

Circular Economy Statement



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PART OF



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HOLDINGS

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1 Introduction

1.1. West London Composting Limited

West London Composting Limited (WLC) has been operating on Newyears Green Lane which is South of Harefield in the London Borough of Hillingdon since 2004. The business shares a site with LJ Grundon Limited, both companies are under the ownership of Envar Composting Limited who operate recycling operations across the south of the UK. The business is part of a larger group of companies collectively known as Heathcote Holdings Limited (HHL).

HHL is a family-owned group of complimentary innovative businesses who work in the circular economy sector. The group of companies that make up HHL are leaders in organics, recycling, waste management, industry innovation, agriculture, and land management. The business strives to operate collaboratively to provide a circular approach. The approach in using complementary businesses to this end is detailed in the visual shown in figure 1.

WLC is part of Envar Composting Limited & recycles up to 75,000 tonnes of green waste per year. The material is primarily sourced from Hillingdon along with other London boroughs where it is directly delivered on dustcarts or bulked up into large lorries and delivered to the site for composting. London boroughs benefit from the ability to effectively recycle their green wastes into compost products within the greater London area. The existence of the waste recycling site in this location supports the policies of the Mayors Objective 7.4 in the London Environment Strategy to:

“Maximise local waste sites and ensure London has the infrastructure to manage all the waste it produces.”

Significantly the London wide target stated in the strategy is to reduce biodegradable waste sent to landfill to zero by 2026.

The operation of WLC facility and the existence of the site within London fully supports these objectives & helps provide the capacity for London to follow the circular pathway towards these objectives and targets by turning green wastes into valuable compost products which replace carbon intensive primary materials whilst providing significant other benefits in agriculture & employment in the local area.

WLC produces an independently certified regenerating soil improving compost from green waste. This product is used on farms helping to build soil carbon & humus & reduce artificial fertiliser use. It is also used in landscape & horticulture to replace less sustainable alternatives such as peat-based composts. The soil improver re-introduces organic matter to the soil, increases soil bound carbon and restores land water balance as well as being probiotic for the soil microbiome.



Figure 1 - businesses in the Heathcote Holdings Group of complementary businesses based in the circular economy sector.

1.2 Proposed Development Summary

This report summarises the waste and circular economy strategy for the proposed development of the land at West London Composting to meet the sustainability requirements of the London Plan.

The development consists of the leveling of the area to the north and west of the current site and the construction of a concrete pad to conduct recycling operations upon, including water handling infrastructure by way of 2 x standard industrial tanks (for rainwater harvesting) and ancillary, modular offices. There is no demolition involved in the construction of the site. The site is not constructing any new buildings, the buildings are modular in nature and are already in existence within the business. The proposal is to relocate these buildings and reuse them on site. The development has a total GIA of 224m². However, this space is not being "constructed" and instead is being simply craned into place and connected to relevant services. The total site area being built, as an external pad of concrete for the treatment of biodegradable waste is 27,890m². The site area is shown in figure 2 below.

