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EMAIL TRANSMISSION

TO: Genevieve Seed EMAIL: genevieve.seed@planning.nsw.gov.au
ORGANISATION: Department of Planning & Environment DATE: 22 January 2016
COPY: Gales-Kingscliff Pty Ltd REFERENCE: 617
Tweed Shire Council
NO. OF PAGES (including attachments): 5
SUBJECT: Cudgen Lakes Sand Quarry – Response to Council Comments

☐ Confidential

☒ Please Reply

☐ For Follow-up

☐ Urgent

☒ For your information

MESSAGE:

Dear Genevieve,

We have reviewed Council's response regarding the flooding / hydraulic assessment. Gales has no objection to the requested condition to limit the fill pad of the initial processing area to 1.8m AHD. We have also reviewed Council's comments regarding additional matters and provide the following.

Waste Water Treatment Plant Buffer

Please see attached a marked up plan showing our measurements of the existing office location and two alternative locations. As can be seen, it would be possible to maintain the office outside the 200m buffer zone on either the eastern or western side of the Initial Processing Area. Gales therefore has no objection to requiring that the Initial Processing Area office meet the 200m buffer zone and ventilation requirements of the Development Control Plan.

In relation to the recommended 10m vegetated buffer for screening the WWTP from public view, based on discussions with Council, this is not required if appropriate justification is provided. Given the existing vegetation (see attached photo) and the fact that the Initial Processing Area is not intended for public access, the recommended buffer is unnecessary.

Water and Sewerage

No mains water or sewerage connection is proposed for the Initial Processing Area. A portable sewerage system would be utilised and serviced by licenced contractor. The ablutions and potable water requirements would be provided by a water tank located adjacent the office. The water tank would be filled as required from potable water transported to site (approximately one load per month).

Subdivision (DA13/0024)

It is noted that the noise assessment for the Initial Processing Area considers impacts to Residence A which is located approximately the same distance as the closest subdivided block within the approved subdivision (see attached marked up plan). Therefore Residence A is representative of the adjacent subdivision. Given it was assessed that compliance would be achieved, no further assessment is considered necessary. Similarly, the air

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22 January 2016

Page 2

quality assessment demonstrates that received PM₁₀ in this area would be less than the approved operation. Therefore, the proposed Initial Processing Area would result in less air quality impacts to the subdivision.

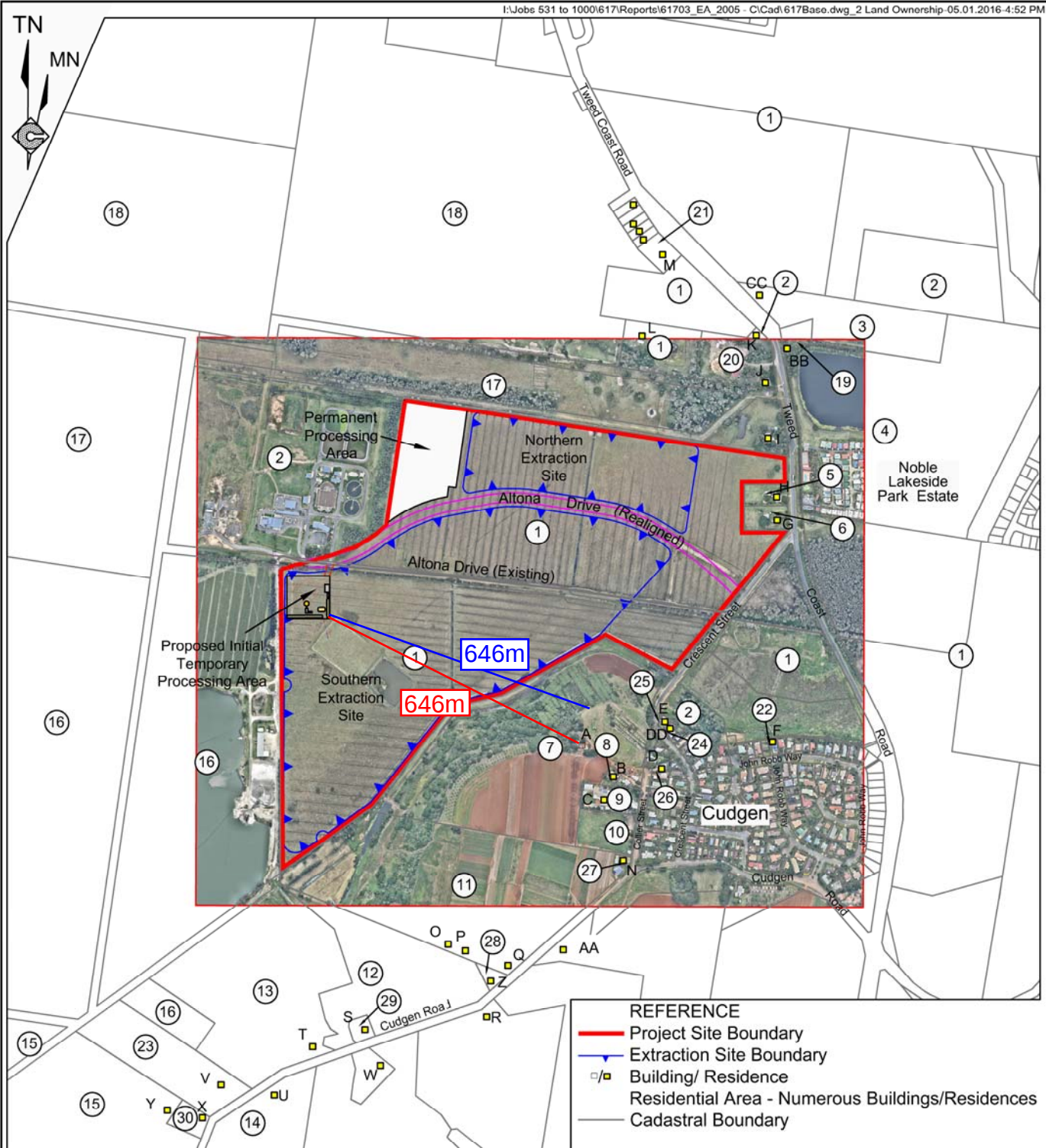
I will call you later this afternoon to talk through the above, however, please don't hesitate to call me in the meantime on 07 3205 5400 if that is more convenient.

