

Fife Kemps Creek Pty Limited  
c/ - Ethos Urban Pty Limited  
173 Sussex St  
SYDNEY NSW 2000

Project 92421.00  
1 October 2018  
R.001.Rev1  
RWG

Attention: Mr Garth Bird

Email: gbird@ethosurban.com

**Contamination Status Summary Report  
Proposed Industrial Development  
200 Aldington Road, Kemps Creek**

## 1. Introduction

Douglas Partners Pty Ltd (DP) were commissioned by Ethos Urban Pty Limited on behalf of Fife Kemps Creek Pty Limited to prepare a contamination status summary report for 200 Aldington Road, Kemps Creek (the site). Fife Kemps Creek is proposing to develop the site for industrial purposes in line with the desired future outcomes of the Mamre Road Precinct and recent amendments (which occurred in June 2020) to the State Environmental Planning Policy (Western Sydney Employment Area) 2009.

The site has been rezoned for industrial land use and this letter has been prepared to address the NSW Government Planning, Industry & Environment, Planning Secretary's Environmental Assessment Requirements (SEARs) application number SSD-10479 for contamination as part of a State Significant Development Applications (SSDA). The SEARs requires *"an assessment of site contamination, including an assessment of the site suitability for the proposed use in accordance with State Environmental Planning Policy No 55—Remediation of Land (NSW DPIE, 2019 – SEPP 55)"*.

DP has previously undertaken preliminary site investigations (contamination) at the site (multiple reports covering the entire site). These reports will form the basis of the response to the SEARs.

The site location and layout are shown on Drawing 1, attached. DP is concurrently preparing *Geotechnical and Groundwater Summary, 200 Aldington Road, Kemps Creek*, Project 92421.00.R.002 (DP, 2020) to address SEARs related to soil and groundwater.

## 2. Scope of Work

DP completed the following scope of work:

- Review of previous contamination reports completed for the site;
- Review of recent aerial photographs to assess the presence of any potentially contaminating activities which have occurred at the site since the completion of previous reports;
- Summarise the contamination status of the site and identified areas of environmental concern (AEC) requiring further investigation and / or remediation; and
- Provide a statement in response to the SEARs.

## 3. Proposed Use

A SSDA for the site has been lodged, including proposed future development lots and building footprints, as well as detailed consent for Stage 1 works which will include construction of a 48,430 sqm warehouse building and associated infrastructure required to be constructed for the development to operate, including road intersections, internal road construction and other associated on-site utilities.

Specifically, the application seeks approval for the following development:

- A concept masterplan with an indicative total building area of 375,755 m<sup>2</sup>, comprising:
  - o 357,355 m<sup>2</sup> of warehouse floor space;
  - o 18,200 m<sup>2</sup> of ancillary office floor space;
  - o 200 m<sup>2</sup> of café floor space;
  - o 13 individual development lots for warehouse buildings with associated hardstand areas;
  - o Internal road layouts and road connections to Aldington Road;
  - o Provision for 1,700 car parking spaces; and
  - o Associated site landscaping.
- Detailed consent for progressive delivery of site preparation, earthworks and infrastructure works (ie: Stage 1 works) on the site, including:
  - o Demolition and clearing of all existing built form structures;
  - o Drainage and infill of existing farm dams and any ground dewatering;
  - o Clearing of all existing vegetation;
  - o Construction of a warehouse building with a total of 48,340 sqm of GFA, including:
    - 48,430 m<sup>2</sup> of warehouse GFA;
    - 2,500 m<sup>2</sup> of office GFA; and
    - 231 car parking spaces.
  - o Bulk earthworks including 'cut and fill' to create flat development platforms for the warehouse buildings, and topsoiling and grassing / site stabilisation works;
  - o Roadworks and access infrastructure;

- o Stormwater and drainage works, including stormwater basins, diversion of stormwater lines, gross pollutant traps and associated swale works;
- o Sewer and potable water reticulation; and
- o Inter-allotment, road and boundary retaining walls.

On this basis, DP assessed the site against Health based investigation level (HIL) D which is suitable for Commercial/industrial, includes premises such as shops, offices, factories and industrial sites.

