

London 2012 Olympic Parklands  
Delivering a Sustainable and Bio diverse  
21<sup>st</sup> Century Park for Games

Presentation to the Swiss Federation of Planners

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# The Story Begins....



4,000,000,000 global audience : 9,200,000 million tickets : 7,700,000 spectators : 800,000 spectators on busiest day : 70,000 volunteers : 20,000 press & media : 14,700 athletes : 9,000 workers on site : 3,800 + viewing hours : 1,000+ cameras : 771 Olympic and Paralympic events : 205 countries : 55 Venues : Olympic and Paralympics : Competition : 46 sports 41 Training venues : 36 venues: **1 Olympic Park**

# Olympic Park Context

The London 2012 Games offer a unique opportunity to revitalise the Lower Lea Valley. It has transformed one of the most underdeveloped areas of London into a benchmark 21st century urban environment that reflects the diverse and vibrant population of the area.

The project is about harnessing this potential to create one of the largest new urban parks in Europe for 150 years. In addition to world-class facilities for sports including athletics, cycling and swimming, there will be homes for a new community, and green spaces in and around the Olympic Park.



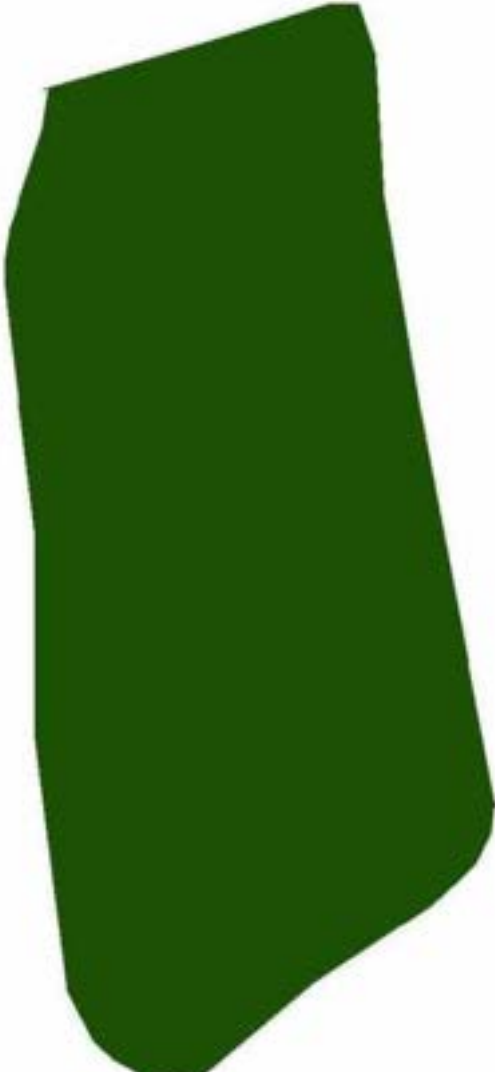
# Olympic Park and London Parks: Scale Comparison



London Olympic Parkland (112ha)



St. James's Park (36.4ha)



Hyde Park and Kensington Gardens (366ha)

Site Photo :1946



# The Clean up: Underground Power

- 52 electricity pylons dismantled.
- 200km of new cabling to move power underground into two 6km tunnels
- 200,000 cubic metres of material excavated from tunnels and shafts.
- 98% of materials generated from demolition being reused or recycled.



# The Clean up: Waterways

- Revitalising of 8.5km of waterways
- Dredging, cleaning, repairing walls, planting new wetland.
- 30,000 tonnes of silt and rubbish dredged in the river clean up operations.
- General site clean up (a century of heavy industrial use and urban neglect)
- 106 buildings demolished



# The Clean up: Soil Cleansing

- 1.5 million cubic metres of soil excavated, cleaned on site and used to form a new landscape
- Cut and fill has been balanced
- Soil washing: 2 soil washing machines on site, removing contamination including, petrol, oil, tar, heavy metals, including arsenic and lead.



