Attachment C14(b)

Proponent Phase I and Phase II Environmental Site Assessment (2/8)

Appendix A

Figures

G:\IENV\GIS\Projects\606 Projects\60623599 Burrows Industrial Estate\FIGURES\60623599 F1 Site Location 03 03 2020 TO

AECOM

SITE LOCATION
Burrows Industrial Estate
New South Wales

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FIGURE 1

G:\ENVGIS\Projects\606 Projects\60623599 Burrows Industrial Estate\FIGURES\60623599 F2 Site Layout and Sampling Locations 03 03 2020 TO

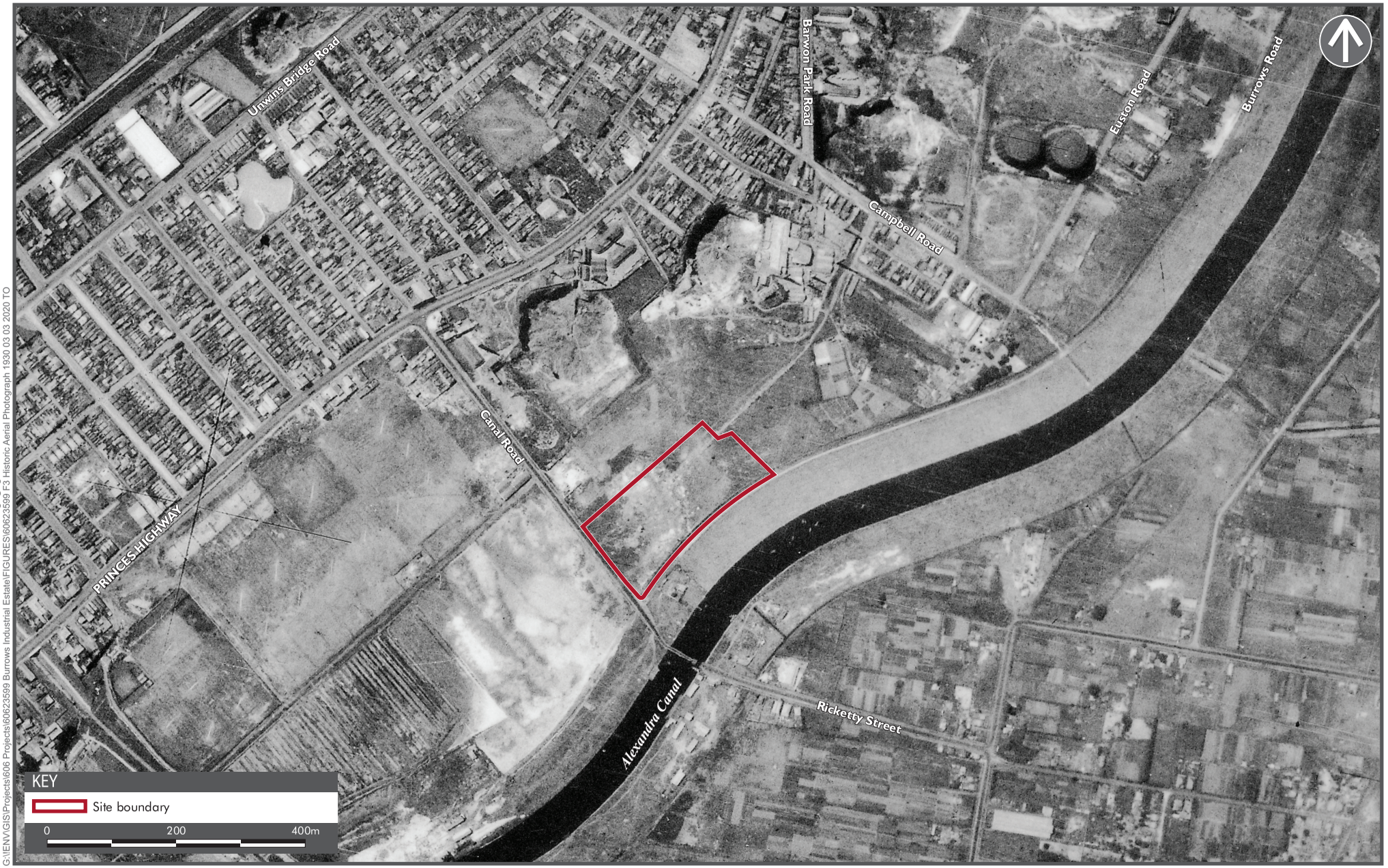
AECOM

SITE LAYOUT AND SAMPLING LOCATIONS

Burrows Industrial Estate
New South Wales

Note: Unit areas are approximate and inferred only

FIGURE 2



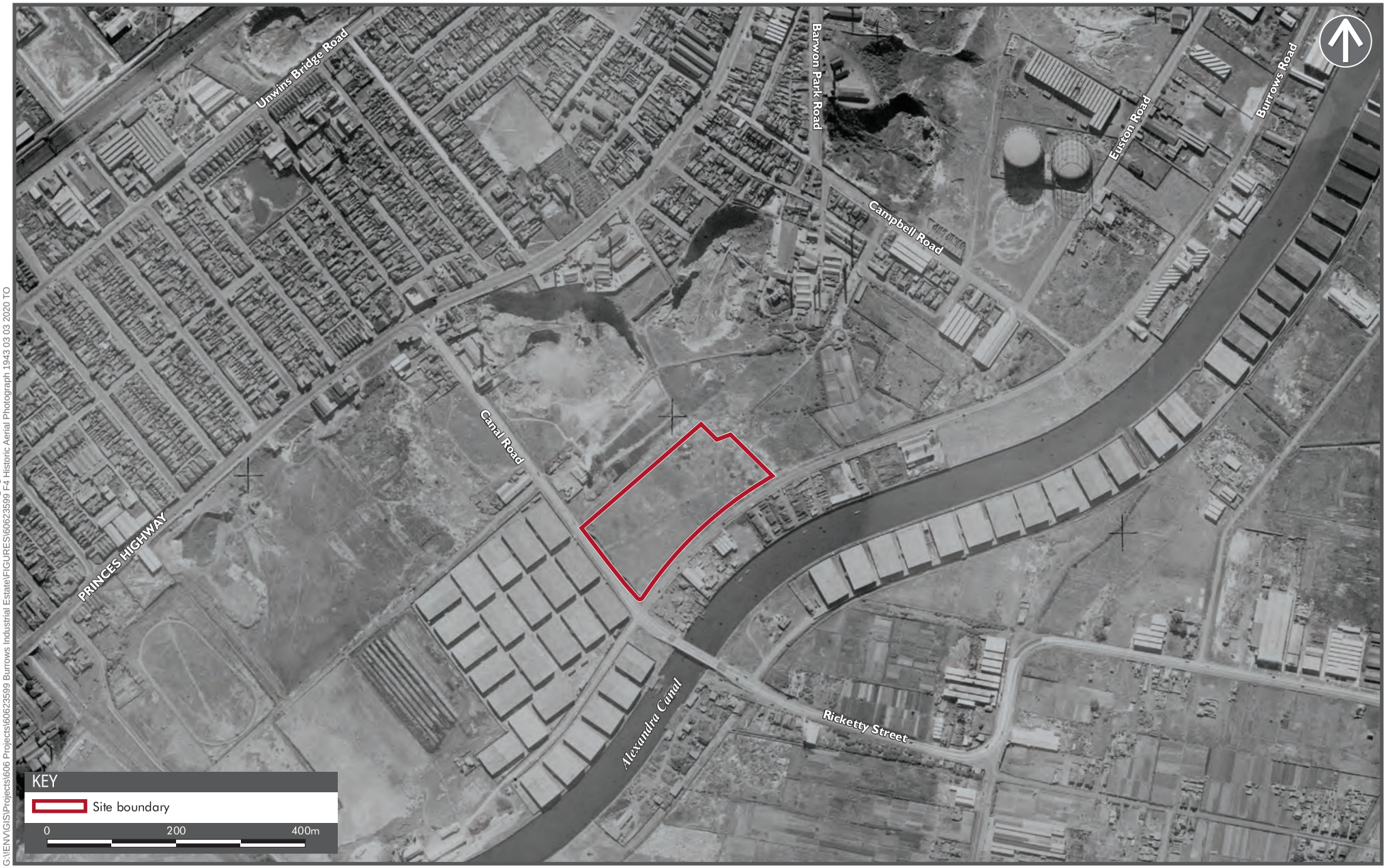
G:\ENV\GIS\Projects\606 Projects\60623599 Burrows Industrial Estate\FIGURES\60623599 F3 Historic Aerial Photograph 1930 03 03 2020 TO

