



TAKE THE LEAD

ADDENDUM TO SERVICING AND INFRASTRUCTURE REPORT

Planning Proposal PP-2022-2899 to amend Campbelltown Local Environmental Plan 2015

Macarthur Grange Golf Course

Prepared for Tescuz Investments

Feb 2023

Our Ref: 057-20

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1. Introduction

1.1 Proposal

Craig & Rhodes Pty Ltd was engaged by Toscu Investments in May 2020 to prepare a Servicing and Infrastructure Report for the Planning Proposal to rezone the Macarthur Grange Golf Course (Appendix A).

In response to Council's request for a Gateway Determination, the Department of Planning and Environment has requested additional information, including confirmation from Sydney Water that the anticipated development can be serviced.

This report serves as an Addendum to our report of May 2020 updating our servicing information for water, sewer and electricity services for the revised Masterplan.

1.2 Subject Site

The subject Site (the Site) consists of Lot 3900 DP1170905. It is 129.5 hectares in size and has a frontage to Raby Road, and is bordered by urban development to the west and the Scenic Hills to the east. The Site is subject of a Planning Proposal to create 53 environmental living lots of around 1 hectare in size.

1.3 Supporting documentation

We have been provided the draft Macarthur Grange Masterplan (Figure 1), a letter to the General Manager of Campbelltown Council from Adrian Hohenzollern dated 28 November 2022, the Gateway Determination Report (PP-2-2022-2889) for the site dated November 2020, Endeavour Energy Report – Raby Road, Varroville dated February 2020 (**Attachment A**), and the email correspondence between Craig & Rhodes and Endeavour Energy dated January 2023 (**Attachment B**).

We have not lodged another Feasibility Application to Sydney Water given the timeframes for feedback are six months, and have relied on servicing updates provided from Sydney Water and current snapshots of Sydney Water's Hydra servicing database.

Indicative Master Plan



Figure 1: Indicative Master Plan (architectus)



2. Water and sewer servicing

2.1 Water

Sydney Water's response to the Feasibility Application from 22 May 2020 stated that the site could not be serviced until the new Currans Hill reservoir was operational. Sydney Water's website (updated November 3 2022) states that this reservoir will be operational by late 2023, which will be well before demand for water would be generated from the site given the approval, DA and development timeframes. Bulk water capacity will therefore be available to meet development demand. We have confirmed with Alexa Pittaway of ProMac, Sydney Water's delivery partner, that site mobilisation for the reservoir is happening now, and that the reservoir is schedule for completion December this year.

Sydney Water offered two potential connection points to the water network – Gledswood Hills Drive in the north and Gregory Hills Drive in the south. We have confirmed from Sydney Water's Hydra database that these points are still available for connection (Figure 2 and 3 below).

