

enVar

Regenerating our Earth

TP – Mat Pad Extension 2024

West London Composting Facility Upgrades 2024

IMS Ref – Travel Plan 24 V1

Envar Composting Limited

Phone - 01487 849 840

Email – enquiries@envar.co.uk

Prepared by J Cooper 17/6/2024

Basis of the Report

This document has been prepared by Envar Composting Limited with reasonable skill, care, and diligence. Envar has taken great care using reasonably available information in the production of this assessment.

Information reported herein may be based on the interpretation of public domain data collected by Envar, and/or information supplied through historical, local, or internal knowledge and through Envar's colleagues and associates. These data have been accepted in good faith as being accurate and valid.

This document may contain information of a specialised and/or highly technical nature and third parties are advised to seek clarification on elements which may be unclear.

Contents

1	Introduction.....	4
1.1	Purpose	4
1.2	Scope	4
1.3	Objectives.....	4
2	Site Information	5
2.1	Location.....	5
2.2	Description	6
2.3	Timeline	6
3	Regional Maps	8
4	Construction Traffic Management	11
4.1	Vehicle Types and Volumes	11
4.1.1	Calculations.....	11
4.2	Parking & Materials Storage	12
4.2.1	Construction Employees.....	12
4.2.2	Freight & Supplies.....	12
4.2.3	Access Routes.....	13
5	Environmental and Safety Considerations	13
5.1	Emissions Control	13
5.2	Noise Reduction	13
5.3	Safety Measures	13
5.4	Community Considerations	13
5.5	Material Sourcing	15
5.6	Material Handling	16
5.7	Waste Management.....	16
5.8	Sustainability	16
6	Conclusion	17
6.1	Summary	17
6.2	Commitment.....	17

1 Introduction

1.1 Purpose

The purpose of the CLP and its implementation is to minimise environmental impact, road risk, congestion, and cost of the logistics associated with the construction of the project and to ensure there is minimal interference with other infrastructure projects in the area, namely HS2.

1.2 Scope

The CLP covers the expansion of the existing concrete pad and logistics associated with site access from public highways. As there is significant use of recycled materials from nearby SCS Railways operations which are not road bound there are mentioned as a benefit but are not considered in the plan due to the non-impact this will have on the plan purpose. The scope includes consideration of the following conditioned issues and suggestions:

- forecast programme and construction trips generated.
- booking systems.
- consolidated or re-timed trips.
- secure off -street loading and drop off facilities.
- use of logistics and consolidation centres.
- re-use of materials on-site.
- collaboration with other sites in the area.
- use of rail and water for freight.
- implementation of a staff travels plan.
- any areas for the parking of vehicles of site operatives and visitors (including measures taken to ensure satisfactory access and movement for existing occupiers of neighbouring properties during construction).

1.3 Objectives

The overall objectives of this Outline CLP are to:

1. Lower emissions.
2. Enhance safety
3. Reduce congestion

These objectives shall be achieved following the below listed sub objectives.

- Promote smarter operations that reduce the need for construction travel or that reduce or eliminate trips in peak periods.
- Encouraging greater use of sustainable freight modes and or local supplies where reasonable including those who do not impact on the road network
- Encouraging the use of greener vehicles.
- Managing the on-going delivery of the CLP with the construction team
- Encouraging the most efficient use of construction freight vehicles.
- Using and recycling on site materials, eliminating the need for transport

2 Site Information

2.1 Location

The West London Composting site at New Years Green Lane, UB9 6LX, is in the Hillingdon Borough of Greater London. The site is in a semi-rural location within the bounds of the M25.

Local Context:

Road Access:

New Years Green Lane: The composting site is directly accessible via New Years Green Lane. This road connects to Breakspear Road South and Harvill Road, providing local access. There is already an agreement in place for heavy transport to be limited to access via Breakspear road.

A4180 (Ruislip Road): To the south, the site is connected to the A4180, which is a significant local road that runs north-south through Ruislip.

Nearby Areas:

Ruislip: Located to the southeast of the site, Ruislip is a residential area with various local amenities and transport links.

Harefield: To the northwest, Harefield is a village offering rural surroundings and local road connections.

Regional Context:

Major Roads:

A40 (Western Avenue): Approximately 3 miles south, the A40 is a major road connecting central London to the M40 motorway, providing access to the wider motorway network, including the M25.

