

WELWYN HATFIELD DISTRICT

**APPLICATION FOR TWO FORM ENTRY PRIMARY SCHOOL WITH WIND
TURBINE, EARLY YEARS' FACILITY AND COMMUNITY HALL, ON LAND
AT THE RUNWAY, HATFIELD**

Report of the Director of Environment

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1. Purpose of Report

To consider planning application ref. 6/0178-04 for a two-form entry (2FE) primary school with wind turbine, early years' facility and community hall, on land at The Runway, Hatfield.

2. Summary

- 2.1 The proposal would provide a new, 2FE primary school facility and community hall for Hatfield. It would re-house the existing Howe Dell Primary school and serve the new residential development on the former Hatfield aerodrome site. The proposal has been designed with sustainability as the core of the design and management brief, in accordance with planning guidance for the area. The proposals therefore incorporate a number of sustainable features such as 'green' energy generation and heat conservation and recycling methods, including the proposal for an approximately 20m high (ground to hub height) wind turbine.
- 2.2 The proposal would initially be built as a 1FE primary school, providing an educational facility for 210 pupils plus 56 0-5 year-olds in the early years' unit. This would be in a compact and primarily 2 storey building, clad predominantly with timber and self-coloured render. Separate to the school building would be a 1.5 storey community hall with its own external play area. The two buildings would border a public parking area, with further staff parking and the school playing fields 'behind' and secured from the civic space. The 'hard play' areas would be on a raised landform in the northern part of the site, created from soil excavated as part of the building construction.
- 2.3 Support for projects incorporating the principles of sustainability and 'green' energy generation can be found in the relevant local plans, and sustainable design is a requirement of development on the former

aerodrome site as set out in the specific SPG relating to it. The policies also state, however, that development should not be at the expense of local amenity.

- 2.4 Principle objections to the proposal relate to traffic and parking congestion, the impact of the community hall on residential amenity, and in particular, impacts of the wind turbine including noise and visual impact.

3. Conclusion

The report concludes that the Director of Environment should be authorised to grant planning permission, subject to conditions including management of the community hall, operational parameters of the wind turbine, implementation of a school travel plan, limit of the height of the hard play area landform, archaeological monitoring, surface water management methods, approval of building materials, approval of landscaping details and hours of construction.

1. Description of the site and proposed development

- 1.1 The development site consists of 2.63ha of land on the site of the former Hatfield Aerodrome, to the west of Hatfield town. Objectives for the redevelopment of the entire aerodrome site are set out in the 'Masterplan' that was issued by Welwyn Hatfield District Council in 1999, which identifies the application site land for the purposes of a school. Outline planning permission for a "school and associated facilities" was subsequently granted in December 2000, however this application is for full planning permission. The proposed school building would replace the existing Howe Dell Primary School in west Hatfield and serve the growing residential population of the former aerodrome site.
- 1.2 The application site is an area of relatively flat, open land, surrounded on three sides by residential properties and on the fourth by an area designated for (as yet unbuilt) light industrial units. The residential properties surrounding the site, which are in various stages of development, are a mix of bungalows, two and three storey houses and three storey blocks of flats. Further afield across the aerodrome site, much larger industrial warehouses and developments approximately 4-5 storeys high are visible.
- 1.3 As shown on the attached plan, the proposal is for a two storey school building intersected by a one storey entrance area, with a separate 1.5 storey community hall. The buildings have been designed to have a small building footprint and a compact building envelope to reduce heat loss, and the school has been designed and orientated so as maximise the available natural light. It is proposed to locate the community hall halfway along the school building and at right angles to it, defining an "entrance zone" and civic space in front of the school, containing the public parking and drop-off facilities. This area would be clearly visible from the proposed buildings and could be secured from the rest of the site, thus incorporating the principle of 'secure by design'.
- 1.4 Planning permission for a two-form entry (2FE) primary school has been applied for, but the intention is that the school would initially be constructed with capacity for one form of entry only, as is the existing Howe Dell School. This would give the new school a capacity of 210 primary pupils, plus 56 early years' pupils. The additional facilities necessary for two-form entry - six further classrooms and associated facilities - could be built on at a later date in accordance with local demand, giving a potential capacity of 420 primary pupils. The 1FE building would therefore be shorter than the 2FE building, with a longer 'bridge link' to the hard play area.
- 1.5 The community hall would comprise a main hall, small meeting room, kitchen, toilets and storage facilities, and have its own enclosed external area.

