



Imperial College London,
Harlington Sports
Ground, Sipson Lane,
Harlington, Hayes,
UB3 5EH

Low Emission Strategy prepared
on behalf of Imperial College
London

December 2021

MILESTONE
TRANSPORT PLANNING

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1. Introduction & Scope of Low Emission Strategy

1.1 This Low Emission Strategy (LES) has been prepared by Milestone Transport Planning (MTP) on behalf of Imperial College London (ICL) to satisfy the requirements of Condition 11 of the planning consent (Ref. 1748/APP/2021/1971) for the construction of a multi-use games area (MUGA) on land occupied by Imperial College London, Harlington Sports Ground, Sipson Road, Harlington, Hayes, UB3 5EH.

1.2 The Council of the London Borough of Hillingdon as the Local Planning Authority granted permission of the proposal on the 16th December 2021, subject to a number of Planning Conditions. Of relevance, Condition 11 of the Decision Notice stated:-

"Low Emission Strategy – No development shall commence until a Low Emission Strategy (LES) has been submitted to and approved in writing by the Local Planning Authority. The LES shall address, but not be restricted to, a series of clear and effective measures to encourage users to:

- a) Use public transport;*
- b) Cycle / walk to work where practicable;*
- c) Enter car share schemes;*
- d) Purchase and drive to work zero emission vehicles.*

The measures in the agreed scheme shall be maintained through the life of the development."

1.3 It is recognised that a LES is a "package of measures to help mitigate the transport impacts of development." (Low Emission Strategies Good Practice Guidance DEFRA – 2010).

1.4 The location of the site in the context of the surrounding highway and transport network is indicated in Figure 1.

Figure 1 **Site Location**



- 1.5 The LES sets out the short- and long-term strategies for reducing dependence on travel by private car, particularly those that work within the development. Its objective is to reduce private car mileage in favour of more sustainable modes of travel through the introduction of a package of physical and management measures that will assist travel by more sustainable modes of transport.

Planning Policy Guidance

- 1.6 In preparation of this LES, reference has been made to National and Local Planning guidance, as well as Low Emission Strategies Good Practice Guidance.

National Planning Policy Framework (2021)

- 1.7 The original National Planning Policy Framework was published in March 2012 and the latest version was issued in July 2021.
- 1.8 The importance of providing clear and effective measures to promote sustainable travel is recognised in both national, regional and local planning policy. Most notably, the revised NPPF states that *"significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes"*.
- 1.9 Para. 110 goes on to emphasise that sites being considered for development or allocations in development plans should provide appropriate opportunities to promote sustainable transport, deliver safe and suitable site access arrangements and ensure mitigation is provided to offset any significant highways and transport impacts, in terms of capacity, congestion or highway safety.

The New London Plan (2021)

- 1.10 The New London Plan was published by the London Greater Authority in March 2021. The document represents a significant shift in approach whereby greater emphasis is placed on *'Healthy Streets'* and the promotion of new and improved walking, cycling and public transport networks coupled with reducing the demand of vehicles on London's streets.
- 1.11 With regards to policy GG2 – Making the best use of land, in order to create successful sustainable mixed-use places that make the best use of land, those involved in planning and development must:
- *"A) enable the development of brownfield land;*
 - *B) prioritise sites which are well-connected by existing or planned public transport;*
 - *C) proactively explore the potential to intensify the use of land to support additional homes and workspaces, promoting higher density development, particularly in locations that are well-connected to jobs, services, infrastructure and amenities by public transport, walking and cycling; and*
 - *G) plan for good local walking, cycling and public transport connections to support a strategic target of 80 per cent of all journeys using sustainable travel, enabling car-free lifestyles that allow an efficient use of land, as well as using new and enhanced public transport links to unlock growth".*
- 1.12 Policy GG3 focuses on creating a healthy city and states that those in planning and development must:
- *"B) promote more active and healthy lives for all Londoners and enable them to make healthy choices;*

- *C) use the Healthy Streets Approach to prioritise health in all planning decisions; and*
- *G) plan for improved access to and quality of green spaces, the provision of new green infrastructure, and spaces for play, recreation and sports".*

