



Acid Sulphate Soils Assessment



Vivienne Albin
Director Environment and Planning
Mosman Council
573 Military Road
Mosman NSW 2088

RE: Masterplan Area Acid Sulphate Soil

I have been requested to provide commentary on the potential presence of Acid Sulfate Soils within the Mosman Masterplan Area. Reference is made to the draft Mosman Masterplan Structure Plan prepared by SJB Architecture, dated 3 August 2026 (Drawing No. 06, Revision 08).

This assessment is informed by more than ten years of experience in the review and assessment of Development Applications within Mosman, including the evaluation of numerous geotechnical investigations, borehole logs, site classifications and subsurface assessments. During my tenure at Mosman Council, I have held the positions of Development Engineer, Manager Engineering, Director Planning and Environment, and now General Manager.

It is further informed by my qualifications in Geology, Geophysics and Geotechnical Engineering. Prior to joining Mosman Council, I worked in the private sector as a Geophysicist and Geotechnical Engineer for approximately two years.

A review of the Mosman Local Environmental Plan (LEP) 2012 Acid Sulfate Soils Maps indicates that the Masterplan area is not identified as either an Acid Sulfate Soil Area or an associated Buffer Area. The mapped acid sulfate soil constraints within Mosman are generally confined to low-lying foreshore, estuarine and harbour-edge environments adjacent to Sydney Harbour and Middle Harbour, and do not extend into the elevated town centre precinct encompassed by the Masterplan area.

From a geological perspective, the Masterplan area occupies the elevated Mosman ridge system, generally exceeding RL 60 m AHD, and is therefore significantly removed from the low-lying estuarine environments typically associated with the formation of acid sulfate soils.

Based on my review of numerous borehole logs and geotechnical investigations undertaken throughout Mosman over the years, the Masterplan area is not underlain by estuarine sediments. Rather, it is predominantly underlain by Hawkesbury Sandstone bedrock of the Sydney Basin, with weathered sandstone profiles and localised occurrences of Mittagong Formation materials forming transitional units between the Hawkesbury Sandstone and overlying shale sequences.

Geotechnical investigations undertaken across the Mosman town centre consistently encounter a subsurface profile comprising:

- fill and pavement layers associated with historical urban development and infrastructure works;
- residual sandy clay, clayey sand and highly weathered sandstone derived from in-situ weathering of the underlying bedrock;
- moderately to highly weathered Hawkesbury Sandstone; and
- fresh to slightly weathered Hawkesbury Sandstone bedrock.

Where fill is present, it is typically urban fill comprising sandstone fragments, sandy gravels, imported sandy soils, road base materials and miscellaneous construction materials associated with historical development activities. Such materials are fundamentally different from estuarine or marine sediments and do not provide the geological conditions typically associated with actual or potential acid sulfate soils.

Accordingly, having regard to:

