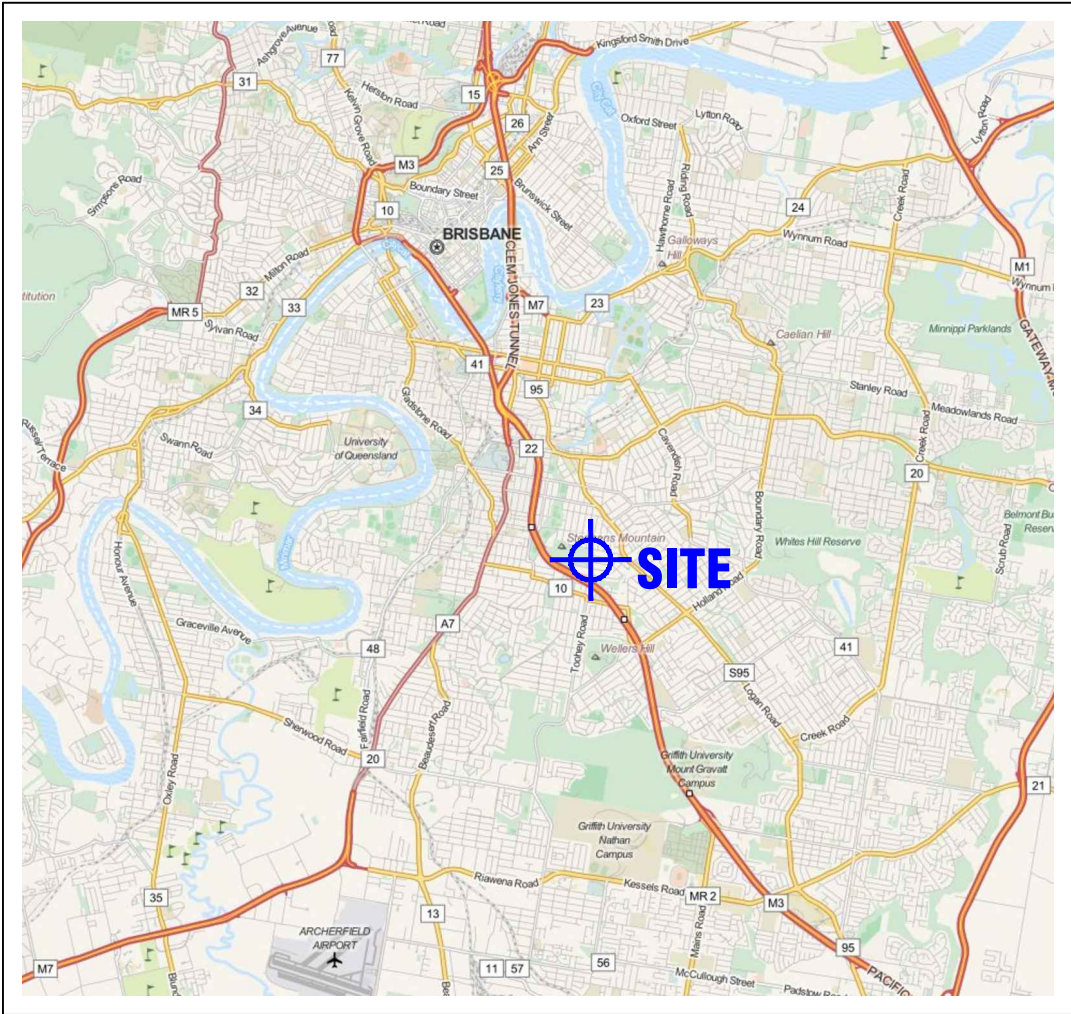
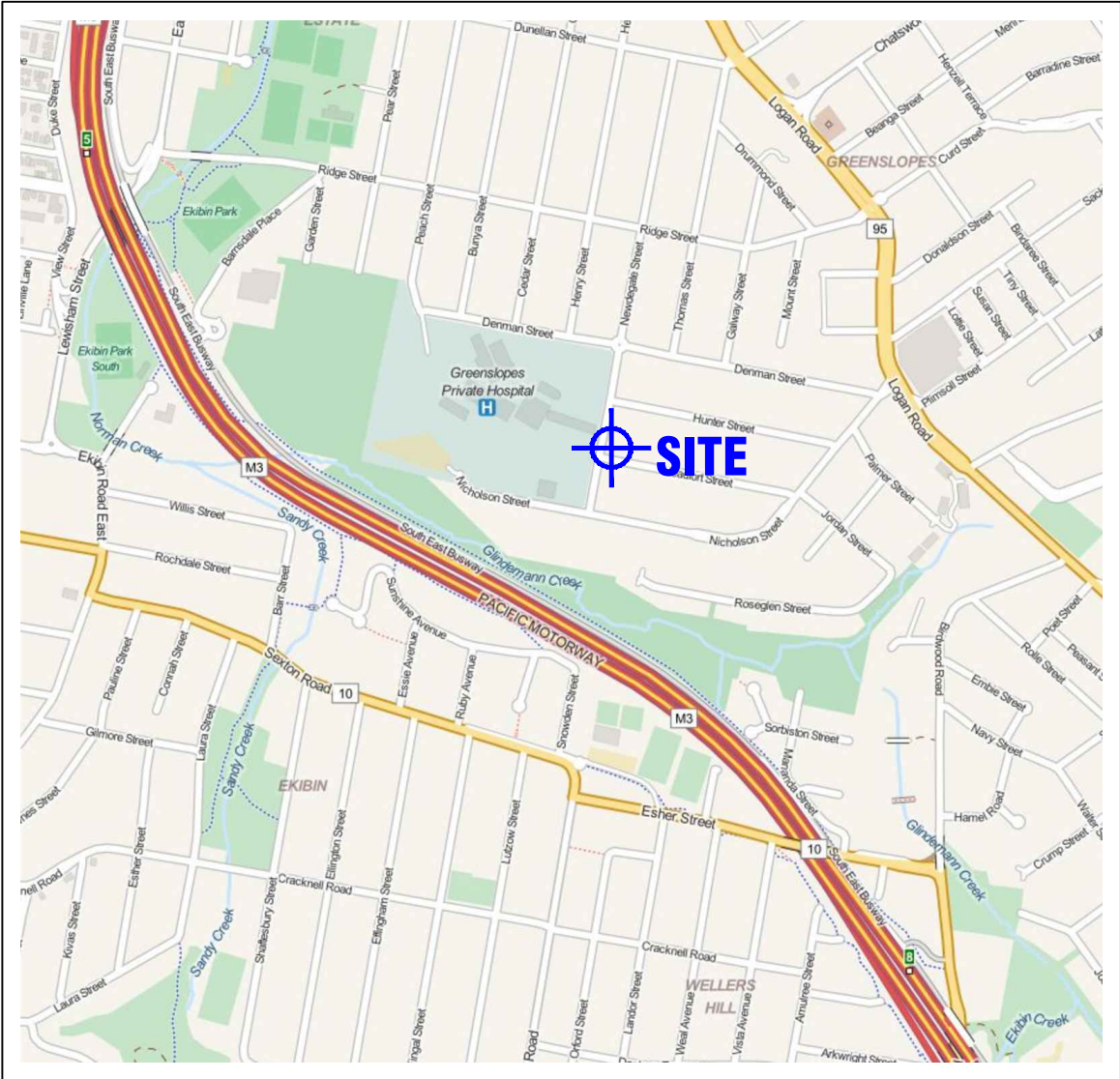