- 1.6 The entire development has been planned with sustainability as the core of the design and management brief, as per the guidance issued regarding redevelopment of the aerodrome site. A wide variety of sustainable features have therefore been included in the building designs, such as photovoltaic cells, low energy ventilation/heating system, underfloor heating using a thermal store, areas of 'green' sedum roofing (i.e. the roof is covered by a living plant: sedum), rainwater reclamation and a ground source heat pump. Maximum use has been made of natural light and areas where children can learn about the sustainable features of their school have been designed in. A 50kW wind turbine is proposed within the site, to supply the majority of the school's power needs. Although the turbine is described as being 20m high (ground to hub height) it would actually be 18.5m high. The turbine would have 3 blades, each 7.5m long and be located 75m from the nearest residential property. It would be 10m from the north-eastern site boundary which adjoins the area designated for future light industrial units.
- 1.7 Both the school and community hall would be of a simple design and finished in the same style and materials. Natural timber cladding and self-coloured render would be the predominant external wall covering, with powder coated aluminium window frames and louvers. The proposed predominant roof and wall coping material is aluminium with a natural mill finish. The community hall roof and enclosed south-east facing roof terrace of the school would be covered with sedum 'green' roofing.
- 1.8 It is proposed that most of the site perimeter be fenced with 2m high galvanised weldmesh fencing for security. Around the site "entrance zone" perimeter, 1.5m high grey powdercoated weldmesh fencing is proposed. Elsewhere on site, 1m high grey powdercoated weldmesh fencing would be used to separate the early years' external play areas from the rest of the school site, to separate the staff parking area from the school grounds, and to segregate the turbine and pond/wetland area from play areas. The community hall's external area would be fenced with timber to match the building cladding.
- 1.9 The northern corner of the site would house the principal hard play areas. These would be located on a raised and graded plateau of land, approximately 2 metres above the existing ground level. The plateau would be formed from soil excavated as part of the building construction.
- 1.9 The entire school grounds would be landscaped and planted and would include a mown sports pitch and running track, seating areas, and a pond and wetland area.

2. Consultations

2.1 Welwyn Hatfield District Council has no objection in principle to the proposals, and supports the principles of sustainability underpinning the design of the new development. However, they do have some detailed concerns (see Appendix 1) regarding specific aspects of the development, with the emphasis on the environmental effects of the wind turbine. With regard to this, the District Council will consider a further report on the turbine at their meeting on the 14th April. Any further comments received will be reported orally to the Committee.

2.2 Hatfield Town Council's Planning Committee supports the provision of a new school, early years' facility and community hall in Hatfield. They request that clarification of the noise levels that the turbine might generate be given before they fully endorse the turbine.

As part of the planning application for the development, Hatfield Town Council has submitted a statement outlining their management intentions for the community hall. In summary, this says that they intend to run the community hall as a facility similar to the existing Oxlease Community Centre, i.e. as an unlicensed facility (no bar and with the restriction that no hirer can apply for a licence to sell alcohol) for bookings that are appropriate to the area and do not create disturbance. They also state that they intend to establish a user panel for the hall.

2.3 The County Archaeologist recommends that a condition be imposed on the permission requiring an archaeological investigation of the site. (See Appendix 1.)

2.4 Hertfordshire County Council as Highway Authority recommends that, if permission is granted, the submission and approval of a school travel plan be made a condition of the planning permission. In a statement accompanying this recommendation and during discussions, the Development Control Engineer commented that he felt that the number of parking spaces shown in the application (61) was sufficient, bearing in mind that, at opening, the school would function as 1FE, much of the public transport infrastructure would not be in place, and the school catchment area would be much wider initially. The parking provision at the site needs to be monitored as the aerodrome and school develop and adjusted accordingly.

2.5 The Civil Aviation Authority has no observations to make on the application. London Luton Airport and National Air Traffic Services (En Route) Plc. both report that they have "no safeguarding objection to the proposal".

2.6 Taylor Woodrow Developments Limited have expressed concern regarding the visual and acoustic impact of the wind turbine on surrounding residents.

- 2.7 Arlington Property Development Limited do not object to the proposals for the school, early years' centre and community hall, but do object to the proposal for a wind turbine. They consider its visual impact unacceptable due to its scale, size and relationship to surrounding development. They do not feel that the turbine accords with the design and landscape objectives set out in the supplementary planning guidance for the Hatfield Aerodrome redevelopment. They also raise "grave reservations" as to the "suitability and acceptability of the proposal having regard to the proximity of both housing and business space uses", and are concerned about noise and shadow flicker from the turbine.

In a further statement submitted, they consider that, in addition to the points mentioned above, it is premature for the application to be considered by the Development Control Committee in advance of the independent visual impact assessment being received by the County Council and are concerned that no drawings of the turbine are available. They are also concerned that the noise of the turbine could prejudice the siting and nature of industrial development to the east of the school site and feel that a thorough assessment of the effects of shadow flicker should be undertaken.