AECOM

HISTORIC AERIAL PHOTOGRAPH 1930

Burrows Industrial Estate
New South Wales

FIGURE 3



627

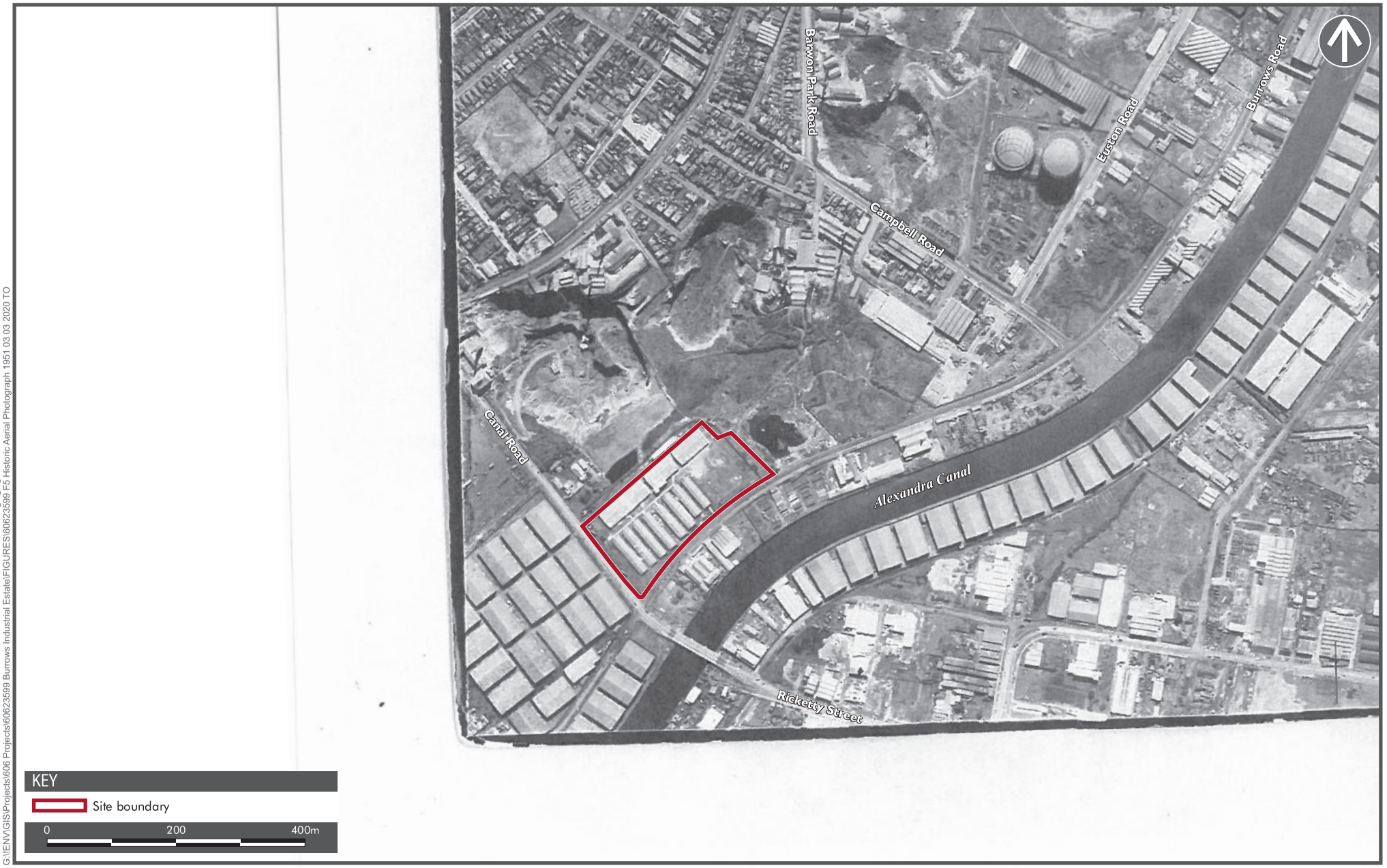
G:\ENVGIS\Projects\606 Projects\60623599 Burrows Industrial Estate\FIGURES\60623599 F4 Historic Aerial Photograph 1943 03 03 2020 TO

