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Title: Buckmore Farm – Drainage Maintenance Note

Date: 10.09.2018

1.0 Introduction

- 1.1 Jubb Consulting Engineers have been appointed by Gentian Development Group to produce a maintenance strategy for the proposed drainage at the Buckmore Farm development at Petersfield.
- 1.2 This technical note considers the proposed drainage infrastructure to be installed as part of the development and the elements which will remain within the private ownership of the developer. The anticipated maintenance requirements of each element is considered and frequencies of action recommended.

2.0 Drainage Overview

- 2.1 The proposed development will be served by new separate foul and surface water drainage networks.
- 2.2 The foul water drainage will be collected on site and conveyed to a package pumping station at the southern end of the development before pumping south along the public highway to the public Southern Water infrastructure.
- 2.3 Surface Water drainage will be collected from each plot by a gravity network and attenuated prior to discharge to the main network which in turn discharges to the existing stream at the southern boundary of the site. Flow restriction will be via hydrobrake with attenuation provided by below ground cellular tanks and large diameter pipes for the highway.

3.0 Drainage Elements

Gullies

Inspection and removal of debris from silt trap once a year (preferably in the spring after leaf fall in the autumn).

Drainage pipes, manholes & Silt traps

Inspect manholes & silt traps for build-up of silt and general debris (once a year, preferably in the spring after leaf fall in the autumn). If silt/debris is building up then clean with jetting lorry/gully sucker & inspect pipe – same may be required. If the pipes to be jetted are plastic then a high flow, low pressure setting should be used so that the pipes are not damaged. NOTE: Manhole covers can be heavy and suitable lifting equipment/procedures should be used. Personnel should not enter manholes to carry out maintenance.

CCTV surveys should be carried out every 5 years to confirm the structural integrity of pipes and identify any defects.

Hydrobrake

Inspect monthly for the first 3 months following commissioning and 6 monthly thereafter (or more frequently as required), hose down as necessary, remove any rags & silt from invert of chamber and especially around Hydrobrake. If a blockage occurs this can usually be overcome by operating the by-pass door using the rope provided. This will empty the chamber of water down the level of the outlet allowing further maintenance to be carried out if required.

Underground attenuation storage

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This system is designed to be low maintenance. Silt is captured within the up-stream catchpits. The system should incorporate an inspection shaft to allow the tank to be visually inspected annually along with the pipe system. The tank can be jetted as required to clear of any silt build up that bypasses the catchpit.

Reactive Maintenance

If the drainage system is still holding water following cleaning with a jetter, or the jetting of the system removes excessive amounts of debris this may indicate greater issues within the system. A CCTV survey is likely to be required and further advice should be sought from a civil engineer.