M25 Motorway: Located about 5 miles west, the M25 is the orbital motorway around London, facilitating regional and national travel.

Public Transport:

Rail: The nearest railway station is West Ruislip, located about 2 miles to the south. It offers services on the Chiltern Railways line to London Marylebone and towards the Midlands.

London Underground: Ruislip and Ruislip Gardens stations, on the Central and Metropolitan lines, provide underground services to central London and other parts of the city.

Summary:

The West London Composting site at New Years Green Lane is well-positioned with access to local roads and major transport routes.

2.2 Description

The West London Composting site at New Years Green Lane uses open windrow composting. This process involves arranging green waste in rows in the open air, turning them regularly to manage odour, oxygen, temperature, and moisture. After around eight weeks, the compost is screened to remove contaminants and grade the material. The site is extending to comply with the Environment Agency's Appropriate Measures Guidance, which ensures improved environmental performance and regulatory compliance.

This project expands the operation by building a single concrete pad expanding the available area to make compost in. The only materials being delivered are in pursuance of constructing this pad.

Because of co-working with already on-site contractors Envar shall not need to bring in stone or export any overburden significantly reducing any construction traffic.

In terms of nearby sensitive areas, the West London Composting site is relatively isolated from residential zones. The nearest residential area is Harefield village, located approximately 1.5 miles to the northwest. Harefield Academy is the closest school, situated about 1.8 miles away. Additionally, Harefield Hospital is approximately 2.2 miles from the site. These distances help minimize the impact of the site's operations on local communities.

For transport links, New Years Green Lane connects to Breakspear Road, which provides access to the A40 and M25, facilitating transportation to and from the site. The primary access routes help ensure efficient movement of materials and reduce congestion on local roads.

2.3 Timeline

Phases of Construction

Phase 1 – Late August – September 2024

Site investigations and preparation. Removal of any materials and preparation of the area. Investigations where required and reports as per ecological statements and assessments. During this phase trial pits shall be dug to assess the site for full design and the appropriate agreements of land hand back shall be made with HS2 and relevant utility companies.

Vegetation shall be cleared in agreement with HS2, and preparation of the land shall be made.

Phase 2 – September – November 2024

Civils and drainage. Lay the base level and underground runs and services. Construct the bunds and drainage for the external areas of the site construct the fencing of the site.

Phase 3 – November – December 2024

Prepare for laying of the concrete bays and structure for the tank supportive pad and trenching for the containment of water.

Phase 4 – December – April 2025

Install Tanks onto the concrete bund, fill the tanks and pressure assess them, connect the tanks into the external irrigation delivery pipework.

Phase 5 – January 2025

Install site offices and connect to utilities.

Phase 6 – March-April 2025

Commission site and start use.

Construction activities will take place 07:30-18:00 hours Mondays to Fridays and up until 1300 on Saturdays. No external construction will take place on Sundays or bank Holidays.

