

COMMITTEE REPORT

Committee: Planning Committee **Ward:** Heslington
Date: 26 March 2009 **Parish:** Heslington Parish Council

Reference: 09/00165/REM
Application at: Proposed University Campus Lying Between Field Lane And Common Lane A64 Trunk Road And Hull Road York
For: Erection of a biomass boiler, 2no. gas oil boilers and associated fuel tanks, fence enclosure, access and landscaping
By: University Of York
Application Type: Approval of Reserved Matters
Target Date: 25 March 2009

1.0 PROPOSAL

1.1

A number of Reserved Matters Approvals have been given for the buildings comprising Cluster 1, pursuant to the grant of Outline Planning Permission 04/01700/OUT. Each of the permissions itemised below contained conditions relating to the requirement that 10% of the energy demands of the buildings came from renewable sources:

08/00032/REM Goodricke College (600 bed student accommodation); condition 14;

08/01751/REM TFTV ; condition 8;

08/02446/REM Computer Science Building; condition 8;

08/02573/REM Law and Management ; condition 8;

08/02572/REM The Hub Building; condition 7.

1.2

In granting permission for the TFTV building the University prepared via Arups, a Renewable Energy Strategy for Cluster 1. This is appendix 5 within the documentation comprising the current planning application. The conclusion to that document is that using ECON54 standards (which appears to be the most relevant to academic buildings) the above buildings would generate an estimated annual energy consumption of 9,394,917 KW hours per annum. 10% of this is 939,492 KW hours per annum. The conclusion to the strategy is that this demand can be met by the installation of a Biomass Boiler in Cluster One. This would provide an immediate solution to meeting the requirements of the above conditions, but the infrastructure used now will enable the buildings to be fed from a centralised energy centre (proposed to be a refurbishment and upgrade of the existing facility at Heslington West).

1.3

The current proposal comprises the erection of a 250KW Woodchip Biomass Boiler and Dual Container Wood Chip Store, a containerised 1000KW Gas Oil Boiler back

up system with five days fuel storage, together with provision for additional 1000KW generating capacity with associated fuel store and a containerised site pump and ancillaries. It would be located to the north-east of the other Cluster 1 buildings in close proximity to Kimberlow Hill. The applicant has confirmed that the "back up" energy system would be utilised with Gas Oil and not Waste Vegetable Oil which would be subject to a different environmental regulatory regime.

2.0 POLICY CONTEXT

2.1 Development Plan Allocation:

City Boundary York City Boundary 0001

DC Area Teams East Area (1) 0003

2.2 Policies:

CYED9
University of York New Campus

CYED10
Student Housing

CYGP4A
Sustainability

CYGP4B
Air Quality

CYGP5
Renewable energy

3.0 CONSULTATIONS

INTERNAL:-

3.1 Highway Network Management raise no objection to the proposal.

3.2 Environmental Protection Unit raise no objection to the proposal subject to any permission being conditioned to reserve details of the final appliance, noise mitigation measures, ash and smoke mitigation measures and method of fuel delivery for further approval.

3.3 Urban Design, Conservation and Sustainable Development raise no objection to the proposal subject to the submitted landscape drawings being referenced in the decision notice and any permission being conditioned to restrict the source area for the biomass fuel. It is felt that the principal issues in relation to sustainability have been adequately addressed and that the University's requirement for generating at least 10% of its energy requirements by renewable means would be adequately provided for.

3.4 The City's Drainage Engineering Consultancy raise no objection to the proposal subject to the details of the site drainage being reserved by condition for further approval.

EXTERNAL:-

3.5 Osbaldwick Parish Council wish to make no comments in respect of the proposal.

3.6 The Environment Agency raise no objections to the proposal.

3.7 The Ouse and Derwent Internal Drainage Board raise no objection to the proposal subject to any permission being conditioned linking implementation to the completion of the proposed retention lakes channelling water into Germany Beck at a controlled rate.

3.8 York Natural Environment Panel request that the application be withdrawn and substituted with a development incorporating an anaerobic digester that would ferment raw sewage to create a gas suitable for burning off to create energy.