- 2.8 Hertfordshire Biological Records Centre advises that the proposed wind turbine, by virtue of its height and location, would constitute a minimal risk to birds.
- 2.9 Sport England do not raise any objections to the proposals but advise that, since the proposed sports pitch has a general north east-south west orientation, users might experience visibility problems with the setting sun. They have requested that, if practical, consideration be given to re-orientating the pitch by 90 degrees.
- 2.10 In their report to Welwyn Hatfield District Council, the Environmental Health Department reported that, on the basis of the information provided, they considered that the proposed wind turbine could operate "without significant impact on the residential properties to the north, south and west of the site, provided hours of operation were controlled". They considered that the hours of operation should be restricted to 08.00-17.00 Monday-Friday with no weekend operation. Further information would be necessary in order to determine whether operating the turbine outside these hours would be permissible. They also commented that the potential noise climate might affect the "proximity and nature of development" in the area designated for future light industrial development. They did not consider that the community hall would give rise to "significant problems" based on the proposed uses and design.
- 2.11 The Environment Agency has no objection in principle to the proposed development, provided conditions are imposed relating to site

investigation works, surface water source control measures, construction of soakaways, and construction of surface and foul drainage systems, to safeguard and manage the water environment.

2.12 Cllr. Frank Clayton, the local member for the development, has said that he fully supports the application, including the proposal for the wind turbine. He would like to see sprinklers incorporated into the internal building design to improve fire safety, and declared a personal interest in the redevelopment of Hatfield aerodrome as a member of De Havilland Sports and Social Club.

2.13 Two site notices were erected on 9th February 2004 and an advert was placed in the Welwyn & Hatfield Times on 11th February 2004. A total of 29 properties were consulted on the application, with two letters and two petitions (of 68 signatures each) objecting to the application being received. The main issues of concern can be summarised as:

- traffic and parking congestion;
- potential impacts of the proposed wind turbine, including:
 - noise;
 - visual intrusion including appropriateness of the development;
 - danger of flying debris and ice;
 - risk to bird life;
 - shadow flicker;
- detriment to residential amenity from the community hall in terms of noise, litter and traffic;
- the fact that residents were unaware that anything other than a "small" school (i.e. a community hall and wind turbine) might be built on the site when they purchased their homes.

3. Planning Considerations

3.1 The relevant development plan policies are summarised in Appendix 2.

3.2 The principal issues to be taken into account in determining this application are:

- increase in traffic and parking congestion within the residential area;
- potential impacts of the proposed wind turbine in terms of:
 - noise;
 - visual impact;
 - danger of flying debris and ice;
 - risk to bird life;

- shadow flicker.
- impact of the Community Hall on residential amenity;
- impact of the raised 'hard play' area on residential amenity;
- appropriateness of the development.

The report also addresses the fact that residents were unaware that anything other than a "small" school (i.e. a community hall and wind turbine) might be built on the site when they purchased their homes.

3.3 Traffic and parking

Concern has been expressed that the proposed school would result in a large numbers of cars using The Runway and surrounding streets at peak times, causing congestion and parking problems along a residential road, which would greatly inconvenience local residents and could hamper emergency services. The greatest volume of traffic is likely to occur in the first few years following the school's opening, as many of the pupils would be coming from residential areas near the current school site two miles away. The Community Hall might also cause an increase in traffic but this is unlikely to be at the same time as school traffic.

- 3.4 Within the submitted plans, provision has been made for 61 parking spaces including disabled parking: 35 spaces in the civic space fronting The Runway, and 26 spaces 'behind' the community hall, which could provide secure spaces for staff. Objectors have questioned the adequacy of this provision.
- 3.5 As part of their consultation response, Hertfordshire County Council as Highways Authority stated that they felt that 61 spaces was sufficient, bearing in mind that at opening, the school would function as a 1FE school. They also highlighted the fact that, at opening, some of the other modes of transport that have been planned to serve the site, such as bus services, are unlikely to be immediately available. As the aerodrome site is progressively redeveloped, so the transport infrastructure will improve; more buses, footpaths and cycle routes will be available, and at the same time the school's catchment area will shift to focus on the new residential development on the former aerodrome site, reducing the need for pupils to be transported to the school by car.
- 3.6 The school would be accessed from The Runway, which is 6m wide. Objectors have raised concerns that this would be too narrow to cope with the volume of traffic that the development would generate. However, alterations to the road width do not form part of this planning application and in any case, the aerodrome Masterplan that states that road widths will be restricted to discourage private car use. Similarly, with parking provision, a balance must be struck between providing enough parking for parents, staff and hall users, whilst not encouraging

private car use in accordance with the principles of sustainability. This follows Policy 13 and 25 of the Structure Plan.

3.7 As Highway Authority, the County Council does not object to the scheme subject to a condition being attached to any permission requiring the agreement and implementation of a School Transport Plan (STP). A robust STP would be crucial in addressing the transport issues relating to the site and could incorporate the suggestion that a point outside the residential area be used as a drop-off point for children, who could then be taken to school as part of a walking bus.

