

Ref: D24/2022

17 January 2024

Department of Planning, Housing and Infrastructure
Northern Region
155-157 Marius Street
TAMWORTH NSW 2340

sam.tarrant@planning.nsw.gov.au

Dear Sam

RE: PP-2023-2403 - 322 Stuarts Point Road, Yarrahapinni

The initial Lower Macleay Flood Study was completed in 2019 and a revised model was finalised in 2023 resulting in the Lower Macleay Flood Study 2023.

Climate Change and Sea Level Rise has been included in the Lower Macleay Flood Study 2023 modelling as recommended by the NSW Government, to safeguard development and reduce future risk.

Council has adopted the inclusion of 2100 Climate Change and 2100 Sea Level Rise for s10.7 Planning Certificates as Habitable Floor Level/Flood Planning Level being the higher of 1% AEP + 0.5m **OR** 1% AEP + 2100CC + 0.9m Sea Level Rise.

The attached data and mapping has been derived from the Lower Macleay Flood Study 2023 regarding the flood risk for the subject site, inclusive of probable maximum flood levels, evacuation capacity and hazard levels. Data and mapping have been prepared with waterRIDE software for the 5% AEP, 1% AEP, 0.2% AEP and PMF levels for the subject site and surrounds.

Flood information for the subject site is as follows:

Item	Minimum	Maximum
Natural Ground Level* (AHD)	1.21	8.40
10% AEP (1 in 10yr) Level	1.61	6.13
5% AEP (1 in 20yr) Level	2.13	6.37
5% AEP (1 in 20yr) Velocity	0.00	1.73
1% AEP (1 in 100yr) Level	4.11	6.75
1% AEP Velocity	0.00	1.90
1% AEP Hazard	H1	H5
1% AEP (1 in 100yr) Level (2100CC)	5.09	6.88
1% AEP Velocity (2100CC)	0.00	1.88
1% AEP Hazard (2100CC)	H1	H5
0.2% AEP (1 in 500yr) Level	5.39	6.91
0.2% AEP Velocity	0.00	1.86
PMF Level	8.40	8.43
PMF Velocity	0.00	2.61

*the above flood information for this property is based on Lower Macleay Flood Study, Jacobs, 2023

*2100CC = 2100 Climate Change including increase of 19.7% in rainfall and 0.91m sea level rise.

Evacuation capacity

If the subject site is flooded then it is likely that localised flooding would be occurring in the village of Stuarts Point, therefore it is assumed the likely evacuation route would be south-west along Stuarts Point Road to connect with the Pacific Highway which is a flood free route. Cross sections for Stuarts Point Road have been provided for locations along this route affected by flooding. It should be noted that these cross sections may not account for local drainage infrastructure, e.g. culverts.

Evacuation measures from the eastern portion of the subject site can be achieved to Stuarts Point Road by installing a creek crossing measure, e.g. a bridge, at the 1% AEP event + 2100CC of 6.88m.

I trust the information provided is sufficient to proceed with determining the Gateway request.

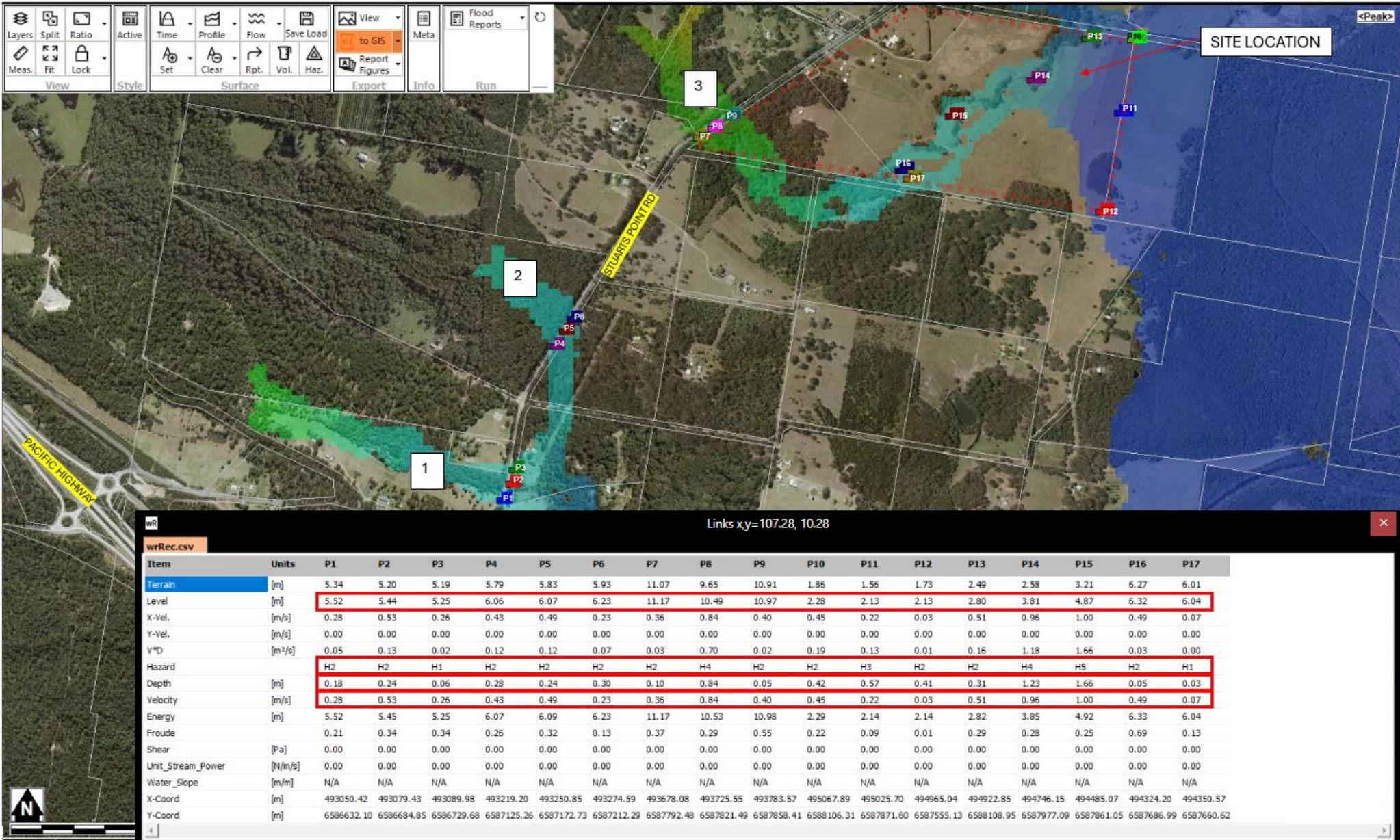
If you have any further questions, please do not hesitate to contact me on 0437 475 246.

