

AGENDA ITEM NO: 7.4

MEETING DATE: July 18, 2023

**STAFF REPORT – COVER SHEET**

SUBJECT: RFP Award – 2023 Novice Pump Tracks Design/Build Project DATE: July 8, 2023

DEPARTMENT: Operations PREPARED BY: Richard Fortin

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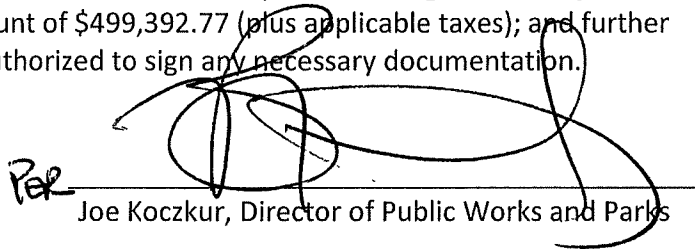
**1. SUMMARY OF ISSUE:**

A Request for Proposal (RFP) was released for the design, supply and installation of two (2) novice neighbourhood pump tracks. The City received initial enquiries from several asphalt paving companies; however, due to the specialized nature of pump track design and construction, only two (2) RFP submissions were received by the due date and time. The submissions were reviewed, and both were found to meet the technical requirement.

A budget of \$600,000 was allocated in the RFP for the design and construction of two (2) novice pump tracks. A decision is required to award the RFP to the sole qualified proponent.

**2. RECOMMENDATION:**

Recommendation that Council award the RFP "2023 Novice Pump Tracks Design/Build Project" to Velosolutions Canada West Ltd. in the amount of \$499,392.77 (plus applicable taxes); and further that the Mayor and Corporate Officer be authorized to sign any necessary documentation.

  
Joe Koczur, Director of Public Works and Parks


**3. FINANCE COMMENTS:**

Sufficient funds are available within the provincial Growing Communities Fund grant.

  
Glen Savard, Director of Finance

**4. CHIEF ADMINISTRATIVE OFFICER'S RECOMMENDATION/COMMENTS:**

Supports recommendation.

  
Chris Crosman, CAO

**STAFF REPORT ON  
RFP Award – 2023 Novice Pump Tracks Design/Build Project**

PREPARED BY: Richard Fortin                      DATE: July 18, 2023

POSITION: Parks Planning Manager                      DEPARTMENT: Operations

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**1. BACKGROUND:**

The City of Chilliwack’s primary pump track facility was established in 2020, featuring two tracks catering to advanced and intermediate skill levels. This facility has achieved remarkable success by attracting a diverse range of users and skill levels, not only from the local community but also from around the globe. The success of the main track highlighted the necessity for beginner-level skill development and training areas.

In response to this demand, a Request for Proposal (RFP) was issued to procure an experienced proponent capable of designing and constructing a smaller, more basic pump track facility. The purpose of the facility was to provide a conducive environment for beginners to learn the fundamental techniques of riding a pump track. This novice track area was designed in two sections. One section was to accommodate kick bikes, striders, tricycles, and wheeled mobility apparatus, allowing riders to familiarize themselves with the basic features of a pump track. The other section further enhanced riders' skills by focusing on the proper "pump" technique used in riding pump tracks.

Due to the growing popularity of this facility, Mayor and Council allocated funds for future development of two additional neighbourhood novice pump tracks. The Government of BC grant under the Growing Communities Fund enabled these two tracks to be built in 2023. Jinkerson Park and Vedder Park have been selected as the locations for these tracks.

**2. FACTORS:**

A Request for Proposal (RFP) was released and due to the specialized nature of pump track design and construction, only two (2) submissions were received. These submissions were reviewed and qualified.

Company	Bid	Score
Velosolutions Canada West Ltd.	\$ 499,392.77	92.20%
Momentum with Van der Zalm and Associates	\$ 560,000.00	75.24%

**3. RECOMMENDATION & SUBSTANTIATION:**

Recommendation that Council award the request for proposal “2023 Novice Pump Tracks Design/Build Project” to Velosolutions Canada West Ltd. in the amount of \$ 499,392.77 (Plus applicable taxes); and further that the Mayor and Corporate Officer be authorized to sign any necessary documentation.

