



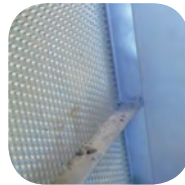
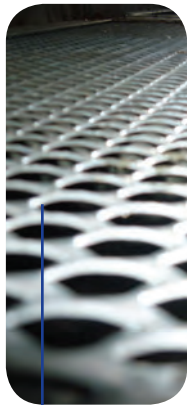
## Project: Hornsby Shire Council

# STORMWATER HARVESTING

### SITE 1:

#### **Somerville oval, Epping:**

- Low flow diversion
- Submerged Maxi Screen GPT
- Pumpwell and dual pumps
- Transfer piping and telemetry
- 300kL raw water storage
- Treatment via media filtration
- Disinfection via UV
- 100kL treated water storage
- Control, sampling, sensors
- Plant room design and construction
- Irrigation water for sports oval
- Raingarden for carpark runoff
- Seating for park users



### SITE 3:

#### **North Epping Oval, Epping**

- CDS unit GPT
- Pumpwell and dual pumps
- Transfer piping and telemetry
- 300kL raw water storage
- Dual media filtration
- Disinfection via UV
- 100kL irrigation header tank
- Plant room design and construction
- Irrigation water for cricket oval
- Additional sports equipment storage

### SITE 2:

#### **Epping Oval, Epping**

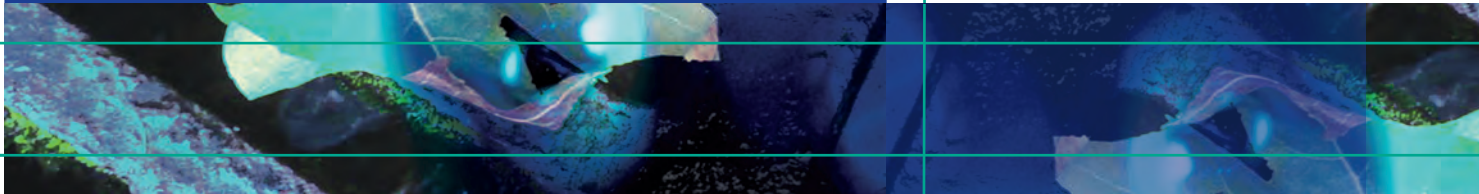
- Drop offtake and diversion
- CDS unit GPT
- Pumpwell and dual pumps
- Transfer piping and telemetry
- 400kL raw water storage
- Dual media filtration
- Disinfection via UV
- Link to existing 20kL header tank
- Plant room design and construction
- Irrigation water for cricket oval and athletics track
- Carpark runoff capture
- Localized changes to capture more water





*optimal stormwater*

**For a sustainable long term water supply, stormwater harvesting can be a very cost effective way to meet demands for irrigation and other non-potable water.**



Optimal Stormwater was selected based on a superior understanding of stormwater supply, stormwater volumes, and the design of off-take structures to maximize the capture of water. Optimal Stormwater reviewed the risks and limitations with the concept design, and did a substantial redesign to achieve some outstanding results for Council. Water savings in excess of 10 million liters of water per year are expected.

#### **Innovative elements at Somerville Oval included:**

- a low headloss, self cleaning GPT to minimize the potential for blocking, and maximize the transport of water to the storage tanks.
- Insitu concrete tanks plus a seating area extension, that were more cost effective than the concept storage alone
- Use of a 300kL Raw water tank plus a 100kL treated water irrigation header tank, to supply 5 times the amount of water previously available
- Construction of a raingarden to polish carpark runoff

#### **Innovative elements at Epping Oval included:**

- A drop offtake to a non-blocking GPT, having no hydraulic impact, allowing the avoidance of a major water main
- Interconnection of storage tanks to allow primary settlement in only the smaller one to minimize ongoing cleaning
- Carpark regrading and stormwater pipe upgrade to increase capture area

#### **Innovative elements at North Epping Oval included:**

- Moving the off-take and GPT location to more than double the catchment area and consequently the water available
- Dual outlet GPT with customized diversion chamber
- Ground level storage tanks 300kL raw & 100kL treated, with access and off-takes located to build future cricket nets on top

Optimal Stormwater are one of the emerging leaders in stormwater harvesting.

We are able to provide you with either a design only or a full D&C. Please consider us on your next stormwater reuse project at any stage, from feasibility to operation.

#### **Address:**

Level 5, 79 Victoria Avenue,  
Chatswood NSW 2067

#### **Telephone:**

02 9417 8369

#### **Facsimile:**

02 9417 8337

#### **Email:**

[info@optimalstormwater.com.au](mailto:info@optimalstormwater.com.au)

#### **Web:**

[www.optimalstormwater.com.au](http://www.optimalstormwater.com.au)

[www.optimalstormwater.com.au](http://www.optimalstormwater.com.au)