



Key Principles for Adaptive Communities

Farrells Case
Studies

FARRELLS

SUSTAINABLE PLACES

- Principles of retrofit, regeneration and fabric first in design
- Opportunities for city region economic prosperity
- Integrate new and enhance existing bio-diverse landscapes
- Embrace and support healthy, diverse and connected communities
- Incorporation of innovative low carbon energy solutions
- Leading reputation in accredited sustainable design
- Encouragement of active, integrated and low carbon travel
- Intelligent design using closed loop solutions for natural resources and manufactured materials
- Cultivate and share sustainability knowledge and skills
- Incorporation of innovative science and technical solutions to meet 2050 CO₂ targets

KNOWLEDGE AND PARTNERSHIPS

- Sustainable knowledge through place making and urban rooms
- Listen
- Connections across disciplines
- Thought leadership
- Strong and significant research
- Co-operative and collaborative design practice
- Participation in global knowledge exchange
- Support and stimulate knowledge and social economies
- A diverse work force which encourages the civic voice
- Work with others to meet sustainability goals

HERITAGE

- Design and thinking which creatively fuses heritage and modernity
- Urban and environmental regeneration and retrofit
- Encouragement of wide-ranging skills and enterprises
- Champion parks as vital urban places
- Respect for diverse history of many cultures
- Involvement of the wider community and volunteers in decision making
- Promotion of sustainable landscapes to challenge impacts of climate change
- Support for tourism economies
- Cherish and share our legacy of physical, natural and intellectual resources
- Shape authentic and inspirational places

FOOD AND WATER

- Places which give opportunities for healthy and sustainable diets
- Bio-diverse planting
- Local food production
- Short food chains
- Incorporation of community food projects
- Promotion of sustainable food or farming knowledge and skills
- Support for food enterprises
- Closed loop solutions for food and water waste
- A future of sustained food supplies
- Rain and grey water harvesting

ECONOMY AND TECHNOLOGY

- Good governance with partnership and community involvement
- Support resource management which uses circular economies and renewable energy
- Global knowledge exchange
- Intelligent use of recycled materials
- Digital connectivity for super connected cities
- Innovate integrated transport solutions
- Support social economy
- Incorporation of training and knowledge exchange which empowers sustainable future
- Recognise rural connectivity and development
- Celebration of achievements

HEALTHY PLACES

- Access to healthy food and drink
- Access to diverse open spaces
- Active, skilled, employed and committed communities
- Available green and inclusive environments
- Contact with diverse natural ecosystems
- Environment which inspires feeling safe
- Integrated, accessible and active travel
- Reduced noise pollution
- Sustained high quality measurements for soil, air and water
- Design, materials and management which ensure healthy buildings

COMMERCIAL

REGENTS PLACE

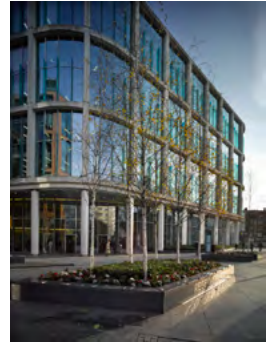
Building A

9 storey office building

GIA 16, 269 sq m

BREEAM 'EXCELLENT' RATING 2006

- Economy and Technology
- Food and Water
- Knowledge and Partnerships
- Healthy Places
- Sustainable Places
- Heritage



Day lighting penetrates deep into office units through glazed façades

CHP for base load heat and electricity

Low energy luminaire lamps

Segregated collection of waste from whole development

Easy access to local transport services- 15 minute walk to Euston Station



PV on roof for street lighting

High embodied energy with renewables for running the building

Water efficient gadgets like spray taps and low flush toilet cisterns

Water metering to monitor consumption

Natural ventilation through courtyard

Secure cycle parking provision

Demolition waste to be used to fill road bases

COMMERCIAL

REGENTS PLACE

Building B
10 storey office building with retail and theatre space
GIA 34, 000 sq m
(22, 000 sq m office, 260 sq m retail, 280 sq m theatre)
BREEAM 'EXCELLENT' RATING 2006

- Economy and Technology
- Food and Water
- Knowledge and Partnerships
- Healthy Places
- Sustainable Places
- Heritage



