



Tauranga Eastern Link

Project update

July 2011

Changing landscape for Tauranga Eastern Link

Work is now well underway on the Tauranga Eastern Link (TEL). In the area adjacent to the Domain Road roundabout on State Highway 2, vegetation and houses have been removed.

Erosion and sediment controls have been installed to ensure untreated water does not enter the existing drainage system now that earthworks at this site have started.

In May long-term traffic management was put in place at the

roundabout, including a 50km/hr temporary speed restriction. Approach lane widths were narrowed and concrete protection barriers installed.

Over 28,000 cubic metres of sand has been laid over geofabric to create a drainage blanket for the wick drains and provide a stable platform for two 55-tonne cranes which have started installing over 23,000 wick drains (see back page for more information about wick drains).



SH2/Domain Road roundabout - January 2011



SH2/Domain Road roundabout - June 2011



What the new Domain Road interchange will look like. Existing SH2 is on the right hand side, and Domain Road and Tara Road are on the left hand side

Your voice is heard on the Bay's largest roading project

The first Tauranga Eastern Link Community Liaison Group meeting was held in May.

These meetings, held quarterly, will enable the community to discuss the project with the TEL project team, be kept up-to-date on project progress, and pass information back to their interest groups.

The kiwifruit season, traffic delays and signage were just a few of the items addressed at the first meeting.

The TEL is the Bay of Plenty's largest ever roading project and to make it a success the NZTA encourages community involvement and the opportunity for feedback. The TEL Community Liaison Group includes representatives from:

- Papamoa College - *Dave Ballard*
- Te Puke Fast Forward and Federated Farmers - *Richard Powdrell*
- Focus Te Puke - *Mark Boyle*
- Comvita - *Julie Chadwick*
- Kiwi 360 - *Graeme Crossman*
- NZ Kiwifruit Growers Inc - *Mike Chapman*
- Papamoa Progressive - *Neville Dixon*
- Te Puke Community Board - *Karyl Gunn*
- Te Puke High School - *David Crone*
- Paengaroa Community Assn Inc - *Linda Ross*
- Pukehina Ratepayers Assn - *Ian Rodger*
- Cycle Action Tauranga - *Kevin Connole*
- Bus and Coach Assn - *Neil Jamieson*
- WBOP Motorcycle Assn / ACC - *Carole Fleming*
- Road Transport Assn - *Charlene Kerr*
- Te Puke Environment Forum - *Gael Blaymires*
- Members of the TEL NZTA, Beca and Fulton Hogan HEB Construction Alliance project teams.

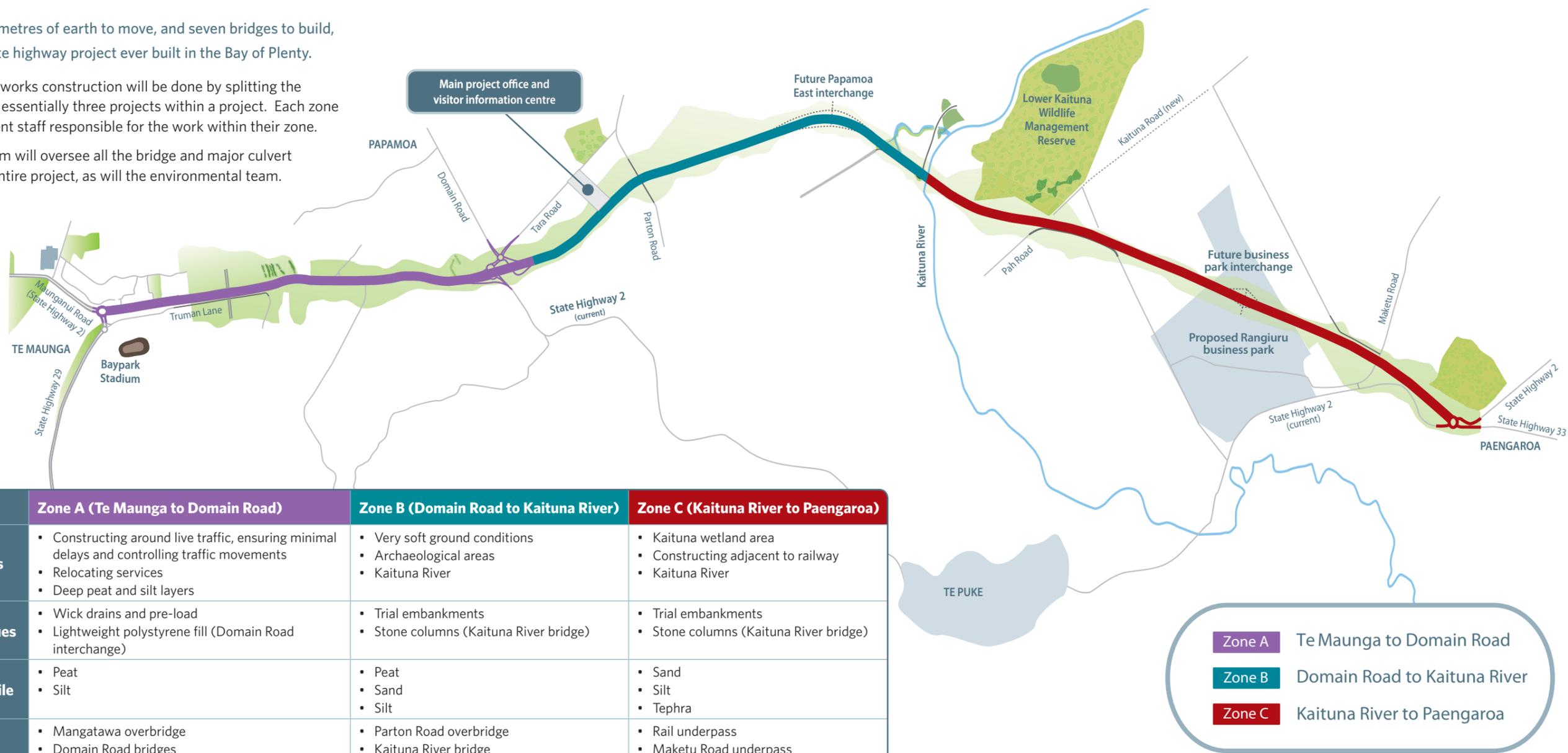
If you feel a sector of the community is missing please contact Kylie Ruegg, TEL Communications and Stakeholder Liaison Manager, kylie.ruegg@nzta.govt.nz or phone 07 928 7901.