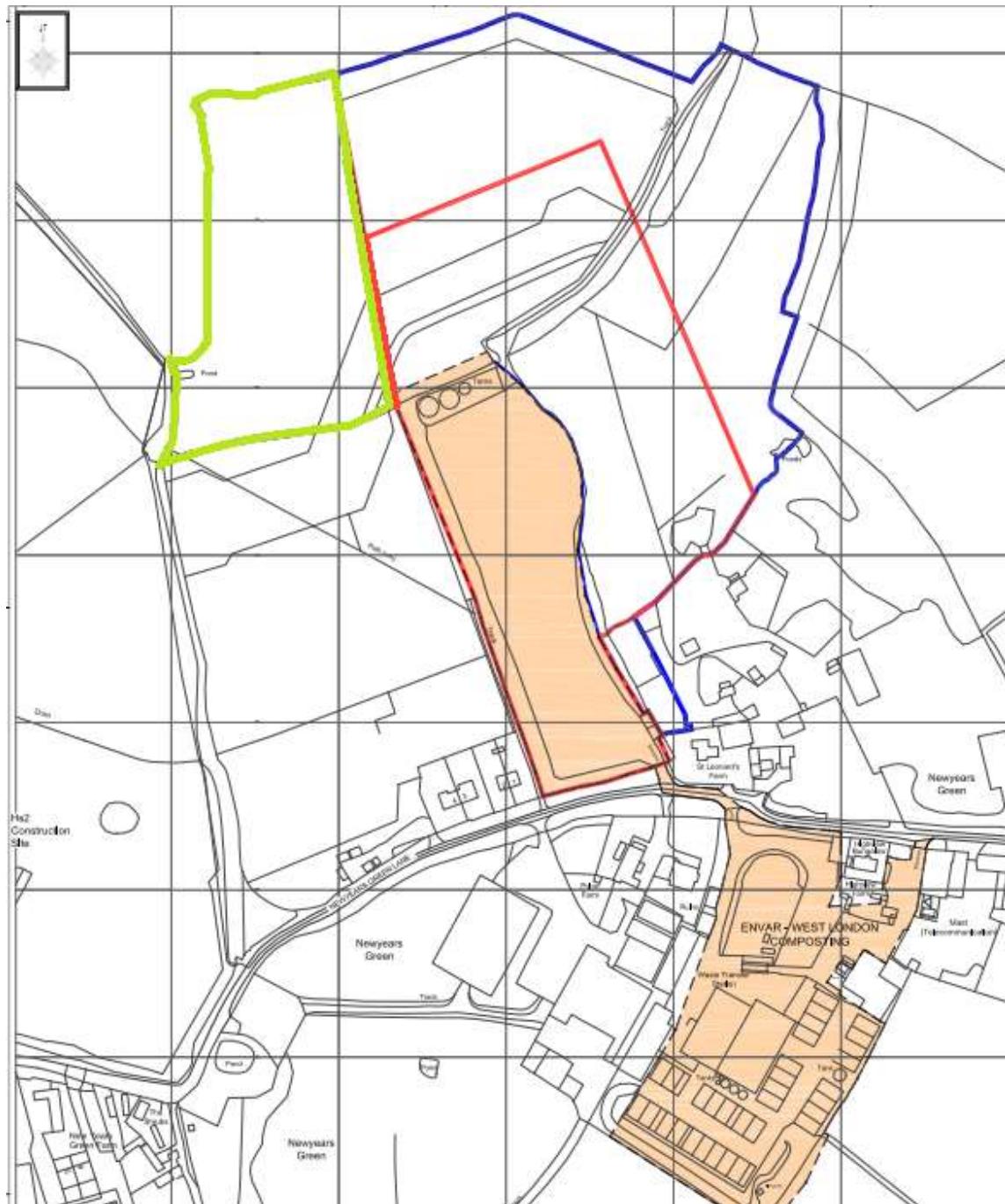


Figure 2 - Location plan of the proposed development. The blue line indicates the applicant's extent of ownership, the red line indicates the planning boundary area, and the green indicates the biodiversity enhancement area. The orange shaded area shows the current permitted area.

The circular economy template is primarily targeted towards the construction of new buildings in the GLA area. As this proposal is not to create buildings, the template document does not apply directly when we look at the

GIA against the construction materials involved. The applicant in this case, wanting to comply with the policies of the London plan, whilst not proposing a project which necessarily fits the reporting template, have sought to clarify in this report where it will meet the relevant London Plan policies and explain where the spreadsheet calculations may be misleading.

Best endeavors have been used to explain the measures which shall be taken to ensure the design and build of the site is in line with various policies and plans, in and of itself the operation of such a site can be considered to weigh heavily towards supporting the circular economy and the objective of the circular economy targets itself which have been explained in section 1.1.

