

Dear Victoria,

Following our discussions please see the below notes and new findings. These are a supplement to the site appraisal undertaken in late 2020. I am awaiting the initial drainage layout / levels and will send as soon as I have the final version..

#### Drainage

Despite intensive investigation the full drainage layout could not be found. Where drains were found the trench sizes were very narrow and covered in topsoil. There was some silting of the aggregate. It would appear the drainage was undertaken in 2 phases with the eastern pitch drained to 2/3 of the area at 5-6m centres and the rest at 8m. As a single drainage system this would have been very poor especially without adequate sand dressings annually and the installation or re-installation of secondary drainage such as sand slits or bands.

There would be a risk of solely installing the most cost effective solution of enhanced secondary drainage as it may not perform well, although would improve the surface. However, their installation cost would not be lost even if a new primary system was then installed.

The most effective solution would be to install a new primary solution.

Following our telephone conversation I have had a conversation with EPG, STRI water management specialists, as I had a concern over our conversation over the outfall, and its discharge downstream. There is a risk that the Environment agency may view the new primary drainage as a new installation and require attenuation to retain onsite 140% of the 100 yr flood risk. The primary drains act as part of this and with careful design with larger deeper could allow the water to be attenuated, but in the case a further cell or soakaway or bunding may be required. This could add significantly to the cost. This would need to be discussed with the Environment Agency.

The secondaries would not need such a permission as they would be deemed as maintenance. There could be an argument to install the secondaries and accept the risk they may not drain at a very high rate but the surface would be significantly improved, but without the risk of significant time and cost to get the primaries approved.

#### Spoil

Any drainage would generate a significant spoil that could either be landscaped on site or be removed at high cost.

#### Maintenance

Any of the works would need a full schedule of maintenance, the existing plan has been reviewed and modifications noted and returned as a model for the maintenance required to ensure the drainage has a long life and especially in the case of a secondary solution.

#### Costs

All costs shown are very approximate and would be confirmed via the specification and tender pricing.

#### Primary system

This would need to be installed at 3m centres typically the would cost around £30k per full pitch and £15k for the small. The main and mobilisation would cost around £20k. A complete attenuation system could cost upwards of £50k if needed

#### Secondary system

This typically would be £20k per full sized pitch and around £10k for the smaller one with around £10k for ancillaries.

#### Surface works

There would be need to a significant sand dressing and maintenance this should be budgeted at around £20k.

#### Next Stages

Agree the route of Secondaries (on reflection the least potentially problematic) or a new primary system.

Consult with Environment Agency as required on need for attenuation and at what level.

Agree and develop specification

Tender works

Install

We would be happy to undertake a teams or zoom call to discuss the above as needed.

