Committee:	Date:	Classification:	Agenda Item No:
Strategic Development	29th May 2008	Unrestricted	8.1

Report of: Corporate Director Development & Renewal **Case Officer:** Richard Murrell	**Title:** Observations to Olympic Delivery Authority **Ref No:** PA/08/00615 and PA/08/00682 **Ward(s):** Bow East

1. APPLICATION DETAILS

Location: Land East of River Lee Navigation and Land North of Carpenters Road (known as Kings Yard) contained within Planning Delivery Zone 4, London E15

Existing Use: Vacant site, previously light industrial (B1 Use Classes)

Proposal:

1. Observations to the Olympic Delivery Authority for a reserved matters application and submission of details with respect to OD 4.1 (i) to (xvii), OD 4.2, OD 4.3, OD 4.4 and OD 4.5 of Outline Planning Permission (Ref: 07/90010/OUMODA) for the Olympic, Paralympic and Legacy Transformation Planning Applications: Facilities and their Legacy Transformation dated 28/9/2008 for

   The construction of a new Energy Centre building housing combined heat and power units, absorption chillers, gas boilers, electric chillers and associated plant and use of an existing 2 storey building to house biomass boilers, offices and a visitors centre and provision of 3 car parking spaces

2. Observations to the Olympic Delivery Authority on the construction of inter-connecting flue between the existing two storey building and the proposed energy centre.

Drawing Nos: **Reserved Matters application**

Drawing numbers : - OEC-KY-G100-P-00-009, OEC-K1-G200-P-00, OEC-K1-G200-P-01, OEC-K3-G200-E-S, OEC-KY-G200-E-N-AL, OEC-K1-G200-S-CC, OEC-K1-G200-S-AA, OEC-K1-G200-E-E, OEC-KY-G200-E-S-AL, OEC-K2-G200-S-DD, OEC-K1-G200-P-RF, OEC-K1-G200-E-N, OEC-K1-G200-E-S, OEC-K1-G200-E-W, OEC-K1-G200-S-DD, OEC-K1-G200-BB, OEC-K2-G200-P-RF, OEC-KY-G100-P-00-004, OEC-K2-G200-E-S, OEC-K2-G200-E-N, OEC-K2-G200-E-E, OEC-K2-G200-E-W, OEC-K2-G200-S-AA, OEC-K2-G200-S-BB, KY-H100-P-00-007, KY-G100-P-OO-EX, OEC-KY-G200-XP-00, OEC-KY-G200-XP-AL, OEC-KY-G200-XP-RF, KY-G200-XE-AL, KY-G200-XS-AL, OEC-K2-G200-P-01, OEC-KY-G100-P-00-006, OEC-K2-G200-P-00, OEC-K1-and G200-P-02.

Appendices:
Inclusive Design
Design and Access Statement
Telecommunications
Emissions Dispersion / Air Quality Statement
Statement of Participation
Noise Report

Equalities Statement
Energy Appraisal
Water Use Statement
External Lighting
Accommodation for loading and unloading, set down and pick up of vehicles
Context Drawings

Interconnection Flue Planning Application

Drawing numbers – OEC-K3-G100-P-00-004, OEC-K3-G200-E-E, OEC-K3-G200-E-N, OEC-K3-G200-E-S, OEC-k3-G200-P-01, OEC-K3-G200-P-02, OEC-K3-G200-P-RF and OEC-K3-G200-S-BB
Appendices:
Design and Access Statement
Emissions Dispersion / Air quality Statement

Other Submissions
Feasibility study for the Mounting of Telecommunications Equipment to the Olympic Park Energy Centre

Feasibility study of Biomass Fuel Delivery to King Yard by Barge

Historic Building: No
Conservation Area: No

2. SUMMARY OF OBSERVATIONS

2.1 The Council would raise the following observations in relation to the above proposals

In overall terms the Council is impressed with the design of the proposed Energy Centre and flue stack. The retention of the existing western building is also welcomed. However, the Council have a number of concerns over detailed aspects of the proposals which should be resolved prior to the determination of the application.

- The Council objects to the current design of the Energy Centre as it does not make provision for the future installation of telecommunications equipment within the flue stack, and it has not been demonstrated that the Energy Centre will not be required to host such equipment.

- The Council objects to the omission of a graded entrance route to the Visitors Centre in the retained building.

- The Council objects to the failure to provide a step-free access to the Energy Centre control room.

- The Council objects to the approval of any design of the retained building that does not make provision for barge deliveries, or that precludes barge delivery in the future.

