

Appendix A4 – Planning ahead – Infrastructure and Partners

Part 1 - Development of new processing facilities in North of Cardiff (including Household Waste Recycling Centre)

Evidence of requirements and location

1. Currently the city has two fit for purpose sites that remain under capacity, but as the city grows and the complexities and time it takes to develop a new licensed site, work should begin now to plan for the future.
2. The consideration of the third site is based upon providing the correct type of facility in an appropriate, fit for purpose location ahead of the existing sites reaching their current usage capacity. In 2018, the Council provided the required capital allocations to begin this new process.
3. Cardiff has identified several strategic sites for housing development in the LDP. The key areas that would impact on the HWRC usage requirements will be the north of junction 33 development (~2000 dwellings), North West (~5000 dwellings) and the North East (~4500 dwellings) strategic sites, plus large infill sites.
4. While the North East site will be serviced by Lamby way, the Junction 33 and North West sites will place too much pressure on the Bessemer Close facility.
5. Each of these dwellings will produce increased volumes of waste and recycling created for the city to manage. 23% of all waste created from a household will not be collected via the kerbside collection, and will require disposal at a household waste recycling facilities (compositional analysis data- Appendix A6)

Timings

6. Depending on the site, existing infrastructure, environmental impact assessments, planning and permitting, a new site could take 24 to 36 months to deliver.
7. Only after a site is secured can any site investigations begin; this will require 6-12 months transport and environmental impact surveys, prior to planning permission processes. Then, a potential build time and permit application of 12 months depending on the chosen site's existing infrastructure and engineering requirements.

Requirement Conclusion

8. With the anticipated growth of Cardiff, and the need to increase recycling, the Council are taking a longer term strategic view. Therefore, the Council will begin the planning and progressing of a third Household Waste Recycling/Re-

use, and commercial centre, ahead of the current infrastructure becoming over its capacity.

Infrastructure Development

9. The Council will firstly complete a review of all available Council land. Use of available Council land would be beneficial, as there would be no additional capital costs for the initial land purchase.
10. The site will need to be close to residential developments, but not directly within. It must be suitable to comply with all relevant planning and permit requirements.
11. It will be based on the successful, best practice design of the Modulo Beton split level HWRC at Lamby Way. Assuming the land will only house a HWRC, it should be a minimum of 1 hectare (2.5 acres) with ability to hold at least 20 skips.
12. The new HWRC is likely to cost in the region of £2.5 to £3m; the potential of claiming Section 106 monies from the new housing developments to part, or wholly fund the site will be explored.
13. Once a suitable site has been identified, there will be a number of further stages to complete before building work can begin. A number of these stages are time restricted, and will therefore impact on the overall delivery time of the project e.g. some Environmental Impact reports need to be completed at a certain time of year.
14. The Council would anticipate the new HWRC being completed in line with the completion of the new housing development work within the North of the City.



15. Example of a Modulo Beton raised level HWRC at Lamby Way

Part 2 - Development of Additional Material Recycling Facilities (MRF)

16. The current Materials Reclamation Facility (MRF) based at Lamby Way was opened in 2006. It is estimated that along with the remaining life span and the

additional waste arisings that will occur as a result of population growth, an updated facility will be required.

17. The footprint of the existing MRF is no longer sufficient; there is a significant lack of storage space for materials at the front reception point and for product storage after sorting. This means that should recycling markets crash, we have little opportunity to store material until the values increase or a new market opens.
18. There may be an opportunity to join with our neighbouring local authorities, to secure a regional sized and funded recycling facility, in a similar arrangement to Prosiect Gwyrdd (residual waste partnership). There is appetite to progress; we are aware that some regional authorities are currently outsourcing their recycling processing to companies that are not within Wales. Far greater economies of scale could be secured by working together. The facility could be located within any of the participating authorities.
19. The size of the facility will be dependent on the number of authorities participating in a joint scheme and their collective incoming recycling tonnages. Cardiff's current MRF has a maximum operational capacity of 51,000 tonnes per annum working over three shifts, with a land area of 1.5 hectare (3.8 acres)
20. A new Cardiff MRF is likely to cost in the region of £15m; a larger regional facility would be based on collective tonnages and dependant on site location and land ownership.
21. The council should also consider the benefits of an additional commercial transfer station and weighbridge. This will allow the Council to receive recycling and waste from businesses, and obtain an additional income. However, the Council must identify the risk of obtaining additional residual waste, and ensure that the waste accepted would not count as additional Municipal Sector Waste (therefore reducing our overall recycling rates).
22. The potential location of the new larger facility will be dependent on the local authorities participating in a potential joint procurement. If Cardiff proceeds alone, the facility would be based within Cardiff.
23. To fully identify the Cardiff and wider regional Recycling Infrastructure opportunities, a feasibility study and Outline Business Case will be required. This will include identifying funding and economic opportunities to co-locate with reprocessing facilities to commence a circular economy for recovered glass, plastics or card to be directly supplied to a company – co-located - to convert this material into a new product, all within the region. This would stabilise the market and generate an economic gain to the City Region.