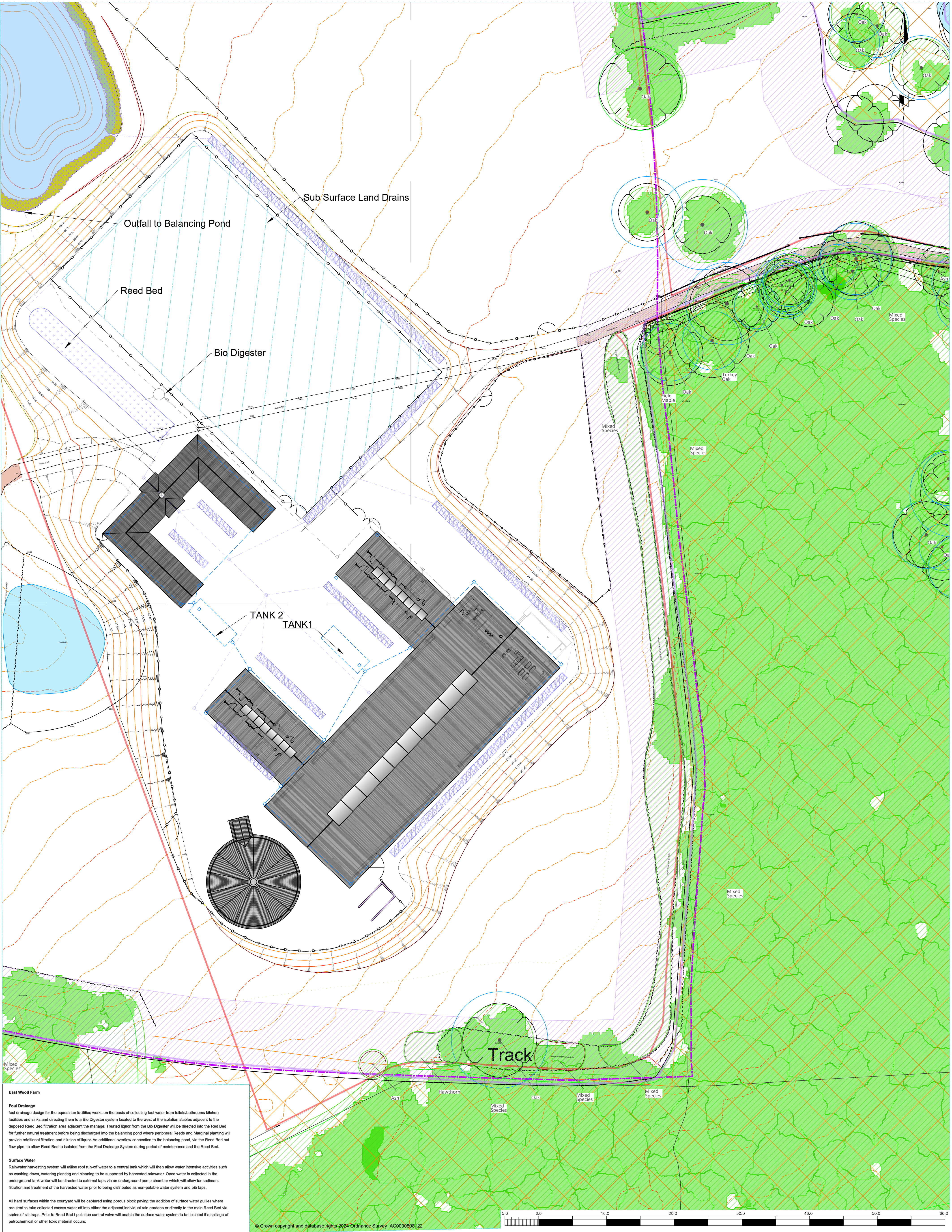




East Wood Farm

Foul Drainage

Foul drainage design for the equestrian facilities works on the basis of collecting foul water from toilets/bathrooms kitchen facilities and sinks and directing them to a Bio Digester system located to the west of the isolation stables adjacent to the deposited Reed Bed filtration area adjacent the manure. Treated liquor from the Bio Digester will be directed into the Reed Bed for further natural filtration before being discharged into the balancing pond where peripheral Reeds and Marginal planting will provide additional filtration and dilution of liquor. An additional overflow connection to the balancing pond, via the Reed Bed out flow pipe, to allow Reed Bed to isolated from the Foul Drainage System during period of maintenance and the Reed Bed.

Surface Water

Rainwater harvesting system will utilise roof run-off water to a central tank which will then allow water intensive activities such as washing down, watering planting and cleaning to be supported by harvested rainwater. Once water is collected in the underground tank water will be directed to external taps via an underground pump chamber which will allow for sediment filtration and treatment of the harvested water prior to being distributed as non-potable water system and bib taps.

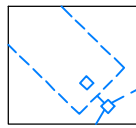
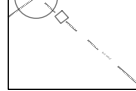
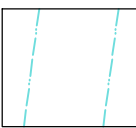
All hard surfaces within the courtyard will be captured using porous block paving the addition of surface water gullies where required to take collected excess water off into either the adjacent individual rain gardens or directly to the main Reed Bed via series of silt traps. Prior to Reed Bed pollution control valve will enable the surface water system to be isolated if a spillage of petrochemical or other toxic material occurs.

Rain gardens are strategically located adjacent to hard surfacing and the periphery of the manure thereby directly intercepting any surface and subsurface run-off and controlling its flow and eventual discharge into the balancing pond and its peripheral Reed Bed. The planting within the Rain Gardens will provide some attenuation and filtering of the water flows.

System is provided to ensure that the current Green Field run-off rates are not exceeded which have been estimated using the HR Wallingford Runoff tool:

Greenfield runoff rates		Drainfall
24hr (mm)		10.68
1 in 1 year (mm)		11.66
1 in 10 years (mm)		31.01
1 in 100 years (mm)		43.01
1 in 1000 years (mm)		60.43

Discharge from the balancing pond will be through a flow control device such as a Hydro Break to control peak flow rate discharge into the existing northern pond. This pond is directly linked to the adjacent larger Fishing Pond on the adjoining land with its outfall running northwards via a tributary of the River Adur.

-  Rain Water Harvesting & Storage System
-  Surface & Sub Surface Drainage System
-  Foul Drainage Leading to Bio-Digester
-  Manure Land Drainage Linked into Rain Garden



FLA
FURSE LANDSCAPE ARCHITECTS LTD
Web: www.furse.net | Email: info@furse.net

Southampton Office:
Magnolia House
No 6 Old Crickmore Close Marchwood
Southampton Hampshire SO40 4SE
Tel: 02380 669 833

Horsham Office:
2nd Floor, Alton Building
Working Road, Horsham West Sussex
RH12 1TS
Tel: 01403 891 980

Copyright FURSE LANDSCAPE ARCHITECTS LTD Chartered Landscape Architects 2024

no.	revision	date	by	check
1				
status	PLANNING			
project	Eastwood Farm			
client	MR & MRS T COLLUM			
planning	South Planning			
drawn by	Gould Baxter			
date	05/01/25			
sheet no.	FLA-EAS-LS-008			