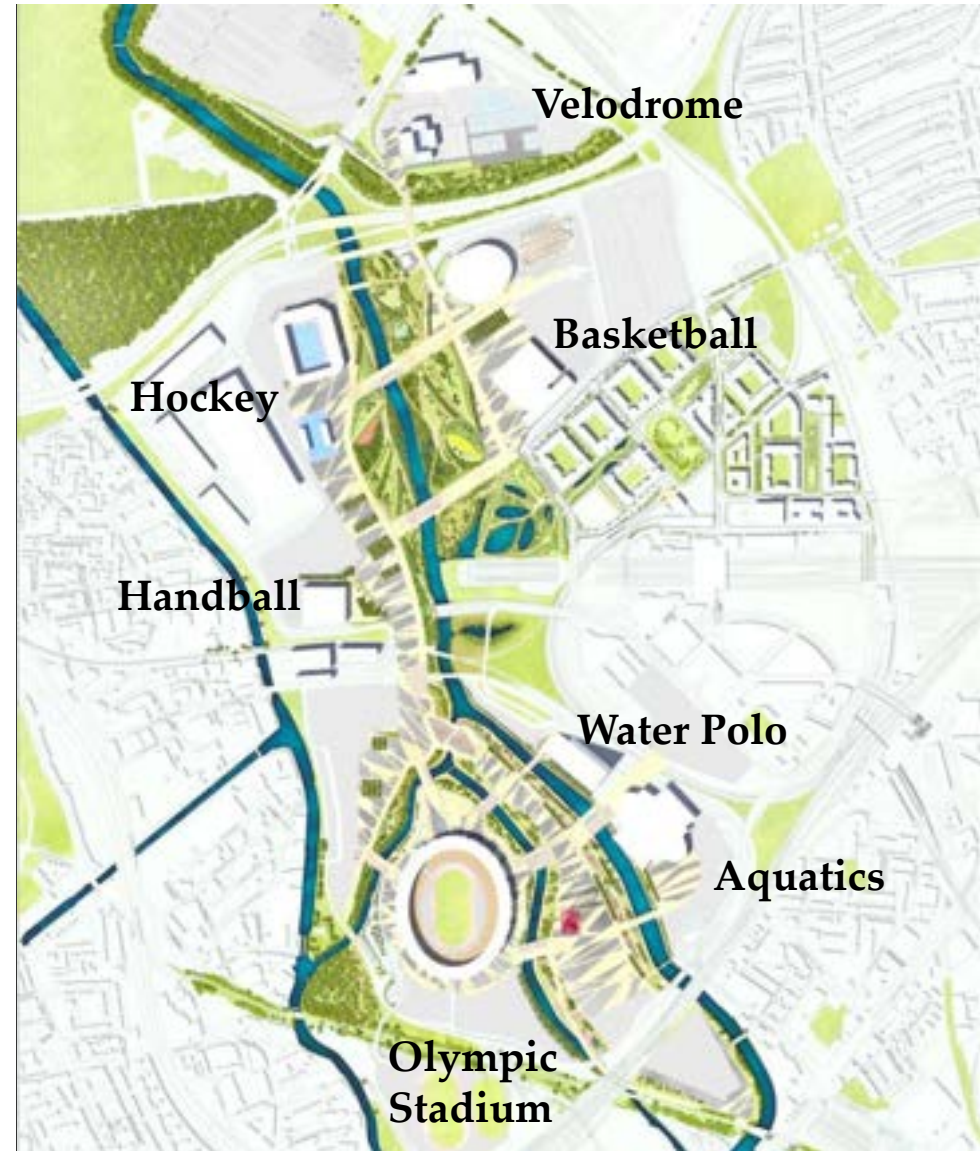


# Illustrative Park Masterplan

## Games 2012

The 10 objectives for the Olympic Park are:

1. Celebrate the Games
2. Be a catalyst for economic development
3. Restore the waterways
4. Enhance biodiversity
5. Promote culture and the arts
6. Build community cohesion
7. Encourage healthy living
8. Develop skills and education
9. Provide connections
10. Integrate infrastructure



# Olympic Park: Consultant Arrangements



Parkwide	South Park	North Park
Landscape architects	Landscape engineers	Landscape engineers
LDA-Design Hargreaves Associates	Arup	Atkins
Landscape Architecture Hard landscape Ecology Specialist horticulture design intent Soft Landscape PPR Lighting Design Sustainability Irrigation Soil design Arts and culture coordination Accessibility Planning delivery Consultation	Civil engineers Hard landscape Pavement designers Geotechnics Topography Surface drainage Foul drainage Utilities Structural engineers Lighting designers Electrical engineers Sustainability Accessibility Crowd modelling Highway engineers Bridge engineers Security advisors Logistics	Civil engineers Hard landscape Pavement designers Geotechnics Topography Surface drainage Foul drainage Utilities Structural engineers Lighting designers Electrical engineers Sustainability Accessibility Highway engineers Bridge engineers Security advisors Logistics



- Concept design
- Scheme Design
- Planning
- Third Party Approvals
- Detail design
- Tender information
- Construction information
- Specification
- Construction
- Site inspection