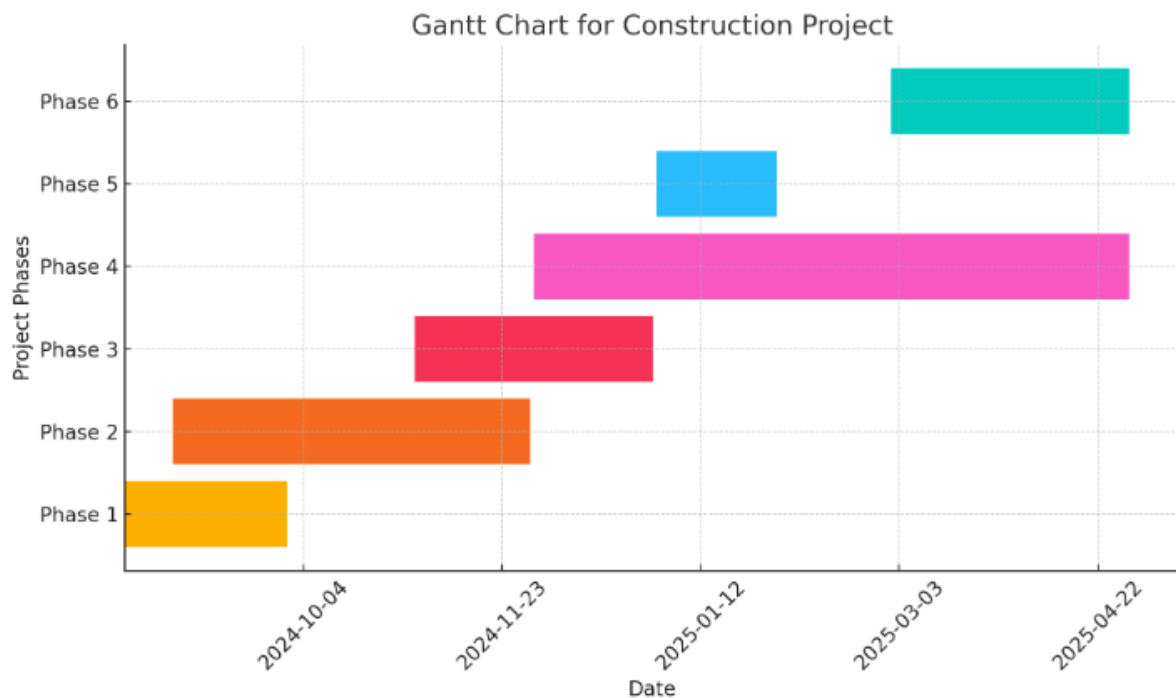


Figure 1 - Project Timeline

3 Regional Maps

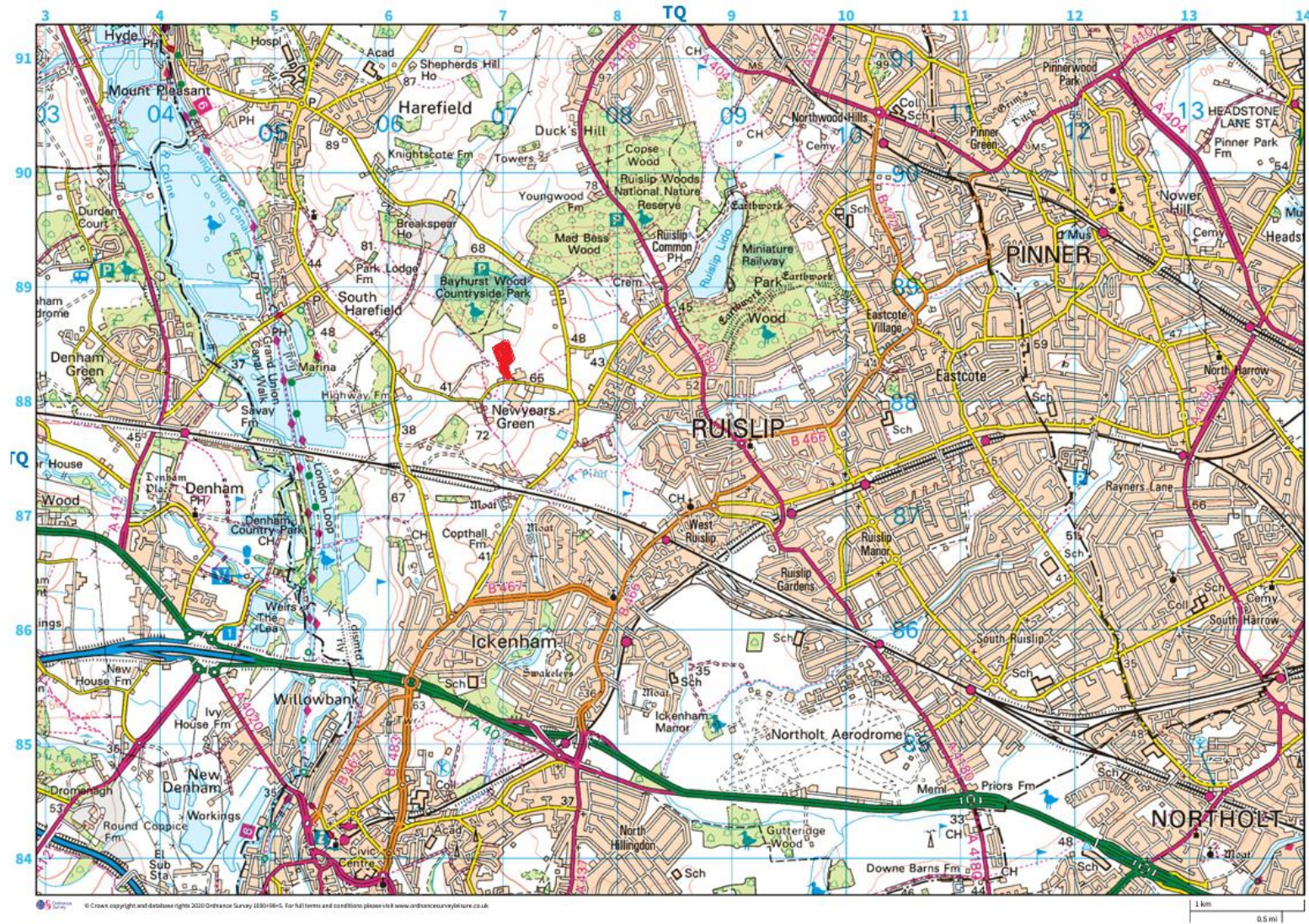


Figure 2 - Context of the site in the area