3.8 Potential impacts of the wind turbine

Extensive support for power generation by renewable methods can be found in the policies listed in Appendix 2 attached to this report, for example Policy 54 of the Structure Plan, Policy BAe12 of the District Plan and guidance in the Masterplan. However, these plans also require that 'green' energy generation is not carried out at the expense of local amenity.

Noise

3.8.1 An independent noise report commissioned by the County Council as planning authority concluded that the turbine could be operated between 07.00 and 16.00 without giving rise to a significant noise impact on surrounding properties. This supports the noise impact assessment that was submitted with the planning application. Both reports also recommend that further assessment of the background noise levels at the site be undertaken. This further work is currently underway and will determine whether the turbine could be operated outside these hours and on weekends without unduly disturbing local residents. It is worth noting that the report that was submitted with the planning application considered the effects of the turbine set 10m closer to the nearest property than in the designs subsequently submitted in the planning application.

3.8.2 Despite the objections that have been raised, the evidence that has been received in respect of the turbine's noise emissions has shown that it could be operated without detriment to local residents. If permitted, it is recommended that the actual noise emissions of the turbine be closely monitored, to ensure that they accord with the submitted data.

3.8.3 Despite Arlington's objection that "the turbine could prejudice the siting and nature" of development to the east of the site, i.e. the light industrial units, it is not considered that erecting the turbine would cause any detriment that could not be overcome by appropriate design of the units. Arlington did not provide any further explanation of the "prejudice" that they envisage.

3.8.4 Given the fact that extensive areas of the aerodrome site are still in the process of being developed, it is likely that the background noise levels at the site will be in a state of flux for the next few years. If planning permission for the turbine is granted, it would therefore seem prudent to tie the operation of the turbine into the level of noise that it would generate relative to background noise, rather than strictly to the hours of the day. This would then incorporate the safeguard that the turbine could be switched off if at any time it was shown that local residents were experiencing an unacceptable level of noise.

Visual impact

3.8.5 In order to assist assessment of the visual impact of the development, an independent visual impact assessment of the proposals was commissioned. This assessment is not available at the time of writing this report, and so the conclusions that it draws will be reported orally to the Committee.

3.8.6 Of all the elements of the planning proposal, the wind turbine will have easily the greatest visual impact on the former aerodrome site. At 20 metres tall it will rise above the residential properties that surround the school site, which are 3 storeys high at most. These are not the tallest structures on the former airfield however; industrial units of at least 10-12m and 4-5 storey office development exist within view of the site. The industrial units in particular are very solid, dominant features. Because of its height, it is against this backdrop of larger, industrial units that the turbine is likely to be viewed.

3.8.7 It is clear that the height and kinetic nature of the turbine will make it stand out against other surrounding developments and it is likely to become a significant local landmark. Whether or not a wind turbine is an elegant structure is very much a personal judgement, but there is no doubt that it is one of the most easily recognisable symbols of sustainable power generation. As such, and in so far as it resembles a propeller, it intrinsically links the sustainable aims of the aerodrome redevelopment with the aviation heritage of the site. As such, it is not concluded that the turbine would have a detrimental visual impact on the site; indeed, it may even have a positive role to play.

Danger of flying debris and ice

3.8.8 Guidance contained within PPG22 states that wind turbines are a safe technology, and that it is most unlikely that any debris would come from the blade.

3.8.9 In response to the concern that was raised by residents as to the possibility of ice and debris being flung from the turbine's blades, the manufacturers of the turbine have stated that, if ice does form on the blades, it unbalances the aerodynamics of the turbine and prevents it from accelerating to operating speed. The slow tip speed of the proposed turbine would not allow ice to be thrown large distances from the tower in any case and the manufacturers felt that Hatfield would be

unlikely to have a high incidence of atmospheric icing. This is supported by guidance in PPG22.

Risk to bird life

3.8.10 Following residents' concerns Hertfordshire Biological Records Centre was asked to comment on the possible risk posed to bird life, particularly skylarks, by the turbine's rotating blades. HBRC reported that, since the proposal is for a single turbine only and it is not to be located within a river valley or on a recognised migration route, the turbine will "constitute a minimal risk to birds". It is not therefore considered that the turbine will pose a hazard to bird life.

Shadow flicker

3.8.11 'Shadow flicker' occurs when the shadow of a wind turbine flicks on and off as the turbine blades rotate and is intrinsically linked to season, geographical position and time of day. A statement from the Energy Conservation and Solar Centre submitted with the application states that "flicker time" is approximately 10-20 hours per annum and can be easily avoided by the installation of electronic sensors on the turbine which detect the time when flicker is a problem and switch off the turbine for this period. The statement also says that flicker is only a 'problem' for fixed dwellings near the turbine; not passers by, and this is supported by PPG22 which states that the effect only occurs inside houses where the flicker appears through a narrow window opening.

