

Hayling Pump Track

This document is to provide a design concept and information for our tender response

DESIGN CONCPET - v.2.1



CONTENTS:

p.1	Cover Page
p.2-5	Aerial views of location map
p.6 - 9	Overviews of Track Concept
p.10	Pump Track Features
p.11-12	About Pump Track features
p.13	Track Concept Dimensions
p.14	Drainage Layout & Section View
p.15	Track Construction / Section View
p.16	Proposed Design & Engagement
p.17	Warranty & Maintenance
p.18-19	Quality Control
p.20	Sustainability
p.21-22	Social Value
p.23	Added Value
P.24	Gant Charty
p.25-27	Proposed Methods
p.28-30	References from similar projects



LOCATION - MAP VIEW

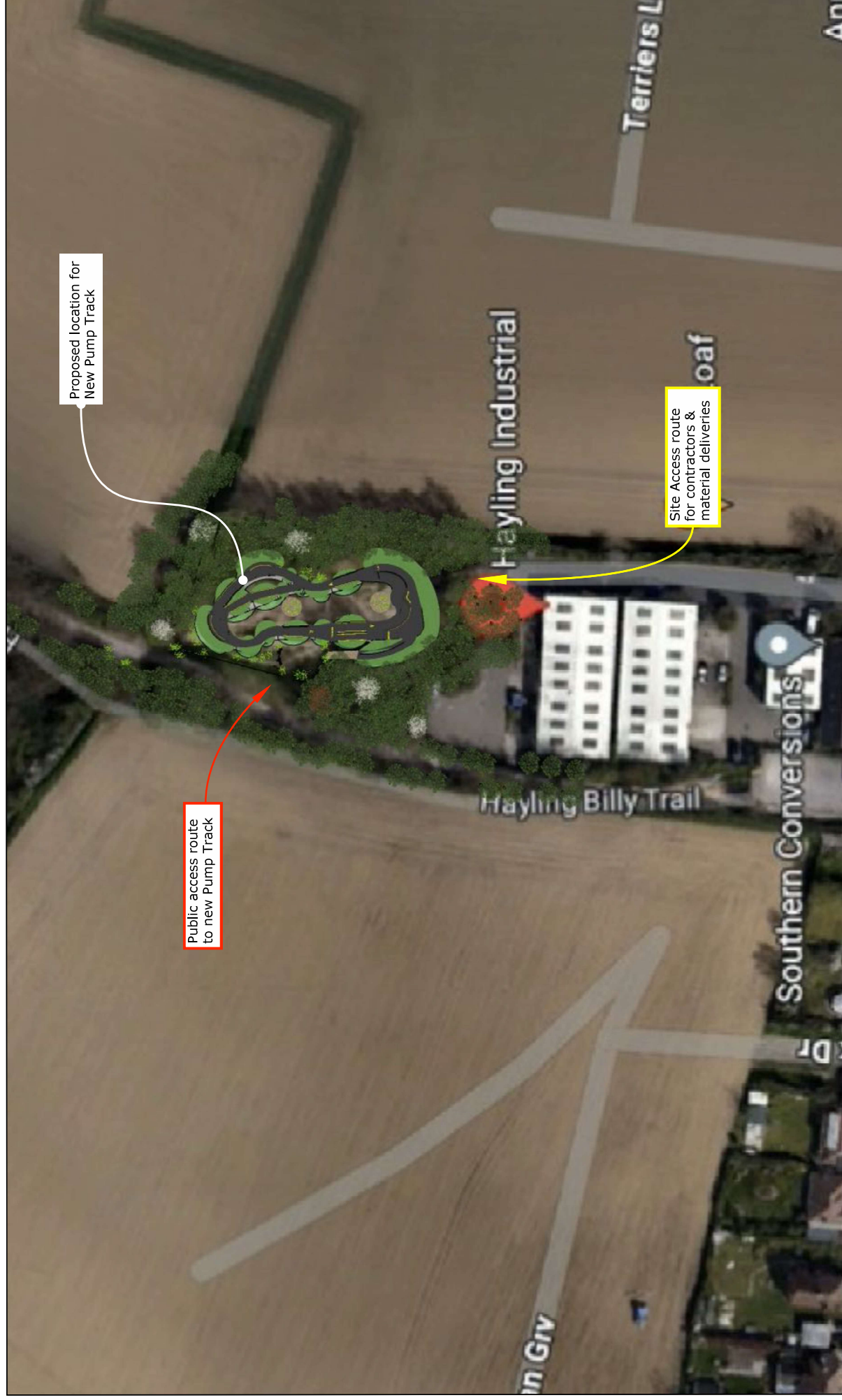
LOCATED: Hayling Island, PO11 0ED



LOCATION - MAP VIEW

DESIGN CONCPET - v.2.1

LOCATED: Hayling Island, PO11 0ED



Hayling Pump Track

DESIGN CONCPET - v.2.1

LOCATION - MAP VIEW

LOCATED: Hayling Island, PO11 0ED



Hayling Pump Track

DESIGN CONCPET - v.2.1

PROPOSED CONCEPT







Track Length: ~ 172 m