Yours faithfully

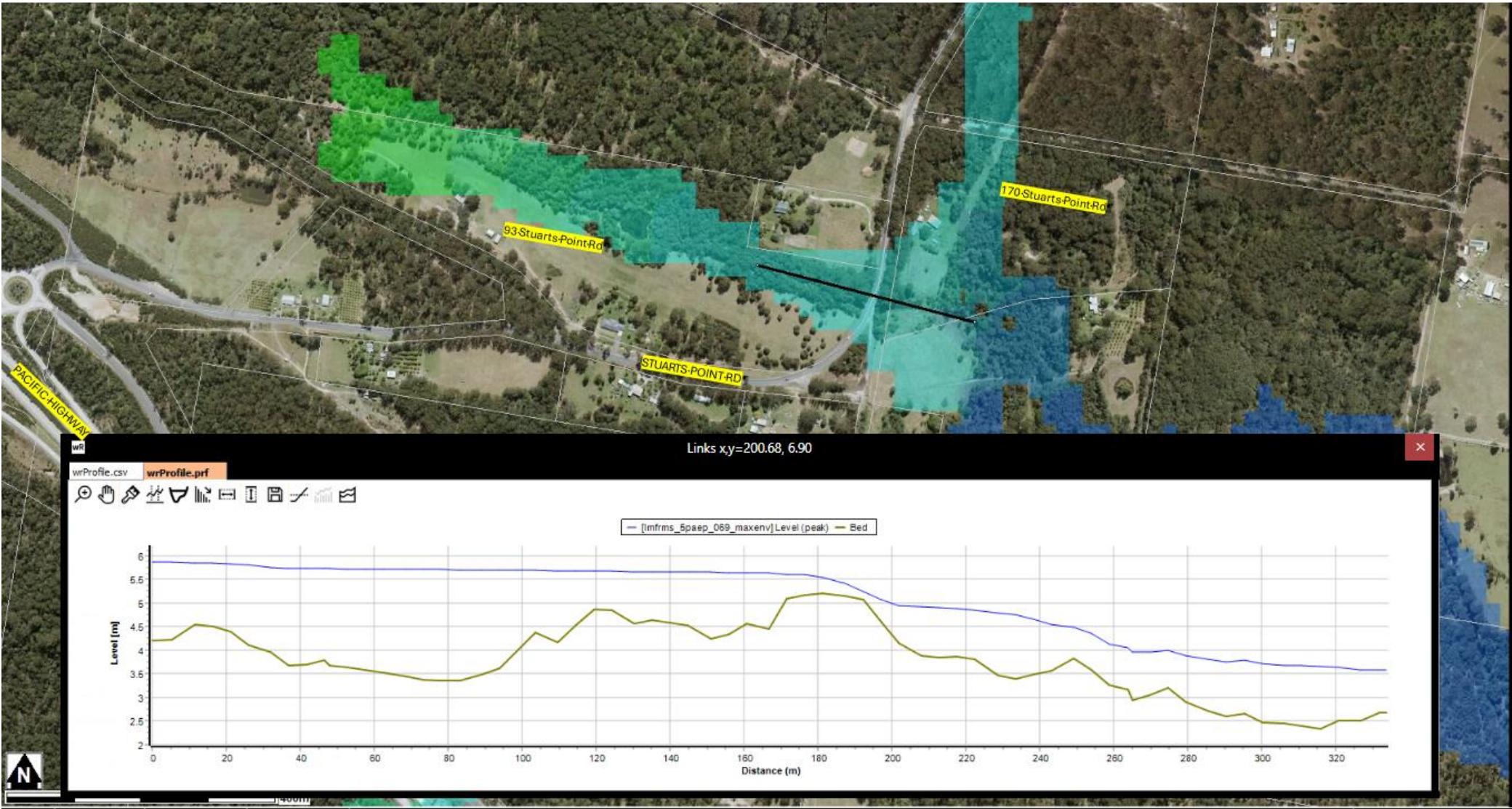


Marnie Jeffery
Strategic Planning Officer
Planning and Operations

5% EVENT



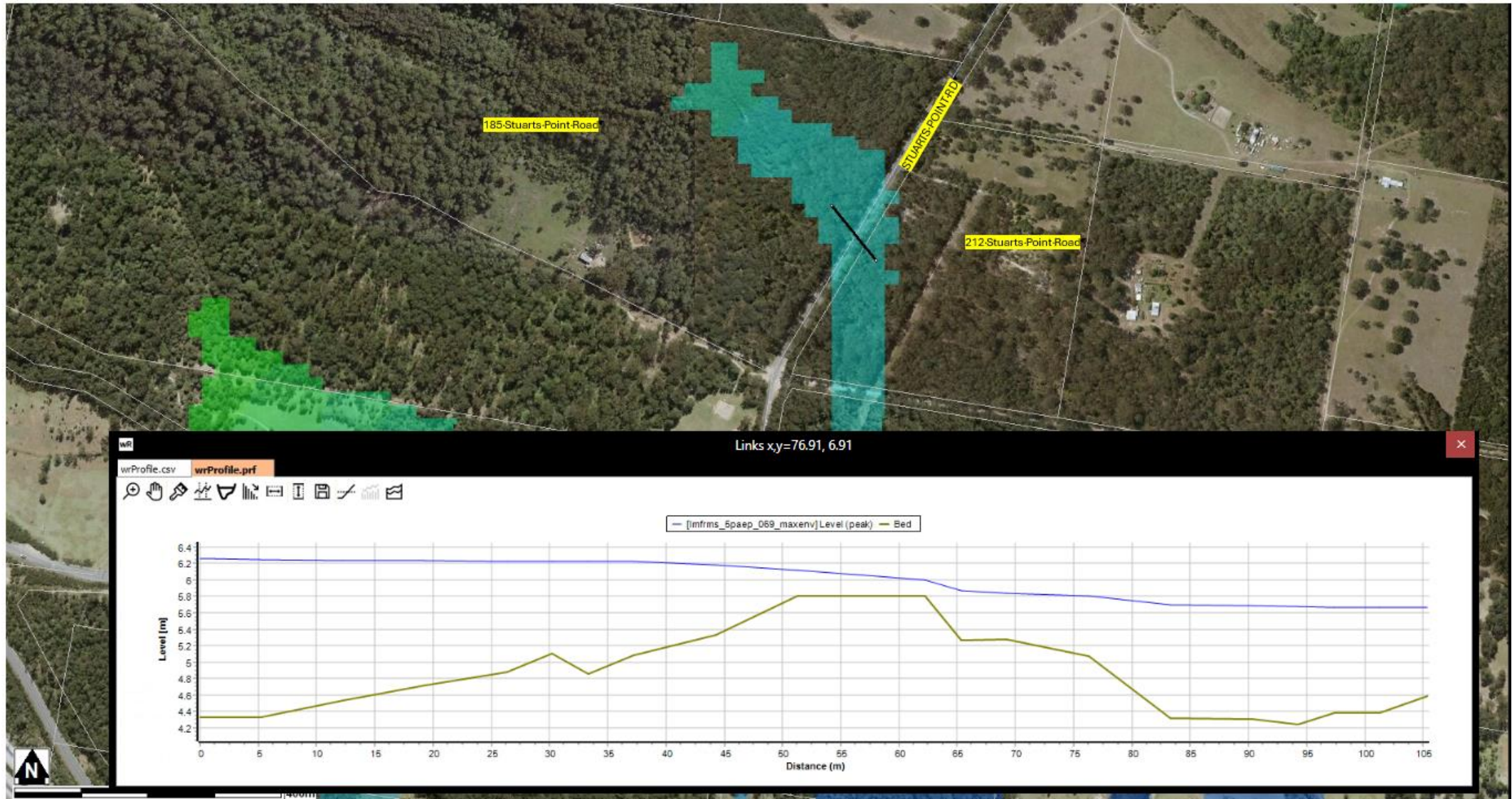
SECTION 1 – Cross Section of Stuarts Point Road



