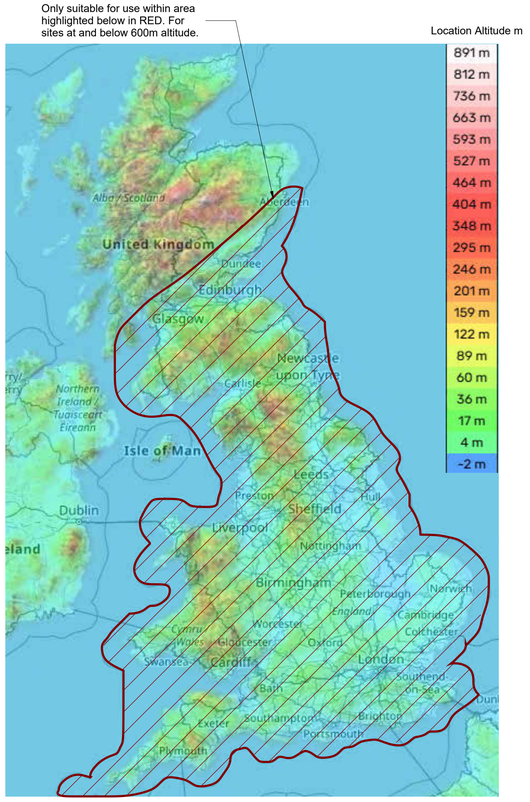
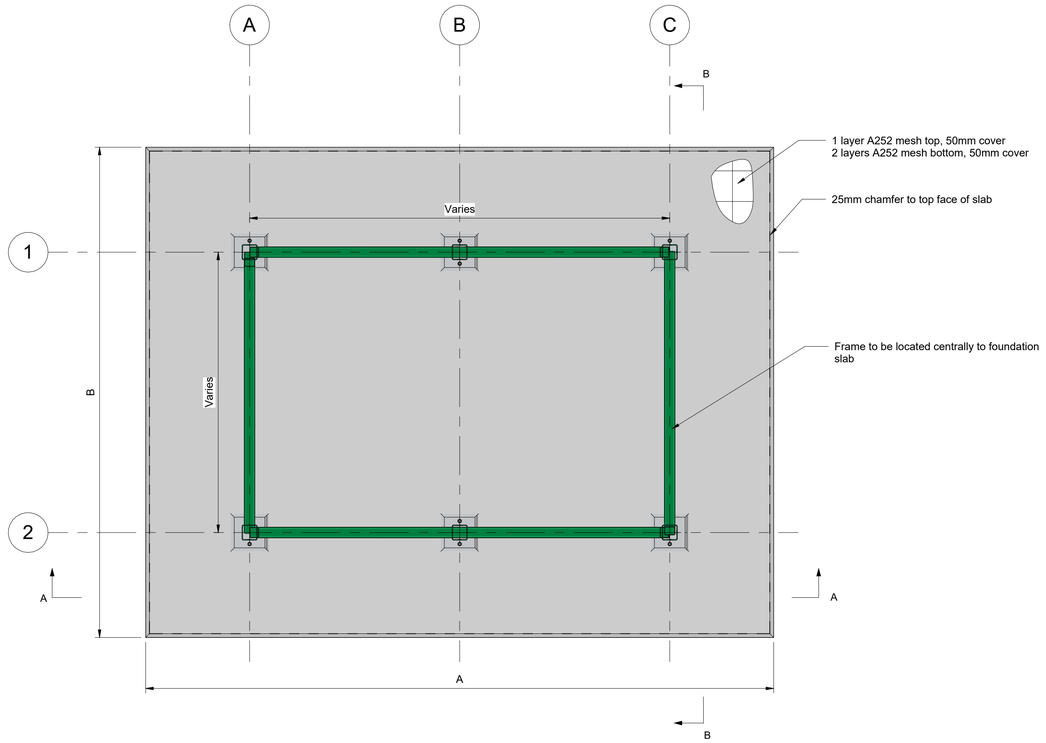