3.8.12 In view of this, it is recommended that if planning permission is granted it should be subject to a condition requiring the submission of a report detailing the likely occurrence of shadow flicker at the application site and proposals for mitigation. The turbine should then be switched off during those periods when shadow flicker is shown to be an issue.

3.9 Impact of the Community Hall on residential amenity

The inclusion of a community hall within the proposals and the proximity of the hall to residential properties have been raised as objections to this aspect of the project. The hall is proposed to be sited opposite the end of Oxford Place, 3 metres from the boundary fence. This would place it 12 metres from the nearest residential property, which would be separated from the hall by the weldmesh boundary fence, 'structure planting' and Oxford Place road. The hall would be 1.5 storeys high and a timber fence would enclose the external area. The hall would therefore be set far enough away so as not to overshadow nearby properties and would be well screened from them.

3.10 The proposals do not include any windows in the side of the community hall that faces the residential properties, so keeping noise emissions in this direction to a minimum. As with the school, the hall will be insulated to a very high standard, which will also help minimise noise levels. In view of these design features, the noise impact assessment submitted with the proposals concluded that noise break-

out from the community hall would not be a significant issue. This conclusion was supported by Welwyn Hatfield's Environmental Health Department.

3.11 Hatfield Town Council's statement regarding use of the community hall makes it clear that they are sensitive to the impact that the hall would have in this residential area and that they have experience of successfully managing similar facilities to ensure that only appropriate bookings are taken. The fact that the hall would not have a licence to sell alcohol and that hirers could not apply for one should significantly reduce the chance that residents might be disturbed. Hatfield Town Council has also stated that they intend to establish a user panel as part of the facility management. It is recommended that this be made a condition of any permission so that the use of the hall is reviewed on a regular basis and residents' comments are fed directly back into the booking process.

3.12 Impact of the raised 'hard play' area on residential amenity

In the northern corner of the school site the proposals show the hard play areas as being on a raised landform approximately 2m above the existing ground level. The bridge link from the first floor of the school also joins to this landform. This mound would be constructed using soil removed as part of the construction of the proposed buildings, thus re-using it and negating the need for soil to be taken off site in accordance with the principles of sustainability. Since the site is not absolutely level, the landform would also ensure a horizontal playing surface. It is likely however, that raising the hard play area would increase the noise impact of children using the area on the facing properties.

3.13 Four properties in Fillingham Way would directly overlook this area. At its highest level, the landform would be 14 metres from the nearest property. It would be graded down to the site boundary and given the same boundary planting treatment as along the rest of the north west and north eastern boundary.

3.14 In view of these factors, it is not considered that the mound would have a significant visual impact on the adjoining properties. The noise impact for surrounding residents of users of the hard play area would be increased however, and it is therefore recommended that the height of the mound be limited to 1 metre only. This will allow creation of a flat playing surface while increasing the degree to which surrounding properties are screened from users of the area. It will also ensure that some of the soil from the site excavations can be re-used.

3.15 Appropriateness of the development

Provision of a school and community hall on this site is an intrinsic and predetermined part of the redevelopment of the aerodrome site. In addition, the proposed design for the school and community hall is particularly appropriate, since it incorporates sustainability at every

level; the layout, materials, energy supply, and also the management and construction techniques have all been planned with sustainability as the fundamental aim.

- 3.16 Objections have also been raised with regard to the fact that residents were unaware that anything other than a "small" school (i.e. not including a community hall and wind turbine) might be built on the site when they purchased their homes. It should be noted that information given to house purchasers regarding the future use of the adjacent site are not strictly a matter for the Development Control Committee and so will not form part of the conclusions drawn in this report.
- 3.17 The current application is for full planning permission, and as such, should be judged on its own merits. Outline planning permission for a "school and associated facilities" was granted in December 2000. This information would have been available to purchasers and did not stipulate the size of the school or nature of the associated facilities that could be built. The aerodrome Masterplan makes clear reference to the provision of a 2FE primary school and includes a number of plans that refer to the site as "school/community hall". Provision of a community hall on the same site is also clearly stated as a possibility within the plan.

4. Conclusions

- 4.1 The concerns that have been raised regarding parking and traffic congestion could be addressed by the development of a robust School Travel Plan, which addresses the way that the transport requirements of the site will develop over time. This could be developed in conjunction with local residents. As part of the STP, the on site parking provision should be monitored and adjusted accordingly. Particular consideration should be given to the parking provision if and when the school expands to 2FE.
- 4.2 Two separate noise impact assessments have already shown that the turbine could be operated for a large part of the day without causing undue detriment to local residents. It is recommended that if planning permission is granted then it should be conditioned in such a way so as to limit the turbine's hours of use to those within which it can be shown that the noise level of the turbine would not exceed the background noise level by a set amount. This will allow the flexibility necessary to adjust the turbine's operational period as the background noise levels change during and following surrounding redevelopment works, while ensuring that residents are not unduly disturbed.
- 4.3 Whilst it does not appear that shadow flicker presents a particular hazard based on the available information, it is clear that the likely occurrence of the problem needs to be clarified. Submission of an independent report assessing the likelihood and timing of shadow

flicker at this site should be a condition of any planning permission. Permission for operation of the turbine should be subject to the turbine being switched off during those periods when shadow flicker is shown to occur to the detriment of surrounding residents.