AECOM

HISTORIC AERIAL PHOTOGRAPH 1943

Burrows Industrial Estate
New South Wales

FIGURE 4



G:\ENV\GIS\Projects\606 Projects\60623599 Burrows Industrial Estate\FIGURES\60623599 F5 Historic Aerial Photograph 1951 03 03 2020 TO

628

AECOM

HISTORIC AERIAL PHOTOGRAPH 1951

Burrows Industrial Estate
New South Wales

FIGURE 5

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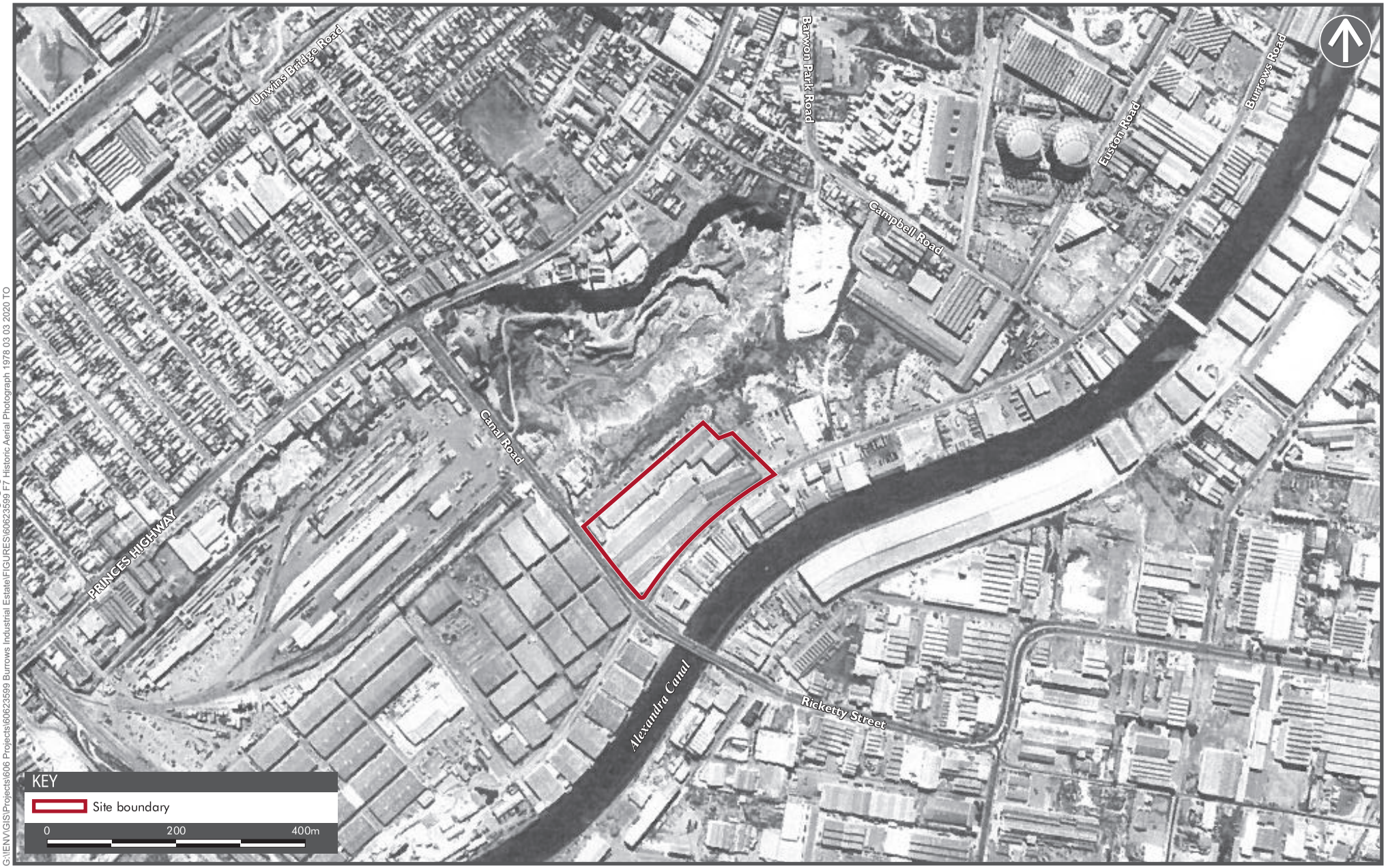
G:\ENV\GIS\Projects\606 Projects\60623599 Burrows Industrial Estate\FIGURES\60623599 F6 Historic Aerial Photograph 1961 03 03 2020 TO

