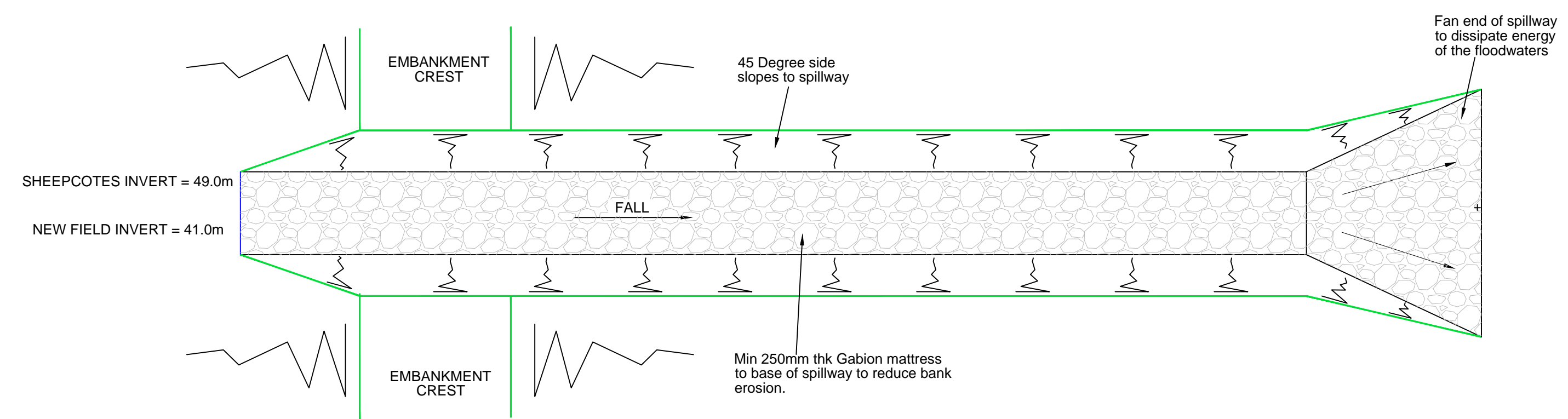


CROSS-SECTION THROUGH SPILLWAY TO NORTHERN BANK OF SHEEPCOTES LAGOON (1:500)



PLAN ON SPILLWAY TYPICAL DETAIL FOR NEW FIELD AND SHEEPCOTES LAGOON (1:500)

**SPECIFICATION FOR PLACEMENT OF ENGINEERED LOWESTOFT TILL TO FORM EMBANKMENTS**

Material shall be placed in accordance with Volume 1 of the Specification for Highway Works, Section 612 Method Compaction, as published by The Department of Transport. On compaction, fill shall be in accordance with the requirements of SLR's Design and Stability Assessment Report, version 3, October 2015.

Prior to commencing general filling, the contractor shall submit a method statement detailing the plant and compaction techniques he proposes to use.

Prior to compaction each discrete (loose) lift will be visually inspected by the Contractor and all unsuitable material will be removed.

Haulage of suitable materials to the areas of placement shall only proceed when sufficient spreading and compaction plant is operating at the place of deposition. There shall be minimum delay between placement and compaction.

If material to be placed is in or attains a condition (e.g. as a result of inclement weather), such that it cannot be placed or compacted in compliance with the specification then one of the following courses of action shall be undertaken:

