

## A new sewer tunnel



A tunnelling machine being lowered at Black Rock

We are building a new sewer and pumping stations to move wastewater from Peacehaven, Telscombe, Saltdean, Rottingdean and Woodingdean, along with Brighton and Hove to a new treatment works at Lower Hoddern Farm, Peacehaven.

After treatment, the cleaned wastewater will be released 2.5km off shore through a new long sea outfall at Friars Bay.

Our supplier 4Delivery (4D) is installing the 11km sewer by tunnelling at a depth of between eight and 40 metres below ground level.

Before the tunnelling starts 4D will carry out pre-condition surveys on all properties that are directly above the route of the sewer.

Shafts are being built along the route to enable local sewer connections to be made. Once tunnelling is complete these areas will be reinstated with the only addition being manhole covers.

## How we will dig the tunnel

4D will use two tunnel-boring machines (TBMs) to build the sewer so different sections of the tunnel can be constructed at the same time. Most of the sewer is being built using 2.4m diameter TBMs which have a rotating cutting wheel at the front. During tunnelling, it is unlikely that local residents will be aware of this activity.

Some sections of the sewer will be created using a method known as pipejacking, in which a series of pipes are pushed through the ground while earth is mechanically excavated from the face of the tunnel.



The cutting wheel at the front of the tunnel-boring machine.

## New pumping stations

An impression of the view across Portobello Treatment Works close to The Badger's Watch pub



We are also building two underground pumping stations to help move wastewater to the new treatment works.

One pumping station will be on existing Southern Water land at the Portobello Treatment Works and be covered with a grassed roof. The pumping station has been designed so that it does not affect sea views from Telscombe Tye (see picture above).

The other pumping station will be in a traffic island in the middle of Marine Drive and surrounded by a domed structure which has been designed by an architect to integrate with the landscape. It will be set as low into the ground as possible to minimise the effect on sea views (see picture below).



An impression of what the pumping station at Marine Drive is expected to look like

## Keeping you safe

Southern Water representatives carry identity cards which show their name, photograph, our logo and a telephone number to ring to confirm they are genuine. For everyone who feels vulnerable or nervous of callers we have a password scheme.



Search 'beware of bogus callers' at [www.southernwater.co.uk](http://www.southernwater.co.uk)

## If you would like to know more

[www.southernwater.co.uk/cleanerseas](http://www.southernwater.co.uk/cleanerseas)

Customer Service Centre  
Southern Water Southern House,  
Yeoman Road,  
Worthing BN13 3NX  
Emergency telephone: 0845 278 0845

## Our advice is always be

- a**ttach your door chain before opening the door to strangers
- w**ater company staff and our contractors always carry identification
- a** company uniform and vehicle logo are things to watch for
- r**emember, if you are unsure, keep them out and either telephone us on 0845 278 0845 or the local police
- e**mployees of Southern Water will always be happy to wait while credentials are checked



**We're bringing cleaner seas to Sussex**

New sewer tunnel from Brighton to Peacehaven



# The 11km sewer route: Brighton Marina to Friars Bay, Peacehaven

Here you can see the route that the sewer will take, where shafts are located and when construction is expected to take place in these areas. The sewer will be installed up to 40 metres below ground level.



**What?** Marine Gate shaft  
**How big?** 6m wide x 41m deep  
**When?** Summer 2009 to autumn 2011

**What?** Marine Drive pumping station  
**How big?** 17m wide x 46m deep  
**When?** Summer 2009 to autumn 2011

**What?** Roedean Way shaft  
**How big?** 3m wide x 22m deep  
**When?** Spring 2011 to spring 2012

**What?** Ovingdean shaft and site compound  
**How big?** 8m wide x 16m deep  
**When?** Summer 2009 to autumn 2011

**What?** Rottingdean shaft  
**How big?** 3m wide x 11m deep  
**When?** Autumn 2010 to spring 2012

**What?** Saltdean Lido shaft  
**How big?** 3m wide x 16m deep  
**When?** Autumn 2010 to spring 2012

**What?** Saltdean East shaft  
**How big?** 3m wide by 32m deep  
**When?** Autumn 2010 to spring 2012

**What?** Portobello pumping station  
**How big?** 18m wide by 34m deep  
**When?** Summer 2009 to autumn 2011

**What?** Peacehaven Wastewater Treatment Works  
**When?** Summer 2009 to winter 2012

**What?** Friars Bay shaft  
**How big?** 8m wide x 41m deep  
**When?** Summer 2009 to spring 2011

**What?** Friars Bay promenade shaft  
**How big?** 7m wide x 14m deep  
**When?** Summer 2009 to spring 2011

To NEWHAVEN →