

mogden update

October 2010

Upgrade will boost capacity and treatment standards

Work has begun to increase treatment capacity by 50 per cent at Mogden Sewage Works.

The improvements are needed in order to treat sewage to a higher standard and significantly reduce the amount of partially-treated wastewater that overflows into the River Thames when the site becomes overloaded after heavy rain.

Earlier this year, we cleared trees and shrubs from the western boundary, in preparation for the main construction work.

Contracts Manager Adrian Jack (pictured on right, above) said: "We will do all we

can to reduce disruption. We have built our on-site construction routes as far away from properties as possible, and will regularly water the area to reduce the potential for dust.

"Work recently began to reshape and move the western embankment, to make space for the new sewage treatment equipment.

"We have preserved a group of mature oak trees, which will help encourage the re-establishment of wildlife. We have put up protective fencing around them, which we will remove once the construction works are complete."



Temporary construction offices for contractors Black & Veatch will be installed at the north-west corner of the site (near Worton Industrial Estate). We will also start building some of the supporting structures for the new equipment.

Next spring, we plan to begin re-planting the new embankment with native trees and hedgerows, and seeding herb-rich grassland, creating new habitats where wildlife can thrive.

Final landscaping will be complete in 2012. Until then, we will need to temporarily store some earth around and on top of the new embankment.

To keep construction traffic off residential roads, we will only use the A316 and Rugby Road to access the site.

Black & Veatch's working hours will be Monday to Friday, between 7am and 7pm, with main construction activities limited between 8am and 6pm.

Adrian added: "We are working closely with the London Borough of Hounslow to keep disruption, especially dust and noise, to a minimum. We would like to apologise for any inconvenience caused."



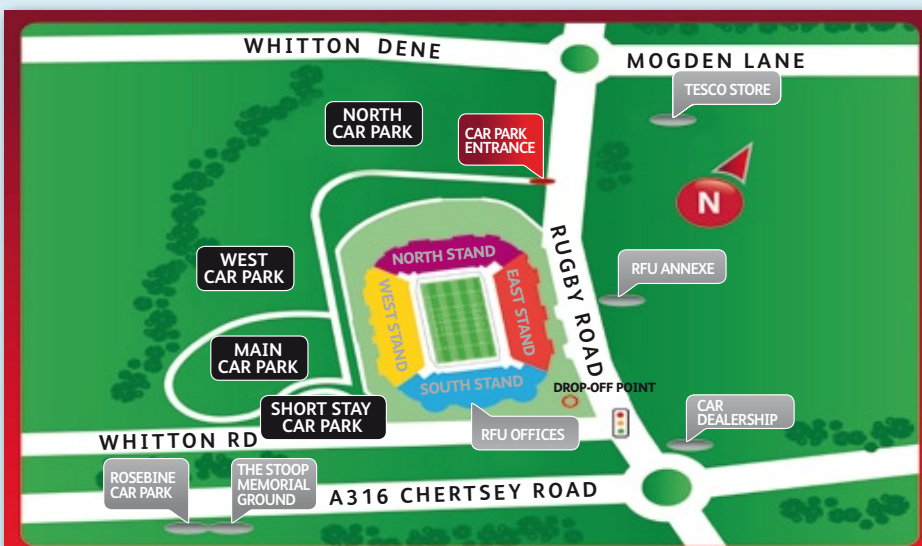
Drop-in sessions

We will be holding regular informal drop-in sessions, where residents can discuss the construction work with members of the project team.

The first three will be held from **4pm to 7.30pm** on **7 October, 4 November and 2 December**, at the RFU (Rugby Football Union), Rugby House, Twickenham Stadium, 200 Whitton Road, Twickenham, TW2 7BA.

Free parking will be available in the main car park (see map right).

On arrival please report to reception at Rugby House Door A, situated in the South Stand.





Improvement work continues

Operations Manager Siân Thomas gives an **update on what's been going on** at Mogden recently.



Siân Thomas

We have had a busy few months here at Mogden, ranging from our open day in the spring to working with the extension project team as they start construction. We've also been carrying out work to increase our treatment capacity.

We have made improvements to our aeration lanes to improve the standard to which we treat sewage. These are a key part of Mogden's treatment process. Once the incoming wastewater has been screened and then settled in the primary tanks, it flows

through these lanes, where the biological treatment is carried out.

This is where wastewater is mixed with a combination of bacteria, known as 'activated sludge', which feed on the sewage, helping to remove impurities.

These bacteria need oxygen to thrive, so jets of air are bubbled up through the aeration lanes via diffusers. Over time, these diffusers begin to work less effectively and need replacing.

We have an ongoing programme to replace these when required at each of our sewage treatment works, and have replaced the diffusers on six of the aeration lanes at Mogden so far (pictured above right). We are beginning work on the next six lanes in October.

We have brought into service eight new final settlement tanks that have been converted from disused primary settlement tanks. These provide extra treatment capacity of 100 million litres a day, which will improve the quality of water we discharge to the River Thames.

In addition, we have been working hard to make sure we comply with the Odour Management Plan for the site, which has been revised in line with the planning agreement for the extension work. Of course, we have as usual been keeping the site running as efficiently as possible to maximise the treatment of what we discharge into the Thames.

Over the last few months we have seen the arrival of some new faces at Mogden. Mark Grimshaw has taken over as Process Manager and is responsible for the Mogden team and day-to-day operations. Alan McEville, who previously held this post, is now the Capital Manager, and will be working closely with the extension project team, co-ordinating the delivery of the major project work on site over the coming years. Finally, Emily Goren is looking after our communications.

I hope you find this edition of the newsletter useful and informative.