- The Council would object to the discharge of any previous S106 commitment to deliver up to 50% of biomass fuel by barge without further justification.

- The Council would object to the proposal unless the ODA demonstrate that consideration has been given to extending the CHP/CCHP scheme beyond the boundary of the Olympic site into surrounding communities.

- The Council would object to the proposal unless the ODA demonstrate that the CHP infrastructure delivered as part of the Energy Centre would not prejudice the future delivery of a more comprehensive network in the Fish Island area. As a minimum the Council need to be satisfied that connection facilities to the west are capable of being provided in the future and that there are no impediments as a result of this development that would frustrate these connections being made in the future. This would include the location of, sufficient capacity for and no obstruction to the routes of those potential connections.

The Council would also make the following requests for further information / clarification which should be provided prior to the determination of the application:-

- Additional information detailing accessible access routes from the site perimeter to the building entrances and of the detailed design of the accessible toilets.

- Additional assessments into the potential for windborne noise disturbance from the interconnecting flue structure

- Additional assessment of the potential impact of any external lighting on flight paths to City Airport and the closest residential properties.

- Detail of the energy efficiency measures that would be applied to the new building and the retained building.

- Does the ODA intend to supply power from the Energy Centre to domestic customers?

- Can the ODA confirm that the management of the Energy Centre will sign a statement of commitment to only procure the biomass fuel from a sustainable and certified fuel supplier?

- Details need to be provided of site-wide voltage optimisation to tap down over-supply of electricity from the grid

- That an assessment is made to determine the carbon cost of any external lighting proposals

Requests for conditions

A condition should be placed on any permission setting maximum permitted noise levels at closest residential receptors.

A condition should be placed on any permission restricting the hours of operation of external illumination unless it is demonstrated that it would not have any impact on residential amenity.

3. RECOMMENDATION

3.1 That the ODA Planning Decisions Team should consider the views and issues the London Borough of Tower Hamlets set out above under Summary of Observations.

3.3 That the Corporate Director Development & Renewal be delegated authority to make further observations and or recommendations as necessary to the ODA.

4. PROPOSAL AND LOCATION DETAILS

Proposal

Background

4.1 The application site is known as Kings Yard and is located to the East of the River Lea Navigation and to the North of Carpenters Road. The site forms part of the London 2012 Olympic and Paralympic Games Site. It is located within the London Borough of Tower Hamlets; however the Olympic Delivery Authority acts as the local planning authority.

4.2 Outline planning permission was granted in September 2007 for development associated with the London 2012 Olympic and Paralympic Games and the subsequent Legacy Transformation (ODA Reference: 07/90010/OUMODA). This outline permission established the principle of the erection of a new Energy Centre on the Kings Yard site and the retention and conversion of the existing western building.

4.3 The Outline permission prescribed the minimum and maximum 'built envelope' the proposed energy centre could occupy. This included a footprint of a maximum of 82m long x 42m wide, and a maximum height of 20m. The flue stack could be a maximum of 48m above ground level.

4.4 The detailed design of the proposed Energy Centre and the treatment of the retained western building were reserved by conditions. These conditions also ensure the proposal accords with other aspects of the approved Olympic masterplans. Detail in relation to the following conditions has been submitted to the ODA for approval:-

Conditions OD4.1 (i) to (xviii) require the submission of plans and a range of supporting technical information (the full text is attached as Appendix 1).

Condition OD 4.2 relates to the treatment of the retained Energy Centre building

Condition OD 4.3 requires the provision of a visitors centre

Condition OD 4.4 requires detail of, and restricts the amount of, parking provision

Condition OD 4.5 requires loading and unloading from vehicles to take place within screened loading docks.

4.5 The proposed Energy Centre must also accord with requirements specified in the Olympic S106 agreement. A full list of the relevant conditions and S106 requirements is appended to this report.

4.6 These reserved matters have now been submitted for approval to the Olympic Delivery Authority and the London Borough of Tower Hamlets has been consulted as a neighbouring Authority.

Detail of proposal

4.7 The submissions relate to the provision of an Energy Centre on an area of land known as Kings Yard located off Carpenters Road, E15. The Energy Centre comprises a Combined Cooling Heat and Power (CCHP) Plant, gas boilers and biomass boilers. The Energy Centre will supply heating to all developments and venues in the Olympic Park, heating to northern parts of the Stratford City development, cooling to the IBC/MPC and electricity to the grid.

