

MEMO

To: North Shore Golf Club – Dan Molloy

From: Scott McIntyre

Cc:

Date: 19/12/2022

Re: Civil Engineering Costs of Access Options for Site 1

McKenzie and Co Consultants have undertaken a high-level estimate of the civil construction costs related to creating the three access options being explored for site 1.

The three options are and as shown in Figure 1;

- 1. Existing Access off Appleby Road Red line
- 2. Laurel Oak Drive Purple Line
- 3. English Oak Drive Blue Line

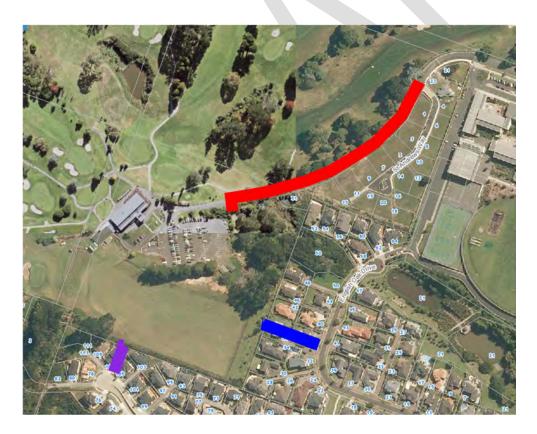


Figure 1 - Access Locations



These estimates have been prepared based on good engineering judgement as no design has been undertaken or approval(s) sought from Council. The purpose is to provide an understanding of the potential magnitude of costs for the three options.

No allowance has been made for land acquisition, consenting costs, professional fee costs or timeframes, etc associated with these aspects. All cost estimates are GST exclusive and based on 2022 rates.

Servicing site 1 is expected to require network upgrades to both Power and Communications utilities. At this stage these are not known and have been excluded from any costs, though an allowance to instal them through the access roads has been made. For the purposes of this assessment these can be considered the same for all three access options.

Water Supply is also expected to require some wider upgrades beyond the location of the access works and as with power and communications for this exercise they are also considered to be the same. An allowance to install water infrastructure has been made along each of the routes.

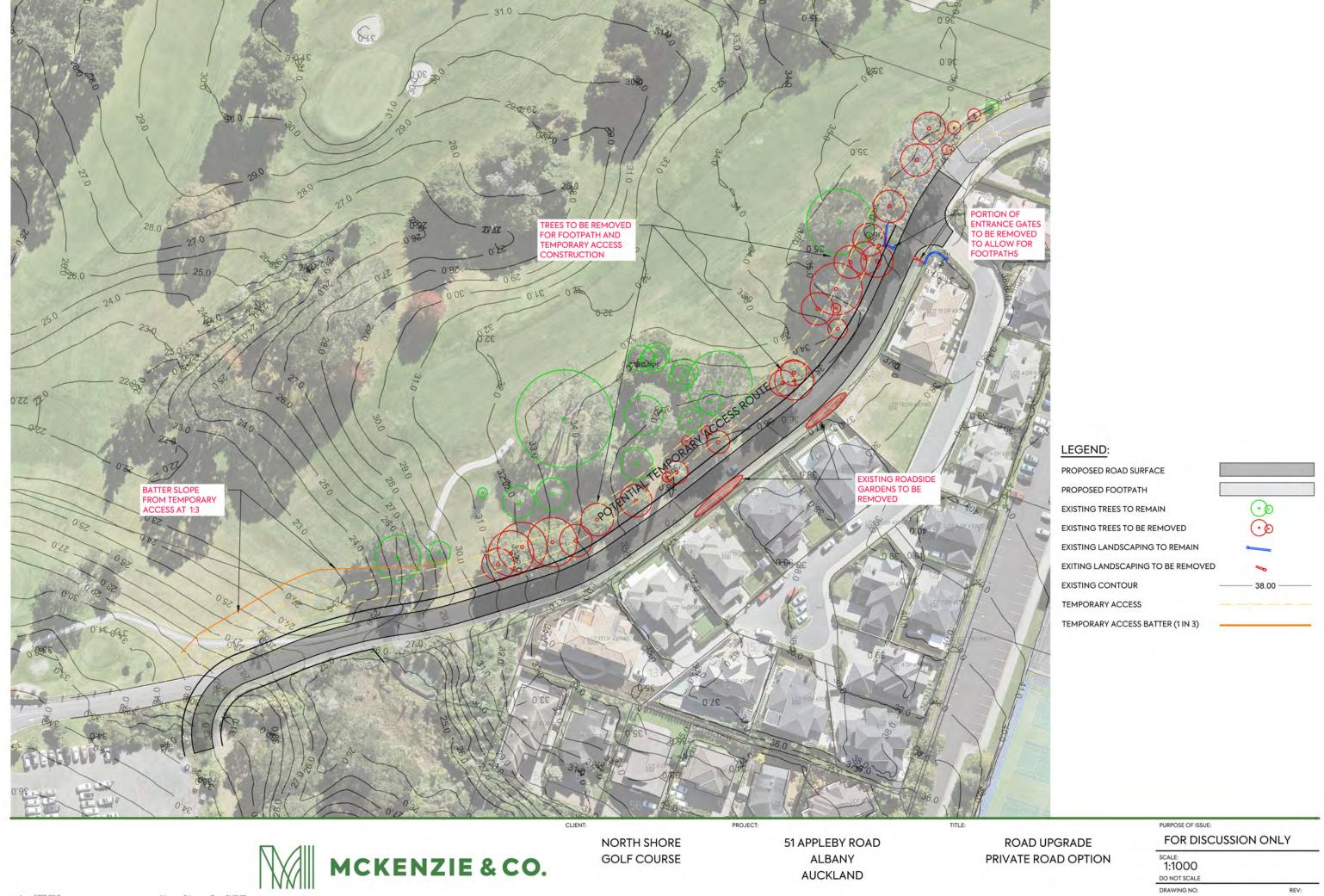
Options 2 and 3 will provide access to existing stormwater and wastewater networks, however depth and capacity are expected to make them of little benefit to the project so they are also not considered in the estimates as providing any benefit over Option 1.

A preliminary and general allowance of 8% has been included in the estimates along with a 25% contingency to reflect the preliminary nature of these costings.

Option 1 costings also include a value to create a temporary access for the golf course, this would be formed as a two-way road with a sealed surface and includes an allowance to remove upon completion of the new road. No allowance to reinstate the golf course to full playing condition is allowed for and should be factored into the costings.

Cost Summary

Option	1	2	3
Roading And	\$ 740,000	\$ 180,000	\$ 260,000
Earthworks			
Drainage	\$ 370,000	\$ 70,000	\$ 90,000
Water supply	\$ 260,000	\$ 40,000	\$ 60,000
Utilities	\$ 125,000	\$10,000	\$10,000
Misc	\$ 50,000	\$10,000	\$10,000
Temp Access Road	\$ 350,000	n/a	n/a
Preliminary and	\$ 150,000	\$ 25,000	\$ 30,000
General Costs			
Contingency (25%)	\$ 475,000	\$ 80,000	\$ 105,000
Total	\$ 2,515,000	\$ 415,000	\$ 565,000



AM SM JD 01/12/22

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