- 4.4 Subject to the conclusions of the visual impact assessment, it is not concluded that any of the objections raised in respect of the wind turbine outweigh the benefits of permitting the wind turbine as part of the development. In addition to providing power to the school it will be an important teaching resource and is a very significant aspect of the development's sustainable features. It should be noted that no information detailing the actual material impact of either shadow flicker or flying ice crystals on local residents has been submitted by any objector. Support and encouragement for the generation of power by renewable methods can be found in the policies of the Structure Plan, Local District Plan, Masterplan and PPS22.
- 4.5 The design and close management of the community hall should ensure that residents are not unduly disturbed by the activities that take place there. While it is relatively close to the site boundary, the nearest residential properties are separated from the boundary at this point by a road. Given this, and provided that particular care is taken to maintain the structural planting along this section, it is not therefore concluded that the hall will cause significant detrimental visual impact for any residents.
- 4.6 The noise impact that users of the hall may have on residential amenity is nevertheless of concern. It is recommended that the establishment of a management group for the hall, to include one or more local resident representatives, be made a condition of the grant of any permission. The proviso that no alcohol can be traded on the premises should also be written into the permission.
- 4.7 It is concluded that the raised landform beneath the hard play areas should be limited to 1 metre in height, so as to retain some soil re-use on site in accordance with the principles of sustainability and to allow the creation of a flat playing surface. Limiting the height in this way should mitigate the noise and visual impact of users of this area for local residents.
- 4.8 It is therefore concluded that the Director of Environment should be authorised to grant permission for the proposals, subject to conditions including conditions regarding management of the community hall, operational parameters of the wind turbine, implementation of a school travel plan, limit of the height of the hard play area landform, archaeological monitoring, surface water management methods, approval of building materials, approval of landscaping details and hours of construction.

5. Financial implications

5.1 There are none for this Committee.

Background information used by the author in compiling this report

Planning application reference 6/0178-04

Consultation responses and representations received in response to planning application ref. 6/0178-04

Hertfordshire County Structure Plan Review 1991-2011

Hertfordshire Structure Plan Review 2001-2016, February 2003 Deposit Version

Welwyn Hatfield District Plan Alterations No. 1, adopted March 1998

Welwyn Hatfield District Plan Review, revised deposit version June 2002

Hatfield Aerodrome: Supplementary Planning Guidance, adopted November 1999 (Masterplan)

Town and Country Planning (Environmental Impact Assessment)(England and Wales) Regulations 1999:

PPG22 (Renewable Energy)

PPS22 (Draft Planning Policy: Statement 22 (PPG22): Renewable Energy)

Appendix 1 - Consultation Responses

1.1 Detailed concerns of Welwyn Hatfield District Council:

The District Council's specific concerns that it requests be addressed by the County Council are:

- i) That the visual impact of the community hall building on the adjoining residential area should be mitigated by suitable adjustment to the design of the community hall, and careful attention to the north-west elevation and boundary screening;
- ii) That the mounding shown in the north-eastern part of the site should be reduced so that there is no significant increase in land levels, to avoid adverse visual impact and minimise any nuisance arising from use of the school games area;
- iii) That the wind turbine should only be permitted if comprehensive technical analysis shows that there would be no significant noise nuisance or shadow flicker nuisance to nearby residential properties and if conditions limiting hours of use are imposed as appropriate;
- iv) That there should be suitable conditions imposed on any permission, requiring a comprehensive landscaping scheme for the development and for the details of external building materials to be approved.

1.2 The County Planning Archaeologist reported that, due to the size and situation of the proposed development site, "there is a reasonable likelihood of significant archaeological remains being present". If permission for the development is granted, he recommends that the following condition be attached to the permission:

No development shall take place within the proposed development site until the applicant, their agent or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted by the applicant and approved by the planning authority.

This scheme should ensure the archaeological monitoring of all groundworks associated with the proposed development, the recording of features, deposits or artefacts revealed, and the archiving and publication of the materials and data recovered.

Appendix 2 - Relevant Development Plan Policies

Hertfordshire Structure Plan Review 1991-2011 (Adopted April 1998)

Policy 1 (Sustainable Development) - Determines that policies of the Structure Plan, together with local plans, will seek to enable activities and development in Hertfordshire to be carried out in accordance with the principles of sustainable development. Part of the general aim will be to:

- "make provision for the housing and social needs of people in ways which minimise the need to travel,
- improve people's quality of life, both in town and county, in ways which do not prejudice the quality of life of people in the future or threaten the environment,
- avoid pollution in all its forms,
- encourage walking, cycling and greater use of passenger transport,
- minimise resource depletion and make the most efficient use of land, minerals, buildings, energy, water and waste."