## SUBSTANTIATION;

The review of the submission was conducted by a four (4) member review team; and the submissions were found to meet all of the requirements set out in the RFP. Factors that influenced the review include but are not limited to the following;

### A. Conceptual Design

- Design and installation two (2) novice neighbour pump tracks.
- Ensure the conceptual and final designs are completed by a professional experienced in pump track design (asphalt or dirt), or of a related discipline in professional skatepark design; BMX park designers, or similar type facility designer.
- Develop conceptual designs that fit into the area identified.
- Provide conceptual drawings for the two novice asphalt pump tracks, including dimensions, features, and materials.
- Describe each track's layout, including alignment, slope, and curvature.
- Identify conceptual staging areas, rest areas, and safe traffic flow concepts.
- Identify any additional design elements, such as berms, jumps, rollers, and rhythm sections, that may be included in the pump tracks. Each design must work in the prescribed location.
- Provide examples or references of similar pump tracks that may be used as inspiration or benchmarks for the design.
- Provide any 3D renditions or pictures of similar features of the concept design to highlight the main and any innovative features of the proposed design/layout.

### B. Working Drawings/Design - Required AFTER Project Acceptance

- Produce and supply detailed working drawings for the construction of two (2) novice asphalt pump tracks in Jinkerson Park and Vedder Park including all dimensions, features, and materials completed by a professional in the industry.
- Provide a detailed description of each track's layout, including its alignment, slope, and curvature.
- Provide a conceptual site grading and drainage design to convey all stormwater away from the track and surrounding landscaped areas via a system of catch basins and underground soak away pits.

## VEDDER PARK CONCEPT DESIGN

We have provided you with a unique design that utilizes the given space in Vedder Park, it provides users of all ages and of a novice ability a fun and progressive track, with the opportunity to be creative. The design stays within the 22 m. x 22 m. allocation.

The track is suited for riders of a Novice level, but can also be enjoyed by more advanced riders. The pump track is approximately 84 meters in length, 2 meters wide, with 4 large berms, 2 open turns as well as 3 straights. There is one starting area located to the West side of the track, the starting area and berm height will be between 1.2m. - 1.3m.

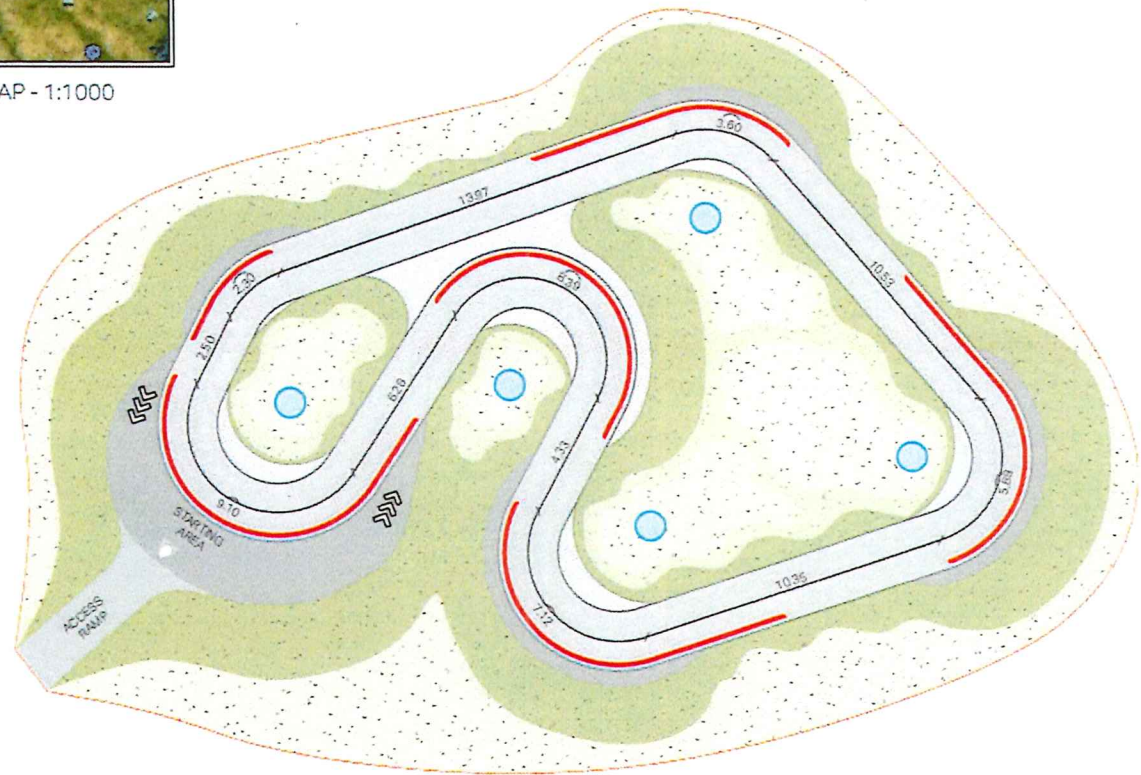
The track is a good mix of technical tight sections and more open faster sections, providing riders with a great balance to help progress their skill level in multiple areas. The tracks design will also allow younger riders who are using balance bikes to enjoy.