4.8 The redeveloped site will comprise a new Energy Centre building, the restoration of the existing western building, the construction of an interconnecting flue and associated site landscaping works. The Centre would provide employment for 15 people although the

number on-site at any time would vary with shift patterns.

4.9 The submissions can be separated into four components:
- The proposed new Energy Centre Building;
- The change of use and restoration of the retained western building;
- The installation of a flue connecting these two buildings; and
- The method of delivering biomass fuel to the Energy Centre

New Energy Centre

4.10 The proposed Energy Centre is located towards the Northern boundary of the site. Pedestrians and vehicles would enter the site from a new access to the East onto Carpenters Road. The Centre is orientated East – West, is rectangular in shape and has a footprint of approximately 70m x 25m. The main body of the building is 20m high. The flue is located at the North-west corner and would be 45m high. The building would house the heavy gas boilers on the ground floor and other CCHP plant equipment on the first floor. Associated office and staff welfare facilities would also be provided.

4.11 The exterior of the building is formed from a main box covered in black synthetic rubber (EPDM) membrane. A support system suspends a layer of Corten steel mesh around the main box structure on 3 of its five elevations. The flue is also clad in Corten steel panels and mesh. The submissions indicate that lighting could be installed in-between the rubber layer and the Corten Steel allowing varied lighting effects to be created. This creates a building with a modern industrial character but with the opportunity for drama and spectacle at night.

Retained Building

4.12 The three storey brick built building to the west of the site, adjacent to the Canal, is referred to as the retained building. It dates from the early 20 century. The decision to retain this building was made at the time of the outline permissions to provide a link to the industrial past of the area. The building is orientated north-south alongside the canal towpath. It has a small frontage to Carpenters Road. The proposal would restore and retain this building. The restoration works would include a new slate roof, making good of brickwork and installation of new windows and glazed entrance canopy. The building would house biomass boilers, a fuel store, offices on the ground floor and a visitors' centre on first floor. It would be possible to view the biomass system from the visitors' centre.

4.13 There would be two accesses to the retained building. The first on the east elevation is via a staircase to the first floor. Step-free access to the building and visitors centre would be provided from a secondary access from the towpath. The submission notes that a separate application for a graded entrance ramp to the east side will be submitted at a later stage.

4.14 The biomass boilers will be fuelled by woodchip. The proposals for the method of woodchip delivery are discussed below.

Interconnecting Flue

4.15 A separate planning application for a flue to connect the retained building and the new building has also been submitted. A separate planning application is required as this interconnecting flue falls outside of the parameters of the outline permission. The flue links the retained building to the Energy Centre. It allows the dispersion of emissions from the biomass boilers in the retained building via the main chimney flue on the Energy Centre. The flue spans a distance of approximately 22m. The flue would be a steel lattice structure clad in Corten steel panels and mesh.

Other development

4.16 As well as the above three main structures the proposal includes detail of associated landscaping works and fencing. The ground area around the buildings would be surfaced with concrete paving. The space left between each block would vary according to how intensively that part of the hard-standing is likely to be used. In areas of infrequent use larger gaps would be left which would allow the planting of grass and shrub native species.

4.17 External security lighting and lighting to emphasise the architectural features of the buildings is also proposed. The 4.8m high Olympic Park fence will run between the railway and Energy Centre. The south and east boundaries will be surrounded by 2.8m high black mesh fencing.

Biomass Fuel Delivery

4.18 The Biomass boilers in the retained building use woodchip for fuel. The submissions identify an existing waste wood facility at Edmonton Ecopark as the likely source of this fuel. There is wharfage space available at this facility for the transfer of woodchip onto barges.

4.19 At Schedule 11, Part A, Paragraph 5 the S106 agreement attached to the outline planning permissions requires a study to be undertaken to determine if it is feasible to transfer up to 50% of the fuel required by the biomass boilers by barge. A study in relation to the discharge of this condition has been submitted to the ODA and also been sent to Tower Hamlets for observations. The findings of this study will be discussed in more detail in the main issues section of the report.

4.20 The application states that in the immediate future delivery of fuel to Kings Yard will be undertaken by road. The Applicant estimates that this would require a maximum of 9 -19 deliveries per week (depending on the size of vehicle used). The vehicles would approach the site via the distributor road network enter the complex via the new east access off Carpenters Road. The proposed source of the woodchips is approximately 6 miles by road from Kings Yard at the Edmonton EcoPark. The woodchip would be unloaded from the vehicles into a fuel store within the retained building.

