

COMMITTEE REPORT

Date: 16 December 2010 **Ward:** Heslington
Team: Major and Commercial **Parish:** Heslington Parish Council
Team

Reference: 10/01825/REMM
Application at: Proposed University Campus Lying Between Field Lane And Low Lane A64 Trunk Road And Hull Road York
For: Reserved matters application for erection of heat and power energy centre
By: University Of York
Application Type: Major Reserved Matters Application (13w)
Target Date: 19 November 2010
Recommendation: Approve

1.0 PROPOSAL

1.1 This is a reserved matters application for the erection of a biomass gasification combined heat and power energy centre with landscaping and access on the Heslington East campus. The application is pursuant to outline planning permission 04/1700/OUT, granted by the Secretary of State in June 2007 for the development of a university campus. The energy centre is the second cluster 2 application to be put before members. The first was the social and catering building approved in November 2010 (10/02140/REM).

1.2 The building would be approximately 50m long, 27m wide (excluding the external fire escape), 11.5m to the eaves and 14m to the ridge. Three cowls required to operate the machinery would project beyond the roofline. A 650mm-diameter chimney flue at the eastern end of the building would extend 11.4m above the ridge (25.4m above ground level). Materials would mainly comprise timber cladding to the four elevations and plastisol-coated steel sheeting for the roof and roller shutter doors. To the west of the building is a service area, which could accommodate a future extension to the energy centre (this would be the subject of a separate planning application). The plant would have capacity in the region of 1,700kWe of electrical energy at peak load and 1,591kWh of thermal energy.

1.3 The proposal forms part of the university's renewable energy strategy, which includes a 10% reduction of its carbon emissions by 2010 from its 2004/5 baseline emissions. The proposal would address council-imposed planning conditions on reserved matters applications for cluster 1 buildings. The conditions require 10% of energy demand to be from renewable sources. The application would supersede the university's interim proposal, approved by members in 2009, to provide a temporary biomass boiler for cluster 1 (09/00165/REM).

1.4 Gasification is a relatively new method of turning biomass material into electricity and heat. In simple terms the biomass (in this instance woodchip) is delivered to the fuel store and then fed to the woodchip dryer. The dried woodchip is then taken to the gasifier where it is 'cooked' or gasified. Gases formed during the process are taken to the combined heat and power engine where electrical and heat energy is

produced via a turbine. The energy is delivered to the district heating system and local electrical distribution network. The facility can generally operate unmanned but one maintenance worker would need to be on site at any one time.

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:

CYGP1
Design

CYGP4A
Sustainability

CYGP5
Renewable energy

CGP15A
Development and Flood Risk

CYED9
University of York New Campus

CYGP9
Landscaping

3.0 CONSULTATIONS

INTERNAL

3.1 Highway Network Management - No objections to the application subject to standard conditions being applied regarding surfacing, cycle parking and turning areas.

3.2 Environment, Conservation, Sustainable Development (Sustainability) - Commercial developments of the scale proposed are required to achieve at least a 'very good' BREEAM rating and for 10 per cent of predicted energy demand to be provided for by renewable technologies. The applicant has committed to achieving both requirements. Conditions should be applied to both requirements to ensure compliance.

BREEAM 'very good' compliance should be demonstrated through the submission of documentation at both the Design and Procurement and Post Construction phases showing the achievement of such a rating. Assessments / Documentation should be carried out / produced by an accredited BREEAM assessor. To comply with the 10 per cent renewable energy requirement information should be submitted setting out

the predicted energy demand of the Energy Centre along with the proportion to be provided from renewable technologies. The purpose of the Energy Centre is to provide greater than 10 per cent of the energy demand of the new Heslington East Campus and is part of a wider renewable energy strategy for the University.

