

14 July 2023

Our Ref: 11584 - Response to RFI

Donna Clarke
Development Assessment
Penrith City Council
601 High Street
Penrith NSW 2750
Attn: Donna Clarke – Consultant Planner

Dear Ms. Clarke,

RE: DA22/0318 – Response to RFI
Property: 158-164 Old Bathurst Road, Emu Plains

Reference is made to the above development application (**DA**) seeking consent for the proposed industrial subdivision of the land at 158-164 Old Bathurst Road, Emu Plains (the **Site**).

GLN Planning Pty Ltd (**GLN**) has prepared this correspondence on behalf of the Applicant; ACOR Consultants in response to matters raised by Penrith City Council (**Council**) in its correspondence dated 22 November 2022, correspondence dated 8 May 2023, subsequent meeting on Site on 8 December 2022 and meeting via Microsoft Teams on 14 June 2023.

There are a number of items raised in Council's correspondence, most of which would typically be addressed by imposing an appropriate condition to any consent granted; the condition required to be satisfied prior to the release of the Subdivision Works Certificate (**SWC**). A Table addressing each individual item raised by Council in the 22 November 2022 correspondence is provided in **Attachment A**.

There are four primary concerns of Council as outlined in the various RFIs received that relate to,

- The retention of the spoil mound,
- The intersection treatment of Old Bathurst Road/David Road,
- Tree protection zones along the eastern and southern boundaries and
- Geotechnical investigations.

Further information on these items is provided in the subsequent parts of this response. In preparing this response to the items raised by Council, the Applicant has recently opted to submit a separate DA for the remediation of the Site. Therefore, this DA no longer seeks remediation works for contaminated material on the Site, which is now applied for under DA23/0506.

We consider that the information provided in this correspondence, coupled with the supporting material attached, detail provided throughout the assessment process, and in the original DA,



ensures Council has sufficient information to provide a positive recommendation to the Regional Planning Panel (**Panel**).

Pursuant to the Panel briefing undertaken on 12 December 2022, we understand that the DA can be determined electronically.

Retention of the “mound”

The Applicant retains the position that the retention of the spoil mound is not a preferred planning, landscaping or environmental outcome and a better position can be achieved through the removal of the mound and re-landscaping of this area in a proper soil landscape with plantings that will provide a better, more resilient and substantive tree corridor. As outlined at the Panel briefing on 12 December 2022 should the Council and the Panel disagree with the proposed approach, and to progress this impasse the Applicant will accept a condition requiring:

- Retention of the part of the spoil mound that fronts the corner of Old Bathurst Road and David Road (to the entrance into the Site).
- Requirement to provide an additional landscape plan (relevant to the part of the mound being retained).
- Requirement to provide a Vegetation Management Plan, which details how the mound will be maintained, enhanced and unwanted species removed.
- Reasonable battering and retention of landform to preserve the existing trees at the interface of the mound and developable land in each lot as well as where the internal road provides access to the estate.
- The provision of the above information is to be provided prior to the issue of a Subdivision Works Certificate, with Council to provide a response within 10 days, otherwise acceptance of the proposed Landscape Plan, Vegetation Management Plan and retention is considered acceptable.

At the meeting on 8 December 2022, Council advised that a condition to retain the mound would be reliant on additional contamination assessment finding no contamination in the mound. The Applicant has subsequently engaged JBS&G to undertake further investigations of the mound.

JBS&G undertook testing of an additional 28 test pits between 3-10 February 2023 in locations shown in **Figure 1**. Soil type in the mound varied between brown silty clay fill, reworked red clayey sand and reworked orange/brown clays. Testing found that the mound included concrete, plastic, road base, gravels, metal and brick. JBS&G outlined that:

The bund material appeared to potentially, mostly comprise site won topsoil and other materials pushed in the bund during previous site development.

Other than a single fragment of asbestos containing material (located in TP12 – and subsequently appropriately disposed of), no other indications of contamination were observed. JBS&G have concluded that “subject to implementation of the unexpected finds protocol provided in the RAP (JBS&G 2022), the bund material does not require remediation or management.



Source: JBS&G 2023

Figure 1 Extract of Sample Locations Map

Although the investigations undertaken by JBS&G did not find any material that would require additional remediation, the testing found that the mound largely consists of material pushed up by the previous operators of the Site and is perhaps one of the reasons for the poor quality of many of the trees found on this artificial landscape feature. It is still the Applicant's belief that removing the mound and replacing it with appropriate soils free of building rubble that would support the long term health, growth and maintenance of vegetation in accordance with the submitted Landscape Plan would be a better planning outcome for the site. However, to ensure a resolution and determination of this longstanding matter, the Applicant will accept a condition requiring the retention of the mound if the Panel disagrees with the applicants position.

The additional bund assessments prepared by JBS&G is provided in **Attachment B**. As previously outlined, the remediation of other Site contaminants has now been applied for under a separate DA; DA23/0506 and is no longer sought under this DA.