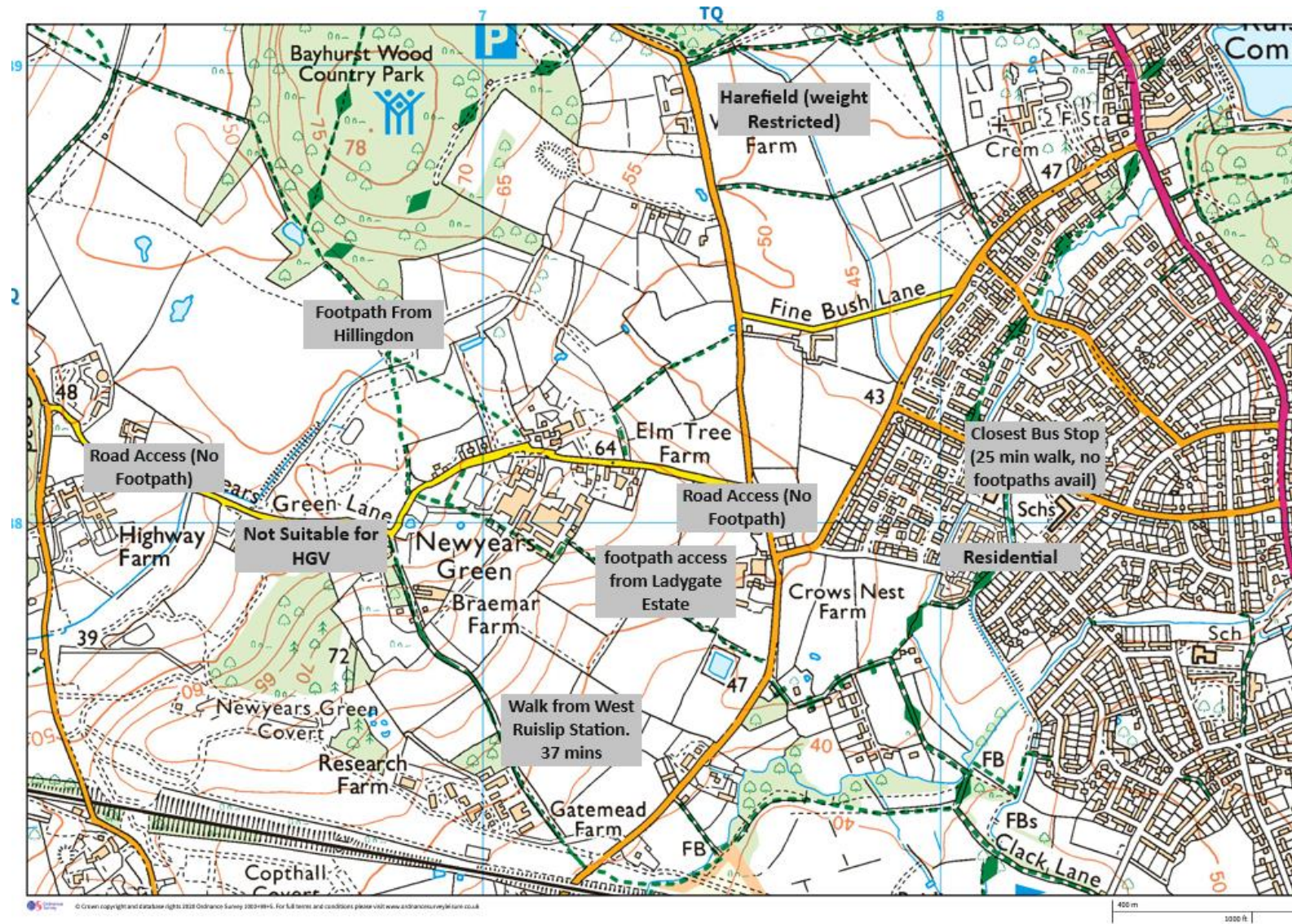


Figure 3 - local access routes and key features

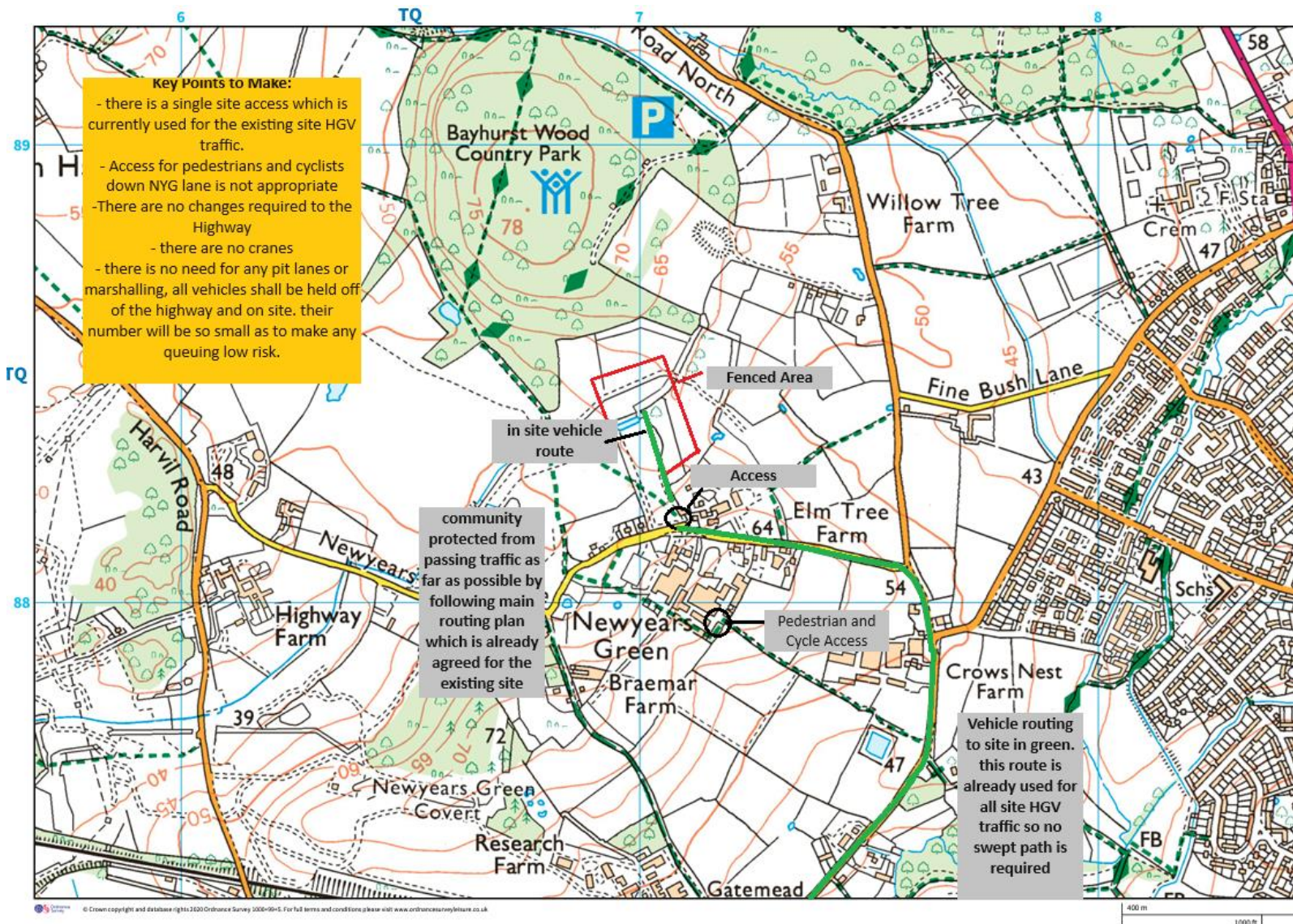


Figure 4 - local and in site considerations. as the site is a single large piece of concrete with no buildings and a very large area the risk of conflict or highway affects is very minimal

