highly dependant on the decision made about the future of kitchen waste collection within the authority area.
- **Recyclates** – There is likely to remain a requirement to bulk and transport recyclable materials to a contracted processing facility. A facility capable of bulking all recyclable material collected at the kerbside could therefore be within the scope of the contract. The inclusion of a glass bulking facility could also be beneficial to the authority.

Proposal

If included within the scope of the contract it is proposed that the successful contractor would deliver a solution in line with their overall proposal. Bidders would be given the freedom to propose a solution that fits with any other services that are being delivered as well as existing services, taking full account of current contract requirements and costs. An integrated contract approach is required for this to be successful.

2.4. Organic Waste Treatment

Background

CBC currently collects approximately 4,550t of organic kitchen waste from the old Mid Bedfordshire area. There are no firm plans to roll this scheme out to the whole CBC area; however it has always been the intention to align services across the authority (where possible) at some point in the future.

The authority currently transports separately collected kitchen waste to Milton Earnest (in the North of the County) where it is treated using Anaerobic Digestion (AD) at the Biogen facility. The current contract with Biogen is due to expire in 2011 with the option of a two year extension to 2013.

On a per tonne basis the current scheme costs more than keeping the waste in the residual stream and sending it to landfill and therefore does not deliver value for money to the authority. The primary cost associated with the scheme is in the separate collection of the material using a number of dedicated collection vehicles. If the scheme is to continue, a cheaper collection coupled with a low cost long-term disposal option method must be found.

Need

As part of the Councils wider cost saving initiative, significant savings have recently been identified by the Waste team from reducing or cancelling the existing kitchen waste scheme. However, it is estimated that if the scheme were to be fully rolled out to south CBC it would lead to a further diversion of approximately 4,500t of waste from landfill and offset LATS fines by a further 3 years from 2013/14 to 2016/17. The increased composting rate would also assist the authority in achieving its target of 60% recycling/composting by 2020.

There is therefore a balance between cost and performance/landfill diversion. As stated above, the current cost of collection means that the total cost of kitchen waste disposal is in excess of that of the residual waste. However, the cost of residual waste disposal is increasing on an annual basis due to the landfill tax escalator. As shown in Appendix B there are also significant opportunities for reducing the costs of the scheme by using alternative collection methods.

By delivering a bespoke facility for Central Bedfordshire within its borders, operational efficiency would increase. The time spent transporting waste to the treatment facility would be significantly reduced, allowing vehicles to spend more time undertaking collections and therefore requiring fewer vehicles.

Proposal

The options for the future delivery of organic waste treatment include:

- Continuing the existing scheme (separate collection of kitchen waste delivered to Milton Ernest) with full roll out across the authority area;
- Development of a bespoke AD facility for the authority with full roll out of separately collected kitchen waste across the authority area;
- Development of a bespoke In Vessel Composting (IVC) facility for the authority with full roll out of co-collected kitchen and garden waste across the authority area; or
- Withdrawal of the current kitchen waste collection service in the North CBC area and subsequent disposal of this waste via the residual contract.

If approved for inclusion by Executive, bidders would be required to propose their best solutions for treating organic material. The Council would not state which form of treatment should be utilised thereby ensuring bidders can fully integrate solutions and are not restricted. Bidders would be provided with suitable background information to enable them to conclude which option would deliver best value for money for the authority in tandem with the other services being delivered.

2.5. Highways Depot

Background

The Bedfordshire Highways Contract with Amey delivers CBC's Highways service from two depots located in Bedford and Dunstable. The service includes all highways maintenance,

winter gritting and improvement projects up to 2016. A Contract novation process was approved at Executive 13th July 2010, and Deed of Novation is now due to be signed, meaning full transferral of the Contract to Central Bedfordshire Council.

Both depots were former County Council buildings and were provided to Amey for use at the time of Contract award (October 2005). As part of the Contract, CBC pays a monthly lump sum for the operation and basic upkeep of the depot assets.