#### **4. Site Identification**

The site has an approximate area of 72 ha, is located in the local government area of Penrith City Council and comprises the following Lots:

- 106-124 Aldington Road – Lot 32 DP258949.
- 126-142 Aldington Road – Lot 31 DP258949.
- 144-160 Aldington Road – Lot 30 DP258949.
- 162-178 Aldington Road – Lot 23 DP255560.
- 180-196 Aldington Road – Lot 22 DP255560.
- 198-212 Aldington Road – Lot 21 DP255560.
- 214-228 Aldington Road – Lot 20 DP255560.

The site is zoned IN1 General Industrial and includes several dwellings, greenhouses and dams, as well as vacant land.

#### **5. Review of Previous Reports**

The below relevant contamination investigations were reviewed, with a high-level summary of the investigation findings detailed in Sections 5.1 to 5.2.

- DP *Preliminary Site Investigation for Contamination, 106 - 142 Aldington Road, Kemps Creek, NSW* Project 92345.00.R.001.Rev0 dated 18 April 2019 (DP, 2019a);
- DP *Preliminary Site Investigation – Due Diligence, 144 - 228 Aldington Road, Kemps Creek, NSW*, Project 92364.00.R.001.Rev0 dated 11 October 2019 (DP, 2019b); and
- DP *Supplementary Contamination Investigation, 144 - 228 Aldington Road, Kemps Creek, NSW*, Project 92364.02.R.002.Rev0 dated 23 October 2019 (DP, 2019c).

## 5.1 Preliminary Site Investigations

Preliminary site investigations (PSI) were completed at the site for Lots 31 and 32 as detailed in DP (2019a) and Lots 20 to 23, and 30, as detailed in DP (2019b) (as shown on Drawing 1). The PSI were undertaken for Stockland (who form part of Fife Kemps Creek Pty Limited) for pre-purchase due diligence purposes. The objectives of the PSI were to identify any past or present potentially contaminating activities and to provide a preliminary assessment of site contamination.

The scope of work for the PSI included the following:

- Undertake a desktop investigation to determine potential areas of environmental concern (PAEC) for the site including:
  - o Review of previous reports and aerial photographs to identify land uses and changes in the land that may indicate potential for contamination.
  - o Search on the Contaminated Land Register for Notices issued under the *Contaminated Land Management Act 1997*.
  - o NSW Office of Water groundwater bore search.
- An initial site inspection for PAEC and to identify actual AEC.
- Development of a preliminary conceptual site model (CSM).
- Excavation of test pits (TP) and boreholes (BH) with soil sampling at each location. Sampling locations were positioned to target selected AEC, as well as in a systematic grid across the site. Due to the timeframe of the investigations, not all AEC were targeted as part of the field investigations. Sampling locations are provided on Drawing 2 (attached).
- Laboratory analysis of selected representative soil samples for one or more of the following contaminants of potential concern (COPC):
  - o metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel, zinc);
  - o total petroleum hydrocarbons (TPH);
  - o monocyclic aromatic hydrocarbons (benzene, toluene, ethylbenzene and total xylenes – BTEX);
  - o polycyclic aromatic hydrocarbons (PAH);
  - o total phenols;
  - o organochlorine pesticides (OCP);
  - o organophosphorus pesticides (OPP);
  - o polychlorinated biphenyls (PCB);
  - o Asbestos.
- Interpretation of laboratory results with reference to NSW EPA endorsed National Environment Protection (Assessment of Site Contamination) Measure 1999 as amended 2013 (NEPC, 2013) guidelines for industrial land use; and
- Preparation of PSI reports outlining the methodology and results of the investigations, and an assessment of the site's suitability for the proposed development.

Given the timeframe for the investigation, a search and review of historic titles and deposited plans, SafeWork NSW information, Council records and Section 10.7 certificates were not conducted.

A summary of the AEC and associated COPC identified in the PSI are outlined in Table 1. The numbering of AEC in Table 1 is based on the AEC numbering provided in DP (2019b). DP (2019a) AEC numbers have been updated to match and DP (2019b) to aid interpretation.