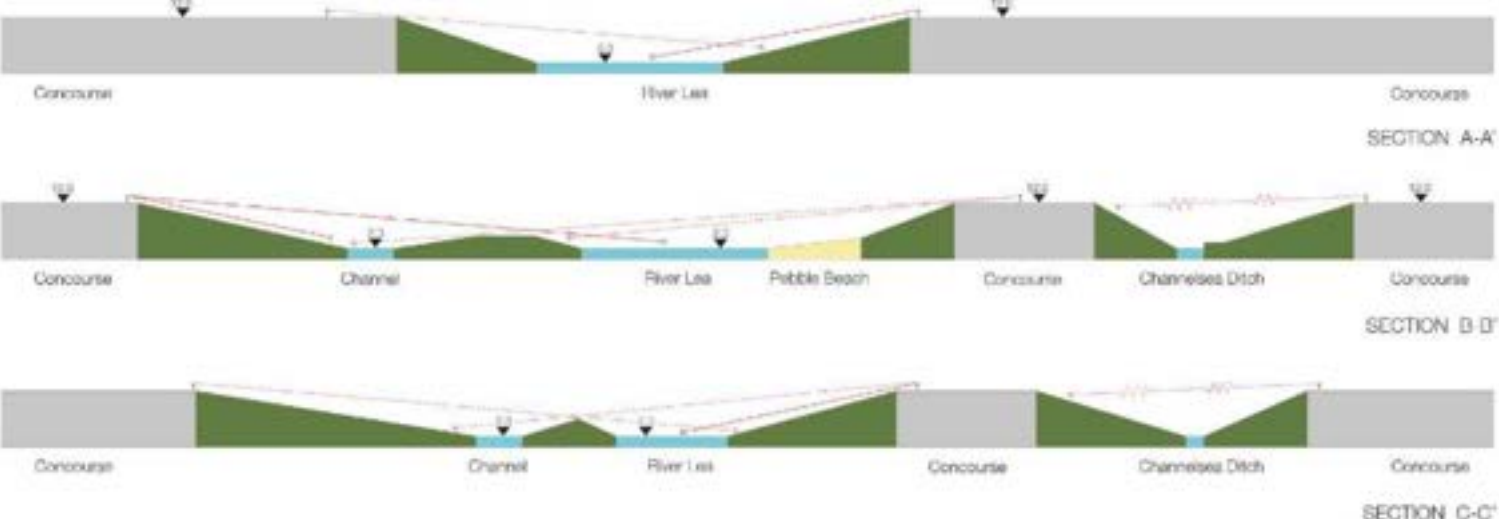
# North Park

## Games 2012 – Design Principles:

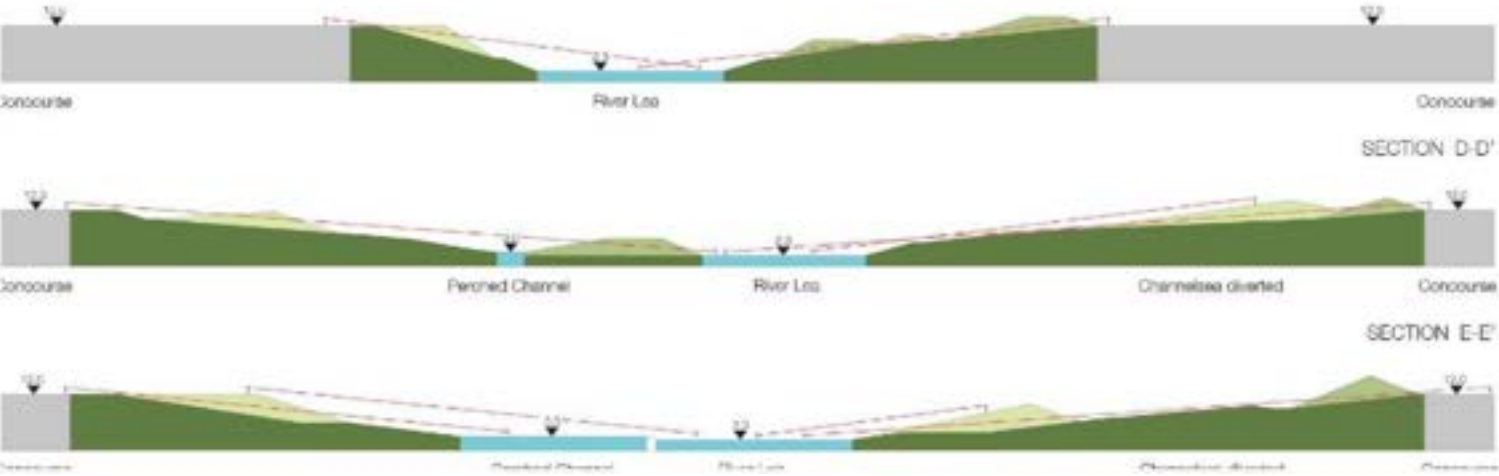
- **Ecological River Park:** River banks re-profiled to maximise green space along the river and encourage access.
- **Sculpting the Land:** Dramatic landforms made from recycled material from the site. Framed views to visually connect to the river system
- **Habitat Richness:** Trees, woodlands, meadows and wetlands extending local biodiversity
- **Places for People:** leisure, recreation and events offer a focus for the local community
- **Integrated Surface Water Management:** Bio swales, wetlands and ponds