Need

Both facilities currently in use fall short of modern design standards are generally life-expired and have impacted upon Amey's potential to deliver a highways service to modern standards. A modern facility, particularly when combined with other services, could deliver notable improvements to the efficiency and sustainability with which Amey and subsequent highways service providers could deliver services to CBC.

Moving the services currently provided at the Bedford depot in the Central Bedfordshire area would also promote self sufficiency.

Proposal

To date, an outline specification has been compiled to enable costing work to be undertaken on this element. The ultimate scope of a bespoke highways depot requires a detailed specification to be developed by the appropriate teams, in conjunction with existing service providers (subject to conflict of interest). If Members decide to include the highways depot within the scope of the Project this work will be undertaken immediately.

The proposed facility would most likely include vehicle parking and storage, vehicle maintenance facilities for CBC fleet vehicles as well as any facilities required for the delivery of the highways contract. Delivering a highways depot in the CBC area will ensure vehicles are more strategically located throughout the authority area, therefore increasing efficiency and response times.

3. Key benefits & risks of integration

3.1. Benefits of integration

There are a number of benefits of delivering the infrastructure/services identified above within a single contract. Typically, when delivering a residual treatment solution, the contracting organisation will be a Special Purpose Vehicle (SPV) formed by a construction company, waste management company and technology provider. The expertise is therefore available to deliver each of the elements outlined above without the requirement to significantly alter the typical bidder consortium format or get additional parties involved.

The key benefits of delivering additional infrastructure items within a single procurement process include:

- **Increased Market Interest** – Market interest has improved due to the increased scale of the Project making it more attractive to some bidders.
- **Procurement cost savings** – running a single procurement to deliver the services will save the authority the cost involved in running multiple procurements. The private sector will also save significant bid costs which would otherwise be passed back to the authority within the resulting gate fee.
- **Economy of scale** – Increasing the scale of the contract should reduce the cost through economy of scale savings.
- **Co-location** – delivering a number of facilities on the same site could provide significant co-location savings. Savings of approximately 15% on these elements have been quoted by the Projects Technical advisors. Savings would come not only during construction period through the use of a single contractor but also from operational savings such as a single security guard covering the entire site.

- **Risk reduction** – Passing a number of waste-related services over to a private sector company under a single contract transfers a significant amount of risk. Such risks include the interface risk between waste operations (e.g. HWRC and treatment), where there may be waste acceptance protocols that would previously have required management by the authority at the authority's risk.
- **Reduction in contract management** – Contract integration will reduce the management requirements, leading to reduced costs to the authority.

3.2. Risks of integration

As well as the clear benefits of following an integrated approach to deliver the required services, there are also risks that need to be assessed and monitored by the authority.

- **Reduced Market Interest** – There is a perceived risk that including additional elements within the contract scope could reduce market interest and subsequently affect competition as some bidders may be too specialised to deliver all services tendered. Market testing to date, including the feedback obtained at the Bidders Day (June 2010) does not support this perception. As stated above, the typical consortium structure for a residual treatment project would not require amendment or inclusion of an additional party to deliver the full suite of infrastructure outlined in this report.
- **Additional complexity** – The inclusion of a range of services will clearly add complexity to an already complex and long-term contract. However, due to the way that waste disposal services interact and overlap, the integration of the services could see a reduction in the complexity of the contracts in some areas by passing the risk and the management of any interfaces to the contractor. The contractors are experienced and comfortable with managing this risk.
- **Cost/profit loading** – In delivering a number of services through a single procurement exercise, the authority must ensure costs are not loaded onto certain elements. To enable Value for Money to be demonstrated, bidders must not be able to hide profit within elements, meaning that the authority could have achieved a better price if the elements were delivered separately. The Project team plan to mitigate this issue by scoring the price of each element individually, whilst utilising an overall affordability position to ensure that the Project as a whole is delivered within budget. This risk is further explained and mitigated in Section 7.
- **Multiple service failure** – There is a risk of multiple service failure with the selection of a single contractor to deliver all of the services if the contractor subsequently defaulted. This is partially mitigated by the significant financial evaluation undertaken on all bidders submissions and in most cases the pass back of facilities to either the lender or the authority upon contract default. In this situation, dependant upon the stage of the contract, the authority (in partnership with the lender) would seek to let a new contract for the operation of the facilities.