3.3 Environment, Conservation, Sustainable Development (Urban Design) - The building is large and necessarily so in order to fulfil its function. An alternative design was undertaken by the applicant to attempt to reduce this scale but the massing benefits were marginal and the design less considered. The original design is therefore favoured with the following recommendations. (1) The design should be kept as visually simple and 'honest' as possible by deleting the ventilation panels in the walls and putting all ventilation through roof cowls. (2) The landscape treatment immediately to the west should be greatly improved. To achieve this a wider area of flat land buffer needs to be provided. This could be achieved by turning the bank into a retaining wall and moving the building footprint further to the east. (3) Appropriate provision should be made in the masterplan to accommodate such a large building. We have previously requested the submission of a developed masterplan to show that the building would not compromise the ambitions of the masterplan. The masterplan is still being developed so it is not possible. This application can proceed without the masterplan context but it must be acknowledged that the masterplan will have to justify this aspect at a later date without the benefit of being able to make changes.

3.4 Environment, Conservation, Sustainable Development (Landscape) - The earthworks and planting proposals on the southern side of the building are acceptable. The drawings provide sufficient information for an approved landscape scheme. Implementation and maintenance of the scheme should be made a condition of approval.

3.5 Environmental Protection Unit - The council would expect the environmental protection conditions of the outline consent to be complied with and information submitted periodically to comply with the requirements imposed. In particular, conditions 31 & 35 regarding land contamination remain relevant and will continue to do so throughout the whole university site development, however long this may take. Within the outline permission there was minimal information on the impacts of the proposed development on air quality and there was no reference to a biomass energy centre. As a result the issue of the provision of an energy centre was not adequately conditioned. The minimum stack height required is 25.4m from the ground. The applicant has used the Environment Agency's guidance on stack heights and has demonstrated that the emissions from the Combined Heat and Power Plant (CHP) can be screened out as insignificant based on an effective stack height of 25.4m. There is therefore no need to proceed to detailed modeling for this plant. There are no air quality objections to the application, subject to conditions regarding the stack height and emission levels.

3.6 Structures and Drainage - The site is in flood zone 1 and should not suffer from river flooding. No objections subject to a condition requiring drainage works to be carried out in accordance with the submitted details.

EXTERNAL

3.7 Heslington Forum including Heslington Parish Council - The university gave a brief presentation to the forum on 19 July 2010 prior to submission. Further details were sent to members by officers on 23 August. The application was discussed at the forum meeting of 4 October. No formal representations on the proposals have been made by forum organisations. Representatives of some forum organisations have submitted their own individual comments – see Public Consultation below.

3.8 York Natural Environment Panel - The use of renewable energy is laudable but question whether it is the right place for it given there is no immediate source nor do there appear to be plans for the university to include its own source in the future. The plant should be sufficiently versatile to burn a range of materials such that the university could work with communities and organisations to remove, eg, tree prunings to provide a mutually beneficial service. More trees should be planted at the top of the slope on the southern side of the plant to provide better screening.

3.9 Public Consultation - The consultation period expires on 30 September 2010. Seven objections have been received raising the following planning issues:

- The proposal is outwith the outline planning consent;
- Building is unsightly;
- The chimney would be too obtrusive;
- Too close to residential areas;
- Air pollution;
- Operational noise and vibration;
- Vehicular noise;
- Wood as a fuel is not sustainable;
- Fuel miles are not sustainable;
- Impact on the environment is not known;
- Public consultation is inadequate;
- If approved, conditions should be applied to protect local residents and the environment.

4.0 APPRAISAL

4.1 KEY ISSUES

Principle of the Use
Visual Appearance
Amenity
Landscape
Sustainability
Transport
Drainage
Cumulative Development
Consultation

RELEVANT LOCAL PLAN POLICIES

4.2 Planning Policy Statement 1 (PPS1) sets out the government's overarching planning policies, which emphasize sustainable development.

4.3 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.

4.4 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.

4.5 Policy GP1 - Development proposals will be expected to respect or enhance the local environment and be of a density, layout, scale, mass and design that is compatible with neighbouring buildings, spaces and vegetation.

4.6 GP4a and GP5 set out a clear requirement for and policy context for the use of renewable energy in major development projects.

4.7 ED9 - The scale, layout and design of the new campus at Heslington East should have regard to, inter alia, a comprehensive landscape scheme including publicly accessible public open space and a comprehensive network of pedestrian/cycle routes between campuses.