GENERAL AREA MAP

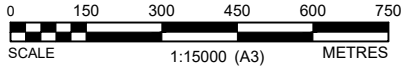


REGIONAL AREA MAP



LOCAL AREA MAP

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revision

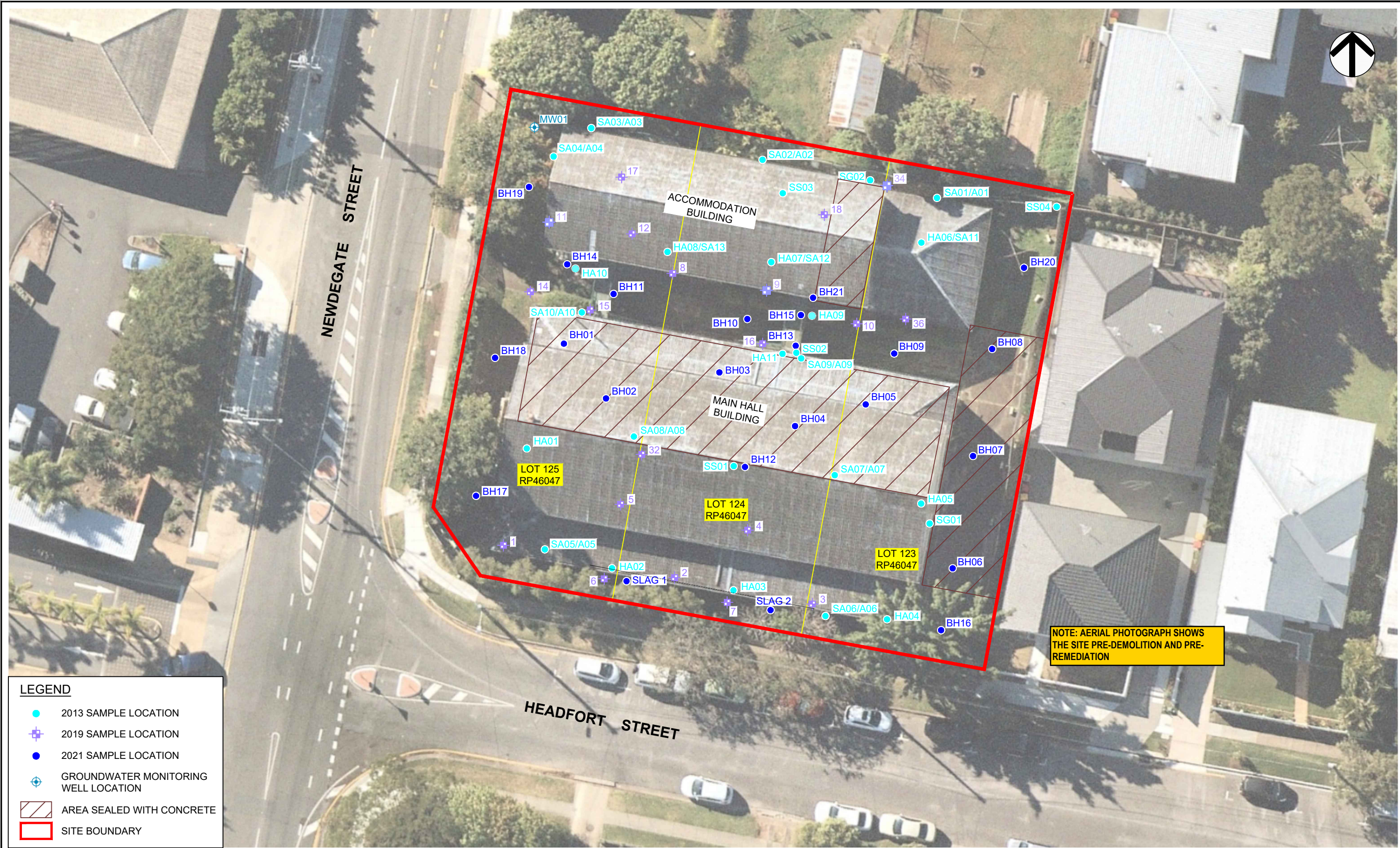
no.	description	drawn	approved	date
A	ORIGINAL ISSUE			