4. Contracting Options

There are a number of contract variables that need to be fully understood ahead of undertaking the detailed stages of the procurement if any additional elements are to be included within the contract. Two key variables are defined below:

4.1. Contract Term

The duration of the main treatment contract is planned to be 25 years due to the significant capital investment required by the contractor and its impact on the gate fee. However, this does not prevent a bidder from proposing a shorter or longer contract term, the benefit of which would be evaluated. Although it is planned to let all elements under a single contract, the duration of the contract can vary from element to element. Shorter term elements will simply fall out of the contract upon expiry.

Depending upon the finance structure used in the delivery of the additional elements, the contract term could vary significantly. If Public Private Partnership (PPP) funding (Section 5.1) is used, it is likely that a longer term would be required to enable the re-payment of the capital investment made by the bidder. If the term was too short the resultant gate fee would not offer value for money to the authority. It should be noted that any new infrastructure delivered through the contract would typically pass back to the authority upon contract expiry and is likely to have a residual life, the benefit of which would be evaluated.

It is anticipated that the HWRC's, Highways depot and organic waste treatment facility would have a contract life of 10 – 15 years, with the WTS having a contract of 25 years to mirror the residual treatment solution. Ultimately the contract duration will be subject to dialogue with bidders.

4.2. Contract type

There are a number of contracting options available. The main residual treatment facility will be let based on a Design, Build, Finance and Operate (DBFO) style contract as the authority is not well placed to take on any of these functions. The HWRC's, WTS and Organic Waste Treatment solution could follow a similar style; alternatively they could simply be Design, Build and Operate (DBO). In this case the authority would take on the financing of the solution through one of the routes identified in Section 5.

Due to an existing highways contract being in place and the lack of expertise to deliver the operational element of the service likely to be within the SPV, the contract for the highways depot would best suite a Design, Build & Maintain (DBM) contract.

5. Financing options for the additional elements

Each of the funding options identified below can operate under a Public Private Partnership (PPP). PPP refers to any collaboration between public bodies, such as local authorities or central government, and private companies.

5.1. Funding sourced by Bidder – Bank/Corporate Funding

Under this option the authority would require bidders to deliver the required funding as part of their solution. The contractor could deliver this funding through either corporate finance (i.e. self funded) or Project finance (Bank/Investment funded). The financial modelling undertaken and resultant affordability position approved by Members to deliver the residual treatment solution assumed that the successful contractor would deliver bank funding (Project Finance) at the latest rates (including buffer) as part of their solution.

The capital cost of delivering the major waste treatment element of the Project is such that it is unlikely to be feasible for the authority to make a significant capital contribution to offset debt. Also, due to the complex technical nature of the residual treatment solution, the authority would also want to pass all finance risk to the contractor.

The low risk nature of the additional elements outlined in this report means that the authority does not need to pass all financing risk over to the contractor and can benefit from better rates by funding part of or all of the infrastructure required for the additional elements through other methods as outlined in Section 5.2 & 5.3.

5.2. Funding sourced by authority - Prudential Borrowing (PB)

If possible, the delivery of some or all of the additional elements utilising direct Council borrowing through PB could provide significant cost savings for the authority (Appendix B), due to its ability to source finance at preferential rates compared to private sector bidders.

The payment for any facilities would most likely be made as a bullet payment to the contractor following construction once the facility had been inspected, thus ensuring the delivery risk remains with the contractor. Funding would therefore not be required until facilities were on the ground in around 2015/16, although this payment could be offset until a later date if required.