Tarmac Area: ~ 355 sq.m
Access Path Area ~ 49 sq.m
Approximate Total Area: ~ 980 sq.m

After conducting a site visit and analysis, we have designed a tarmac surfaced Mini Wheels Track specifically tailored to meet the requirements of the Epsom community.

This design primarily caters to children and novice riders, ensuring that the track features are low level and user-friendly for first-time users.

We have incorporated designated areas on the track to accommodate balance bikes, providing ample space and flat area for optimal balance practice. Additionally, we have included areas where parents can stand and assist younger children as they navigate the track.

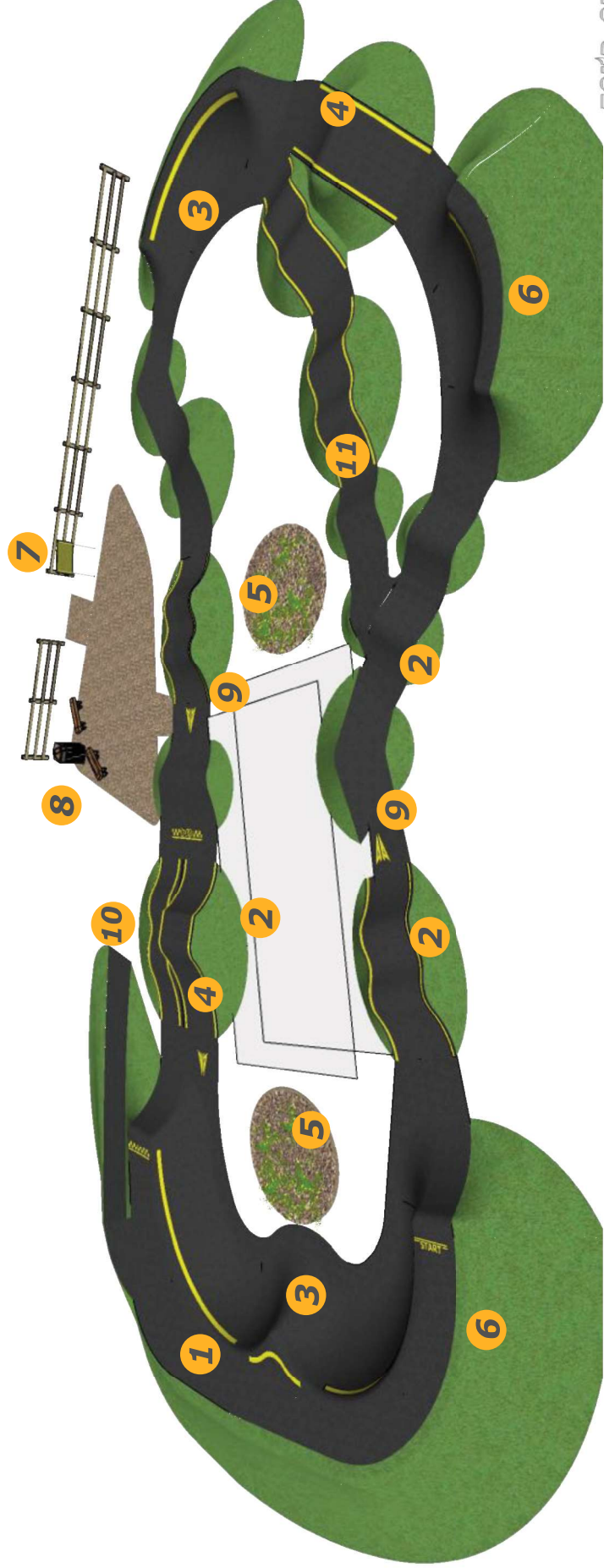
To ensure long-term usability and minimal maintenance, we have opted to surface the track with our bespoke tarmac mix. This choice not only allows for year-round usage but also provides an exceptionally smooth finish, enabling accessibility for various small wheels such as scooters and skateboards.

