Foul Drainage Note (August 2026)

Wrexham AFC – Colliers Park 1st Team Training Pavilion

Foul Drainage

This note has been prepared in response to the consultation letter issued by NRW, dated 05th August 2026. Within their letter NRW raise queries about the foul drainage design for the above development and request further information in relation to the proposed foul drainage arrangements.

The four key queries listed in their response are as follows:

1. *Clarification on whether the nutrients would be considered existing foul flows and loads, from residents of the same SAC catchment or;*

2. *Clarification on whether the nutrients would be considered existing foul flows and loads, from an existing lawful activity in the same SAC catchment, where that existing use could be permanently retired in a secure manner within a planning or legal agreement (such that it could not be double counted);*

3. *Further details regarding the whether the treatment is to an appropriate level by the proposed private drainage, and that the land capacity is suitable to ensure no additional Phosphorus loading to the nutrient sensitive SAC from those discharges to ground, taking into consideration of other discharges in the vicinity;*

4. *Clarification on the discharge destination – location and whether this is to ground or watercourse.*

Wrexham AFC's response to each query is set out under the relevant subheadings below.

Clarification on Foul Flows

In terms of queries 1 and 2 above, the application simply moves a proportion of foul flow (phosphate-producing) activity from one location in the catchment to another by essentially the same people as follows:

- **Current situation:** Football Club players and staff undertaking 1st Team training currently use Cae Ras and Colliers Park, both of which lie in the same SAC catchment;

- **New Situation:** The same numbers of players and staff will carry out the activities at the same regularity but will this will almost exclusively be at Colliers Park (if any residual training activity takes place at Cae Ras in the future it will

automatically offset any activity that would otherwise have been undertaken at Colliers Park).

This represents a “no nett change” situation that is also reflected in the submitted document “WAFC – Sports Training Pavilion, Colliers Park: Phosphorous Statement, June 2026” and also in parallel (and accepted by WCBC Highways) responses regarding car usage and travel.

Further Information on the Package Treatment Plant (PTP) and Discharge Destination

In terms of query 3 above, Avie Consulting Ltd (on behalf of the Design-and-Build Contractors Modulek) have selected the Tricel Novo submerged aeration plant that considers fixed bed technology.

The PTP comprises a three-stage independent treatment zone. The Tricel wastewater plant selected (Tricel Novo UK50) has been tested to European Certification EN 12566-3. CE certified products are complied with tests and inspections which guarantee a high level of security and efficiency. The product Complies with Environment Agency general binding rules in England, Natural Resources Wales exemption criteria and SEPA requirements.

Avie Consulting Ltd have selected the Tricel Novo UK50 based on the known Population Equivalent (PE) derived from the expected occupancy number and wastewater loading. The PE considered in design was 30 players and 20 number of staff, occupancy numbers provided by Modulek.

The Tricel brochure and supporting information (which is included with this response) demonstrates the treatment efficiencies of:

- BOD_5 11mg/l
- SS 16mg/l
- NH^4-N 8mg/l

These levels fall within normal limits for discharge into water courses (BOD ≤ 20 mg/l, SS ≤ 30 mg/l) but in addition in this case the treated foul flows are intended to discharge to ground via an existing soakaway feature located adjacent the existing 3G football pitch approximately 100m in a northeasterly direction. (see attached Avie Consulting Drawing No. P4920-01 Rev F).

The latter comment also addresses query 4 above.

Cost Benefit Analysis of PTP

Other comments on foul drainage from NRW on foul drainage included queries as to the choice of a PTP system versus a mains connection and the relative cost of both options.

Modulek and Avie Consulting have responded as follows:

As stated on Avie Consulting Drawing No. P4920-01 Rev G a gravity flow connection design to the nearest public sewer could not be achieved. This mirrors the situation for the existing FAW buildings on the Colliers Park site which also consists of a PTP discharging to soakaway towards the SW of the site.

Notwithstanding this, any works involved in connecting to the mains public sewer system would cause unacceptable operational disruption to the ongoing FAW activities at Colliers Park.

The PTP design option route has therefore been adopted for the Wrexham AFC Colliers Park Pavilion.

Outline costings for the two options are estimated by Modulek as follows:

- **Option 1 PTP**
  Supply and installation of Tricel Sewage Treatment Plant [redacted]
- **Option 2 Connection to Mains Sewer**
  Extend foul drainage system to nearest sewer in Chester Rd and statutory sewer connection, including highway works in Chester Road [redacted]