5.3. Capital Receipts

Capital receipts from the sale of authority-owned assets could be utilised to fund some or all of the capital requirements for the additional elements. However, it is acknowledged that there is likely to be significant competition for capital receipts from other departments, such as the Schools Development Program. Under this option the payment for any facilities would take place in a similar way to that identified in 5.2.

5.4. Re-Financing

Typically, under modern waste PFI/PPP contracts, the authority will put a requirement to re-finance into the contract. This has particularly been the case in recent years with the financial downturn and the inability to achieve good financing deals ahead of contract close. CBC would intend to place a similar requirement on any Project elements funded by the contractor.

Re-financing provides a requirement on the contractor to seek a better finance deal at a point in the contract (typically year 7) with the authority taking a share in any financing gain and benefiting through a reduced service price.

6. Financial Modelling

6.1. Methodology

In undertaking the financial modelling of the additional elements outlined within this report a similar process was followed to that used to cost the residual treatment solution approved by Executive in April 2010. In each case, the model calculates the costs associated with delivering a bespoke facility delivered specifically for the authority within its borders and compares this to the costs of continuing with existing services (do-minimum).

Key inputs to the model include:

- **Waste flow data** – This is typically the number of tonnes of waste to be treated at each of the facilities in each year over the life of the contract and takes future housing growth into account.
- **Capital costs** – Any bespoke facilities being delivered for the authority through the contract will have an associated capital cost. These costs have been defined by the Projects Technical advisers and other local authorities that have recently let similar contracts.
- **Operational costs** – The operational costs of each of the elements are typically paid for on a per tonne basis.
- **Lifecycle & Maintenance costs** – Maintenance costs cover the day-to-day maintenance of the facilities and Lifecycle costs cover the replacement costs of parts of the facilities (e.g. if part of the facility has a 5 year operational life and the full contract term is 15 years it would need to be replaced twice).

Any bespoke facilities modelled are assumed to be delivered via a Design, Build, Finance and Operate (DBFO) style contract and each element has been modelled under PPP and PB scenarios. The model works by calculating the cost of building a facility and then operating and maintaining it over the life of the contract. On top of this cost, a profit margin is added to account for the benefit to the successful bidder.

A wide range of assumptions are used in the financial model, all of which are deemed to be “on-market” (i.e. in line with current conditions) or more prudent than current conditions. All costs in the model are inflated over the life of the contract so that a true representation of the cost can be provided to the authority.

It is very important to note that, although modelled as new bespoke facilities for costing purposes, market intelligence has demonstrated that a number of bidders may propose the use of existing commercial facilities (Merchant Solutions) to deliver a number of the services detailed in this paper. The use of existing facilities is likely to come at a reduced fee, either through economy-of-scale savings or due to the debt associated with building the facility having already been covered or partially covered by another contract. The actual costs will not be known or fully understood until the detailed stage of the procurement exercise gets underway in 2011. The procurement will be structured to ensure these options can be evaluated alongside bespoke offerings.

6.2. Key assumptions

The key overarching assumptions utilised in all of the financial models are identified below. Specific assumptions for each of the elements are detailed alongside the results of the modelling in Section 6.3.

- The price base date is 1 April 2010;
- Capital costs have been indexed by 5.0% from the price base date to the start of construction;
- Operating costs have been indexed by RPIx (2.5%) and AEI (Average Earnings Index, assumed at 3.0%) where there is a strong staff focus;
- For Prudential Borrowing (PB), the interest rate assumed is 4.89% (4.39% plus a 50bps interest rate buffer). PB is repaid through a bullet payment at the end of the concession, an alternative option to pay on an annual annuity has also been modelled and is included in Appendix B;
- For Project Finance (Bidder funded solutions), the wrapped up interest rate assumed is 7.77% (including a 50bps interest rate buffer on the base rate). Arrangement fees and commitment fees are also included.
- The operational start date for all facilities is assumed to be 1 April 2016 and are evaluated over a 15 year or 25 year period as applicable.