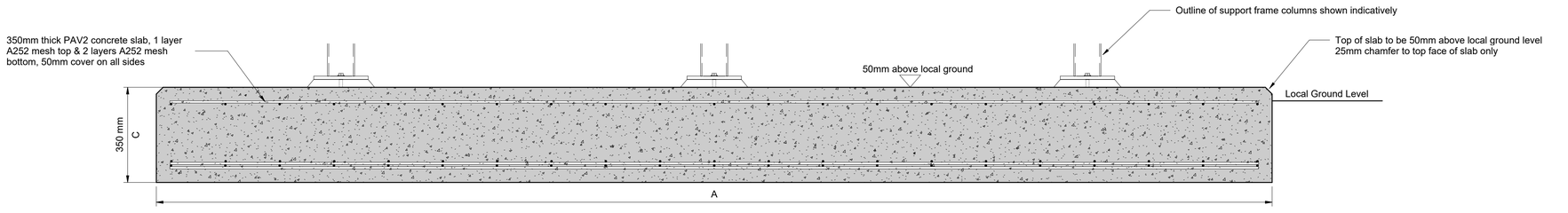
Designated Tank Usable Area

Scale: 1 : NTS



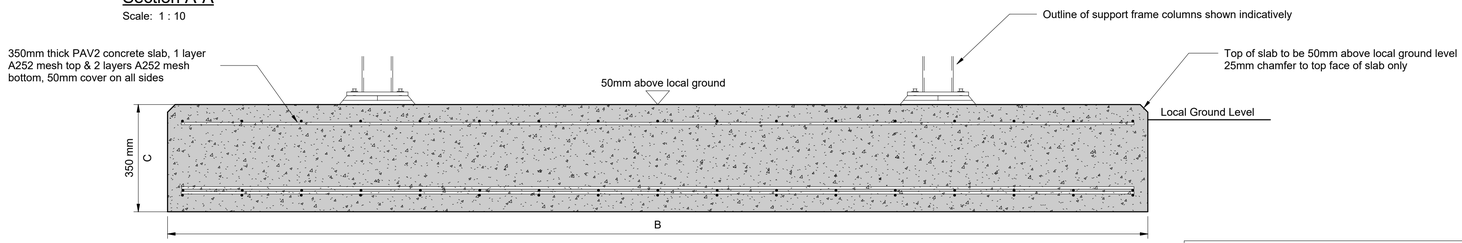
Tank Foundation GA and RC Plan

Scale: 1 : 20



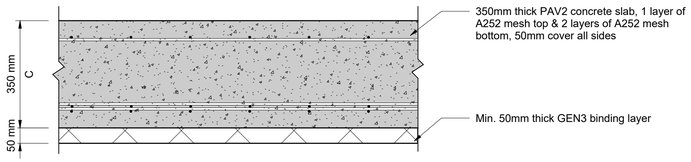
Section A-A

Scale: 1 : 10



Section B-B

Scale: 1 : 10



Slab Foundation Typical Detail

Scale: 1 : 10

Tank Foundation Details

Tank Size T	Length mm A	Width mm B	Depth mm C
12 T	4200	3300	350
20 T	4000	4000	350
24 T	4200	3700	350
30 T	5200	4000	350
32 T	5800	4000	350
35 T	5600	4100	375
40 T	6200	4100	375

Granular Soil Classification

Description	Safe Bearing Capacity (kN/m2)	Notes
Loose sand	50-100	Small resistance to shoveling
Medium dense sand	100-300	Hand pick - Resistance to shoveling
Compact sand	>300	Hand pick - Resistance to shoveling
Loose gravel and sandy gravel	<200	Small resistance to shoveling
Medium dense gravel and sandy gravel	200-600	Hand pick - Resistance to shoveling
Compact gravel and sandy gravel	>600	Requires pneumatic tools for excavation

Cohesive Soil Classification

Description	Safe Bearing Capacity (kN/m2)	Notes
Soft clays and silts	50-75	Easily moulded with firm finger pressure
Firm clays	75-150	Can be moulded with firm finger pressure
Stiff clays	150-300	Can't be moulded by hand but can be indented by thumb
Very stiff and hard clays	300-600	requires a pneumatic spade for excavation but can be indented by thumb

