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PROJECT: Barnsley, Wormwell Lane

PROJECT REF: 171007

TITLE: Proposed Drainage Strategy Statement

DATE: 22 November 2017

PREPARED: Tudor Muresanu

Proposed development

The proposed development consists of a new class A1 unit with loading dock on an area of existing car park in the vicinity of an existing Tesco retail store. The loading dock is assumed to ramp down to 1.2 metres below finished floor level.

Existing drainage

Existing drainage design information has been obtained from historical planning applications and has been shown indicatively on the attached drawing. There are no foul connections in the immediate area and the surface water drainage consists of several drainage channels that ultimately discharge via an existing petrol interceptor and attenuation tank.

A detailed CCTV survey will be undertaken prior to the design stage.

Proposed surface water drainage

The proposed arrangement does not entail an increase of impermeable area. As such, the total volume of surface water runoff will not increase. The proposed car park will be drained by means of drainage channels that will connect into the adjacent existing 225mm diameter surface water system. The surface runoff will be treated by the existing petrol interceptor downstream, as per the current scenario. The roof of the structure will be drained utilising traditional rainwater pipes with below ground connections into the existing 300mm diameter drainage system close by. The existing system connects to a Yorkshire Water surface water sewer downstream.

The loading dock surface water is to run through a full petrol interceptor with a potential requirement for a pumped rising main to overcome the level difference, following detailed topographical and CCTV surveys.

Proposed Foul Water Drainage

The proposed class A1 unit will be provided with foul water facilities and as a result the overall discharge rate of the site is expected to increase. Approval from the local water authority will be sought prior to commencing the detailed design.

The unit itself will be served by a drainage pipe running underneath the structure that will pick up the required connections. A drainage channel will also be provided for the loading dock to capture any contaminants, depending on the confirmed use of the class A1 unit. The proposed foul system is to be connected into the existing Yorkshire Water foul sewer further East of the new development. This will potentially require a pumped rising main, following detailed topographical and CCTV surveys.