**Table 1: AEC and Associated COPC**

<b>AEC #</b>	<b>Description</b>	<b>COPC</b>
<b>1</b>	<b>Market gardens</b> – There is the potential for surface soils in the market gardens to be impacted with pesticide related COPC.	OCP, OPP, metals.
<b>2</b>	<b>Current and former structures</b> – Numerous residential structures and sheds are located within the site. The location of several former structures were also identified. Given the age of the structures (often pre 1980's) there is the potential for surface soils in the vicinity of the structures (current and former) to be impacted by hazardous building materials.	Asbestos containing material (ACM), PCBs, metals.
<b>3</b>	<b>Chemical and fuel storage areas</b> – Former and current sheds may have also been used for chemical and fuel storage. Multiple pesticide storage and mixing areas were identified, associated with market gardening activities. Fuel storage and refuelling areas, including three above ground storage tanks (AST) were also identified. There is potential for contamination of surface soils in the vicinity of these area as the result of spillages and storage malpractice.	TRH, BTEX, PAH, PCB, metals, OCP, OPP.
<b>4</b>	<b>Fill Material</b> – Multiple stockpiles, areas of fill and ground disturbance were observed within the site. Stockpiles and fill may have been generated from impacted on or off-site sources. Areas of ground disturbance are potential indicators of filling. Imported aggregate fill has been placed on several access roads within the site. ACM associated with fill was identified in several locations (as shown on Drawing 3).	TRH, BTEX, PAH, PCB, metals, OCP, OPP, asbestos.
<b>5</b>	<b>Timber powder poles</b> – Multiple timber power poles are present within the site. Timber treatment chemicals associated with the poles have the potential to leach into, and impact, surrounding soils.	TRH, BTEX, PAHs, Metals
<b>6</b>	<b>Possible asbestos pipes</b> – Asbestos pipes may be present at the site, both from legacy utility trenches and from private networks installed by lot owners. Degradation and damage of pipes may lead to hazardous materials being present within the near surface soils.	Asbestos
<b>7</b>	<b>Refuse</b> – Refuse including building demolition waste was observed in multiple areas of the site. Building demolition waste is a potential indicator for asbestos.	Aesthetic issues and asbestos

The location and approximate extent of AEC 2, 3, 4 and 5 within the site are shown on Drawing 3, attached.

Based on the results of the PSI, DP considers that there is a moderate to high potential for contamination at the site. DP recommended further investigation to assess the contamination status and extent of AEC 1 to AEC 5. Investigation of the footprints of current structures (AEC 2) should be completed following demolition to assess for the presence of COPC. Investigation of the contamination status of sediments within onsite dams was also recommend.

## 5.2 Supplementary Contamination Investigation

The supplementary contamination investigation (SCI) was completed for Lots 20 to 23, and 30, as detailed in DP (2019c) (as shown on Drawing 1). The SCI were undertaken for Stockland for pre-purchase due diligence purposes. Due to time constraints and the requested scope for due diligence, the purpose of this SCI was to obtain additional data from AEC 1, AEC 3, AEC 4 and AEC 5 to allow calculation of approximate fill volumes (reported separately - 92364.02.R.001.Rev0). As such, only limited analytical testing was completed as part of this assessment, with the view of further analytical investigations to be completed later to confirm (or otherwise) the suitability of the AEC from a contamination perspective.

DP carried out the following scope of work as part of the SCI:

- Review of DP (2019b).
- Excavation of 50 test pits within AEC4, and collection of representative soil samples from the test pits at regular depth intervals.
- Collection of 22 surface samples within AEC1, 11 surface samples within AEC3, six surface samples within AEC4 and 10 surface samples within AEC5.
- Collection of seven dam sediment samples.
- Laboratory analysis of selected soil samples for COPC.
- Interpretation of results in accordance with NEPC (2013) guidelines.
- Preparation of the SCI reports outlining the methodology and results of the investigations, and an assessment of the site's suitability for the proposed development.

Sampling locations are shown on Drawing 2, attached.