Site and Surroundings

4.21 The application site is located in Fish Island East. It is within the London Borough of Tower Hamlets; however the Olympic Delivery Authority is the local planning authority. The site is approximately 0.69 ha and is bounded by the North London line to the north, White Post Lane to the South, the River Lee Navigation to the West and an Access Road to the East. The site is relatively flat with a fall of 0.5m from east to west. However, adjacent to Carpenters Road the site level rises by approximately 1m to form a vehicle access.

4.22 The site was previously used for a variety of light industrial employment uses. The outline planning permissions established the principle of the proposed uses.

4.23 The Olympic masterplans indicate that three buildings will be constructed on the land surrounding the proposed Energy Centre during the Games and Legacy phases of development. To the West an electrical substation is proposed. To the South buildings SSB12 and SSB13 are proposed which will be used to provide spectator support facilities. The use of these buildings in Legacy has not yet been determined.

4.24 In legacy the site would occupy a prominent position and could be viewed from the railway line, a pedestrian bridge over this railway and from the canal towpath.

4.25 Currently the closest residential properties are located approximately 300m to the northwest in Prince Edwards Road and 180m to the south in Roach Road.

Previous comments from Tower Hamlets

4.26 London Borough Tower Hamlets were consulted on the original Outline planning applications (reference PA/07/218 and PA/07/345). Members made a number of observations and recommendations in relation to the proposed Energy Centre. Specifically that:-

- the building should be designed to a high standard
- a detailed energy statement is submitted
- at least 15% of energy efficiency requirements provided to above 2006 Part L Building regulations
- All Olympic and legacy facilities must be connected to, and maintain their primary energy sources, from CCHP
- All public facilities within legacy facilities and Olympic park to be powered by CCHP plant
- The capacity, operation and technology within the CCHP plant must be reviewed every 5 years after the Olympic Games to ensure that new technologies are implemented in order to ensure sustainable energy production throughout the area
- Supplies for CCHP plant biomass boilers must be sourced from local suppliers within Greater London Area
- At least 50% of supplies for the CCHP biomass boilers must be delivered to the site by water
- That all permanent legacy facilities be connected to the CCHP plant
- That the plant has the capacity to potentially provide energy for surrounding communities
- That the CCHP plant is adaptable for future technologies
- That woodchip should be sourced from local suppliers
- That a comprehensive air quality assessment is submitted

4.27 Following receipt of the current request for observations Officers also returned some initial views to the Olympic Delivery Authority. A copy of the letter giving these views is attached at Appendix 2.

5. POLICY FRAMEWORK

5.1 For details of the status of relevant policies see the front sheet for "Planning Applications for Decision" agenda items. The following policies are relevant to these observations:

Unitary Development Plan 1998 (as saved September 2007)

Policies:	DEV1	Design
	DEV2	Amenity
	DEV10	Telecommunications
	DEV12	Landscaping
	DEV46	Protection of waterways
	DEV50	Noise
	T16	Operational traffic
	T26	Promotes use of waterways for freight
	U1	Criteria for utility development

Interim Planning Guidance for the purposes of Development Control

Core Strategies:	CP1	Creating sustainable communities
	CP2	Equality of opportunity
	CP3	Sustainable Environment
	CP4	Good Design
	CP5	Supporting Infrastructure
	CP6	A sustainable legacy from the 2012 Olympics

	CP11	Sites in Employment Use
	CP31	Biodiversity
	CP36	The Water Environment and Waterside Walkways
	CP38	Energy Efficiency and Production of Renewable Energy
	CP44	Promoting Sustainable Freight Movement
	CP46	Accessible and Inclusive Environments
	CP48	Tall Buildings
	CP49	Historic Environment
Policies:	DEV1	Amenity
	DEV2	Character and Design
	DEV3	Accessibility and Inclusive Design
	DEV4	Safety and Security
	DEV5	Sustainable Design
	DEV6	Energy Efficiency and Renewable Energy
	DEV7	Water Quality and Conservation
	DEV8	Sustainable Drainage
	DEV9	Sustainable Construction Materials
	DEV10	Disturbance from Noise Pollution
	DEV13	Landscaping and Tree Preservation
	DEV16	Walking and Cycling Routes and Facilities
	DEV19	Parking for Motor Vehicles
	DEV21	Flood Risk Management
	EE2	Redevelopment / change of use of employment sites
	U1	Utilities
	U3	Telecommunication Equipment

Supplementary Planning Guidance/Documents

None relevant

Spatial Development Strategy for Greater London (London Plan 2008)

