2012 Central Scotland Green Network Forum – How Green Networks make our Towns and Cities Livable

The London 2012 Olympic Park and Green Network Legacy

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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
The London 2012 Games offer a unique opportunity to revitalise the Lower Lea Valley, transforming 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, hockey, swimming and tennis, 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)
- Hyde Park and Kensington Gardens (366ha)
- St. James’s Park (36.4ha)
- Glasgow Green (52ha)
The Clean Up

- 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
- 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
- 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.
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
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
North Park: Systems

Water Systems:
- Drainage
- Bio-Swales
- Wetlands
- River Lea

Lawn and Terraces:
- Open Lawn
- Seating Terraces
- Wet Woodland With Alder And Willow Carr
- Woodland Hill
- Feature Plantings
- Species Rich Grasslands
- Swale Slope Plantings
- Wetlands
- Water Edge Plantings
- Riparian Trees
- Path Trees
- Tree Connectors
- Existing Trees

Circulation:
- River Walk
- Park Footpaths and Concourse
- Bridges

Plantings:
- Landforms

[Diagram showing various systems and features of North Park]
Wet Woodland – Concept to Establishment
North Park
North Park
North Park
North Park
North Park
Olympic 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 Gardens: Geographic Zones and Plant Introduction Timeline

1. Western Europe and the Mediterranean 1400-1600
2. Temperate Americas 1600-1800
3. Southern Hemisphere: South Africa, Australia, and New Zealand 1700s-1800s
4. Temperate Asia 1800s-1900s
2012 Gardens concept – heritage/plant collection/biodiversity

Temperate Asia

Southern Hemisphere

Temperate Americas

Western Europe and Mediterranean
2012 Gardens - Games Mode
London Olympic 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
London 2012 Gardens
London 2012 Gardens
London 2012 Gardens
South Park - Meadows
South Park - Meadows
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 Patternation
Olympic Park: LOCOG Overlay

July 2012

Image: Courtesy of ARUP
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!!!’. 
Transformation into Legacy

Connecting the communities with the Olympic Park

2013
Queen Elizabeth Olympic Park
Scale of the Challenge

- Similar area of green space as Games.
- Similar number of large trees as Games.
- To be constructed in half the time.
- Complex phasing.
- Demand for early access by the public.
- Olympic Anniversary celebrations 2012
- The challenge of landscape establishment
Pedestrian Connections

Pedestrian routes key
- Red: Pavements on roads and streets
- Blue: Routes segregated from vehicular traffic
Park to Community Transformation

Safe

Welcoming

Park extends to edge of site

Permanent and temporary landscape

2012 Olympic Parklands

2014 Transformation Parklands
Connections – Main Entrance
Connections – Western Bridges
Connections – Negotiating Existing Infrastructure
Park Strategy

Activity

Circulation and Organisation
Eton Manor – Local Facilities
Games / Transformation

Remove

Connect

Complete
Northern Parklands

Olympic Games

Transformation
Removing Temporary Infrastructure

Games mode

Legacy mode

Games mode

Legacy mode
Cycle Circuit and Mountain Bike Track
Thank you for listening!