# Making the most of the River Lea



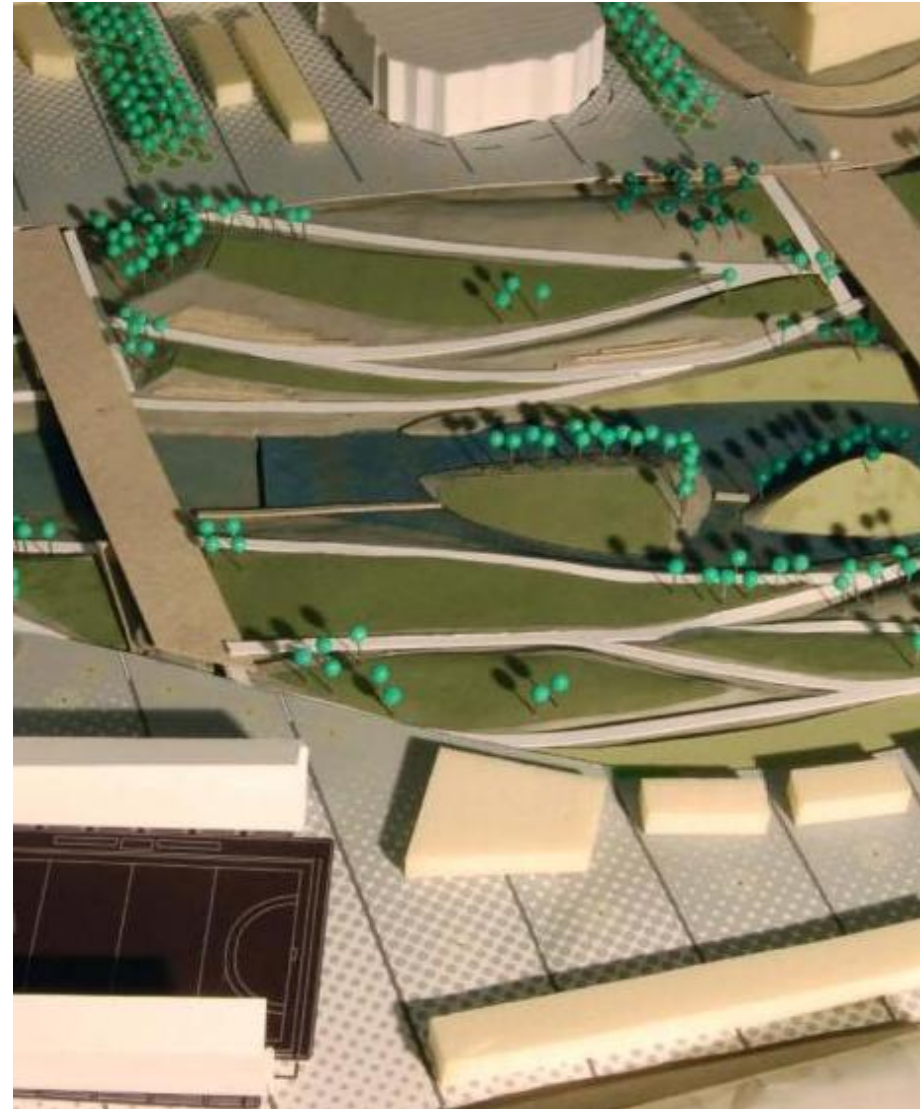
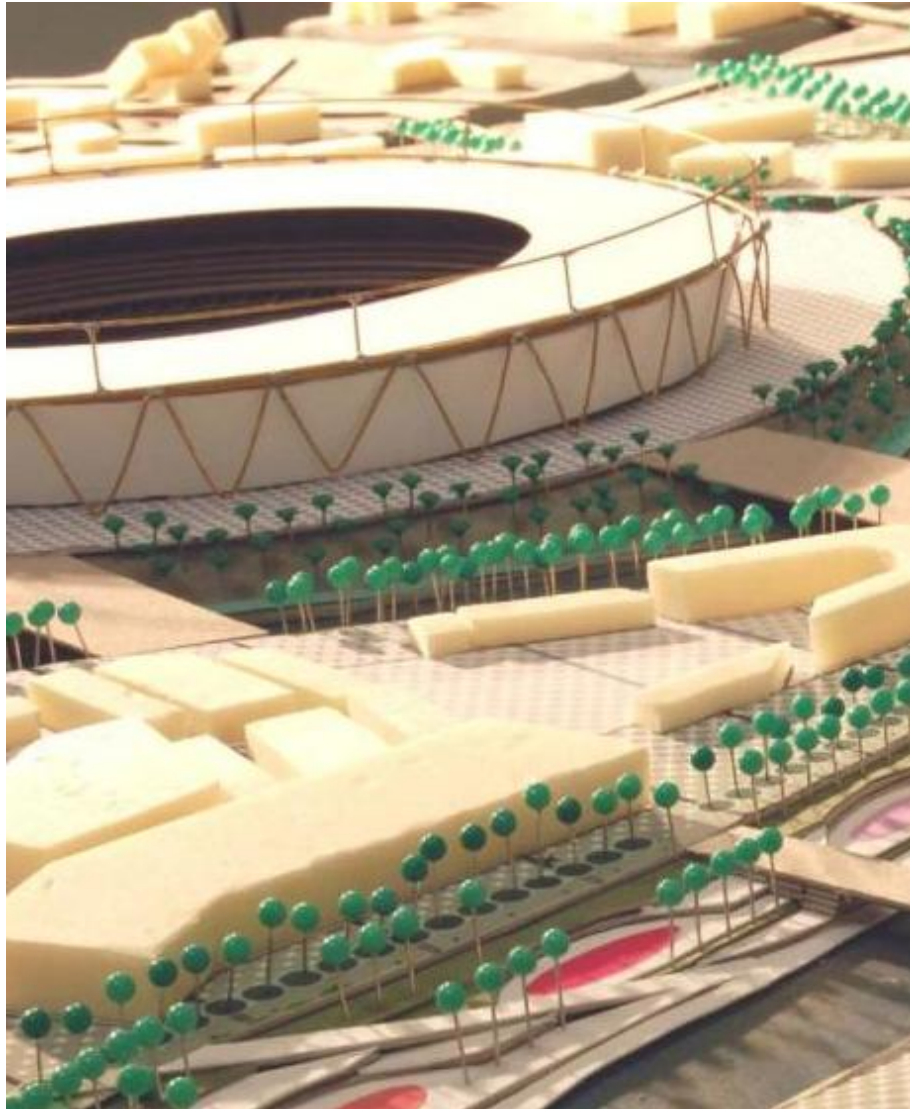
Existing Stage C Section