Policy 2 (Design and Provisions of Development) - states that "the design and provisions of development will be expected to help achieve the sustainability aims and objectives of this Plan".

Policy 13 (Education and Training) - supports development that provides for education and training needs. This development should aim to reduce travel need and car usage and encourage walking, cycling and the use of passenger transport.

Policy 15 (Key Employment Sites) - in conjunction with the Key Diagram, this policy identifies British Aerospace, Hatfield, as a Key Employment Site. As such, employment generating activities will be encouraged and uses other than employment may be appropriate as part of an employment-led mixed development package.

Policy 25 (Car Parking) - requires that all non-residential development with significant parking implications should be in locations with the potential for good access to means of travel other than the private car.

Policy 54 (Energy Generation) - supports, in principle, generation of power by renewable methods, subject to the other policies of the plan, in particular those relating to environmental effects of development and impact on traffic generation.

Hertfordshire Structure Plan Alterations 2001-2016, February 2003 Deposit Version

Where the details of a policy in this deposit version of the Structure Plan do not differ significantly from those in the adopted plan in the context of the planning application under consideration, the policy is not listed below.

New Policy (Design and Quality of Development) - High standards of design, layout and form will be required in all development, which should "contribute positively to a sense of place and local character and have regard to the principles of good urban design". Landscaping should be an integral part of development proposals and complement both the development and the surrounding area.

New Policy (Visual Amenity) - "The design of development will seek to enhance visual amenity".

Policy 54 (Energy Generation) - Supports proposals for small-scale renewable energy projects, subject to the other policies of the Structure Plan.

New Policy (Energy Conservation) - Recommends that Local Plans should contain policies to ensure that new development is energy efficient in its siting, design, scale, massing, density, orientation, landscaping and layout. "The integration of renewable sources of energy into development, such as solar power systems, will be encouraged."

Welwyn Hatfield District Plan Alterations No. 1 (Adopted 2nd March 1998)

Proposals Map - Designates the site as Future Development Land

British Aerospace Inset

- Objectives: "The most important of these is the concept of sustainable development, which now must underpin any planning strategy.
 - (i) The development should be sustainable,
 - (vi) The development should contain an aero-based heritage element,
 - (vii) The development should provide high standards of environment, open space and leisure facilities,
 - (viii) The retention and provision of social and community facilities should be achieved."

Policy BAe1 (Development Mix) - Requires that the redevelopment of the BAe site as a whole provide for a variety of land uses. Principle uses of the site listed include development for educational purposes, but it is recognised that other uses such as community facilities may form an integral part of the development.

- Commensurate with the progressive development and introduction of a Central Hertfordshire Passenger Transport System would be "a need to consider a gradual series of controls to limit the accessibility of new developments by the motor vehicle".

Policy BAe2 (Sustainability) - Requires that any development be based on the principles of sustainability, including layout, mix of uses, orientation and design of buildings and energy efficiency.

Policy BAe12 (Energy) - Provision should be made, during the redevelopment of the entire site, for a local source of power generation.

Hatfield Aerodrome: Supplementary Planning Guidance (SPG) (Adopted November 1999) (Masterplan)

This SPG was produced by Welwyn Hatfield Council, St. Albans City & District Council and Hertfordshire County Council in consultation with the landowners, the Government Office for the Eastern Region, the Highways Agency and other relevant bodies and organisations. Its purpose is to guide the formulation of development proposals for the redevelopment of the former BAe site at Hatfield, pursuant to adopted Local Plan policies. This 'Masterplan' has been adopted by both Welwyn Hatfield Council and St. Albans City & District Council, and it is a material consideration against which planning applications for the BAe site will be determined.

- States that the requirement for a new, two-form entry Primary School with a nursery class within the Masterplan area has been identified. "The possibility of including community hall and day care provision on this site will be investigated". On plans included within the Masterplan

the particular site is primarily referred to as either, "primary school and playing fields" or "school/community hall".

- The provision of community facilities on site is encouraged to counteract the increased pressure that the new development will place on existing facilities. It would also "add to the sense of place and add to the opportunities for building a community in the broadest sense".
- In accordance with the principles of sustainability, alternative methods of transport (to private cars) will be encouraged and facilities such as cycleways and cycle storage will be provided. Parking provision and road widths will be restricted to discourage private car use.
- Consideration and encouragement should be given to efficient and sustainable methods of energy generation and conservation.
- A complete area brief for the residential area including the designated school site is given.