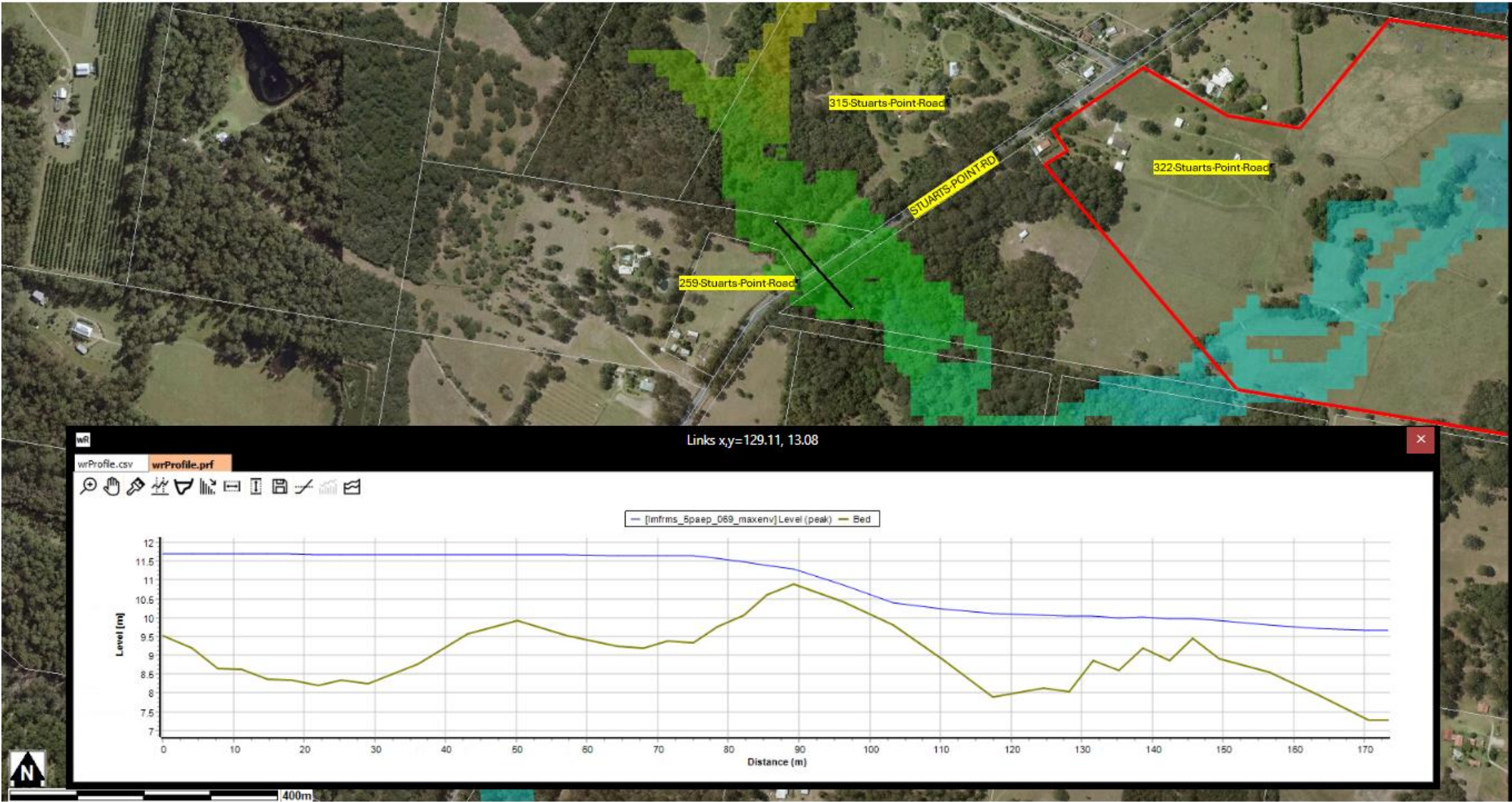
— Flood Level

— Road Level

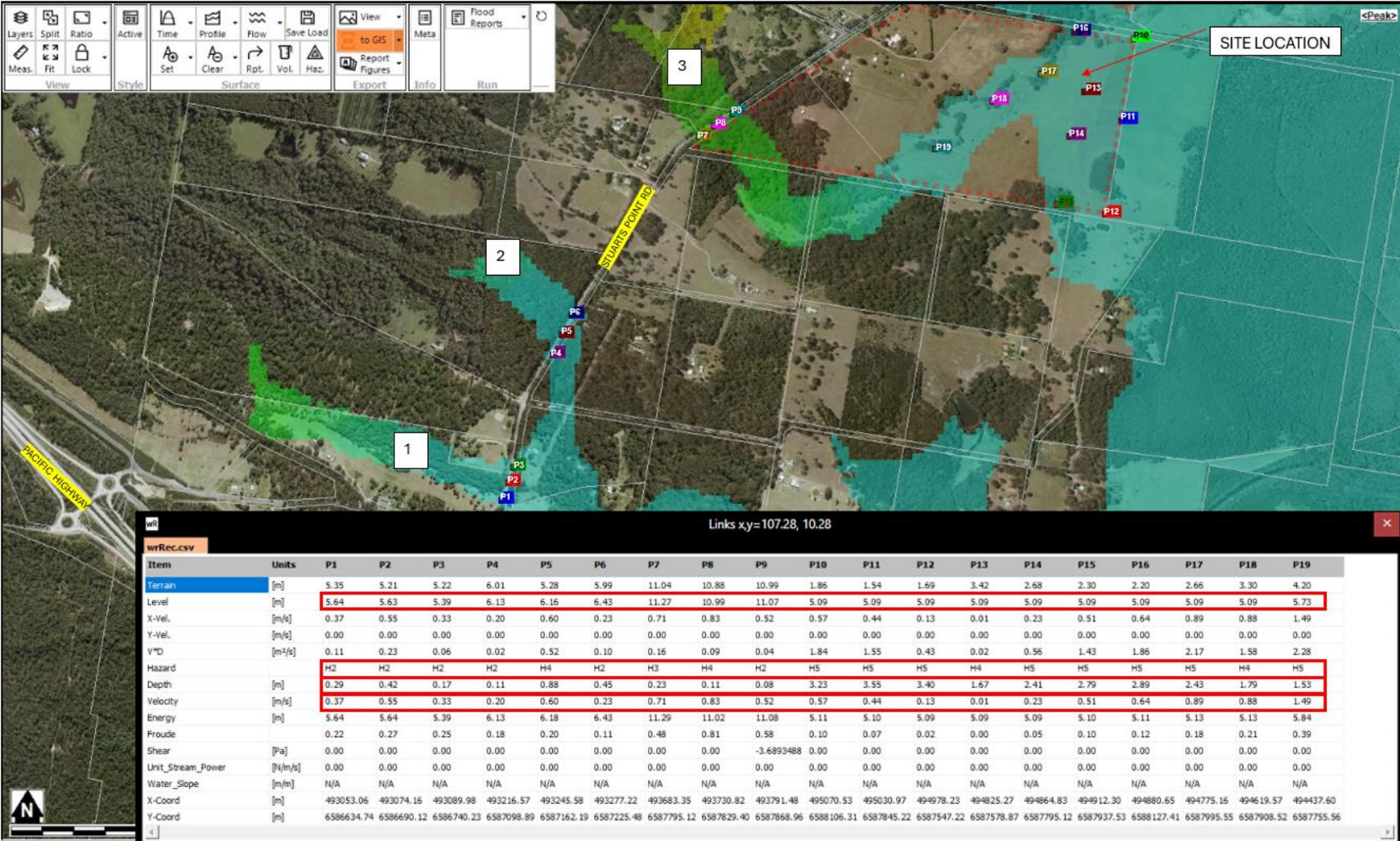
SECTION 2 – Cross Section of Stuarts Point Road



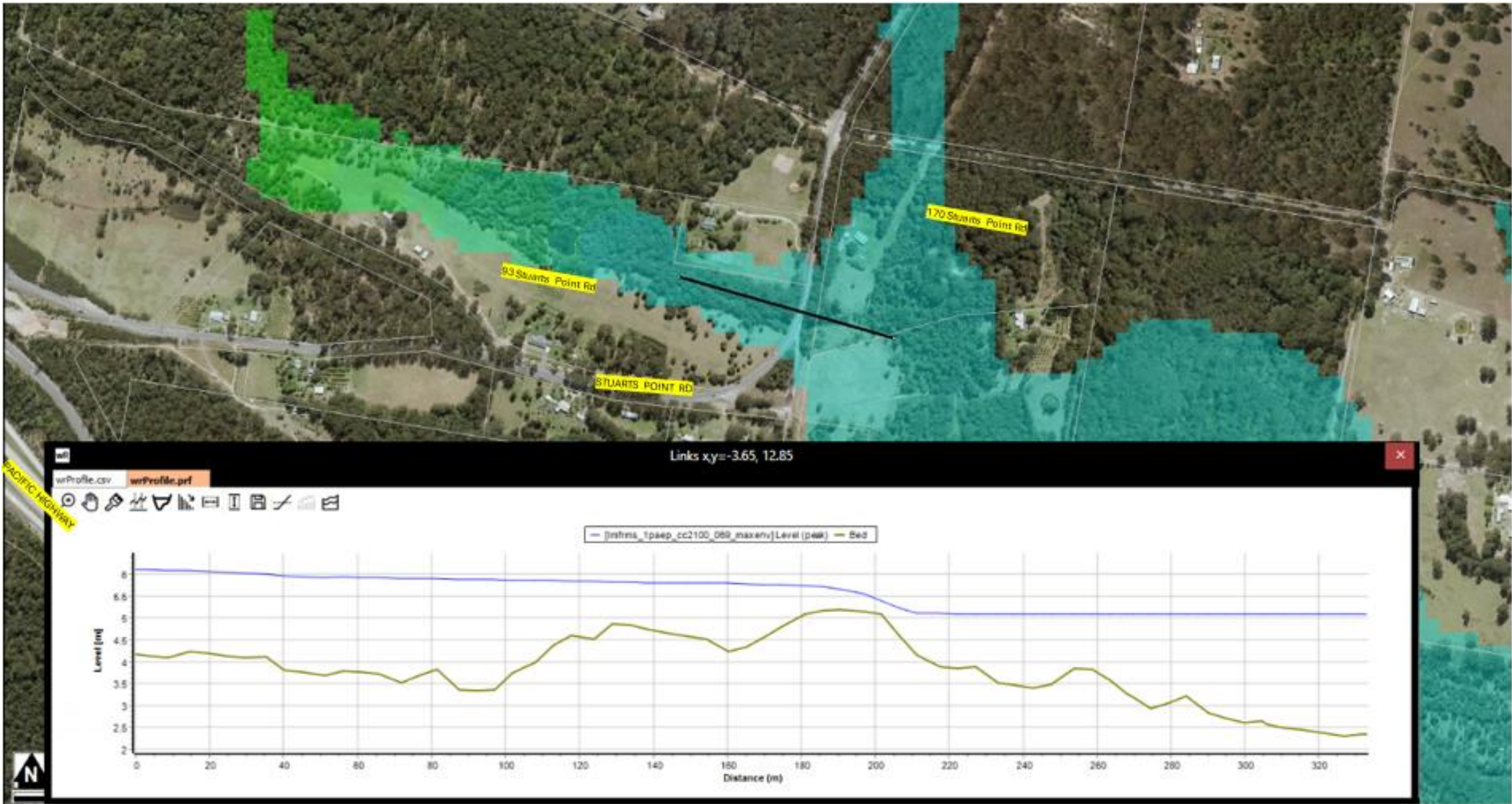
SECTION 3 – Cross Section of Stuarts Point Road



