



# THE BOTANICA GROUND MOVEMENT INSTRUMENTATION & MONITORING REPORT

OCTOBER 2019

TAS-CYP-DOM-ZWD-REP-CGI-DMA-C0002 00

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## TRIGGER LEVELS

Trigger levels have been set in accordance with percentages of the predicted value as calculated by the design model. Table 1, extracted from the Project Wide Ground Movement Instrumentation and Monitoring Report, summarises the trigger levels and associated actions.

Table 1 - Trigger Level Summary

#	Trigger Levels	Percentage of the Predicted Value (%)
01	Green (Normal)	< 80%
02	Amber (Alert)	80% to 120%
03	Red (Action)	> 120%

## DATA ASSESSMENT

No bulk excavation activities are currently being undertaken to induce ground movements. Data is being collected to establish baseline, and understand fluctuations from environmental effects.

## MOVEMENT MONITORING PRISMS (MMP)

### GRAPH 1.0 - MMP - Z SETTLEMENT

Movements of up to 7mm have been noted on various instruments. Settlement may be due to environmental affects and/or natural ground movement. Trigger levels to be added once bulk excavation commences.

### GRAPH 2.0 - MMP - CHANGE IN EASTING

Movements of up to 5mm have been noted on various instruments. Movements may be due to environmental affects and/or natural building movement. Trigger levels to be added once bulk excavation commences.

### GRAPH 3.0 - MMP - CHANGE IN NORTHING

Movements of up to 7mm have been noted on various instruments. Movements may be due to environmental affects and/or natural building movement. Trigger levels to be added once bulk excavation commences.



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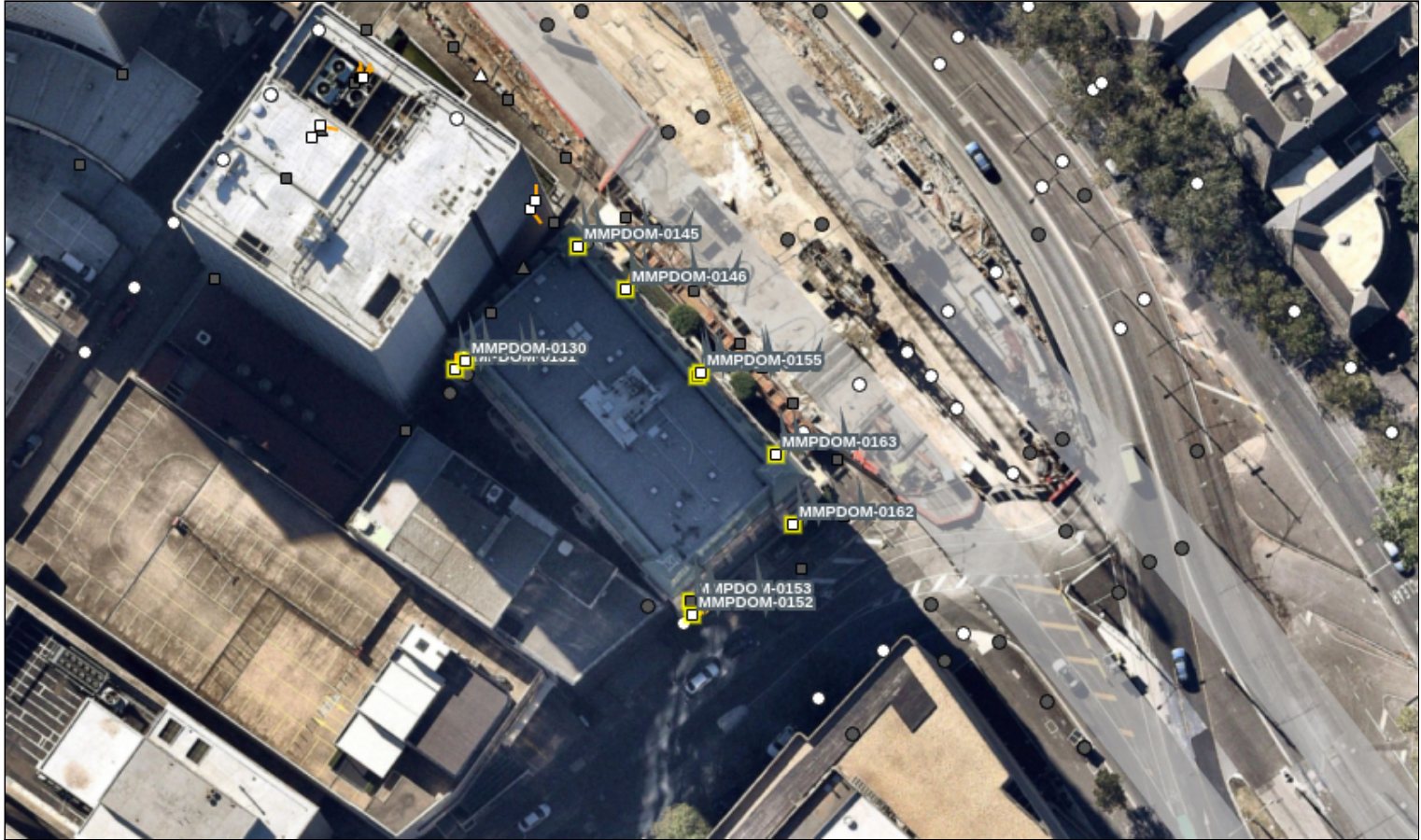
# Cross Yarra Partnership