Day lighting penetrates deep into office units through glazed façades

Courtyards help in day lighting the service spaces

High embodied energy with renewables for running the building

Segregated collection of waste from whole development

Improved thermal building performance

Secure cycle parking provision

Easy access to local transport services- 15 minute walk to Euston Station



PV on roof for street lighting

Natural ventilation through courtyard

Water efficient gadgets like spray taps and low flush toilet cisterns

Water metering to monitor consumption

CHP for base load heat and electricity

Low energy luminaire lamps

Demolition waste to be used to fill road bases

RESIDENTIAL

ONE OSNABURGH STREET

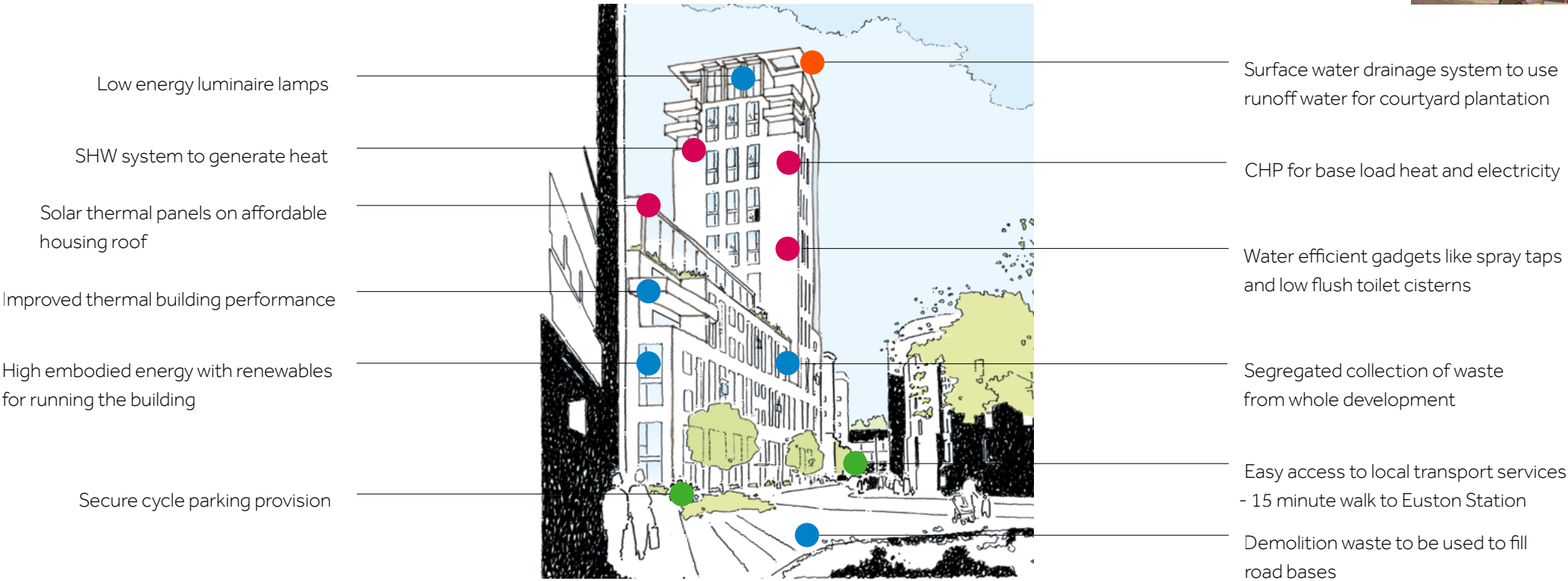
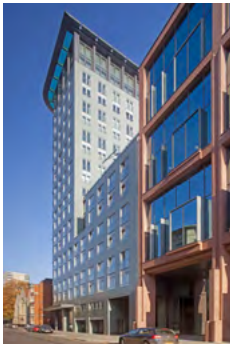
20 storey residential building

GIA 18, 000 sq m

(4, 400 sq m social rented housing, 1, 700 sq m intermediate housing, 4, 100 sq m market housing)

ECO HOMES 'EXCELLENT' RATING 2004

- Economy and Technology
- Food and Water
- Knowledge and Partnerships
- Healthy Places
- Sustainable Places
- Heritage



INTERIORS

14 PIER WALK & 6 MITRE PASSAGE

Building A: 6 storey office building with retail

GIA 25, 445 sq m (18, 350 sq m office, 1, 225 sq m retail)

BREEAM 'EXCELLENT' RATING 2004

- Economy and Technology
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Light sources are energy efficient with small percentage of low voltage lighting

General ambient lighting is provided by square luminaires with a diffuser and a separate low voltage downlight

Random position pattern of pendant luminaires to allow for full flexibility

Design for space efficiency: Frequent waste and recycling collection minimised waste room space requirements