1.3 Policy

Policy SI 7, “Reducing waste and supporting the circular economy policy” from the London Plan outlines guidance for developments in reducing waste and supporting a circular economy resource conservation, waste reduction, increases in material re-use and recycling, and reductions in waste going for disposal will be achieved by the Mayor, waste planning authorities and industry working in collaboration to:

1. Promote a more circular economy that improves resource efficiency and innovation to keep products and materials at their highest use for as long as possible.
2. Encourage waste minimization and waste prevention through the reuse of materials and using fewer resources in the production and distribution of products.
3. ensure that there is zero biodegradable or recyclable waste to landfill by 2026.
4. meet or exceed the municipal waste recycling target of 65 per cent by 2030.
5. meet or exceed the targets for each of the following waste and material streams:
 - a. construction and demolition – 95 per cent reuse/recycling/recovery
 - b. excavation – 95 per cent beneficial use
6. design developments with adequate, flexible, and easily accessible storage space and collection systems that support, as a minimum, the separate collection of dry recyclables (at least card, paper, mixed plastics, metals, glass) and food.

Referable applications should promote circular economy outcomes and aim to be net zero-waste. A Circular Economy Statement should be submitted, to demonstrate:

1. how all materials arising from demolition and remediation works will be re-used and/or recycled
2. how the proposal’s design and construction will reduce material demands and enable building materials, components, and products to be disassembled and re-used at the end of their useful life
3. opportunities for managing as much waste as possible on site.
4. adequate and easily accessible storage space and collection systems to support recycling and re-use.
5. how much waste the proposal is expected to generate, and how and where the waste will be managed in accordance with the waste hierarchy.
6. how performance will be monitored and reported.

Development Plans that apply circular economy principles and set local lower thresholds for the application of Circular Economy Statements for development proposals are supported.

The method statement and further details in this document and its relevant appendices explain how the applicant shall achieve these objectives insofar as they are able in the understanding that there being no building or development work which directly applies to some of the circular economy guidance.

1.4 Method Statement

This circular economy report was in line with the new London plan policy SI 7, following the guidance outlined in “Circular Economy Statement Guidance” document of March 2022.

1.5 Circular Economy Aspirations

A circular economy is one where materials are retained, reused, and recycled at their highest value for as long as possible, with the goal of having no residual waste at all. To make this possible requires dramatic change in the way buildings are designed, built, operated, and deconstructed. Achieving a more circular economy will dramatically reduce the requirement for virgin materials and resources, as well as reduce the amount of waste produced.

As the development is not a residential or industrial development, which requires buildings further than the relocation of already existing containerised, or modular buildings, we have applied the circular economy logic to the general construction of the recycling site as this is by far the biggest element of the Planning Application proposal.

West London Composting, the Applicant, aspires to contribute to the circular economy not only through its operations in being an active player in the recycling business but also as an example to others by using best available techniques to ensure construction use and recycling in its operations are always pre-considered and applied to the best of their ability whilst maintaining practicality and safety of use in operation and maintenance of the site and any associated infrastructure.

2 Circular Economy Goals and Strategic Approach

The strategic approach for each section for the development is summarised in Appendix A.

The proposed development is for an extension of the existing composting pad at Newyears Green Lane to enable the processing of compost in line with the Environment Agency's "Appropriate Measures" document which seeks to improve waste management operations and allow for the most efficient processing of waste to produce the best output with the lowest environmental impact. Our compliance with this is enabled by using a larger area for compost treatment operations which consists of a concrete pad area only to enable better material processing. This fits in with section 7.3 of the London Environment plan in minimising the impacts of waste activities. The site is suitable for this development and no demolition is required.

The proposed new development is to enable the long-term operation of green waste composting meeting the latest guidelines of the Environment Agency. It is expected the need for a green waste solution for London is a long-term requirement which is likely to exist into perpetuity. The location of the site is well suited to this need and complies with section 7.4 of the London Environment plan. It is not expected the site will be removed or demolished with no further use for a minimum of 60 years. Its basic construction allows for further development, subject to obtaining planning permission, for the same activity should a new and better recycling technology become available.