The track will include;

- Directional arrows on track including entrance and exit locations (anti-clockwise riding direction).
- Flat open waiting/ entrance/ exit area.
- Natural drainage system will be situated on the inside of the track where there are 5 French drains.



TOPOGRAPHIC MAP - 1:1000



PLAN - 1:150

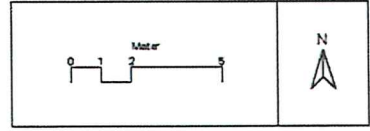
**Legend:**

- Total area
- Slopes
- Pump Track
- Platforms
- Connections
- Safety line
- Drainage hole
- Access path

**Specification:**

<b>Total Area:</b>	719 m2
<b>Asphalt Surface:</b>	275 m2
<b>Dirt Surface:</b>	0 m2
<b>Artificial Turf:</b>	0 m2
<b>Pump Track Length:</b>	84 m
<b>Jump Track Length:</b>	0 m
<b>Safety Line Length (Total):</b>	66 m
<b>Number of Drainage Holes:</b>	5
<b>Number of Sewers:</b>	0



Chilliwack - Vedder Park

Pump Track Preliminary Design

Track Design:	Tech. Drawer:	Client:	Project number:
Claudio Caluori	Amedeo Gadotti	City of Chilliwack	22-0059