4 Construction Traffic Management

4.1 Vehicle Types and Volumes

There will be a maximum of ten construction employees on average working on the site at any one time. This relatively small amount of construction employees is because all the construction is non-residential or commercial in nature. The groundworks and laying of concrete require minimal workers per square meter as there are no walls to build, no fittings to fit and no services to wire or plumb in.

It is therefore expected that there will be a worst-case scenario of 10 extra cars at any one time than the current site staffing level. Construction employees shall be encouraged to use shared transport and come together in work vans where possible.

4.1.1 Calculations

Base Layer

The site underlay and formation are being constructed from recycled non-waste aggregate which has been sourced from operations adjacent to the site. Meaning there is no requirement for highway based overland transport for these materials.

Based upon 20t loads this eliminates the need for many vehicle deliveries as has been detailed below:

Construction Project Area – 29000m²

Depth of hardcore layer – 300mm

$29,000 \times 0.3 = 8,700\text{m}^3$ of compacted hardcore required.

In 18m³ loads this would equate to $8,700 \div 18 = 483$ loads not required. This is a significant benefit of co-working with a local contractor to avoid this extra road transport and a significant carbon benefit achieving the objectives of this CLP.

Remaining transport required shall be for materials (rebar, baskets and ancillaries), plant and machinery and concrete. The transport of plant and machinery shall be minimal as most of the plant and equipment already operates on the site.

Plant machinery

1 x concrete pump

1 x telehandler

3 x power floats

Hand tools and machinery

Total traffic between 4 and 10 HGV's

Concrete

8,700m² x 0.25m thickness – 2175m³

A standard concrete mixer can hold 8m³ concrete where concrete weighs about 2.5 tons per cubic m

2175 ÷ 8 = 272 trips

The period of concrete pouring is expected to take place in a bay arrangement. The expected pour will take place over a six-week period during working hours. Meaning there will be an average daily delivery for two hours a week. (22 trips, 44 movements per day).

Other

Trips for steel delivery (reinforcing steel for concrete) is expected to be max 20 trips per month in the month in which the construction of the sub structure is occurring.

Services installation including electricians and plumbers for the very small number of services to be connected are expected to be max 5 days each, 10 visits in a month,

4.2 Parking & Materials Storage

4.2.1 Construction Employees

Construction employees' vehicles shall be parked on the southern site where there is ample access and parking. The routes are established as the site is a currently operating business. In the unlikely event of a person walking from the station (40mins) they will also arrive at the southern site and then move to the northern on foot crossing over NYG lane as the currently employed staff do.

Materials storage shall be on the northern site construction area as there is significant amounts of room on WLC owned land to be able to store the small number of materials required adequately. Most materials required are on site already or are on adjacent owned land so will not have to move via the highway or any public land.

Concrete is delivered as it is used so is not required to be stored.

4.2.2 Freight & Supplies

The delivery of materials and concrete shall be timed to reduce impact on local infrastructure. Busy times of between 0800 and 0900 shall be avoided wherever possible. Construction employees shall also arrive pre 0800 under normal circumstances.

4.2.3 Access Routes

The site shall be accessed via the route marked in green on figure 4. This route is already an agreed HGV access route with Hillingdon BC. This will minimise any impact on local residential areas, residential roads and sensitive receptors. This will also mean there is no impact on HS2 area of operations.

5 Environmental and Safety Considerations

5.1 Emissions Control

The construction programme shall use only vehicles which comply with the relevant statutory legislation for the area. Any vehicles which do not comply will be excluded or pay the appropriate charge.

5.2 Noise Reduction

To reduce noise the deliveries shall be in line with the planning permission time conditions.