As such these sections of the development will be designed to meet long term needs while being durable and resilient to a changing climate. All waste operations sites must be built to be resilient to climate change in line with a risk assessment conducted under CIRIA 736. This forms part of the Environmental Permitting regulations and is not relevant to planning. For planning purposes, the site has been designed to maximise re-use of rainwater and be able to cope with a 1 in 100-year rainfall event plus the effects of climate change.

This means it will be designed to meet the needs of the present, but with consideration of how those needs might change in the future and designed for change.

The small number of internal spaces are designed to be suitable for the process for which they are providing support to. These spaces already exist and will be fitted with energy efficient air source heat pumps (aircon/heating) and are unlikely to be re-fitted out as part of the main build.

In construction of the main recycling area the construction shall reuse cut and fill material to ensure off-site disposal is not required. Landscaped soil bunds shall be created out of the available materials. Recycled aggregate shall provide an underlayer for the main concrete construction. The strategy is to use as many recycled materials as possible as they are more cost effective than primary materials however, they must meet the relevant specification required. For this reason, it may not be possible to use fully recycled aggregate concrete. Efforts shall be made to include recycled aggregate concrete where appropriate and this shall be reported on in the post construction stage report with justification on materials used.

3 Circular Economy Commitments

3.1 Narrative

The commitments have been summarised in Appendix B, Table 2. These will be reviewed and updated at the post construction phase.

3.2 Plans for Implementation

3.2.1 Conserve resources, increase efficiency and source sustainably.

When minimising the quantities of materials, it is about ensuring that unnecessary material is not used to meet the requirements of the building or in our case the construction of the recycling site (no buildings as such). The development shall:

- The depth of the subbase shall be designed to be adequate for the purpose for which it is being used. Which means an optimum amount of material will be used to reduce the need for repairs whilst not using too much to be wasteful.
- The slab will be optimised to balance concrete and reinforcement requirement.
- Pipework shall be preinstalled with extra duct installed for any future use allowing the site to benefit from less work required should further services be required later.
- Existing buildings (modular) shall be re-used or purchased second hand to minimise pressure on raw materials and products.
- To ensure commitments are maintained, a review of them will be conducted during the construction and post construction stages.

3.2.2 Minimise the quantities of other resources used.

The development has taken steps to ensure other resource use will be kept to a minimum, such as:

- High strength concrete to minimise repairs required and maximise longevity line with GLA targets.
- The addition of processing space allows for fewer liters of diesel to be used in processing material and maximises energy efficiency per tonne of material managed.
- Full sitewide rainwater harvesting to reduce or remove grid water resource use.
- Solar panels where appropriate to reduce energy usage.

3.2.3 Sourcing materials responsibly

Materials with a high recycled content will be prioritised as per the development materials plan in the appendices. The development will:

- Consider opportunities to use cement replacement materials in concrete, with products with up to 50% available in London. Amount of recycled binders in concrete should be maximised, subject to structural and cost considerations. IE more recycled content may lead to greater repairs so considerations will need to be made. To be reviewed by the structural engineer when specifying concrete and reported in the post construction plan.
- Recycled aggregate shall be used for under burden.
- Reinforcing steel shall be specified with a high recycled content.
- Modular buildings will be reused from owned stock or purchased second hand.

3.2.4 Design to eliminate waste.

The principle guiding strategy behind the development is the design for longevity. These principles have guided the overall approach to the development, such as:

- The development will use a reinforced concrete slab which will last for at least the design life of the development and can be extended with sufficient maintenance.
- All buildings shall be from secondhand stock and shall be repaired for as long as it is cost effective to do to
- All materials recovered in slab repair shall be reused on site.

