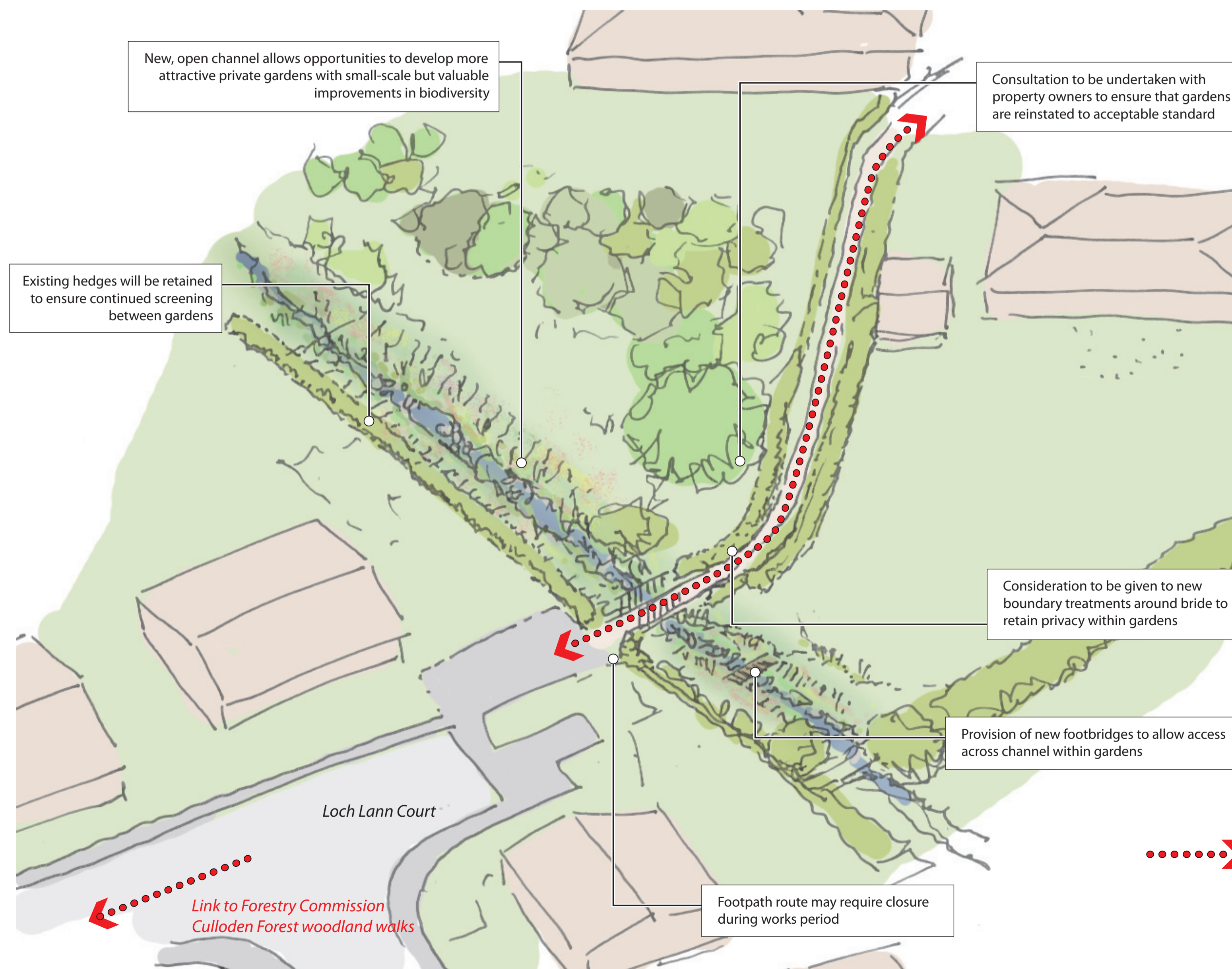


11 What is proposed for Redburn Avenue?

The existing culvert between Redburn Avenue and Loch Lann Court is not big enough to contain flood flows and is also prone to blockage. We have investigated ways of improving the hydraulic capacity and reducing the risk of blockage in this location. Options that are considered to be feasible are:

1. To remove the existing culvert and restore to a more natural channel (see diagram to right). This would include the construction of up to three bridging structures. This option would provide good channel capacity and reduce the risk of blockage to a negligible probability. However, this option affects many of the local residents and will be difficult to construct between existing houses.
2. To retain the existing culvert, but reshape the headwall structure to improve the culvert inlet hydraulics and add additional overflow pipes (see diagram, bottom right). This option would increase the flow capacity of the culvert to accommodate larger flows. It would be easier to build and will have a lower impact on local residents. However, this option will not reduce the risk of blockage to the same extent as the open channel option.

We have also considered landscaping the ground over the culvert so that if flooding occurred, the flows would be directed back into the stream. This option was rejected as it would pass through private gardens and would be difficult to ensure the overflow channel was kept in a suitable condition to function.



Concept plan: note that this shows general issues and solutions; it is not intended to represent the detailed scheme



Concept visualisation, looking north

