

Crossrail monitoring of settlement across the Barbican: information from Barbican Association 26 February 2014

Crossrail's tunnelling contractor, Dragados Sisk, needs to monitor for settlement along the line of the tunnelling. It is starting to do this monitoring now. Residents with settlement deeds should have received some information on the monitoring and there are notices about it around the estate.

The contractors, who have listed building consent for their work, will be placing prisms and sockets and studs at various points around the estate. The prisms will be at 3-5m high, on walls and columns, the sockets will be about 1.5m high, and the studs will be on the ground. A map in the notices shows the positions of prisms and sockets. These will start being installed on 27 February.

No access to individual flats will be needed to install the monitors. Wherever possible the contractors will drill into mortar between bricks and they have an obligation to make good after the monitors are removed. They may have to drill into some concrete but plan to install the prisms on columns by using strapping.

The monitors will be read by people (wearing high visibility orange jackets) taking readings from theodolites from the public parts of the estate. At first monitoring will be done monthly (to build up a baseline picture of normal movement on the estate). When the tunnel boring machines get near the estate they will move to daily monitoring, which will continue until the machines have passed under the estate and out the other side (about a month). If any settlement does occur it is likely to be immediately after the machines have gone through. But monitoring will then drop to weekly, then monthly until settlement is less than 2 mm.

Defects surveys

The next thing that will happen is defect surveys: these are to assess the baseline position in flats so they have something against which to assess any damage. Crossrail are currently planning this work with their subcontractor. It is likely to start in May-June. The contractors will want to do surveys in the flats of everyone with a settlement deed and others in the blocks in the settlement zone*; they don't yet know exactly which. As soon as they do they will come and talk to us. We agreed that they should hold a public meeting open to all residents to explain how the surveys will work (they will need access to individual flats to do the surveys) and answer questions. So we will aim to fix this up as soon as possible.

In the meantime Crossrail hope in March to be able to provide the definitive dates for the tunnel boring machines to come under the estate. At the moment it is November-December.

*Buildings in the settlement zone: Shakespeare, Willoughby+Speed, John Trundle+Bunyan, Lambert Jones, Lauderdale, Defoe, Gilbert, Andrews, Brandon Mews