drawn	SMW / AW
approved	-
date	24-07-2023
scale	AS SHOWN
original size	A3



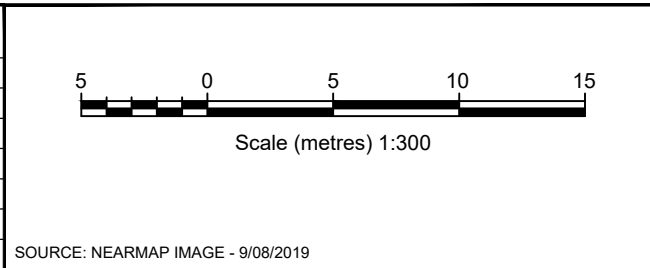
client:	DEPARTMENT OF VETERAN AFFAIRS		
project:	DVA GREENSLOPES 51/53/55 HEADFORT STREET, GREENSLOPES, QLD		
title:	SITE LOCATION PLAN		
project no:	754-BNEEN282781	figure no:	FIGURE 1
		rev:	A

PLOT DATE: 24/07/2023 1:44:15 PM DWG FILE: F:\1 PROJECTS\1. SYDNEY\OTHER OFFICES\BNEEN\EN754-BNEEN\282781\CA0754-BNEEN\282781.DWG



LEGEND	
	2013 SAMPLE LOCATION
	2019 SAMPLE LOCATION
	2021 SAMPLE LOCATION
	GROUNDWATER MONITORING WELL LOCATION
	AREA SEALED WITH CONCRETE
	SITE BOUNDARY

revision	no.	description		drawn	approved	date
	A	ORIGINAL ISSUE				



drawn	SMW / AW
approved	-
date	24-07-2023
scale	AS SHOWN
original size	A3

TETRA TECH
COFFEY

client:	DEPARTMENT OF VETERAN AFFAIRS		
project:	DVA GREENSLOPES 51/53/55 HEADFORT STREET, GREENSLOPES, QLD		
title:	SAMPLE LOCATION PLAN		
project no:	754-BNEEN282781	figure no:	FIGURE 2
		rev:	A

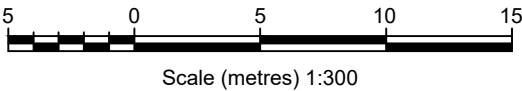


LEGEND

- 2013 SAMPLE LOCATION
- 2019 SAMPLE LOCATION
- 2021 SAMPLE LOCATION
- AREA SEALED WITH CONCRETE
- SITE BOUNDARY
- SAMPLE LOCATION WITH NEPM HIL-A EXCEEDENCE (OCP)
- SAMPLE LOCATION WITH NEPM HIL-C EXCEEDENCE (OCP)
- SAMPLE LOCATION WITH NEPM HIL-D EXCEEDENCE (OCP)
- FILL DEPTH OBSERVED IN 2021 INVESTIGATION AND ANTHROPOGENIC MATERIALS OBSERVED IN PREVIOUS INVESTIGATIONS
- ASBESTOS CONTAINING MATERIALS OBSERVED AT SAMPLE LOCATION