Use of recycled materials e.g. kitchen worktops are made of decommissioned Victoria line

FSC certified timber: Junkers Floating Clip

Waste materials used as bio fuel and raw material acquired from sustainably managed forest



High acoustic performance (above 50db)
Void above ceiling and below floor will be closed off with an acoustic barrier

Luminaires to be switched on and off via local ceiling mounted automatic presence detection

Cradle to cradle design, all glass from landfills, bonded with solvent-free resin

Blinds Mechoshade manual and electrical double bracket system, glare control and black out

Hexcelscreen PVC free shade cloth

Interface carpet: Interface an environment accredited manufacturer; BREEAM A rated product; Random design pattern, virtually no waste when laid

Design for flexibility: Sliding/folding partitions used as internal walls only contribute 1% overall environmental impact

5 WRAP principles/solutions met:

- Elements of biggest impact, nearly 100% recyclable e.g. glass, steel, concrete
- Design of space efficiency; frequent waste and recycling collection
- Specify products that produce minimum installation waste
- Demountable partition walls for flexibility
- Design services for maximum flexibility

OFFICE AND RETAIL

14 PIER WALK & 6 MITRE PASSAGE

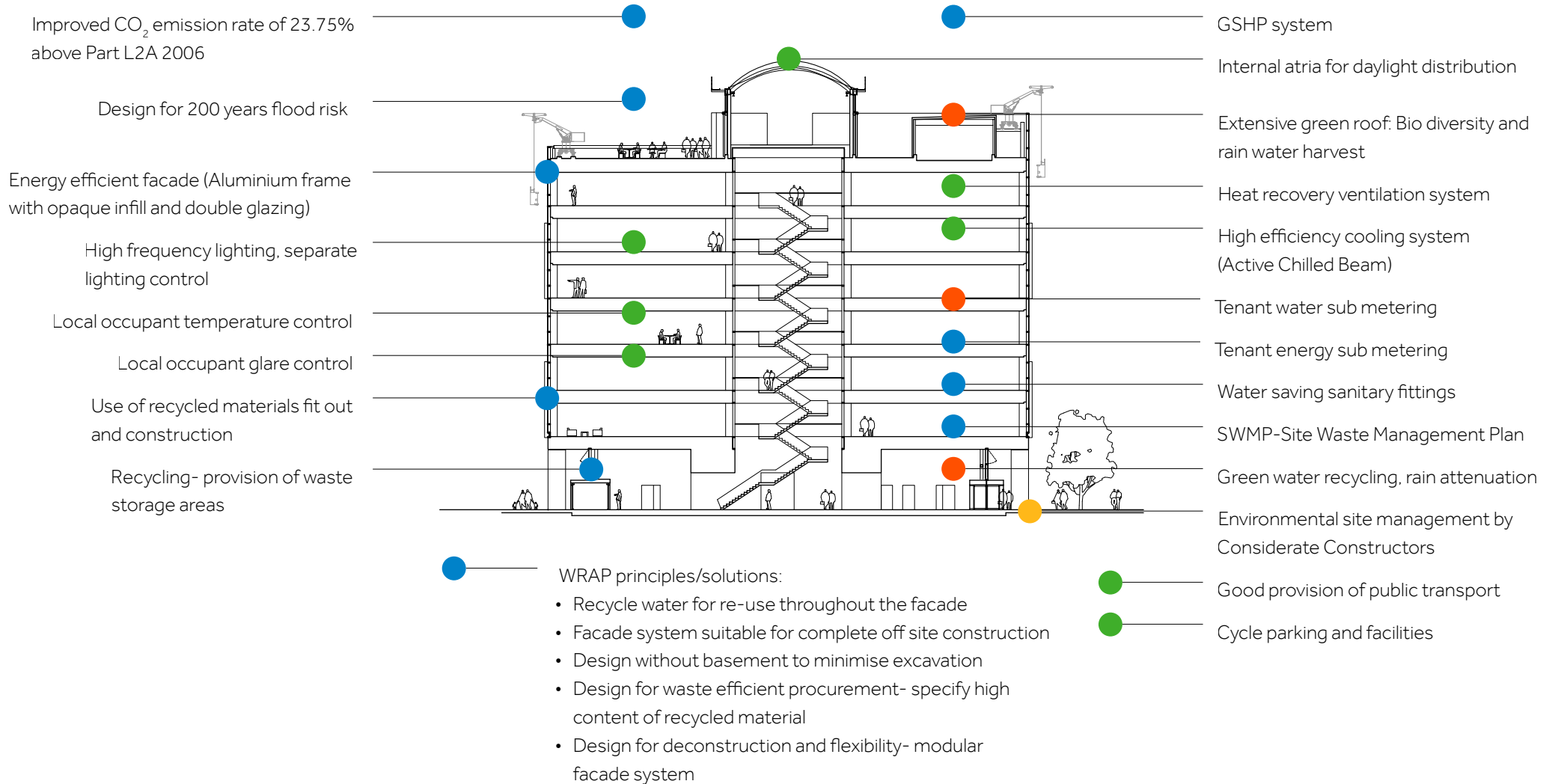
Building A: 6 storey office building with retail

