FISC, GILES LANE, CANTERBURY

SUMMARY REPORT TO ADDRESS CONDITION 4

OF PLANNING PERMISSION CA/18/02364/FUL

Surface Water Drainage Scheme

The proposed surface water drainage scheme for the proposed student accommodation development at Franciscan International Study Centre consists of soakaway discharge. The scheme as proposed was based upon assumed infiltration rates. Canterbury City Council have commented as follows:-

"*We would expect infiltration testing to have been undertaken at this stage to ensure that the soakways are designed appropriately. Borehole tests from the ground investigation undertaken back in December 2018 have shown variability with the underlying geology at the location of SA2. The borehole log of SA2 contains no evident of the more permeable sandy gravel. Therefore, we would ask for infiltration testing to be undertaken at the proposed soakaway locations and invert levels. In addition, we note that soakaway design calculations provided utilise the M5-60 value of 20.00mm. At the detailed design stage, we would expect to see the drainage system modelled using FeH rainfall data in any appropriate modelling or simulation software. Where FeH data is not available, 26.25mm should be manually input for the M5-60 value, as per the requirements of our latest Drainage and Planning Policy Statement".*

Soakage testing was carried out by Soiltec in July 2019, at three locations, test sites 1, 3 and 5.

Test site 1 soil infiltration rate of 8.63×10^{-6} m/s was achieved

Test site 5 soil infiltration rate of 7.87×10^{-6} m/s was achieved

Test site 3 – no infiltration rate was achieved.

Ground water was encountered at test site locations 3 and 5. However, no groundwater was encountered during the site investigation undertaken in December 2018.

The site investigation undertaken by Soiltec in December 2018 consisted primarily of 3 boreholes. These boreholes revealed gravels over clay at borehole 1, gravels over clay at borehole 3, and clay at borehole 2.

The soakaway positions and sizes have been redesigned. The calculations have been modelled using FSR of 26.25mm and have incorporated 40% climate change.

Block D adjacent to test location 3, where no soil infiltration was received, is not being altered and the existing drainage is therefore to be retained.

Attached are copies of the site investigation report by Soiltec, soakage testing report by Soiltec, drainage drawings 17093-A1-DRN-006-P3, 009-P2, 012-P3, 015-P1, together with associated soakaway calculations.