Siân Thomas
Operations Manager



Emily Goren and Mark Grimshaw



Thames Water's Network Challenge team, including Shazia Zeb (far right)

St Mark's pupils triumph in water supply challenge

Local pupils got a taste of what it's like to plan water supplies for a new development when they competed in a game which mimics some of the real-life challenges.

Youngsters from local secondary schools tried their hand at the Network Challenge, our award-winning educational resource. The game asks teams to design, cost and build a water supply network, simulating a real engineering project.

Rosemary Waugh, Community Investment Manager, said: "The game supports the National Curriculum at Key Stages 3 and 4 in science, geography and design and technology.

"The schools were very positive, and I have since heard from two of them saying how much their students enjoyed the event."

"It aims to increase students' awareness and understanding of the engineering and supply issues faced by a water company. It also provides an opportunity to use and develop key skills such as working together, problem solving, communication, numeracy and literacy."

Competing teams design a water network to supply a series of customers. They must purchase land and materials and submit a

planning application before building and testing their pipe network.

The challenge is designed to represent the real stages in a construction project and students have to deal with similar challenges and issues to those faced by Thames Water project teams.

The event was hosted at Kew Bridge Steam Museum, in partnership with Hounslow Education Business Partnership and supported by a number of local community partners.

The schools participating in this year's event were Longford Community School, The Green School, Brentford School for Girls, Isleworth and Syon School for Boys, and St Mark's School in Hounslow.

Shazia Zeb, Corporate Responsibility Assistant, said: "All the teams rose to the challenge, demonstrating some excellent teamwork, ingenuity and budget management. Congratulations to St Mark's, who were the winning team."

Following the event, Garth Buckle MBE, of Hounslow Education Business Partnership, said: "The schools were very positive, and I have since heard from two of them saying how much their students enjoyed the event.

"The buffet at the end was a great way to finish and enabled the students, teachers, community partners and colleagues from Thames Water to interact."

Feathered friends are bright sight

Among the more unusual visitors to Mogden are ring-necked parakeets, which can often be seen and heard around the site.

Parakeets, originally from the Himalayas in India, are the UK's only naturalised parrot and have adapted well to the climate in south-east England.

The birds are easy to spot, even in flight, as they are large, emerald green in colour and have a red beak and long tail. They often travel in flocks, can number in the hundreds at roost sites and often make piercing calls at dawn and dusk.

Project Engineer James Clarke said: "About a year ago I noticed some bright green birds in one of the trees.

"I later learnt that these were parakeets and now see them regularly. They are very striking in appearance. I often watch out for them when I'm on site."

Other birds frequenting Mogden include grey herons, moorhens, mallard ducks and kingfishers.

Many thanks to local resident Gurvinder Singh Chana, who took this photo of a parakeet in a neighbour's garden.





Insect experts are buzzing with enthusiasm

We are continuing to work with the London Boroughs of Hounslow and Richmond upon Thames to control mosquitoes in the area. As part of this, we run a year-round survey and pest control programme at Mogden.

John and Barbara Ismay are professional insect experts – or ‘entomological consultants’ – employed by Thames Water to carry out mosquito surveys at Mogden. John began visiting the site in 1992, and his wife has joined him since 2002.

Any standing water on site could potentially be used by mosquitoes to lay their eggs. This means that between spring and autumn, when mosquitoes are most active, John and Barbara survey the whole site weekly, from road drains to the wash compactors.

During the winter, they visit once a fortnight, only checking areas where mosquitoes could breed, such as the warm underground digester tunnels.

During the surveys, they look for mosquito egg rafts, larvae, pupae and adults. Treatment options are limited in the UK and currently only the larval stage and adults indoors can be sprayed with an insecticide.

All mosquito activity seen, regardless of lifecycle stage, is treated with preventative measures. This is in addition to our regular spraying programme around the works, all of which is carried out by specialist company Bioguard.

We spoke to John and Barbara during one of their visits.

What have you seen change at Mogden in the time you have been surveying here?

John: “I saw the last extension of the works at Mogden built.”

Barbara: “We have both seen the covering of the east side primary settlement tanks and the two storm tanks, plus the installation of the new odour control units.”

How did you get into entomology?

John: “I was catching grasshoppers at the age of two!”

Barbara: “I discovered my love of insects while studying for my Masters degree at the University of Oxford ten years ago. People often don’t realise how important flies are in our ecosystems. They are the second largest group of pollinators – they break down

compost and also prey on other insects such as aphids and caterpillars.”

What other insects are to be found at Mogden?

Barbara: “The way the trees are managed at Mogden means that timber can be used to create habitats for wildlife. You therefore see deadwood insects here, including saproxylic flies, of which the stag beetle is one.”

What organisations, other than Thames Water, do you consult for?

John: “We advise on fly issues, as well as monitoring flies, for a local council and the Environment Agency. We also advised on the Guidance to the Clean Neighbourhood Act regarding insect nuisance.

“Other projects have included surveys of saproxylic flies and other invertebrates for Natural England, the City of London and several consultancies.”

What is the best and worst thing you’ve had to do for your work?

John: “The best was carrying out insect surveys by helicopter over Papua New Guinea for the government there.

“The worst was having to move 300 fox corpses that maggots were feeding on. The bodies were near a road and the maggots were causing a skid hazard for motorists!”

Barbara: “The best was surveying flies on Salisbury Plain and also participating in field meetings of the Dipterists Forum – which studies flies – in beautiful areas all over the UK, including the Scottish Highlands, the coast of Wales and East Anglia.

“The worst was searching for flies in a chicken house with over 4,000 residents, as I’m allergic to chicken feathers!”

Need to contact us about Mogden?

Call us on

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Please quote your address and ‘Mogden’ (If asked, Mogden’s postcode is TW7)

Visit our website

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Write to us

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