6.3. Results

Each of the additional elements is considered individually below. The options that have been compared are detailed and the modelled costs both in nominal terms over the whole life of the Project (Appendix B, Table 1) and in revenue term for the first 5 years of operation (Appendix B, Table 2) are included in exempt Appendix B. The results have been removed from this document and are exempt under the Freedom of Information Act 2000 - Sections 36 (Prejudice to effective conduct of public affairs) and 43 (Commercial interests).

The selected funding method for all elements in Appendix B, Table 1, apart from the Residual Treatment Solution (previously approved by Executive) is Prudential Borrowing. This option was compared to Project Finance (bidder supplied funding) and offered significant savings to the authority. For this reason the cost of delivering each element via alternative funding options has not been included in the results. The low risk nature of the additional elements infrastructure lends itself to an authority funded solution.

6.3.1. HWRC's & Salt Barns

Two options have been modelled to provide members with a clear understanding of the cost of updating the HWRC's as part of the BEaR Project and including salt storage facilities at two of the sites.

1. **Existing Services** - Continue to utilise the Biggleswade, Ampthill, Leighton Buzzard and Dunstable sites in their current state. Current operating and maintenance costs are assumed to increase with inflation over the modelled period. Salt storage is not included.

- 2. New Services & Facilities** - Redevelop the Biggleswade, Ampthill and Leighton Buzzard sites to best practice standards and relocate and update the Dunstable site to a more suitable location. Provide salt storage facilities at two of the HWRC sites.

Key assumptions used in the development of these costs include:

- Appraisal performed over a 15 year period
- Site tonnage throughput assumed to be the same in either option
- Costs of moving the Dunstable HWRC to a more suitable location without the current issues have not been included in the “Existing Services” case.
- Salt storage capital cost estimated using best available information
- Salt storage assumed to be co-located with two out of the four HWRC sites. Dependant upon space and planning restrictions.

6.3.2. Waste Transfer Station

Two options have been modelled to provide Members with a clear understanding of the cost of delivering a bespoke WTS for the authority as part of the BEaR Project.

- 1. Existing Service** – Utilise the Elstow WTS to bulk and transport 40Kt of recyclable materials for the remaining duration of the contract at the current cost (plus indexation). Following contract expiry this option assumes that the site can still be utilised at the same rates.
- 2. New Service & Facility** – Deliver a purpose-built WTS within Central Bedfordshire as part of the BEaR Project, with the capacity to bulk 40Kt of recyclable materials annually.

Key assumptions used in the development of these costs include:

- Appraisal performed over a 25 year period;
- Both options modelled only cover the bulking and onward transport of recyclable materials as this is the only waste stream that is known to require long term bulking regardless of the residual waste treatment solution;
- No consideration is given for improved efficiency of transport modelling; and
- Lifecycle costs are assumed to be included within the operational costs of the facility.

6.3.3. Organics Treatment Solution

As outlined in Section 2.4, four options have been modelled to provide Members with a clear understanding of the potential future cost of delivering organic waste treatment as part of the BEaR Project.

- 1. Existing Service** – Roll the existing scheme out across the authority area. Continue to utilise the current treatment contract (indexed annually). Continue to collect kitchen waste separately using dedicated vehicles.
- 2. Purpose built Anaerobic Digestion (AD) Plant** – As option 1 but with this provision of a purpose built AD plant in the CBC area to treat the authority’s kitchen waste.
- 3. Purpose built In-Vessel Composting (IVC) Plant** – Collect the kitchen waste co-mingled with garden waste and treat the material at a purpose built IVC plant in Central Bedfordshire. Roll this co-mingled collection scheme out across the authority area.
- 4. Withdraw scheme** – Cancellation of the current kitchen waste collection stream and inclusion of this waste back into the residual (black) bin for treatment via landfill and, as from 2016, the BEaR residual waste treatment facility.