3.9 Three letters of representation from local residents have been received in respect of the proposal. The first supports the principle of the development but expresses concern in respect of the proposed gas/oil back up boilers, which in his opinion are superfluous and should be refused. The monitoring of energy use by the University is also requested together with a short temporary permission for the proposal to encourage the University to establish a more permanent solution to its energy needs. The second objects to the proposal, which it is felt, would leave the University free to burn a wide range of waste materials causing pollution and annoyance to local residents over a wide area. The scale of the proposal is also challenged on the grounds that it is inconsistent with the intentions of the original Outline Permission. If approval is given a condition restricting the proposed fuel to waste wood only is strongly recommended. The third objects to the proposal on the grounds that the burning of waste vegetable oil in relatively close proximity to a residential area would give rise to unacceptably high levels of pollution and attendant health risks and should have been the subject of a full Environmental Impact Assessment.

4.0 APPRAISAL

4.1 DETAILED POLICY CONTEXT:

PPS 10 Planning for Sustainable Waste Management in Annex C defines a waste hierarchy with explicit encouragement being given to the re-use of waste materials including waste wood and energy recovery from waste materials including waste wood product usage as a biomass fuel. This is directly relevant in consideration of the current proposal.

PPS 22 Renewable Energy gives explicit encouragement to the use of small scale renewable energy projects including biomass heating as part of larger development

schemes such as the York University expansion. Locational and other development control criteria are addressed and in relation to biomass schemes the need to secure fuel as locally as possible is specifically highlighted. Again this is directly relevant in considering the current proposal.

Policy Y1 of the Yorkshire and Humber Regional Spatial Strategy establishes the expansion of York University as a major development priority and so is relevant to the consideration of the current proposal.

Policies GP4a) and GP5 of the York Development Control Local Plan set out a clear requirement for and policy context for the use of renewable energy as part and parcel of major development projects and are particularly relevant in the consideration of this proposal.

Policies ED9 and ED10 of the York Development Control Local Plan set a clear policy framework for the expansion of the University and give a detailed context for the current proposal.

4.2 KEY CONSIDERATIONS:-

- Potential impact of the proposal on the residential amenity of nearby properties in terms of the potential for the emission of ash, other pollutants and bad smells;
- Suitability of the proposed boiler to provide the Authority's requirement for the generation of a minimum of 10% of the University development's energy needs;
- Securing the sustainable sourcing of biomass fuel in the locality;
- Ensuring the safe and efficient drainage of the application site and its surroundings;
- Requirement for the proposal.

4.3 POTENTIAL RESIDENTIAL AMENITY IMPACTS:-

Policy GP4b) of the York Development Control Local Plan sets a firm policy framework for examining proposals likely to have an impact upon air quality in the surrounding area. This links closely with Central Government advice outlined in PPS 10 "Planning for Sustainable Waste Management" and PPS 23 "Planning and Pollution Control". The proposal envisages the installation of a 250KW Woodchip Biomass Boiler including a 7 metre high stack with a maximum 0.3 metre diameter, with a 1000KW Gas/Oil Boiler as a back up supply. The nearest residential property is approximately 325 metres away to the north west. The City's Environmental Protection Unit have confirmed that the proposed installation as outlined in the application would not have an adverse impact upon air quality in the area. In view of the size of plant and distance from residential property there would not be a material impact upon residential amenity, a factor that would be reinforced by a series of robust conditions covering items such as fuel storage, ash disposal and the final plant specification being appended to any permission. Furthermore the submitted scheme falls below the threshold in terms of its scale for requiring a separate Environmental Permit in relation to its emissions. In relation to the "back-up" gas/oil system the applicant has confirmed that it is not their intention to use waste

vegetable oil or any other waste product as a fuel source thereby removing any adverse environmental impact from that area.