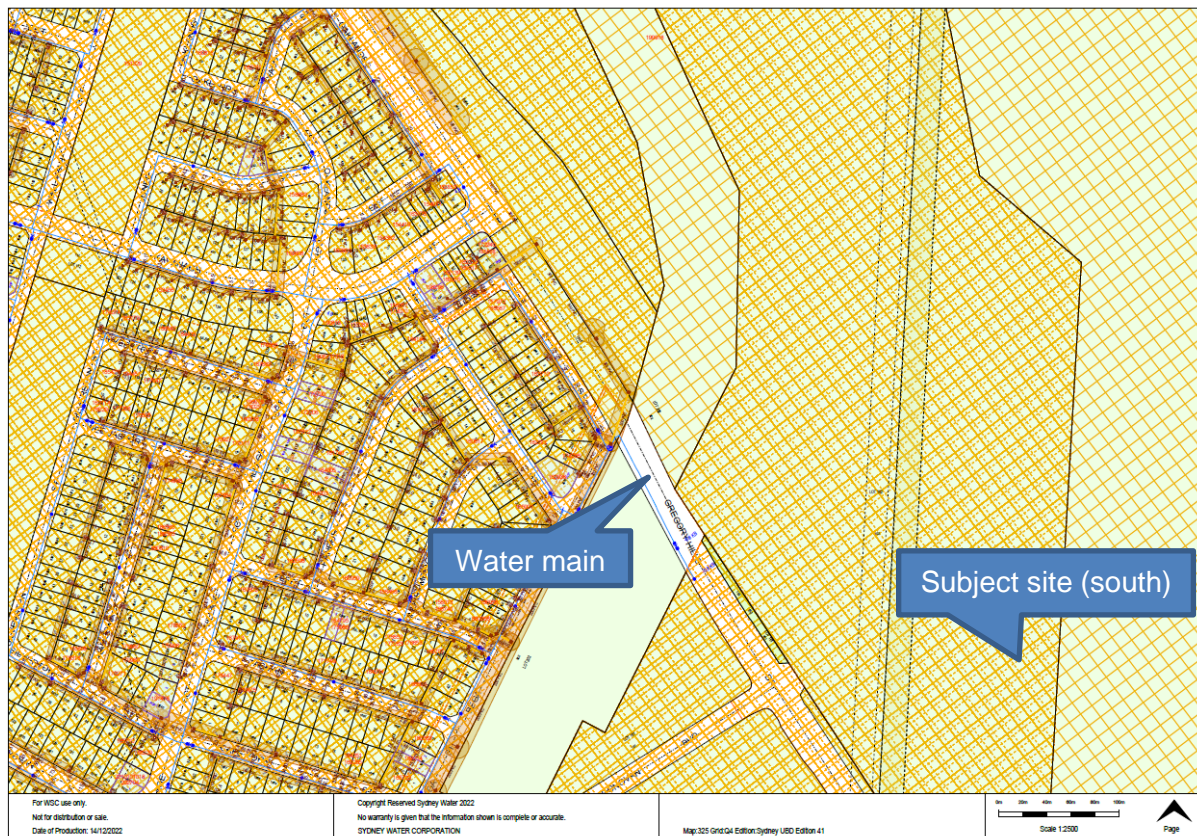


Figure 2: Water access to the southern portion of the site (SWC Hydra 2022)

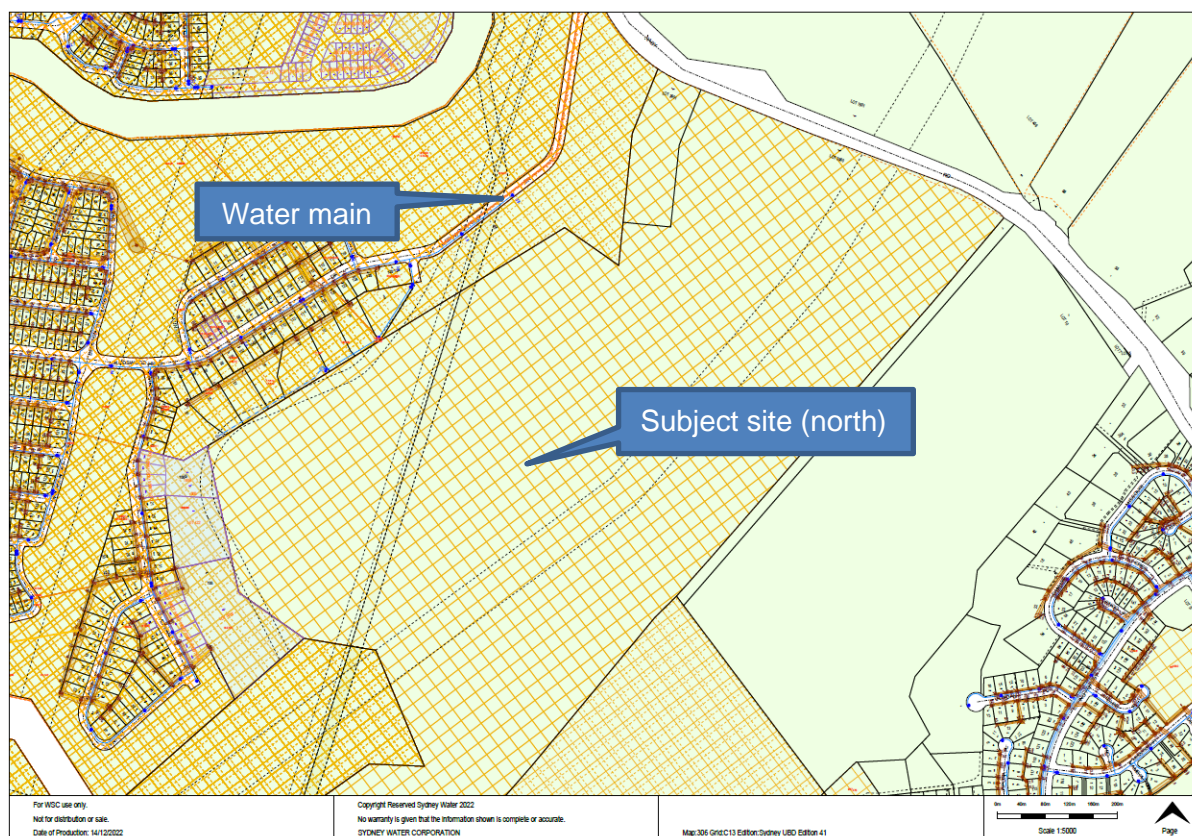


Figure 3: Water access to the northern portion of the site (SWC Hydra 2022)

The development intensity of the Site is minimal (being 53 lots) and therefore it is unlikely that the existing network would require augmentation should the reticulation network from the Site connect to these points. This would be confirmed by network modelling that may be required as part of Sydney Water's Section 73 Application process.

