

WSCC COUNTY ARBORICULTURIST response to planning consultation

Application reference number: WSCC/007/24

Location: Staplefield Wastewater Treatment Works, Cuckfield Road, Staplefield, West Sussex, RH17 6ES

Proposal: Installation of Integrated Constructed Wetland (ICW) and associated infrastructure at land adjacent to Staplefield Wastewater Treatment Works.

District: Mid Sussex

Date: 29/02/2024

Summary response: Further information required.

Response:

This application proposes the installation of Integrated Constructed Wetland (ICW) and associated infrastructure at land adjacent to Staplefield Wastewater Treatment Works. Temporary and permanent effects to arboricultural features are expected to occur as a result of the installation of permanent infrastructure and associated construction/landscaping activities required. New tree and hedgerow planting are also proposed within landscaping plans.

Tree Preservation:

An Arboricultural Report (ver. B, ref. 639529-MM-N-RPT-0021) has been submitted to support the application, inclusive of an arboricultural impact assessment (AIA), arboricultural method statement (AIA) and tree protection plan (TPP).

The arboricultural report has been read in conjunction with other submitted documents, and whilst in principle the proposal is considered to be feasible on arboricultural grounds, the following considerations need addressing within the Arboricultural Report to enable a planning response without objection:

- The AIA (sec 3) must identify and assess the effects of all impacts to arboricultural features and provide justified tree protection measures to mitigate adverse impacts (which may require addressing within the AMS). The following have been proposed within root protection areas (RPA) of retained trees without assessment of impact: all landscaping works requiring level changes, new/replaced hard surfacing for access tracks, new drainage, temporary access within construction exclusion zones and excavation within RPAs.
- The AMS (sec 4) must:
 - Identify within sec. 4.3, ground protection measures for all trees which may require temporary access within construction exclusion zones are considered appropriate (reflecting sec. 4.2).
 - Identify within sec. 4.3, appropriate ground protection systems to be employed for the expected construction vehicle loads (identified within the CEMP as 8-tonne tracked excavators and 6-tonne dumper trucks);
 - Provide further methodology for the installation of new or replaced surfacing within the RPA of trees.
 - Identify within sec. 4.5, that any additional requirements for pruning work shall require written approval from West Sussex County Council as the planning authority.
- The TPP must:
 - Show the extent and type of ground protection proposed (temporary or permanent), and any additional physical measures, such as tree protection boxes, that will need to be installed to safeguard vulnerable sections of trees and their RPAs where construction activity cannot be fully or permanently excluded.
 - Show where temporary access is to be permitted into a construction exclusion zone, the extent of the set-back of the permanent barrier should be clearly indicated, along with the temporary ground protection measures to be adopted for the duration of the works within the RPA.

Tree Provision:

A Landscape Plan (rev.C02, ref.752214-UAX-ZZ-ZZ-DR-EN-00007) has been submitted proposing numerous specimen and shrub trees, in addition to a new hedgerow to the south of the site.

The Landscape Plan contains planting specifications and a management plan which addresses most landscaping considerations relating to new tree planting. Additional planting specification information is required to ensure appropriate measures are in place for effective planting, this includes:

cross-section planting drawings or descriptive planting techniques appropriate for all stock types; use and specification of supports, guards, or other protective measures required; and, use and specification of mulches or other sundries to aid successful plant establishment.

A full young tree maintenance programme must be included, addressing all maintenance activities required for a minimum of five years post planting which demonstrates independent establishment in the landscape is achievable.

Ground preparation works appropriate for the site conditions should be prescribed to improve soil profiles, unless demonstrated that suitable soil conditions are present, and will be post construction activity (consideration must be made for protection of existing tree roots for such works). Given the current and historic use of the site as agricultural fields on clay, sub-soils are likely to be heavily compacted which may result in poor soil structure restricting root growth of new trees. Soil compaction can also affect soil water status, causing waterlogging during wetter periods and drought conditions during drier periods which may limit root development. Additional construction activity may lead to further compaction unless appropriate ground protection is utilised (not mentioned within the AIA or AMS).

Proposed tree planting should include species more adaptable to waterlogging given their location adjacent the flood mitigation area, such as: *Alnus glutinosa*, *Salix sp.*, *Betula pubescens*, *Rhamnus Frangula*, or *Populus nigra subsp. Betulifolia*. The species proposed as specimen trees are not considered tolerable of such conditions.

There is an opportunity to enhance the hedgerow aligning the northern and eastern boundaries of the site (ref. H3 within the arboricultural report). This could include planting up gaps with diverse species, selecting individual existing trees within the hedge to grow as standard trees, and by providing longer-term management prescriptions to allow the hedge and marginal growth to thicken by reducing mown areas of vegetation directly adjacent the hedgerow. If carried out in advance, this may aid in screening construction activity and permanent site changes visible from Cuckfield Road (B2114) where gaps exist, as demonstrated by viewpoint VP08 of the Landscape Visual Assessment (noting that VP08 does not show a majority of the site which is visible from the roadside).

Further information

Populus nigra subsp. Betulifolia is a native tree at threat of extinction from the UK which thrives on wetland sites. Please see the Sussex Black Poplar Partnership website for further detail, found here- <https://sussexwildlifetrust.org.uk/discover/around-sussex/a-living-wetland-landscape/sussex-black-poplars-partnership>.

Jordan Walker MArborA

County Arboriculturist, Environment & Heritage, Planning Services
West Sussex County Council, Ground Floor, Northleigh, County Hall, Chichester PO19 1RQ