0m 0.4m 0.8m 1.2m 1.6m 2m

SCALE 1:20 @ A1

ARTHUR

QUALITY DOCUMENT QD001

info@arthurcs.com

GENERAL NOTES

1. This drawing is to be read in conjunction with all other relevant documents relating to the project.
2 All dimensions noted are in millimetres unless stated otherwise.
3 All levels to be above Ordnance Survey Datum defined levels (A.O.Dm) unless noted otherwise.
4. This document has been created in accordance with Arthur Consultancy Services (ACS) Terms & Conditions along with the scope of works provided by the client to ACS. Any use of this document other than for its original purpose is prohibited, ACS accept no liability for any third party uses of this document.
5. Arthur Consultancy Services Ltd. to be immediately notified of any suspected omissions or discrepancies.
6. If scaling from this drawing use the scale bar provided as a check, if dimensions are not clear ask.
7. Drawing to be read in conjunction with provided Fabrication drawings by Stuart Ross on the 18th of October 2024.
8. Drawing to be read in conjunction with Arthur Consultancy Services Design Calculations Report D2618-ACS-XX-XX-CA-S-0001 & Tank Support Frame Details dwg. D2618-ACS-XX-XX-DR-X-0001

REINFORCED CONCRETE NOTES

1. Insitu Concrete to be PAV2 with max w/c ratio 0.45, 330kg/m³ cement/combination content (III-A), with 20mm max. aggregate, chloride content class 0.4cl and minimum slump of class S3 (90mm Slump).
2. Insitu Concrete to be in accordance with BS EN 1992-1 and BS EN 206-1 and the NSCS.
3. Reinforcement to be Grade H 500N/mm² High Yield, Deformed Type 2 Bar detailed in accordance with BS 4449 and BS 8666.
5. Slab to have Chamfered Edges and Float finish class U2, sides to be timber shuttered finish class F2 in accordance with SFHW Series 1700 with ± 10mm level and max. 5mm deviation under 3m straight edge.
6. Slab nominal thickness as noted on drawing. Minimum 50mm cover to all faces (bottom, sides and top).

FOUNDATION NOTES

1. Designed to min. GBP value of 50kN/m². Client to confirm on site with site investigation prior to consstruction of foundations.
2. Any soft spots or deleterious material is to be removed & taken down to virgin ground level & replaced with compact DfT Type 1 or suitable engineering material.
3. Overdig to be made up in 150mm layers compacted DfT Type 1 or lean mix concrete
4. Foundation designed for tank capacities provided by ED&F Man only. (Document ref. Bulk Molasses Tank Outlet Set-Up & Use and J5674- Rev. 0 - Support Frame and Pad Base Foundations)

HEALTH, SAFETY & ENVIRONMENT INFORMATION:
Notes below are additional hazards/risks normally associated with this type of work.

CONSTRUCTION:
CI. Bearing pressure is limited to a minimum of 50 kN/m2, soil that can be moulded with firm finger pressure. Ensure ground conditions are verified before construction. If weaker soil is encountered, additional foundation strengthening or ground improvement may be required.

OPERATION:
Oi. Ensure adequate drainage around the base to prevent water accumulation, which could affect stability.

MAINTENANCE:
Mi.

DEMOLITION:
Di.

These notes are based on the use of experienced & competent contractors carrying out the works, using approved & safe methods.

The temporary works coordinator (or other suitable competent person) is responsible for the implementation of these works on site and notifying the designer of any changes.

Rev	Date	Description	By
C01	22-04-25	Issued for Construction	SNJ
P01	10-04-25	First Issue	SNJ

FOR CONSTRUCTION

ARTHUR

Project

Farm Molasses Tank
ED&F Man Commodities

Title

Tank Foundation Details

Client

ED&F Man

Drawn By	Rev By	Checked By	Scale @ A1	Project No.
SNJ		NPR	As indicated	D2618

Drawing No. D2618-ACS-XX-XX-DR-C-0002 | Rev C01