4.8 GP9 - Where appropriate, development proposals should incorporate a suitable landscaping scheme that is an integral part of the proposals; includes an appropriate range of species, reflects the character of the area; enhances the attractiveness of key transport corridors; and includes a planting specification where appropriate.

4.9 GP15a - Developers should ensure that the site can be developed, serviced and occupied safely and that discharges from new development should not exceed the capacity of existing/proposed sewers and watercourses.

PRINCIPLE OF THE USE

4.10 The use of the site as part of a new campus was accepted when the Secretary of State granted outline consent in 2007. The principle of the provision of an energy centre accords with the land use plan approved as part of the outline consent and the campus masterplan approved in 2008. The building is shown on the draft indicative masterplan for cluster 2, which is currently being discussed with officers.

4.11 A biomass energy centre was not included in the outline planning application for Heslington East campus. Nor was it referred to at the subsequent public inquiry. Nevertheless officers are satisfied that the application can be treated as a reserved matter on the basis that (a) the energy centre would provide a function that is ancillary to the approved use of the land as a university campus and (b) the development would have no effects due to its size, scale, operation, etc that are so significant that the application should be treated as falling outside the outline consent. Nor would the application require its own environmental impact assessment. The council has given a screening opinion to this effect.

VISUAL APPEARANCE

4.12 The building would be rectangular in shape with most of the plant located inside. Whilst the building would be very large and have an essentially utilitarian appearance the bulk of the building would be partially mitigated by being cut into the side of the sloping site. As a result, whilst the eaves height on the south side would be approximately 11.5m above ground level the north side would appear 6m above ground level. Furthermore the building (other than the flue) would be hidden from Field Lane over 300m to the north by the sloping ground and proposed woodland screening at the western end of Kimberlow Hill. The building would be visible from within the campus to the south but this would be partially mitigated by proposed tree screening.

4.13 The draft masterplan for cluster 2 has only recently been submitted to the council. Discussions between the university and officers are ongoing. Whilst officers would normally expect a masterplan to have been agreed before submission of reserved matters the design and location of the energy centre are acceptable. Materials should be made conditions of approval. The use, design and location of future reserved matters proposals for cluster 2 will have to take into account the constraints imposed by the presence of the energy centre.

4.14 Objectors consider that the energy centre should be located further away from Field Lane, particularly in the south-eastern section of the campus. Such a location would be more visible (due to most of the campus land being flat) and would provide a greater constraint on the proper development of the campus. The proposed location is close to the northern service road for access to the public highway network and is close to existing services. Furthermore, the south-eastern part of the campus is zoned for organized sport and landscaping.

TRANSPORT

4.15 The energy centre would generate 6 two-way movements of biomass fuel per day with each vehicle delivering 12-14 tonnes of woodchip material for the process. In addition, waste material would be collected twice a week by a single skip vehicle. Service vehicles would initially access the site from the newly constructed Field Lane roundabout, but with completion of the northern service road in 2012, entry would be via the Grimston Bar Park and Ride access. These additional vehicle movements are considered to have a minimal impact on travel volumes on the adjacent highway network.

SUSTAINABILITY

4.16 A biomass CHP facility such as this is likely to generate at least 19,500,000kWh of renewable energy per year, which is approximately 23% of projected total energy demand for Heslington West and Cluster 1. The proposal accords with national planning guidance in PPS1 and PPS22 and policies GP4a and GP5 of the local plan.

4.17 Some objectors are concerned about the credibility of using biomass as a sustainable renewable fuel source. Whilst the university has yet to finalise the source of the fuel for the energy centre their intention is for 34% to come from clean wood industrial waste and 66% from recycled virgin timber waste sourced within a maximum of 60 miles of York. Officers understand this waste would normally go to landfill. The council supports a proposal of this nature because it

would: enable a reduction in carbon emissions when compared to a similar application using fossil fuels; reduce reliance on centralised power sources e.g. large power stations; increase the level of renewable energy generation and contribute to the achievement of city-wide carbon reduction targets. The standard condition should be attached requiring 10% of the building's energy consumption to be from renewable sources.