Kind regards
Scott Hollamby
Senior Environmental Consultant

Attached: Mark up of office locations
Mark up of subdivision distance
Photo – View north from proposed Initial Processing Plant area

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Reference	Landowner	Reference	Landowner
1	Gales - Kingscliff Pty Ltd	17	C. Cooper
2	Tweed Shire Council	18	J. Brinsmead
3	P. Phillips	19	B. Rudman
4	Baglon Pty Ltd	20	M. & J. O'keeffe
5	K. Martin	21#	J. Brinsmead
6	L. & P. Hermann	22	T. & L. Rascionato
7	R. Julius	23	S. Elworthy
8	R. & B. Julius	24	S. & A. Lawton
9*	NSW Dept. of Education & Training	25	V. Long
10	Tweed Shire Council	26	D. & J. Clark
11	C. Pritchard & W. Julius	27	R. & C. Prichard
12	H. & R. Taylor	28	P. & H. Hardy
13	S. Thomson	29	Country Energy
14	S. & G. Melville	30	D. Green
15	I. Kettle & M. Stephens		
16	Hanson Construction Materials		

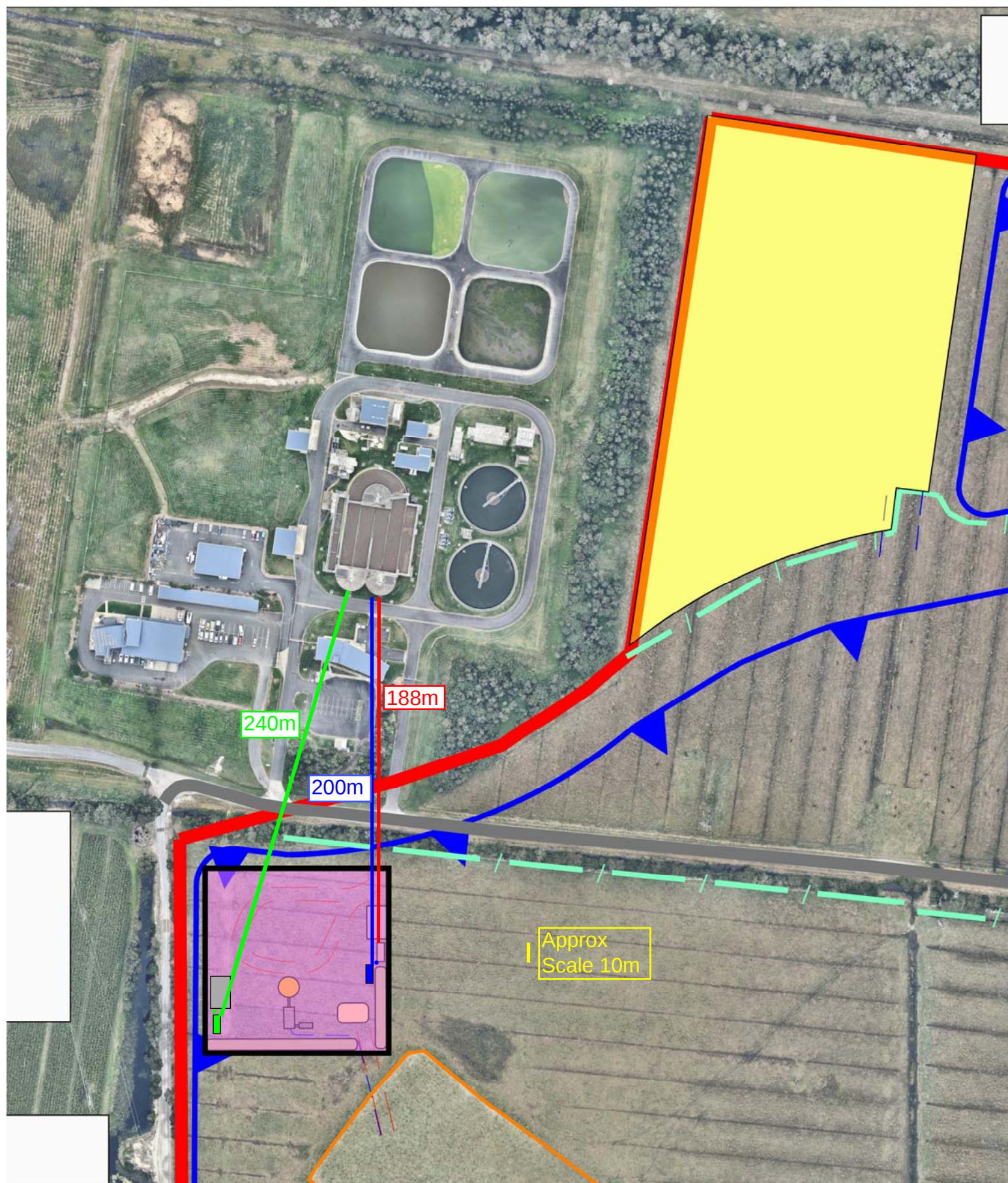
* Cudgen Public School
Chinderah Golf Club

SCALE 1:15 000 (A4)

250 0 250 500 750 m

Land Ownership Source: Dept. of Lands (2005)

Figure 2
SURROUNDING LAND OWNERSHIP
AND PRINCIPAL RESIDENCES



Alternative office locations with water tank

The ENM noise model for the site was run in point calculation mode to predict the noise levels at the boundary of Lot 14 in the subdivision, nearest to the initial processing area. The model was run for the same scenarios as the original assessment with results shown in **Table A**.

