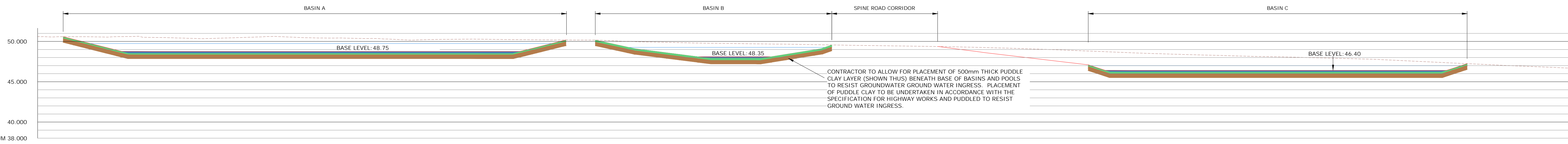
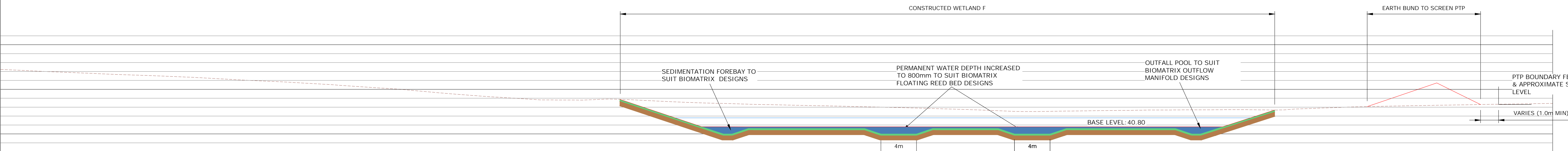


DO NOT SCALE



CHAINAGE	0.000	10.000	20.000	30.000	40.000	50.000	60.000	70.000	80.000	90.000	100.000	110.000	120.000	130.000	140.000	150.000	160.000	170.000	180.000	190.000
EXISTING GROUND LEVEL	50.592	50.592	50.352	50.596	50.372	50.250	50.218	50.151	49.847	49.690	49.541	49.395	49.183	48.830	48.457	48.176	47.946	47.603	47.140	46.708
FINAL PROPOSED GROUND LEVEL	50.592	48.875	48.750	48.750	48.750	48.750	48.774	50.022	48.370	48.100	49.541	49.395	48.346	47.170	46.400	46.400	46.400	46.400	47.140	46.708



180.000	190.000	200.000	210.000	220.000	230.000	240.000	250.000	260.000	270.000	280.000	290.000	300.000	310.000	320.000	330.000	340.000	350.000	352.404
47.140	46.708	46.324	45.817	45.190	44.389	43.807	43.772	43.400	43.161	42.924	42.604	42.587	42.688	42.690	43.026	43.222	43.385	43.424
47.140	46.708	46.324	45.817	45.190	44.389	43.807	43.059	40.800	40.800	40.800	40.800	40.800	40.800	42.299	43.026	45.404	43.385	43.424

REV	DATE	DESCRIPTION	DRAWN	CHKD
B	18.02.22	UPDATED TO SUIT REVISED DESIGN OF CONSTRUCTED WETLANDS. PUDDLE CLAY SPECIFICATION ADDED. TITLE & SCALE AMENDED	KRT	JJT
A	08.10.21	UPDATED SITELAYOUT ADDED, EXTENT OF TREATMENT REMOVED PENDING DESIGN BY BIOMATRIX AND GABION BASKET ADDED TO SUIT REALIGNED PTP BOUNDARY LEVELS	KRT	JJT

**REVISIONS**  
 This drawing is to be read in conjunction with all other Engineer's drawings and all other project information. Any discrepancy between the Engineer's drawings and other project information is to be reported to the Engineer immediately.