Key assumptions used in the development of these costs include:

- Where required due to scheme roll out, additional costs for caddies/bins included.
- An annual 10% replacement factor for caddies/bins for kitchen and garden waste has been included
- Provision of kitchen waste biodegradable bags not included.
- No benefit of reduced transport included in model.
- Cost of on-farm composting of garden waste included in options 1,2 and 4 to enable costs to be comparable (i.e. costs identified include the treatment of garden and kitchen waste).

- Appraisal performed over a 15 year period;
- There is no additional cost for collection of kitchen waste with residual waste or IVC co-collection options as the contract is not on a £/t basis.

Of the options identified above, Option 3 was modelled as the lowest cost option and is subsequently used as the cost comparator in Appendix B (where it is has been compared to existing service costs (including full roll out of the scheme - Option 1).

6.3.4. Highways Depot

The delivery of a highways depot as part of the BEaR Project has been modelled as a standalone option (Appendix B, Table 3) as it cannot be easily compared to current practice. This is because the future of the current depot provision is unclear.

Key assumptions used in the development of these costs include:

- Appraisal performed over a 25 year period;
- Analysis does not allow for any operating and maintenance costs and is a capital cost comparison between the funding options available (PB, Project Finance or Capital Injection); and
- No consideration is given to avoidable costs from closing the existing depot and improved efficiency of transport modelling.

6.4. Aggregate affordability position

The aggregate affordability position (Appendix B, Table 1) is a calculation of the total lifecycle cost of all of the elements combined and is the figure that requires Executive endorsement to enable the inclusion of the additional elements within the scope of the Project.

The aggregate affordability position will be utilised during the procurement as an upper limit to the cost of the solution. An overall affordability pass / fail criterion will be included within the evaluation of bids meaning that if a bidders overall solution (all elements together) costs in excess of the upper affordability position endorsed by Members, the authority will reserve the right to exclude them from the procurement.

The costs identified in Appendix B - Table 1 assume that under Prudential Borrowing the debt is repaid via a bullet payment at the end of the concession. If the authority were to opt to repay the debt on an annual annuity basis (much like a standard repayment mortgage) the total lifecycle cost of each element would decrease as the interest on the debt would reduce annually. However, there would be a revenue impact to this approach in the early years impacting the results of Appendix B – Table 2.

The aggregate affordability position has been removed from this document and is exempt under the Freedom of Information Act 2000 - Sections 36 (Prejudice to effective conduct of public affairs) and 43 (Commercial interests). The information is contained in exempt Appendix B.

6.5. 5 year revenue projection

A 10 year revenue projection (Appendix B, Table 2) has been provided to allow Members to assess the implications of delivering the additional infrastructure over the first 10 years of operation. Included within this assessment is the full cost of borrowing the funds required to deliver the additional elements via Prudential Borrowing.

6.6. Target Price

In order to drive down the ultimate price of the Project, the Project Team will be setting a Target Price which will be utilised during the procurement. A target price will be calculated for each of the elements included within the scope of the contract and will be a means of evaluating bidders prices on a sliding scale. Table 2 below provides an example of this methodology.

Table 2 – Example price scoring methodology

Score	0	1	2	3	4	5	6	7	8	9	10
Price	> Affordability position										< Target Price

If a bidder hits or falls below the target price then they will achieve full marks (10) for that element of the evaluation. If however their solution costs in excess of the target price they will be marked accordingly on a sliding scale up to the point at which they reach the affordability position. A mark of zero will be awarded to any bidder whose price falls above the affordability position for the element.

This methodology will ensure that bidders provide keen prices rather than bidding to the authority's affordability position. The authority will reserve the right to reject any bidder that falls outside the overall affordability position for the Project, as approved by the Executive.

The target price for each element will be set taking account of the very latest information and known best value contracts secured elsewhere.

