

# Equestrian Arena, Manège (Ménage\*) Construction

## SUDS Compliant Affordable Drainage

Drainnovation® offers an innovative, affordable and sustainable solution to the drainage of equestrian arenas, manèges (ménages). The DRAINTUBE drainage scheme requires no gravel, no geotextile, no soakaway and satisfies local planning SUDS (Sustainable Urban Drainage Scheme) requirements.

It can be installed on a new construction or retro-fitted to an existing poorly, drainage arena.

Yes, you read that right; no gravel, no geotextile and no soakaway.

DRAINTUBE is a patented, capillary and siphonic drainage system. A full description of how the product works is on our website <https://www.drainnovation.net/how-does-it-work/>

DRAINTUBES are installed vertically in a 3–5m triangular grid pattern to a depth of 4–10m depending on ground conditions. The gravity head of water in the capillaries pushes the water into the soil deep below the arena. The downward flow of water in the capillaries creates a siphonic suction force, which draws water out of the working surface faster than it would do by natural drainage. This creates a virtuous cycle of gravity head pushing water into deep soil which drives the siphonic action of the DRAINTUBE that draws water out of the working surface.

### Sustainable Urban Drainage Scheme (SUDS)

To gain planning permission for a new arena, will require the submission of a SUDS to the local planning office. Dealing with the drainage water at source, rather than discharging into ditch, stream or sewer is always a higher priority for the planning office. Ordinarily, you would be required to discharge the water into a soakaway or attenuation pond. This takes up space and has a construction cost. The vertical DRAINTUBE drainage scheme discharges the water to the sub-soil underneath the arena, thus it uses the soil below the arena as the soakaway. This deals with the drainage water at source and means there is no run-off from the area, satisfying the planners' SUDS objectives.

Drainnovation can undertake a site investigation and submit a SUDS plan for submission with your planning application.

Benefits of DRAINTUBE vertical drainage;

- No gravel/stone required
- No geotextile
- No soakaway or attenuation pond
- SUDS compliant
- Can be retro-fitted as remedial drainage to an existing arena

A typical layout plan is available to view on the next page For more information or to request a site visit investigation, SUDS plan, detailed design and quotation contact; Giles Wardle. [admin@drainnovation.net](mailto:admin@drainnovation.net)

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*\* The correct term is manège, however ménage is commonly (although incorrectly) used.*

Customer: Drainnovation®

Project: Equestrian Arena Drainage

Drawing Title: SUDS Compliant Vertical Drainage

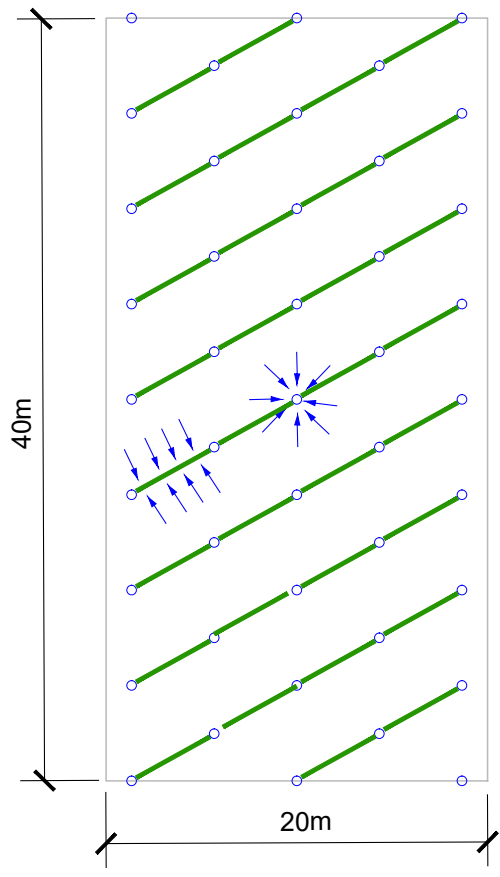
Drawn By: GW Date: 12.11.22 Scale: NTS Drawing No: ED\_V Rev No: A

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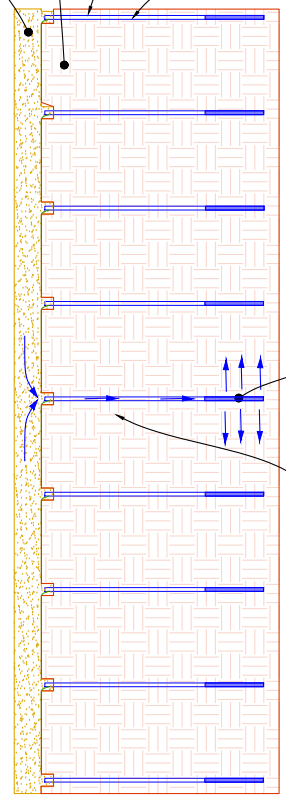
This is a typical layout only. Contact Drainnovation for a site survey and detailed plan tailored to your site and ground conditions.

### Layout Plan



- Vertical Draintubes in 3-5m triangular grid to depth of 4-10m dependent on ground conditions. Installation by hand auger or percussion/rotary drill according to depth and ground conditions
- Horizontal Drainbelt laid on sub-soil

### Cross Section



Downward flow in Draintube capillaries creates siphonic suction, drawing water out of the working surface

No gravel, no geotextile and no soakaway required.