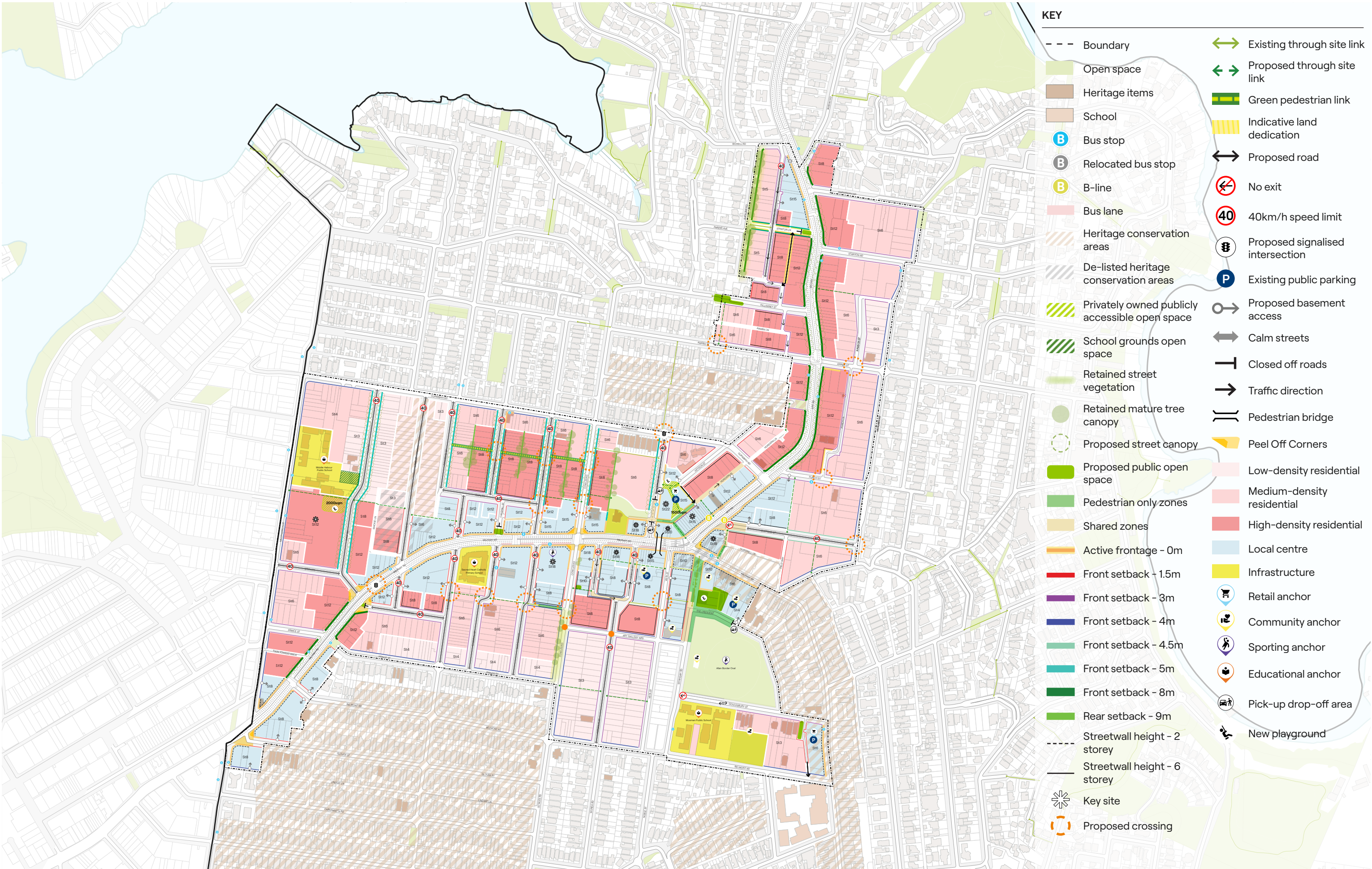
- the Mosman LEP 2012 Acid Sulfate Soils Mapping;
- the elevated topographic position of the Masterplan area;
- the absence of estuarine, marine or tidal sediments;
- the predominance of Hawkesbury Sandstone bedrock and weathered sandstone profiles; and
- the extensive borehole and geotechnical information reviewed throughout my professional experience within Mosman,

it is my opinion that the likelihood of encountering actual or potential acid sulfate soils within the Mosman Masterplan Area is negligible. Consequently, no significant planning, geotechnical or environmental constraints associated with acid sulfate soils are anticipated.

Please don't hesitate to contact me if you have any questions.

A handwritten signature in cursive script, reading "Covich".

Craig Covich, BEng(Civil)(Hons I), BSc(Geology, Geophysics)
GENERAL MANAGER



STRUCTURE PLAN

Scale 1:7000@A1

0 70 140 210 280 350



Drawing no.
06

Revision no.
08

03/08/2026

Project no.
7218

Project Name
Mosman Masterplan

Project address
Mosman NSW

Client
Mosman Council

SJB Architecture (NSW) Pty Ltd
ABN 20 310 373 425
ACN 081 094 724

Adam Haddow 7188
Emily Wombwell 10714
John Pradel 7004
Jonathan Tondi 11981
Nick Hatzis 9380