3.2.5 Sustainably managing waste

There will be very little waste from construction. Almost all created wastes can be used on the site or recycled within 1 mile of the application premises. Of the small amount of waste created on site it will most likely consist of:

- Concrete overpour
 - Can be used in the construction of on-site bunds or used in later repairs after stockpiling.
 - Can be sold as recycled aggregate to the aggregate's supplier bordering the site.
- Rebar Offcuts
 - Can be incorporated as extra reinforcement on pad edges in the next pour.
 - Can be recycled at BFA recycling less than 0.2 miles from the application site.
- End of life cabins (Use stage)
 - Can be recycled into basic components on site through our recycling yard which occupies our own premises and fully recycled or recovered.

3.2.6 Managing municipal waste

Municipal waste is created from the offices of our current operation on site and shall not increase as part of this construction project as no further offices are proposed. Municipal waste is managed by:

- Segregation of recyclate from non-recyclate
- Procurement policies in place to maximise procurement of sustainable goods which can be easily recycled, preferably by processes on site.
- 100% of waste to be diverted from landfill (Current normal)

3.2.7 Technical Design, construction, and reporting

Basic designs including bills of materials have been created. At final detailed design review the commitments made in this document shall be incorporated. Contractors shall be required to follow the policies of the detailed design review including the requirements of this document and its appendices. A construction circular economy audit shall be conducted during the construction and included in the post construction report.

A maintenance plan shall be created on final construction.

Following at least six months of full operation of the development to gather a full set of data on waste production, a Post Completion Report shall be completed and submitted to the local authority and GLA. The Post Completion Report shall provide revised versions of the tables outlined in the appendix of this report, comparing actual performance against predicted targets.

4 End-of-Life Strategy

The end of the life of the site has been considered from an early stage to ensure it can be simply deconstructed. The priority is to ensure the site lasts beyond its design life. The proposed development is built out of a conventional reinforced concrete flat slab which is a well-established and robust material. These materials, when properly maintained and looked after, can outlast the proposed design life of the development, and should last in perpetuity. There are no buildings on site which are not already recycled which will continue to be maintained until they are ultimately recycled into components on site with 100% landfill diversion. To aide this, there are several techniques that can be used to extend the life of key materials. It is likely over the lifetime of the development further techniques will be developed to extend the life of the materials as well. Information on these techniques will be included in the site files.

When disassembling the site, the key structural materials are all recyclable, re-useable or can be re-used on site as crushed aggregate for future developments. Guidance on disassembly and disposal of key materials will be provided within the standard industry guidance notes. The key EOL use of key materials is outlined below:

- Concrete – Concrete is by far the most significant material within the development. At the end of the frame’s life, it can be crushed and used as recycled aggregate. Evidence from typical construction sites typically show that almost all concrete is recovered for recycling into aggregate, with minimal amounts sent to landfill.
- Rebar - Steel is one of the most valuable materials for recovery. Rebar should be separated from crushed concrete and be recycled. When correctly separated, steel can be consistently recycled at a high value, again and again.
- Recycled aggregate – Bricks, tile, rubble, and glass make up recycled aggregate and are a durable material that outlast the life span of developments and shall be suitable for re-use.

5 Conclusion

This report summarises the waste and circular economy strategy for development at Newyears Green Lane to meet the sustainability requirements of Policy SI 7, “Reducing waste and supporting the circular economy policy” from the London Plan. The site is situated in London Borough of Hillingdon. The proposed development consists of the extension of a currently designated waste facility to better comply with the Environment Agency and London Plan (Environmental Strategy) requirements. Several key commitments and design strategies were identified to ensure the development contribute towards better supporting a circular economy. These involve design decisions to minimise resources use, minimise waste and strategies to manage waste effectively. A plan for how these will be implemented was detailed. The end-of-life strategy for the proposed development has been considered from an early stage and has been outlined within this document.

Appropriate post construction reports can and shall be completed. As a waste industry partner to multiple London Boroughs, West London Composting can show that it is possible to build sites to an outstanding level of circular development which shall be detailed in the post construction report.