

Environmental Health Referral Response - contaminated lands

Application Number:	DA2023/0127
Proposed Development:	Designated Development - alterations and additions to an educational establishment (Narrabeen North Public School) including the removal and replacement of trees, landscaping works, and the installation of a substation and fire hydrant booster
Date:	22/03/2023
Responsible Officer	Adam Susko
Land to be developed (Address):	Lot 3 DP 1018621 , 6 Namona Street NORTH NARRABEEN NSW 2101

Reasons for referral

This application requires detailed consideration of Phase 1 and 2 contaminated land matters. And as such, Council's Environmental Investigations officers are required to consider the likely impacts.

Officer comments

General Comments

Relevant information is reproduced below from - Douglas Partners in their report "Detailed Site Investigation (Contamination) Project 86973.04 August 2022".

Conclusions and Recommendations:

Contamination identified in the soils within the investigation areas requiring consideration is largely related to asbestos. In this regard the following is noted:

- Asbestos impacted areas are identified in the NNPS AMP (PB, 2013). The area in the western section of the school overlaps with some of the areas proposed to be subject to the upgrade works;
- The historical aerial photographs show the demolition of older structures both within the investigation areas and the greater school boundaries;
- The investigation areas include existing buildings, the footprints of which have not been investigated;
- Asbestos was detected in soil samples TP1001A/0.2-0.4, TP1007/0-0.2, TP1008/0-0.2, BH1027/0-0.5, as well as additional samples outside of the current investigation area on NSHS;
- Fragments of ACM have been observed on the ground surface at A01-A04, confirmed by laboratory analysis of representative samples A02 and A04;
- Asbestos has previously been identified in other areas of the schools (NNPS - northern and western areas as outlined in PB (2013); NSHS - HBM identified friable asbestos beneath the school hall (Building 6)); and
- Building rubble (concrete, glass and plastic) was observed in some sample locations which can be an indicator for the potential presence of asbestos.

The HBM reports prepared by DP also identified asbestos and other HBM in buildings within the school sites, and, as such, there is potential for HBM to further impact on surface soils as a result of demolition and refurbishment as part of the proposed works.

ASS was identified in the natural soil profiles across both NNPS (predominantly in the deeper natural soil profile) and NSHS (predominantly in the natural soil around and beneath the groundwater table).

Based on the above, the following comments and recommendations are provided:

- Post demolition investigations should be conducted in the building footprints, where appropriate. Assessment would include asbestos and other COPC for comparison against the adopted SAC;
- Development of a remediation action plan (RAP) to address the asbestos impacted soils within the

investigation areas / proposed works areas, most notably in the central, western and northern sections of the NNPS investigation area. From a contaminated land perspective, soils with low levels of asbestos (i.e., below the SAC) may not require remediation, although from DP's experience on NSW school sites, a more stringent approach has been applied on occasions resulting in all asbestos impacted soils being remediated. DP has been advised NSW Department of Education that this more stringent approach to asbestos impacted fill is to be applied for this project. Remediation approaches would typically comprise:

- o Dig and dump strategy which removes the impacted material from the school and disposes it to a suitable licensed disposal facility; and / or
- o Cap and contain strategy where a barrier is constructed over the impacted soils (e.g., building slab) and managed in the long term under the school's AMP.
- Additional ASS assessment may be required for the new NNPS buildings depending on the final depth and nature of works, e.g., if works are limited to 2.5 m or a driven pile approach then further investigations may not be warranted;
- Development of an ASS management plan. This is expected to be required on the NSHS site, whilst its need on the NNPS will be informed by the final depth and nature of the proposed works. In this regard, if soils on NSHS below 1.5 m bgl are proposed to be disturbed as part of the works, these would require treatment for ASS (e.g., liming);
- For all buildings where proposed disturbance of the building materials is proposed (e.g., maintenance, refurbishment, demolition), a HBM assessment should be undertaken. Subsequently the HBM to be disturbed during the works is to be removed and disposal of by an appropriately licensed and qualified contractor, at an appropriately licensed disposal facility;
- Validation / clearance of the works area post-demolition of buildings should be conducted by a qualified occupational hygienist upon completion of demolition and removal of the buildings. The validation / clearance is to confirm that there are no residual ACM or other HBM remaining on the site; and
- Implementation of an unexpected finds and asbestos finds protocol by the contractor, and in agreement with the client, prior to commencing works.

It is noted that validation of the remedial works will be required during the works by a qualified environmental consultant. In addition, final waste classification assessments of soils will be required prior to soils being disposed off-site.

The above recommendations and future investigations should be undertaken in consultation with other relevant project consultants such as, project manager, architect, geotechnical, civil, structural, heritage, landscape and arborist. Should the scope, boundaries or depths of the proposed development change, a suitably qualified environmental consultant should be engaged to assess their implications.

In conclusion, DP considers that the investigation areas could be made suitable for the proposed school upgrade works, subject to implementation of the above recommendations and any associated remediation and / or management requirements.

Environmental Health supports the proposal subject to conditions.