4.4 ALTERNATIVE MEANS OF GENERATING ON SITE RENEWABLE ENERGY:-

Policy GP4a) of the York Development Control Local Plan sets a firm policy framework requiring the adoption of sustainable principles in the design and construction of new development with indicative thresholds depending upon the development size. Criteria h) of Policy GP4a) further sets a requirement to maximise the use of renewable energy sources on development sites and Policy GP5 of the York Development Control Local Plan encourages new renewable energy projects providing they would not give rise to adverse environmental impacts. The City's Interim Policy Statement on Sustainable Construction sets a threshold for large scale commercial developments such as the scheme that the current proposal is part of to generate a minimum of 10% of their energy needs from renewable sources on site. As part and parcel of the overall development scheme the applicant has developed a site wide Renewable Energy Strategy and associated with this an exercise has been undertaken to explore alternative means of renewable generation. This identified the current scheme together with wind generation as the most appropriate means of renewable energy generation to fulfil the site's needs. Wind generation has been discounted as being too complex in terms of its long term financial viability and the likely difficulties of securing planning permission for a suitable scheme. The York Natural Environment Panel suggests that an anaerobic digestion system would be more appropriate as a means of providing the required proportion of renewable energy dealing in parallel with both the need to deal with sewage disposal and the need to provide renewable energy generation capacity in parallel. However PPS 22 Renewable Energy (2004) highlights the significance of odour issues in relation to anaerobic systems and the likelihood that they would be inappropriate in close proximity to residential areas. The closest residential properties currently are over 300 metres away, however they lie in a location downwind of the application site making them particularly vulnerable to any problem of odour nuisance. Any odour impact upon the student residences presently under construction at Goodricke College would be heightened by their closer proximity to the site. The current dry biomass proposal is considered the most appropriate as the fuel is seen as broadly carbon neutral in terms of its energy inputs, the fuel source is relatively easily available in the locality as a by-product of other processes, the process is relatively versatile being able to be used for electricity or direct heat generation and the direct combustion process carries fewer environmental risks in terms of emissions.

4.5 SOURCING OF BIOMASS FUEL:-

The sourcing and storage of biomass fuel is a highly significant issue in dealing with any scheme. For biomass to be a truly sustainable renewable source the fuel needs to be sourced within the direct locality. The Technical Annex to PPS 22 (Planning for Renewable Energy) identifies ideal maximum travel distances from source to plant of 40km or 25km depending upon the scale of the project. In the present case there are available fuel sources within both zones. The ability to restrict the type and source of biomass fuel by condition has been established elsewhere and it is suggested that any permission be conditioned to restrict the sourcing of biomass fuel to a 25km radius of the proposed plant, securing it as both a sustainable and a renewable operation.

4.6 DRAINAGE OF THE APPLICATION SITE:-

The proposal forms part of the wider development of Cluster 1 of the Heslington East campus. This is to be drained via a series of open swales into attenuation lakes, which will gradually discharge into Germany Beck. Any oil or contaminant discharges would be passed through separators prior to surface water being discharged to the main lake. The main lake to the south of Cluster 1 is being designed as a complete attenuation system equivalent to green runoff rates. On balance it is felt that the use of an open swale system would provide increased attenuation when compared to a traditional piped system. It is suggested that the details of the sustainable drainage system together with the details of the oil and contaminant separation system be reserved by condition for further approval.

4.7 REQUIREMENT FOR THE PROPOSAL:-

Policies ED9 and ED10 of the York Development Control Local Plan set a firm policy framework for the expansion of the University incorporating student housing on a phased basis. This was given effect by the Secretary of State for Communities and Local Government's decision in respect of outline application 04/01700/OUT, which the current proposal relates to. This finds further echo in Policy Y1 of the Yorkshire and Humber Regional Spatial Strategy, which establishes the expansion of York University as a major policy priority. Over and above the requirement of the IPS covering Sustainable Construction for a minimum of the campus's energy to come from renewable sources, the University has through ARUP Consulting developed a global renewable energy strategy setting a target of a 10% reduction in CO2 emissions below 2004/2005 levels by 2009/2010. A long term strategy of refurbishing the existing University Combined Heat and Power (CHP) plant to accommodate a mix of renewable and sustainable energy technologies including biomass and anaerobic digestion of waste. This will take a period of five to ten years to implement and so will not be available to serve the energy needs of Cluster 1, which is currently under construction. Furthermore the permissions for the Theatre, Film and Television (ref:08/01751/REM) and Computer Science Buildings (ref:08/02446/REM) required that works be carried out to ensure that a minimum of 10% of their energy demand be met from renewable sources prior to their first occupation. The current proposal has been devised as an interim measure to enable the Cluster 1 complex to come on stream whilst work on the Central Energy Centre is drawn up and progressed.