For a more comprehensive understanding of this design and additional information regarding our pump tracks, please refer to the accompanying document.



Pump Track Features

1. Raised Start / Finish Spaces - Defined by Track markings. User space for rest and social area
2. Rollers Single / Double / Triple - used to keep speed by rolling or pumping so no peddling or pushing is required perfect for beginner and advanced use
3. Banked turns / Berms - Including Double Berm, used for change of direction, the banked profile helps keep the users's momentum
4. Table Top Jumps - these can be rode over by younger users or jumped over for more experienced users
5. French Drains - Ensures rain waters can escape the track and avoid flooding
6. Grass Bunds - Used to blend from the track surface down to the existing landscape
7. Signage – user guidance on how to use the Pump Track safely & emergency contact details.
8. Optional - Waste Bins & Optional bench seating, style of street furniture can be agreed with client.
9. Directional Arrows and track markings will be used to show users the intended flow of the track
10. Double Lane is perfect for changing your route and making Transfer Jumps to grow into more experienced riders, while providing and easy passage for beginners
11. Additional track to provide alternative routes, suiting both experienced an beginner level of users.



ABOUT PUMP TRACK FEATURES -1

Track Surface

A special track mix of Tarmac surface is chosen due to it's proven suitability for the many different wheeled sports disciplines, Cycles, BMX, MTB, Scooter, Inline Skate, Skateboard, Wheelchair, and mountain board users. The Tarmac surface also allows us to form interesting and various features suitable for the all ability levels from beginner to expert.

Start Area

Start area - Is a raised section of the track (Tarmac Surface) it's the Start / Finish point to the Pump Track usable for all abilities, generally around 8m x6m. This can also be a social area for riders to catch their breath and wait for their turn.