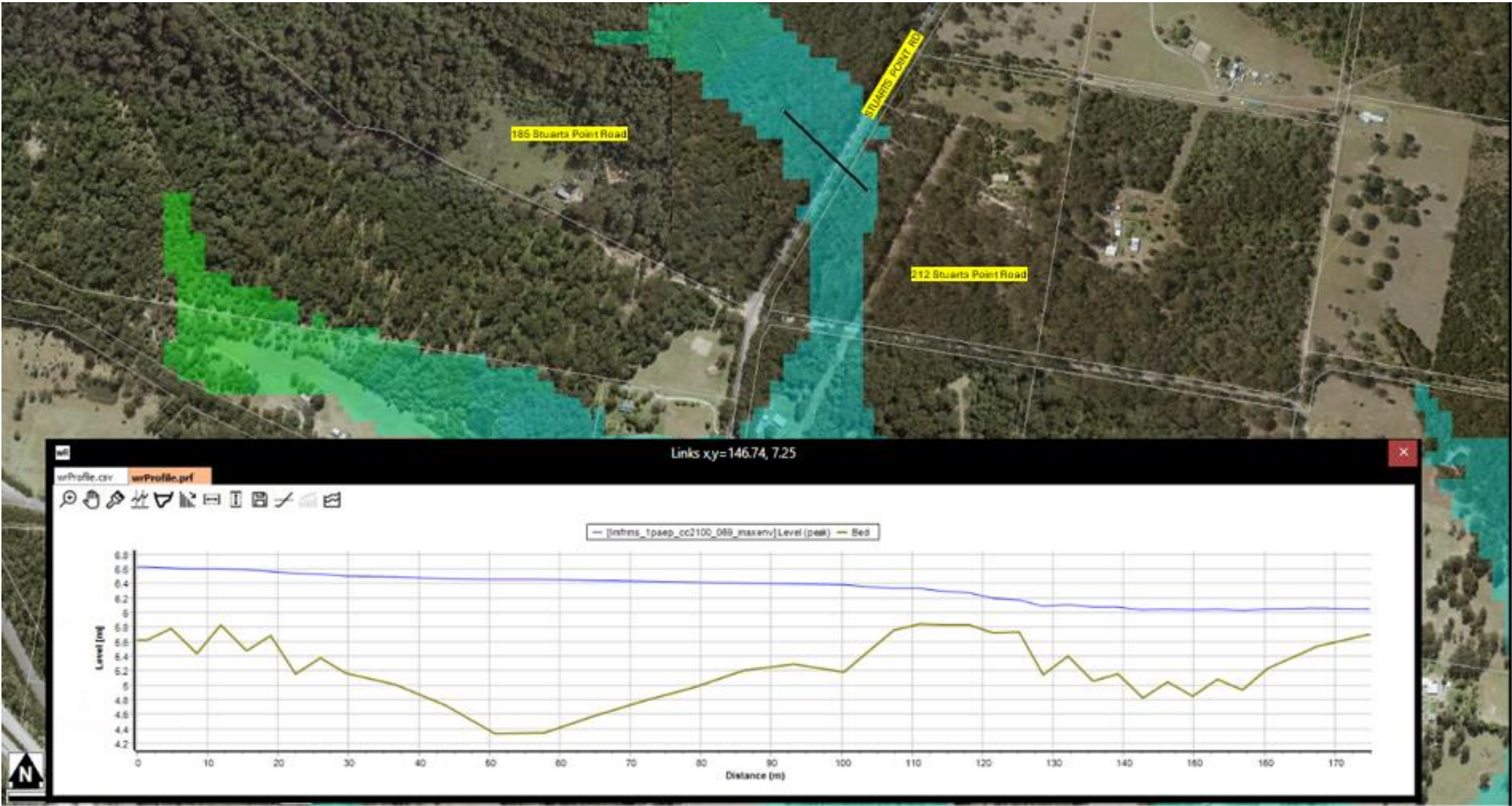
1% EVENT INCL 2100 CC & 2100SLR



SECTION 1 – Cross Section of Stuarts Point Road



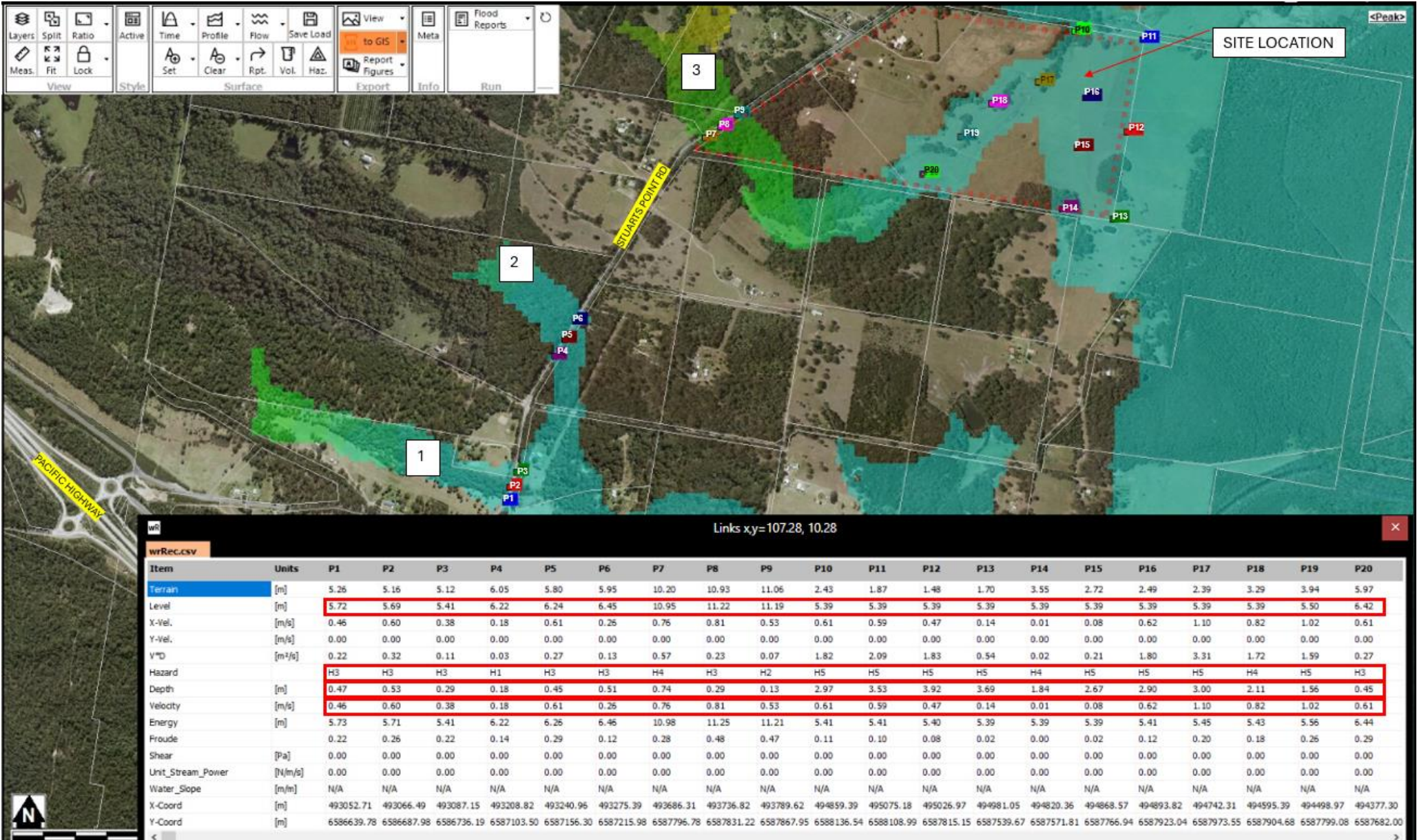
SECTION 2 – Cross Section of Stuarts Point Road



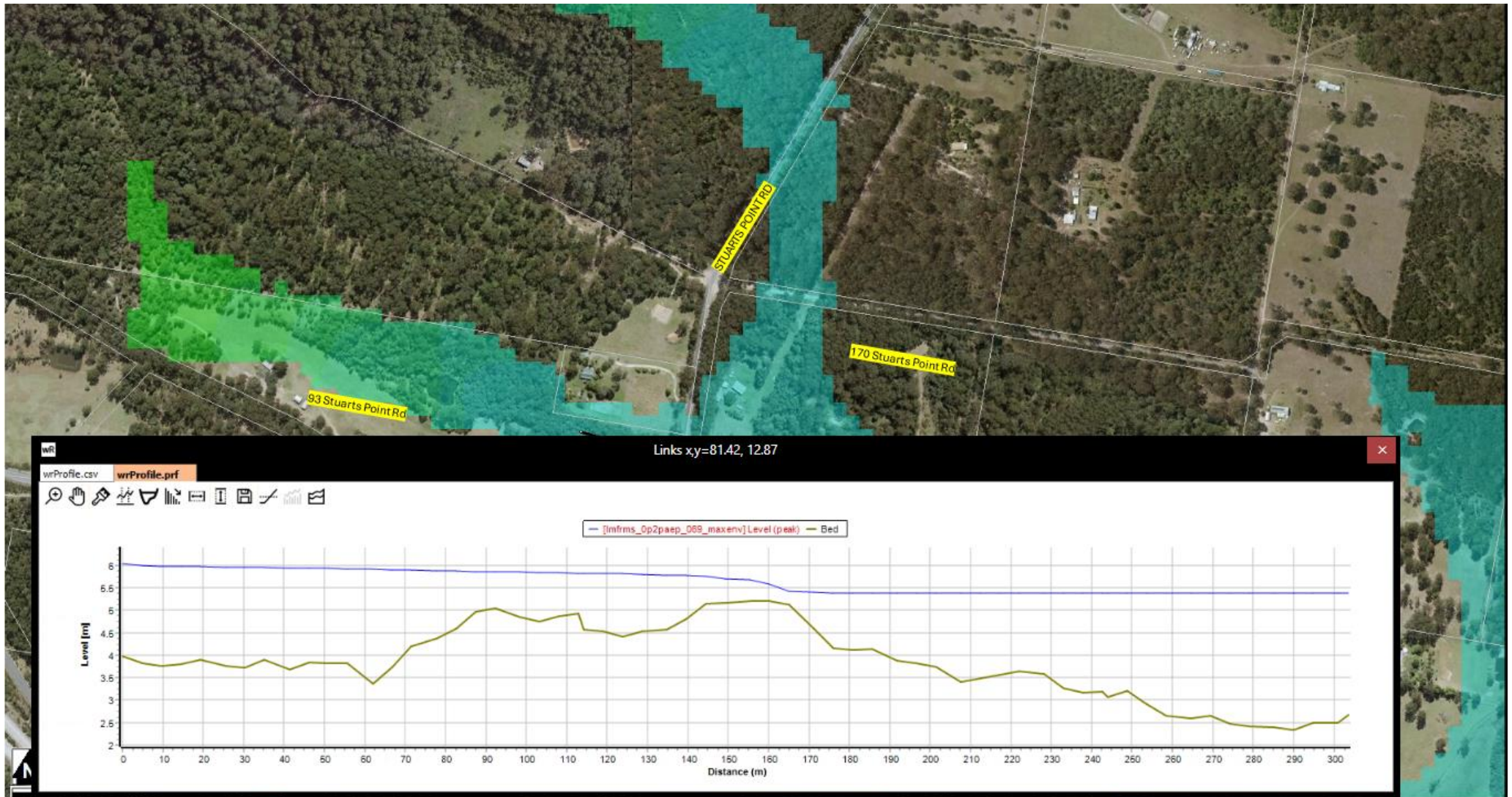
SECTION 3 – Cross Section of Stuarts Point Road