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Preliminary Design

07-04-2023 Scale: 1:150 / A3



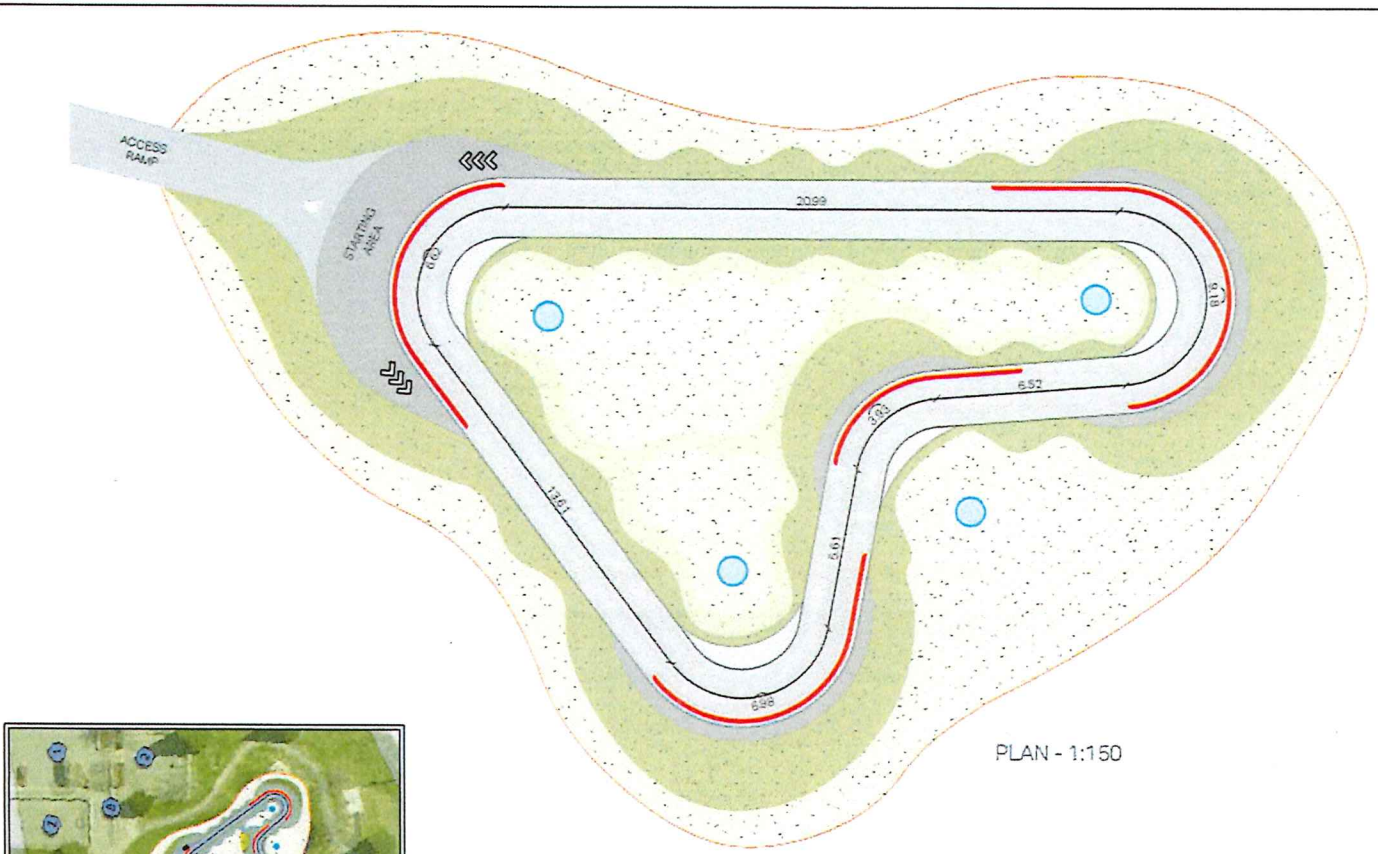
We have provided you with a unique design that utilizes the given space in Jinkerson Park, it provides users of all ages and of a novice ability a fun and progressive track, with the opportunity to be creative. The design stays within the **20m. x 20m.** allocation.

The track is suited for riders of a Novice level, but can also be enjoyed by more advanced riders. The pump track is approximately **73 meters in length, 2 meters wide, with 3 large berms, 1 open turns** as well as **2 large straights**. There is one starting area located to the West side of the track, the starting area and berm height will be between **1.2m. - 1.3m.**

The track is a good mix of technical tight sections and more open faster sections, providing riders with a great balance to help progress their skill level in multiple areas. The tracks design will also allow younger riders who are using balance bikes to enjoy.

The track will include:

- Directional arrows on track including entrance and exit locations (anti-clockwise riding direction).
- Flat open waiting/ entrance/ exit area.
- Natural drainage system will be situated on the inside of the track where there are 4 French drains.