7. Bid Evaluation

7.1. Objectives of Evaluation Award Criteria

The aim of the Competitive Dialogue (CD) procurement procedure is to allow a contracting authority to "identify and define the means best suited to satisfy its needs" (Public Contracts Regulations, 2006). It has been specifically developed for use on complex projects where a number of solutions are possible. The dialogue is generally conducted in successive stages to reduce the number of solutions involved by applying the contract award criteria at each stage. The award criteria must follow the Most Economically Advantageous Tender (MEAT) principles, thus determining best value for money for the contracting authority.

The evaluation criteria are used as a means to differentiate between bidders and their proposed solutions. The process is designed to be transparent and fair and maintain competition amongst the bidders. Regulation 18 of Public Contracts Regulations 2006 also expects that the criteria and weightings to be used for the award of the contract should feature in the early contract documentation, thereby providing a guide for perspective bidders on the Council's key objectives for the contract.

7.2. Evaluation Criteria Development

The evaluation criteria were originally developed for the Partnership Project and were subsequently approved by each of the Partner authorities as part of the approval of the PFI Outline Business Case. At this time a full background to the selection and development of the criteria, as well as a detailed rationale for the allocated weightings was provided to Members.

Although the Project has changed significantly since the original framework was developed, the fundamental principles of the evaluation process and the ultimate goals of the authority have not changed. A high level review has taken place and the following amendments are proposed:

- Inclusion of any additional elements within the overall framework following Executive approval
- Move the legal and contractual criteria to a higher level to incorporate a single assessment of the entire contract rather than each element.
- Move from a 3 stage process to a 2 stage process dependant upon the number of bidders taken through to the next stage.

It is not proposed to change the balance of the evaluation process, i.e. the split between quality and price at a high level or between the weightings at the lower levels as these have already been approved by Members.

Following Executive approval of the inclusion of any additional elements within the contract scope, the evaluation framework will be finalised and tested to ensure that it delivers the objectives of the authority and does not favour a particular technology or bidder. The framework will then be approved by the Project Board and presented to the Members Reference Group ahead of inclusion with the contract documentation issued to bidders at the Invitation to Participate in Dialogue (ITPD) stage (as per procurement requirements). Bidders can then review the criteria and construct their bid accordingly. Once issued to bidders the evaluation criteria are fixed.

8. Conclusion

This report provides a clear rationale for the inclusion of each element within the scope of the BEaR Project. The financial analysis provided in Appendix B also clearly demonstrates that through the delivery of an integrated contract, savings can be made when compared to the projected costs of existing practices. Each element is concluded below with an overall conclusion provided at the end.

8.1. Household Waste Recycling Centre (HWRC) redevelopment / relocation

The existing HWRC facilities are outdated and do not provide the best experience for users. By redeveloping the sites and relocating the Dunstable site to a more suitable location, CBC can offer residents a much better experience. Due to the capital costs involved, the financial analysis demonstrates that updating the facilities comes at a cost to the authority when compared to continuing with the existing facilities. However, the increase in diversion rates coupled with the reduction in health & safety and accessibility risks and gain share mechanisms within a new contract will go some way to bridging this gap.

The future growth anticipated to take place in Central Bedfordshire will put additional pressure on these sites. Having modern facilities with swift turnaround times due to improved layouts is therefore essential to prevent the need to deliver additional sites in the future to cope with increased demand.

8.2. Waste Transfer Station (WTS)

Waste Transfer is an essential stage in the journey of waste from the householder to its final point of treatment/disposal. It allows waste from a number of collection vehicles to be combined near the point of collection for onward transport thereby reducing the number of vehicles on the road.

Due to the capital costs involved, the financial analysis demonstrates that delivering a bespoke WTS for the authority comes at an additional cost to the authority when compared to continuing with the existing facilities. The BEaR Project team are awaiting confirmation of the future of the existing facility at Elstow. To assume that this facility will be available for use by the authority past 2021 (as per the "Existing Services" option) is a risk to the CBC authority. If this facility is available for use in the future, bidders will be made aware of this as a potential option.