Sydney Water's Feasibility Notice noted that some of the high points of the Site may suffer from low pressure from the Currans Hill reservoir zone, and that inline boosters may be required. Again, this would be confirmed by modelling that may be required as part of the Section 73 process. The modelling and or delivery of in-line booster stations to boost water pressure to license limits would be at the proponent's expense.

Subject to the successful delivery of the Currans Hill reservoir in late 2023, and modelling to determine whether the supplying network would require local augmentation or boosting within the Site, it is our opinion that the Site can be serviced by Sydney Water.

2.2 Sewer

Sydney Water's response to the Feasibility Application from 22 May 2020 stated that the site was outside the existing wastewater catchments. It offered two potential connection points to its network in Gregory Hills, but noted that modelling would be required to determine the need for downstream network augmentation. We have confirmed through Sydney Water's Hydra database that these points are still available for connection.



There will be bulk sewer capacity to service the site at the West Camden Treatment Plant which is being doubled in capacity by the end of 2023 (Sydney Water, Nov 22). Peter Jensen of Sydney Water's Developer Branch has confirmed this information.

The site could be serviced by either a conventional gravity sewer which would require a pumping station to lift the sewer out of the catchment, or a low-pressure sewer system which is more suited to the undulating and dispersed nature of the site. Both of these solutions would then connect to the Gregory Hills network as indicated in the Sydney Water Feasibility. The exact point and extent of network augmentations (unlikely given the small number of lots being serviced) would be determined as part of the Section 73 Application process.

As the lot sizes are around 1 hectare each, a far more cost effective and water efficient way of servicing the development would be for each lot to have its own onsite treatment. This would involve the installation of a system such as those supplied by Envirocycle. These standalone underground tank systems are installed on site with all grey and blackwater produced from the dwelling treated to a standard that meets all regulatory requirements for irrigation of lawns and gardens. These systems have a long track record of providing safe sewerage and irrigation systems to unsewered areas in NSW and across Australia.

Separate approval for the installation of these systems is required by Council. This could be achieved either part of the subdivision DA and works, or as part of the dwelling DA and construction of individual houses.



3. Electricity servicing

Craig & Rhodes was advised in a letter from Endeavour Energy on 24 February 2020 (**Attachment A**) that the 11kV feeder SV1142B originating from the South Leppington Zone Substation (SLZS) did not have sufficient capacity to serve the anticipated demand from the proposed development at the site, and that the other 11kV feeders, originating from the Narellan and Minto Zone Substations, were also utilised to their full capacity.

In the same letter, Endeavour advised that the SLZS was to be upgraded, scheduled to be completed in the 2021 financial year, and that this upgrade would service the energy demand of the site. Endeavour stated that they did not reserve network capacity unless a formal application for “Connection of Load” was submitted.

In January 2023, Craig & Rhodes contacted Endeavour Energy to confirm whether the works to upgrade the SLZS had been completed. Endeavour’s email dated 18 January 2023 (**Attachment B**) confirmed that the upgrade had been completed and that South Leppington 11kV Feeder SL1432 currently has the capacity to service the site’s future demand, which is estimated to be approximately 1.5MVA.

Furthermore, Endeavour Energy notified Craig & Rhodes that:

- The current capacity cannot be reserved;
- A full network capacity investigation would have to be conducted when a formal “Connection of Load” application was submitted;
- At present, there are a couple of ENL submissions that could “consume” the future spare capacity; and
- The advice may change upon the submission of a “Maximum Demand”, should the load be greater than the estimated amount.



4. Conclusion

This addendum to our original Infrastructure Servicing Report has found that the subject site can be serviced by water, sewer and electricity. Water and sewer can be serviced via either conventional or alternative means once the bulk water and sewer upgrades are delivered at the Currans Hill reservoir and West Camden Sewer Treatment Plant in late 2023. This has been confirmed with Sydney Water representatives in Sections 2.1 and 2.2 of this report being Alexa Pittaway and Peter Jensen. The site's electricity demands can be serviced by Endeavour Energy's South Leppington 11kV feeder SL1432, as confirmed in their email correspondence dated 18 January 2023 (**Attachment B**), although this is subject to its capacity at the time of the formal "Connection of Load" application's submission.