Project  
**BROAD OAK FARM**  
**STURRY**  
**CANTERBURY**

Title  
**SECTIONS THROUGH SURFACE**  
**WATER BASINS AND**  
**CONSTRUCTED WETLANDS**

Client  
**DAVID WILSON HOMES**  
 WHERE QUALITY LIVES

**Richard Jackson Engineering Consultants**

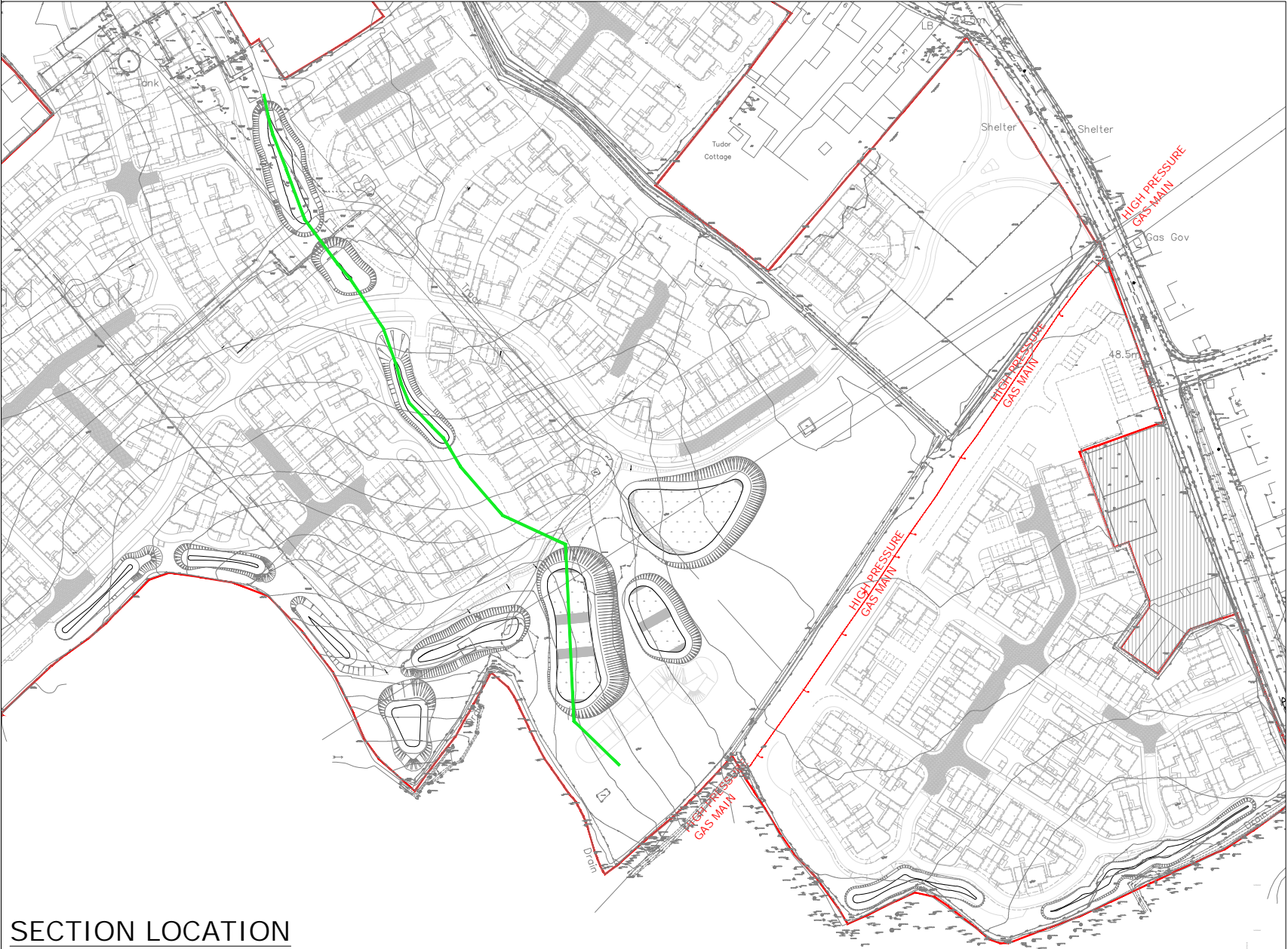
847 The Crescent, Colchester, Essex CO4 9YQ  
 Unit 06/130, 6th Floor, 1 St. Katherine's Way, London, E1W 1UN  
 5 Quorn House, Mill Court, Great Shelford, Cambs CB22 5LD  
 4 The Old Church, St. Matthews Road, Norwich, Norfolk NR1 1SP  
 The Wheelhouse, Bonds Mill, Stonehouse, Gloucestershire GL10 3BF

