

13th April 2016



Derek Tanner
London Borough of Richmond upon Thames
Civic Centre
44 York Street
Twickenham
Middlesex
TW1 3BZ

Unit 22
41 Maltby Street
London
SE1 3FF

M 07799 708148

vincent.gabbe@vrgplanning.co.uk
www.vrgplanning.co.uk

Dear Mr Tanner

**TEDDINGTON WEIR HYDRO ELECTRIC TURBINES
APPLICATION REFERENCE: 16/0438/VRC**

I write on behalf of Lensbury Ltd, to object to the above planning application for the reasons set out in this letter and its supporting technical documentation.

Lensbury has sought detailed specialist advice regarding the revised proposals and this confirms that, as with the previous planning application for this site:-

- There are a number of procedural defects with the application to date; and
- There is insufficient information to enable proper consideration or approval of this application. In particular:
 - The planning application contains insufficient assessment of the likely impacts of the revised scheme.
 - Where the impacts are assessed, they appear to have been significantly under-estimated.
 - The application therefore ignores relevant legislation, policy and guidance. To the extent that such policies and guidance are not ignored, it is clear the application conflicts with the same to warrant refusal of the application.

The key areas of concern are summarised in more detail under relevant headings below. However, reference should be made to the appended documentation for full details of the reasons for objecting.

Background to Lensbury and its concerns

Lensbury provides leisure, conference, hotel and events facilities. Many of the facilities are unique and represent an important asset to the Borough.

Lensbury is a nationally important venue for rugby, working closely with the IFRB, Rugby Football Union, and other national rugby bodies, by accommodating international, national and regional rugby teams. Lensbury takes part in the Olympic Passport Scheme, facilitating the training of some of our country's top athletes. A number of these athletes

have represented Great Britain and/or are future potential Olympians, particularly in relation to athletics, water sports and tennis. In association with St Mary's University, the Lensbury provided training camp facilities to the Irish Olympic team during the 2012 London Olympics and hosted the All Blacks, Wallabies and the Springboks during the 2015 Rugby World Cup. Its support to international sporting fixtures arises from the combination of its location, hotel / conference accommodation and specialist training facilities for players and their support staff.

Lensbury's conference centre is a significant regional conference centre, bringing 70,000 annual blue chip corporate delegates/guests to Teddington, providing facilities to the likes of Moody's, Exxon and Coca Cola.

In addition, the Watersports Centre is a key offer, instructing over 6,000 people a year in safe handling of water craft – including disabled sailing and local school usage.

The Lensbury generates 13 million pounds of revenue a year, of which a significant portion finds its way into the local Teddington and Richmond Borough economy. Lensbury provides employment to over 300 people, 50% of which are local residents. The annual wage bill is £4.6 million. The business and its guests play an important role in supporting local shops, facilities and businesses, especially on the Teddington High Street and nearby pubs and restaurants. A threat to Lensbury is therefore a threat to Teddington's economy as a whole.

An important part of the appeal that makes Lensbury successful is its tranquil position on the banks of the River Thames. Lensbury's guests and members use all of the grounds, including the areas immediately adjoining the River Thames. Weddings, events and sports fixtures take place on the lawns. There is also a pavilion building located immediately next to the proposed Ham Hydro facility, which is used for yoga and other studio classes. In addition, guests and members walk along the bank, exercise, read, picnic, play games immediately next to the River Thames, because of its attractiveness and interest. The proposed hydro power development has obvious potential to have a major impact on the business, particularly in relation to noise and visual impacts.

The Lensbury continues to find that trading conditions are very challenging and is very concerned about the impact of the proposed development. It is for this reason that the Lensbury has commissioned technical experts to review the content of the planning application and comment on the extent to which adequate information and assurances are provided about the impacts. These experts have expressed surprise and concern about the lack of technical detail and rigor, which is not commensurate with the complexity and scale of potential impacts arising from the development.

Procedural concerns

There are a number of procedural flaws relating to the determination of this application and these are set out below:

1. An application under section 73 of the Town and Country Planning Act 1990 may only be used to develop land without complying with conditions subject to which a previous planning permission was granted, or to apply different conditions. The revised details submitted under the section 73 application fundamentally alter the scheme that is currently permitted and is therefore outside of the scope of the original planning permission. We do not therefore consider that the section 73 process may be used to permit the revised scheme. The Council must instead refuse to determine the application and instead require a new full or outline planning application to be made.