5.3 Safety Measures

To ensure the safety of persons and pedestrians the vehicles being used to deliver shall

- Comply with all the required statutory legislation in force for their area of operation including the appropriate mirrors, windows signage and alert systems.
- There will be designated on aide traffic management plan
- Use established routes secured under planning condition already
- Requiring the procurement process to give extra weight to operators who are in pursuit of FORS silver accreditation.

There are progressive requirements for achieving FORS accreditation at bronze, silver and gold levels. The FORS logo allows construction clients to readily distinguish FORS operators from other operators – it is a mechanism by which adherence to the CLOCS standard can be assured and monitored. FORS accreditation confirms that a fleet operator can demonstrate that appropriate systems and policies exist to ensure drivers are suitably fit, qualified and licenced to operate vehicles which are properly maintained, equipped and insured.

Taking this into account West London Composting shall include within its procurement processes the requirement to consider hauliers or suppliers who are working towards the requirements of FORS Silver.

5.4 Community Considerations

To minimise any effect on the local community WLC shall commit to the following

The route to the site as noted in figure four shall avoid areas that may increase the traffic risk to vulnerable road users. The route is in fact already conditioned within the planning permission but to make extra sure the noted route has been designed to avoid (and it achieves this also):

- Residential areas
- Schools

- Hospitals
- Health centres
- Community centres
- Sports facilities
- Public transport infrastructure
- Cycle Superhighways
- Bus stops

None of these are passed through using the travel route detailed in figure four.

The types of HGV required will affect the safety of nearby road users. With less “off road” vehicles generally being safer for vulnerable users. Using the CLOCS guidance a rating of 5 has been assessed:

Ground Condition 1 – Angle

The approach angle is the maximum angle of a ramp onto which a vehicle can climb from a horizontal plane without interference. It is defined as the angle between the ground and the line drawn between the front tyre and the lowest hanging part of the vehicle at the front overhang.

The ground angle into the construction area is less than 6 degrees and is therefore suitable for all vehicles to make appropriate access including LEC vehicles.

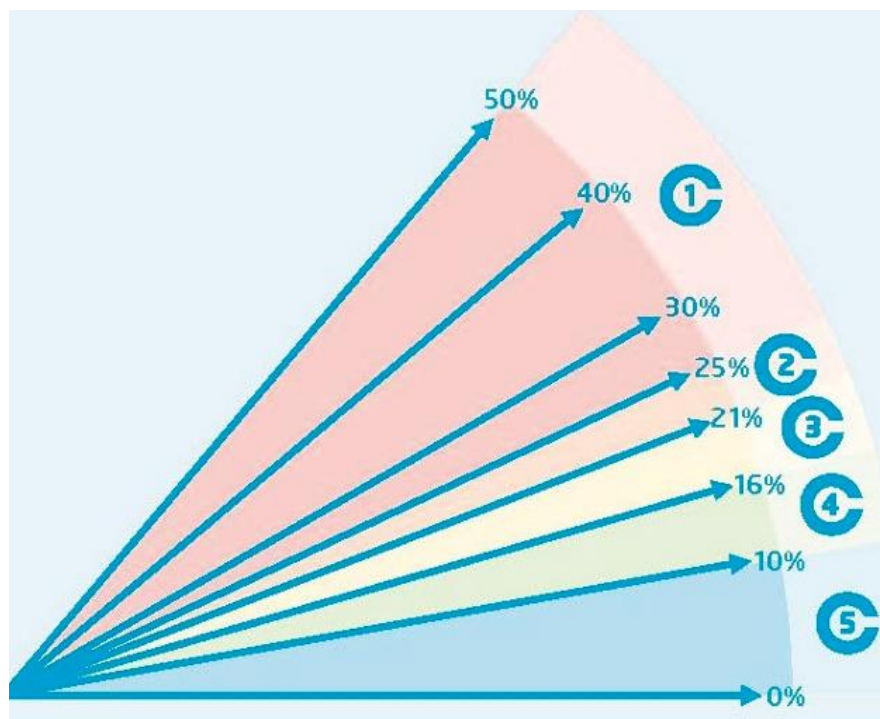


Figure 5 - Gradient assessment levels from the CLOCS handbook indicating the required gradients to be in each category

As the gradient is less than 10% the entrance and working areas can be rated as 5.

Ground condition 2 – Material Type

The material at the construction site for all areas required to be accessed via road going vehicles is hard wearing asphalt in good repair.



