

Our ref: L.A12101.001.docx

20 July 2022

Anne and Anne Shomali  
Grays Lane  
Tyagarah, NSW 2481  
[anne\_shomali@hotmail.com]

Dear Anne and Sam,

**RE: 1% AEP PEAK FLOOD LEVEL – LOT 1 ON DP 258921**

This letter provides peak flood level data for the predicted 1% AEP peak flood level at the dwelling house, and across the allotment.

BMT has previously prepared a flood model of Tyagarah and Simpsons Creek. While the model is not formally adopted by Council, it has accepted the use of the model on a number of prior projects such as Flood Impact Assessments for both external development and for development instigated by Council itself, i.e. the recent Grays Lane upgrade. BMT understands the Tyagarah and Simpsons Creek flood model to be the most detailed model available model for the catchment currently available.

Limitations of the Tyagarah and Simpsons Creek flood model are that it is not calibrated, and it will not represent catchment modifications that have occurred since its development in 2017. However, the Grays Lane upgrade completed by Council in 2021 has been included in the current model.

The Tyagarah and Simpsons Creek flood model was developed subsequently to the North Byron Flood Study which did produce a calibrated flood model for Mullumbimby, Ocean Shores, Brunswick Heads, etc. The flood model of Tyagarah and Simpsons Creek has been developed using model parameterisation and methodologies consistent with those applied in the North Byron Flood Study.

Additionally, the Tyagarah and Simpsons Creek has a model grid domain of 10m which is of adequate resolution for determining peak flood levels on the subject (rural) Site. As such we regard the model as generally suitable for intended purposes.

For the current developments on Lot 1 DP 258921, BMT have prepared Figure 1 and Figure 2 that overlay peak flood depths at the Site showing the existing developments (aerial images taken on 2 June 2022). The figures show that the buildings are within the 1% AEP flood extent. The Canty's Surveyors have determined the floor level of the building to be 5.02m AHD as per the survey assessment in Figure 3. Refer to survey drawing in Figure 4 for exact details of the development's finished floor levels.

The model results indicate that the peak flood levels at the Site for the 1% AEP event is 3.8m AHD. Finished floor levels will need to allow a minimum of 0.5m freeboard above this predicted peak flood level and hence be about 4.3m AHD.

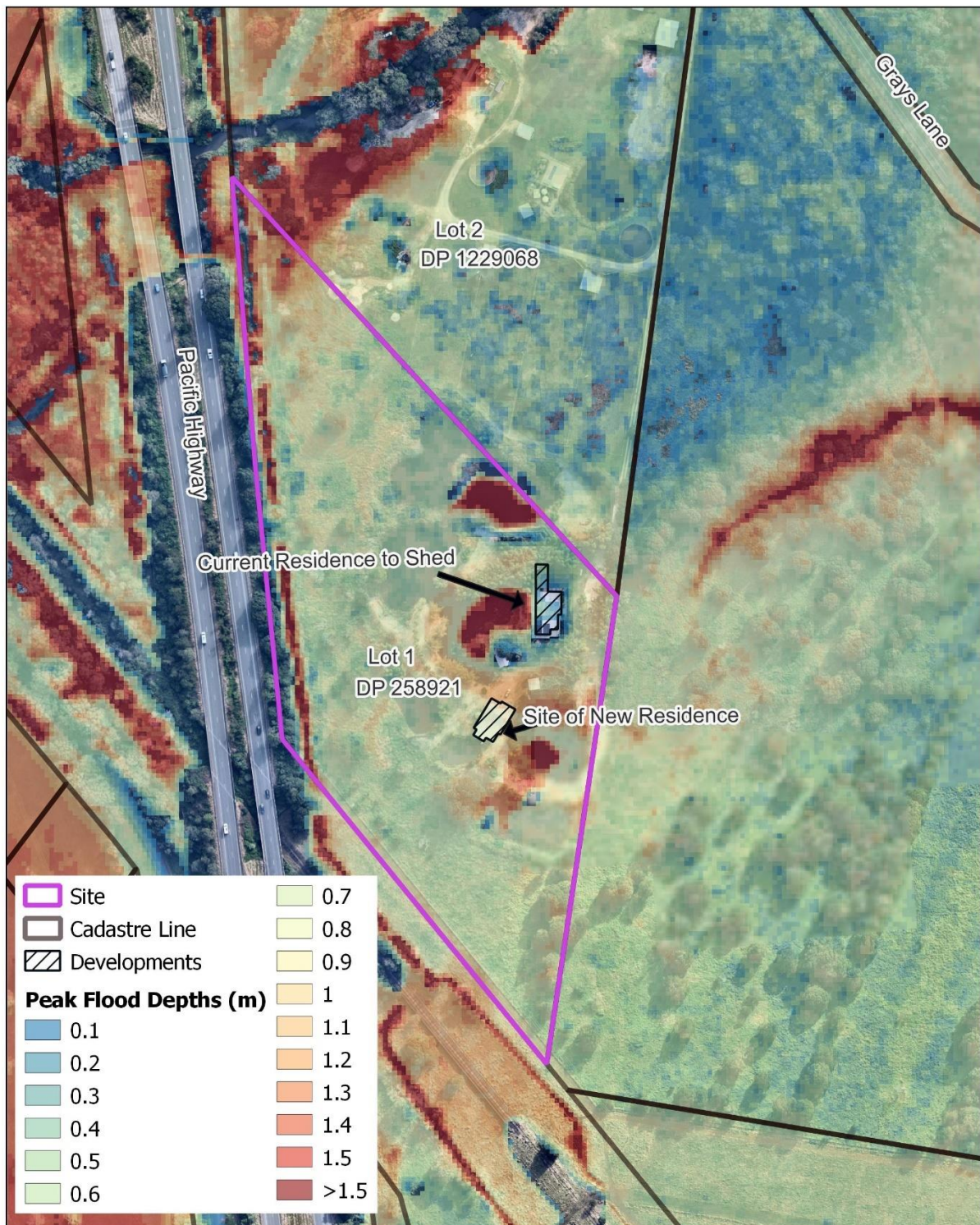
If there are further enquiries related to the above advice, please contact Damion Cavanagh on 0447 172 123 to discuss.