4.18 As a minimum, commercial developments of this scale are required to achieve at least a 'very good' BREEAM rating. The applicant has committed to achieving this requirement. A condition should be attached to ensure compliance.

AMENITY

4.19 The proposal is likely to have a negligible impact on the nearest existing residential area, which is at Badger Hill 350m from the energy centre. Traffic levels would be low and the building would be almost entirely screened from view. Noise generated by the centre is unlikely to be audible from Field Lane and is already controlled by condition 22 of the outline consent. The student residential buildings at cluster 1 and cluster 2 would be much closer to the energy centre than would the dwellings on Field Lane. As a result equipment and mitigation measures will be necessary to ensure that noise levels at these blocks do not cause noise problems. Officers do not expect vibration from the plant to be an issue for residents on Badger Hill; once again the University needs to consider its own residential blocks which are will be much closer to the energy centre.

4.20 Some objectors are concerned about air quality and emissions from the centre. A study was undertaken to determine the minimum stack height that would allow adequate dispersion and avoid unacceptable impacts on local air quality. The study (which was based on Environment Agency guidance) demonstrated that the emissions from the centre would be insignificant with a stack height of 25.4m above ground level (41.4m AOD), which is as proposed. Stack height and emission levels should be made conditions of approval.

DRAINAGE

4.21 Surface water from the energy centre would drain via a swale into the main lake to the south of the site. Foul water would drain into the centre's own septic tank to the south of the building. Temporary arrangements would be put in place until cluster 2 is at a more advanced stage of development. Drainage officers have no objections subject to a condition requiring drainage works to be carried out in accordance with the submitted details.

LANDSCAPE

4.22 The earthworks and planting/screening proposals along the most exposed elevation to the south are acceptable. The planting to the west, as currently proposed, is unlikely to adequately screen the building from the bus interchange. Officers are in discussion with the university to improve the level of screening. Members will be updated at the meeting.

CUMULATIVE DEVELOPMENT

4.23 Condition 4 of the outline consent restricts the developed footprint (including buildings car parks and access roads) to 23% of the allocated area. The cumulative

total to date, including the current application and the recently-approved social and catering building, is 5.73% of the allocated area.

CONSULTATION

4.23 Some objectors are concerned that the level of public consultation by the council was inadequate. The university gave a presentation to Heslington Forum on 19 July 2010 prior to submission. Further details were sent to forum members by officers on 23 August. The application was discussed at the forum meeting of 4 October. In addition a site notice was erected at the main entrance to the campus, which is from Field Lane. Bearing in mind that the nearest dwellings are over 350m from the site, which is largely screened from public view, officers consider that the amount of consultation carried out was appropriate and proportionate.

5.0 CONCLUSION

5.1. The principle of the use of the land for an energy centre to serve the university accords with the outline consent for the university. The purpose of the energy centre, ie to produce renewable energy for use within the university, addresses accords with the council's interim planning statement on sustainability and with planning conditions of previous reserved matters approvals for Heslington East. The design of the building is acceptable subject to conditions regarding screening, details and materials. Pollution, noise and other environmental impacts can be controlled by conditions.

COMMITTEE TO VISIT

6.0 RECOMMENDATION: Approve

1 The development hereby permitted shall be carried out only in accordance with the following plans: [Plans list to be tabled at committee].

2 Foul and surface water drainage works shall be carried out only in accordance with the following plans and other submitted details:

Master Plan Layout - Phase of Works - Side Wide Plan - drawing number 30080-0-SK-0000-004 by Aecom received November 2010 (Temporary and Permanent Solutions).

Surface Water Drainage Philosophy dated 6th August 2010 by Aecom received September 2010.

Foul Water Drainage Statement dated August 2010 by RPS received September 2010.

Reason: To ensure proper foul and surface water drainage of the development both during the temporary and permanent phases.

- 3 HWAY9 Vehicle areas surfaced
- 4 HWAY18 Cycle parking details to be agreed
- 5 HWAY21 Internal turning areas to be provided

6 The minimum chimney stack height to the biomass CHP hereby approved shall reach a height of 41.4m AOD on the basis that there are no buildings which exceed 34.5m AOD within a 65m radius of the stack unless otherwise agreed in writing with the Local Planning Authority.

