

## MEMORANDUM

To: TRICE

From: Trevor Todd Pages: Page 1 of 5

Project: MOUNT LOFTY GOLF RESORT Reference: LCE21369-005

Date: 09 December 2022

Subject: Building Services Infrastructure Summary

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### INTRODUCTION

For the purposes of informing the projects planning application Lucid Consulting have prepared the following summary of the potential building services provisions services anticipated for the development located at Golflinks Road Stirling, South Australia. The area of the proposed new development site currently contains the existing golf course club rooms and associated buildings which are understood to be removed as part of the development. The proposed development is summarised as follows:

- Hotel - 3-5 level hotel building comprising:
  - 56 hotel suites.
  - 15 x two bedroom serviced apartments.
  - 15 x three bedroom serviced apartments.
  - 2 penthouse serviced apartments.
  - Back of house, plant storage and maintenance areas.
  - A 537m<sup>2</sup> function room.
  - A 212m<sup>2</sup> restaurant with 89 m<sup>2</sup> external terrace.
  - 186m<sup>2</sup> sports bar.
  - A 189m<sup>2</sup> gallery and cafe.
  - A 94m<sup>2</sup> wellness centre with 125m<sup>2</sup> gym and spa/massage treatment rooms.
- Private retreats – ‘Pods’
  - 17 x one bedroom units.
  - 1 x back of house Service Pod.
- Adaptive reuse of the existing perfumery:
  - Refurbishment of the existing local heritage place to accommodate a multipurpose space for use as café, retail or functions.
  - Extension to the Perfumery to include a covered outdoor dining area.
  - Orchard and perfumery garden plantings to reimagine the former use of the building as a “Scent Factory”.
  - Note: the perfumery building will temporarily house the golf club whilst construction is occurring.
- Golf Course Facilities Building - 2-5 level building comprising:
  - Retention of 18-hole golf course with improvements.
  - Refurbished function facilities, cart storage and 138m<sup>2</sup> clubhouse in new building.
  - New 97m<sup>2</sup> pro-shop, administration areas, gym and change rooms.
- Car Parking, Access and Waste Management
  - A total of 200 car parking spaces in two car parking areas.

- Emergency vehicle access via western entry from Golflinks Road.
- Main access point via Golflinks Road.
- Designated service bay for waste collection and service vehicles.
- Porte cochere and valet area for guests and buses.
- A separate entry from Old Carey Gully Road to provide maintenance vehicle access and public access to the perfumery building.
- Designated waste storage areas.
- Subdivision – following construction of the proposed development, it is proposed to divide the site into three (3) allotments:
  - Allotment 532, with an approximate area of 9,924m<sup>2</sup> together with a right of way 'A', comprising the hotel building and pods.
  - Allotment 533, with an approximate area of 5,056m<sup>2</sup> together with a right of way 'B', comprising the golf club and facilities building.
  - Allotment 531, with an approximate area of 38.4 hectares, comprising the balance of the golf course, subject to easements 'A' and 'B'.

Lucid consulting has been engaged to provide engineering consulting services during the planning and concept phase to assist in determination of the required Building Services; consisting of Mechanical, Electrical, Communications, Hydraulic, Fire and Vertical Transport Services, to inform the buildings design and spatial representation of major services and infrastructure. It should be noted wastewater (sewer) systems are to be designed by others.

## INFRASTRUCTURE SUMMARY

The following provides a summary of the existing and proposed services infrastructure provisions.