2. Notwithstanding the above, it is not clear what parts of the scheme the revised details or application seeks to replace or indeed the way in which the applicant is asking for the planning conditions to be varied. The application form states that this application relates to condition “U88569 – *Decision details*”. This condition lists a vast number of drawings, plans and assessments and therefore it is entirely unclear as to which details are sought (or capable of being varied) by this application. This lack of clarity means it is impossible for the Council to determine this application in the absence of knowing exactly which parts of this condition are being varied, and if the remaining documents remain consistent and applicable to the revised scheme.
3. Further, there is no information supporting the application which confirms that the revised scheme shall be capable of complying with the remainder of the conditions on the original planning permission which should, as a matter of course, be incorporated into any new planning permission issued as a result of the application. The Council cannot possibly determine that the application to vary condition U88569 is acceptable without being satisfied that this revision shall still enable the remainder of the conditions to be complied with.
4. The decision by the Council not to consider Environmental Impact Assessment (EIA) remains of significant concern for the following reasons:
 - a. The revised hydropower scheme remains “*designed to produce*” in excess of the 0.5MW threshold defined within Schedule 2 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 (“the Regulations”) and a screening opinion should be undertaken by the Council.
 - b. The Council shall be aware of the witness statement and exhibits of Paul Johannsen dated 1 April 2016. This statement confirms clearly why the scheme is Schedule 2 development, and there is no evidence to suggest the same conclusions do not apply to the revised scheme. The Council should therefore take a precautionary approach and screen.
 - c. Further, in accordance with Regulation 3(4), the Council is prohibited from granting “*subsequent consent*” for EIA development unless they have first taken environmental information into consideration.
 - d. Should the Council not fully comply with its obligations in the Regulations (and confirm that a screening opinion shall be undertaken) Lensbury reserve their right to request the Secretary of State for a screening direction under the provisions of Regulation 5(7).
5. Pursuant to section 38(6) of the Planning and Compulsory Purchase Act 2004 the Council’s determination of the application must be made in accordance with its development plan documents unless there are material considerations which indicate otherwise. For the reasons set out below, we consider that the application does not contain sufficient information to enable the Council to conclude that the application is in accordance with the development plan. Further, based on the limited information that has been submitted it is in any event clear that the revised scheme is likely to conflict with many key policies in development plan to warrant refusal.

Acoustic Impacts

A specialist report has been prepared by Adrian James Acoustics (AJA) and is attached at **Appendix 1**. These comments and initial observations are based on the information submitted with the application. However, we maintain that the application documents do not contain sufficient information to enable full assessment of the acoustic impacts of the revised scheme and the application should not be approved until such impacts are properly understood. The AJA report confirms the following areas of concern in relation to noise impacts:

- The proposed changes to the scheme are very substantial and would significantly change the noise emissions from the system. This is effectively a different scheme with a different type of machinery operating under different conditions and therefore could generate substantially different noise impacts.
- There is no clear evidence to support the claim that these changes will reduce noise levels. Indeed the scheme would introduce new noise sources which could substantially increase noise levels, but noise from these has not been considered in the noise report.
- The noise report suggests that the proposed variation might result in lower noise levels than the original scheme. This is, however, a qualitative and conjectural discussion rather than quantitative noise assessment. There is no attempt to predict or even estimate the amount of noise reduction or the predicted noise levels from the amended scheme. In particular, there is no data setting out the sound power output.
- The authors of the report claim to have considerable experience of noise from this type of equipment. They have measured noise from other installations, but they have not attempted to use this data to predict the resultant noise impacts from the proposed scheme at Teddington.
- The Design and Access Statement states that the key reason for the variation is mitigation of flood risk rather than noise mitigation. It promises a “...*detailed analysis of the projected sound of the scheme*” but the SSC report is not, and does not claim to be, a detailed analysis.
- In fact the noise report acknowledges that considerable further work will be needed to demonstrate that the scheme is capable of complying with the planning restrictions on noise. It does not refer at all to the predicted noise levels in the assessment for the original scheme, which is extraordinary given that this is presented as a variation to that scheme.
- None of the shortcomings of the original noise assessment identified both by AJA and by the Local Authority’s own expert consultant have been addressed.
- Given the acknowledged shortcomings of the original noise assessment and the magnitude of the proposed changes to the scheme, it is difficult to see how this could be assessed as the basis of a variation to the existing consent. It follows that consent for the variation should not be granted. A full, robust and reliable noise impact should be commissioned to predict the noise impacts from the scheme which the applicant now proposes to build.

Without the above issues being addressed by the applicant, we consider it simply impossible for the Council to determine the application and properly consider whether Policies CP1 of the Council's Local Development Framework Core Strategy Policies 2009 ("Core Strategy") and Policy DM DC 5 of the Borough's Local Development Framework Development Management Policies 2009 ("DMP") are complied with. For this reason alone the application should be refused.