Tauranga Eastern Link construction zones

With three million cubic metres of earth to move, and seven bridges to build, the TEL is the largest state highway project ever built in the Bay of Plenty.

Management of the earthworks construction will be done by splitting the project into three zones – essentially three projects within a project. Each zone has dedicated management staff responsible for the work within their zone.

A separate structures team will oversee all the bridge and major culvert construction across the entire project, as will the environmental team.



	Zone A (Te Maunga to Domain Road)	Zone B (Domain Road to Kaituna River)	Zone C (Kaituna River to Paengaroa)
Key project challenges	<ul style="list-style-type: none"> Constructing around live traffic, ensuring minimal delays and controlling traffic movements Relocating services Deep peat and silt layers 	<ul style="list-style-type: none"> Very soft ground conditions Archaeological areas Kaituna River 	<ul style="list-style-type: none"> Kaituna wetland area Constructing adjacent to railway Kaituna River
Construction techniques	<ul style="list-style-type: none"> Wick drains and pre-load Lightweight polystyrene fill (Domain Road interchange) 	<ul style="list-style-type: none"> Trial embankments Stone columns (Kaituna River bridge) 	<ul style="list-style-type: none"> Trial embankments Stone columns (Kaituna River bridge)
Predominant soil profile	<ul style="list-style-type: none"> Peat Silt 	<ul style="list-style-type: none"> Peat Sand Silt 	<ul style="list-style-type: none"> Sand Silt Tephra
Structures to be built	<ul style="list-style-type: none"> Mangatawa overbridge Domain Road bridges 	<ul style="list-style-type: none"> Parton Road overbridge Kaituna River bridge Bell Road underpass 	<ul style="list-style-type: none"> Rail underpass Maketu Road underpass
Progress to date	<ul style="list-style-type: none"> Monitoring Tara Road trial embankment Ground improvements at Domain Road (wick drains) Relocating services 	<ul style="list-style-type: none"> Monitoring Parton Road trial embankment Constructing access and haul roads Ground improvements (stone columns) at Kaituna River for the bridge 	<ul style="list-style-type: none"> Monitoring Pah Road and Kaituna River trial embankments Constructing access and haul roads Ground improvements (stone columns) at Kaituna River for the bridge Orchard reconfiguration

Information centre now open - 65 Tara Road, Papamoa

To find out more about the Tauranga Eastern Link visit the project information centre located on Tara Road, Papamoa (the entrance is located off the Tara Road/Doncaster Drive roundabout).

Information centre opening hours - 9.00am to 5.00pm Mondays to Fridays

At the information centre you can see the latest construction news, access project information, view a virtual "drive through" of the TEL and project DVD (which will be updated regularly). Staff will be available to answer questions about the project and community and school groups are more than welcome to visit the centre. Please call the the information centre on 07 542 9995 to arrange a visit.

Ground improvements

There are seven bridges to be built on the TEL and ground improvements are required for all bridges. Due to the nature of the soft soils, a number of ground improvement techniques will be used to strengthen the ground including stone columns, displacement piles, pre-load and pre-load with wick drains. The following are two of these techniques:

Stone columns

Stone columns will be installed at the Kaituna River Bridge to stabilise the ground against liquefaction in the event of an earthquake plus provide a greater bearing capacity for the approach embankments.