PLAN - 1:150



TOPOGRAPHIC MAP - 1:1000

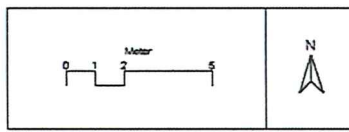
**Legend:**

- Total area
- Slopes
- Pump Track
- Platforms
- Connections
- Safety line
- Drainage hole
- Access path

**Specification:**

<b>Total Area:</b>	742 m <sup>2</sup>
<b>Asphalt Surface:</b>	255 m <sup>2</sup>
<b>Dirt Surface:</b>	0 m <sup>2</sup>
<b>Artificial Turf:</b>	0 m <sup>2</sup>
<b>Pump Track Length:</b>	73 m
<b>Jump Track Length:</b>	0 m
<b>Safety Line Length (Total):</b>	47 m
<b>Number of Drainage Holes:</b>	4
<b>Number of Sewers:</b>	0



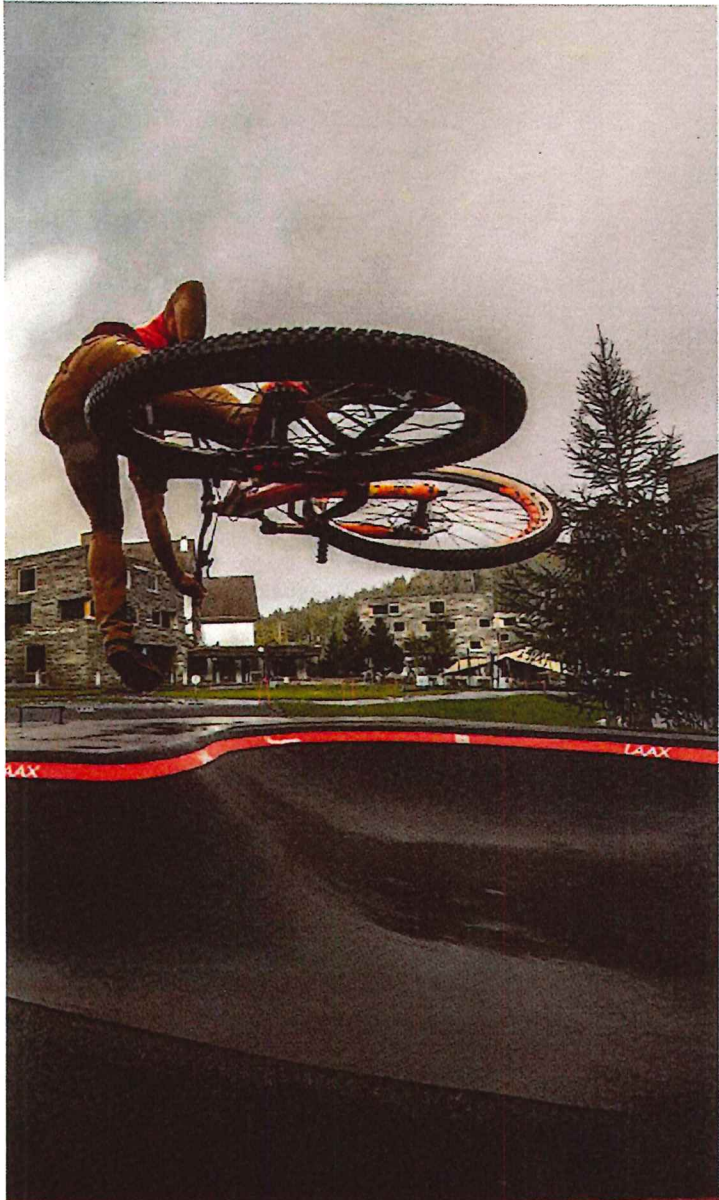
<p><b>eloSolutions</b> Pumtracks &amp; Bike Parks</p>	Chilliwack - Jinkerson Park		Track Design:	Tech. Drawer:	Client:	Project number:
	Pump Track	Preliminary Design	Claudio Caluori	Amedeo Gadotti	City of Chilliwack	22-0059
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Preliminary Design	
07-04-2023	Scale: 1:150 / A3