GIA 25, 445 sq m (18, 350 sq m office, 1, 225 sq m retail)

Building B: 12 storey office building with retail (NIA 10, 747 sq m)

BREEAM 'EXCELLENT' RATING 2004

- Economy and Technology
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- Heritage

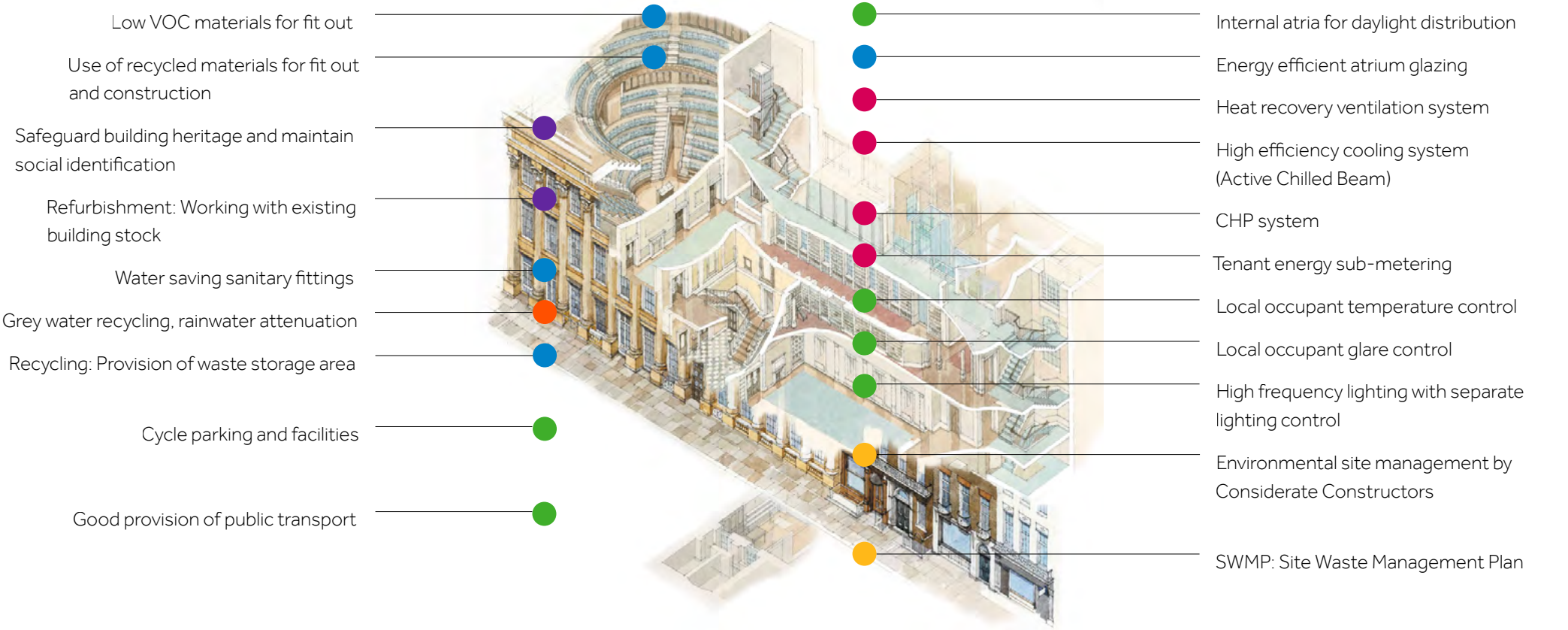


CULTURE, LEISURE, HEALTH, LEARNING, INTERIORS AND RETROFIT

ROYAL INSTITUTION OF GREAT BRITAIN

Refurbishment of Grade I listed building: Exhibition, new atrium, new social hub, educational re-organisation of internal spaces and educational facility

