

Future proofing streetworks

Future proofing is a new and innovative opportunity that is being explored in the context of collaborative streetworks in London. The objective of future proofing is to minimise successive excavations on the road network by pre-empting future infrastructure needs.

Future proofing streetworks can take many forms, including:

- Installing new underground infrastructure or ducting in advance of requirement.
- Repurposing existing underground infrastructure.
- Using adaptable construction typologies.

Future proofing measures can alleviate the need for future excavation, reducing costs and time for works promoters, improve collaboration and increase infrastructure efficiency. This contributes towards increased resilience, a reduction in greenhouse gas emissions and healthier urban areas.

As things stand, some early future proofing pilots have already been executed in London. TfL have constructed several future proofing projects in a range of locations, installing additional ducting whilst road works were taking place¹. The GLA's Infrastructure Coordination Service (ICS) team are looking to build on this experience to understand the potential application of future proofing within collaborative streetworks projects.

GLA future proofing activities:

The ICS is currently undertaking two activities in relation to future proofing of streetworks:

1. **Research policy paper:**

The ICS will carry out a policy research paper on future-proofing streetworks. An external consultant will undertake interviews with relevant industry experts and bodies and examine future proofing case studies. It will also develop a clear framework matrix to help the ICS team identify best-case scenario future proofing projects. The aim is to help the ICS answer questions about funding, strategic placement and methodologies when it comes to future proofing collaborative streetworks projects. The study is due for completion in November 2021.

2. **ICS Future proofing case study:**

The London Borough of Tower Hamlets has allocated funding for future proofing with a requirement for the ICS and stakeholder partners to have a delivery plan in place by October 2021. The purpose of this experiment is to test policy implications and to better understand requirements of successful future proofing interventions, so that the ICS can establish best practice for boroughs around funding/delivering future proofing. The outputs of this case study will align with the policy research paper mentioned above and help inform the findings.

¹ [Elephant and Castle Publication \(tfl.gov.uk\)](https://www.tfl.gov.uk/about-us/infrastructure/infrastructure-publications/elephant-and-castle-publication)
[archway-gyratory-ducting-publication-final-update.pdf \(tfl.gov.uk\)](https://www.tfl.gov.uk/about-us/infrastructure/infrastructure-publications/archway-gyratory-ducting-publication-final-update)
[Stockwell Gyratory Publication \(tfl.gov.uk\)](https://www.tfl.gov.uk/about-us/infrastructure/infrastructure-publications/stockwell-gyratory-publication)
[Cycle Highway 5 Inner Publication \(tfl.gov.uk\)](https://www.tfl.gov.uk/about-us/infrastructure/infrastructure-publications/cycle-highway-5-inner-publication)
[Cycle Highway North South Publication \(tfl.gov.uk\)](https://www.tfl.gov.uk/about-us/infrastructure/infrastructure-publications/cycle-highway-north-south-publication)



ICS future proofing Case study options:

For the Tower Hamlets case study, the future proofing will take the form of additional ducting, with its intended use to be utilised in the future. The aim is to install these additional ducts during a streetworks project identified through our stakeholder group. The focus is to install these extra ductworks with minimal disruption and impact to the original works programme whilst adhering to Health and Safety requirements on site.

The following scenarios have been identified as strategic locations and the number of additional ducts will adapt to suit a specific site condition.

- Extra ducting traversing a road/junction.
- Extra ducting in a location of high growth.
- Extra ducting in a location of future works.

Details of chamber/access hatch requirements will be examined on a case by case basis, which may allow better access to the ducting, as well as providing a means of visually locating the spare infrastructure. The project will also be monitored and evaluated by our M&E partner.

ICS next steps to identify future proofing location:

1. Identify potential location for future proofing within the London Borough of Tower Hamlets.
2. Assess viability and potential strategic benefit of installing future proofing in this location.
3. Convene conversation between existing works promoter, GLA and Tower Hamlets to assess viability of additional ducting.

References:

» [Future Proofing Collaboration Best Practice Hub \(ccsbestpractice.org.uk\)](https://ccsbestpractice.org.uk)
[Cycle Highway North South Publication \(tfl.gov.uk\)](https://www.tfl.gov.uk/cycle-highway-north-south-publication)
<http://content.tfl.gov.uk/archway-gyrotory-ducting-publication-final-update.pdf>
<http://content.tfl.gov.uk/publication-final-ch5inner.pdf>

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