1.13 Policy T1 'Strategic Approach to Transport' states: -

- *"A – Development Plans and development proposals should support:*
 - 1) the delivery of the Mayor's strategic target of 80 per cent of all trips in London to be made by foot, cycle or public transport by 2041.
 - 2) the proposed transport schemes set out in Table 10.1.
- *B – All development should make the most effective use of land, reflecting its connectivity and accessibility by existing and future public transport, walking and cycling routes, and ensure that any impacts on London's transport networks and supporting infrastructure are mitigated."*

1.14 Of importance, Policy T2 focuses on the Healthy Streets approach and highlights that development proposals should:

- 1) demonstrate how they will deliver improvements that support the ten Healthy Streets Indicators in line with TfL guidance;
- 2) reduce the dominance of vehicles on London's streets whether stationary or moving; and
- 3) be permeable by foot and cycle and connect to local walking and cycling networks as well as public transport.

Healthy Streets for London (2017)

1.15 Healthy Streets for London was published by TfL in 2017, the integrated transport authority responsible for delivering the Mayor's Strategy and commitments on transport. The Commissioner's foreword states: *"The Healthy Streets Approach provides the framework of policies and strategies we will put in place to achieve this. At a street level, direct investment in our walking, cycling and public transport infrastructure is vital to providing a safer, easier, cleaner and more appealing environment for everyone to enjoy."*

1.16 The approach uses 10 evidence-based indicators of what makes streets attractive places and is believed to create a much healthier city if all of these targets are worked towards. The indicator relating to walk, cycle and use of public transport states;

"Walking and cycling are the healthiest and most sustainable ways to travel, either for whole trips or as part of longer journeys on public transport. A successful transport system encourages and enables more people to walk and cycle more often. This will only happen if we reduce the volume and dominance of motor traffic and improve the experience of being on our streets".

1.17 The approach is embedded across the full range of Mayoral policy and strategy documents to ensure it is delivered effectively across the city.

Hillingdon Local Plan: Part 1 Strategic Policies (2012)

- 1.18 The Hillingdon Local Plan: Part 1- Strategic Policies is the key strategic planning document for Hillingdon and will support the delivery of the spatial elements of the Sustainable Community Strategy. It sets out the long-term vision and objectives for the Borough, what is going to happen, where, and how this will be achieved.
- 1.19 Part 1 of Hillingdon's Local Plan promotes sustainable forms of transport with an overall aim of improving air quality and reducing private car dependency. It seeks to provide a sustainable transport system that addresses whole of length journeys, reduces car dependency, supports the economy, encourages active travel and improves the quality of life.
- 1.20 Strategic Objective SO12 states that Hillingdon will aim to *"Reduce the reliance on the use of the car by promoting safe and sustainable forms of transport, such as improved walking and cycling routes and encouraging travel plans."*
- 1.21 It is recognised that the principles of the LES for this site are largely shared with that of a Travel Plan.

2. Baseline Conditions

Site Context

- 2.1 The site is located circa 400-metres to the west of Harlington and is accessible via Sipson Lane which gives direct access to High Street, running through Harlington. The Sports Ground is within the London Borough of Hillingdon with the surrounding area mixed in character. This includes residential uses and rural fields around the site, whilst still being in proximity to key transport links. The location of the site in a local context is illustrated at Figure 2.