Reason: To prevent unacceptable impacts on local air quality.

INFORMATIVE

The applicant should note that deviation from the minimum stack height or increases in height of adjacent development is likely to be subject to the further emissions significance testing using the Environment Agency's H1 Guidance Annex F(I). Detailed air quality dispersal modelling may also be required depending on the outcome of the screening exercise.

7 The NO_x and NO₂ emission levels from the biomass CHP hereby approved shall not differ significantly from those assumed in the Emissions Significance Assessment which accompanies the planning submission. Provisional levels are identified as 1.156 and 0.809 g/s for natural gas emissions and 0.74 and 0.518 g/s for syngas respectively. Final emission rates shall be submitted to and approved in writing by the Local Planning Authority prior to the end of the commissioning period of the biomass CHP. On an annual basis, from the date of operation, the operator shall provide a written summary to the Environmental Protection Unit regarding the relative use (% of year) of syngas and natural gas in the plant.

Reason: To prevent unacceptable impacts on local air quality.

8 Notwithstanding the information contained on the approved plans, the ridge height of the approved development shall not exceed 30m above ordnance datum. Before any works commence on the site, a means of identifying ordnance datum on the site shall be agreed in writing, and any works required on site to identify that level accurately during the construction works shall be implemented prior to any disturbance of the existing ground level. Any such physical works or marker shall be retained at all times during the construction period.

Reason: To ensure that the approved development does not have an adverse impact on the character of the surrounding area.

9 The detailed landscaping/screening proposals hereby approved shall be implemented within a period of six months of the completion of the development. Any trees or plants which within a period of five years from the completion of the development die, are removed or become seriously damaged or diseased, shall be replaced in the next planting season with others of a similar size and species, unless alternatives are agreed in writing by the Local Planning Authority.

Reason: To minimize the visual impact of the proposals on the surrounding area.

10 Unless otherwise agreed in writing with the Local Planning Authority, within three months of commencement of development the developer shall submit in writing and be approved by the local planning authority a formal pre-design BREEAM assessment for the design and procurement stages of the development. The developer shall submit a further BREEAM assessment after construction, at a time to

be agreed in writing by the local planning authority. The developer shall submit a completion assessment when issued by the BRE. All assessments shall confirm the minimum 'Very Good' rating anticipated in the preliminary BREEAM assessment submitted with the application

Reason: To ensure the development complies with the principles of sustainable development

11 No building work shall take place until details have been submitted to and approved in writing by the local planning authority, to demonstrate how the applicant will provide, from renewable sources, 10% of the building's total energy demand on land within the control of the applicant. The development shall not be occupied until these works have been carried out in accordance with the submitted details unless otherwise agreed in writing by the local planning authority (as part of an energy strategy for the Heslington East campus). Not later than 12 months after the building has first been brought into use, the applicant shall submit an Energy Statement to the Local Planning Authority, which details the percentage of the buildings energy consumption that has been derived from renewable sources. Thereafter the Energy Statement shall be submitted on an annual basis unless otherwise agreed in writing with the Local Planning Authority.

Reason: In the interests of sustainable development

12 Notwithstanding any proposed materials specified on the approved drawings or in the application form submitted with the application, samples of the external materials to be used shall be submitted to and approved in writing by the Local Planning Authority within three months of commencement of the development. The development shall be carried out using the approved materials.

Reason: So as to achieve a visually cohesive appearance.

13 No mechanical, electrical, telecommunications or other plant, equipment or apparatus (other than as shown on the approved plans) shall be installed on the roof of the building without the prior written consent of the local planning authority.

Reason: In the interests of the design and external appearance of the building

7.0 INFORMATIVES:

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 the principle of the use, scale and appearance of the building, renewable energy, landscaping, neighbour amenity, transport, sustainability and drainage. As such the proposal complies with policies ED9, GP1, GP4a, GP5, GP9 and GP15A of the City of York Local Plan Deposit Draft.

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