**ESTIMATED MATERIAL AMOUNT**



**MATERIAL**

Structural pad 3" Minus	576 t
Drainage gravel 1 1/2"	50 t
Suitable fill material 3/4" Road base (compactable)	700 t
Asphalt (special velosolutions mix)	70 t

**MATERIAL**

Structural pad 3" Minus	540 t
Drainage gravel 1 1/2"	40 t
Suitable fill material 20mm. Road base (compactable)	550 t
Asphalt (special velosolutions mix)	60 t

**VEDDER & JINKERSON PARK COMBINED MATERIAL TOTAL**

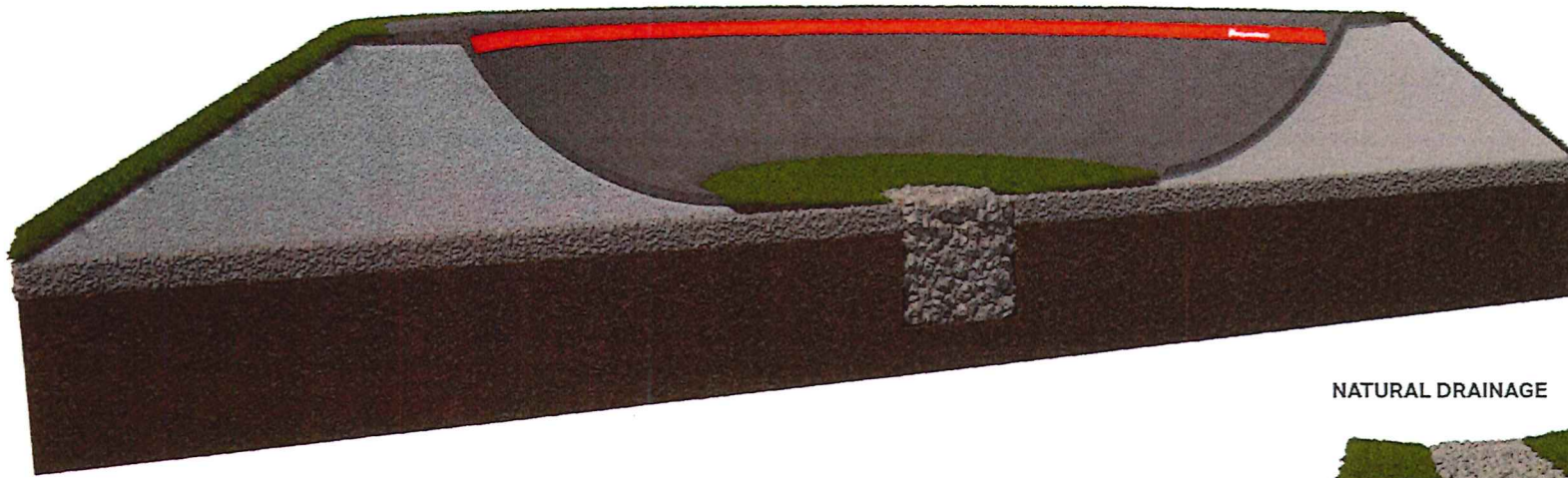
Structural pad 3" Minus	1,116 t
Drainage gravel 1 1/2"	100 t
Suitable fill material 3/4" Road base (compactable)	1250 t
Asphalt (special velosolutions mix)	130 t



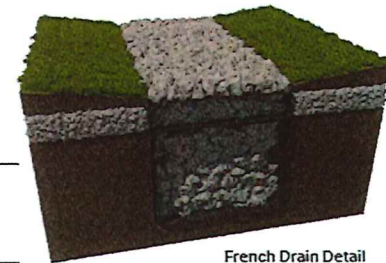
# PUMP TRACK SPECIFICATIONS



## BERM DETAIL



NATURAL DRAINAGE



French Drain Detail

## Berm X- Sections

### Legend

Vegetation		Structural Pad 3" Minus	
Asphalt		Drainage Rock	
Shaping 3/4" Road Base		Natural Ground	