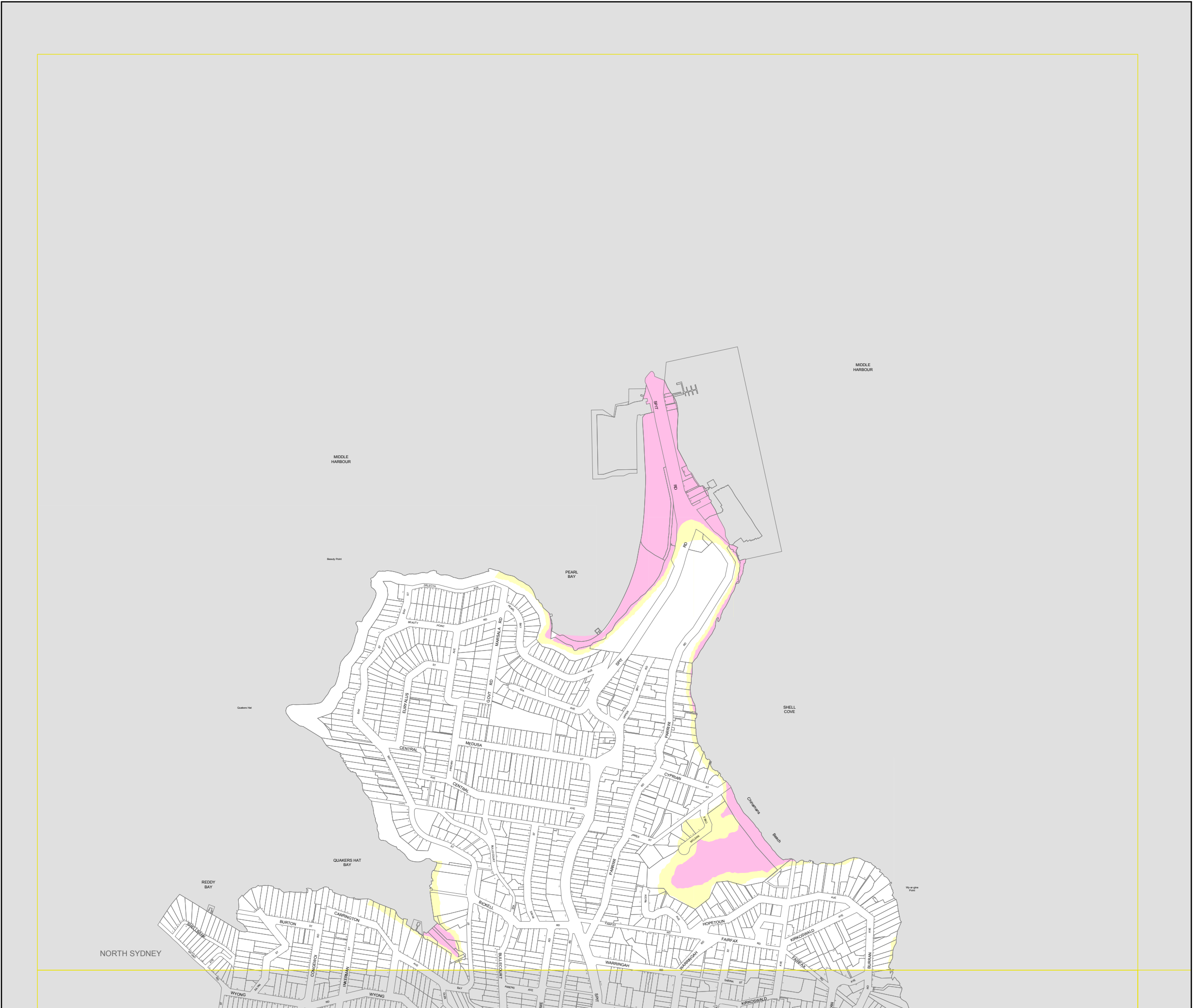
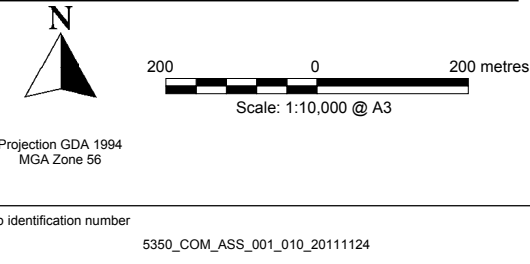
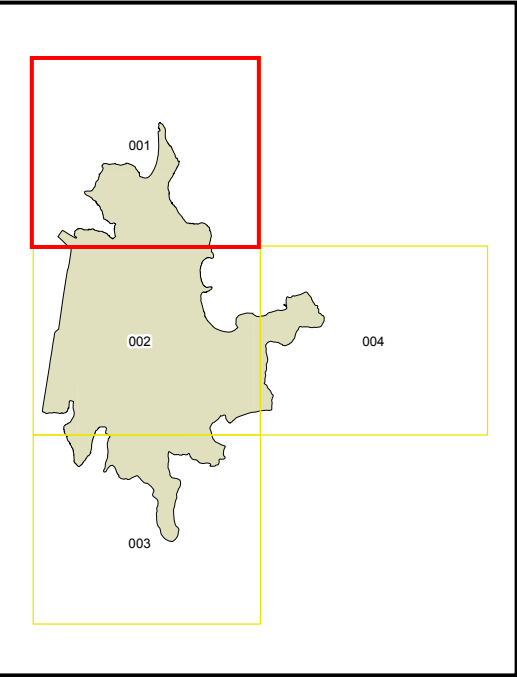