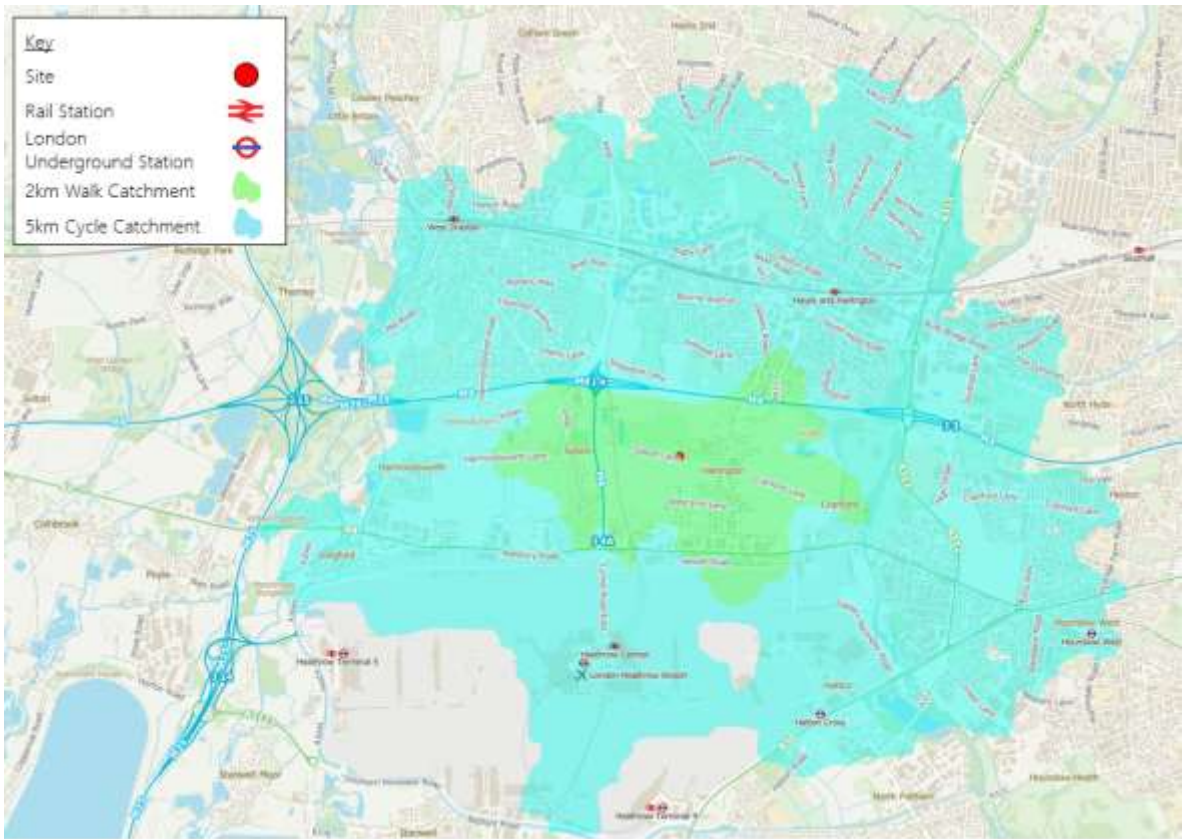
Figure 2 Site Context within Harlington



Pedestrian and Cycle Permeability

- 2.2 Pedestrian access to the site is from Sipson Lane. A well-lit footway is present on the northern side of Sipson Lane measuring circa 1.8-metres in width. Harlington High Street can be accessed by walking south-east along Sipson Lane for approximately 700-metres. In the vicinity of the site, the standard of footways is good with dropped kerbs and tactile paving provided over side roads to aid pedestrian movement. A formal pedestrian crossing facility is provided on Harlington High Street in the form of a pelican crossing, facilitating safe passage over the carriageway.
- 2.3 In terms of cycle infrastructure, no dedicated cycle lanes are provided within the vicinity of the site, however, cycle route 88a runs through Harlington in a north-southerly direction. Access to Hayes and Harlington rail station is via High Street within approximately 2.7-kilometres (34-minute walk time / 10-minute cycle time). The route offers good conditions for cyclists with low speed limits and street lighting.
- 2.4 To assess the accessibility by modes of sustainable travel, a 2-kilometre walk and 5-kilometre cycle catchment plan is illustrated in Figure 3.

Figure 3 Walk and Cycle Catchment Plan



Public Transport Connections

- 2.5
- Within the core planning principles of the National Planning Policy Framework (NPPF), paragraph 103 states that planning should “...be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health.”
- 2.6
- The nearest bus routes serving the site are the 90, 278, H98, N140, X140, 222. Bus stops for these routes are located on the High Street as well as the A408. The closest bus stop is Manor Lane on the High Street circa 600-metres from the sites entrance (7 min. walk time / 2 min. cycle time). The bus stops are provided with a flagpole and timetable information, whilst the westbound stop also provides a shelter. A summary of local bus services is provided in Table 2.1.

