7th July 2011

Sue Penaluna
Devon County Council

By Email

Our Ref: 402.00036.00350
Your Ref:

Dear Sue

RE: NEW ENGLAND RESOURCE RECOVERY CENTRE – CLARIFICATION: WET WOODLAND COMPENSATION MEASURES

Further to recent consultation responses from the Environment Agency (1st July 2011) and Natural England (4th July 2011) and recent telephone conversations with Jess Thomasson at the EA and Denise Ramsey at Natural England, SLR is pleased to provide a response to the additional points of clarification you raised.

Losses of Woodland

SLR can confirm that the areas used for calculating woodland losses are based upon the application planning boundary and are therefore considered to be the maximum extent of woodland directly impacted by the proposed development. We have fully considered the indirect effects upon woodland habitats, including fragmentation, disturbance, dust etc. within the updated ES Section 12 although these are not quantified as woodland losses, as (if they were to occur) they are more accurately described as a reduction in woodland quality. Mitigation measures to reduce the effects of dust, disturbance (including lighting), eutrophication are described in the ES.

Effects upon Ancient Woodland

Field surveys indicate that much of the woodland resource that would be directly affected by the proposed development is plantation on ancient woodland (PAWS).

SLR has completed Natural England's checklist for applications affecting ancient woodland:

1) The size of the woodland affected.

The woodland block affected by the proposed scheme is approximately 25ha. It is predicted that up to 1.39 ha of ancient woodland would be lost. The woodland that would be brought under management totals 22.52ha, with 1.1ha restored to broadleaved woodland and with a further 11.37ha of new planting.

2) Will an area of woodland be lost?

It is predicted that up to 1.39 ha of ancient woodland would be lost. This woodland is largely PAWS and the footprint of the losses has been minimised by sensitive road design. No veteran trees would be affected by the proposals. Alternative access routes have been

considered, including an earlier design through the same woodland block and using the existing access to the south of the site. None of the alternatives proposed are considered appropriate.

In compensation for the loss of ancient woodland, the applicant has committed to bringing a larger area of woodland into beneficial management and planting new, much larger connected woodland.

3) Will there be damage to Root Protection Areas of Individual Trees

All trees that are predicted to be affected by the proposed road are highlighted in the bat report (June 2011). None of those trees highlighted in this report have been identified as veteran or of nature conservation significance in their own right.

4) Is the application within an AONB or National Park?

Application is within 3km of South Devon AONB and 4km of Dartmoor NP.

4) Has a survey for protected species been undertaken?

A suite of surveys for protected species have been undertaken between 2008 – 2001 within the woodland habitats of the application site and surrounding areas. These are reported in the ES.

5) Will Connectivity be Damaged?

The application will not affect connectivity of the woodland block to surrounding woodlands, but would lead to fragmentation within the woodland itself. This impact is described in the ES.

6) Has an impact assessment for pollution been conducted and mitigation secured?

Assessment for air quality and water pollution has been conducted and mitigation measures are included within the application.

7) Will access to the woodland increase?

There will be no public access to the site except on pre-arranged meetings or by invitation.

8) What is the function of the land to be lost to development?

With the exception of the access route, the majority of the remaining areas of the development are within previously developed land. The location of the proposed EfW facility is not predicted to have any affects on other woodlands in the vicinity. Losses of other habitat types to development are compensated for to ensure no net loss of scrub and gains in area of grassland habitats.

9) Landscaping include native species of local provenance?

The proposed habitat creation, including woodland planting, will use only locally appropriate native species. Where available, stock will be sourced from nurseries that are accredited suppliers of plants of local provenance.

Compensation for Wet Woodland – Design Details.

Additional information with respect to deliverability of wet woodland compensation has been requested. The attached 1 in 20yr flood map (SLR FRA1) indicates that fluvial flooding in the northern compensation fields is unlikely to occur sufficiently regularly to maintain wet woodland habitats in isolation.

Therefore, through discussions with the EA Biodiversity Officer and SLR hydrologists, the following scheme for delivery of wet woodland habitats has been agreed.

Undertake earthworks in the northern woodland compensation fields and the eastern woodland compensation fields to create more gently sloping land. These locations are marked on the attached annotated plan DWG 12-17.3 (Woodland Mitigation, Compensation and Enhancements). The aim of earthworks will be to both slow overland flows and, in the case of River Yealm riparian corridor, to reduce ground levels sufficiently to allow regular, i.e. 1 in 1 year, flood events, to encroach upon the wet woodland planted areas.