TABLE A ENM POINT CALCULATION RESULTS (dB(A) Leq (15 min)) RECEIVER Lot 14 in Subdivision		
Noise Source	Scenario 1	Scenario 2
1.- Dredge	42.1	42.2
2.- Wash Plant	31.8	33.8
4.- FEL	34.0	36.0
6.- 30t Excavator	33.7	33.8
7.- Mini Tanker	37.5	37.5
9.- Road Truck Loamy Sand	39.3	39.4
10.- 30t Excavator	28.2	29.6
11.- Haul Truck	34.4	35.4
Total	46.0	46.4
Criterion	46	46

The results in **Table A** show that the worst case predicted noise level would be higher than the adopted noise criterion by 0.4 dB(A). This would not be regarded as an exceedance of a noise criterion. A difference of less than 1 dB(A) is inaudible to the human ear. The tolerance for a Type 1 laboratory grade Sound Level Meter is +/- 1.1 dB at 1 kHz and, therefore any exceedance of this magnitude (0.4 dB(A)) would not be measureable.

It would, therefore, not be considered reasonable to apply noise controls to reduce the noise by an amount that is neither audible nor measurable.

In addition to this, it is noted that an exceedance of less than 2 dB (A) above a statutory noise limit specified in a licence condition is not considered to be a non-compliance as per the discussion in Section 11.1.3 of the NSW Industrial Noise Policy.

We trust this report fulfils your requirements at this time, however, should you require additional information or assistance please do not hesitate to contact the undersigned.

Yours faithfully,

SPECTRUM ACOUSTICS PTY LIMITED



Ross Hodge

Acoustical Consultant