Berm

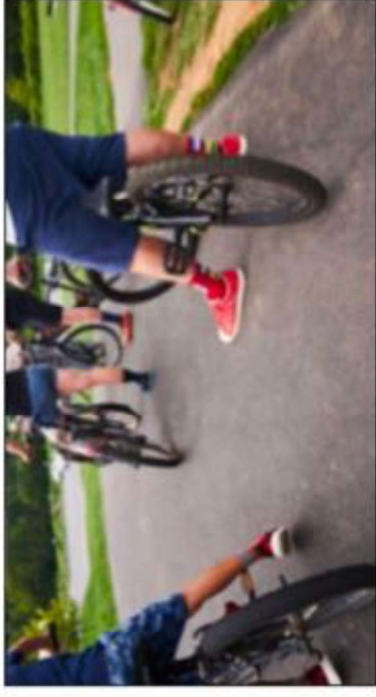
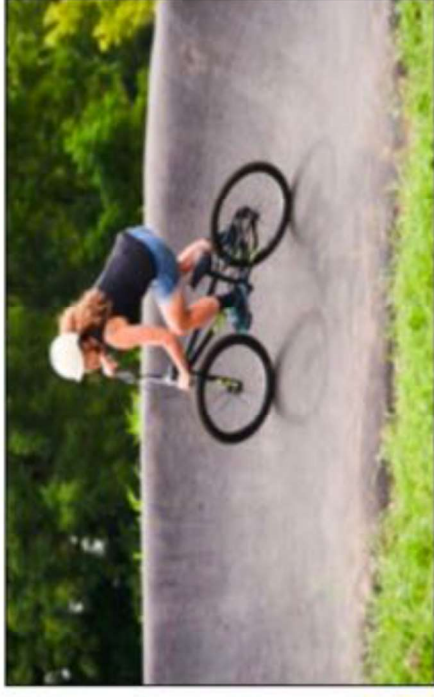
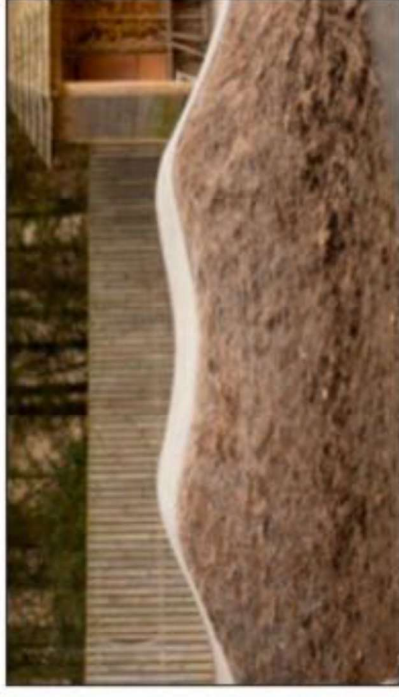
Banked turns / Berms - used for change of direction, the banked profile helps keep momentum. We build our berms with mellow insides so younger and less experienced riders can use this section of the berm, then toward the top of the berm we build it slightly steeper so more experienced riders can use this section. This allows progression so users can gradually learn to ride the berms higher as their speed around the track increases.

Roller

Roller / Bumps -Tarmac Surface - used to keep speed by 'pumping' over and between humps. So no peddling or pushing is required. Beginners would start by simply riding over the bumps and then as they progress you can start to jump over the rollers. Rollers are a key feature on a pump track to insure the track flows.

Double & Tripple Rollers

Double Roller - Is a feature generally found on a race track however on a much larger scale. It is a combination of two rollers allowing riders to choose their quickest route over the bumps, helping keep their speed and improve their bike control, you can jump, manual or if you're a beginner just simply ride over the double rollers.



ABOUT PUMP TRACK FEATURES -1

Table Top

Table top - Is a raised part of the track, usually 1/1.5 metres in length it is used to keep generating speed and also allows riders to try and jump across it. The flat surface caters for all users to learn to jump safely whilst also being beginner friendly allowing riders to just pump over it.

Tank

Is a feature generally found on Olympic style race track on a much larger scale, it is a combination of rollers and table tops combined allowing riders to choose their quickest route over the bumps, also allowing beginners to easily ride over it too.

Hips

Hips - Are a variant to all of the features above. For example a hipped double roller, would be a double roller that slightly turns to the left or right. They are used to keep the flow of the track, they allow us to use the maximum amount of space available so the track can adapt to fit into its footprint.

