201570 CAAA



14 October 2021

Campbelltown City Council 1/27 Hotham Pde ARTARMON NSW 2064

Attention: Ellise Mangion

### Genesis Care Campbelltown NSW (2036/2021/DA-C) RESPONSE TO COUNCIL RFI - STORMWATER

Dear Ellise,

This letter has been prepared in response to stormwater matters (item 4) raised in the Campbelltown Council letter - Request for Additional Information (dated 5 October 2021).

The comments raised by Council are responded exclusively and item-wise as following:

- (a) <u>The applicant was advised prior to lodging the development application that the stormwater infrastructure</u> was to be built as deep as necessary where it approached the rail corridor to allow for future excavation without disturbance if the Narellan Road underpass road link is built. There are no details demonstrating that this has been addressed.
- TTW have not been provided with details of the Narellan Road underpass link.
- Referring to Siteworks and Stormwater Plan (TTW-C106-P07), the proposed drainage pipeline between the Camden Road cul-de-sac (pit 26) and the proposed headwall at Birunji Creek is 3m deep (average) with pipe grade of 0.86%.
- The proposed headwall invert level (IL) is 64.37m AHD. The Birunji Creek bed level at the headwall location is approximately 64.37m AHD (based on available Lidar data).
- The proposed headwall invert level (IL) cannot practically be lower than the existing creek bed.
- Considering the above, TTW believe that the proposed drainage pipe is located as deep as practically viable.
- Since the current design near the railway corridor is based on Lidar data, additional survey data covering the existing footpath under Narellan Road and Birunji Creek bed (at the proposed headwall location) might provide an opportunity to slightly lower the current levels of the proposed pipeline at this area which will be further investigated at detail design stage.
- (b) <u>The outlet at Menangle Road is not aligned correctly, the outlet must be streamlined into the pit with the</u> <u>flows discharging from the large pipes flowing through the Marketfair site.</u>
- The stormwater network design is prepared for development application (DA) stage and is conceptual (not for construction). TTW will properly address this issue in the detail design (CC) stage.
- (c) <u>The alignment of the stormwater line is shown as very close to the boundary of the Main Southern Railway,</u> <u>especially considering point 1a and rail authority requirements for excavation close to the rail corridor.</u> <u>The applicant is to move the alignment further away from the rail corridor.</u>
- We understand that Clause 86 of The Infrastructure SEPP applies to the proposed drainage pipeline which requires the development to consult with and obtain concurrence from the rail authority.

- The stormwater network design is prepared for development application (DA) stage and is conceptual (not for construction). Further arrangements need to be made with the rail authority in detail design stage to confirm a minimum desirable distance from the rail corridor.
- The stormwater plan has been updated to provide 2.00m distance between the stormwater pipe and the rail corridor along the rail corridor boundary. Refer to updated TTW stormwater plan (TTW-C106-P08) as attached for details.

#### (d) <u>The existing stormwater line from Narellan Rd is to be connected to the stormwater network.</u>

- We understand that the Narellan Road drainage network is under the TfNSW administration.
- Based on the Narellan Road drainage plan (TfNSW) provided by Council, the existing drainage system consists of a grassed open drain along the northern embankment of Narellan Road followed by a sedimentation basin. The basin receives stormwater flows from Narellan Road (for an extent between Narellan Bridge to intersection of Narellan Road and Kellicar Road) via an existing 450mm pipe. The basin drains towards the Birunji Creek Culvert at southern side of Narellan Road via an existing 450mm drainage pipe (Refer Figure 1).



Figure 1 Narellan Road Drainage Mechanism

 We recommend the connection point to the proposed stormwater line to be at the southern side of Narellan Road, upstream of the proposed headwall as shown in Figure 2. Refer to the updated TTW stormwater plan (TTW-C106-P08) as attached for details.



Figure 2 Narellan Road Stormwater Connection to the Proposed Stormwater Line

Should you require anything further please contact the undersigned.

Yours faithfully, TTW (NSW) PTY LTD

#### Ali Attar Senior Civil Engineer

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# SITEWORKS LEGEND Lot boundary from survey Lot boundary from Six Maps • F22.00 Finished surface level \_\_\_\_\_F22.00 Finished contour Stormwater pit, flow direction ø 600 and line with Pipe size Ø 600 - - $\times$ SW - $\times$ - SW - Existing drainage system to be demolished - - - SW - - - SW - Existing drainage system location unconfirmed



## SCALE 1:250 0 2.5 5 7.5 10 12.5 AT ORIGINAL SIZE \_\_\_\_\_ m

| P6  | ISSUE FOR DRAFT DA SUBMISSION     | AA  | AW    | 09.06.21 |     |                         |     |       |          |                 |     |       |      |
|-----|-----------------------------------|-----|-------|----------|-----|-------------------------|-----|-------|----------|-----------------|-----|-------|------|
| P5  | ISSUE FOR DA SUBMISSION           | AA  | AW    | 27.04.21 |     |                         |     |       |          |                 |     |       |      |
| P4  | ISSUE FOR DA SUBMISSION           | AA  | AW    | 09.04.21 |     |                         |     |       |          |                 |     |       |      |
| Ρ3  | ISSUE FOR DEVELOPMENT APPLICATION | AA  | AW    | 01.04.21 |     |                         |     |       |          |                 |     |       |      |
| P2  | ISSUE FOR DEVELOPMENT APPLICATION | AA  | JW    | 05.02.21 | P8  | ISSUE FOR COUNCIL RFI   | AA  | LW    | 15.10.21 |                 |     |       |      |
| P1  | PRELIMINARY                       | AA  | AS    | 01.03.21 | Ρ7  | ISSUE FOR DA SUBMISSION | AA  | LW    | 11.06.21 |                 |     |       |      |
| Rev | Description                       | Eng | Draft | Date     | Rev | Description             | Eng | Draft | Date     | Rev Description | Eng | Draft | Date |