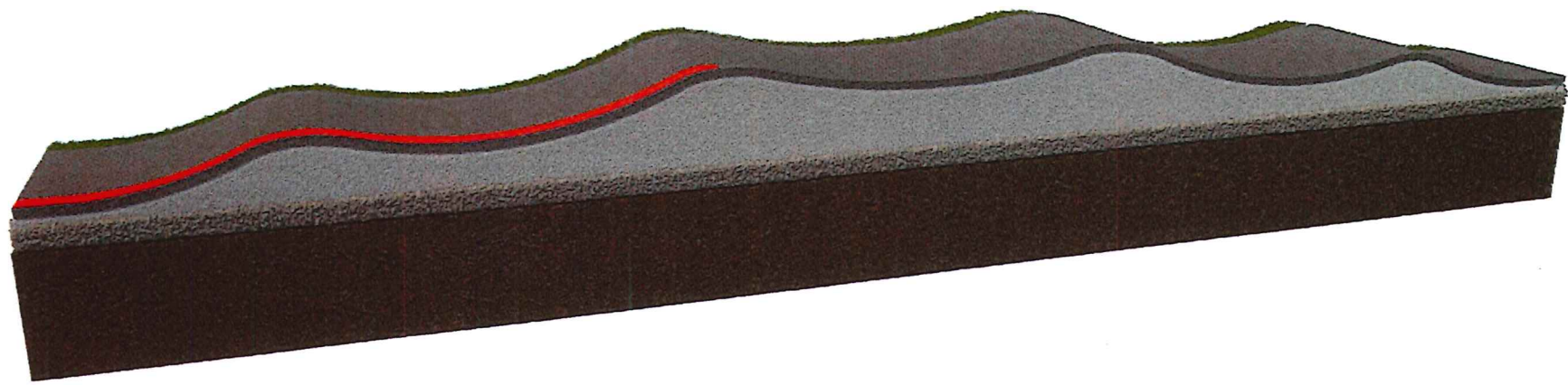
### Dimensions

Height	Maximum height of berms and platform <b>1.30m</b>
Width	Maximum track width: <b>2m</b> Berm coping to coping: <b>7-8m</b> Back slope average: <b>2.5m</b>
Material Thickness	<b>Structural pad</b> (Base layer)   Approx. 250-300mm thickness   3" Minus. <b>French Drain</b>   Hole approx. 1.5 cubic m   Drain rock 70-80mm   Surrounded by Geo Textile to separate/ hold material. <b>Shaping</b>   Variable Thickness   3/4" Road Base for shaping. <b>Asphalt</b>   80mm thickness for riding surface.

# PUMP TRACK SPECIFICATIONS








## ROLLER DETAIL



### Roller X- Sections

#### Legend

Vegetation		3" Minus	
Asphalt		Natural Ground	
3/4" Road Base			

#### Dimensions

Height	Maximum height of rollers <b>1.30m</b>
Width	Maximum track width: <b>2m</b>
Material Thickness	<b>Structural pad</b> (Base layer)   Approx. 250-300mm thickness   3" Minus. <b>French Drain</b>   Hole approx. 1.5 cubic m   Drain rock 70-80mm. <b>Shaping</b>   Variable Thickness   3/4" Road Base for shaping. <b>Asphalt</b>   80mm thickness for riding surface.



# PUMP TRACK SPECIFICATIONS








## STRAIGHT DETAIL



### Straight X- Sections

#### Legend

Vegetation		3" Minus	
Asphalt		Natural Ground	
3/4" Road Base			

#### Dimensions

Height	Maximum height of rollers <b>1.30m</b>
Width	Maximum track width: <b>2m</b>
Material Thickness	<b>Structural pad</b> (Base layer)   Approx. 250-300mm thickness   3" Minus. <b>French Drain</b>   Hole approx. 1.5 cubic m   Drain rock 70-80mm. <b>Shaping</b>   Variable Thickness   3/4" Road Base for shaping. <b>Asphalt</b>   80mm thickness for riding surface.