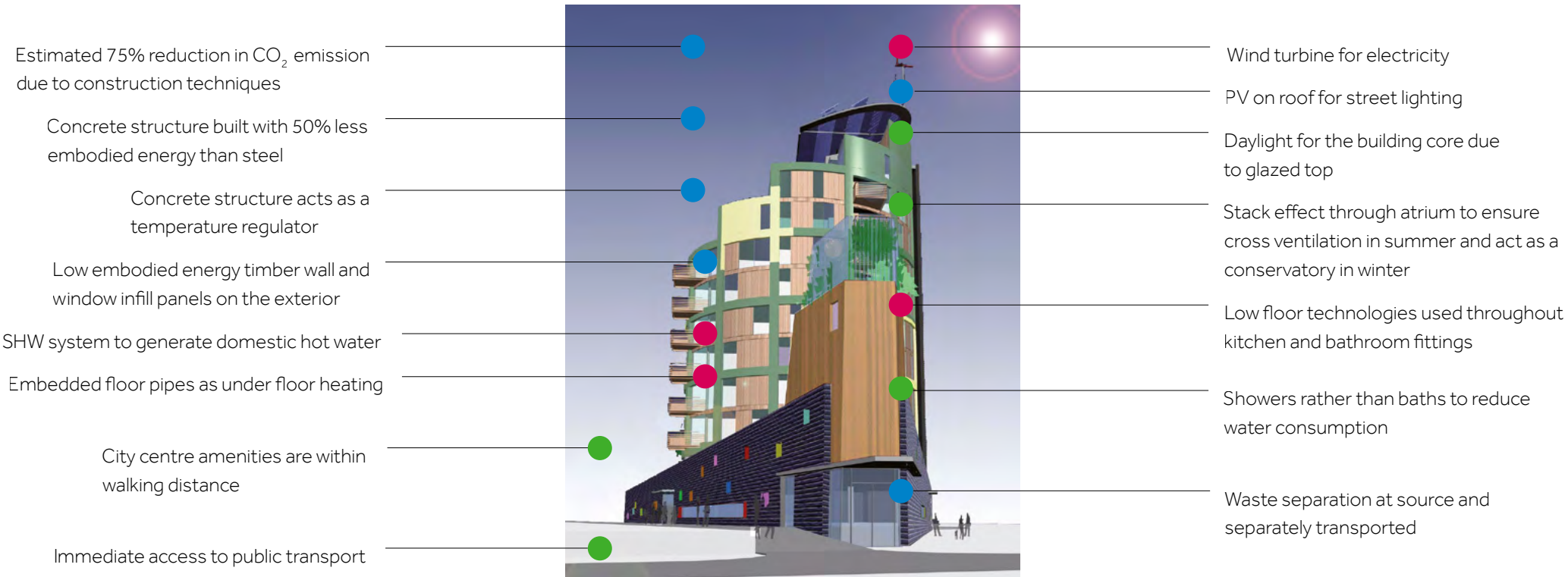
- Economy and Technology
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HEALTH, LEARNING AND RESIDENTIAL
GREEN BUILDING

10 storey residential building with a nursery and doctor's surgery
36 sq feet
GREEN LEAF AWARD FOR SUSTAINABLE BUILDINGS 2006

- Economy and Technology
- Food and Water
- Knowledge and Partnerships
- Healthy Places
- Sustainable Places
- Heritage



STRATEGIC VISIONS

THAMES ESTUARY PARKLANDS

Exemplar masterplan for low carbon regeneration and growth at a regional scale

Area 120, 000 sq km

- Economy and Technology
- Food and Water
- Knowledge and Partnerships
- Healthy Places
- Sustainable Places
- Heritage



Centralised management: Under strict government rules to ensure sustainability goals are met

Overall waste strategy implementing strict government regulations on household, commercial and industrial waste

Community parklands: Linking communities to the river

Renewable energy offshore wind farms and tidal energy

Greening the urban landscape regeneration and development of urban parklands as places of cultural and social interaction

Enhancing existing open spaces and improve access to become 22 new community parklands



New Homes: Creating new low carbon homes

Active water landscape

Re-invigorate the blue landscape as a major environmental, recreational and economic asset

New water identity: The Thames Estuary is deprived of major parklands compared to other parts of the south-east

