

Correnso Community Meetings

Minutes from the Correnso Community Meetings held on 12 November are available on our website. Printed copies and audio CDs are also available at the iSite and Hauraki District Council Service Centre.

The Sky Tower again ...



The top of the Correnso mine is the same distance below Waihi East as the street is below the Sky Tower glass viewing deck.

You may remember in the last issue we provided the example of the height of the viewing deck at the Sky Tower in Auckland as a way of illustrating how deep the top of Correnso mine is under Waihi East. A few people have told us that they have not been to the Sky Tower, the above photo was provided by one of our staff who visited there recently.

Tsunami blast notification

Some people prefer to be advised of planned underground blasts. Others are not concerned. Currently we advise of blasts by text, email, website and phone. In preparation for Correnso we have been trialling a device that alerts residents just before a blast event. Called the Tsunami, the device was originally developed for natural disaster alerts. It was meant to be loud and startling. We have had the device modified to play music, so that it 'advises' rather than 'warns'. Local radio station Gold FM 96.4 has been an integral part of the development of this system.



The Tsunami device is a specialised FM radio. It receives a signal we send, then it plays a short piece of music to advise residents that a blast will soon follow.

Each Tsunami in individual homes receives a signal from us immediately prior to both development and production blasts. When signalled, the Tsunami will play a short piece of music. The underground blast will follow after this. For those people who are concerned by blast vibration this device should reduce the 'startle effect' of a blast event. They will know that once they hear the music an underground blast will follow soon after.

We know from experience that blast events in different areas of our almost completed Trio underground mine resulted in different vibration levels on the surface ranging from imperceptible to quite obvious. This will mean that it is likely that, depending on the location and type of blast at Correnso, the Tsunami device will advise of an upcoming blast but some residents may not feel any vibration.

Installation of the transmitting infrastructure will take place in January, with the system operational in February. We will be contacting residents in early 2015 to identify those people who would like this device in their homes.

Find out more
www.waihigold.co.nz

Contact us:
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NEWMONT

What is the difference between a development and production blast?

When we talk about 'development' blasts we are usually referring to the blasts required to create the tunnels we use to get to the orebody. The 5m x5m tunnels you see in the plans on the facing page were created by development blasts. Production blasts are bigger. They are the blasts which fragment the rock which contains the ore. They use more explosives and blast larger areas, typically 5m x 18m.

The consent conditions define any single hole with a charge weight of more than 7 kilogrammes of explosive as a production blast.

Can blast vibration damage my house?

There are many studies, regulations and standards relating to ground vibration and property damage. The British standard BS7385 (1993) states that there should be no cosmetic damage if vibration is below 15mm/s, but it cautions that this should be halved for 'historic buildings in poor repair'.

A quick browse on the internet will provide many academic papers, explanations and experiences. It doesn't take much reading to realize that not all vibration is the same, and different types of vibration over different timespans can have different effects on different structures.

Confused? Next year we will run the blast vibration workshops and get someone who really understands all of this to explain it in simple language.

Blasting at Correnso

When can we blast, how many blast events, and for how long?

Our Trio underground mine is almost completed. The consent conditions for Trio allowed blasting at night time. The consent conditions for Correnso are different. Blasting is only allowed during the day from Monday to Saturday between the hours of 7.00am and 8.00pm. We are not allowed more than three 'blast events' on any day and blasting on public holidays is not allowed. We are required to use our 'best endeavours' to meet these requirements. There may be an occasion, for example for safety reasons, where we need to blast outside these times. The consent conditions require us to minimise the impact of blasting on the community where practicable. This means restricting the duration of blasts events to the minimum consistent with safe and efficient mining operations and firing production blasts within the three defined blast windows at shift changes and meal breaks where at all possible.



Blasts underground are not 'light the fuse and run' like in the movies. Modern blasting techniques involve careful planning of charge weights, sequencing and timing to ensure the rock is fragmented with the minimum of vibration.

Blast vibration is measured in millimetres per second. This is written as mm/s. This measure relates to the speed of the movement not 'how high things jump'. The actual 'jump' from a production blast is about the same as the thickness of a piece of paper.