Yours Sincerely,

**BMT**

A handwritten signature in black ink, appearing to read 'Damion Cavanagh', with a stylized, cursive script.

**Damion Cavanagh**  
Principal Engineer



Title: **Lot 1 on DP 258921 - 1% AEP Peak Flood Depths**

Drawing:

**1**

Rev:

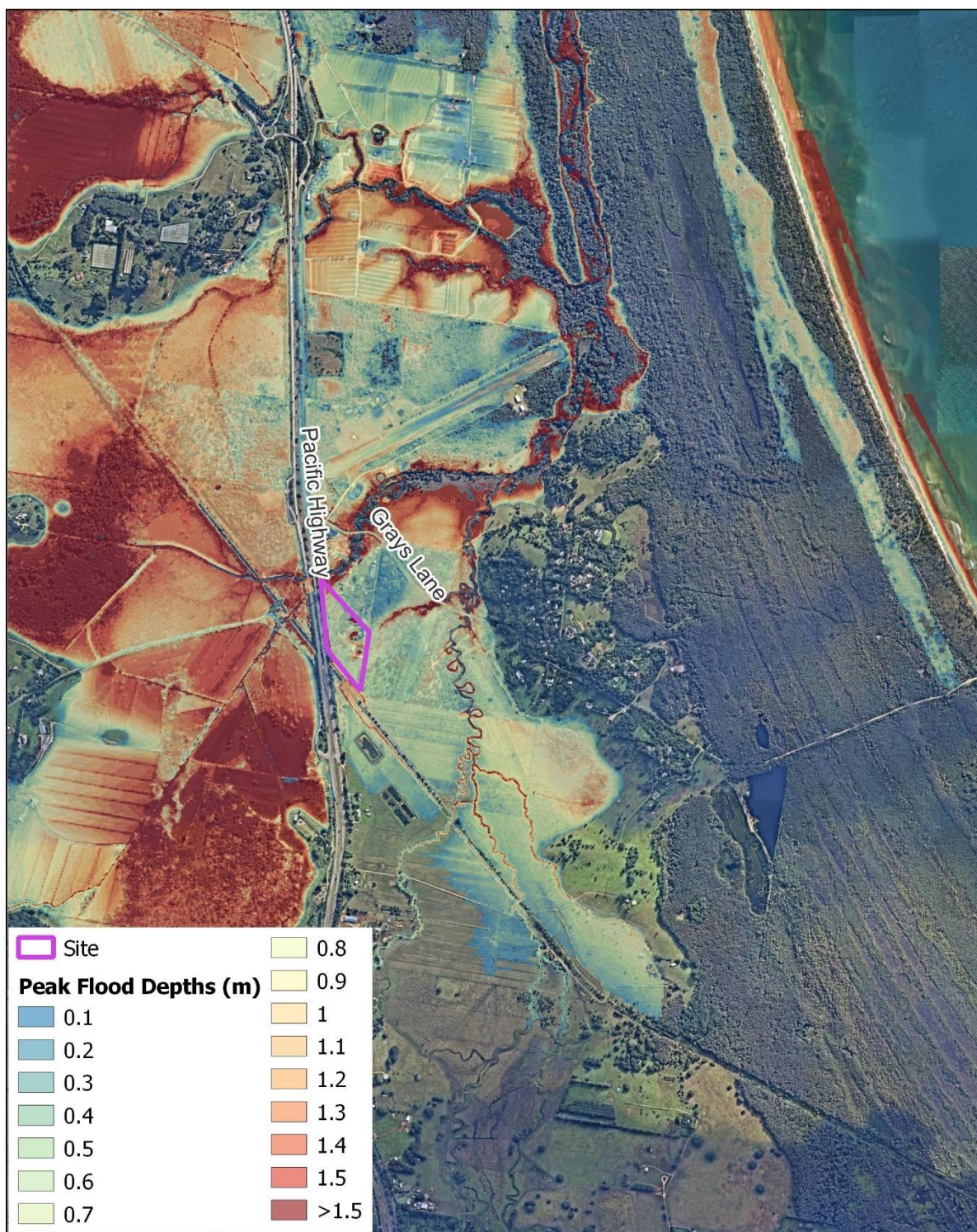
**A**

BMT endeavours to ensure that the information provided in this map is correct at the time of publication. BMT does not warrant, guarantee or make representations regarding the currency and accuracy of information contained in this map.

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Title:

**Tyagarah - 1% AEP Peak Flood Depths**

Drawing:

**2**

Rev:

**A**

BMT endeavours to ensure that the information provided in this map is correct at the time of publication. BMT does not warrant, guarantee or make representations regarding the currency and accuracy of information contained in this map.

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Scott A. Thompson  
B.App.Sc.Surv. (Q.U.T.)  
Grad.Dip.Surv.Prac. (Q.U.T.) M.I.S. (Aust.)



Scott Thompson Surveying Pty Ltd  
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11 January 2021

Sam & Anne Shomali  
anne\_shomali@hotmail.com

Dear Sam & Anne

**Re Lot 1 DP 258921, 32 Grays Lane, Tyagarah**

In accordance with your instructions we have surveyed part of the land contained within Folio Identifier 1/258921 Edition 3 being Lot 1 in Deposited Plan Registered Number 258921 having access to Grays Lane, Tyagarah via a Right of Carriageway, Shire of Byron, Parish of Brunswick, County of Rous and we find that erected thereon is a timber building with a metal roof, which stands wholly within the limits of subject title and does not encroach on any other adjoining property or road.

Offsets of walls from boundaries are as shown on the accompanying sketch plan.

Please note we have determined the floor level of the building and find it to be RL 5.02 metres Australian Height Datum (AHD).

It is noted from the Folio Identifier that the subject land has the benefit of a Right of Carriageway 6 metres wide created by the registration of W381288. This right of carriageway is located in the position as shown on the accompanying sketch plan.

Boundary occupations have been located for identification purposes only and if further development is considered on the site then it is essential that the boundaries be remarked.

We are of the opinion that there are no easements or rights-of-way affecting the same apart from the conditions and reservations to the Crown as contained in the original Crown Grants.

The property may be identified from the information as shown on the sketch plan.

This report however does not certify compliance with the Building Code of Australia.

This survey and report is in respect to the position of the building shown located on the accompanying sketch plan only and no other inference should be drawn from this survey and report.

Thanking you.

Yours faithfully,

S.A. THOMPSON  
Registered Surveyor  
**CANTY'S SURVEYORS**

Figure 3 Canty's Surveyors assessment of the Site at Lot 1 DP 258921, dated 11 January 2021