Retrofitting existing homes

Flood protection

Creating new jobs in agriculture, leisure, green energy and new settlements

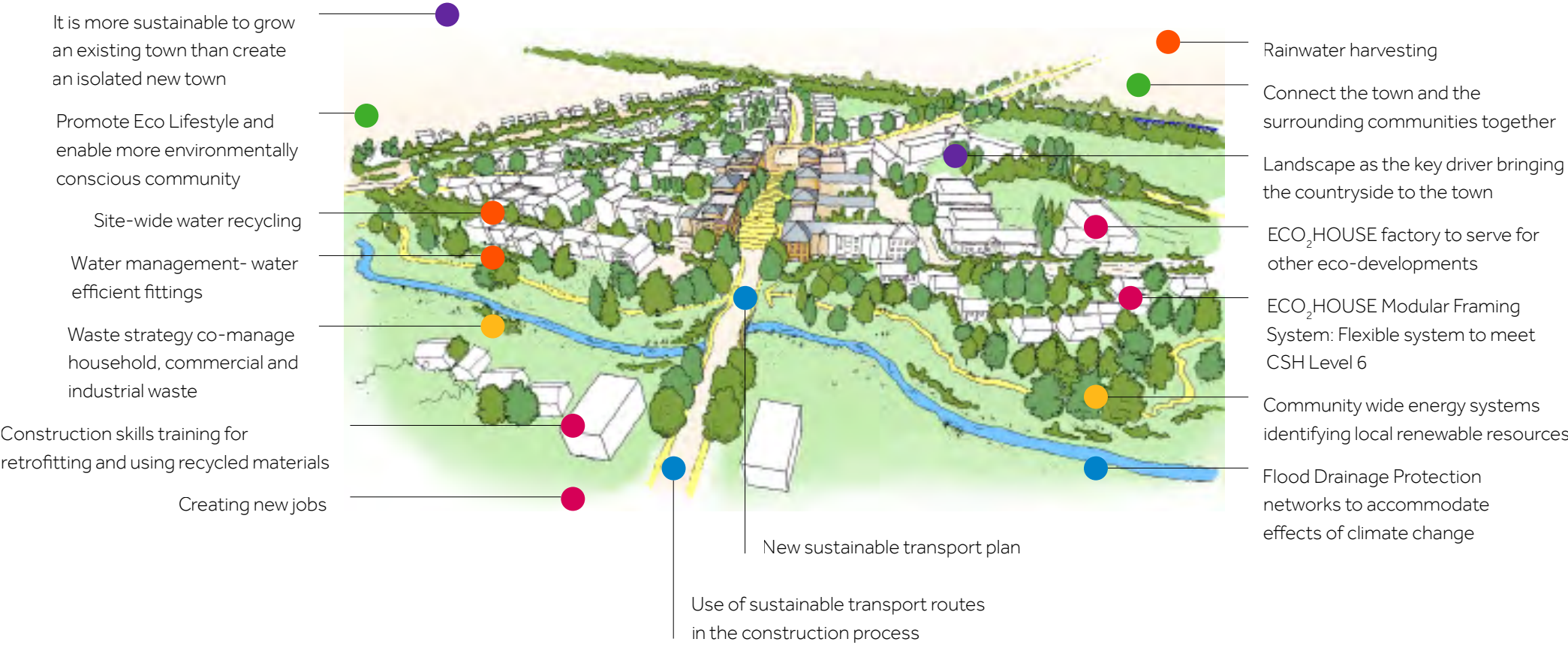
Create a connected parklands landscape with 'green grids'

STRATEGIC VISIONS

BICESTER ECO TOWN

Exemplar masterplan for low carbon regeneration and growth at a regional scale
Area 120, 000 sq km

