



BRIGHT PLAN CIVILS

Project No: D1990
Project Name: Lidsey Road, Woodgate
Sheet No: 1

GEOCELLULAR STORAGE TANK HYDROSTATIC UPLIFT ANALYSIS FOR SOFT GROUND

Level Data:

Ground Level = 8.42 m
Depth to Groundwater = 0.31 m
Invert of Tank = 7.45 m
Top Level of Tank = 7.85 m

Depth of Penetration
in groundwater = 0.66 m

Hydrostatic Uplift 6.60 kN/m²
Factor of Safety = 1.2

Min' downward force required = 7.92 kN/m²

Height of Tank = 400 mm
TOTAL = 400 mm

Thickness of surfacing above Tank:
Soil = 150 mm
Clay = 300 mm
TOTAL = 450 mm

Densities:		
Top Soil =	15.7	kN/m ³
Clay =	22	kN/m ³

Weight of Topsoil = 2.36 kN/m²
Weight of Clay = 6.60 kN/m²

Downward force of layers over liner= 8.96 kN/m²

Make-up over TANK OK