Environmental Health Referral Response - acid sulfate soils

Application Number:	DA2021/2034

Date:	11/11/2021
Responsible Officer	Adam Croft
Land to be developed (Address):	Lot 50 DP 705739 , 30 Fairlight Street FAIRLIGHT NSW 2094

Reasons for referral

This application seeks consent for one or more of the following:

- All development in class 1 land
- Any works below ground surface or will lower water table in area class 2 land
- Any works beyond 1 metre or lower water table by 1 metre in class 3 land
- Any works beyond 2 metres or lower water table by 2 metres in class 4 land
- Works on land below 10 metres AHD and within 500m of class 1, 2, 3 or 4 land which are likely to lower water table below 1 metre

And as such, Council's Environmental Investigations officers are required to consider the likely impacts.

Officer comments
General Comments

The property is located in a Class 5 for acid sulfate soils. Acid sulfate soils are not typically found in a Class 5 area. Areas classified as Class 5 are located within 500 metres on adjacent class 1,2,3 or 4 land. Any Works in a class 5 area that are likely to lower the water table below 1 metre AHD on adjacent class 1, 2, 3 or 4 land will trigger the requirement for assessment and may require management.

SEE advises the following:

Clause 6.1 Acid Sulfate Soils - Clause 6.1 of MLEP 2013 maps the site as Class 5 on the Acid Sulfate soils map. The DA is accompanied by a Geotechnical assessment report prepared by JKGeotechnics dated 12 July 2021 which did not identify the presence of acid sulfate soils. Accordingly, no further investigation is warranted.

From the Geotechnical Report prepared by JKGeotechnics dated 12 July 2021 (Reference: 34216Brpt) there is no mention of acid sulphate soils or if the works are likely to lower the water table below 1 metre AHD on adjacent class 1, 2, 3 or 4.

However, the Geotechnical Report advises the following regarding excavation:

The basement is proposed at RL42m, which is the street level at the south-eastern corner of the site, but will require excavation to a maximum depth of about 5.5m towards the rear of the site. The basement will extend to the eastern, southern and western boundaries and will be offset about 5.5m from the northern boundary. The portion of the site to the rear of the basement will require excavation to a depth of about 1.5m to 2m to form a level landscaped area, with retaining walls constructed along the

boundaries to allow this excavation.

Given that the site is located approximately 45m above sea level and nearest Class 4 is approximately 385m away at approximately 15m above sea level the likelihood of the works lowering the water table below 1 metre AHD within an adjacent Class 4 area is low.

The proposal is therefore supported.

Note: Should you have any concerns with the referral comments above, please discuss these with the Responsible Officer.

Recommended Environmental Investigations Conditions:

Nil.