A summary of findings for the SCI (for Lots 20 to 23, and 30) are outlined below:

- AEC 1 – No broad scale pesticide impacts were observed and therefore AEC 1 is considered suitable for the proposed land use from a contamination perspective.
- AEC 3 – Soils in the vicinity of the chemical storage/mixing areas where samples SS15, SS20, TP120 and TP122 (as shown on Drawing 2) were collected will require remediation. Remediation will require chase out excavation to remediate all impacted fill.

With regards to the balance of the tested AEC 3 locations (including the AST), based on the results, no further investigation or remediation is required for these locations.

- AEC 4 – AEC4 was divided into individual AEC4A to AEC4L based on site observations and locality.
  - o AEC 4 A, B, C, F, G, I, J, K and L – Due to the limited assessment completed and based on the on-site observations, further investigation of the fill will be required to confirm suitability for on-site retention.
  - o AEC 4 D, E and H – Are considered suitable for reuse on-site, from a contamination perspective.
- AEC 5 – DP considers that remediation of the in-situ soils at the base all timber power poles is required. Remediation will require chase out excavation to remove all impacted fill.

## 6. Review of Recent Aerial Photographs

Review of Nearmap aerial photographs taken since the completion of the previous investigations did not identify the presence of any additional potentially contaminating activities had occurred within the site.

## 7. Summary

Previous contamination investigations at the site have identified the following areas of environmental concern (AEC):

- AEC 1 – Market gardens.
- AEC 2 – Current and former structures.
- AEC 3 – Chemical and fuel storage areas.
- AEC 4 – Fill material (in-situ and stockpiles).
- AEC 5 – Timber power poles.
- AEC 6 – Possible Asbestos pipes.
- AEC 7 – Refuse.



Based on the findings of the PSI and SCI, and review of recent aerial photographs taken since the completion of previous reports, DP considers that the site can be made suitable for the proposed industrial land use subject to further investigation and / or remediation of the identified AEC as follows:

- AEC 1 – Further investigations are required to confirm the contamination status of surface soils in market gardens within Lots 31 and 32. Market gardens in Lots 20 to 23, and 30, are considered suitable for the proposed use, from a contamination perspective.
- AEC 2 – Further investigations are required to confirm the contamination status of surface soils in the vicinity of current and former structures. A hazardous material assessment should be completed for current structures prior to demolition, with structure footprints investigation following demolition.
- AEC 3 – Further investigations are required to confirm the contamination status of surface soils in chemical and fuel storage areas within Lots 31 and 32 and at SCI sampling locations SS15, SS20, TP120 and TP122. Other identified chemical and fuel storage areas are considered suitable for the proposed use.
- AEC 4 – Further investigations are required to confirm the contamination status of fill material within Lots 31 and 32 and at AEC 4 A, B, C, F, G, I, J, K and L. Fill material at AEC 4 D, E and H are considered suitable for the proposed use.
- AEC 5 – Remediation of soil at the base of power poles is required at Lots 20 to 23, and 30. Further investigations are required to confirm the contamination status of soil at the base of power poles within Lots 31 and 32.
- AEC 6 – Buried asbestos pipes (if present) may become apparent during remediation and would normally require remediation under an unexpected finds protocol.
- AEC 7 – Removal of surface refuse would be required as part of initial site development works.

Additionally, septic tanks were present adjacent to houses within the site. Removal, following the decommissioning of the tanks, is recommended prior to development.

## 8. Conclusion

Based on the review of previous investigations and review of recent aerial photographs, and with reference to SEPP 55, DP considers that the site can be made suitable for the proposed commercial/industrial use. Further investigations are required to confirm the contamination status of selected areas of environmental concern within the site and to provide data to assist in the development of a remediation action plan. A validation assessment will be required at the completion of remediation works to confirm the suitability of the site for the proposed use.



## 9. References

- DP. (2020). *Geotechnical and Groundwater Summary, 200 Aldington Road, Kemps Creek, Project 92421.00.R.002*.
- NEPC. (2013). *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM]*. Australian Government Publishing Services Canberra: National Environment Protection Council.
- NSW DPIE. (2019). *State Environmental Planning Policy No 55—Remediation of Land*. NSW Department of Planning, Industry and Environment.

