Vibration Monitoring Data-Monthly Summary						
Month and Year:	Sep-20					
Project:	Central Station Main Works					
EPL Licence Number:	21148					
EPL Weblink:	https://centralstationmetro.com/documents/					
Specific EPL Monitoring Condition:	M7.2- Vibration Monitoring					
Monitoring Location:	**Number of Monitoring Events during the Month**	**Attended/Continuous Monitoring**	**Event Based Monitoring? (Y/N)**	**Measured Parameter: Peak particle Velocity (PPV) (mm/s)**	**Predicted Parameter: Peak Particle Velocity (PPV) (mm/s)**	**Comment**
TCAC AKA. CEB (Central Electric Building)	1	Continuous	Y	Max: 13.36mm/s (localised bump) Max due to construction: 4.07mm/s on 30/09/20	<7.5mm/s	For the month of September 2020, 3 individual data points recorded vibration > 7.5mm/s with the highest being 13.36mm/s. The Northern Concourse area experienced vibration intensive works towards the end of the month (demolition of concrete slab), however works overall were low impact at the slab of the CEB. Where vibration exceeded 7.5mm/s, these were only momentary spikes and were not continuous in nature, which indicates that this was attributed to a localised bump of the geophone.
CENA68	12 (Daily)	Continuous	Y	0.43 - 2.22mm/s	3mm/s	Brokk was used in the upper northern concourse to break out the old escalator concrete slab. Elevated vibration levels were observed from typical background levels, however below the target screening level.

30 Chalmers St	1	Continuous	Y	36.24mm/s (localised bump)	<25mm/s	The works at the Eastern Entrance throughout September 2020 consisted predominantly of the removal of excavated shale. No hammering/breaking occurred during September. The larger elevated peaks in vibration (max 36.24mm/s) were singular in nature. Elevated vibration levels throughout the month of September were attributed to renovation activities at 30 Chalmers St. The singular nature of the detected vibration (36.24mm/s) suggests a localised bump of the geophone.

Definitions

Attended: Operator attended measure at either the façade of sensitive receiver, internal dwelling of a sensitive receiver or at a location of interest, typically in anticipation of an event.

Continuous: Real time vibration data recording the peak within a 1 min intervals, 24/7.

Event: The peak particle velocity (PPV) measured in mm/s of any measuring interval either during attended monitoring or a period of interest reviewed from the continuous data. The period is typically selected to monitor works as the works occur, or to validate predictions of planned works, or in response to a complaint, or due to an unexplained elevated PPV in the continuous data noise trace.