Mosman Local
Environmental
Plan 2012

Acid Sulfate Soils Map
Sheet ASS_001

Land shown on the Acid Sulfate Soils Map	Works
 Acid Sulfate Soil Area (land up to 5 metres AHD)	Works beyond 1 metre below the existing ground surface or works involving the disturbance of more than 1 tonne of soil or works that are likely to lower the ground water table.
 Buffer Area (land greater than 5 metres but less than 10 metres AHD or within 170 metres of Acid Sulfate Soil Area)	Works involving excavation below 1 metre AHD or works that are likely to lower the ground water table.

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 Cadastre 21/04/2011 © NSW LPI



Mosman Local Environmental Plan 2012

Acid Sulfate Soils Map
Sheet ASS_002

**Land shown on the
Acid Sulfate Soils
Map**

 Acid Sulfate Soil Area
(land up to 5 metres
AHD)

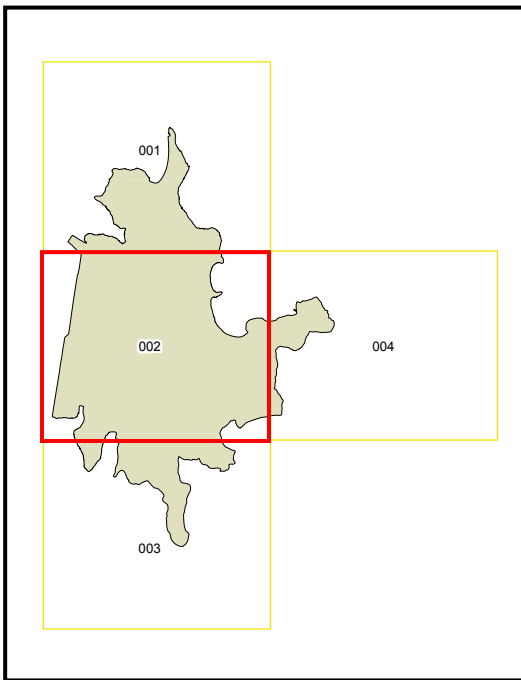
Works

Works beyond 1 metre below the existing ground surface or works involving the disturbance of more than 1 tonne of soil or works that are likely to lower the ground water table.

Works involving excavation below 1 metre AHD or works that are likely to lower the ground water table.