## 10. Limitations

Douglas Partners Pty Ltd (DP) has prepared this report for this project at 200 Aldington Road, Kemps Creek in accordance with DP's proposal MAC200177.P.002 dated 24 June 2020. The work was carried out under Fife Kemps Creek Pty Limited Contract Standard Consulting Terms (Design). This report is provided for the exclusive use of Fife Kemps Creek Pty Limited for this project only and for the purposes as described in the report. It should not be used by or relied upon for other projects or purposes on the same or other site or by a third party. Any party so relying upon this report beyond its exclusive use and purpose as stated above, and without the express written consent of DP, does so entirely at its own risk and without recourse to DP for any loss or damage. In preparing this report DP has necessarily relied upon information provided by the client and/or their agents.

The results provided in the report are indicative of the subsurface conditions on the site only at the specific sampling and/or testing locations, and then only to the depths investigated and at the time the work was carried out. Subsurface conditions can change abruptly due to variable geological processes and also as a result of human influences. Such changes may occur after DP's field testing has been completed.

DP's advice is based upon the conditions encountered during this investigation. The accuracy of the advice provided by DP in this report may be affected by undetected variations in ground conditions across the site between and beyond the sampling and/or testing locations. The advice may also be limited by budget constraints imposed by others or by site accessibility.

This report must be read in conjunction with all of the attached and should be kept in its entirety without separation of individual pages or sections. DP cannot be held responsible for interpretations or conclusions made by others unless they are supported by an expressed statement, interpretation, outcome or conclusion stated in this report.

This report, or sections from this report, should not be used as part of a specification for a project, without review and agreement by DP. This is because this report has been written as advice and opinion rather than instructions for construction.

The contents of this report do not constitute formal design components such as are required, by the Health and Safety Legislation and Regulations, to be included in a Safety Report specifying the hazards likely to be encountered during construction and the controls required to mitigate risk. This design process requires risk assessment to be undertaken, with such assessment being dependent upon factors relating to likelihood of occurrence and consequences of damage to property and to life. This, in turn, requires project data and analysis presently beyond the knowledge and project role respectively of DP. DP may be able, however, to assist the client in carrying out a risk assessment of potential hazards contained in the Comments section of this report, as an extension to the current scope of works, if so requested, and provided that suitable additional information is made available to DP. Any such risk assessment would, however, be necessarily restricted to the environmental components set out in this report and to their application by the project designers to project design, construction, maintenance and demolition.

Please contact the undersigned if you have any questions on this matter.

Yours faithfully

**Douglas Partners Pty Ltd**



**Rod Gray**  
Senior Associate

Reviewed by



**Christopher C Kline**  
Principal

Attachments:      Drawing 1 to 3





Legend

- Site Boundary
- 2019a Boundary
- 2019b and 2019c Boundary
- Lot Boundary
- NSW 2m Elevation Contours
- Elevation Contours: 2m Interval (AHD)



TITLE: **Site Location and Layout**  
**Contamination Status Summary Report**  
**200 Aldington Road, Kemps Creek, NSW**



