

ACA THREADS



Chris Handt
Operations Manager
ACA Threads

OUR PRODUCTS



TWISTING



DYESPOOL WINDING



DYEHOUSE



BOILER HOUSE



HFO & WATER TANK



DYEHOUSE – RF OVEN



DYEHOUSE LAB



FINALE WINDING



LABORATORY



WAREHOUSE & DISTRIBUTION



WATER INTERVENTIONS

1. New Dyevat Controllers – automation



WATER

INTERVENTIONS

- 1. New Dyevat Controllers – automation**
- 2. Modified Recipes**
- 3. Recycling of cooling water**

WATER INTERVENTIONS



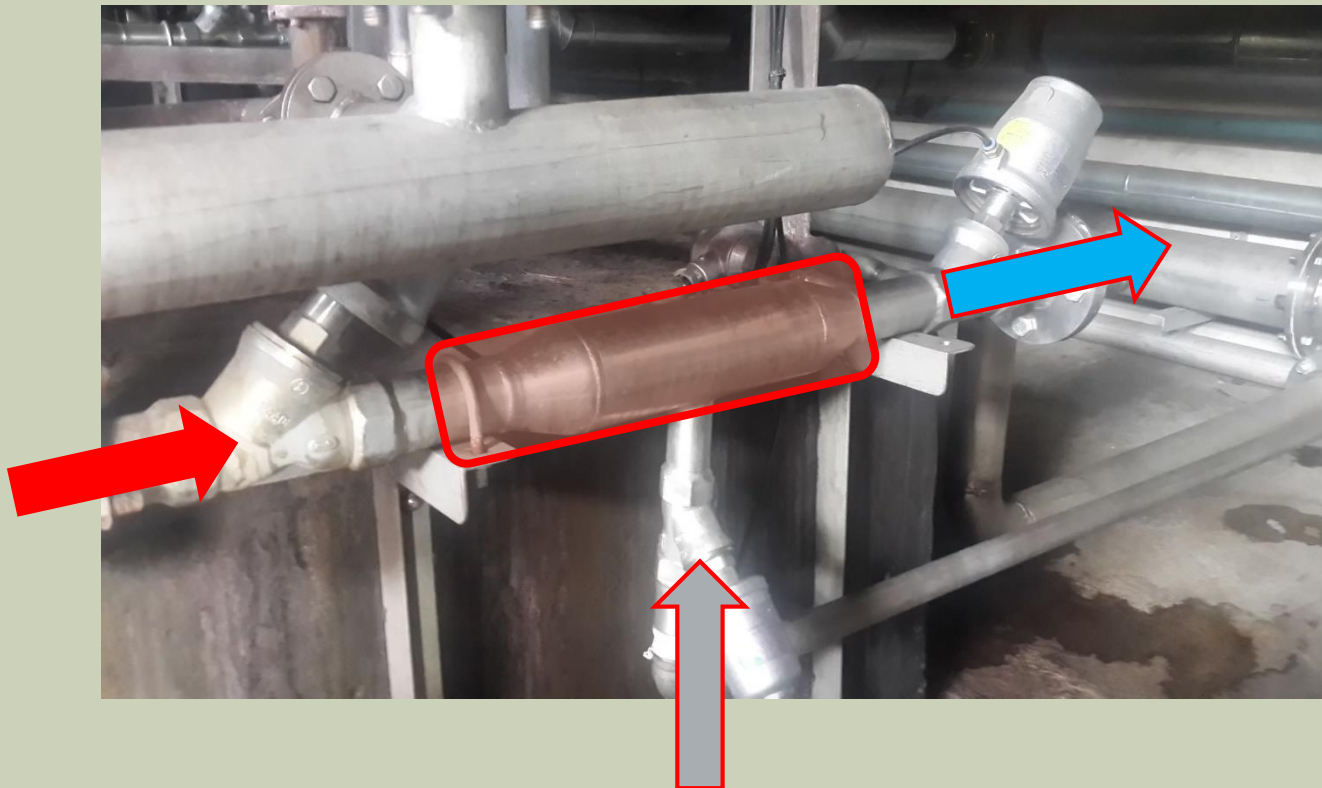
WATER

INTERVENTIONS

- 1. New Dyevat Controllers – automation**
- 2. Modified Recipes**
- 3. Recycling of cooling water**
- 4. Hot Drop capability**

WATER INTERVENTIONS

Hot Drop Facility



WATER

INTERVENTIONS

- 1. New Dyevat Controllers – automation**
- 2. Modified Recipes**
- 3. Recycling of cooling water**
- 4. Hot Drop capability**
- 5. Use borehole water for toilets**
- 6. Use of Aerators**

WATER

RESULTS

Water usage for every kg dyed

- 2012 = 160 Litres/kg
- 2017 = 50 Litres/kg
- 2018 = 48 Litres/kg

Savings per Month

- +- 4.5 Mil Litres /Month
- +- R 175000 / Month

WATER RESULTS



CaseStudy



Reducing water use in textile manufacturing

ACA Threads
Cape Town

Through equipment automation
and process adaptation, ACA
Threads have reduced their water
consumption by 70% between
2012 and 2017.