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 Cadastre 21/04/2011 © NSW LPI



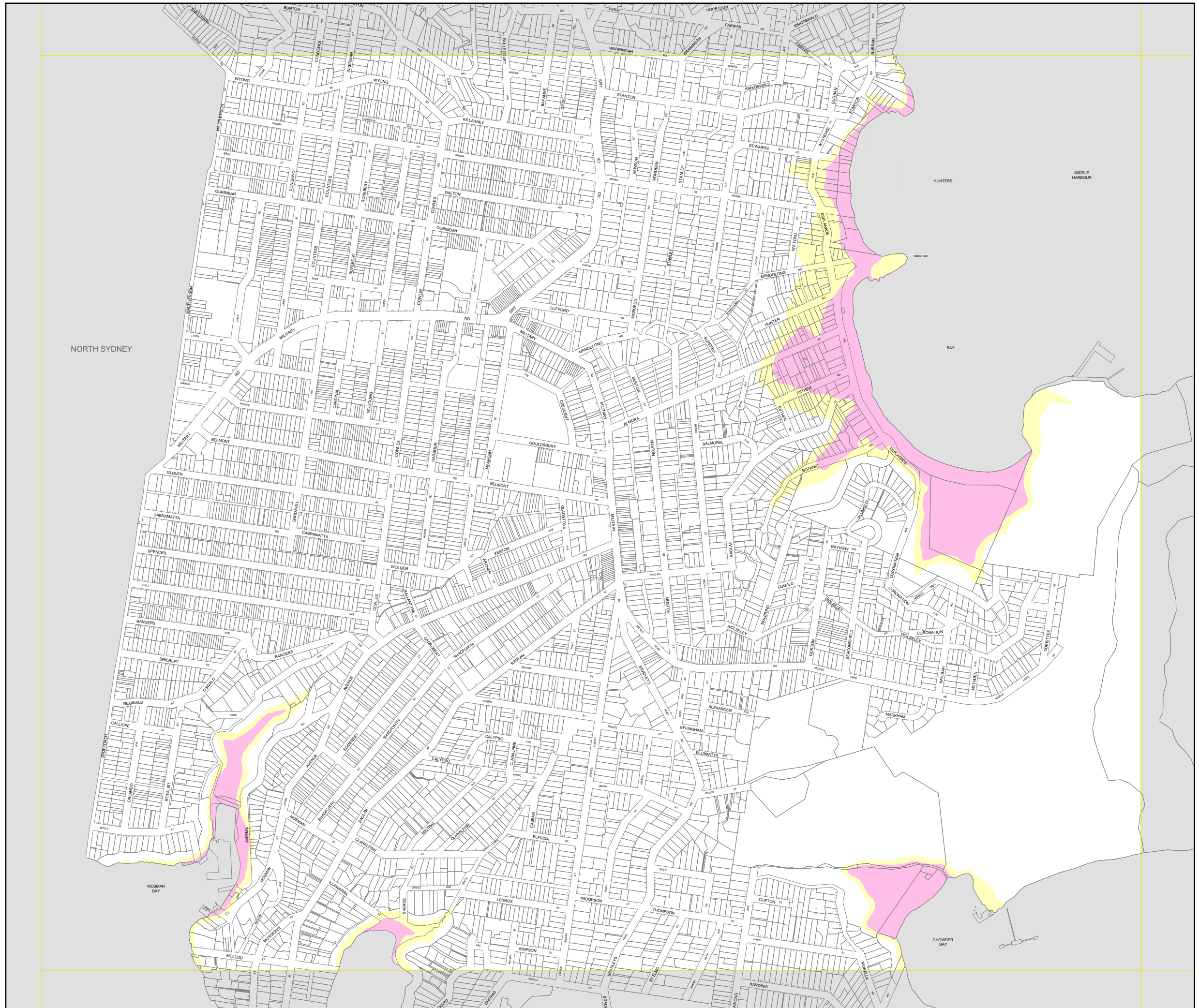
200 0 200 metres

Scale: 1:10,000 @ A3

Projection GDA 1994
MGA Zone 56

Map identification number

5350_COM_ASS_002_010_20111124



Mosman Local
Environmental
Plan 2012

Acid Sulfate Soils Map
Sheet ASS_003

Land shown on the Acid Sulfate Soils Map	Works
 Acid Sulfate Soil Area (land up to 5 metres AHD)	Works beyond 1 metre below the existing ground surface or works involving the disturbance of more than 1 tonne of soil or works that are likely to lower the ground water table.
 Buffer Area (land greater than 5 metres but less than 10 metres AHD or within 170 metres of Acid Sulfate Soil Area)	Works involving excavation below 1 metre AHD or works that are likely to lower the ground water table.

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