Flood Risk

A specialist report has been prepared by HR Wallingford and is attached at **Appendix 2**. This confirms the following areas of concern in relation to flood risk:

- The planning application is not supported by sufficient information about the proposals or the changes to the design since the permitted scheme. This leaves many critical questions regarding flood risk unanswered. Therefore, whilst it is impossible to robustly assess the revised scheme in terms of flood impacts, the following comments are made based on the information that has been submitted to date.
- In consideration that part of Teddington weir is likely to be blocked during construction, the scheme will increase flood levels during the construction period.
- The estimated increase in flood levels would be from 0.01 m (½ inch) during a 10% annual probability flood event (1 in 10 years) to 0.03 m (1¼ inches) during a 1% annual probability flood event (1 in 100 years) with climate change. These changes would have a significant impact.
- The mechanism used to raise the turbines consists of hydraulic rams and lifting arms. These appear very vulnerable to damage by debris in flood water during a flood event. Damage could lead to failure of the turbines and a resulting increase in flood levels.
- It is unclear how any reliable system can be put in place to raise the turbines when there is a flood event. If a manned approach is proposed, this appears likely to be unreliable, due to uncertainties in forecasting flood levels on the Thames. If a machine operated approach is proposed, then that system will be susceptible to faults. In either scenario, flood levels would increase.
- The scheme will change river flow patterns both upriver and downriver of the weir. The ecology implications of this are considered separately below.
- The above issues raise serious concerns that render the proposals unacceptable in their current form. To determine the application without resolving these issues would leave the local community at a serious risk of increased flood levels.

Without addressing the above issues we again consider it impossible for the Council to determine whether the revised scheme complies with relevant flood policies - such as Policy 5.12 of London Plan, Policy DM SD6 of the DMP and Policy CP3 of the Core Strategy. For this reason alone the application should be refused.

Impacts on aquatic ecology and fisheries

A specialist report has been prepared by SLR Consulting Limited and is attached at **Appendix 3**. This confirms the following areas of concern with the application material:

- The current application does not provide sufficient information that allows the ecology impacts to be properly understood, nor is there any proper attempt to assess such impacts. As a result, the following comments are made based on the information that has been submitted.
- The current design of fish pass does not state what the life stages and species of fish that will be supported are. This is crucial for the delivery of Water Framework Directive objectives and maintaining WFD fisheries status in the lower river Thames waterbody and upper Thames transitional waterbody. The fish pass design does not consider the migration of the river lamprey (*Lampetra fluviatilis*), which is a UK BAP priority species. UK BAP species are those that were identified as being the most threatened and requiring conservation action under the UK Biodiversity Action Plan (UK BAP). The Habitats Directive stipulates that member states must maintain or restore habitats and species to ensure their favourable conservation status in the long-term. There is a complete lack of detail on what the flow regime will be within the fish-pass, which is critical to facilitate river lamprey migration.
- During low-flow 'drought conditions' it is unknown how the fish pass, bi-wash and elver pass will operate in conjunction with the scheme. The change in design gives greater uncertainty to the long-term impact of the scheme on the fish population and aquatic ecology.
- The new application refers to three 4.2m diameter turbines travelling at an unknown speed with unknown intake velocities. Given that the design has a much shorter intake area it is likely to increase velocities over and above those previously submitted. An increase in flow speed above the weir will impact upon juvenile fish by drawing them into the intake area. Environment Agency research on fish swimming speeds indicates that juvenile fish may not be adequately protected and unable to escape the intake flows during the operation of the hydropower scheme. This may have potential long-term impacts upon angling activity as there may be a permanent loss of juvenile coarse-fish during the operation of the THHCL hydropower scheme. There is also a further consideration that the juvenile fish translocated downstream may also become prey for larger predatory fish within Teddington Weir pool.
- Changes in flow speed and flow profile with the revised design could cause morphological changes at Teddington Weir both upstream in the River Thames (due to increased intake velocities) and subsequently downstream within the weir pool. The hydropower variable angle screw design may cause new areas of erosion and impact upon weir pool habitat including associated fish spawning areas.
- A further operational unknown is what the influence of the variable screw will be given that the screws will operate during a tidal-cycle. During high-water operation the angle of the hydropower screw will be 12 degrees and at low water 22 degrees. This change in screw angle will occur twice a day in association with the daily tides. It is unclear with the information provided what the impact of the variable operational angle of the turbines will be on the existing aquatic habitat and ecology.
- The variable angle screw design is stated to optimise energy production but is likely to cause changes in downstream flow-regime. This disturbance of fish may be an issue during key spawning and migration periods. It is unknown how the

current design will operate annually during 15th March to 15th June inclusive (coarse fish close season) and what the impact during this period will be on fish migration and spawning ability.

- It is unknown what the impact of the revised design will be in relation to underwater noise, given that the current design indicates that the downstream entrance of the fishpass is 1.4m from the closest hydropower screw. There is no evidence to suggest that the fish pass will be effective given that fish may be deterred from using the fish pass due to the operational noise produced from the hydropower screws.
- There is no evidence that fish bumpers are included within the proposed design. The Environment Agency state that these fish protection measures have to be fitted so that this design is 'fish friendly' in accordance with the 2015 hydropower guidance.
- It must be concluded that the planning application is not supported by the necessary supporting information required to understand the ecology impacts that would arise. This is a significant procedural failing.