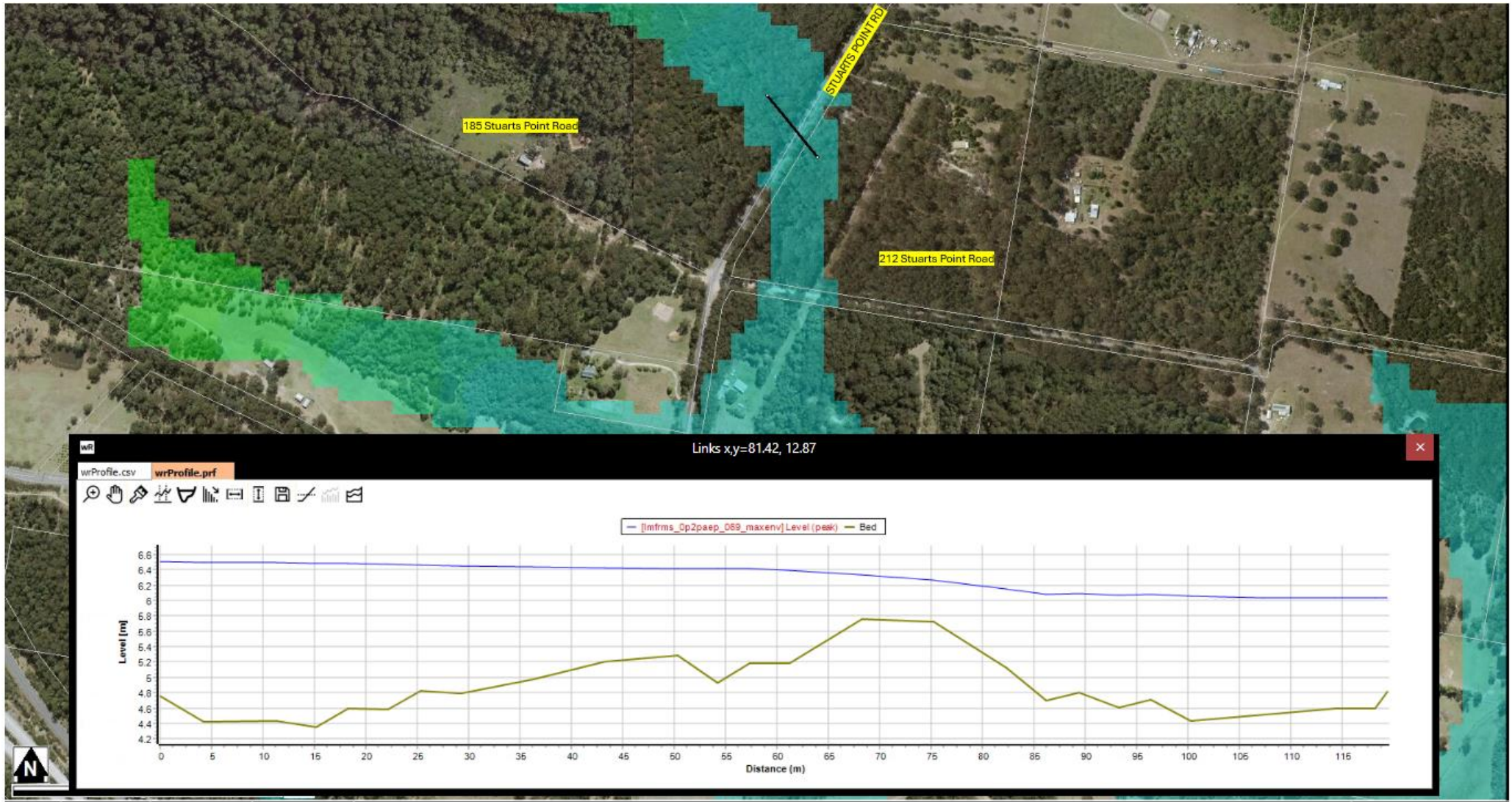
0.2% EVENT



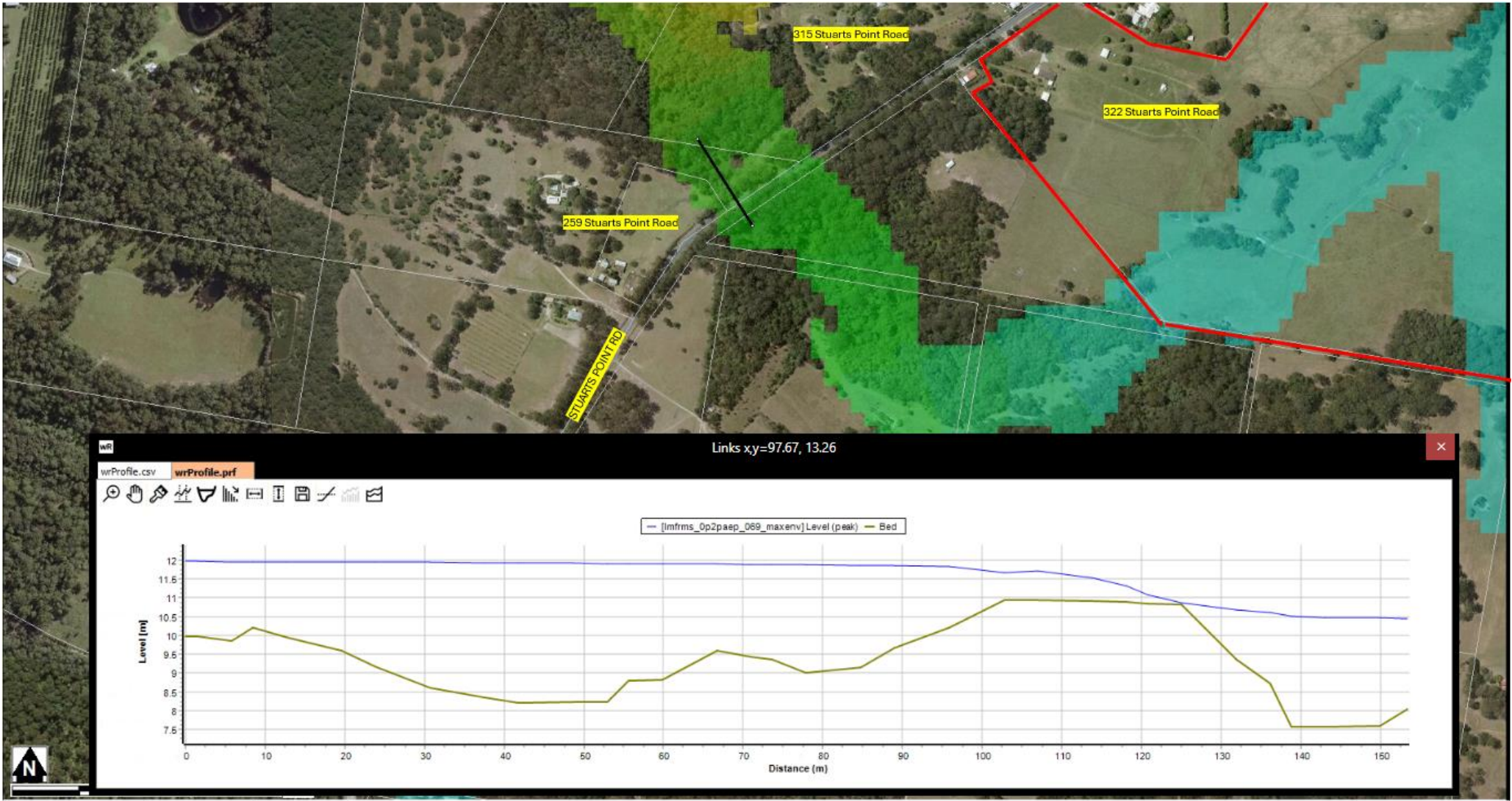
SECTION 1 – Cross Section of Stuarts Point Road



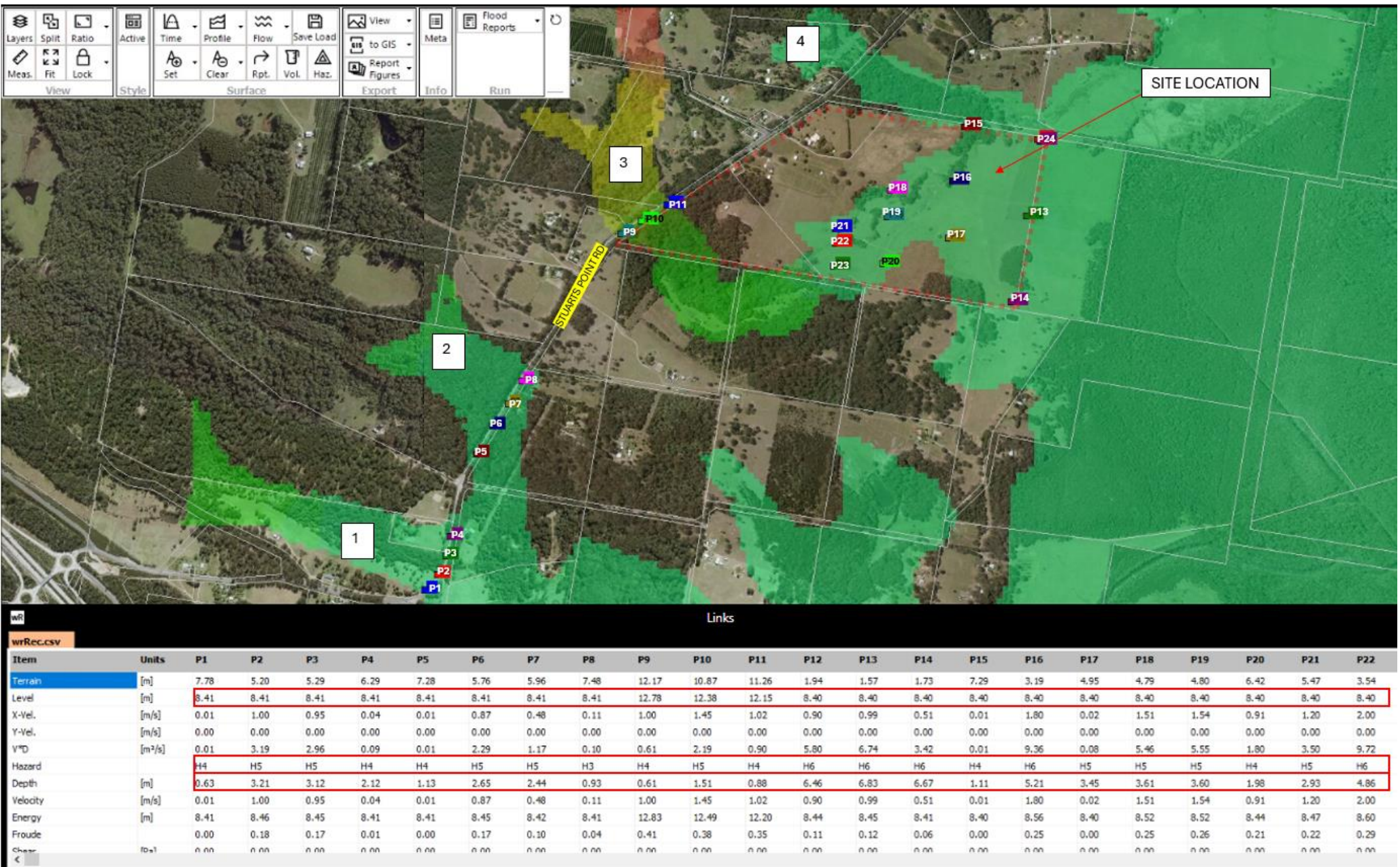
SECTION 2 – Cross Section of Stuarts Point Road