2A.1	Sustainability Criteria
3C.25	Freight Strategy
4A.1	Tackling climate change
4A.2	Mitigating climate change
4A.3	Sustainable Design and Construction
4A.4	Energy Assessment
4A.5	Provision of heating and cooling networks
4A.6	Decentralised Energy: Heating, Cooling and Power
4A.7	Renewable Energy
4B.1	Design principles for a compact city
4B.2	Promoting world class architecture and design
4B.5	Creating an inclusive environment
4B.9	Tall buildings
4C.8	Freight uses on Blue Ribbon Network
4C.11	Increasing access alongside and to Blue Ribbon Network
4C.20	Development adjacent to canals

Government Planning Policy Guidance/Statements

PPG8	Telecommunications
PPG24	Noise
PPS1	Sustainable Development
PPS22	Renewable Energy
PPS24	Pollution Control

Community Plan The following Community Plan objectives relate to the application:

A better place for living safely

A better place for living well

A better place for creating and sharing prosperity
A better place for learning, achievement and leisure
A better place for excellent public services

6. CONSULTATION RESPONSE

6.1 The views of officers within the Directorate of Development & Renewal are expressed in the MATERIAL PLANNING CONSIDERATIONS section below.

6.2 Detailed comments from specialist Officers from the Council's Environmental Health Section are presented in the main body of this report.

6.3 **British Waterways** were consulted by the ODA on the planning applications and have raised the following objections to the proposals:-

- The Energy Centre represents an excellent opportunity to deliver exemplar freight by water development.
- The submitted feasibility study is flawed and does not satisfactorily address issues
- The design of the retained building does not make allowance for future barge deliveries
- The complexities of barge delivery have been overstated

7. LOCAL REPRESENTATION

7.1 The London Borough of Tower Hamlets has been consulted by the Olympic Delivery Authority as a neighbouring planning authority. As Tower Hamlets has the status of a consultee no direct external consultation with local residents has been carried out by the Borough as this would be done by the ODA as the local planning authority.

7.2 For information Members are advised that the application documentation includes a 'Statement of Participation' which details the communication process undertaken by the Applicant to inform local residents, and other interested parties, of the proposal. This process included drop in exhibitions and community liaison meetings.

7.3 As the relevant local planning authority the Olympic Delivery Authority (Planning Decisions Team) have also carried out consultation in accordance with statutory requirements.

8. MATERIAL PLANNING CONSIDERATIONS

8.1 The main planning issues raised by the application that the Committee must consider are:

1. The design of the new Energy Centre, retained building and interconnecting flue;
2. Telecommunications;
3. Accessibility
4. The feasibility of delivering biomass fuel by barge;
5. Energy and sustainability; and
6. Amenity and emissions.

Design of the new Energy Centre, retained building and interconnecting flue

8.2 <u>Energy Centre</u>

Outline planning permission has been given for the erection of an Energy Centre building within certain maximum and minimum size parameters. The proposed Energy Centre is contained within this previously permitted 'built envelope'. When Members were consulted on the outline proposals they noted that a building of the scale permitted would have to be

designed to the highest standards to be acceptable.

8.3 Policy DEV1 of the UDP, CP4 and DEV27 of the IPG and 4B.2 of the London Plan all require new development and tall structures to be of the highest standard of design. This is particularly important given the size of the Energy Centre and the height of the flue which makes it very prominent.

8.4 The Energy Centre has several functional requirements that have influenced the proposed design. Firstly is the need to house numerous pieces of very large and heavy plant equipment. Secondly is the requirement for these pieces of equipment to be removed and replaced over the life-time of the building - which would require an adaptable external cladding system.

8.5 In overall terms Officers are impressed with the architecturally led response to the functional requirements of the Energy Centre and Flue Stack. The innovative use of a black rubber membrane with the Corten steel mesh above is considered to work well. In particular the opportunity to light the mesh from behind creating 'skeletal' views is likely to result in an impressive visual landmark. The incorporation of glazing on the ground floor of the South elevation improves the relationship of the building to pedestrians within the site and to passer-by's on Carpenters Road.

8.6 The design is considered to be high quality design and responds to most of the issues raised at the time of the initial applications about the potential impact of a building of this scale. However, issues relating to telecommunications and accessibility remain and these are discussed below.

Retained building

8.7 This building has fallen into a state of disrepair and is neglected in appearance. In general terms the proposed restoration and adaptation to provide office space, a visitors' centre and the biomass plant is acceptable.