A stone column is a vertical column of compacted gravel which is installed into the ground. A vibrating tube penetrates the ground to the required depth. Gravel is poured into the tube, then the tube is extracted (with vibration) causing the gravel to be pushed into the surrounding ground as a stone column.

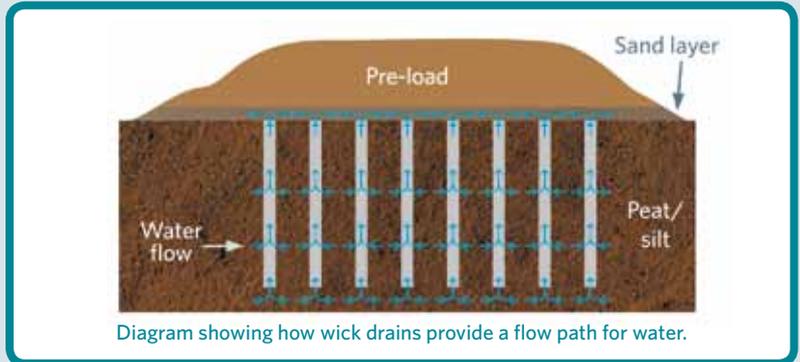
Once the ground improvement work is completed the fill embankments and pre-load material can be constructed.

Pre-load with wick drains

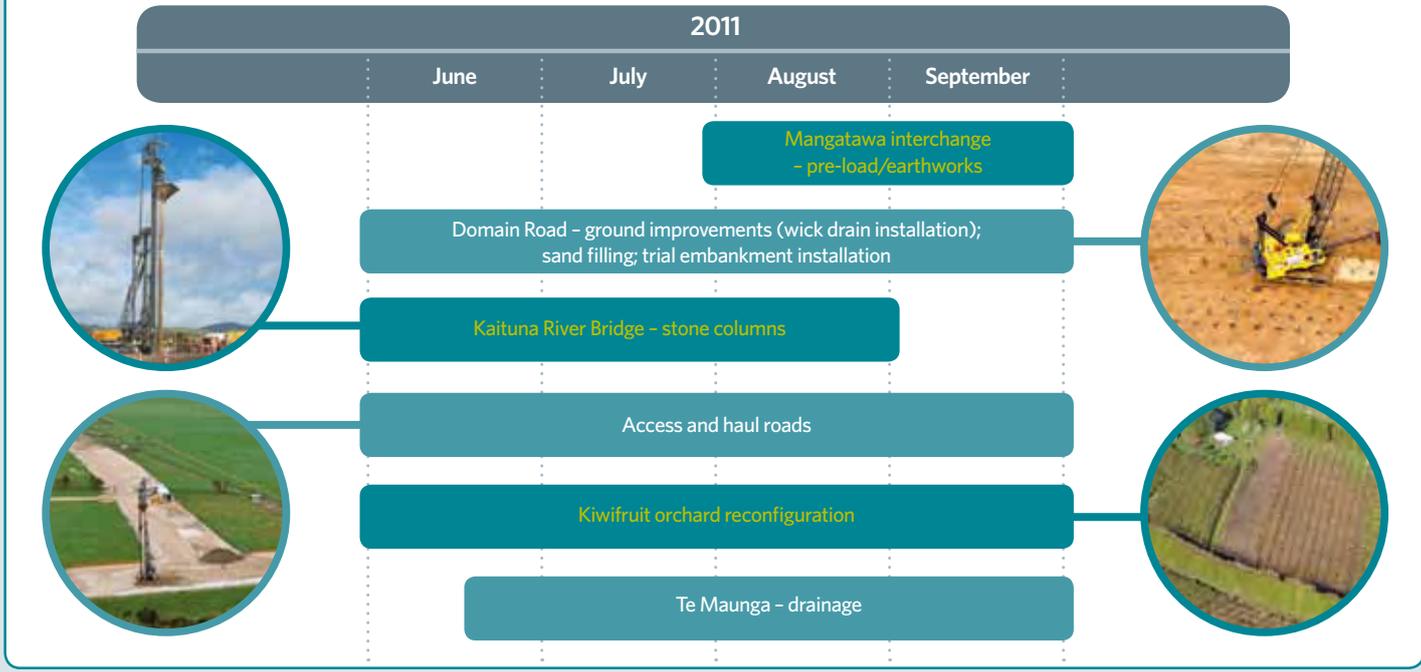
A wick drain is a vertical drain that allows an escape route for water when the soil is compressed. The drain comprises a synthetic material wrapped around a piece of grooved plastic. This is inserted vertically into the ground providing a path for water to flow and quickly escape once pre-load material is placed on top.

This speeds up the rate at which the water can escape from the underlying silt and peat layers, decreasing the subsequent settlement time.

On the TEL, over 23,000 of these drains will be installed at Domain Road alone to a depth of up to 25 metres due to the peat and silt layers encountered in this area.



Proposed construction programme for the next three months



Our contact details

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 For more information visit www.nzta.govt.nz/tel

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