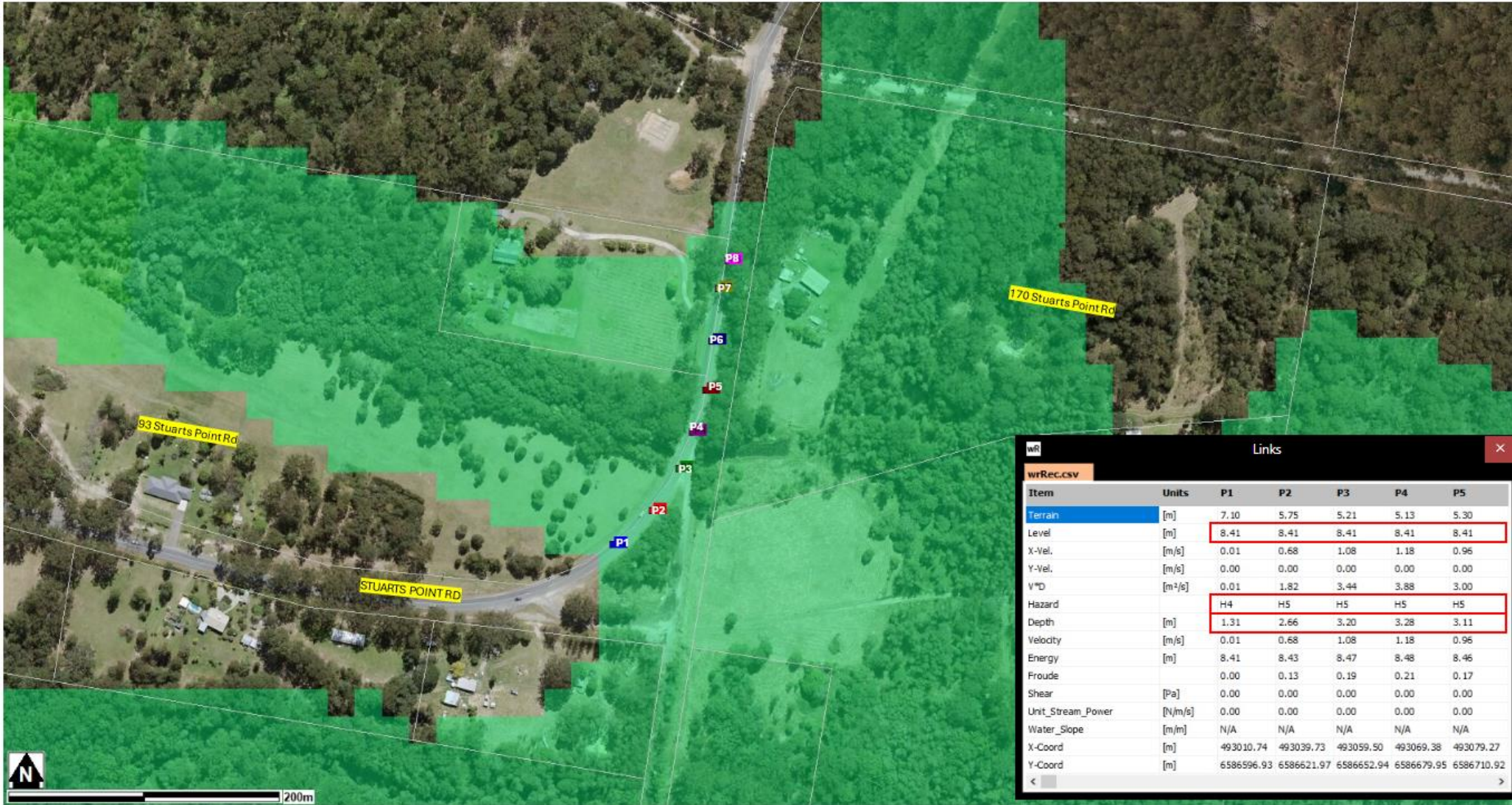
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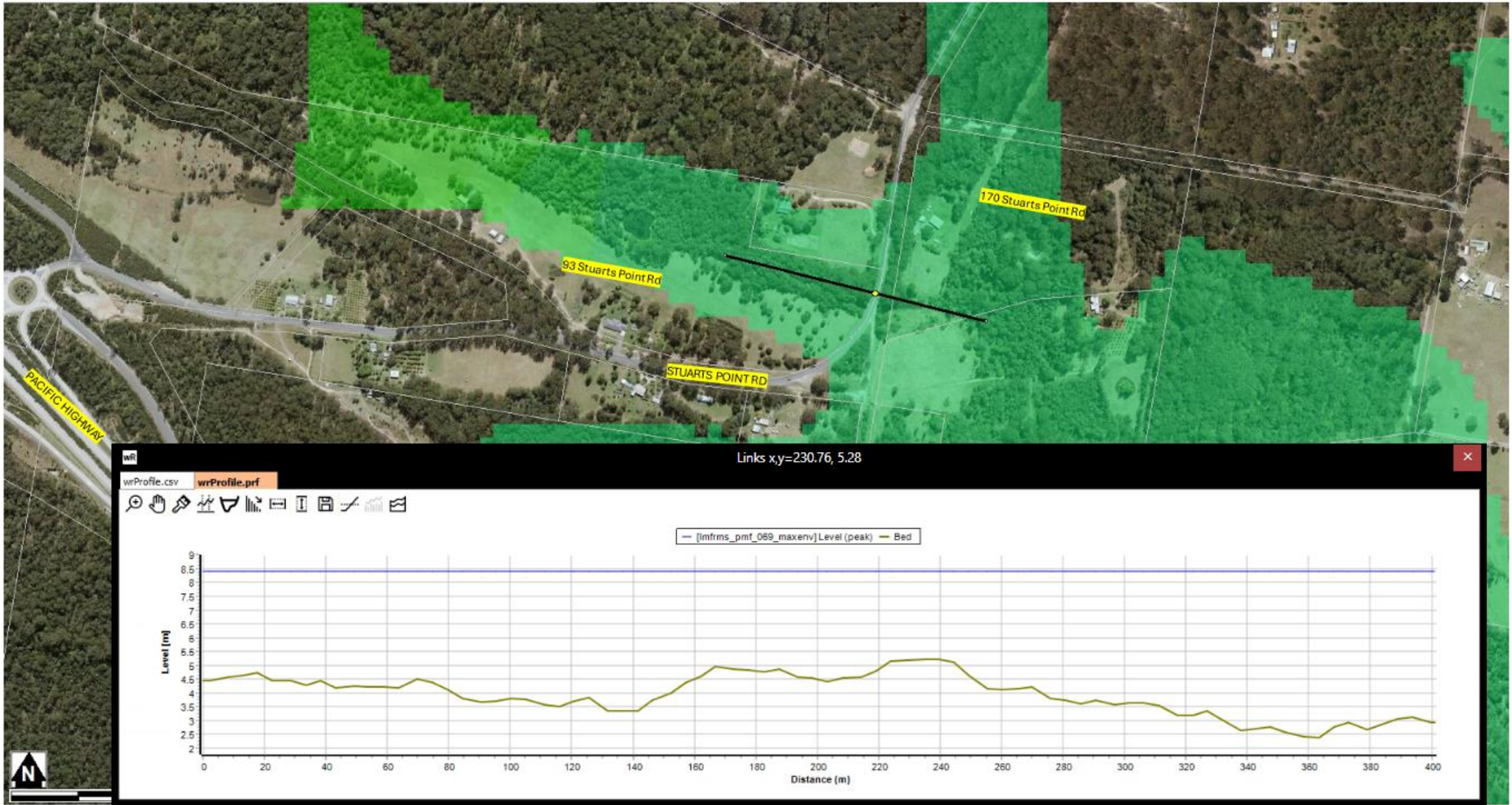
PMF EVENT