Old Bathurst Road / David Road intersection

In response to queries raised by Council and Transport for NSW (**TfNSW**) regarding the intersection of Old Bathurst Road and David Road, SCT revised the Traffic Impact Assessment (**TIA**) previously submitted with additional traffic data and modelling (**Attachment C**).

The revised TIA has found that Old Bathurst Road / David Road intersection will meet signal warrants criteria for five hours and hence traffic signals are warranted at this location. The TIA outlines:

"The warrant assessment indicates that:

- *Two hours in the AM (green rows highlighted) meet the signal warrants (i.e. between 7-9am when traffic volumes on a major road exceed 600 (and 900) veh/h in each direction and that on a minor road exceeds 200 (and 100) veh/h*
- *Three hours in the PM (green rows highlighted) meet the signal warrants, i.e. between 3-6 pm when traffic volumes on a major road exceed 600 (and 900) veh/h in each direction and that on a minor road exceeds 200 (and 100) veh/h.*
- *Therefore, there could be a total of five hours to meet the traffic demand requirement for a signalised intersection".*

Peak period	Time	Traffic volumes for all approaches			Total throughput
		major (E)	minor	major (W)	
AM	6:00-7:00	450	350	1,050	1,850
	7:00-8:00	600	350	1,400	2,350
	8:00-9:00	650	500	1,500	2,650
	9:00-10:00	550	350	1,300	2,200
	10:00-11:00	500	350	1,050	1,900
	11:00-12:00	550	350	850	1,750
PM	12:00-01:00	900	350	500	1,750
	1:00-2:00	900	350	500	1,750
	2:00-3:00	950	350	500	1,800
	3:00-4:00	1,100	400	600	2,100
	4:00-5:00	1,150	550	650	2,350
	5:00-6:00	1,150	400	600	2,150

Source: SCT, 2023

Figure 2 Extract of volumes against traffic warrant criteria - Old Bathurst Road / David Road

Warrant	Criteria	AM	PM	Warrants met?
a) Traffic demand	(i) The major road flow exceeds 600 vehs / h in each direction; and	Yes	Yes	Yes
	(ii) The minor road flow exceeds 200 vehs / h in one direction.	Yes	Yes	
b) Continuous traffic	(i) The major road flow exceeds 900 vehs / h in each direction; and	No	No	No
	(ii) The minor road flow exceeds 100 vehs / h in one direction; and	Yes	Yes	
	(iii) The speed of traffic on the major road or limited sight distance from the minor road causes undue delay or hazard to the minor road vehicles; and	Possibly		
	(iv) There is no other nearby traffic signal site easily accessible to the minor road vehicles.	Yes	Yes	
c) Pedestrian safety	(i) The pedestrian flow crossing the major road exceeds 150 persons / hr; and	No	No	No
	(ii) The major road flow exceeds 600 vehicles / hr in each direction or, where there is a central median of at least 1.2m wide, 1,000 vehicles / hr in each direction.	Yes	Yes	
d) Pedestrian safety – high-speed road	(i) The pedestrian flow crossing the major road exceeds 150 persons / hr; and	No	No	No
	(ii) The major road flow exceeds 450 vehicles / hr in each direction or, where there is a central median of at least 1.2m wide, 750 vehicles / hr in each direction; and	Yes	Yes	
	(iii) The 85th percentile speed on the major road exceeds 75 km / hr.	No	No	
e) Crashes	(i) The intersection has been the site of an average of three or more reported towaway or casualty traffic accidents per year over a three year period, where the traffic accidents could have been prevented by traffic signals; and	N/A	N/A	No
	(ii) The traffic flows are at least 80% of the appropriate flow warrants.	No	No	

*- The warrant criteria must be satisfied for each of four one-hour periods of an average day.

Source: SCT, 2023

Figure 3 Extract of Warrant criteria review results

Despite meeting warrants for signals, the TIA reviewed other options for the intersection including an alternative roundabout solution. The report found that the roundabout option would fail during the PM peak hour “given excessive development traffic which needs to give way to the westbound through traffic (a major direction during the PM peak period)”. Therefore, a signalised intersection is preferred as this intersection treatment would achieve a level of service A and B “in the future year base case with about 12 per cent remaining capacity”. With development travel added, it was found that the intersection could operate at a “level of service D for both peak hours, which is satisfactory” (see **Figure 4**).

Intersection	Future year			Future year with development		
	Delay	LoS	DoS	Delay	LoS	DoS
Weekday AM Peak						
Old Bathurst Road/Russell Street (signal)	41.1s	C	0.73	55.4s	D	0.93
Old Bathurst Road/David Road (roundabout)	13.6s	A	0.84	27.0s	B	1.01
Old Bathurst Road/David Road (signal)	10.1s	A	0.87	42.7s	D	1.00
Weekday PM Peak						
Old Bathurst Road/Russell Street (signal)	48.3s	C	0.92	54.6s	D	0.99
Old Bathurst Road/David Road (roundabout)	24.5s	B	0.73	>70.5s	F	1.68
Old Bathurst Road/David Road (signal)	15.6s	B	0.88	43.9s	D	0.98

Source: SCT, 2023

Figure 4 Extract of Future year intersection performance with upgrades 2035

It is our understanding that Council is supportive of the proposed signalised intersection, however under Clause 87(4) of the *Roads Act 1993* (**Roads Act**):

"the construction, erection, installation, repair, removal or replacement of a traffic control light may not be carried out otherwise than by or with the consent of TfNSW".