Grass Bunds

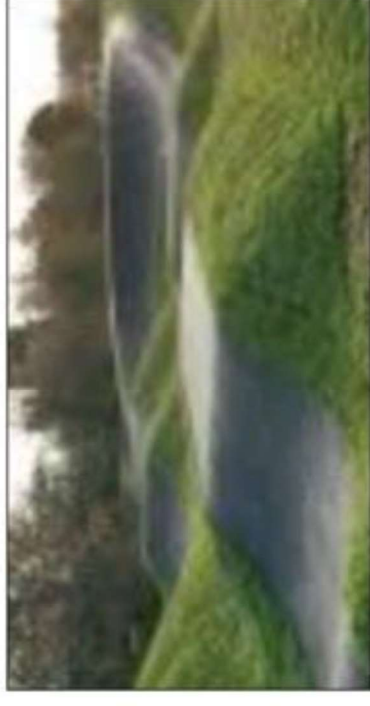
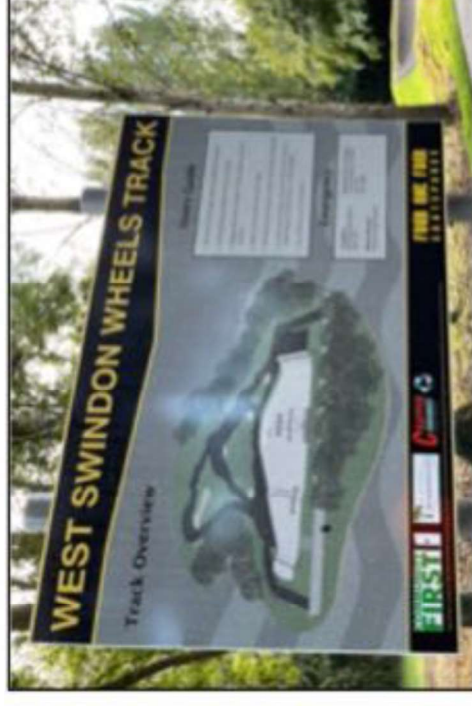
Grass bunds - Used to blend from the track surface down to the existing landscape with a maximum steepness of 45 degrees.

Lines / Signage

Lines are used to define edges of the track and clear Start/ Finish graphics help riders identify the boundaries of the track.

Signage and markings such as arrows on the track surface, help riders understand the direction of track and maintain the flow ensuring the track is safe for all users with everyone going in the same direction.

A min of 1x metal sign with safety advice will be installed at entrance to the track.



Concept Dimension

Track Length: ~ 172 m
Tarmac Area: ~ 355 sq.m
Access Path Area ~ 49 sq.m
Approximate Total Area: ~ 980 sq.m