5.0 CONCLUSION

5.1

The proposal comprises the erection of a biomass boiler with a maximum output capacity of 250kW capable of generating approximately 9,500,000kWh of renewable energy per year, at least 10% of the energy needs of Cluster One of the Heslington East Campus. This enables the development scheme as a whole to comply with the City's IPS on Sustainable Construction, the University's own Renewable Energy Strategy and the planning conditions pertaining to the buildings of Cluster One currently in the process of erection. The boiler would generate hot water to supplement the capacity of the existing district heating system and the existing CHP plant at Heslington West complex. It is required for a temporary period of approximately 10 years to allow sufficient time for the capacity of the University's Central Energy Centre to be upgraded sufficiently. The proposed boiler would be

modest in scale with a chimney of 4.1 metres high and a back-up system using gas/oil boilers would also be provided. Subject to conditions covering the sourcing of the biomass fuel in relation to sustainability, the technical specification of the biomass system in relation to emissions and the fuel for the back up system in relation to impact upon residential amenity, then the scheme is acceptable in planning terms and approval is therefore recommended.

6.0 RECOMMENDATION: Approve

1 The building shall be removed by 25th March 2019 unless prior to that date a renewal of the permission shall have been granted in writing by the Local Planning Authority.

Reason: The temporary nature of the building is such that it is considered inappropriate on a permanent basis.

2 The development hereby permitted shall be carried out only in accordance with the following plans:-

U-969-EX03 Dated Jan2007, DD110317.L.3021 Dated Jan 2009 , U-969-DO1 Dated Dec 2008, UE-SK-001(RevB) Dated Mar 2009, UE-SK002 Dated Nov 2008, UE-SK-003 Dated Nov 2008, UE-SK-004 Dated Nov 2008, UE-SK-005 Dated Nov 2008, UE-SK-006 Dated Nov 2009, 30080-P-316 Dated Dec 2008, 30080-P-315 Dated Dec 2008 and DD110317.P.302B Dated Jan 2009.

or any plans or details subsequently agreed in writing by the Local Planning Authority as amendment to the approved plans.

Reason: For the avoidance of doubt and to ensure that the development is carried out only as approved by the Local Planning Authority.

3 Details of all means of enclosure to the site boundaries shall be submitted to and approved in writing by the Local Planning Authority before the development commences and shall be provided before the development is occupied.

Reason: In the interests of the visual amenities of the area.

4 Full details of the biomass boiler to be installed in the proposed premises including maximum power output and the proposed noise mitigation measures shall be submitted to and approved in writing by the Local Planning Authority. These details shall include maximum (LA_{max}(f)) and average (LA_{eq}) sound levels (A weighted), and octave band noise levels they produce. The biomass boiler shall not be used on the site except in accordance with the prior written approval of the Local Planning Authority. The biomass boiler and any approved noise mitigation measures shall be appropriately maintained thereafter.

Reason: To protect the amenity of occupiers of nearby buildings.

5 Prior to the development hereby approved being first brought into use, details of the method of ash disposal, to incorporate fully enclosed receptacles, shall be

submitted to and approved in writing by the Local Planning Authority, and the development shall thereafter be carried out in accordance with the agreed details, unless otherwise agreed in writing with the Local Planning Authority.

Reason: To prevent loss of amenity due to dust emissions.