NOTE: AERIAL PHOTOGRAPH SHOWS THE SITE PRE-DEMOLITION AND PRE-REMEDICATION

revision	no.	description			drawn	approved	date
	A	ORIGINAL ISSUE					

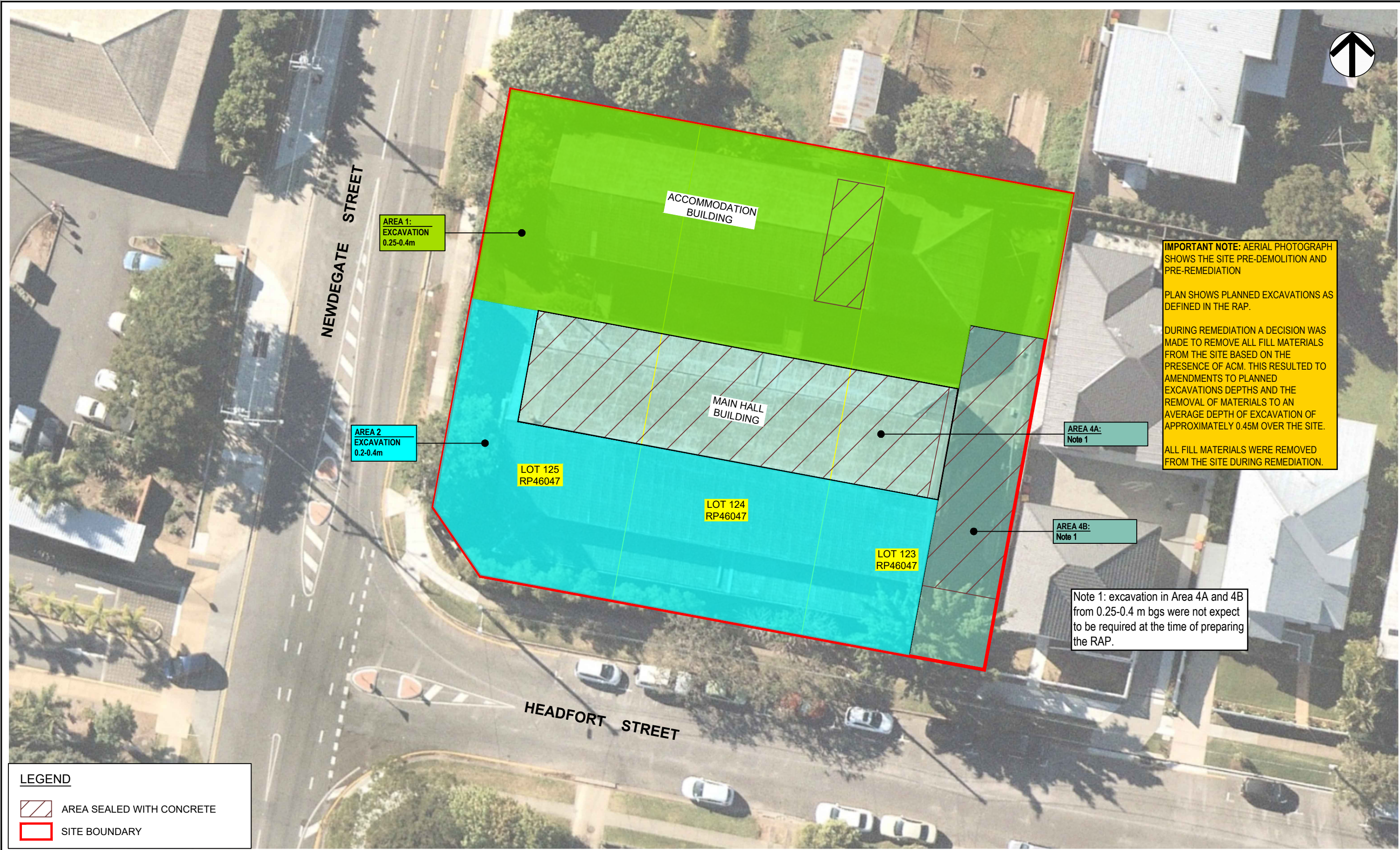


SOURCE: NEARMAP IMAGE - 9/08/2019

drawn	SMW / AW
approved	-
date	24-07-2023
scale	AS SHOWN
original size	A3



client:	DEPARTMENT OF VETERAN AFFAIRS		
project:	DVA GREENSLOPES 51/53/55 HEADFORT STREET, GREENSLOPES, QLD		
title:	SUMMARY OF HUMAN HEALTH EXCEEDANCES AND FILL DEPTH		
project no:	754-BNEEN282781	figure no:	FIGURE 3
		rev:	A



IMPORTANT NOTE: AERIAL PHOTOGRAPH SHOWS THE SITE PRE-DEMOLITION AND PRE-REMEDICATION

PLAN SHOWS PLANNED EXCAVATIONS AS DEFINED IN THE RAP.

DURING REMEDIATION A DECISION WAS MADE TO REMOVE ALL FILL MATERIALS FROM THE SITE BASED ON THE PRESENCE OF ACM. THIS RESULTED TO AMENDMENTS TO PLANNED EXCAVATIONS DEPTHS AND THE REMOVAL OF MATERIALS TO AN AVERAGE DEPTH OF EXCAVATION OF APPROXIMATELY 0.45M OVER THE SITE.

ALL FILL MATERIALS WERE REMOVED FROM THE SITE DURING REMEDIATION.

AREA 4A:
Note 1

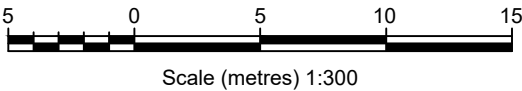
AREA 4B:
Note 1

Note 1: excavation in Area 4A and 4B from 0.25-0.4 m bgs were not expect to be required at the time of preparing the RAP.

LEGEND

- AREA SEALED WITH CONCRETE
- SITE BOUNDARY

revision	no.	description			drawn	approved	date
	A	ORIGINAL ISSUE					



SOURCE: NEARMAP IMAGE - 9/08/2019

drawn	SMW / AW
approved	-
date	24-07-2023
scale	AS SHOWN
original size	A3




client:	DEPARTMENT OF VETERAN AFFAIRS		
project:	DVA GREENSLOPES 51/53/55 HEADFORT STREET, GREENSLOPES, QLD		
title:	RAP EXCAVATION PLAN 0.25-0.4 M BGS		
project no:	754-BNEEN282781	figure no:	FIGURE 4B
		rev:	A



- LEGEND**
- Area 1C boundary Delineation Locations
 - Area 1C
 - ▭ Surveyed Property Boundary

SOURCE
Site boundary and investigation locations from Tetra Tech Coffey.
Aerial imagery from Nearmap (capture date: 31/10/2023)



0 2 4
m

SCALE 1:200
PAGE SIZE: A3
PROJECTION: GDA 1994 MGA Zone 56

DEPARTMENT OF VETERAN AFFAIRS

DVA GREENSLOPES
51-55 HEADFORT STREET, GREENSLOPES, QLD

FIGURE 5 **DRAFT**

Area 1C Delineation Locations





- LEGEND**
- Floor Sampling Pre Import of Material
 - ▭ Surveyed Property Boundary

SOURCE
Site boundary and investigation locations from Tetra Tech Coffey.
Aerial imagery from Nearmap (capture date: 31/10/2023)