Table 2.1 Summary of local Bus Services

Route No.	Operator	Frequency (Daytime buses per hour)			Route
		Mon - Fri	Saturday	Sunday	
90	Tfl	Every 8 mins	Every 8 mins	Every 15–20 mins	Feltham, Leisure West - Northolt
278	Tfl	Every 20 mins	Every 20 mins	Every 20 mins	Ruislip – Heathrow Central
H98	Tfl	Every 10–15 mins	Every 10–15 mins	Every 15–20 mins	Hayes End – Hounslow, Bus Station
N140*	Tfl	2 p/h**	2 p/h	2 p/h	Harrow Weald, Bus Garage – Heathrow Central
X140	Tfl	Every 12 mins**	Every 13–15 mins	Every 15–20 mins	Harrow, Limited Stop – Heathrow Central, Limited Stop
222	Tfl	Every 8–10 mins**	Every 10 mins	Every 12–15 mins	Hounslow, Bus Station - Uxbridge
*Night Bus **Mon,Tues,Fri					

- 2.7 The nearest railway station is Hayes & Harlington, located approximately 2.7-kilometres north-east of the site, within a 34-minute walk and 10-minute cycle ride. The station is managed by TfL Rail. A summary of direct railway services to key destinations is provided below in Table 2.2.

Table 2.2 Summary of Direct Rail Services from Hayes & Harlington Railway Station

Destination	Journey Time	Weekday Daytime Frequency (Service per hour)
Heathrow Terminals 2&3	9 mins	2tph
London Paddington	22 mins	7tph
Reading	42 mins	2tph
Didcot Parkway	84 mins	1tp2h
Train frequencies have been affected by COVID-19 Pandemic; this timetable is under current circumstances (April 2021)		

- 2.8 In summary, despite the site's urban fringe location and the very nature of typical Sports Ground facilities requiring the use of a private car, the site has good connectivity for pedestrians and cyclists and is well served by existing bus and rail networks that provide services throughout the day to a range of destinations.
- 2.9 There are several other rail stations within the area that fall within the 5-kilometre catchment (as shown in Figure 3). These provide connectivity to the wider rail network, as well as access to the London Underground network via the Heathrow terminals, Hatton Cross and Hounslow West.

PTAL

- 2.10 To determine the site's current Public Transport Accessibility Level (PTAL), an assessment based on TfL's Web-based Connectivity Assessment Toolkit (WebCAT) methodology was undertaken. This assessment takes account of the distance of public transport facilities and the relative frequencies of services from a specific location. A PTAL rating is defined by a scoring of 1a to 6b, in which a score of 1a is classified as 'Very Poor' and 6b 'Excellent.'
- 2.11 The results of the PTAL assessment reveal that the site (measured from the centre point) currently has a Public Transport Accessibility Index (PTAI) of 4.49, which corresponds to a PTAL rating of 1b, representing a 'poor' level of accessibility to public transport services.

3. Low Emission Strategy Aims and Objectives

- 3.1 ICL is committed to ensuring that everyone travelling to and from Harlington Sports Ground can do so as safely as possible. ICL will encourage future-end users to choose active and sustainable modes of travel (by foot, bicycle and / or public transport) and that they are offered assistance through drive to work schemes and the purchase of zero emission vehicles.
- 3.2 The objectives of the LES will be to provide a focus for a range of initiatives to encourage journeys to Harlington Sports Ground to be made by sustainable modes of transport..
- 3.3 In accordance with the national and local policies, the key objectives of the LES are as follows:
- Actively encourage future-end users to walk or cycle to Harlington Sports Ground where possible, or use public transport where walking or cycling is not possible to limit the number of car journeys to and from the site;
 - Reduce congestion on surrounding roads to improve road safety and minimise harmful emissions;
 - Maximise opportunities for the use of alternative modes of travel;
 - Increase awareness of the benefits of entering care share schemes;
 - Raise awareness of road safety;
 - Provide information / encourage users to purchase zero emission vehicles.