Scale: 1:250 @ A1  
 Project Manager: K. TOSH  
 Status: D2  
 Discipline: CIV  
 Phase: X  
 Client: BDW  
 Number: 4180  
 Revision: B

Drawn: KRT  
 Checked: JJT  
 Approved: KRT  
 For Tender

Date: JULY 2021  
 Approved: KRT  
 RJK Project No: 61109

Website: <http://www.rj.co.uk>



SECTION LOCATION  
 SCALE: 1:2500

NOTE: REFER TO DRAINAGE GENERAL ARRANGEMENT AND LONG SECTION DRAWINGS FOR DETAILS OF ALL PIPE WORK AND MANHOLES, ETC. WHICH HAVE BEEN OMITTED FROM THIS DRAWING

KEY	
	PROPOSED FINISHED GROUND PROFILE (BASE LEVEL GIVEN IS THE BOTTOM OF THE DESIGNED SURFACE WATER ATTENUATION STORAGE)
	EXISTING GROUND PROFILE
	DESIGN WATER LEVEL FOR 1:100 YEAR + 40% DESIGN RAINFALL EVENT
	0.2m DEPTH OF PERMANENT WATER WITH LEVEL CONTROL TO SUIT BIOMATRIX TREATMENT DESIGNS
	0.2m THICK PLANTING SUBSTRATE (BY OTHERS)
	0.5m THICK PUDDLE CLAY TO RESIST GROUND WATER INGRESS

**PUDDLE CLAY SPECIFICATION**

- General  
 Material to be used as puddle clay shall be naturally occurring homogeneous plastic material. It shall be free from deleterious matter such as sand, stones and organic material. The use of lime-stabilised clays shall not be allowed.
- Properties
  - More than 65% of the natural material shall be finer than 0.06mm and more than 40% shall be finer than 0.002mm
  - The natural material shall be defined as firm clay in accordance with BS5930:1981 Table 8 (Cu 40-75 kPa).
  - The natural material shall be defined as clay of intermediate to extremely high plasticity in accordance with BS5930:1981, figure 31 and the liquid limit shall not be less than 35%.
  - The coefficient of permeability (k) of the remoulded material shall not be greater than 10<sup>-9</sup> m/s.
  - The remoulded material shall be defined as Non-dispersive (ND1) in accordance with BS1377:Part 5:1990, Table 2.
- Identification  
 An indication of a material's suitability may be obtained from the following empirical tests, at the moisture content agreed for placement.
  - Tenacity Test  
 A 300mm long, 25mm diameter cylinder of clay is held vertically for 15 seconds so that at least 200mm is unsupported and in tension under its weight. If the cylinder breaks the clay will be rejected as unsuitable.
  - Pinch Test  
 A 75mm diameter ball of remoulded clay is squeezed into a 25mm thick flat disc. If any cracks appear the clay may be rejected as unsuitable.
  - Slaking Test  
 A 50mm diameter ball of remoulded clay is placed in a 600ml beaker and covered with water. If the ball disintegrates within 24 hours the clay may be rejected as unsuitable.
  - Permeability Test  
 A sample of remoulded clay shall be formed into a tray to hold 20 litres of water and the loss measured after 24 hours. This shall be compared with the water loss from a metal tray of the same surface area holding the same quantity of water. If the difference is greater than 1% the clay may be rejected.