

Attachment E - Infrastructure/sequencing considerations

Large future urban areas

The adoption of the Unitary Plan resulted in live zoning approximately 26 per cent of future urban land included in the Strategy, and has effectively determined the initial sequencing and council priorities for infrastructure servicing. The sequencing of other areas has in part been influenced by the quantum of land live zoned (i.e. available development capacity through live zoning) and ability to provide infrastructure. A brief summary of the key rationale for proposed sequence changes in the Strategy is provided below. This informs Tables 1 and 2 and the sequencing maps in Attachments B, C and D.

Warkworth

A new wastewater treatment plant at Snells Beach, along with an associated new pipeline from Warkworth and upgraded outfall is required to service development in Warkworth North. This work is currently being consented, and expected to be implemented over the next five to six years. The later sequencing of Warkworth South provides for the efficient staging of wastewater infrastructure. The Pūhoi to Warkworth motorway is expected to be completed in 2021, and associated upgrades to the local roading network align with the sequencing of Warkworth North. Warkworth North East is sequenced later to enable connections to the town centre to be adequately addressed.

Wainui East, Silverdale, Dairy Flat

Interim water and wastewater solutions can provide capacity in the short term to service the live zoned area at Wainui East. There is currently a cap of 2,000 dwellings applying to the Special Housing Area. Sequencing of the remaining areas reflects the need for significant new bulk water and wastewater infrastructure, including a new water main from Albany and additional wastewater conveyance and treatment capacity at Army Bay. The proposed business area in Silverdale – Dairy Flat has been brought forward to provide local employment opportunities and address demand on transport infrastructure. It is likely that structure planning for this business area will need to occur 2017 – 2018 to enable some business land to be live zoned in the short-term.

Kumeu, Huapai, Riverhead, Whenuapai and Redhills

The sequencing of the north-west is dependent on completion of the Northern Interceptor in 2025, which is needed to provide bulk wastewater capacity to this area. Interim solutions can provide wastewater for initial development in the live zoned area of Redhills and first stage of Whenuapai until the Northern Interceptor is completed. Kumeu, Huapai and Riverhead have been put back to align with the timing of transport improvements needed to address safety and capacity issues on State Highway 16, and the completion of the Northern Interceptor.

Takanini

The future urban zone in Takanini is subject to significant flooding hazards, as well as geotechnical constraints due to peat soils. Initial cost estimates to provide a comprehensive stormwater solution to the area were considered, at the time, to be high with a relatively low to moderate dwelling yield. This could make development possible in the medium to longer term. Since the adoption of the Future Urban Land Supply Strategy in 2015, further analysis of recent stormwater project costs in the Takanini area have been undertaken. The results of this analysis indicate that stormwater costs for the future urban zone remain high and further work is required to understand the viability of development in this area in the medium to long term. It is therefore proposed to sequence the Takanini area later, to the third decade (2038 – 2042). It is currently sequenced as 2027 – 2031.

Hingaia, Opaheke-Drury, Drury West

Proposed interim solutions provide wastewater capacity for initial development in Hingaia, Drury West Special Housing Area (which is now live zoned), Drury West Stage 1 and Drury South. In the longer term, augmentation of the South and Southwestern Interceptors is required to provide wastewater capacity for the full build-out of these areas, including Drury West Stage 2 and Opaheke-Drury.

The later sequencing of Drury West Stage 2 allows for the provision of a new expressway between Drury, Paerata and Pukekohe, which is required to alleviate capacity and safety issues on State Highway 22.

Opaheke-Drury has been brought forward slightly as a result of developer interest in this area. However, a solution to the flooding constraints in combination with the completion of the final wastewater infrastructure is required before comprehensive development can occur in this area.

Rural Settlements

Rural settlements and other 'standalone' areas have been sequenced according to the anticipated availability of bulk infrastructure services and timing of structure planning and plan change processes.

North – Wellsford, Algies Bay, Albany Village, Hatfields Beach

Wellsford: Further geotech testing will be required due to instability in some areas. A new water source will be required to service the Future Urban zone areas. These areas will also require an upgrade to the wastewater plant, which is likely to take until the early 2020s.

Algies Bay: Upgrades to the wastewater outfall pipe will be necessary to service new connections outside the existing service area.

Albany Village: Full buildout of the future urban areas will require new water services capacity (North Harbour watermain) and road upgrading.

Hatfields Beach: Wastewater upgrades are necessary to service new development and are likely to take until the early 2020s. With limited water supply, large scale development will require new transmission lines from Albany, which is likely to take ten years following commencement of design.

North-west – Helensville (Stages 1 and 2)

Further geotech investigation is likely to be necessary to manage slope stability issues and ensure effective drainage to overland flow paths and streams. The Helensville wastewater plant has recently been upgraded and can accommodate approximately 6,000 people. This provides sufficient capacity for the existing urban zoned areas, and part of the Future Urban zoned area. The Helensville stage 1 area is the closest Future Urban zone area to the wastewater plant. Watercare will monitor growth and review additional upgrade options when population nears the treatment plant capacity.

South – Maraetai, Oruarangi, Puhinui, Clarks Beach, Glenbrook Beach

Maraetai: the wastewater treatment plant will be upgraded as required in order to maintain discharge compliance and to accommodate growth.

Oruarangi: The area has sufficient water and wastewater bulk capacity. Structure planning will need to take cultural heritage and landscape values into account, consistent with the Mangere Gateway Precinct.

Puhinui: The remaining future urban zone is not anticipated to be development ready until 2030 due to transport constraints and anticipated market readiness.

Clarks Beach: A new wastewater outfall at Clarks Beach will be required to service new development, subject to a sub-regional wastewater discharge consent which has currently been applied for.

Glenbrook Beach: New development will depend on the new Clarks Beach wastewater outfall, and structure planning for the new area to be developed as a gateway to, and logical extension of, the existing village.