### SEWER SERVICES

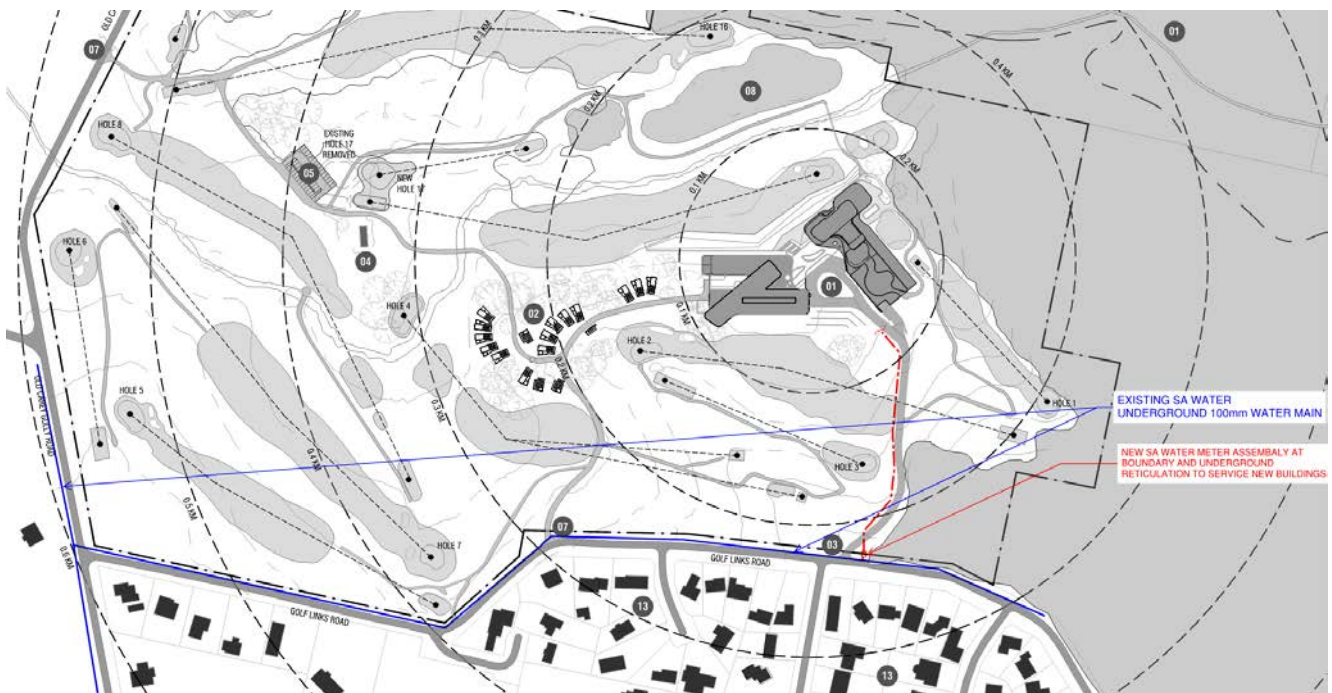
It is understood the proposed site sewer wastewater system infrastructure is to be addressed by others (Arris).

### GAS SERVICES

There is currently no utility towns mains gas supply available within the area, as such a natural gas supply shall not be provided to the building and infrastructure systems are typically proposed to be electric. Should minor gas supplies may be required for kitchen equipment, as such if required shall be provided via local onsite external LPG cylinders.

### DOMESTIC WATER SUPPLY

The existing site is serviced via 2 off 100mm SA Water Corporation towns mains within Golflinks Road and Old Cary Gully Road. There is currently no authority recycled water mains within the local area of the site.



**Image 1 – SA Water Corporation Water Infrastructure**

Preliminary assessments undertaken to evaluate the required water demand for the proposed development, it is anticipated onsite domestic water storage tanks and pressure pumpset will be required and is intended to be incorporated within the main resort building envelope within the lower ground level plant rooms.