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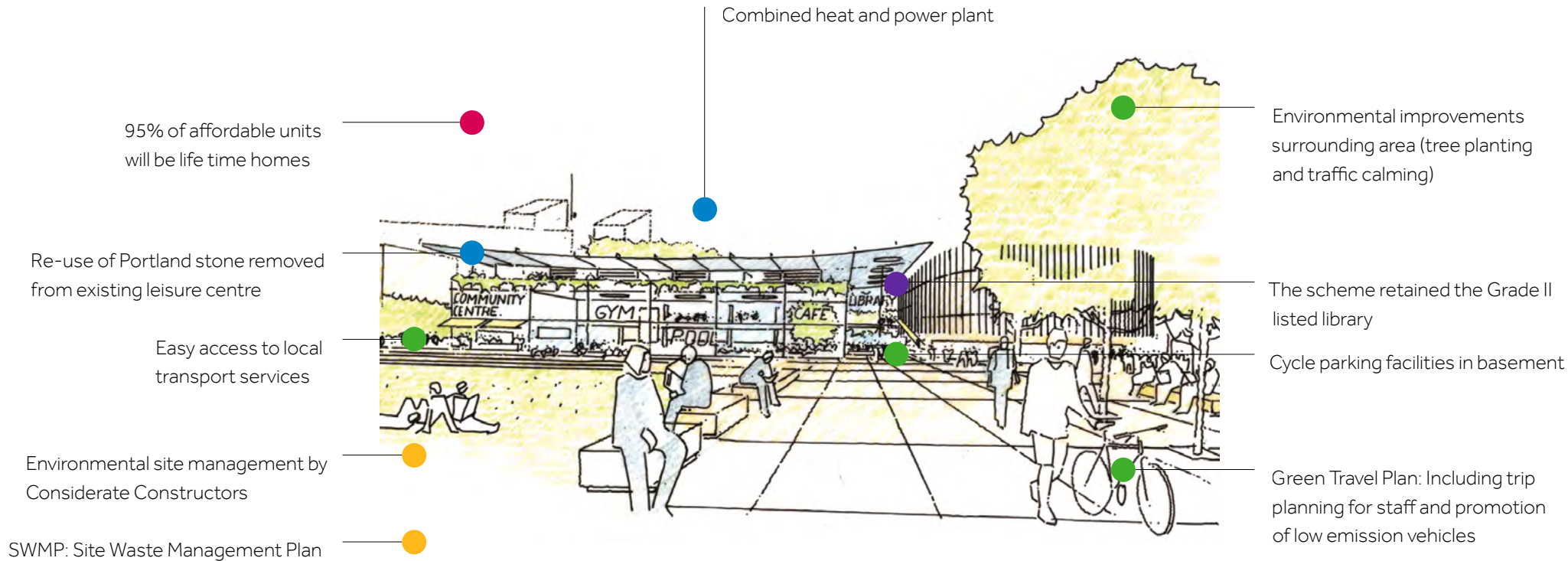


MASTERPLANNING AND RESIDENTIAL

SWISS COTTAGE

A new cultural quarter comprising of a landscaped civic space, social and welfare amenities including a new community centre, doctor's surgery, café, crèche, award-winning social housing, private apartment and leisure centre

- Economy and Technology
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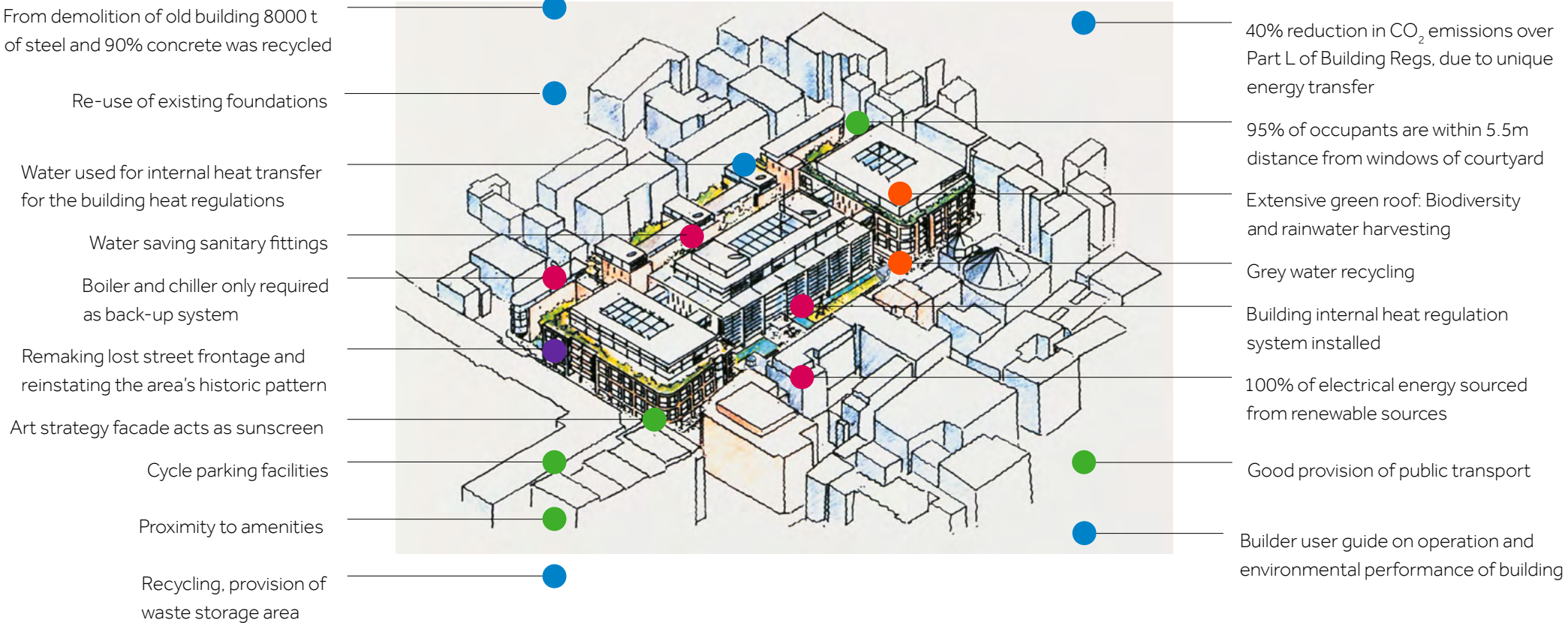


