4th July 2023

Grass & grassland management



Parks for London

London Parks Benchmarking Group

An Introduction to Queen Elizabeth Olympic Park

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July 2023



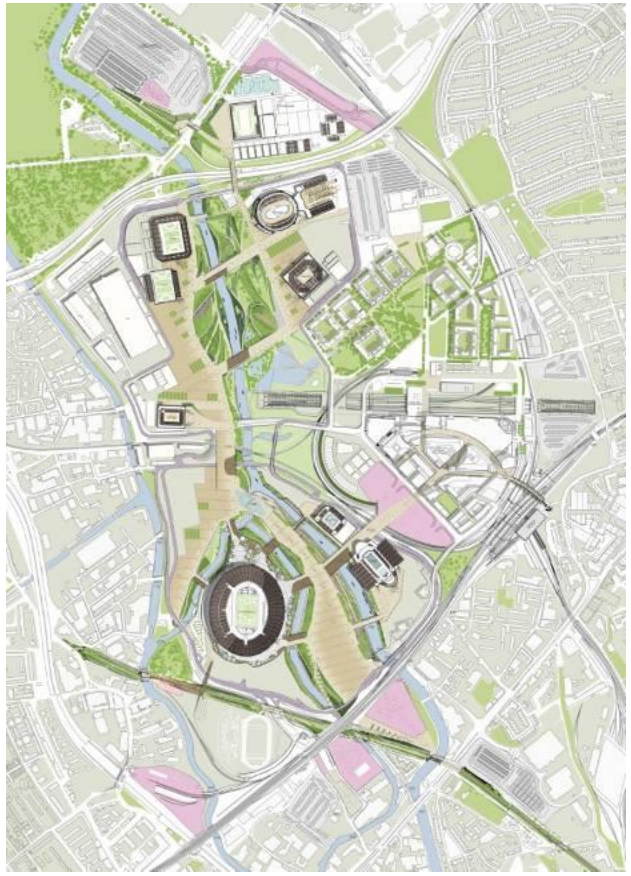
The Beginning 2005



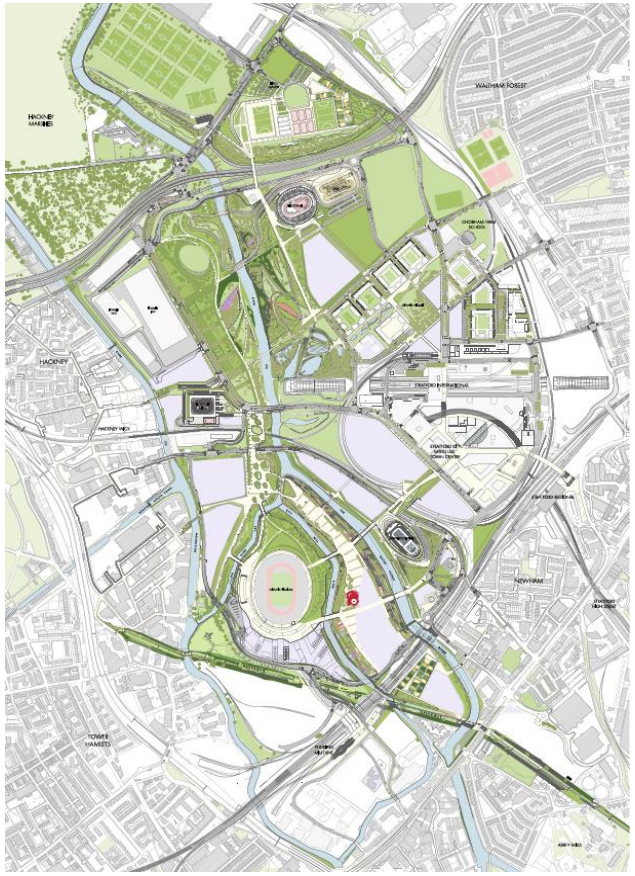
Park Construction Facts

- At its time one of the largest construction sites in Europe.
- Size roughly equivalent to Hyde Park and Kensington Gardens combined.
- 1 square mile of brownfield land remediated.
- Probably the largest new urban park to be built for over 100 years.
- 102 hectares of parkland created with nearly half of that designated as wildlife habitat.
- 30 new bridges, 12 miles of new roads and 5 miles of waterways refurbished and revitalised.
- Contaminated industrial land.
- 2 million tons of soil washed and processed.
- 7 different types of soil made up for different habitats.