8.8 However, the design of this building could have implications for the feasibility of delivering fuel to the biomass boilers by barge. The current plans do not appear to indicate any possible loading / unloading path from canal side to the proposed fuel stores. The Council would object to the current proposals unless it is demonstrated that the current designs do not preclude the future delivery of woodchip by barge.

8.9 The Council is also not satisfied with the current access arrangements to the building and this matter is discussed in the Accessibility section below.

Design of the Interconnecting Flue

8.10 An interconnecting flue is required to link the biomass boilers in the retained building with the main flue on the Energy Centre. The interconnecting flue spans a distance of approximately 22m. The bottom of the flue meets the Energy Centre at a height of 10.5m falling to 5.8m where it joins the retained building. The flue is clad in Corten steel panels and mesh.

8.11 In design terms the flue is seen as part of the operational Energy Centre where such plant is to be expected. It is set back from the front of the site to help minimise its visual impact. It is appropriate in scale given the size of Energy Centre and the use of matching Corten Steel materials is appropriate. In overall terms the design is appropriate and there is no objection to this aspect of the development.

Telecommunications

8.12 Saved UDP Policy DEV10, IPG Policy U3 and guidance in PPG8: Telecommunications emphasise the importance of minimising the impact of telecommunications equipment such as masts and antennae.

8.13 The Council has repeatedly drawn the attention of the ODA to the importance of designing Olympic legacy buildings so that they can host telecommunications equipment internally. Without making this provision it is likely that the appearance of the iconic legacy buildings and parklands is likely to be seriously marred by the addition of 'bolted-on' antennae and free-standing phone masts.

8.14 The current proposals for the Energy Centre make no provision for the installation of telecommunications equipment. The potential problems caused by this were raised with the ODA soon after the receipt of the submissions. In response to this a feasibility study, prepared by Elyo East London Energy Ltd, was submitted for consideration. This concludes that the installation of antennae to the flue unlikely to be practical or aesthetically acceptable.

8.15 Fundamentally Officers' cannot agree with this conclusion as if the Energy Centre had been designed from the outset to incorporate telecommunications equipment the problems discussed would have been avoided. Officers' are of the opinion that the Architect should have been given a brief that included the ability to accommodate telecommunications apparatus within the building. It is this failure to properly brief the Architect that has created the difficulties identified in the feasibility report.

8.16 Because of this omission Officers' lodged an interim objection to the proposals and recommended to the ODA that, as a matter of urgency, the design of the Energy Centre and flue stack should be revisited to make proper provision for the internal installation of telecommunications equipment.

8.17 Further discussions on this matter have taken place and the ODA have informed Officers' that a site-wide strategy for the provision of telecommunication apparatus is currently being prepared. The results of this strategy may show that all necessary apparatus can adequately be installed on other legacy buildings. If this were the case there would be no objection to the current design of the flue - as the risk of additional bolt-on antennae or free standing masts would be removed.

8.18 However, until the outcome of the site-wide strategy is known there remains a possibility that the flue may be required as a potential site for antennae - and that it should therefore be designed accordingly. So, unless a mechanism is agreed that would allow the design of flue to be re-visited, should it prove necessary to do so to accommodate antenna, Officers recommend the Council retains its current objection.

Accessibility

8.19 Policy DEV1 of the UDP and policies CP46 and DEV3 of the IPG require development to fully incorporate inclusive design principles. The policies require that development can be easily accessed and used by as many people as possible without undue effort, special treatment or effort.

8.20 The submitted Inclusive Access Statement has been reviewed by the Council's Access Officer and several objections have been raised to the current proposals. The first of these relates to the access arrangements for the Visitors Centre. The Visitors Centre would be valuable community resource and is likely to be used by school groups and it is of paramount importance that it is designed to be fully accessible.

8.21 The Visitors Centre would be located on the first floor of the retained building. Currently two accesses are proposed. The first of these is on the eastern side of the building. This

entrance is at first floor level and is reached by a flight of stairs. Another access is provided on the western side of the building from the canal towpath. This entrance is located on the ground floor and provides access to a lift to the upper floors.

8.22 The application states that the canal side entrance is the primary route into the building and that it provides a suitable accessible entrance. Officers do not agree that this canal side entrance is the main entrance to the building; as the submitted plans shows that a large lobby area is provided at the top of the stepped access from the east, whereas only a narrow corridor to the lift is found through the canal side entrance.