0 2 4
m

SCALE 1:200
PAGE SIZE: A3
PROJECTION: GDA 1994 MGA Zone 56

DEPARTMENT OF VETERAN AFFAIRS
DVA GREENSLOPES
51-55 HEADFORT STREET, GREENSLOPES, QLD

FIGURE 6 **DRAFT**
**Floor Validation Sampling
Prior to Importing Fill**



DATE: 16.11.23 PROJECT: 754-BNEEN282781 FILE: 282781_VAL_F006_GIS



- LEGEND**
- Trench Validation Point
 - Driveway Validation Sample
 - Top of trench
 - Bottom of trench
 - ▭ Surveyed Property Boundary

SOURCE
Site boundary and investigation locations from Tetra Tech Coffey.
Aerial imagery from Nearmap (capture date: 13/11/2023)



0 2 4
m

SCALE 1:200
PAGE SIZE: A3
PROJECTION: GDA 1994 MGA Zone 56

DEPARTMENT OF VETERAN AFFAIRS

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51-55 HEADFORT STREET, GREENSLOPES, QLD

FIGURE 7 **DRAFT**

**Trench and Driveway
Sampling Locations**



**TETRA TECH
COFFEY**

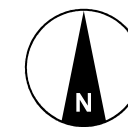
DATE: 09.05.24 PROJECT: 754-BNEEN282781 FILE: 282781_VAL_F007_GIS



LEGEND

- × Excavation Floor Validation Point
- Headfort Street Boundary Validation Point
- Newdegate Street Boundary Validation Point
- Northern Boundary Validation Point
- Eastern Boundary Validation Point
- Horizontal Extent of Excavation
- Manhole Cover
- Surveyed Property Boundary

SOURCE
Site boundary and investigation locations from Tetra Tech Coffey.
Aerial imagery from Nearmap (capture date: 31/10/2023)



0 2.5 5 m

SCALE 1:200
PAGE SIZE: A3
PROJECTION: GDA 1994 MGA Zone 56

DEPARTMENT OF VETERAN AFFAIRS

DVA GREENSLOPES
51-55 HEADFORT STREET, GREENSLOPES, QLD

FIGURE 8 **DRAFT**

Final Excavation Floor
and Boundary Validation Samples

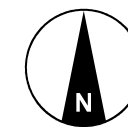


DATE: 08.01.24 PROJECT: 754-BNEEN282781 FILE: 282781_VAL_F008_GIS



- LEGEND**
- Redundant Newdegate Street Validation Locations
 - Redundant Northern Boundary Validation Location
 - Horizontal Excavation Extent
 - ▭ Surveyed Property Boundary

SOURCE
Site boundary and investigation locations from Tetra Tech Coffey.
Aerial imagery from Nearmap (capture date: 31/10/2023)



0 2 4
m

SCALE 1:200
PAGE SIZE: A3
PROJECTION: GDA 1994 MGA Zone 56

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DVA GREENSLOPES
51-55 HEADFORT STREET, GREENSLOPES, QLD
FIGURE 9 **DRAFT**
**Redundant Newdegate Street &
Northern Boundary Validation Locations**



DATE: 08.01.24 PROJECT: 754-BNEEN282781 FILE: 282781_VAL_F009_GIS



- LEGEND**
- Imported Fill Sample Locations
 - Horizontal Excavation Extent
 - ▭ Surveyed Property Boundary

SOURCE
Site boundary and investigation locations from Tetra Tech Coffey.
Aerial imagery from Nearmap (capture date: 31/10/2023)