Three masterplans



Olympics 2012



Transformation 2014



Legacy 2030

The Parklands

Five Aims

The Parklands will be:

- Well designed
- Well financed
- Well managed
- Well maintained
- Well used

Ten objectives

- Celebrate the Games
- Be a catalyst for economic development
- Restore the waterways
- Enhance biodiversity
- Promote culture and the arts
- Build community cohesion
- Encourage healthy living
- Develop skills and education
- Provide connections
- Integrate infrastructure







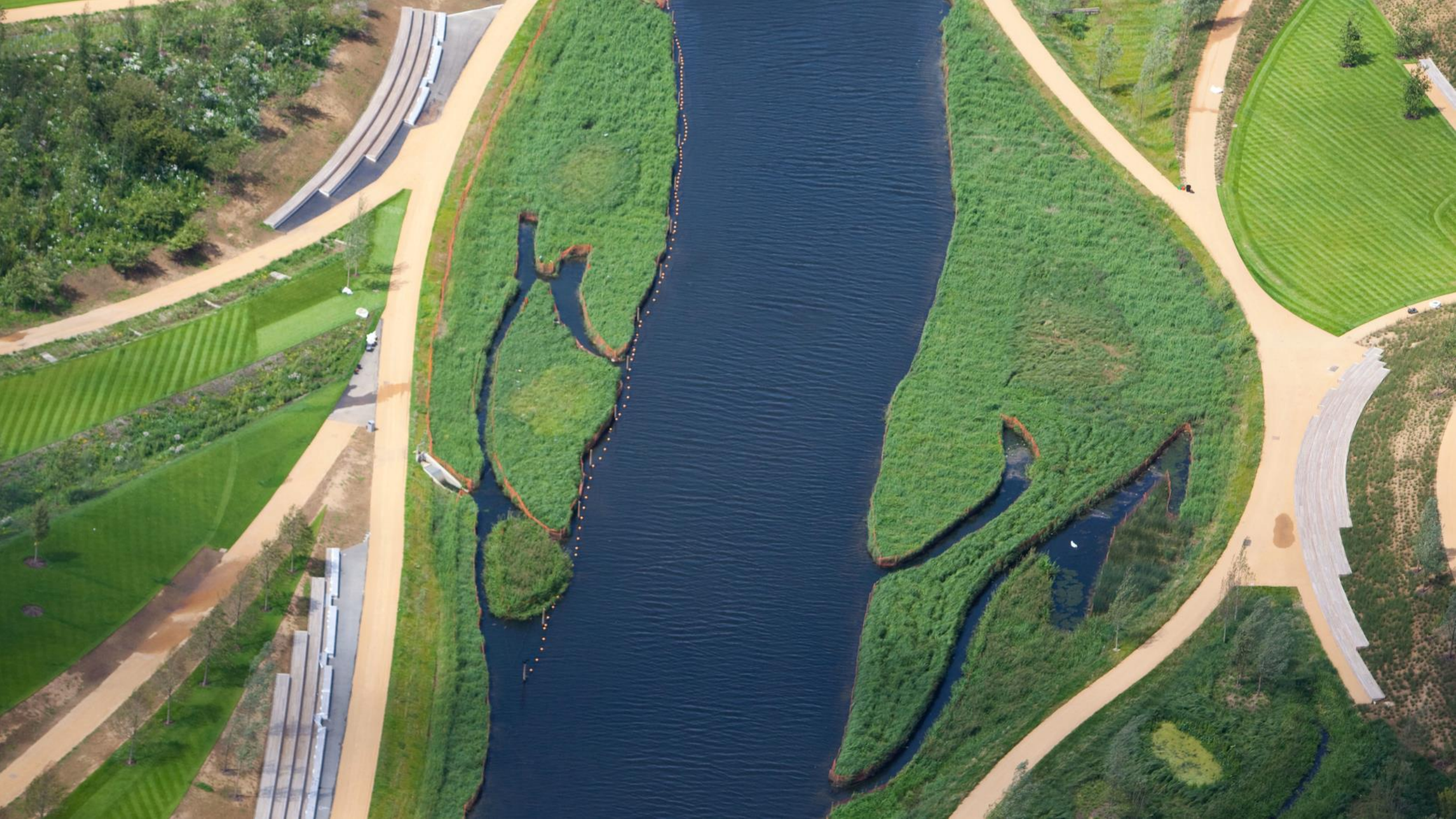




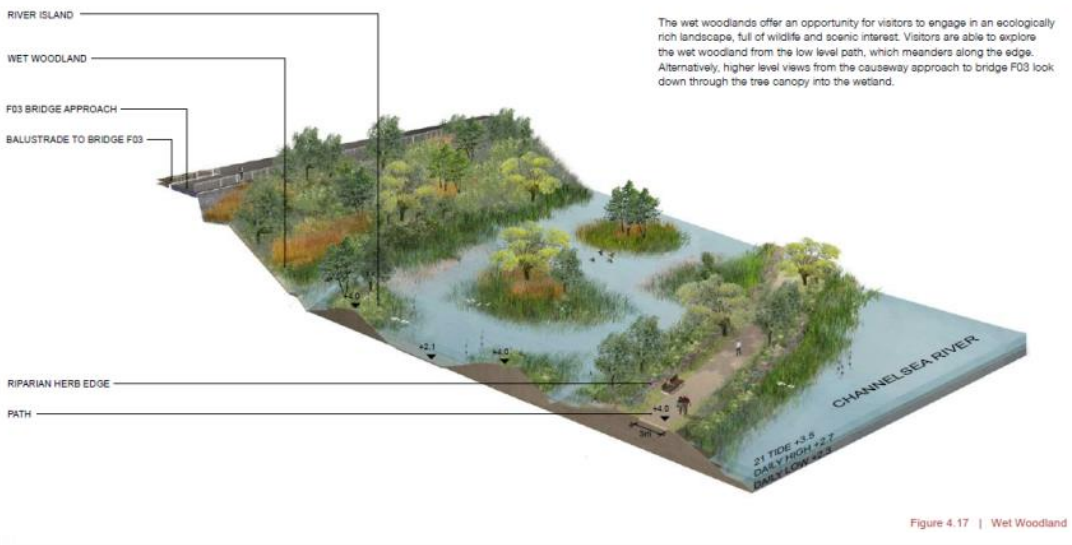






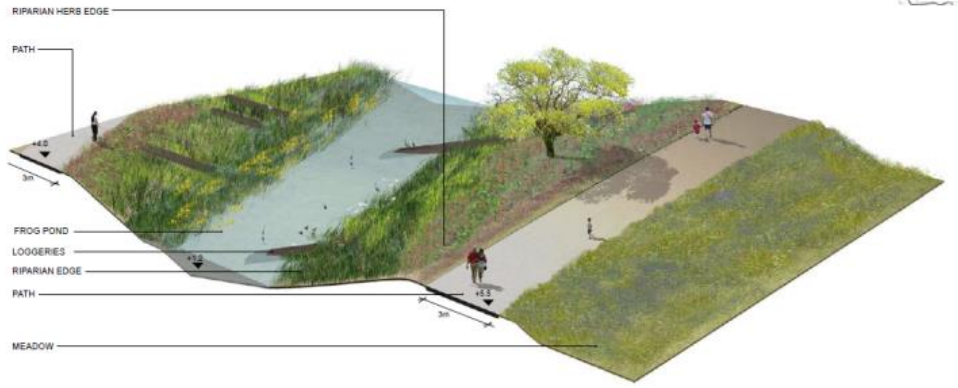


Ecological Design for the Wetlands



The wet woodlands offer an opportunity for visitors to engage in an ecologically rich landscape, full of wildlife and scenic interest. Visitors are able to explore the wet woodland from the low level path, which meanders along the edge. Alternatively, higher level views from the causeway approach to bridge F03 look down through the tree canopy into the wetland.