Development blasts are required to be no more than 2mm/s on average and no higher than 5mm/s for 95% of the blast events. A development blast event must be no longer than 12 seconds. We are allowed to fire two development blasts one after the other as long as the maximum duration is no more than 18 seconds in total. If you are experiencing vibration from Correnso you will be feeling development blasts.

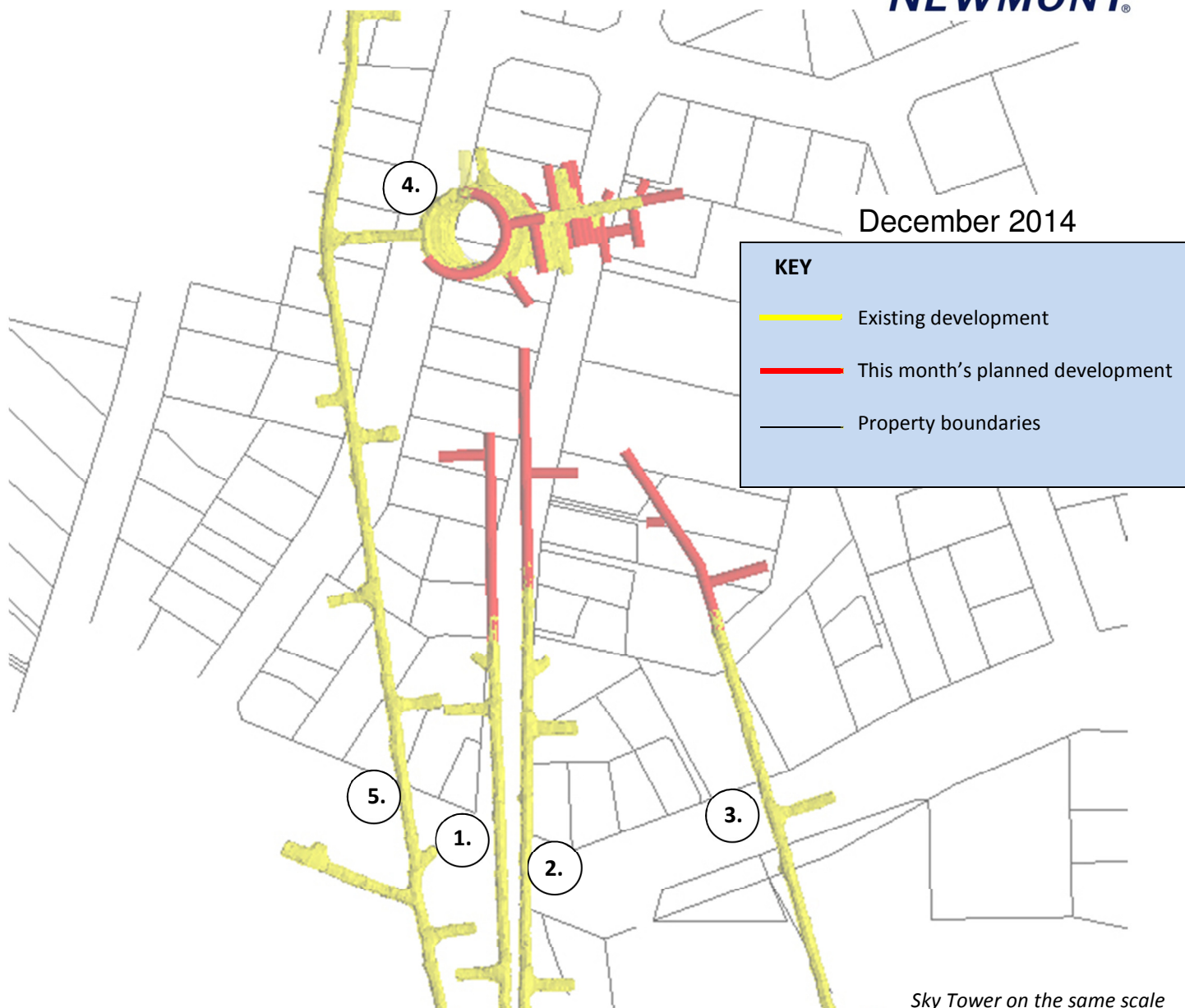
Production blasts must be no more than 3mm/s on average and no higher than 5mm/s for 95% of the blast events. Production blast events must last no more than 9 seconds. Production blasting to access the ore will begin mid-2015.