8.23 It is noted that the submitted access statement states that an application for a graded entrance route to the first floor will be made in the future. Given the importance of providing a fully accessible entrance the Council would object to the proposals unless detail of the proposed route is submitted prior to the determination of the application. This detail is required to ensure that the ramp provides suitable access arrangements and that it is acceptable in appearance.

8.24 The second objection relates to the failure to provide step free access to the control room of the Energy Centre which is located on the first floor. The application notes that a lift could be installed at a later date. However, policy requires that accessibility is fully integrated into buildings from the outset, and a step-free access should be provided. Officers recommend that an objection is raised against this omission.

8.25 The Council's Access Officer has also requested additional information on accessible routes around the application site and for information regarding the layout of the accessible toilets. Officers recommend that the Council request this information from the ODA for comment prior to the determination of the application.

The feasibility of delivering biomass fuel by barge

8.26 Unitary Development Plan policy T26, IPG policy CP44 and London Plan policy 4C.11 all promote the transportation of freight by water. In response to commitments attached to the Olympic planning applications a study has been submitted assessing the feasibility of delivering 50% of the fuel required by the biomass boilers by barge.

8.27 The study identifies Edmonton Ecopark as the likely source of the woodchip fuel used by the biomass boilers and reviews three possible methods of fuel transportation : -

- Delivery by barge direct to the Energy Centre,
- Delivery by road direct to Energy Centre,
- Delivery by barge to an intermediate transfer station and then delivery by road.

8.28 In a discussion of the merits of barge transportation the study recognises the benefits this mode of transport brings in terms of carbon savings in comparison to road transport. It is estimated that 3 barge deliveries would be needed per week. The study states that there are a number of practical difficulties which makes this method their 'least preferable' solution. The majority of these difficulties are associated with the unloading of biomass material at the Energy Centre.

8.29 The study notes that the physical characteristics of the woodchip fuel selected for use means that it does not 'flow' (in effect the large and uneven size of each individual chip means that they tend to bind together and clog pneumatic and auger based machinery. This means that the opportunities to move the fuel from the barge to the fuel stores using pneumatic pumps or an auger screw system is restricted, and instead the fuel would have to be containerised and moved by gantry / crane. The report suggests that the installation of such equipment to the side of canal building would be aesthetically unacceptable and that it would also require

the closing of the towpath during unloading times. It is also noted that the canal towpath would be closed during the Olympic Games for security reasons and that during this period road delivery would have to be under-taken anyhow.

8.30 The study finds that road transport is the 'most preferable' option. The Edmonton Ecopark is located approximately 6 miles by road from the Energy Centre. The study estimates that this would require a maximum of 9 -19 deliveries per week (depending on size of vehicle used and seasonal variations in energy demand). The vehicles would approach the site via the distributor road network and enter the complex via the new east access off Carpenters Road. The woodchip would be unloaded from the vehicles using moving floor technology directly into the fuel stores. The study concludes that this method is the least technologically complex and the least costly method of fuel delivery.

8.31 The final method discussed is the delivery of fuel by barge to a new wharf somewhere within the Olympic park, and completing the journey by road. Potential wharf sites include Waterworks River, adjacent to the aquatics centre or Bow Midlands East – on the East Bank of the River Lea in PDZ14. The possibilities of removing waste from the facility by barge are also considered. The study concludes that this option could be appropriate in the medium to long term reflecting the fact that the provision of the required wharf space is unlikely to occur until later phases of the Olympic site developments.

8.32 British Waterways, a statutory consultee, have lodged an objection to the submitted feasibility study and the selection of a road based delivery method. In essence British Waterways consider that the submitted study considerably overstates the complexities of delivering fuel by barge and that states that waterborne transport is being dismissed prematurely. British Waterways also consider that the possibility of incorporating the removal of waste from the site by barge also needs to be investigated.

8.33 Officers are of the opinion that delivery of fuel direct to the Energy Centre by barge is the most desirable option. In light of the British Waterways objection, and the weight of policy in favour of water freight, Officers recommend that, at this time, the Council objects to:-

1. The approval of any design of the retained building that does not make provision for barge deliveries, or that precludes barge delivery in the future

2. The discharge of any previous S106 commitment to deliver up to 50% of biomass fuel by barge without further justification.

It is understood that the ODA and British Waterways are having further discussions about the content and assumptions made in the feasibility study and Members will be updated should this alter the current objection.