The future requirements for waste transfer are currently unclear and will only be fully appreciated once the final residual waste treatment solution for the authority has been selected through the BEaR Project procurement. For this reason, it is essential that waste transfer services are included in the scope of the contract to allow bidders to deliver an integrated solution ensuring that there is a link between the two elements.

8.3. Organic Waste Treatment

The current costs of kitchen waste collection and treatment are unsustainable, especially in the current climate. The financial appraisal undertaken on the future options for this waste stream (Appendix B) clearly demonstrates that significant savings can be delivered if changes are made to the current methodology. The continuation of the scheme in whichever format is essential in assisting the authority to achieve the diversion targets that it has set of 60% recycling/composting by 2020. Removal of the existing scheme would see the current recycling rates drop by approximately 5%.

The Project team do not propose to specify the treatment solution to be supplied by bidders or whether kitchen and garden waste should be collected together. By providing bidders with the opportunity to influence this element a better value for money integrated solution can be developed.

By delivering a lower cost solution, the scheme can actually save the authority money when compared to both the existing scheme and sending the waste back to landfill. Full roll out of the scheme and alignment of services across the authority area would also then be possible due to the cost savings being delivered.

8.4. Salt Storage

The need for salt storage facilities in the Central Bedfordshire area is clearly defined within the main body of this report. The authority currently does not have any salt storage capacity within its boundary and as well as an operational need there may shortly be a legislative need to provide capacity for salt storage.

The costs of delivering the salt storage facilities have been wrapped up with the costs of delivering the HWRC element. By delivering the salt storage infrastructure as part of a larger project, economies-of-scale and co-location benefits can be achieved. The co-location savings achieved by placing the sites adjacent to, or within existing HWRC sites, would be significant. The final scope of the sites and the locations to be utilised will be subject to dialogue with bidders and the Highways team, taking the proximity principle, land availability and price into account.

8.5. Highways Depot

The BEaR Project team is awaiting confirmation of the future of the existing Highways Depot at London Road, Bedford. To assume that this facility will be available for use by the authority past the current contract expiry date of 2016 is a risk to the authority and its ability to deliver high quality services in the future.

A new Highways depot, delivered within the CBC administrative area will enable the authority to be self sufficient and will ensure that long-term service provision can be achieved, taking the proximity principle into account. As shown in Appendix B – Table 3, funding the delivery of this element through capital receipts provides the best value financing option, however Members will need to decide whether this is the best use of these funds.

8.6. General Conclusion

Ultimately, the best value for money solution will be achieved when a bidder is given the freedom to link services together and deliver economy-of-scale and co-location savings to the authority. The Project team will be providing bidders with a set of parameters within which they must deliver the required services rather than specifying exactly how the authority would like the service to be delivered. This ensures that a fully integrated service is provided and that an innovative approach can be taken selecting the best options to create an overall solution.

Integrated contracts have previously been discouraged under PFI due to the consideration that competition could be limited only to those bidders capable and experienced in the delivery of all tendered services. This is more the case when including collection services within the contract, and interest in the BEaR Project procurement has actually increased with the inclusion of additional services as they can be delivered by existing members of a bidding consortium. The other benefits of integration, as highlighted in this report are clear and should be fully considered when reviewing the recommendations.

Taking the above information into account, as well as the financial information included within Appendix B, this paper concludes that the following elements should be included within the extended scope of the BEaR Project and procured as part of a single integrated contract:

- The redevelopment of 3 and relocation & development of 1 Household Waste Recycling Centre (HWRC) and delivery of the service for the contract period;
- The provision of Waste Transfer Services if required as part of an integrated solution;

- The provision of organic waste treatment services;
- The provision of salt storage facilities.

Members are also asked to consider the inclusion of the Highways Depot element within the scope of the contract on the understanding that it would deliver clear benefits to the authority but comes at an additional cost.