Challenge

ACA Threads is a Cape Town based sewing thread manufacturer and supplier with over 60 years of experience in the South African sewing thread industry. Their sewing thread is dyed in a package format, with the process requiring a significant amount of water. The company decided to improve the sustainability of their business by reducing their water consumption and associated costs.

Solution

Starting in 2012, ACA Threads invested in new Dye vat controllers that improved process automation. They also adopted modified dye recipes, started to use recycled cooling water and implemented a hot drop capability in their dyeing process.

Business benefits

These investments have resulted in a 70% reduction in water consumption between 2012 and 2017. They are now using 50 litres of water per kg of dyed thread, versus 168 litres of water per kg in 2012.

Annual water savings	50 000 Kilolitres per year
Annual savings	R1.9 million per year
Total capital investment	R4.5 million

Lessons learned and plans for the future

Due to persistent water scarcity in the Western Cape region, ACA Threads plans to further lessen their dependence on municipal water supply. They will be investigating the use of extensive rainwater harvesting, the reuse of certain effluent streams and the extension of groundwater, together with the on-site storage and blending of these waters.

For your business to also benefit...

1. Visit our business drought support page for info on how to get started:
www.greencape.co.za/water-business-support
2. Become a GreenCape member and receive industry updates, news and events info:
<https://www.greencape.co.za/become-a-member/>



