

2.0 DRAINAGE STRATEGY – BUILDING 5 FDPF

The new Building 5 is to be constructed to the south of existing Building 2, the rear (west) of Building 1. The site area is currently paved with asphalt, laid to falls to gullies connected to the site surface water drainage system. The construction of Building 5 forms part of the remodelling of a wider area of the site extending from the site entrance and security office through to the west side of Building 5. An assessment of this overall development area and the management of surface water run off has been carried out by Caulmert and is summarised on drawing no. 4869-CAU-XX-XX-DR-C-1600.S4-P1.

Run off from Building 5 roof falls to six roof outlets that are collected internally and routed to two internal downpipes that discharge to a new surface water gravity drain parallel to the south elevation of the Building. The drain then outfalls without attenuation or passing through any SuDS elements to the existing site system at a manhole to the south of Building 1. This is consistent with the Drainage Principles set out by Caulmert and described on the drawing referenced above. The proposed drainage layout is set out on drawing number 20382-CIV-DRG-1501-T0.

An existing surface water rising main crosses the site footprint running from a pump chamber at the west side of Building 2 to a discharge point south of Building 2 and then draining by gravity to the existing manhole at the south of Building 1. This main will be diverted around the south of the Building 5 footprint before works commence as shown on drawing 20382-CIV-DRG-1102-T0.

Foul and process waste water will be discharged to the existing site sewage system via an existing manhole and pump chamber that will both be retained within the building footprint, and to a new manhole and drainage connection to the east of Building 5 that drains to an existing manhole to the south. This arrangement is shown on drawings 20382-CIV-DRG-1102-T0 and 20382-CIV-DRG-1501-T0. Wastewater from the process equipment will be treated and conditioned/ cooled in a waste collection tank before being discharged to the foul drainage system.

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