This compliance is measured over a six month rolling period. This means if we have a few blasts that register 4mm/s we will need a number of much lower blast events to bring down the average over any rolling six month period.

We have had to simplify the consent conditions in this summary. The full consent conditions contain more detail and can be found on our website.

Blast Vibration workshops 2015. Your chance to ask the experts about blast vibration, human perception, property damage, and anything else you want to know about vibration effects. Details to be announced early next year.

Correnso Development



Sky Tower on the same scale



Gladstone Road: 1120 RL

1120-919 = 201m below surface

919 RL

922 RL

873 RL

5.

792 RL

795 RL

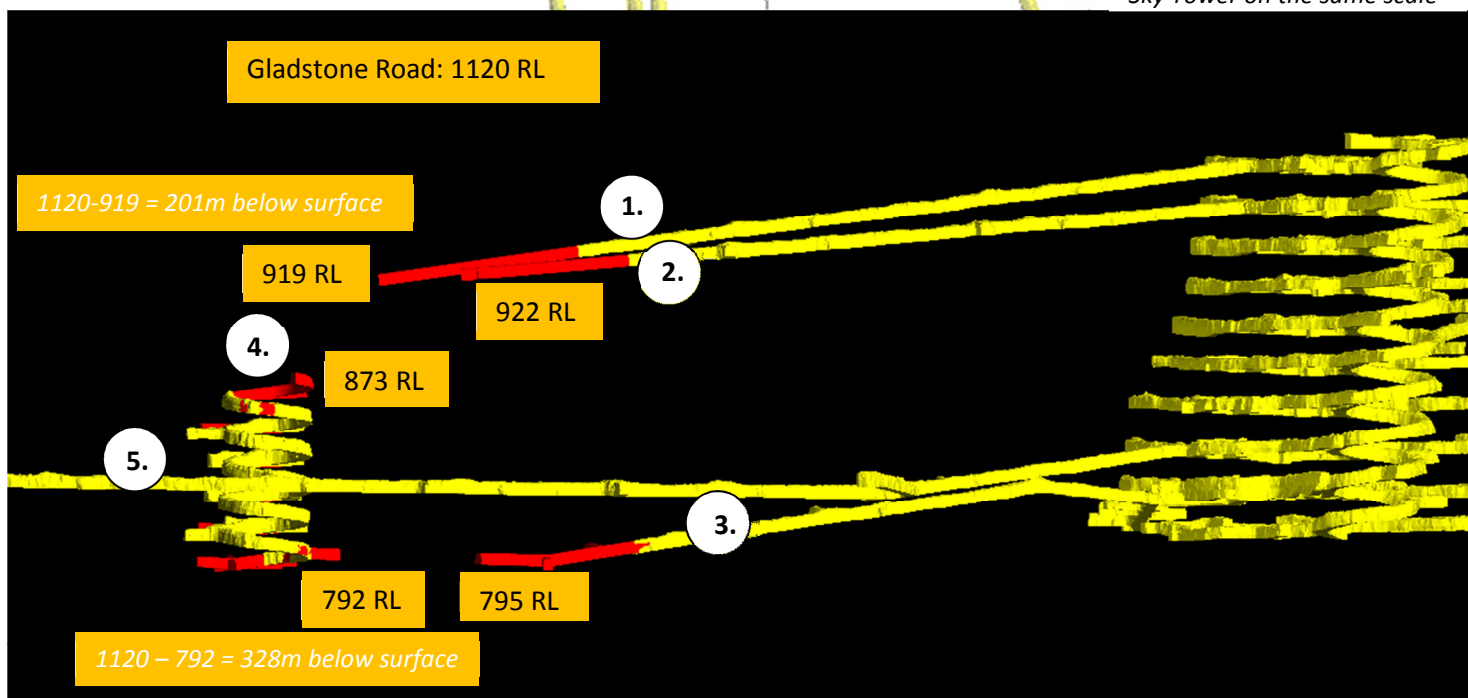
1120 - 792 = 328m below surface

1.

2.

3.

4.





Mine Development Plan

Published at the start of each month as required by Condition 22a of the Correnso Underground Conditions of Consent

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