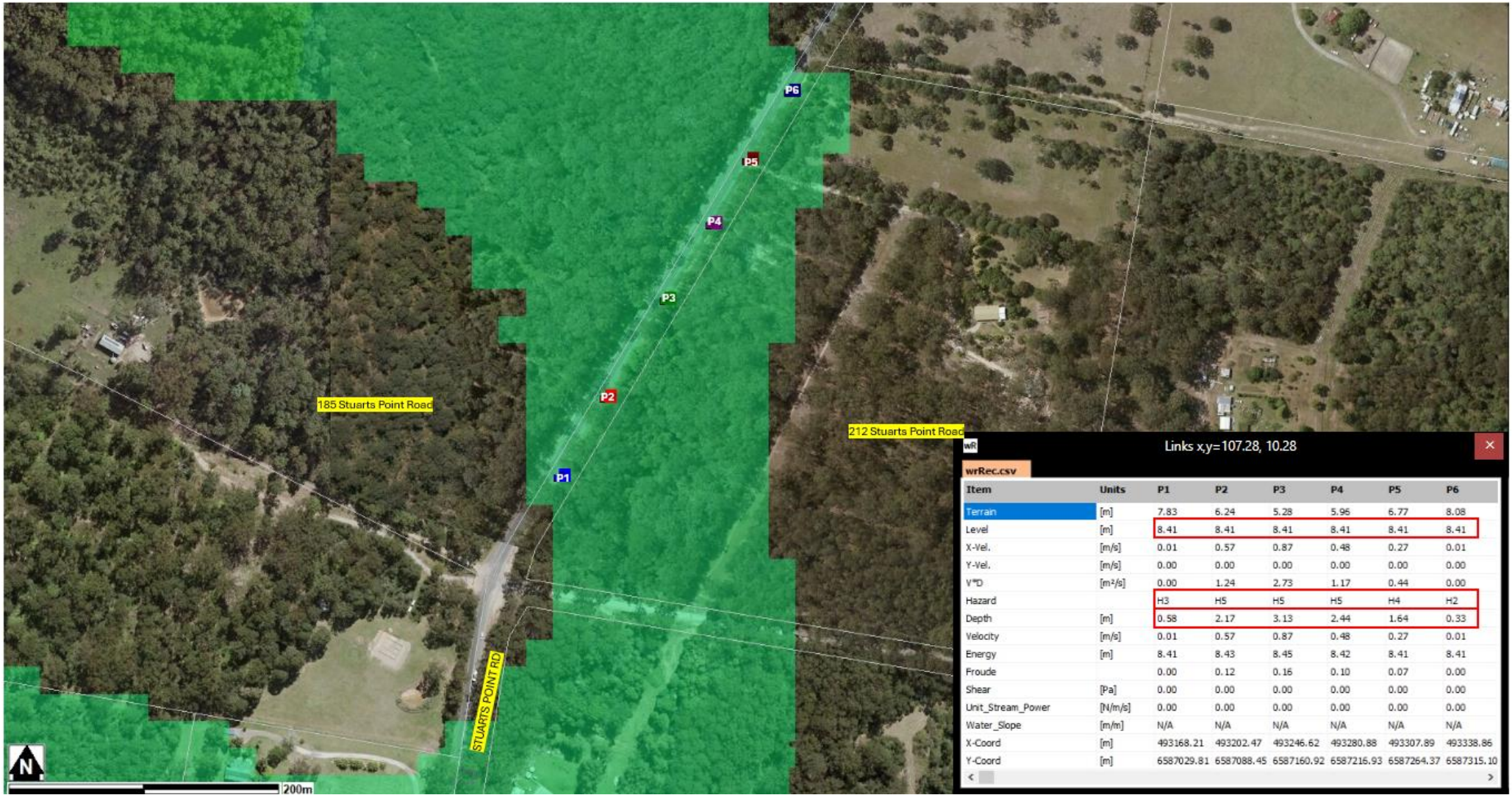
PMF - LOCALITY 1 - FLOOD ACCESS



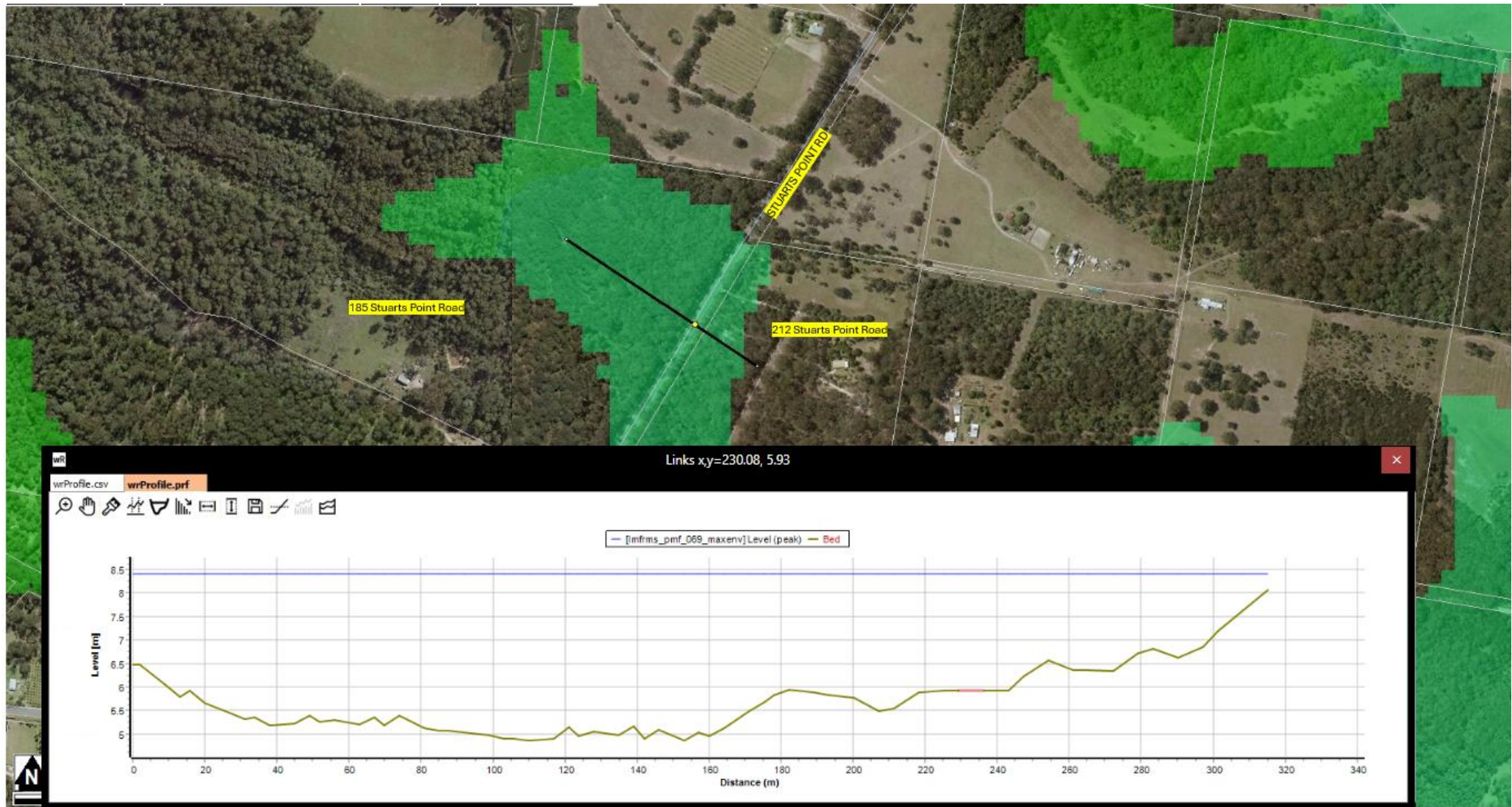
SECTION 1 – Cross Section of Stuarts Point Road



