



1. Will tunnelling at this depth affect the stability of our homes' foundations? The stability of your property will not be compromised. Precondition surveys and postconstruction monitoring will also take place to ensure this and quell any understandable fears you may have.

# 2. How will the tunnelling process impact our daily lives and routines?

Other than the noise coming from the access point to the tunnel from generators and other equipment, the tunnelling itself will not audibly be noticeable, nor will there be any vibration or noise emanating from the tunnelled section under, or near your property.

# 3. Are there any potential risks of water leakage or flooding during or after the tunnel construction?

No, the pipeline is designed in such a way as to mitigate this. As the water pipe itself is contained within a concrete outer collar, in the event of a burst pipe, water from the pipe will only leak into the outer collar, and then pass to the two pipe shafts at a minimal rate. The pipeline can be shut down remotely to limit any damage to the area around the pipe shaft location.

# 4. What measures will be taken to ensure the safety of our properties and the surrounding area during construction?

Precondition surveys, property monitoring and reporting during the tunnelling section and postconstruction monitoring of your property too.

5. How long will the construction process take, and what disruptions can we expect? Other than the noise from the pipe shaft construction from generators, machinery, and our workforce, which will be minimal, there will be no other disruptions. The duration of the tunnelling section is estimated to begin in 2025 and last for approximately 26 weeks for the entire section west of the M3 connecting at the Otterbourne water service works.

# 6. Will there be any compensation or provisions for inconveniences caused by the construction?

In the unlikely event that any damage is caused to your property because of the tunnelling, you will of course be reimbursed for this. However, sufficient ground investigations have been conducted to ensure that no damage will occur during this phase of the project.

# 7. What environmental impact assessments have been conducted, and how will the project mitigate any negative effects on the ecosystem?

Environmental and ecological surveys and assessment have and continue to be carried out so that we understand the conditions present and can identify potential effects and mitigation requirements. Example mitigation includes; environmental management plans during construction, timings of works, pre-construction checks, supervision/watching briefs during construction by environmental specialists and reinstatement measures. 8. Who will be responsible for any damages to our properties resulting from the construction work?

Even though we do not envisage any damage occurring, Southern Water will of course harbour the costs in the unlikely event that damage occurs.

9. Will there be ongoing maintenance or monitoring of the tunnel to prevent future issues? Smart monitoring of the pipeline will be active 24/7 once the pipeline is commissioned, in addition; pre, during and postconstruction monitoring will be undertaken throughout the process.

10. How can we stay informed about the progress of the project and any updates or changes to the construction plans?

We will provide you with all necessary telephone and email contacts and please also speak with any of our helpful onsite operatives if you wish to discuss any aspect of the tunnelling process.

11. Can we receive assurances regarding the long-term structural integrity of our homes after the tunnel is completed?

Southern Water has a responsibility to all our customers and stakeholders and all assurances related to the tunnelling works will be provided and owned by us as a responsible company.

12. Will there be any noise or vibrations from the tunnelling that could disrupt our peace and quiet?

The tunnelling operations below properties and gardens will not be perceptible at ground level. There will be noise at the proposed shaft locations arising from the construction activities, which we will mitigate.

13. What measures will be taken to minimise dust and debris during the construction process?

This will not be an issue due to the local soil structure and nature of the planned works.

14. Are there any potential health hazards associated with the tunnel construction, such as air pollution or exposure to chemicals?

15. Will access to our properties be restricted during the construction period, and if so, how will emergency situations be addressed?

We will minimise disruption to residents, and we will make sure that access to your property is maintained.

# 16. How will the tunnel construction affect property values in the area, and what steps will be taken to mitigate any negative impacts?

Reports and other similar schemes in the water industry and other infrastructural tunnelling projects highlight that there will be no adverse effect to the value of your property.

17. Can we receive detailed information about the technology and methods that will be used for tunnelling and tunnel construction?

All information and methodology of the works will be provided at the community drop-in presentations we are planning. We will be more than happy to address any concerns during this time.

18. What plans are in place to address any unforeseen challenges or emergencies that may arise during the project?

Smart monitoring and remote operational controls are in place to ensure your properties will not be affected in the event of any incident.

19. Will there be any disruption to utilities such as water, electricity, or internet service during construction?

No, all ground investigations and the depth of tunnelling will not cause any disruption to any services or utilities in the area.

20. How will the company ensure that the tunnel construction complies with all relevant regulations and permits, and what recourse do we have if there are violations or non-compliance issues?

Our chosen contractors rigorously comply to full Construction Design and Management 2015 regulations, including detailed design methodology and sophisticated hydraulic modelling to ensure that the option chosen is the best option within our customer's interests and the regulatory bodies we work with.

21. What insurance coverage does the construction company have in place to protect against potential damages to our properties during the tunnelling process? As mentioned, we do not envisage this being an issue. Full indemnity cover is within Southern Water's policies, along with that of our construction delivery partners.

22. Will the construction company provide proof of liability insurance, and what are the coverage limits?

This can always be arranged, and we will be happy to facilitate this in the form of an insurance summary.

23. Are there any requirements or recommendations for us as landowners to obtain additional insurance coverage during the construction period? No, this will not be necessary.

24. How will insurance claims be managed in the event of property damage or other issues related to the tunnel construction?

This will not be an issue. However, Southern Water would manage anything that arises because of the tunnelling works. We will have multiple measures and mitigations in place to ensure that this will not be something you will have to worry about.

25. Will the construction company be responsible for any increase in insurance premiums for landowners due to the project, and if so, how will this be addressed? This will not be an issue.

26. Are there any exclusions or limitations in the insurance coverage that we should be aware of?

There are no coverage exclusions or limitations associated to the planned works.