Welwyn Hatfield District Plan Review (Revised Deposit Version June 2002)

Policy SD1 (Sustainable Development) - Permits proposals that demonstrate accordance with the objectives and policies of the plan and satisfy the principles of sustainable development. To assist the Council with determining this latter point, a checklist of sustainability criteria is given. Applicants are expected to submit a statement on the sustainability of their proposals based on the given checklist.

Policy R3 (Energy Efficiency) - New development is expected to include measures to "maximise energy conservation through the design of buildings, site layout and provision of landscaping", and to "incorporate the Best Practical Environmental Option (BPEO) for energy supply".

Policy R4 (Renewable Energy Sources) - Gives a list of criteria to which permission for proposals for the development of renewable energy sources will be subject. The list includes the requirements that development would not have a significant visual impact, would not have a detrimental impact upon adjoining properties and land holdings, and would not generate an unacceptable level of noise. In the explanatory text, a 1997 survey by the Department of Trade and Industry is cited as indicating the generation of solar power to be particularly appropriate in Hertfordshire's climate.

Policy R7 (Noise and Vibration Pollution) - States that proposals for noise generating or noise sensitive developments will only be granted if planning conditions can be applied to the permission that provide an adequate level of protection against noise and/or vibration as appropriate.

Policy D2 (Character and Context) - New development is required to respect and relate to the character and context of the area and, where possible, enhance or improve the character of the existing area.

Policy D2a (Continuity and Enclosure) - All new development should distinguish between public and private spaces in accordance with the principles of continuity and enclosure.

Policy D3b (Safety by Design) - The design of new buildings is required to contribute to safer communities, for example by ensuring that the design of developments provides natural surveillance over public spaces.

Policy D3c (Landscaping) - Landscaping should be an integral part of the overall design and should use materials that respect the character of the area.

Policy D3d (Access and Design for People with Disabilities) - Developments should be accessible, both internally and externally, by those with disabilities and by prams and pushchairs.

Policy CLT8 (New and Extended Education Facilities) - Proposals for new schools will be granted planning permission provided that: they are situated close to centres of population and passenger transport services; they provide opportunities for shared journeys, for example by school bus; secure staff and student bicycle storage is provided; the proposal complies with the Council's current car parking standards and there would be no adverse impact on the highway network including highway safety; provision is made for the safety of students being dropped off or picked up; there would be no harmful impact on the amenity of nearby residential properties, and there would be no significant impact on the character of the area.

Policy CLT10 (Nurseries and Childcare Facilities) - States that proposals for such facilities will be granted, subject to similar provisions to those listed in Policy CLT8.

Policy CLT12 (New Community Facilities) - These will be granted permission where proposals would not harm the amenities of nearby residential properties, on new residential developments where there is a deficiency of access to such facilities, or where the demand for the facility in an area is sufficient for the catchment of the proposed facility.

Policy HATAER1 (Sustainable Development of the Site) - All aspects of the redevelopment of the entire Hatfield Aerodrome site will be based on the principles of sustainability, including energy efficiency.

Policy HATAER3 (Requirement for a Masterplan) - Development of the Hatfield Aerodrome site will be in accordance with the adopted Masterplan.

PPG22 (Renewable Energy)

5-563(14) - The impact of a wind farm on the local ecology should be minimal. Evidence suggests that there is minimal danger to bird life from the turbines.

5-567(30) - Experience indicates that properly designed and maintained wind turbines are a safe technology... There has been no example of injury to a member of the public, only to operational staff.

5-567(31) - "The only source of possible danger (from a wind turbine)...would be the loss of a piece of the blade, or, in most exceptional circumstances, of the whole blade. Many blades are composite structures with no bolts or other separate components. Blade failure is therefore most unlikely. Even for blades with separate control surfaces on or comprising the tips of the blade, separation is most unlikely."

5-568(33) - "The build up of ice on turbine blades is unlikely to present problems on the majority of sites likely to be developed in the near future."

5-569(38) - "Under certain combinations of geographical position and time of day, the sun may pass behind the rotor of a wind turbine and cast a shadow over neighbouring properties. When the blades rotate, the shadow flicks on and off; the effect is known as "shadow flicker". It only occurs inside buildings where the flicker appears through a narrow window opening."

5-570(42) - Wind-generated background noise increases with wind speed, and at a faster rate than wind turbine noise increases with wind speed. The difference between the noise of the wind farm and the background noise is therefore liable to be the greatest at low wind speeds.

5-573(52) - Provided careful attention is paid to siting, wind turbines should not cause any significant problems of electro-magnetic interference, i.e. adverse effects on communication systems (e.g. television, radio)

PPS22 (Draft Planning Policy: Statement 22 (PPS22): Renewable Energy)

- "The wider environmental and economic benefits of all proposals for renewable energy projects, whatever their scale, are material considerations that should be given significant weight in determining whether proposals should be granted planning permission."