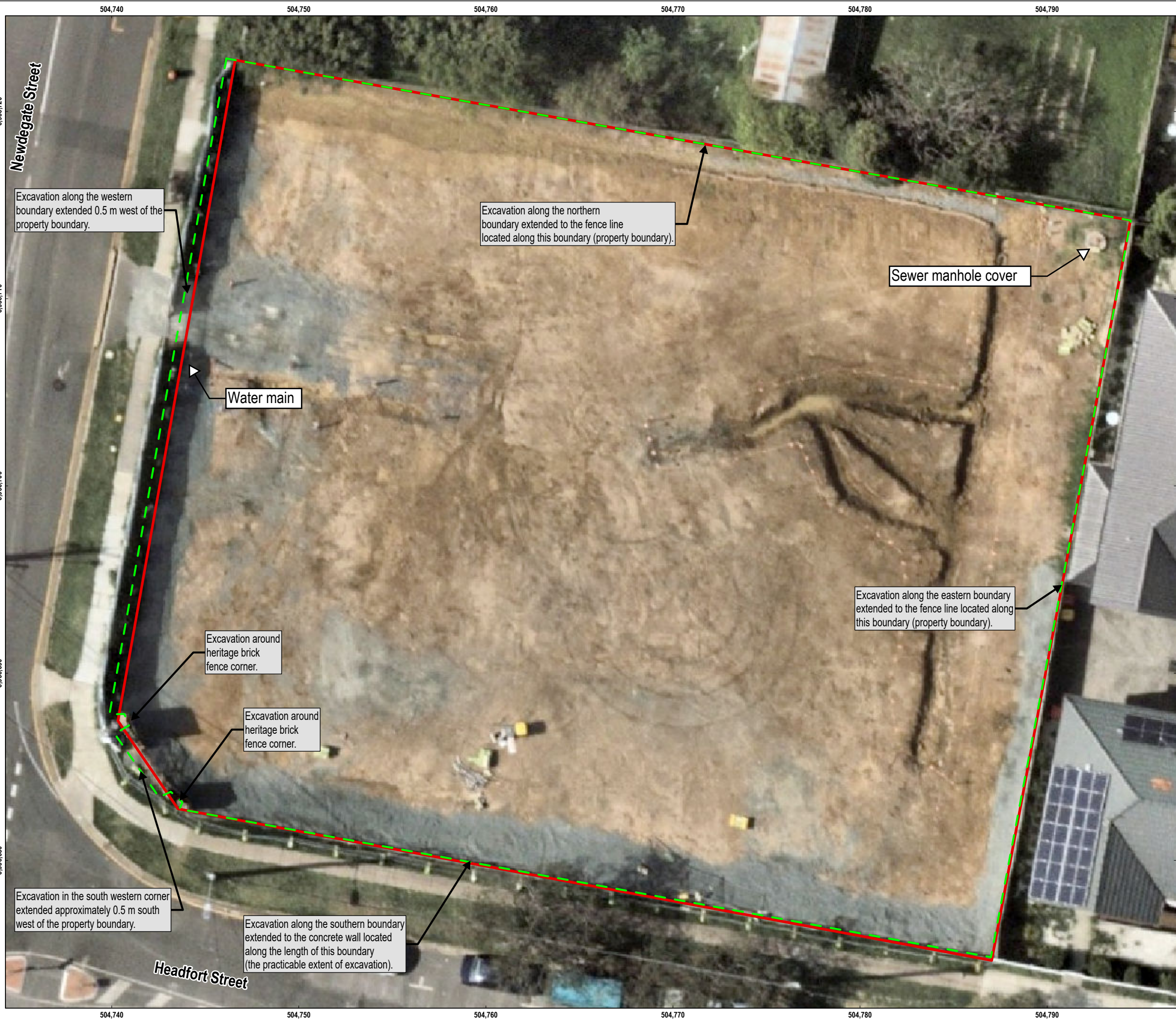
0 2 4
m

SCALE 1:200
PAGE SIZE: A3
PROJECTION: GDA 1994 MGA Zone 56

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DVA GREENSLOPES
51-55 HEADFORT STREET, GREENSLOPES, QLD
FIGURE 10 **DRAFT**
Imported Fill Sample Locations



DATE: 22.11.23 PROJECT: 754-BNEEN282781 FILE: 282781_VAL_F010_GIS



- LEGEND**
- Horizontal Excavation Extent
 - Surveyed Property Boundary

SOURCE
Site boundary and investigation locations from Tetra Tech Coffey.
Aerial imagery from Nearmap (capture date: 13/11/2023)