### BUILDING FIRE WATER

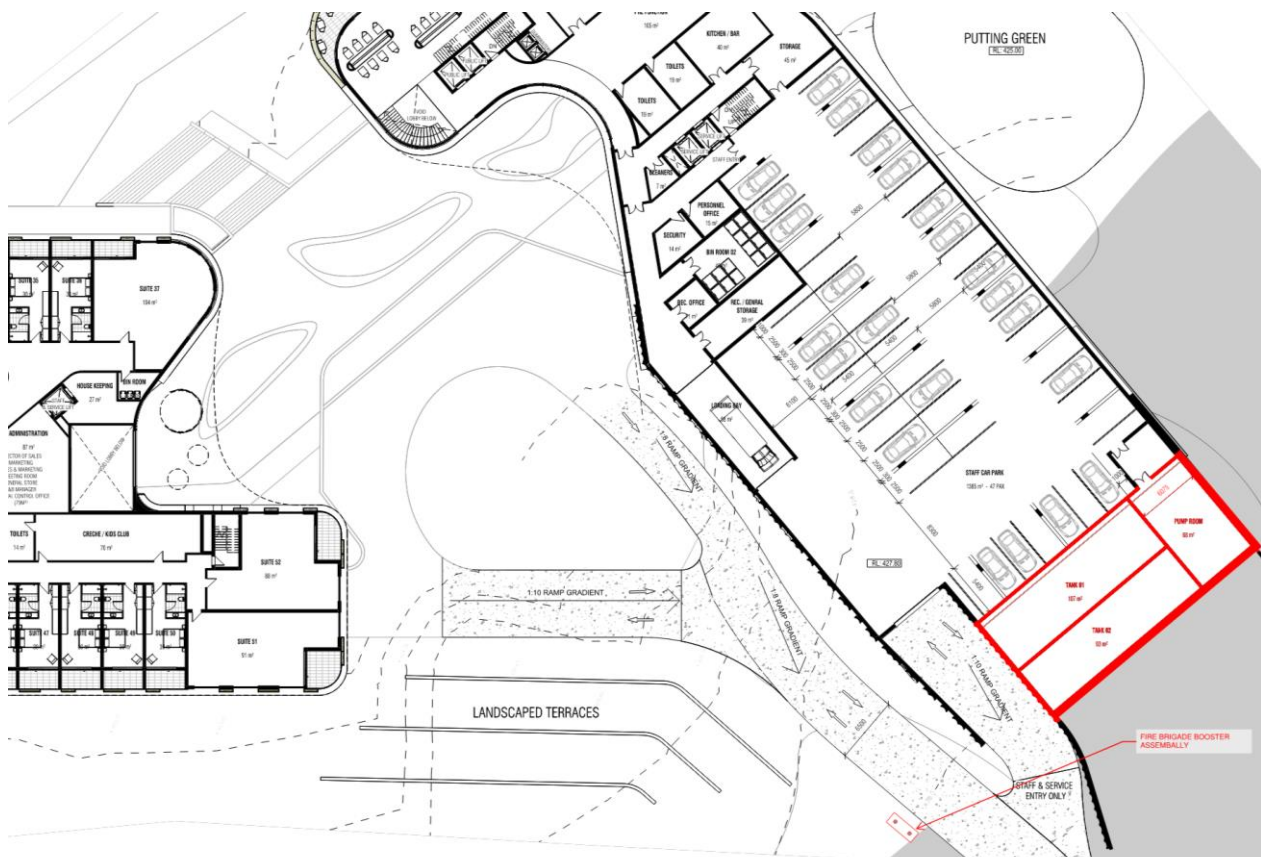
The latest architectural documents indicate the main building fire protection services will require as a minimum fire hydrants and sprinkler protection. Similar to the domestic water supply a preliminary assessment has undertaken to determine the anticipated requirements for onsite water storage and pumping systems. The anticipated building fire water demand will require on site water storage and pump systems to supplement the available capacity from the SA Water Corporation infrastructure. It is anticipated onsite fire water storage tanks and pumps consisting of 2 off tanks of approximate capacity of 150-200kL each and a fire pump facility containing 2 off fire pumps, both are required to be co-located and in close proximity to the sites main vehicle entry to facilitate the Country Fire Service operational response, as such are currently proposed to be incorporated internally within the building envelope adjacent the carpark at level 1.

In addition to the fire water storage and pumps a booster assembly is required for the attending fire brigade to connect to the system, this is to be located adjacent the main entry driveway on the approach to the buildings to facilitate the Country Fire Service operational requirements.

### BUSHFIRE FIRE WATER

It is understood the development is within a bushfire risk area and through consultation with the Country Fire Service it has been agreed in lieu of dedicated individual bushfire tanks to each building (accommodation pod and main building) a consolidated "community" bush fire water storage strategy is proposed and combine the Bushfire water storage and the Building fire water storage tanks. The current recommendations from the Country Fire Service indicate a recommended water storage quantity in the order of 400-500kL for the precinct including the main building and accommodation pods.

To provide access to the bushfire water it is proposed to provide external hydrants to the perimeter of the buildings supplied from the tanks and pumps.