27. Will the construction company provide indemnification to landowners for any losses or damages caused by the tunnel construction activities? Of course, however as mentioned we do not envisage this being an issue.

28. Will there be a mechanism in place for landowners to review and verify the construction company's insurance coverage before work begins? Already answered in 22.

29. Will there be any building or planning restrictions reducing my ability to construct an extension or outbuilding over the tunnelled section beneath my property? No, this will not be the case; the tunnel depth is planned at ~8 metres and your ability to construct on or add value to your property will not be inhibited by the existence of the tunnel. The tunnel will not be a point of consideration with your local planning office, or restricted by Southern Water in the event you wish to build over the proposed route.

30. Why have you changed the route and doubled your workload? You had decided on a route north of Waterworks Lane through woodland a while ago, why did it change? The project has been reviewed and re-designed since then, and this route has a different scope. The original plan that was provided to residents from the 2016 iteration of the scheme only undertook desktop-based assessments, further feasibility testing to the current programme of works confirmed that this route was no longer viable, hence the tunnelled section was deemed to be the best preferred option.

31. How will you minimise construction vehicles parking in Waterworks Road? Our construction plan will contain a Traffic Management Plan which will aim to minimise disruption from parking in public roads.

32. My house is Victorian build with old foundations, does that pose a problem? My property is 50 years old, does that mean it's more vulnerable to damage? No, the depth of the tunnel and its design should avoid any damage. No, all properties expand, and contract based on weather conditions.

#### 33. Where does the spoil go?

The spoil will be sent to a Waste Transfer Centre for re-use or disposal.

34. Will you repair damage to roads caused by extra lorries?

Yes, if any damage occurs, but we hope to minimise this through our Traffic Management Plan.

#### 35. Are you monitoring the condition of properties?

Both Southern Water and our contractor teams have explained the property condition survey process, and that we will collaborate with customers throughout the construction process. Properties will be monitored 6 weeks before, at regular points during construction, and 6 weeks after construction.

### 36. How do we compare natural movement to movement from the pipeline installation?

By conducting property surveys before and after, to measure any movement against a baseline measurement. We advise that your house insurer is informed, but this should have no effect on premiums, based on Southern Water's experience of previous tunnelling projects.

#### 37. Will we hear water flowing under our house?

No, the depth of the pipe and its sealing within a concrete pipe will deaden any noise.

### 38. Are there joints in the pipe?

Yes, these are pressure tested, the pipe is made of ductile iron and has a 120-year lifespan.

### 39. Can you service the pipe?

No, but it could be re-lined in the future, if required.

### 40. Where are the shafts located?

They are located in the field adjoining Oakwood Copse behind Regent Close(accessed off Waterworks Road), and in the field adjoining the nursery on Otterbourne Road.

### 41. What is the depth of the pipe and what impact will it have?

Southern Water and our contractor team have explained the expected settlement levels and worst-case scenario, up to 9mm settlement which is less than normal property movement during a year (on average up to 10mm). In addition, we have explained the benefits of drilling through chalk versus soil. Chalk conditions will provide greater support for the tunnel and will have less impact on settlement at the surface.

42. Do we have to go through the courts if there is any damage to property? No, it is Southern Water's statutory liability to compensate residents for any damage caused.

# 43. Do we get a copy of the condition survey report?

Yes.

44. Do we have to say that a pipe is under the property if we want to sell our property? Yes, you do, but there is no evidence from Southern Water's experience from tunnelling projects to say that this will affect your property value or ability to sell. The depth of the pipeline means that it is very unlikely to prevent property extension or alteration. There could be however an impact on alternative heat source installations such as GSHPs (Ground Source Heat Pumps) as borehole systems penetrate the ground at depths of 30-70 meters in some instances and would come into contact with the pipeline if its location were not taken into consideration.

## 45. How many boreholes are there?

There are eight.

#### 46. Have other utilities been consulted?

Yes, and we use their records of services as part of our planning. They are located at a higher ground level than the tunnel.

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### 47. What is the size of the pipe and how do you decide its alignment?

The water pipe measures 800mm in diameter. And ~2000mm in total including the concrete jack pipe. The pipeline is aligned based on ground profiles.

# 48. Could you confirm in writing that it will not affect my property? What happens if there is a problem 3 years later? Will any problem be rectified?

We will issue a legal notice which is valid for 6 years from the date of the notice. Residents are covered under the Water Industry Act 1991. Any problems would be rectified.

#### 49. Is all the tunnelled section under our property deemed to be chalk?

Yes, we have explained the benefits of passing through chalk and exemplified this through diagrams of how settlement is calculated and analysed in these particular conditions compared to that of sandier soils.

#### 50. What is the cost of the project?

The cost is estimated at ~£150m across the two pipeline schemes (Southampton Link Main and Andover Link Main), with a total of 45km of pipeline. The schemes are essential to help us transfer water in Hampshire more easily and make sure we supply you with water constantly.

### 51. Do you use sensors to record property movements, and how accurate are they?

No, we use small targets which measure crack movements. They are accurate to 1mm.

#### 52. What will you do if there is a lot of movement?

Our investigations have included geological and geophysical studies of the ground conditions and type. The findings tell us that this is predominantly chalk which is a soft, self-supporting rock, unlike soil. Our project engineers have considered all worst-case scenarios and are confident that settlement will be less than if the ground consisted mainly of soil. Additionally, tunnelling works will commence in areas away from residential property, this will provide us with more data and understanding of settlement as we progress along the route.

#### 53. I wish to install a Ground Source Heat Pump - will this work prevent this?

If it is your intention to ever install a ground source heat pump (GSHP), we advise you or future property owners to consult with Southern Water to determine the location of the pipe relative to your proposed GSHP, as drilling rigs may have to bore to depths of 50 - 100m+ depending on local geology and other factors.