## Metro Tunnel Project

### Botanica - MMP (1)

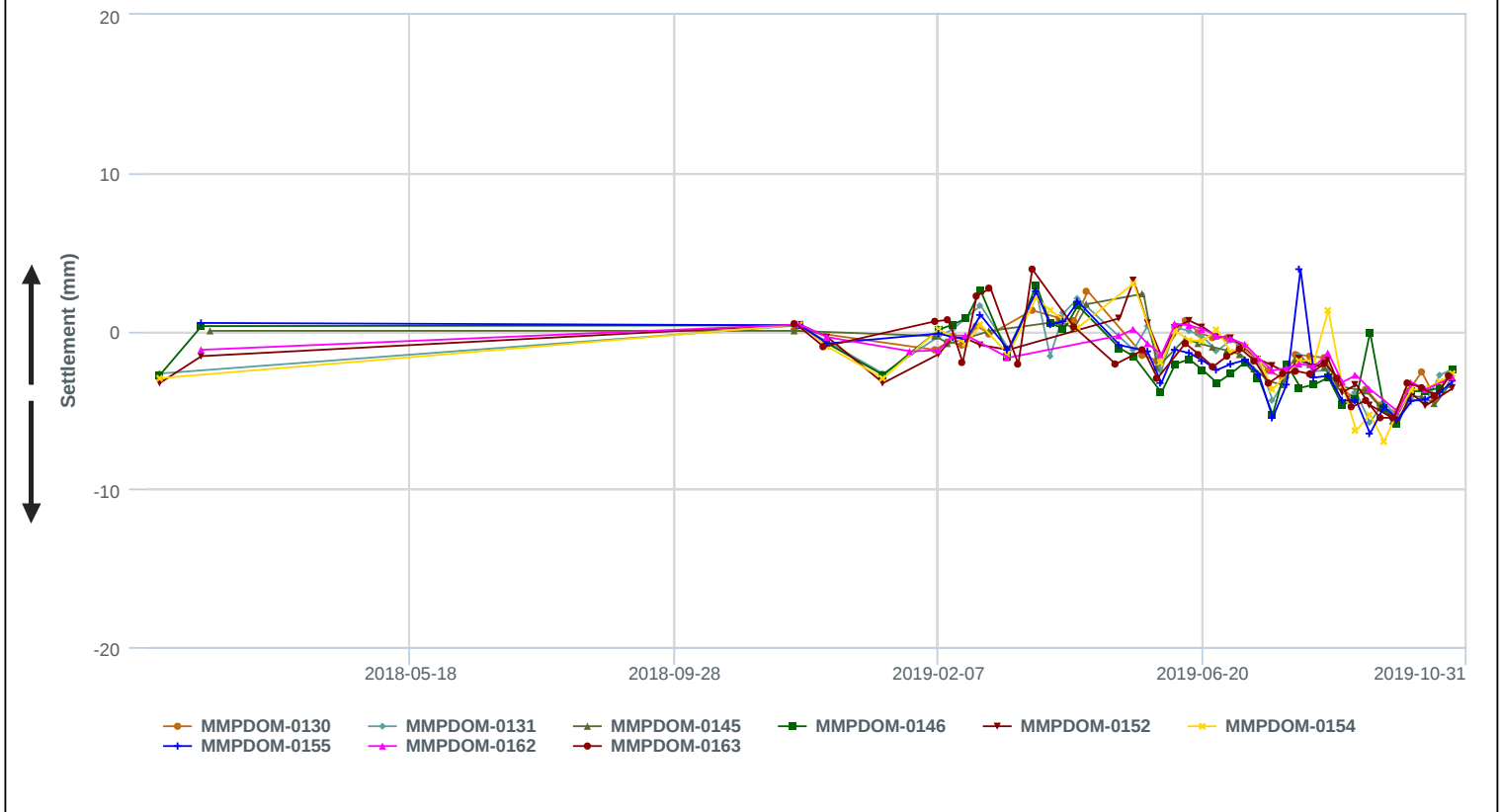


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Graph 1.0

Z Settlement





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## Cross Yarra Partnership