0 2 4 m

SCALE 1:200

PAGE SIZE: A3

PROJECTION: GDA 1994 MGA Zone 56

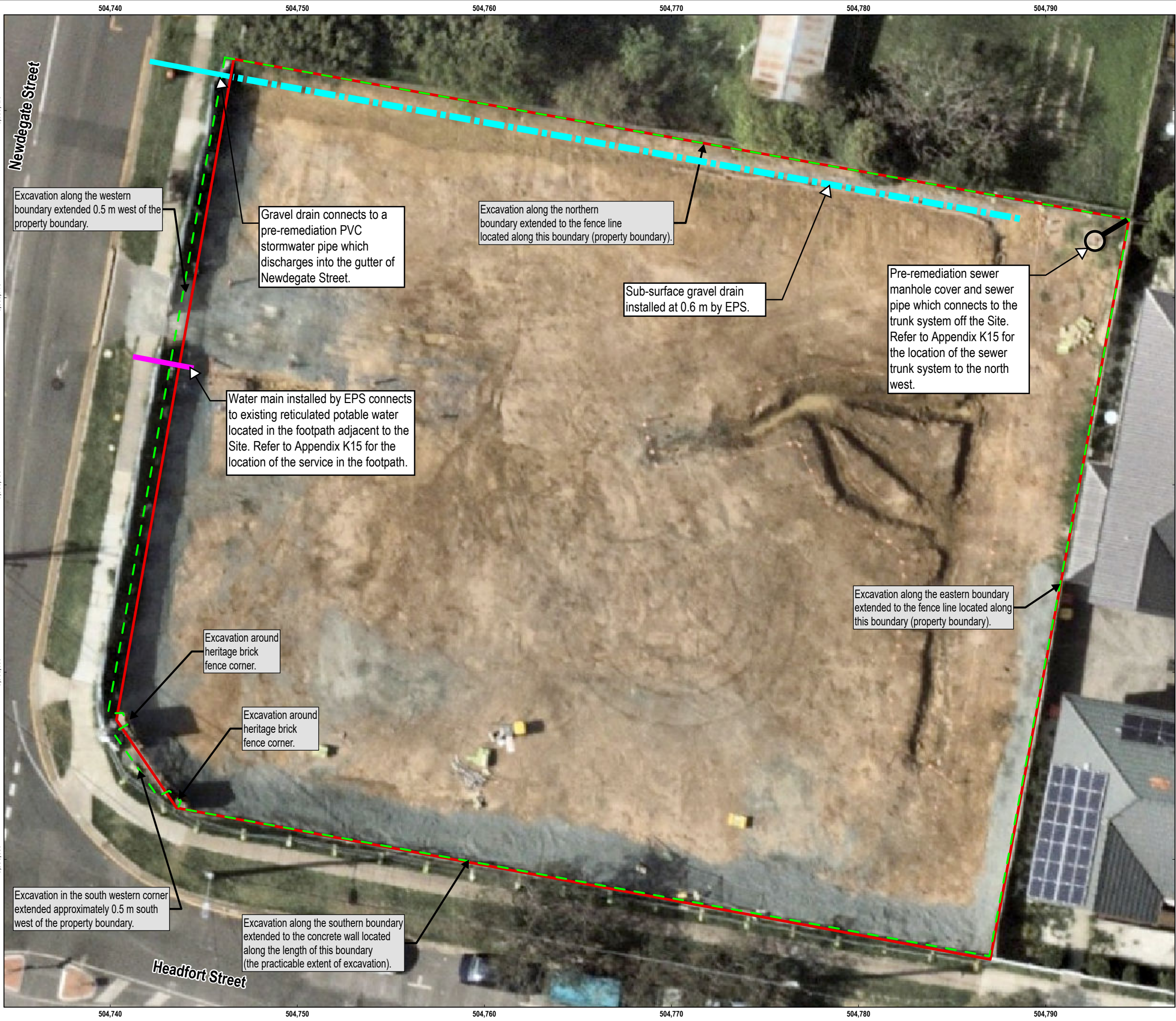
DEPARTMENT OF VETERAN AFFAIRS

DVA GREENSLOPES
51-55 HEADFORT STREET, GREENSLOPES, QLD

FIGURE 11 **DRAFT**

Excavation Extents





- LEGEND**
- Horizontal Excavation Extent
 - Surveyed Property Boundary

Underground Services Post Remediation (approximate location)

- Gravel Drain
- Stormwater Pipe (PVC)
- Water Main
- Sewer Pipe
- Sewer Manhole Cover

SOURCE
Site boundary and investigation locations from Tetra Tech Coffey.
Aerial imagery from Nearmap (capture date: 13/11/2023)



0 2 4 m

SCALE 1:200
PAGE SIZE: A3
PROJECTION: GDA 1994 MGA Zone 56

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51-55 HEADFORT STREET, GREENSLOPES, QLD



FIGURE 12 **DRAFT**
Services Post-Remediation



DATE: 19.02.24 PROJECT: 754-BNEEN282781 FILE: 282781_VAL_F011_GIS

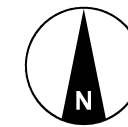


LEGEND

-  Horizontal Excavation Extent
 Surveyed Property Boundary

SOURCE

Site boundary and investigation locations from Tetra Tech Coffey.
Contours from Department of Resources Queensland
Aerial imagery from Nearmap (capture date: 13/11/2023)



SCALE 1:200
PAGE SIZE: A3
PROJECTION: GDA 1994 MGA Zone 56

DEPARTMENT OF VETERAN AFFAIRS

DVA GREENSLOPES
51-55 HEADFORT STREET, GREENSLOPES, QLD

FIGURE 13 **DRAFT**

Pre-Remediation Ground Levels

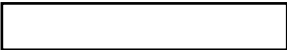


DATE: 08.04.24 PROJECT: 754-BNEEN282781 FILE: 282781_VAL_F012A_GIS



Important Note: ground levels were surveyed at the time of validation sampling on the 16/10/2023 and included imported materials which had been used in the shoring of boundary walls along the eastern, southern and western portions of the Site as shown in the Figure. The depth of excavations along eastern boundary wall were to approximately 26 m AHD.

- LEGEND**
- Horizontal Excavation Extent
 - Surveyed Property Boundary
 - Approximate location of imported materials used for shoring of boundary walls



SOURCE
Site boundary, Contours and investigation locations from Tetra Tech Coffey.
Aerial imagery from Nearmap (capture date: 13/11/2023)