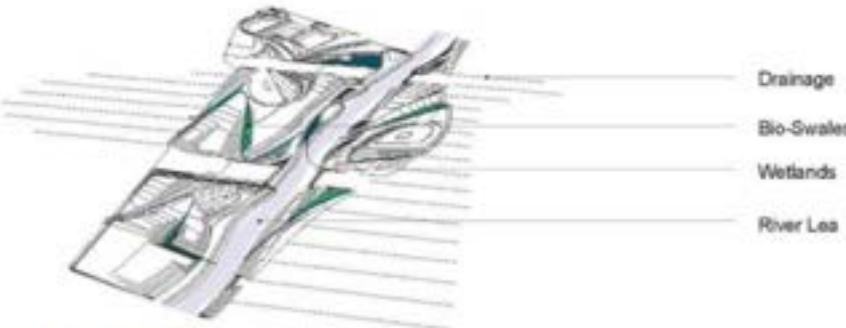
Proposed Adjustment to Stage C Section

KEY  
 - - - - - River Level

# Model of the London Olympic Park



# North Park: Systems



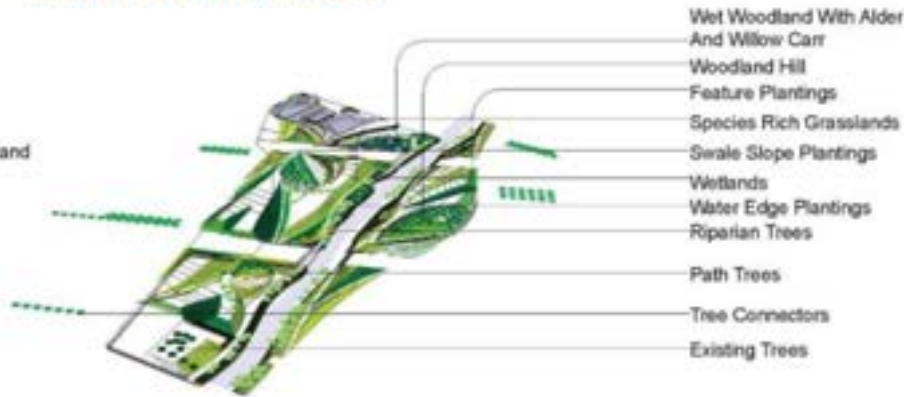
WATER SYSTEMS



LAWN AND TERRACES



CIRCULATION



PLANTINGS



LANDFORMS

# Wet woodland: Concept

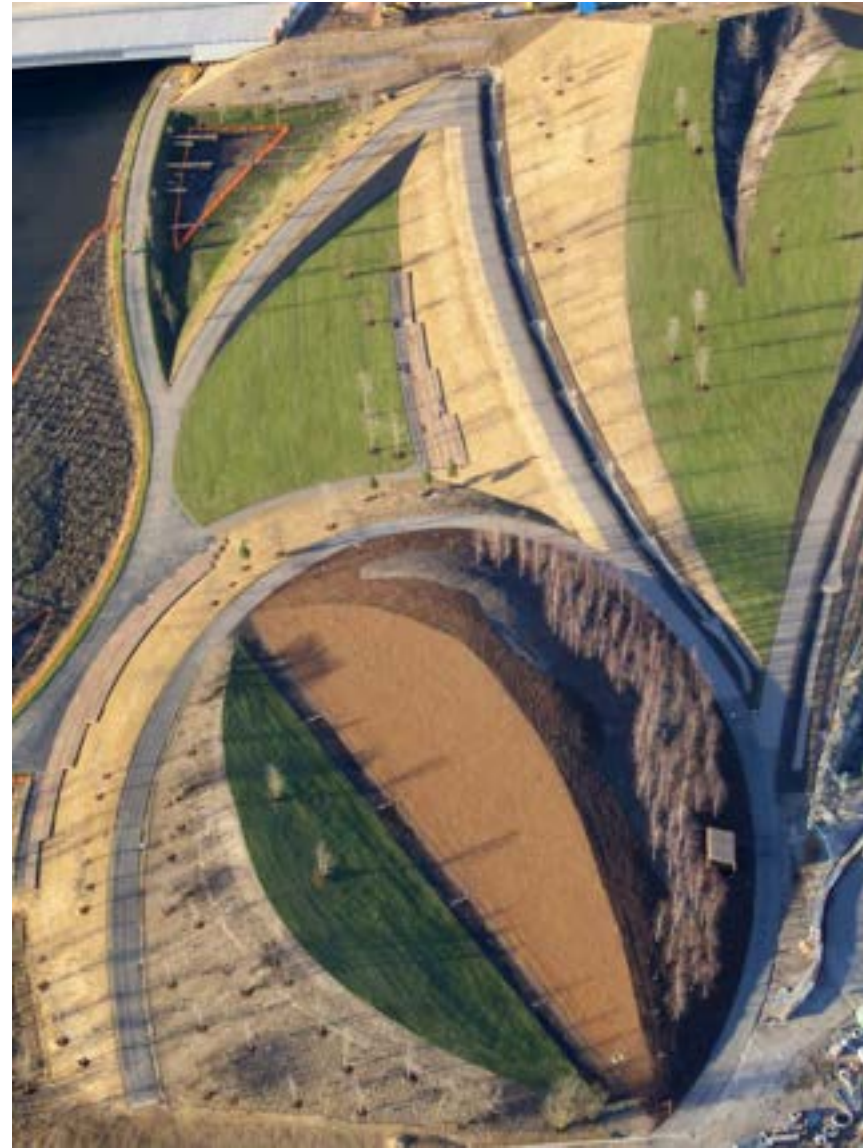


# Wet woodland: 2010/11 Establishment Phase





# North Park – Looking South (December 2011)



# North Park - Spring 2011



# North Park



# North Park



# North Park



# North Park



# South Park

## Games 2012 – Design Principles:

- **Urban Entertainment:** Festival Ground, Orbit, multiple uses.
- **A Cohesive Parkland:** Parkland link between North Park and South Park
- **Ecology:** Continuity of North Park river valley character
- **London 2012 Gardens-Cultural influence of Garden Design:** British garden heritage, biodiversity and habitat spaces.