Without addressing the above and in the absence of further information, we again consider it impossible for the Council to legitimately determine the application and conclude that the revised scheme is in accordance with Policy 5.7 of the London Plan, Policy CP4 of the Core Strategy and Policy DM OS 5 of the DMP. For this reason alone the application should be refused.

Impacts on non aquatic ecology

We note that there is no consideration whatsoever of non aquatic ecology impacts and therefore it cannot be clearly determined whether there would be any impacts, including on protected species. There is also a lack of clear information about the supporting infrastructure for the proposals, which could well lead to ecology impacts.

Visual impacts and impact on heritage assets

The Council is required to work within a strict legislative and policy framework to assess the impact of the application on heritage assets. This is in addition to the Council's statutory duty to determine the application in accordance with section 38(6) of the 2004 Act. This statutory and national policy framework relating to heritage assets includes:

- Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 provides:

“In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses”.

- Section 72 provides that:

“In the exercise, with respect to any buildings or other land in a conservation area, of any functions under or by virtue of any of the provisions mentioned in sub-section (2), special attention shall be

paid to the desirability of preserving or enhancing the character or appearance of that area”.

- Further, paragraph 128 of the National Planning Policy Framework (“the Framework”) sets out that *“local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting”.*
- In accordance with paragraph 129 of the Framework *“local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise”*

A number of the concerns relating to the visual and heritage impacts of the application are summarised below. These concerns again confirm that the Council, in the absence of a full heritage impact assessment from the applicant, does not currently have enough information before them to determine that the application. Any subsequent determination without this information would be fundamentally flawed:

- No heritage impact assessment has been provided by the applicant as required by paragraph 128 of the Framework to assess the impact of the revised scheme on heritage assets.
- Initial studies undertaken on behalf of Lensbury indicate that there is likely to be significant harm caused to both designated and non-designated heritage assets. Please see a note prepared by StephenLevrant: Heritage Architecture Ltd at **Appendix 4.**
- The document titled *“Visual Impact”* purports to be a visual impact assessment but is inadequate to appropriately judge the visual impact of the proposals.
- The applicants have not submitted verified views, nor have they submitted actual photos with the proposals inserted to provide an indication of how the proposal shall be viewed in the context of its surroundings, and from key viewpoints such as the Lensbury. The images provided are merely computer generated images and cannot be relied on as part of a robust analysis of impact.
- What is further misleading is the lack of description of the movement of the sluices and the depiction of the structure in only one position. The applicant has not adequately assessed the effect of this movement on the surrounding heritage assets or their setting, nor have they provided adequate information to understand the movement.
- As explained above in relation to flood risks, the proposed turbines may be raised out of the river for prolonged periods of time which shall inevitably exacerbate visual and heritage impacts. The applicant has failed to provide any explanation in this regard or assessment of the level of harm that may be caused.

Next steps

In consideration of the application’s significant failings detailed above, the Lensbury urges the Council to request that the application be withdrawn and re-submitted in an appropriate form and with a full and accurate assessment of the impacts of the revised scheme. We

would also urge the Council to comply with its requirements under the Regulations and seek to adopt a screening opinion for the application.

At present, we consider that the application cannot be determined without the above concerns being addressed and indeed prior to the determination of the legal proceedings relating to the original underlying consent. For the Council to do so otherwise would be irrational and procedurally flawed.

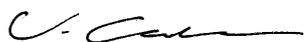
We also expect that the application shall be determined by the Council's Planning Committee rather than by a delegated decision. There has been considerable public interest in the application with 188 objecting comments, 5 observations and 93 supporting comments posted on the Council's website (as of 6 April 2016) – in addition to the severe concerns raised in this letter which must be reserved to planning committee.

In consideration of the above, please confirm:

1. receipt of this letter and appendices;
2. if Council shall continue with the determination of this application; and
3. in the event the Council shall, despite the concerns and failings raised in this letter, proceed with the determination of this application please confirm:
 - a. if the Council shall be undertaking a screening opinion as required under the Regulations ;
 - b. any further information shall be requested from the applicant and the time periods for providing this information and responses by statutory consultees and third parties; and
 - c. if the application shall be referred to planning committee and the likely date of committee.

This shall enable the Lensbury to consider this matter further to include, if necessary, a request for a Screening Direction from the Secretary of State.

Yours sincerely



Vincent Gabbe
For and on behalf of
VRG PLANNING LTD

Encl.

Appendix 1 – Acoustic Report
Appendix 2 – Aquatic Ecology Report
Appendix 3 – Flood Risk Report
Appendix 4 – Heritage Technical Note