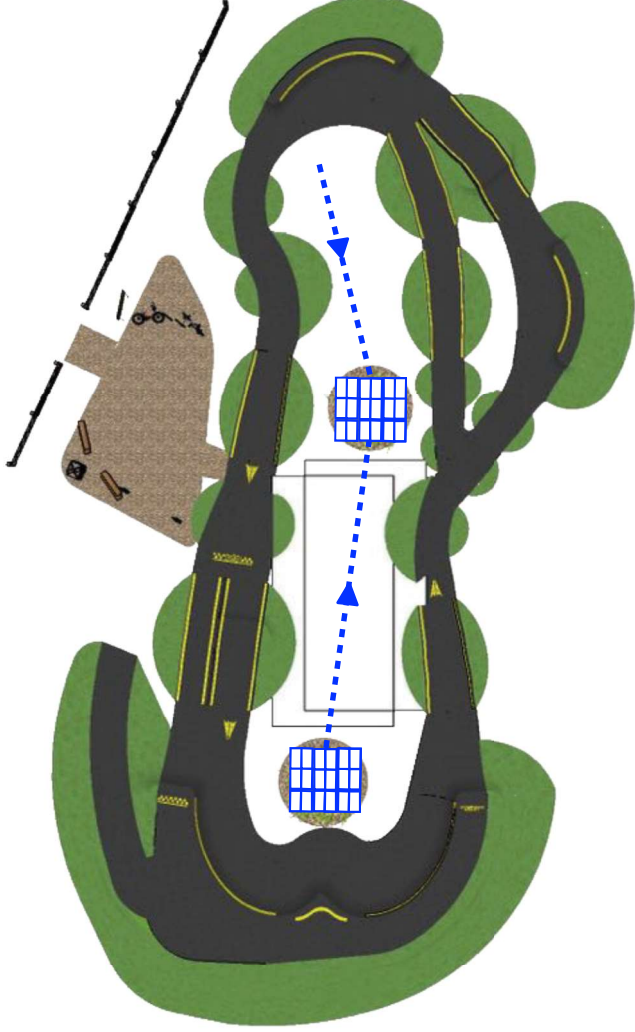
Drainage Layout - Section Views

A French Drain system is used to carry water strategically away from the track.

Shown here is the predicted drainage layout for the site, this layout will be reviewed and developed based on drainage test results.

Drainage is calculated for the individual track layout by means of an on site Soakaway Test that we will carry out after site set-up to determine the rate the water disperses into the ground.

This allows us to calculate the recommended size, quantity and best layout for the drainage required.

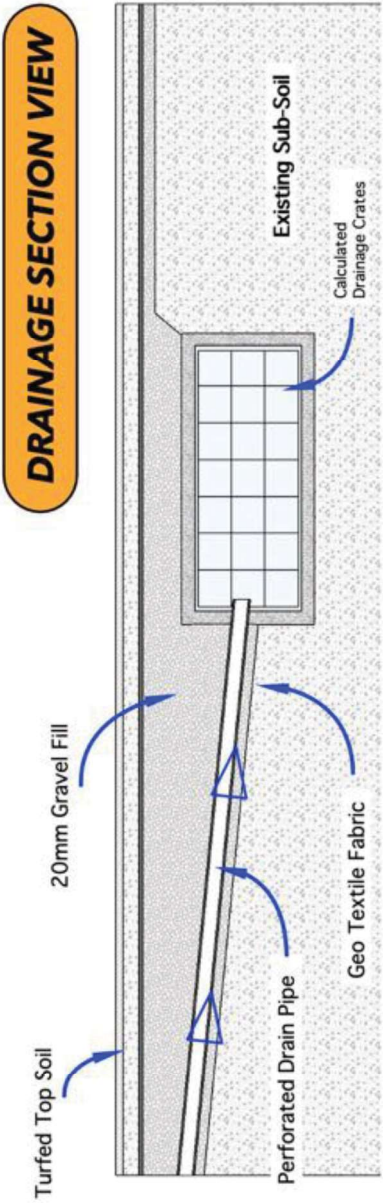


From our initial site calculations to the track we estimate the track will have total of 2 - 3 soakaway pits linked by French Drains.

** Drainage layout may be revised once tests have been completed and results have been received.*

** This document will be updated to reflect any changes to the drainage layout.*

Soakaway size (per create) - 0.5m(w) x 0.4(H) x 1.0(L)



Track Construction // Drainage Construction - Section Views

We use our own bespoke specification of Tarmac for our tracks providing a surface giving greater suitability for all wheeled sports disciplines. This mixture allows us to form shapes and features for the all ability levels.

Under all Tarmac areas of the track will be 160 -180mm MOT type 1 sub-base sitting on a Geotextile Fabric lining on top of the existing and shaped subsoil material.

Tarmac is to be laid of the depth of a min 60-70mm and compacted with vibrating plates and rollers to give a smooth, compact and long lasting finish to the surface compliant to standards EN14974.

All areas of the track will be 100mm above the existing ground level and have fall to assist water draining away from the track surface.

All Areas within 2.5m of the track edges will be turfed or topsoil and seeded depending on the time of year and climate conditions.

Any subsoil areas will be landscaped with 100-140mm of topsoil and seeded.

On completion the site will be landscaped and any ground damage from plant operation repaired and seeded to promote new growth.