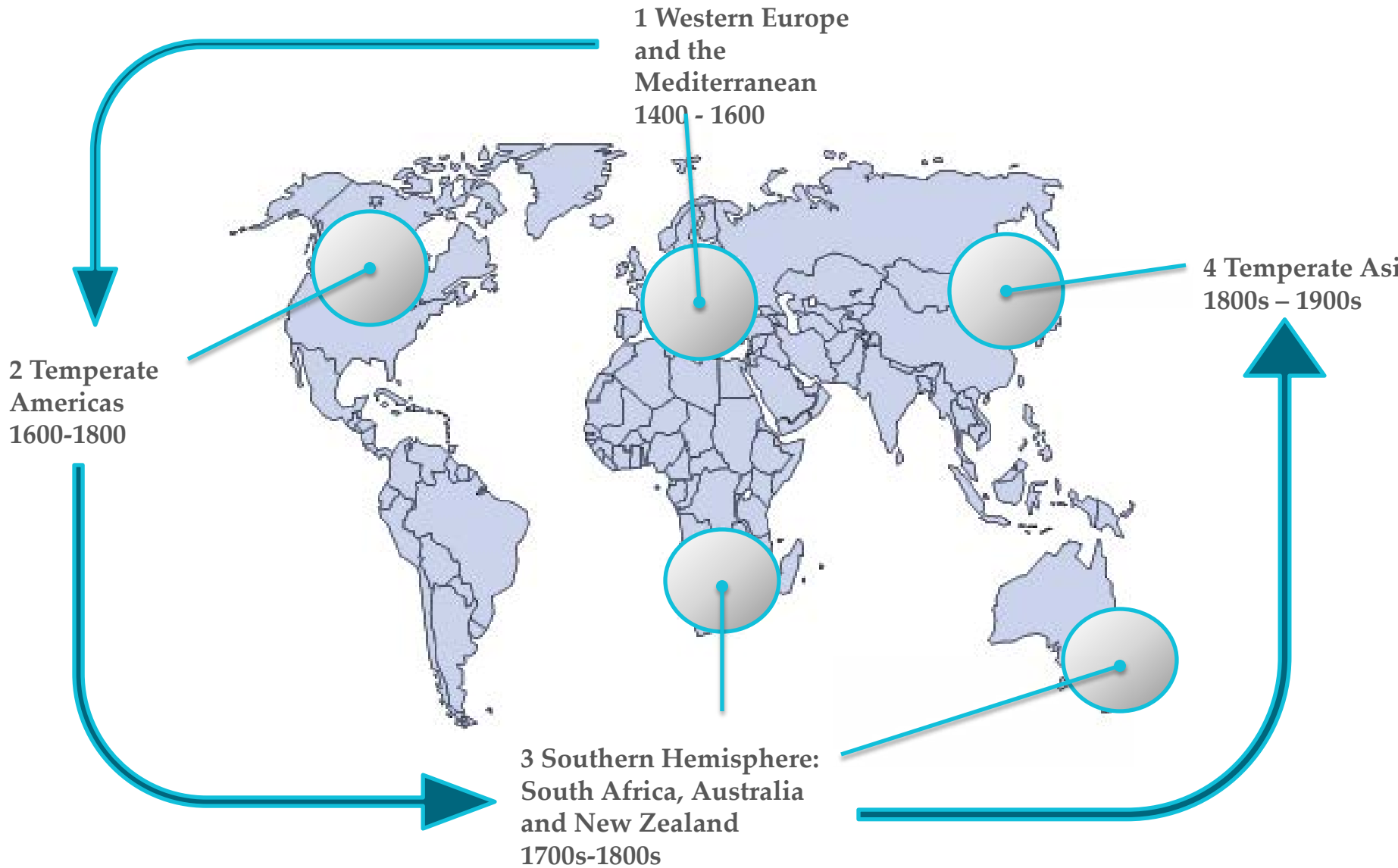


# Olympic Park: South Park

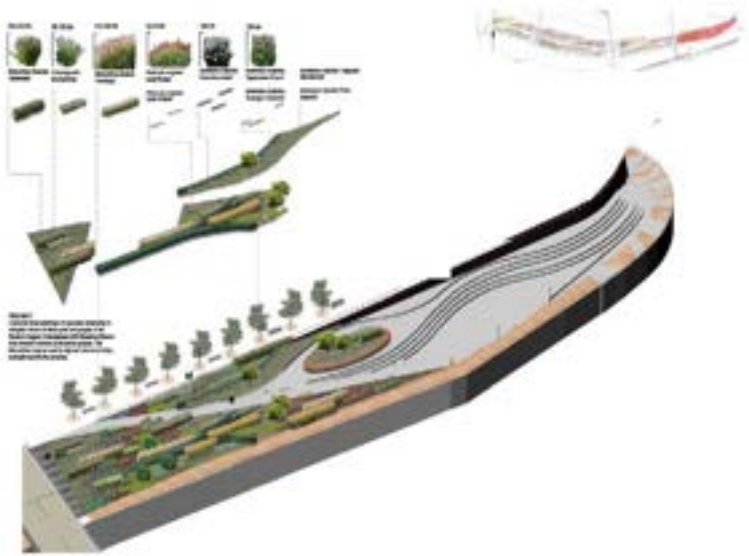




# 2012 Gardens : Geographic Zones and Plant Introduction Timeline



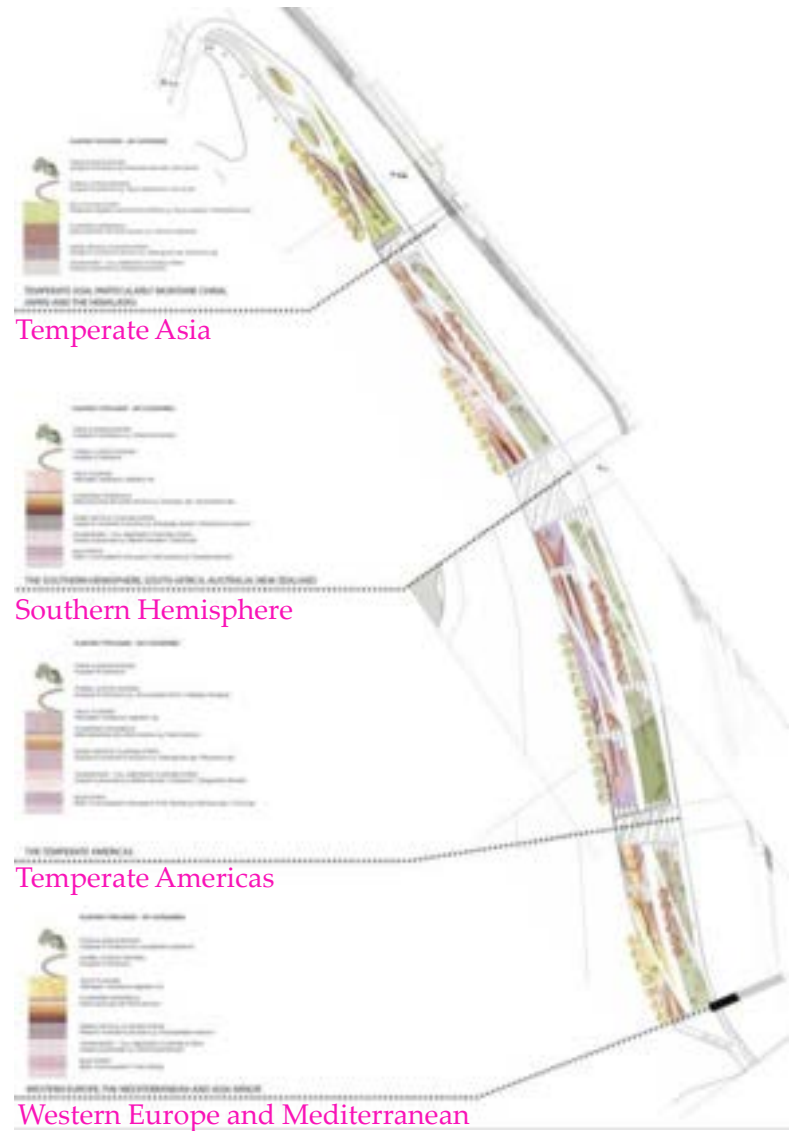
# 2012 Gardens concept – heritage/plant collection/biodiversity