This does not necessarily restrict the power or ability for the Panel to approve the development as the DA is only required to be referred to TfNSW under Clause 2.122 of the *State Environmental Planning Policy (Transport and Infrastructure) 2021* (**SEPP T&I**). In accordance with the Department of Planning and Environment Development Referrals Guide 2022:

"The council must refer certain DAs to a referral authority where required under the legislation. This requirement is usually in an EPI and is typically for consultation purposes to obtain advice from the referral authority. For example, under State Environmental Planning Policy (Transport and Infrastructure) 2021 (Transport and Infrastructure SEPP), Chapter 2 (Infrastructure), section 2.122 councils must consult with Transport for NSW before determining development proposals for traffic-generating development on certain land. The agency will provide the council with advice to inform its assessment".

In accordance with the above, the consent authority does not require concurrence from TfNSW to determine the DA and approval under Clause 87(4) of the Roads Act can be sought after determination of the DA. Should TfNSW disagree with the warrants assessment by SCT, which would not be expected the consent would be required to be amended as would be the case of any development with a similar condition and outcome.

Tree protection zones along the eastern and southern boundaries

At the site meeting on 8 December 2022, Council officers raised concerns over the design and location of the batters in relation to tree protection zones (**TPZs**) of trees on the eastern and southern boundaries. It was relayed that Council would not support any batters within the TPZ. The Applicant has revisited the design and proposed a sleeper retaining wall with piers (see **Attachment D**). This will remove the need for the batters and allow for strategic location of support piers.

The design was prepared in consultation with the project Arborist who has proposed the following, which can be included in conditions of consent:

Where the installation of structures (i.e. retaining) is proposed within the TPZ(s) of site trees designated for retention, root sensitive construction methods and (root sensitive) exploratory excavation will be required.

Such construction methods may include the suspension/cantilevering of walled/built sections and/or the use of pier and beam/post and rail design.

Pier, pile or post placement/installation is considered preferable to contiguous footing excavation(s) within the TPZs of trees to be retained.

Proposed pier, pile or post locations should allow for adjusted placement of no less than 20cm around the axis to accommodate for the presence of significant root mass (i.e. roots over 40mm in dia.).

Any proposed excavation (i.e. post/pier potholing) within documented TPZ(s) is to be undertaken using techniques that are sensitive to tree roots to avoid unnecessary damage. Such techniques include:

- Excavation using a high-pressure water jet and vacuum truck
- Excavation using an Air Spade with vacuum truck
- Excavation by hand.

Machine excavation is prohibited within the TPZ(s) of retained trees.

Roots discovered are to be treated with care and minor roots (<40mm diameter) pruned with a sharp, clean handsaw or secateurs. All significant roots (>40mm diameter) are to be recorded, photographed and reported to the project arborist.

Roots (>40mm diameter) are to be retained and protected. This will include protection from desiccation/stripping during exploratory works and careful back-filling/consolidation to eliminate the negative effects of soil compaction”.

Included in **Attachment E** are examples of Air Spade Root Exploration and Manual Root Exploration.

Geotechnical Investigations

Council’s RFI letter of 8 May 2023 identified a range of numbered matters to be addressed. A detailed response to each item raised was provided via email on 25 May 2023 and subsequently discussed at a meeting on 14 June 2023. In response to the items raised the Geotechnical Report has been updated in **Attachment F**.

Conclusion

We are of the belief that Council now has sufficient information to finalise their report, recommending approval to the Panel.

Should you have any questions regarding information provided in this letter or attached, do not hesitate to contact me directly on 0403 239 230.

Yours faithfully

GLN PLANNING PTY LTD



MICHAEL HANISCH
SENIOR PLANNER



Attachment A – Response Table



Attachment B – Contamination Assessment Documentation

- JBS&G's updated Remediation Action Plan (RAP) dated 16 December 2022 (Rev 2) (**Attachment B1**)



- Site Auditor Review – Interim Advice 03 – Review of JBS&G (2022) Revised Remediation Action Plan (**Attachment B2**).

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- JBS&G's Surface Water Management Options Assessment dated 24 February 2022
(**Appendix B3**)

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- JBS&G's Bund Assessment Summary - 13 February 2023(**Attachment B4**)

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- Site Auditors Review – Interim Advice 04 – Review of the JBS&G (2022) Surface Water Management Options Assessment and JBS&G (2023) Bund Assessment (**Attachment B5**)



- JBS&G's Response to the Side Auditors Comments – 13 March 2023 (**Attachment B6**)



Attachment C – Traffic Impact Assessment



Attachment D - Retaining Wall Design



Attachment E – Root Exploration Examples



Attachment F – Additional Swept Paths



Attachment F – Geotechnical Report