Figure 4.17 | Wet Woodland



A key feature of the North Park is the integration of places for people within an ecologically rich and diverse landscape. The frog ponds are one example of these interconnected habitats which will enrich the Park. Shallow pools, fed by the drainage swales, will collect water, which will form a breeding habitat for frogs as well as other amphibians and reptiles. Loggeries to benefit invertebrates are designed as a sculptural addition to the frog pond edges, thus combining landscape, ecology and art in one element.

Figure 4.18 | Offline Wetland/Frog Pond



Games 2012



Transformation



Park of two halves



North Park – informal countryside – picturesque design. Biodiversity hub with wetlands, woodland, swales, mosaic of perennial meadows, species rich grassland and wildflowers.

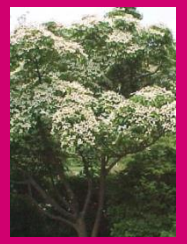


South Park – formal horticulture, herbaceous gardens and well mown amenity lawns but with woodland and meadows juxtaposed along the river margins to create biodiversity habitats.







Temperate Asia, Japan, Himalayas: C19th C20th






S Africa, Australia, New Zealand: C18th early C19th





Temperate Americas: C17th C18th





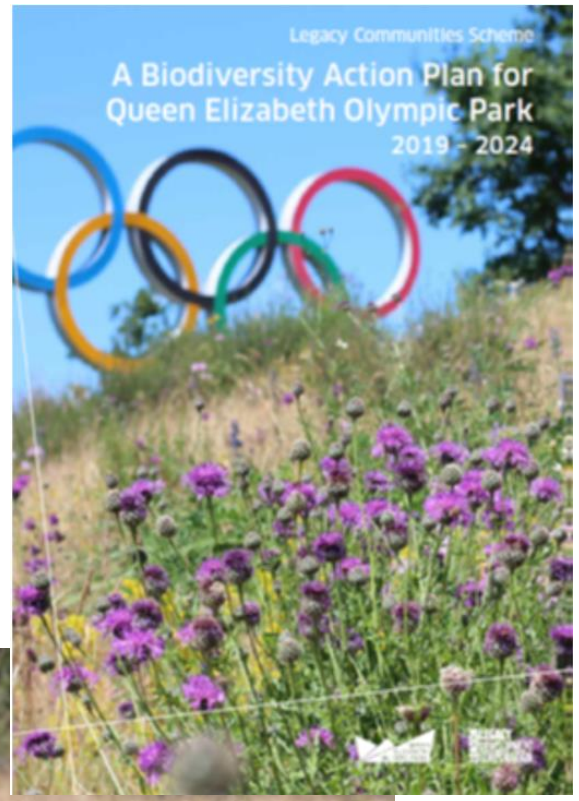

Western Europe, Mediterranean: post 1400 AD



How the park is managed

- Current contract delivered by Equans - main contractor – with sub-contractors Idverde, Greenwich Leisure Limited and Community Interest Company ‘Our Parklife’
- Output specification, managed by a range of quality based KPI’s, supported by the Park Management Plan (with range of maintenance prescriptions) and specific BAP targets.
- Idverde maintain the work streams which cover, horticulture (including BAP monitoring), cleansing/waste management, play, waterways management and irrigation.
- New 8-year grounds maintenance/hard FM external infrastructure contract with Idverde starts in January 2024.

Biodiversity





- Queen Elizabeth Olympic Park plays a key role in connecting east London's biodiversity to local communities.
- As a part of the River Lea wildlife corridor between the Thames and open countryside to the North of London, it is an important link, providing 78 miles of connected open spaces, and a home for hundreds of different birds, plants, fish, and insects.
- The Olympic Park regeneration project had three key objectives that shaped the design and how it was constructed – sustainability, biodiversity, and accessibility. Nature and green spaces are essential assets providing a range of benefits, from wildlife habitats and nutrient cycling to recreation and flood mitigation.

Biodiversity Action Plan (BAP)

Over 49 hectares of new BAP habitat have been created on the Park to date. Aimed to acknowledge the synergies between the needs of wildlife and those of local people.