Temperate Asia



Temperate Americas



Temperate Asia

Southern Hemisphere

Temperate Americas

Western Europe and Mediterranean

# 2012 Gardens- Games Mode



# 2012 Gardens : Planting concept



Strip planting

Field planting

Formal clipped hedges



ABOVE: PLANTING CONCEPT  
LOWER: ANNUAL MEADOW



ABOVE: FIELD PLANTING  
LOWER: CLIPPED HEDGE



ABOVE: FIELD PLANTING  
LOWER: PERENNIAL MEADOW

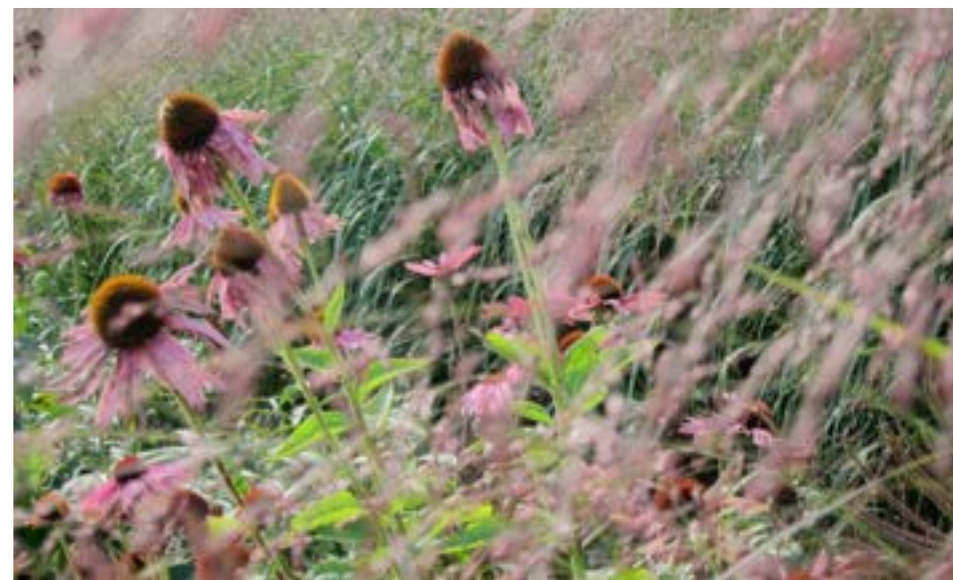
# 2012 Gardens



# 2012 Gardens



# 2012 Gardens



# South Park - Meadows





# South Park - Meadows



# Great British Garden



# Sustainability



David Higgins, Chief Executive of the ODA said:  
'We want to ensure London 2012 is remembered not only as two weeks of fantastic sporting action, but also as the "Greenest Games" in modern times'.

- The key parts of the strategy cover:

**Climate Change:** Aiming to minimise the carbon emissions associated with the Olympic Park and venues through a 50% reduction in carbon dioxide by 2013. This will be achieved through a combination of on-site energy generation and renewable energy.

**Waste and materials:** Reducing waste through design - 90% of demolition material to be reused or recycled and at least 20 per cent of materials used in permanent venues, associated works and the Olympic Village to be recycled. The bridge abutments are being clad in reinforced soil baskets using site won arisings that give a 'softer' feel, appropriate for the park environment. Approximately 2,700 tonnes of waste material: i.e.; recycled crushed concrete will be utilised in abutment facings.

**Water:** ensuring efficient water use, reuse and recycling, with a target for a 40% reduction in the demand for potable water in permanent venues and a 20% reduction target for residential development.

**Transport and mobility:** prioritising walking, cycling and the use of public transport to and within the Olympic Park and venues, including building over 80km of walking and cycling routes and to aspire to 50 per cent of construction materials to be transported to the Park by water and rail.