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WATER

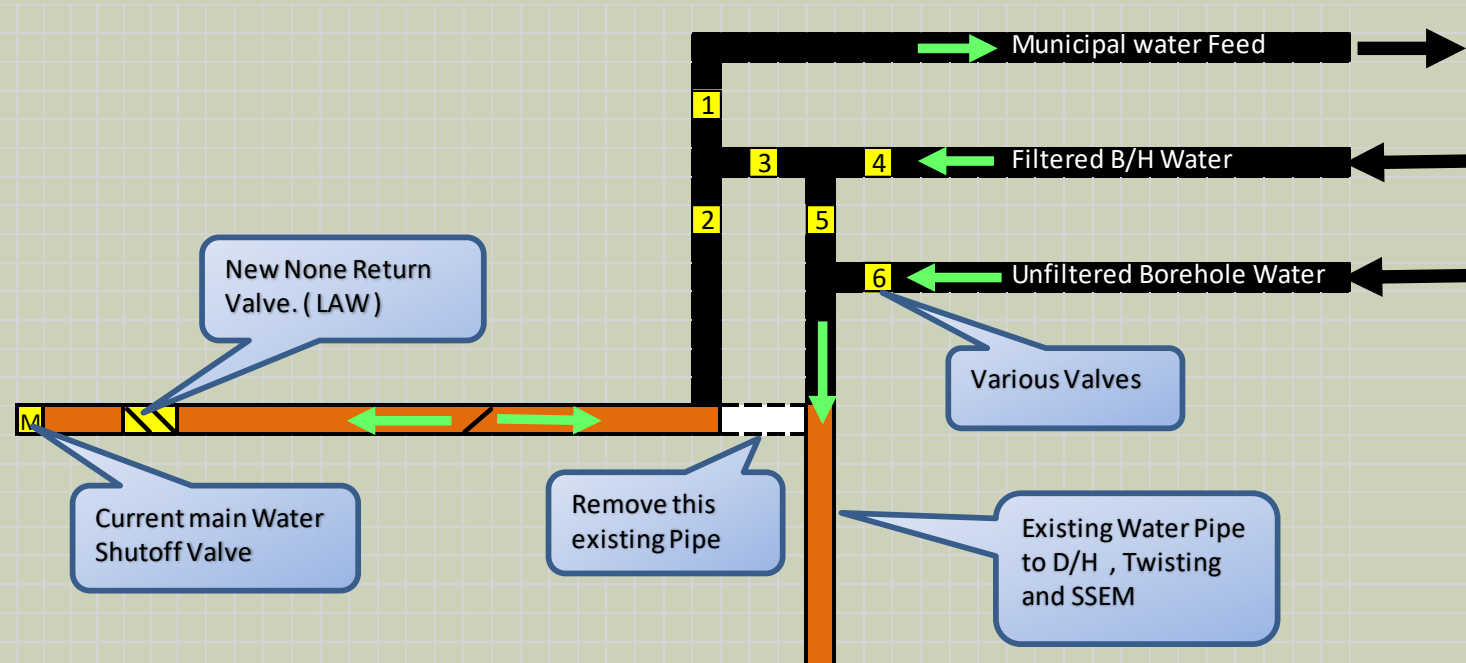
FUTURE PROJECTS

1. Use of Borehole Water

- **Dyehouse (+- 120000 litres per day)**
- **The whole company**

WATER

FUTURE PROJECTS



Various options

- | | |
|--|-------------------|
| 1 Whole plant on Municipal Water | Close : 1 4 6 |
| 2 Whole plant on Filtered BH Water | Close : M 1 6 |
| 3 Whole plant on BH Water | Close : M 4 1 |
| 4 Whole plant on Filtered BH & M- Water | Not and option |
| 5 Only D/H , Twisting and SSEM with F BH Water | Close : 1 2 3 6 |
| 6 Only D/H , Twisting and SSEM with BH Water | Close : 1 2 3 4 5 |

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the next Tab**



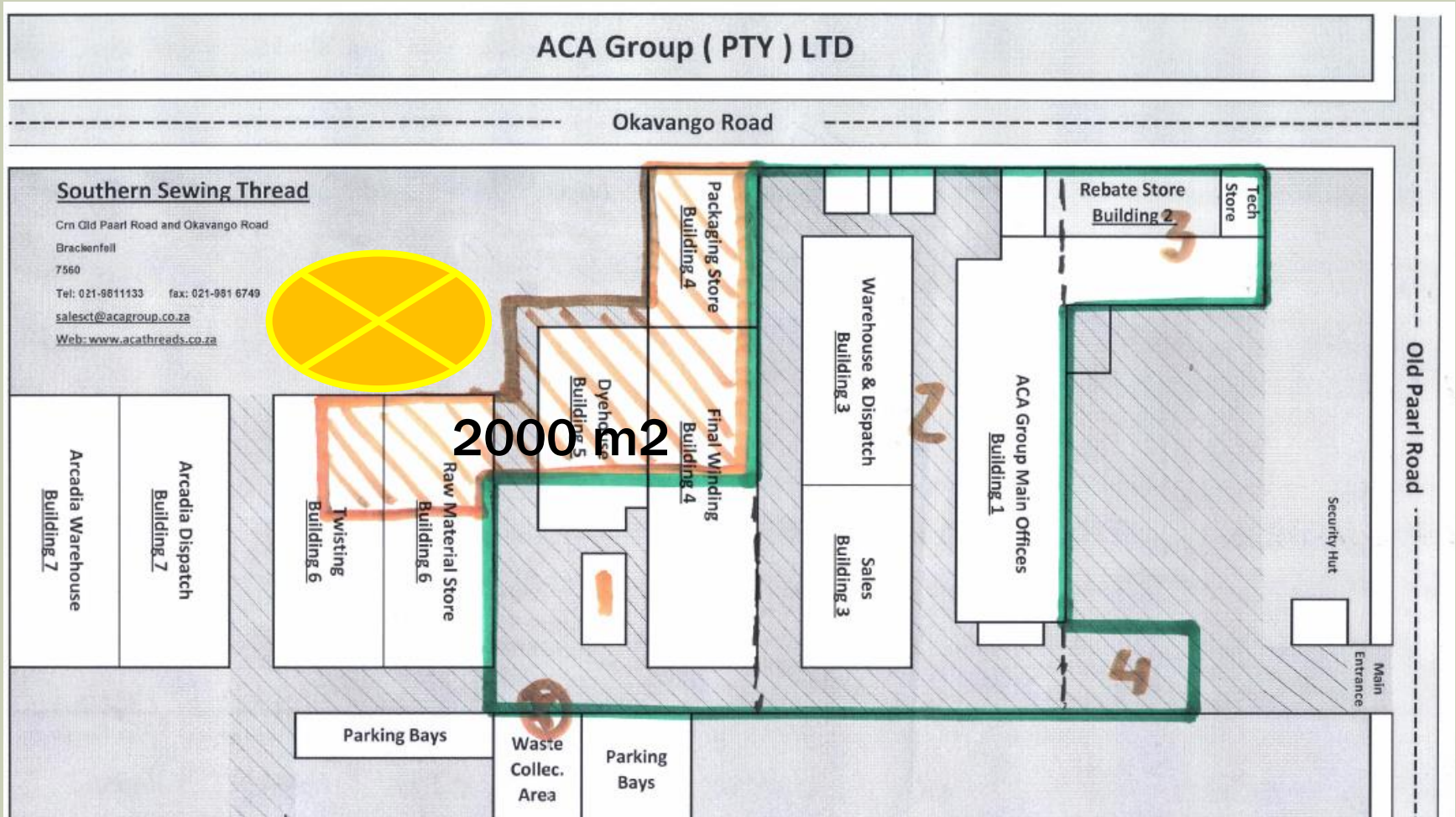
WATER

FUTURE PROJECTS

- 1. Use of Borehole Water**
 - **Dyehouse (+- 120000 litres per day)**
 - **The whole company**
- 2. Investigate recycling of our Effluent Water**
- 3. Using rain water for ground recharge**