Amenity and Emissions

Noise

8.34 The submission includes a noise report prepared by Parsons Brinckerhoff Ltd. This is required to demonstrate that the proposal accords with the requirements of saved UDP policies DEV2 and DEV50 which seek to ensure that noise from proposed developments does not have an adverse impact on residential amenity. The submitted report details baseline conditions in the area and likely noise output from the proposed CCHP plant. It also specifies a range of noise attenuation and mitigation measures. It notes that the proposed gas engines generate very high levels of noise.

8.35 The study takes into account the location of current noise receptors at Prince Edwards Road and Roach Road. It also gives consideration to the potential location of future residential

occupiers in Legacy development. The study concludes that current Olympic masterplans plans indicate Whitepost Lane and the Handball arena will be the closest residential receptors at a distance of 55m. The study also notes that if in future residential properties are proposed closer to the Energy Centre they would have to be insulated against external noise in accordance with Building Regulation requirements.

8.36 The submitted study has been reviewed by the Council's specialist Environmental Health Officers; who have concluded that the proposed noise attenuation levels are acceptable - subject to maximum noise levels being specified in a condition. The Council should recommend such a condition to the ODA.

8.37 The Council's Environmental Health Officer has raised some additional concerns about potential noise and vibration caused by wind turbulence around the building and flue structures. The Council would expect the ODA to investigate this matter further by way of a condition attached to any planning permission.

Air Quality and Emissions

8.38 IPG (2007) Policy DEV11 requires an assessment of the impact of new development on air quality and the incorporation of mitigation measures if necessary. An air quality assessment and emissions dispersal statement has been submitted for review. The study does identify that there will be an increase in fine particulate matter and nitrogen dioxide concentrations in the vicinity of the area. However, these will not result in air quality objectives for the area being exceeded. The study includes a consideration of potential impacts on a future residential tower to the north of the facility and concludes that the impact would be acceptable with no anticipated adverse health impacts.

8.39 The study has been reviewed by the Council's specialist Environmental Health Air Quality Officer who is satisfied with the methodology used and the findings of the study. The study provides adequate justification that the 48m high flue is required.

Energy

8.40 Policy CP38 of the IPG (2007) and Policies 4A.4 and 4A.6 of the London Plan 2008 detail the approach taken to CCHP installations. The submissions include an Energy Appraisal and supporting technical information that have been reviewed by the Council's Energy Officer.

8.41 The Energy Officer notes that the scheme is designed to be in-line with current local, regional and national energy policies. The Centre will contain

2 x 5MW gas fired CHP Units
1 x 3MW Woodchip biomass boiler
4 x 20MW gas boilers
2 x 2 MW dual effect absorption chillers
3 x 5MW electric chillers
2 x 800 cubic metre water storage tanks

There is the capacity for an additional 5 MW gas fired CHP unit, a 5MW gas boiler and a 3 MW biomass boiler should additional capacity be required in the future.

8.42 London Plan policy 4A.6 requires that consideration should be given to extending proposed CCHP schemes to serve adjacent areas. The Council has previously commissioned research to identify locations for the delivery of decentralised energy networks. This research identified Fish Island as a potential location. The ODA need to demonstrate to the Council that consideration has been given to extending the CHP/CCHP scheme beyond the boundary of the site into surrounding communities.

8.43 The ODA also need to demonstrate that the CHP infrastructure delivered as part of the Energy Centre should not prejudice the future delivery of a more comprehensive network in the Fish Island area. As a minimum the Council need to be satisfied that facilities to the West are capable of being provided in the future and that there are no impediments as a result of this development that would frustrate these connections being made. This would include the location of, sufficient capacity for and no obstruction to the routes of those potential connections.

8.44 The Council would also expect details of the energy efficiency measures that would be applied to the new building and to the retained building themselves.

In terms of other sustainability measures it is noted that the centre has been designed to minimise water use and that the Centre exceeds current building standards by 15%.

8.45 The Council's Energy Officer has also made a number of recommendations and requests for additional technical information which the ODA should respond to, specifically:-

- That the Energy Centre should be designed to allow gas boilers to switch to biomass fuel source
- The management of the Energy Centre should sign a statement of commitment to only procure the biomass fuel from a sustainable and certified fuel supplier.
- Details need to be provided of site-wide voltage optimisation to tap down over-supply of electricity from the grid
- Does the ODA intend to supply power from the Energy Centre to domestic customers
- That consideration be given to the carbon cost of any external lighting proposals

Conclusions

8.46 All other relevant policies and considerations have been taken into account. The observations set of in the SUMMARY OF OBSERVATIONS should be made to the Olympic Delivery Authority.