6 Prior to the development hereby approved being first brought into use, the method of fuel/chip delivery, to incorporate sheeting and fully enclosed receptacles to minimise spillages and fugitive emissions in all weather conditions shall be submitted to, and approved in writing by, the Local Planning Authority and the development shall thereafter be carried out in accordance with the agreed details, unless otherwise agreed in writing with the Local Planning Authority.

Reason: To prevent loss of amenity due to dust emissions.

7 There shall be no visible smoke emissions from the boiler flue during normal operation of the plant except during the start up procedures, unless otherwise agreed in writing with the Local Planning Authority.

Reason: To prevent the loss of amenity from smoke.

8 Once approved the biomass burner shall be installed, operated, cleaned, maintained and serviced in accordance with the manufacturer's instructions.

Reason: To prevent the loss of amenity from smoke and to prevent loss of amenity due to dust emissions.

9 The Back-Up boilers hereby authorised shall be used solely for the burning of gas/oil and shall not be used for the burning of waste vegetable oil or any other waste product.

Reason: To safeguard the amenity of occupiers of neighbouring buildings.

10 The fuel used to power the biomass boiler hereby authorised shall arise or be produced only within a 25km radius of the site.

Reason: To secure compliance with Policies GP4a) and GP5 of the York Development Control Local Plan

11 Development shall not begin until details of foul and surface water drainage works have been submitted to and approved in writing by the Local Planning Authority, and carried out in accordance with these approved details.

Reason: So that the Local Planning Authority may be satisfied with these details for the proper drainage of the site.

12 Any facilities for the storage of oils, fuels or chemicals shall be sited on impervious bases and surrounded by impervious bund walls. The volume of the bunded compound should be at least equivalent to the capacity of the largest tank plus 10%. If there is multiple tankage, the compound should be at least equivalent to

the capacity of the largest tank or the combined capacity of the interconnected tanks, plus 10%. All filling points, vents, gauges and sight glasses must be located within the bund. The drainage system of the bund shall be sealed with no discharge to any watercourse, land or underground strata. Associated pipework shall be located above ground and protected from accidental damage. All filling points and tank overflow pipe outlets should be detailed to discharge downwards into the bund.

Reason: To prevent pollution of the water environment.

13 Prior to being discharged into any watercourse, surface water sewer or soakaway system, all surface water drainage from parking areas and hardstandings shall be passed through an oil interceptor designed and constructed to have a capacity and details compatible with the site being drained. Roof water shall not pass through the interceptor.

Reason: To prevent pollution of the water environment.

7.0 INFORMATIVES: Notes to Applicant

1. REASON FOR APPROVAL

In the opinion of the Local Planning Authority the proposal, subject to the conditions listed above, would not cause undue harm to interests of acknowledged importance, with particular reference to impact of the proposal on residential amenity, securing sustainable sourcing of the biomass fuel, suitability of the plant to secure the requirement for 10% of the energy needs of the site to come from renewable sources, ensuring the safe and efficient drainage of the site and the general requirement for the proposal. As such the proposal complies with ****IN of Policies ED9, ED10, GP4a), GP4b) and GP5 of the City of York Local Plan Deposit Draft.

2. i) All demolition and construction works and ancillary operations, including deliveries to and despatch from the site shall be confined to the following hours:

Monday to Friday 08.00 to 18.00

Saturday 09.00 to 13.00

Not at all on Sundays and Bank Holidays.

ii) The work shall be carried out in such a manner so as to comply with the general recommendations of British Standards BS 5228:Part1:1997, a code of practice for "Noise and Vibration Control on Construction and Open Sites" and in particular Section 10 of Part 1 of the Code entitled "Control of Noise and Vibration".

iii) All plant and machinery to be operated, sited and maintained in order to minimise disturbance. All items of machinery powered by internal combustion engines must be properly silenced and/or fitted with effective and well maintained mufflers in accordance with manufacturers instructions.

iv) The best practicable means as defined by Section 72 of the Control of Pollution

Act 1974, shall be employed at all times in order to minimise noise emissions.

v) All reasonable measures shall be employed in order to control and minimise dust emissions including sheeting of vehicles and use of water for dust suppression.

vi) There shall be no bonfires on site.

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