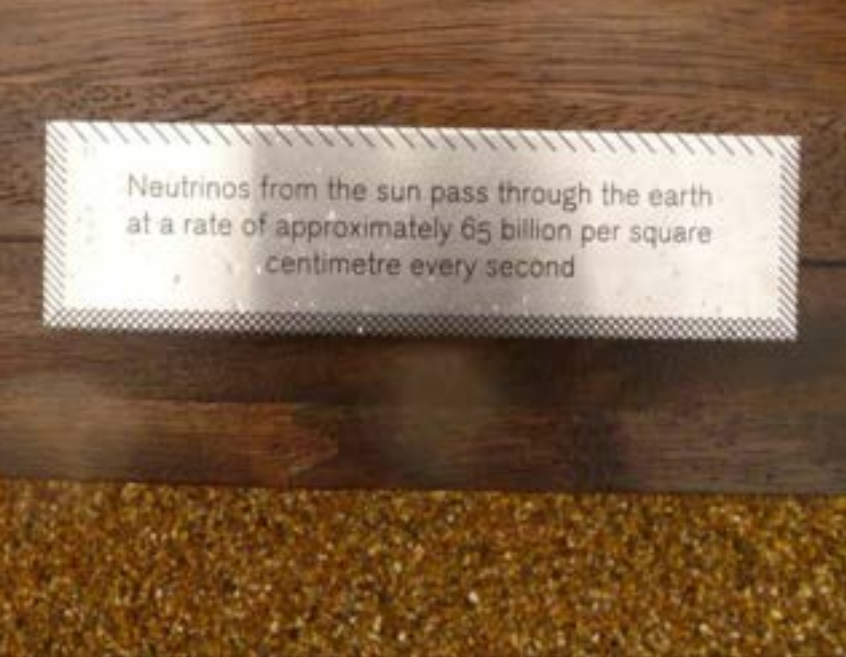
# Lighting



# Biodiversity



# Art in the Park



# Art in the Park

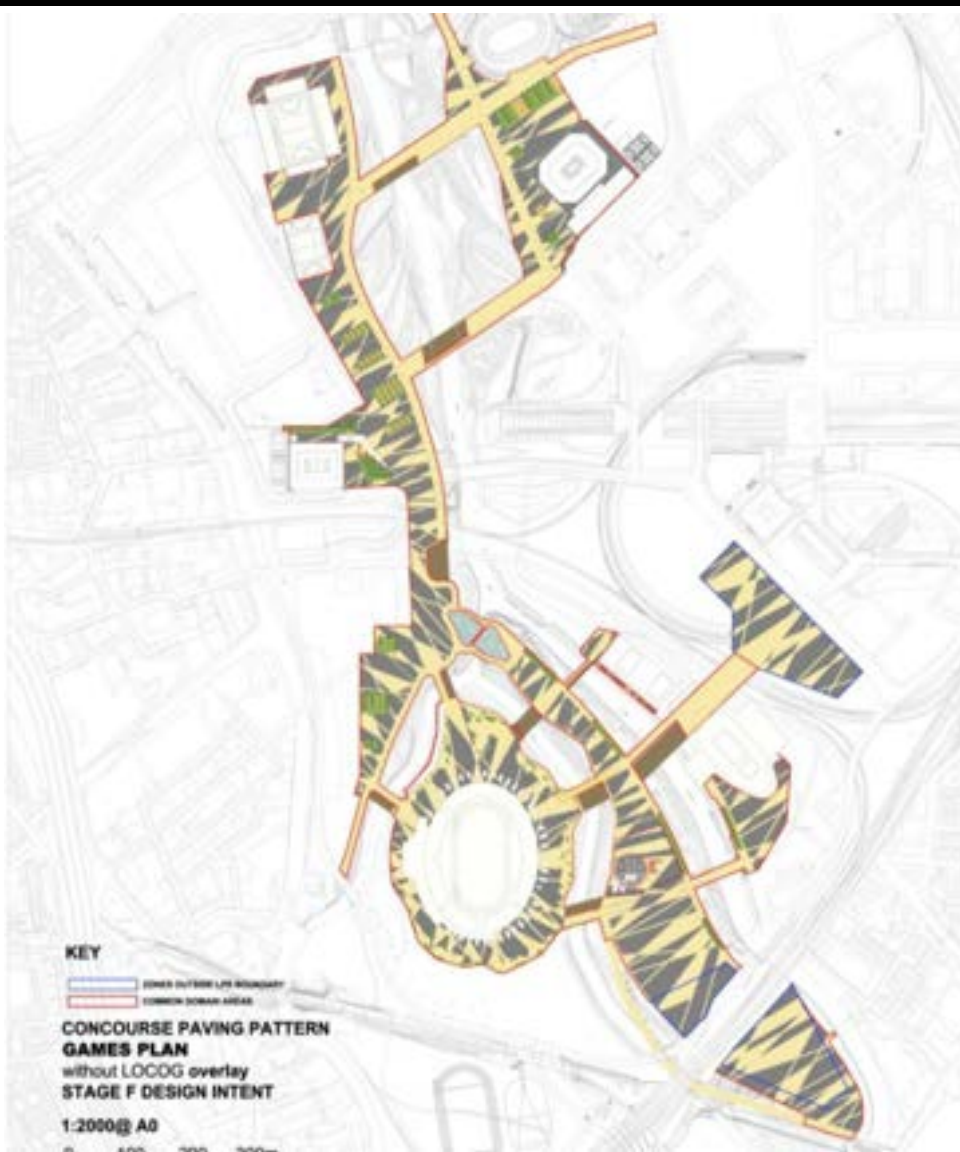


# Art in the Park





# Surface Patterning



# Olympic Park: LOCOG Overlay

July 2012



Image: Courtesy of ARUP

# Olympic Park: 2012 Games



Image: Courtesy of ARUP

# Olympic Park: 2012 Games



Image Courtesy of ARUP

# Olympic Park: 2012 Games



# Olympic Park: 2012 Games



# Olympic Park: 2012 Games

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# Olympic Park: 2012 Games



# Olympic Park: 2012 Games



# Olympic Park: 2012 Games



# Olympic Park: 2012 Games





**Alison Nimmo, Director of Design & Delivery at London 2012 said:  
'You and your team have done the most extraordinary job of giving us the most  
beautiful new contemporary landscape. When I think back to what it looked like only  
5 years ago –  
What a transformation!!!'.**

# Games/ Transformation

Remove

Connect

Complete





# Northern Parklands



**Olympic Games**



**Transformation**

# Cycle Circuit and Mountain Bike Track



# Aquatics Landscape and Riverside Walk





Thank you for listening.