### Metro Tunnel Project

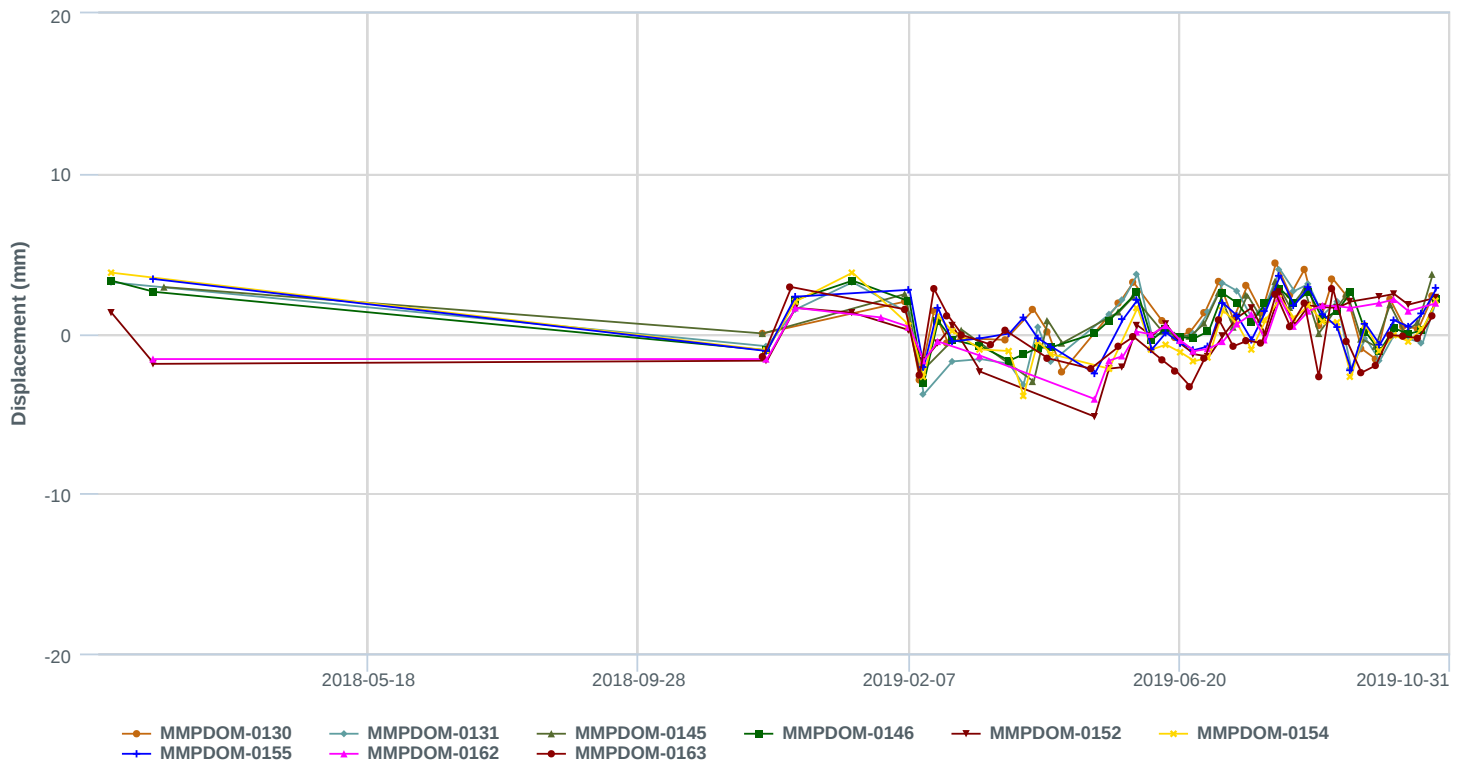
#### Botanica - MMP (2)



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Graph 2.0

Change in Easting



Graph 3.0

Change in Northing