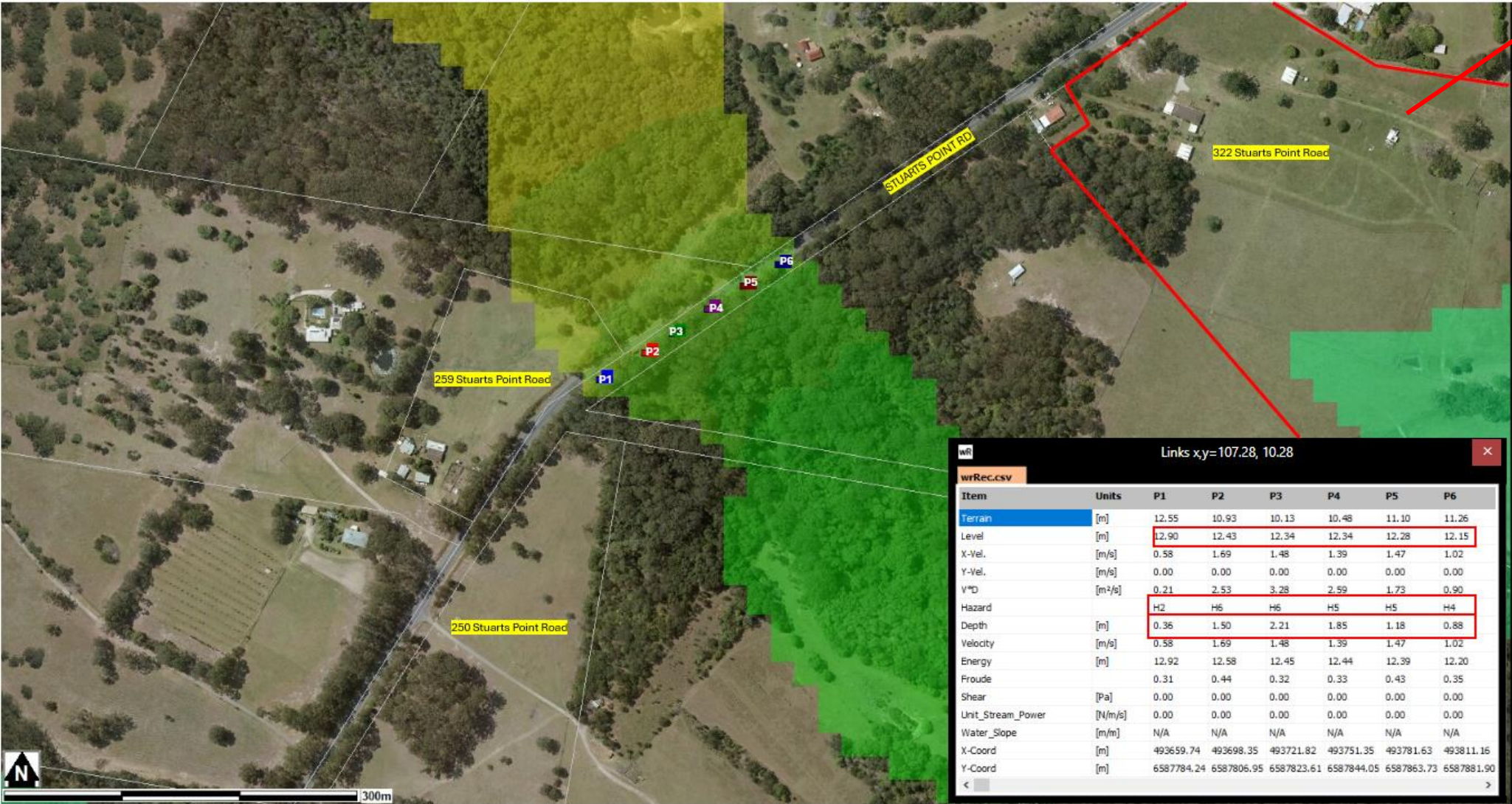
PMF - LOCALITY 2 - FLOOD ACCESS



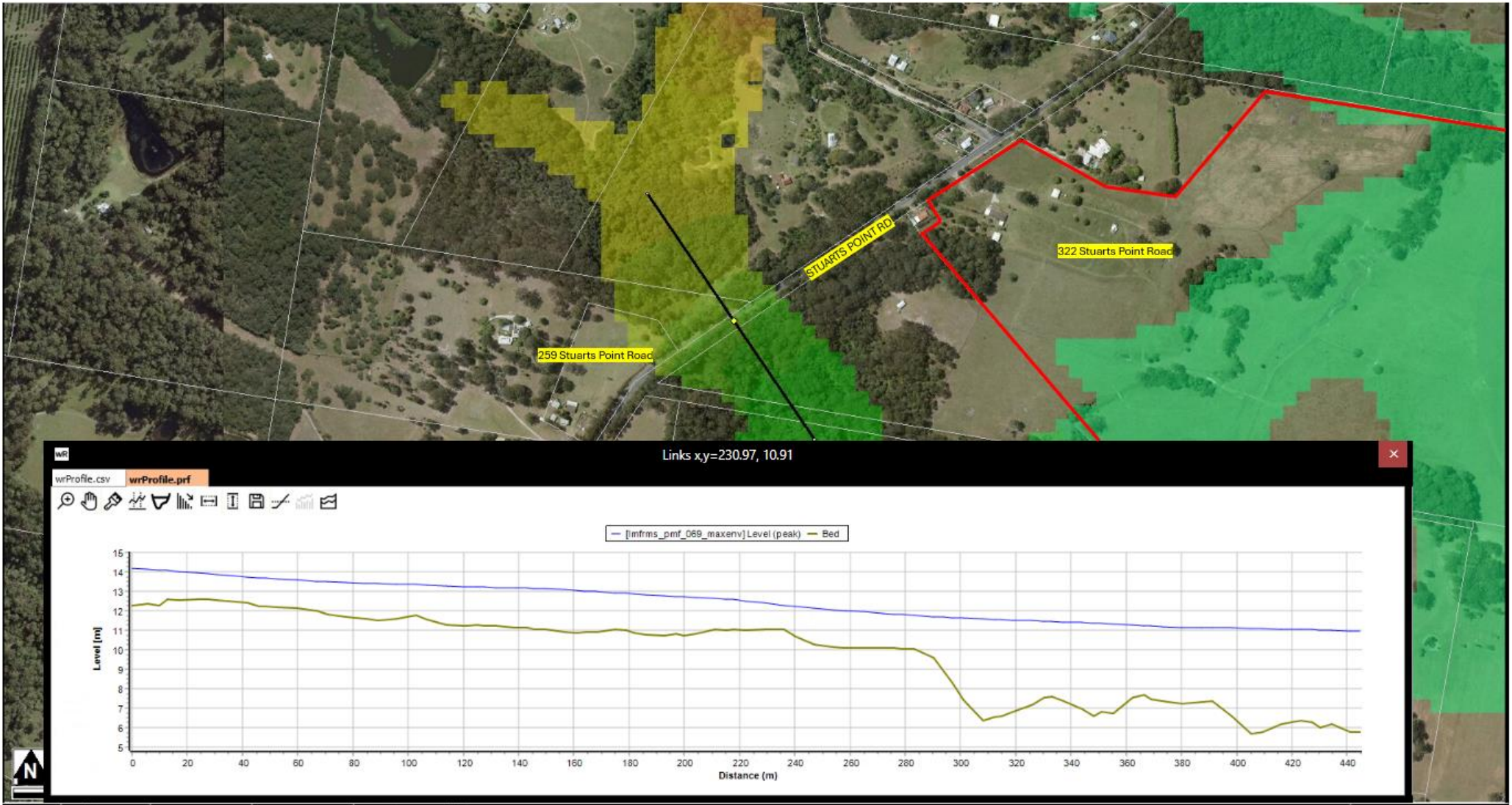
SECTION 2 – Cross Section of Stuarts Point Road



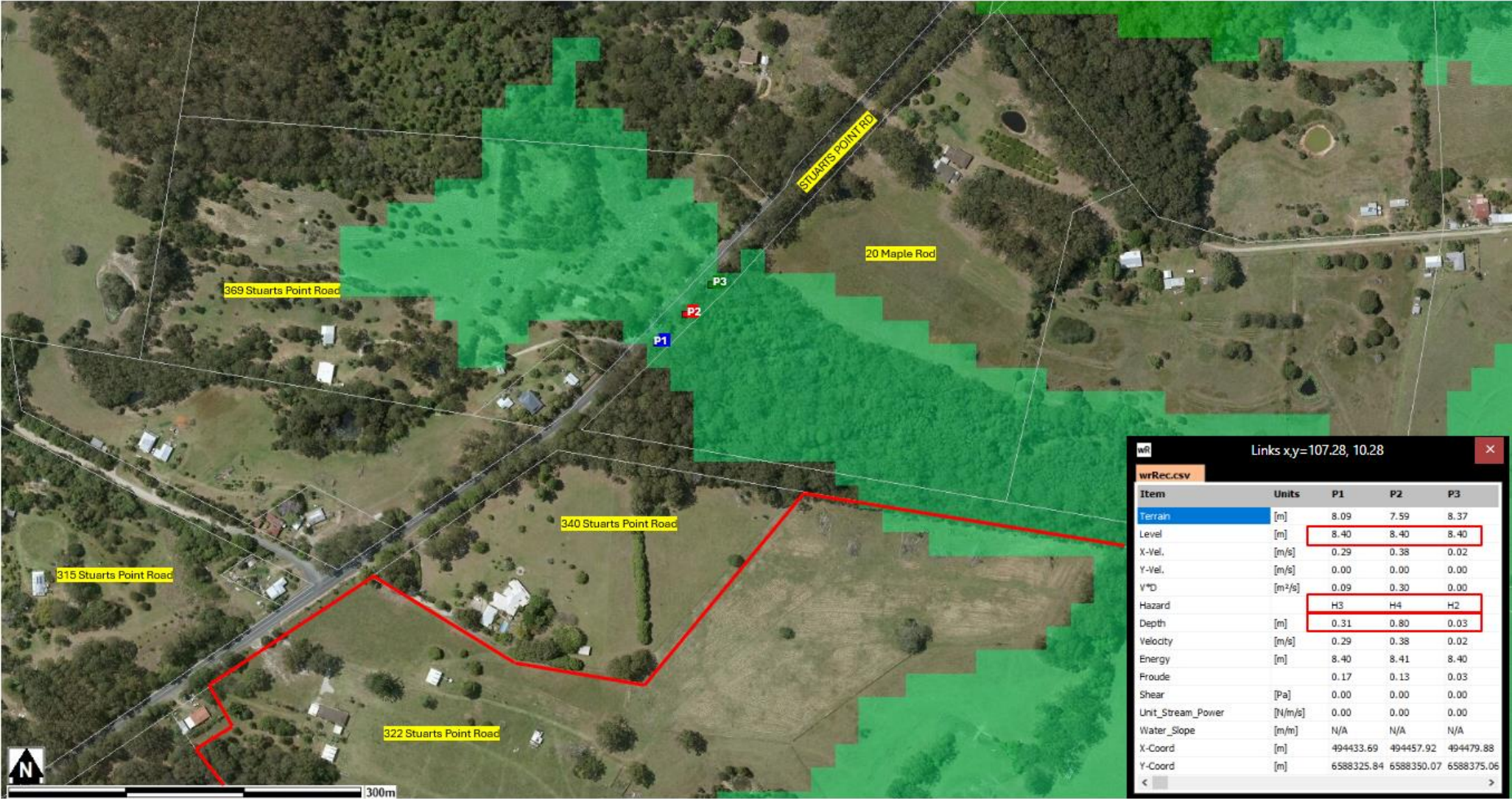
PMF - LOCALITY 3 - FLOOD ACCESS



SECTION 3 – Cross Section of Stuarts Point Road



PMF - LOCALITY 4 - FLOOD ACCESS



SECTION 4 – Cross Section of Stuarts Point Road