OFFICE: Macarthur  
DRAWN BY: KLM  
DATE: 15 September 2020  
SCALE: As Shown

CLIENT: Fife Kemps Creek Pty Limited

PROJ. #: 92421.00

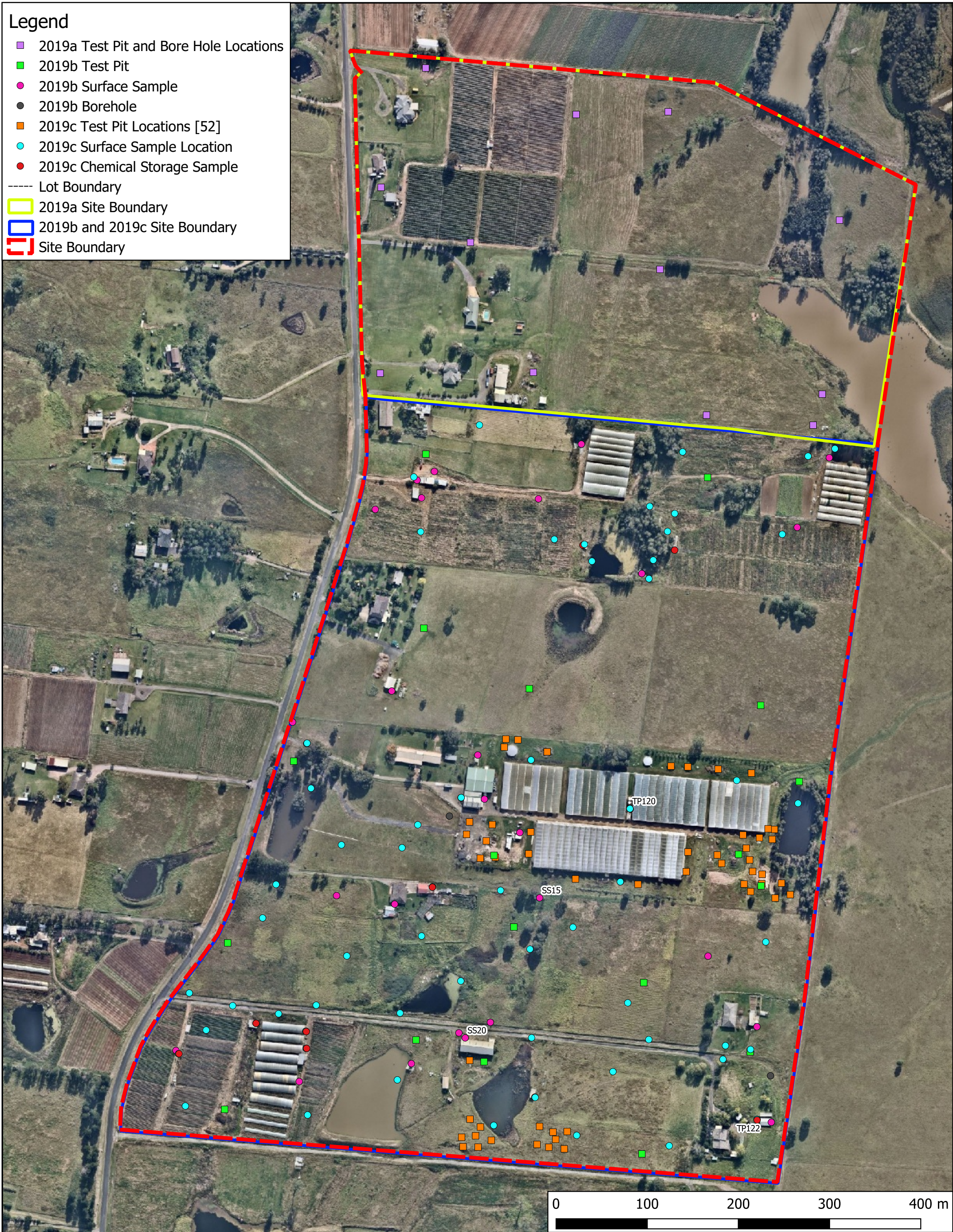
DRAWING No: 1

REVISION: 0



Legend

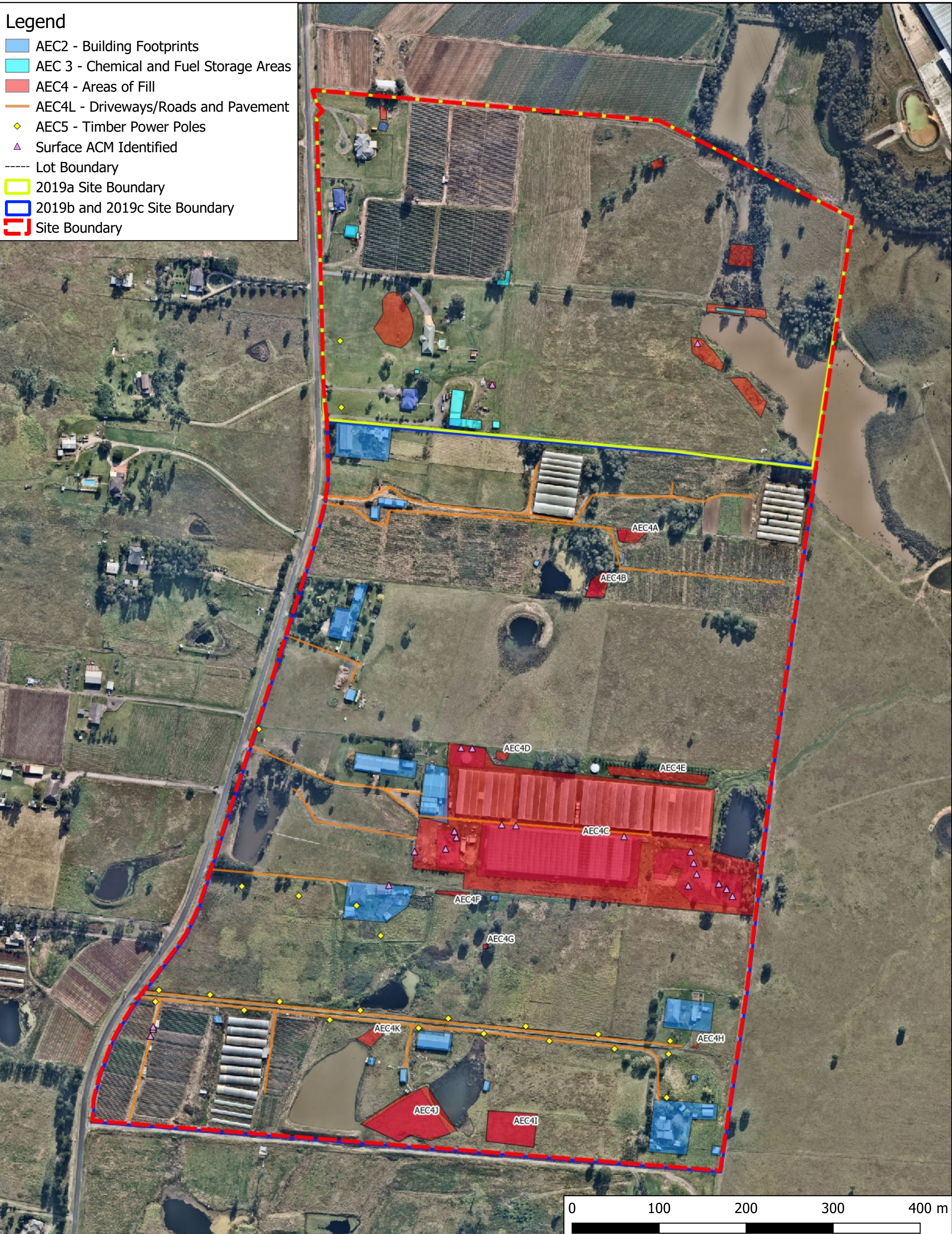
- 2019a Test Pit and Bore Hole Locations
- 2019b Test Pit
- 2019b Surface Sample
- 2019b Borehole
- 2019c Test Pit Locations [52]
- 2019c Surface Sample Location
- 2019c Chemical Storage Sample
- Lot Boundary
- 2019a Site Boundary
- 2019b and 2019c Site Boundary
- Site Boundary





Legend

- AEC2 - Building Footprints
- AEC 3 - Chemical and Fuel Storage Areas
- AEC4 - Areas of Fill
- AEC4L - Driveways/Roads and Pavement
- AEC5 - Timber Power Poles
- Surface ACM Identified
- Lot Boundary
- 2019a Site Boundary
- 2019b and 2019c Site Boundary
- Site Boundary



TITLE: AEC and ACM Locations  
Contamination Status Summary Report  
200 Aldington Road, Kemp's Creek, NSW



OFFICE: Macarthur  
DRAWN BY: KLM  
DATE: 15 September 2020  
SCALE: As Shown

CLIENT: Fife Kemp's Creek Pty Limited      PROJ. #: 92421.00      DRAWING No: 3      REVISION: 0