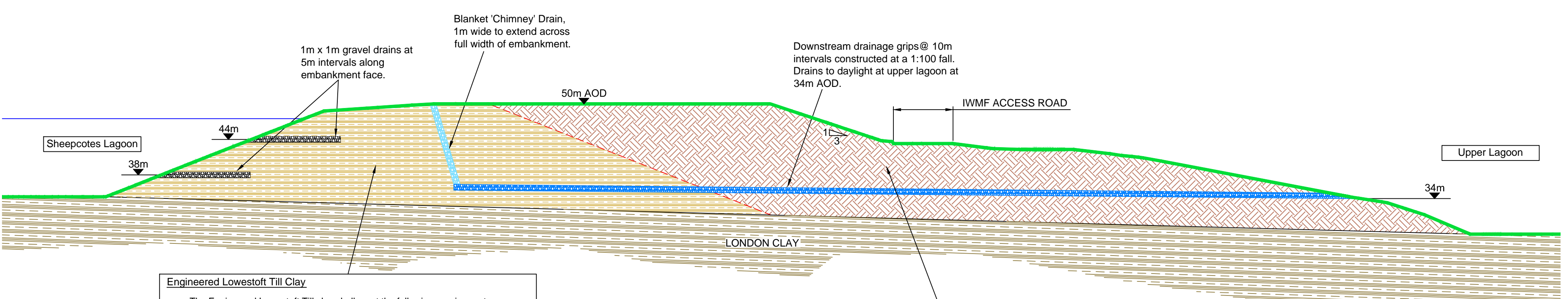
- the affected material shall be removed and discarded and/ or stored until it attains a suitable condition; or
- the material shall be treated by wetting or being allowed to dry as appropriate.

On completion of compaction of the fill material, the material will be tested using a hand shear vane. The frequency of the testing shall be one test per 200m<sup>3</sup> of placed material. The compacted material will be required to achieve a minimum shear strength in accordance with SLR's Design and Stability Assessment Report. For any materials not achieving a suitable shear strength the following courses of action shall be undertaken:

- the affected material shall be removed and discarded; or
- the material shall be reworked and retested as appropriate.

No earthmoving or other plant which could damage the compacted material shall be allowed onto the surface of the material following satisfactory compaction.

**NOTE:**  
Drainage designed according to "Chapter 26, Part 633, National Engineering Handbook"



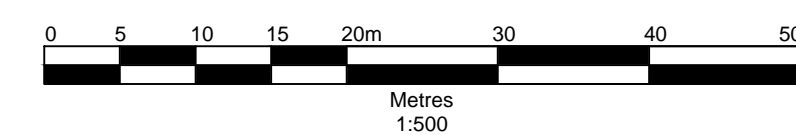
**Engineered Lowestoft Till Clay**

- The Engineered Lowestoft Till clay shall meet the following requirements:
  - An engineered low permeability clay with Unit weight - 19 kN/m<sup>3</sup>.
  - Effective Cohesion C' = Average - 32 kPa, Lower bound - 20 kPa.
  - Angle of Shearing Resistance  $\phi'$  = Average - 17°, Lower bound - 17°
  - Saturated Water Content - 27%
  - Permeability < 1 x 10<sup>-8</sup> m s<sup>-1</sup> (BS1377: 1990: Part 6)

**Back cast Lowestoft Till**

- The back cast Lowestoft Till shall meet the following requirements:
  - A lower spec engineered low permeability clay with Unit weight - 19 kN/m<sup>3</sup>.
  - Effective Cohesion C' = Average - 10 kPa
  - Angle of Shearing Resistance  $\phi'$  = 17°
  - Saturated Water Content - 27%
  - Permeability < 1 x 10<sup>-8</sup> m s<sup>-1</sup> (BS1377: 1990: Part 6)

CROSS-SECTION THROUGH EASTERN EMBANKMENT OF SHEEPCOTES LAGOON (1:500)



**LEGEND**

RESTORATION PROFILE / GROUND PROFILE

Revision	By	CHK'd By	Date	Comments
1	IMR	GR	July 16	Notes Amended
0	IMR	DP	July 16	Draft (Detail from dag 012, Rev 4)

Gent Fairhead & Co. Ltd.

**SLR** TREEWOOD HOUSE  
ROWDEN LANE  
BRADFORD-ON-AVON  
WILTS. BA15 2AU  
T: 01225 309400  
F: 01225 309401  
www.slrconsulting.com

Site	RIVENHALL AIRFIELD
Project	River Blackwater Abstraction
Drawing Title	<b>INDICATIVE LAGOON EMBANKMENT AND SPILLWAY DESIGN</b>
Scale	AS SHOWN
Date	JULY 2016
Drawing Number	112
Revision	1
DRAFT	