MASTERPLANNING AND OFFICE

THE HOME OFFICE, LONDON

3 buildings at 7 storeys with a naturally lit, internal street link

- Economy and Technology
- Food and Water
- Knowledge and Partnerships
- Healthy Places
- Sustainable Places
- Heritage



MASTERPLANNING

GREENWICH PENINSULA

A masterplan providing for four new residential neighbourhoods, an office and a retail district structured around the bus and tube interchange, five public parks and 12 public squares

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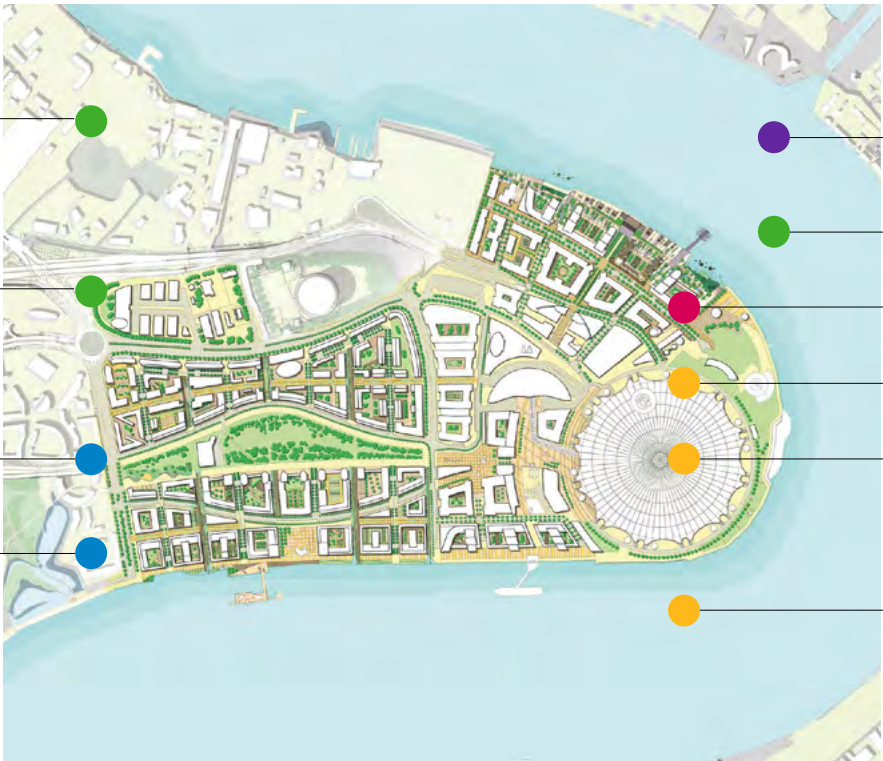


Travel Plan: The creation of high density development in close proximity to a transport interchange

Community Service Plan: A range of services and facilities to serve the new Peninsula community

Infrastructure

Sustainability Management Plan: BREEAM and ECO HOMES EXCELLENT rates are required for every building



Ecological Management Plan: To protect and enhance the local ecology

Bio-diversity

Buildings built to last

The Environmental Statement

Integrated Management System (IMS): To limit environmental impact when developing the Peninsula.

Landscape Management Plan: The methods employed to safeguard and promote existing and new landscapes