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:

CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF THE CONSTRUCTION CERTIFICATE

Contaminated Land Requirements

Prior to the issue of any Construction Certificate a Contamination Management Plan is to be prepared

by an appropriately qualified Environmental Consultant and provided to the satisfaction of the Certifier. The plan shall detail:

- a) How all the requirements and / or recommendations contained within the Contamination Reports Douglas Partners in their report "Detailed Site Investigation (Contamination) Project 86973.04 August 2022" are to be implemented;
- b) A Remedial Action Plan (RAP) prepared by a suitably qualified Environmental Consultant in accordance with State Environmental Planning Policy (Resilience and Hazards) 2021, and with any contaminated land planning guidelines under the Contaminated Land Management Act 1997;
- c) Stipulate reporting and processes associated with discovery of any new contamination that is revealed during excavation, demolition or development works and notification to the Council and Principal Certifier.
- d) A requirement to complete ongoing water and soils testing during excavation, demolition and development works as follows:
 - (a) During construction in order to monitor water and soil quality the following is to be implemented:
 - i) Water testing is to be completed in accordance with Section 3 of the NSW RTA's Guideline for Construction Water Quality Monitoring
 - ii) Soil Testing in order to detect contaminants is occur weekly with two (2) samples in accordance with the NSW EPA Contaminated Site Sampling Design Guidelines.
 - (b) The requirements of (i) and (ii) above are to be implemented from the commencement of works as follows:
 - i) Fortnightly during excavation works
 - ii) Monthly during building works
- e) To ensure water quality is maintained runoff must be drained to an adequately bunded central collection sump and treated, to meet NSW Department of Environment and Climate Change (formerly Environment Protection Authority) discharge criteria.

Other options for the disposal of excavation pump-out water include disposal to sewer with prior approval from Sydney Water, or off-site disposal by a liquid waste transported for treatment/disposal to an appropriate waste treatment/processing facility.

- f) All stockpiles of potentially contaminated soil must be stored in a secure area on the site (no greater than 48 hours) so as not to cause pollution or public health risk until disposed of at a waste facility.

All contaminated soil removed from the site must be disposed of at a waste facility that can lawfully receive that waste and must be done in accordance with all relevant Acts, Regulations and Guidelines. Copies of all test results and disposal dockets must be retained for at least 3 years and be made available to authorised Council officers on request.

The following Acts and Guidelines applied at the time of determination:

- i) Protection of the Environment Operations Act 1997; and
- ii) Environment Protection Authority's Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes (1999).
- g) Hazardous or intractable wastes arising from the demolition process shall be removed and disposed of in accordance with the requirements of WorkCover NSW and the Environment Protection Authority and the provisions of all relevant Acts, Regulations and Guidelines.

The following standards applied at the time of determination:

- i) Environment Protection Authority's Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes (1999).
- h) Stipulate protocols for the importation of any landfill material onto the site the protocols shall include:

- 'Chain of Custody' documentation shall be kept and submitted for the transport of the validated fill material from the (*) site at (*), to the subject premises.
- Requirement that any landfill material being brought to the site shall be free of contaminants or toxins and shall be suitable for the use on the land.
- Any landfill material being brought to the site shall have a validation report prepared to the satisfaction of the Certifier (prepared in accordance with the Department of Environment & Climate Change's guidelines).

Details demonstrating compliance are to be submitted to the Certifier prior to the issue of the Construction Certificate.

Reason: Protection of the environment, SEPP (Resilience and Hazards) 2021 compliance.

CONDITIONS TO BE COMPLIED WITH DURING DEMOLITION AND BUILDING WORK

Requirement to Notify about New Contamination Evidence

Any new information revealed during demolition works that has the potential to alter previous conclusions about site contamination or hazardous materials shall be immediately notified to the Council and the Principal Certifier.

Reason: To protect human health and the environment.

Compliance with the Contamination Management Plan

The requirements of the Contamination Management Plan required by this consent and the report by Douglas Partners in their report "Detailed Site Investigation (Contamination) Project 86973.04 August 2022" are to be fully implemented from commencement of any excavation, demolition or development works until the issue of an Occupation Certificate.

Reason: Protection of the environment, SEPP (Resilience and Hazards) 2021 compliance.

Off-site Disposal of Contaminated Soil - Chain of Custody

'Chain of Custody' documentation shall be kept and submitted for the transport of the validated fill material from the (*) site at (*), to the subject premises.

Details demonstrating compliance are to be submitted to the Principal Certifier and Council within seven (7) days of transport.

Reason: For protection of environment.

CONDITIONS WHICH MUST BE COMPLIED WITH PRIOR TO THE ISSUE OF THE OCCUPATION CERTIFICATE

Validation for Remediation

A validation and site monitoring report, including a survey of all sites used for landfill disposal is to be prepared in accordance with relevant guidelines issued under the Contaminated Land Management Act 1997 must be submitted to the Council within one month from completion of the remediation.

The report shall reference the report by Douglas Partners in their report "Detailed Site Investigation (Contamination) Project 86973.04 August 2022 and stipulate that compliance with all recommendations and processes during works have been achieved.

The plan must identify the extent and depth of all fill material in relation to existing roadways and

buildings. The survey must also include a detailed survey of all sites used as landfill disposal pits, identifying boundaries and depth of disposal pits in relation to existing roadways and buildings.

Details demonstrating compliance are to be submitted to the Principal Certifier prior to the issue of an Occupation Certificate.

Reason: To ensure environmental amenity is maintained.

Positive Covenant for encapsulated contamination

A covenant must be registered on the title of the land, giving notice of the former use, level of site contamination and its former location on the land.

A covenant must be registered on the title of the land binding the owners and future owners to be responsible for ongoing maintenance and any future rehabilitation works required in terms of the encapsulated materials, including the discharge or prevention of discharge there from of any contaminants or for any works required by Northern Beaches Council or any State or Federal Department/Authority.

Details demonstrating compliance are to be submitted to the Principal Certifier prior to the issue of an Occupation Certificate.

Reason: Environmental Protection.