11 new habitat types created on the Park:

- Allotments
- Brownfield
- Built environment
- Parks, squares and amenity space
- Wet woodlands and rivers
- Ponds
- Reed beds
- Rivers
- Species-rich grassland
- Trees and scrub
- Wet woodland

Role of grassland in the Park

- Species rich grassland is one of the 10 BAP habitat types.
- Important landscape typology supports wildlife - invertebrates, bees, birds etc.
- Almost 20 hectares of species-rich grassland found throughout the Park, growing in low fertility soils that support native wildflowers.
- Grasslands are cut on rotation to provide structure and variety through the seasons.





Perennial meadows

- Visually exciting, mix of ornamental and native species (including grasses) increases biodiversity and landscape interest.
- Supports invertebrate larvae and flowers attract pollinators at different times of the year.
- Provide areas of tall structurally complicated vegetation where invertebrates can overwinter and spiders can build webs.
- Meadows are hay cut once a year in October.
- Selected areas (including some meadow margins) cut in September on 2 or 3 year rotation to leave over wintering vegetation.







Species rich lawns

- The species rich lawns are characterised by an open lawn with a low grassy sward and some flowering species that can withstand regular use, but with capacity to cope with periods of higher usage. Some areas of Hopkins Field are beyond repair following damage caused by large scale events and will be over seeded.
- These lawns provide for regular informal recreational and event related use.
- Managed as species rich sward through incorporating native flowering species (including flowers which attract pollinators) within a matrix of mixed lawn grasses.
- Grass cut to 50 mm when sward reaches height of 100 mm (remove arisings).







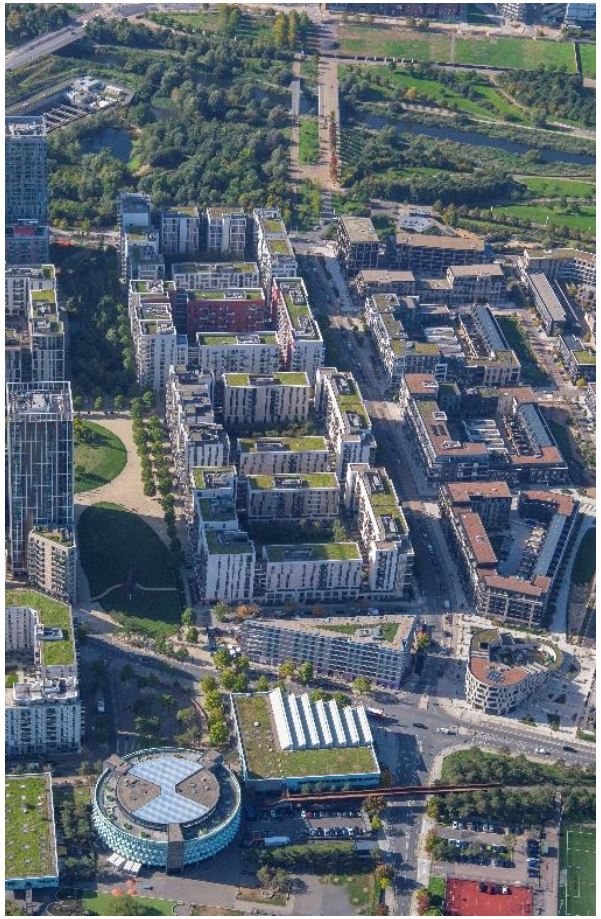
Amenity lawns

- These lawns are designed for regular leisure, recreation and event use and are characterised by a mix of grass species designed to provide hard wearing, dense grassy sward which can withstand regular use.
- Complements the South Park formal landscape.
- Usual turf maintenance – box mow, height of cut 20-40mm, aeration, scarifying, topdressing, fertiliser application, edging and weed control to maintain 95% grass species.



New development and the Park

- Careful design is undertaken to ensure that the landscaping of new housing developments adjacent to the Park complements the Park landscape planting to create a seamless connection between estates and the Park. Attention is given to species selection including the use of similar grasslands.
- Park Design Guide used as a reference source.







Annual wildflower display



North Park perennial meadow



The Greenway meadow



Species rich grassland LVRPA near Velodrome



Lea Valley perennial grassland



Grassland at Lea Valley



Thank you.

Visit our Resources Hub

https://parksforlondon.org.uk/resource/managing-grass



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