Figure 6 - entranceway to the site showing asphalt in good repair

This is classed as level 5

Ground Condition 3 – Ruts & Bumps

An assessment of ruts and bumps on the surface has been made. Due to the nature of the site, there will always be ruts and bumps and when measured none exceeded 50mm and there is also debris on the road from the composting activity. Therefore, they can be graded as 4 as no ruts or bumps were over 50mm

Ground Condition 4 – Water

During rain the site does develop puddles but there are around processing materials (windrows) and are not in access routes or trafficked areas. The area is suitable for grading as a 4

This gives the overall grading a 4. Suitable for most vehicles to use. Meaning there will be no requirement to use off road specification vehicles to access the site. These vehicles are more expensive to use in general and will be avoided.

5.5 Material Sourcing

Materials shall be sourced from the nearest available supplier who is reasonably financially viable and who can provide the correct specification. The only material in any quantity is concrete which is available locally.

- Concrete will be sourced from within 20 miles where possible. If possible, even closer
- Underburden has been sourced from local works and is not traveling over the highway as it already exists on site
- Cabins already on site
- Tanks and steels shall be delivered from the nearest available local source using a maximum capacity 44t articulated vehicle to reduce the number of movements needed.

5.6 Material Handling

Materials shall be mechanically unloaded and handled and shall be stored on site in the very large open areas of space. There is no requirement to store anything off site or worries about reaching capacity.

Logistics and consolidation areas are not appropriate for this project because:

- All materials for tanks are being created in one factory in one location and are being delivered together
- All materials for reinforcement are being purchased from a single supplier in bulk
- Concrete can only come in specialist vehicles
- Other materials are already on site

Materials are not transportable by rail. All vehicles used will be of the maximum payload for the vehicle type which is suitable for the task. Mainly to save money. Where possible for everything but concrete 44 tonne articulated HGVs shall be used.

5.7 Waste Management

As West London Composting's primary business activity is the recycling of waste the business is set up to ensure wastage is minimal and has minimal effect on the highway. WLC are also reusing a lot of material left over from other local construction projects which does not require the use of road haulage as it is within 300m of the site on the land to be developed. To make sure this happens West London Composting is committed to:

- Recycling on site aggregate on site
- Sending scrap steel (low quantities mainly from offcuts) to BFA recycling at 9 Newyears Green Ln, Harefield, Newyears Green, Uxbridge UB9 6LX which is less than 300m away from site
- Other wastes shall be sent to LJ Grundon Limited a waste operator 100m away from site. Minimising any transport requirements.
- Compostable waste and biomass from land clearance shall be treated on site.

5.8 Sustainability

All the described measures which are summarised below in table 1 are contributory to sustainability. Additional measures not mentioned in the main body text include:

- Secure cycle parking available
- Maintenance of the rear access for the public footpath
- Company car scheme which encourages electric car use and the ability to charge on site using zero carbon sourced electricity

6 Conclusion

6.1 Summary

The CLP commits West London Composting Limited to undertaking the construction in the best possible way which is available to ensure and maintain/improve the safety of the transport network and proves that through reuse of materials on site a significant amount of road haulage has been eliminated. Further steps have also been taken, using appropriate tools to show the CLP has achieved its aims. The commitments are summarised in table one below:

6.2 Commitment

Item	Effect	Commitment
Standards	General Safety & Environmental performance improvements	To Favor, where possible, suppliers following FORS
Routing	Minimising Disturbance, protecting sensitive receptors	To provide all hauliers with a routing plan, require they abide by it and raise the issue if non-conformances are found
Scheduling	Minimising Congestion	HGVs will be scheduled, where possible to avoid peak times which will minimise congestion. Workers shall be arriving before larger congestion is seen in general. Due to the nature of the site the HGV traffic naturally lends itself to not travel in peak periods.
Out of Hours Deliveries	Eliminated – meaning no nuisance	OOH deliveries are not permitted under condition, so this is eliminated
Vehicle Choice	Reduce Movements, improve efficiency	Due to the nature of the construction, it is not likely that small deliveries will be required with most items being delivered by 4 tonne artic HCV or “8 wheel” 32-ton concrete mixers.
Travel Plan	Improve modes of access to work	A travel plan has been committed to including bike parking and maintenance of public footpaths.