0 2 4 m

SCALE 1:200

PAGE SIZE: A3

PROJECTION: GDA 1994 MGA Zone 56

DEPARTMENT OF VETERAN AFFAIRS

DVA GREENSLOPES
51-55 HEADFORT STREET, GREENSLOPES, QLD

FIGURE 14 **DRAFT**

Post-Remediation Ground Levels



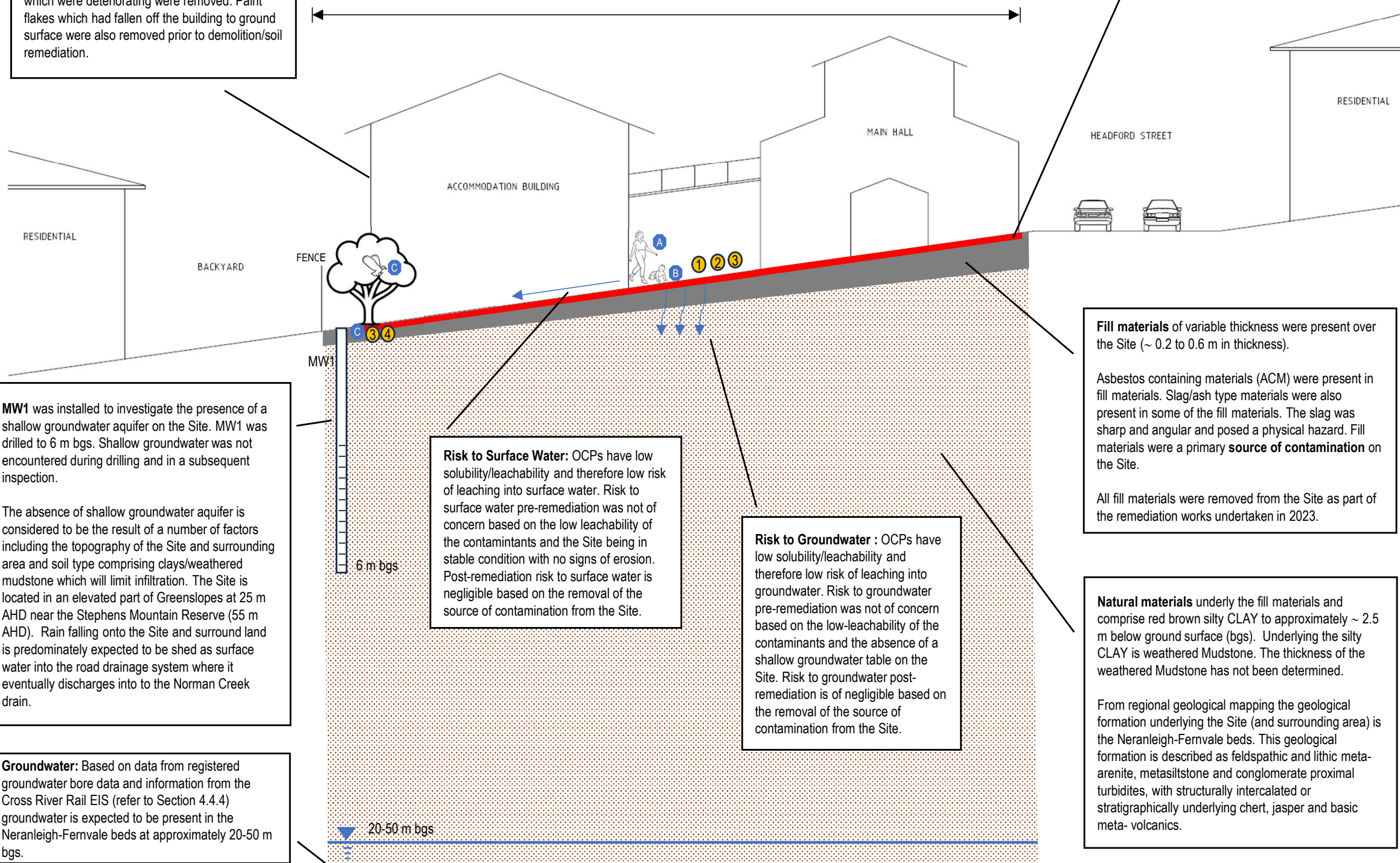
Receptors	Exposure Pathways
A Adult future site users / construction and maintenance workers B Child future site users	1 Inhalation of dust particles and asbestos fibres 2 Dermal contact with soil 3 Incidental ingestion of soil
C Terrestrial flora and fauna	3 Incidental ingestion of soil 4 Biological uptake mechanisms

Termiticides (termite barriers) were historically installed around the perimeter of the buildings and resulted in the contamination of soil materials with organo-chlorine pesticides (OCPs). OCPs in soil were a primary **source of contamination** on the Site. Elevated concentrations of OCPs were generally limited to shallow soil materials less than 0.2 m below ground surface where the termiticides were originally applied.

All soil materials with OCP contamination which exceeded NEPM HIL-A Residential Health Guidelines were removed from the Site as part of the remediation works undertaken in 2023.

Asbestos containing materials (ACM) were present in buildings and in paints used on the buildings. Lead based paints were also used. Prior to demolition/soil remediation exterior paints which were deteriorating were removed. Paint flakes which had fallen off the building to ground surface were also removed prior to demolition/soil remediation.

SITE



MW1 was installed to investigate the presence of a shallow groundwater aquifer on the Site. MW1 was drilled to 6 m bgs. Shallow groundwater was not encountered during drilling and in a subsequent inspection.

The absence of shallow groundwater aquifer is considered to be the result of a number of factors including the topography of the Site and surrounding area and soil type comprising clays/weathered mudstone which will limit infiltration. The Site is located in an elevated part of Greenslopes at 25 m AHD near the Stephens Mountain Reserve (55 m AHD). Rain falling onto the Site and surround land is predominately expected to be shed as surface water into the road drainage system where it eventually discharges into to the Norman Creek drain.

Groundwater: Based on data from registered groundwater bore data and information from the Cross River Rail EIS (refer to Section 4.4.4) groundwater is expected to be present in the Neranleigh-Fernvale beds at approximately 20-50 m bgs.

Risk to Surface Water: OCPs have low solubility/leachability and therefore low risk of leaching into surface water. Risk to surface water pre-remediation was not of concern based on the low leachability of the contaminants and the Site being in stable condition with no signs of erosion. Post-remediation risk to surface water is negligible based on the removal of the source of contamination from the Site.

Risk to Groundwater : OCPs have low solubility/leachability and therefore low risk of leaching into groundwater. Risk to groundwater pre-remediation was not of concern based on the low-leachability of the contaminants and the absence of a shallow groundwater table on the Site. Risk to groundwater post-remediation is of negligible based on the removal of the source of contamination from the Site.

Fill materials of variable thickness were present over the Site (~ 0.2 to 0.6 m in thickness).

Asbestos containing materials (ACM) were present in fill materials. Slag/ash type materials were also present in some of the fill materials. The slag was sharp and angular and posed a physical hazard. Fill materials were a primary **source of contamination** on the Site.

All fill materials were removed from the Site as part of the remediation works undertaken in 2023.

Natural materials under the fill materials and comprise red brown silty CLAY to approximately ~ 2.5 m below ground surface (bgs). Underlying the silty CLAY is weathered Mudstone. The thickness of the weathered Mudstone has not been determined.

From regional geological mapping the geological formation underlying the Site (and surrounding area) is the Neranleigh-Fernvale beds. This geological formation is described as feldspathic and lithic meta-arenite, metasiltstone and conglomerate proximal turbidites, with structurally intercalated or stratigraphically underlying chert, jasper and basic meta- volcanics.

Legend

- Termite Barrier
- Fill Materials
- Natural Materials

NOT TO SCALE

ILLUSTRATION OF SITE PRE-DEMOLITION AND PRE-REMEDIATION



Figure 15 Pre-Remediation Illustrative Conceptual Site Model