4. Sustainable Travel Measures

- 4.1 ICL is committed to the promotion of maximising opportunities for sustainable transport as well as mitigating the impacts of development. As such, a number of physical and management initiatives have been designed to facilitate travel to and from Harlington Sports Ground by sustainable modes of transport. The measures outlined in this section are to address the requirements of Condition 11 of the planning application (Ref: 1748/APP/2021/1971).

Travel Information

- 4.2 ICL will provide information for site users on the walking, cycling and public transport options available and will promote these actively to future-end users.

Website

- 4.3 ICL will update the travel page on its website. It will include information about the role of the LES and the importance of minimising trips by car. It will also set out details of all the modes of transport available for travelling to and from Harlington Sports Ground and the benefits of using them. The website will also display information about the benefits of using these 'active' modes of transport.
- 4.4 Details of the public transport services available in the vicinity of the site will also be set out on the website. Links to public transport websites will be included. Details of safe walking and cycling routes to Harlington Sports Ground, car sharing and road safety will also be included.
- 4.5 A link to a copy of the LES will be included on the website so that the aims and objectives of the LES can be viewed by those who travel to / from the site.

Notice Boards

- 4.6 Notice boards will be placed in communal areas at the site. The notice boards will display information related to the LES and sustainable transport. They will display details of existing facilities such as bus stops, bus routes and the location of Hayes and Harlington rail station, in addition to cycle routes in the vicinity of the sports ground.
- 4.7 Information on notice boards will also promote "Car Share Schemes" with the aim to motivate the community to support the principles of the LES.

Newsletters

- 4.8 Newsletters and emails will also be used as a means of communicating local changes that may affect travelling to Harlington Sports Ground.
- 4.9 Newsletters can incorporate articles prepared by users and both reports back on successful sustainable travel initiatives and encourage their further uptake.

Walking

- 4.10 Walking to Harlington Sports Ground and the health benefits attributed to walking will be actively promoted through the website. Walking is a form of 'active travel' that represents a viable alternative to emission-generating travel modes. Future-end users will be made aware of the pedestrian access routes to the sports ground. End users will also be provided with easy to read maps showing local safe walking and cycling routes.

Designing for Pedestrians

- 4.11 Locker access is provided at Harlington Sports Ground. This supports travel by foot by allowing the safe and secure storage of coats and umbrellas.

Cycling

- 4.12 Future-end users will be encouraged to cycle to Harlington Sports Ground on an individual basis depending on where they live and the route they would travel.

Designing for Cyclists

- 4.13 As part of the development proposal, Harlington Sports Ground will be provided with 18 short-stay cycle parking spaces and 1 long-stay space per 8 FTE staff. All spaces will be easily accessible will be covered.
- 4.14 All users will have access to showers. This facility will encourage cycling by providing an opportunity to freshen up and change clothes.
- 4.15 Cycle parking demand will be monitored on a regular basis and should demand increase, additional facilities will be provided.

Public Transport

- 4.16 The website will include direct links to external websites that provide timetable information and route maps for these bus services.
- 4.17 Notice boards will also be used to display details of the bus services / routes that stop in the vicinity of Harlington Sports Ground to help users plan their journeys. A map showing the location of the nearby bus stops will also be on display.
- 4.18 All site users will be issued with information about travelling by public transport and the benefits of purchasing season tickets.

Car Sharing

- 4.19 Site users will be encouraged to car share. A formal car share database will be established and will be used to pair site users living in the same locality, with records updated on an annual basis.

Zero Emission Vehicle Scheme

- 4.20 It is envisaged that promotion of Zero Emission Vehicle (ZEV) purchases will be at the forefront of effective measures to reduce the transportation impact of the proposed MUGA at Harlington Sports Ground.
- 4.21 Information will be distributed accordingly on the available government grants for end users wishing to purchase a brand new low-emission vehicle for means of commuting to and from the site.
- 4.22 Despite the economic impacts of the COVID-19 pandemic, the ZEV market has remained resilient and the most stable means of reducing emissions caused by vehicular activity.