



Newcastle Inner City Bypass – Rankin Park to Jesmond

Fact Sheet

Low impact controlled blasting

As part of construction of the Newcastle Inner City Bypass, the project team will complete drilling and low impact controlled blasting.

This blasting will be carried out to safely remove dense rock north west of the John Hunter Hospital.

What is low impact controlled blasting?

Low impact controlled blasting is used to excavate hard rock by drilling a series of holes into the rock and placing explosives according to a set pattern and depth. The small explosives are detonated in a sequence to break up the rock. The rock is then crushed, screened, stockpiled and transported.

Blasts are designed by specialist engineers to reduce the impacts of noise and vibrations to nearby stakeholders while removing the dense rock.

Why is low impact controlled blasting being used?

Low impact controlled blasting reduces overall impacts to local stakeholders and the project, in terms of duration of ground borne noise and vibration impacts on surrounding properties and local communities.

The project considered a method of excavation using only rock hammers, however it has a higher impact and longer duration to achieve the same results. The use of low impact controlled blasting allows us to reduce the duration of this work with less impact to nearby residents.

What is the rock used for?

The rock will be crushed for other parts of the project which could include pavement materials or drainage rock. Earth moving equipment will excavate and haul the material from the blast site.

How long will low impact controlled blasting take to complete?

Low impact controlled blasting will take about two months to complete. We expect to start the blasting in March 2024, weather permitting.

When will the low impact controlled blasting take place?

We intentionally stage our blasts to minimise impacts for the community. Blasts will be spread over several weeks to reduce impacts. Low impact controlled blasting work hours differ to standard working hours, they are:

- Monday to Friday, 9am to 5pm
- Saturday, 9am to 1pm

Local community members will be provided with exact dates that the low impact controlled blasting will be carried out.

What are the expected noise impacts?

Noise from a blast is over quite quickly and can be compared to thunder rumbling. People in close proximity to the blasting area may feel some slight vibration. The Minister's Conditions of Approval for the project sets strict limits on air blast overpressure (noise from energy) and all blasts are modelled and monitored to ensure compliance.

All work will take place within approved construction hours with respite periods scheduled as required under the project's approvals.

Will low impact controlled blasting cause damage to nearby property?

The Minister's Conditions of Approval for the project sets strict limits on vibration and all blasts are modelled and monitored to ensure compliance. Due to the location of the project, these limits are significantly lower than many other projects requiring this type of work.

Eligible properties have already been offered building condition surveys to provide property owners with a record of their property's pre-construction condition should any concerns arise.

Will I need to be relocated?

This is not expected, however if it is required for some residents to temporarily leave their homes to stay safe, the project team will arrange a meeting with individual residents to discuss potential impacts and relocation arrangements while the low impact controlled blasting takes place.

Will there be impacts to traffic?

There are no expected impacts to traffic.

Will there be any impact to utilities?

We are working closely with utility providers to ensure there is no disruption to utility services.



Controlled blasting at a cut site

How will safety risks be managed?

The safety of workers and the community is our highest priority. A **Blast Management Plan** has been developed to manage and monitor the safety of our workers, the community and the environment.

All blasts are managed by a licensed contractor and experienced shotfirer in line with relevant legislation. Other safety measures include:

- a safe exclusion zone established before each low impact controlled blast
- the blast controller, blast sentries and safety/traffic control will ensure the area is secure and everyone is a safe distance from the blasting
- the shotfirer will sound a siren to indicate the blast is imminent. The siren will be activated for about 30 to 60 seconds and nearby residents may be able to hear this siren
- a final siren will sound to indicate the blast is complete and the zone is safe.

All blasts are planned to prevent blast fumes being released into the environment. Blast fumes may occur from non-ideal detonation (for example, if groundwater is present) and can pose a health risk if exposure occurs. In the unlikely event of blast fumes being released beyond exclusion zones, the project team will contact sensitive receivers to shut windows and stay indoors. Blast fumes are different to the normal gases released from controlled blasting which usually disperse rapidly and pose no health risks.

What if I have concerns or more questions about low impact controlled blasting?

To discuss your individual circumstances or for more information, please contact our project team:

Phone: 1800 818 433 (24 hours)

Email: RP2JCommunity@fultonhogan.com.au

Mail: Rankin Park to Jesmond project team,
PO Box 186, Waratah, NSW 2298

For more information about the project visit nswroads.work/rp2j or scan the QR code to visit our interactive portal.



Translating and interpreting service



If you need help understanding this information, please contact the Translating and Interpreting Service on **131 450** and ask them to call us on **1800 818 433**

Low impact controlled blasting locations



This is an artist impression only and is not to scale.