WATER

FUTURE PROJECTS



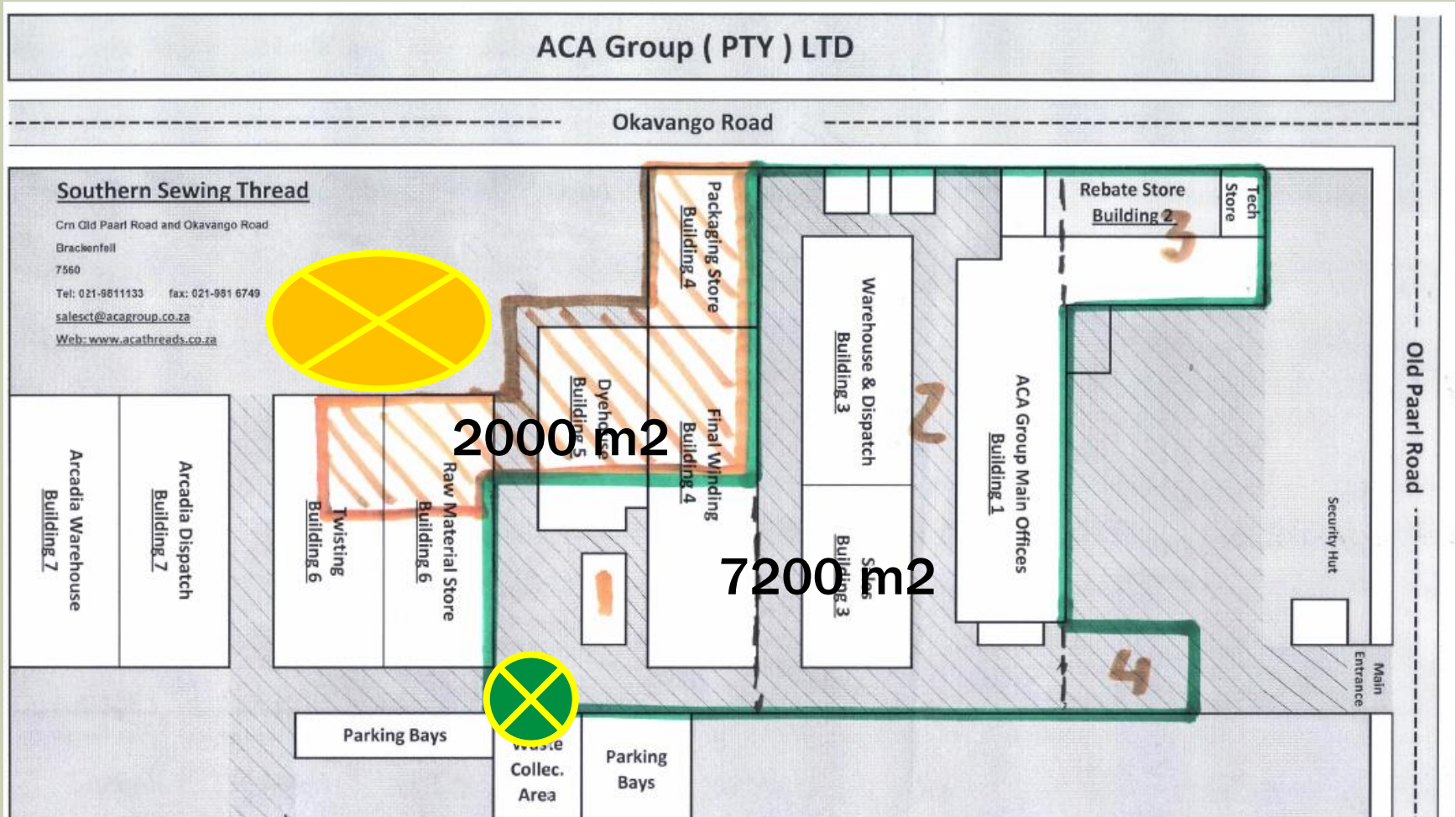
WATER

FUTURE PROJECTS



WATER

FUTURE PROJECTS



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FUTURE PROJECTS



WATER

FUTURE PROJECTS

- 1. Use of Borehole Water**
 - **Dyehouse (+- 120000 litres per day)**
 - **The whole company**
- 2. Investigate recycling of our Effluent Water**
- 3. Using rain water for ground recharge**
- 4. 2500 l water trailer**

WATER

FUTURE PROJECTS



OUR CURRENT PV PLANT



133 KWH

OUR NEW PV PLANT



200 KWH

***GOOD, IS THE
GREATEST
ENEMY OF
EXCELLENT***

Thank you



Threads