**Image 2 – Combined Building Fire and Bushfire Fire Water Infrastructure**

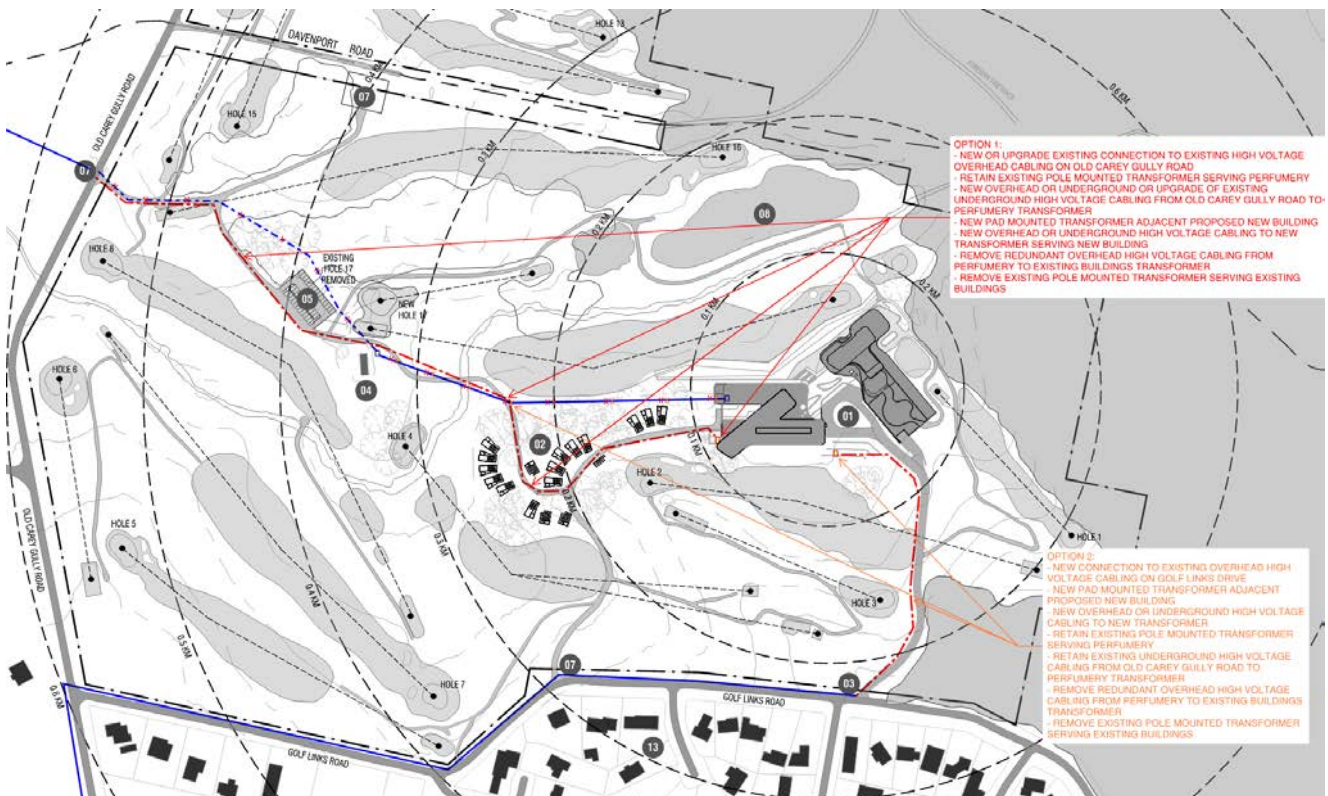


## ELECTRICAL INFRASTRUCTURE

The development area has access to existing SA Power Networks overhead high voltage lines which currently serve the local transformer providing power to the golf course facilities. The existing supply enters the site from Old Carey Gully Road via underground high voltage cabling before transitioning to overhead high voltage cabling within the site.

Preliminary consultation with SAPN indicates the existing high voltage infrastructure is required to be altered/ upgraded to service a new larger capacity transformer located local to the main building to suit the electrical demand of the proposed buildings and removing the existing transformer. Current advice from SAPN indicates the power supply is likely to enter from Old Cary Gully Road however a second option is available to enter the site from Golf Links Drive. Both Golf Links Drive and Old Cary Gully Road have existing overhead high voltage infrastructure.

Consideration is being given to diverting the existing overhead SAPN power lines below ground, however this will be resolved as part of the detailed design as the project progresses.



**Image 3 – SA Power Networks Electrical Infrastructure**  
(Refer attached full size drawing for clarity)

We trust the above is satisfactory. Please do not hesitate to contact the undersigned should you require further information.

Regards,  
**LUCID CONSULTING ENGINEERS**

**TREVOR TODD**  
Associate