No impacts to existing wet grassland or other habitats of interest have been identified in the selection of these areas for wet woodland creation. It is proposed to remove top soils from these areas, which would be used elsewhere in the landscaping and site restoration works.

The wet woodland compensation areas on the River Yealm have been selected on the inside of river bends where water velocities are lower and erosion would be minimised. Those areas of lowered ground levels in the River Yealm corridor would provide additional flood storage capacity, which is recognised as beneficial.

It is proposed to lower ground levels such that wet woodland creation areas are approximately 0cm-30cm above usual river base flows, creating ideal conditions for growth of species such as alder. Consideration will be given to the creation of structures, e.g. controllable stop-boards, which would allow maintenance staff to artificially control the level at which water flowed into the wet woodland areas.

Construction will be undertaken to minimise release of silt into the watercourses. Coir rolls, biodegradable matting and willow spiling will be used to control erosion throughout the construction of these areas and during vegetation establishment. A combination of willow and coir rolls will be used to reinforce the lowered river banks and matting will be used to reduce release of unvegetated soils from the woodland creation areas.

Top-soils arising from wet woodland areas impacted by the construction of the access road would be translocated to these locations following ground preparations. This would maximise the opportunities for seed bank, soil in-fauna, fungi and other species to be maintained in the translocated soils.

The in-flow and outflow from the River Yealm woodland creation area will be designed to minimise the risk of stranding fish after periods of high flows. In-flows will be controlled by stopboards or reinforced with willow spilings, which will act as an upstream screen to reduce the chances of fish entering. Downstream bank levels will be sufficiently low to allow water to drain away. During soil stripping, care will be taken to minimise compaction and to avoid any leaving any areas where water may pool.

Post-construction is it proposed that quarterly monitoring would be undertaken for the first 2 years, at different river water levels, to allow the design to be tweaked and improved, e.g. reinforcing any areas of potential erosion and altering the level of the weir-lip structure to maintain optimum conditions. Monitoring visits would become at least annual after the first 2 years for the stated aftercare management period.

A sketch of the preliminary design for these areas is also attached.

Further information with respect to engineering details would be produced in advance of any ground works and submitted to the EA for approval for Flood Defence Consent. It is expected that these details would also be submitted to DCC for agreement. If required, it is considered that any further design details for wet woodland creation can be controlled through an appropriately worded planning condition.

It is considered that the information above sufficient to ensure delivery of new wet woodland habitats in the areas proposed. This approach is technically feasible and deliverable in the timescales committed to by the applicant.

Bats – Bat Surveys and Indirect effects upon foraging routes

Additional bat surveys were undertaken by SLR in May 2011, specifically to address concerns over the potential for bat roosts in trees along the access route and other locations within the proposed development footprint. SLR has undertaken surveys, consistent with BCT Good Practice Guidelines, to identify any tree roosts within the survey area. We did not report any limitations to these surveys and are confident that they were sufficient to address the aims of the study. The 2011 surveys are in addition to comprehensive studies reported in the ES, including activity and emergence surveys undertaken monthly between July – September 2008 and May – June 2009.

Some concern over the potential for impacts to foraging routes for all bat species has been raised by Natural England, although is understood that this officer has not had the opportunity to read all the information presented by the applicant in relation to bats.

Information presented in the ES provides clear descriptions of the survey effort, predicted impacts and mitigation measures included to minimize the effects of the proposed development. With specific reference to bat foraging routes, the applicant is committed to the following:

- The access road will be lit for safety purposes and to mark the edge of the carriageway, although all lighting will be low level and directional to minimize impacts upon fauna commuting routes, including bats. There are no proposals for floodlighting or for high level lighting.
- The River Yealm is recognized as a corridor used by foraging bats and the potential for impacts to this corridor has been identified, particularly at the 3 locations where the access road is close to, or crosses, the river. It is proposed to enhance existing scrub and woodland at these pinch points to ensure that habitat connectivity of this corridor is not impacted.
- The bridge is designed as a “viaduct” style crossing, ensuring sufficient space beneath the bridge spans to allow bats to forage un-impeded.

Closure

It is hoped that this additional information is sufficient to inform your decision. Should you require any further information, please do not hesitate to contact me.

Yours sincerely

SLR Consulting Limited

Bob Edmonds
Principal Ecologist

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Sarah Jennings, DCC