AECOM

HISTORIC AERIAL PHOTOGRAPH 1961

Burrows Industrial Estate
New South Wales

FIGURE 6



630

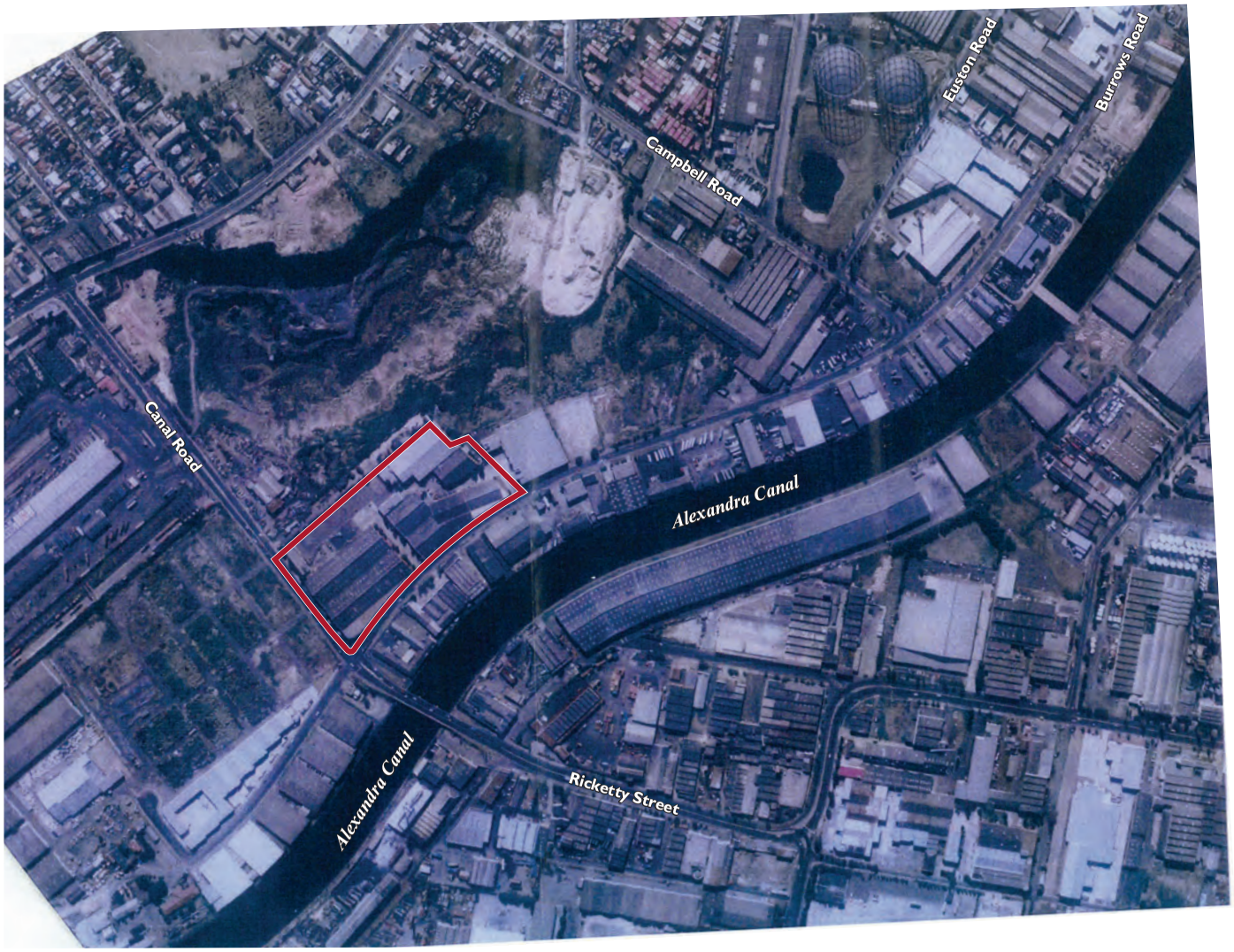
G:\ENV\GIS\Projects\606 Projects\60623599 Burrows Industrial Estate\FIGURES\60623599 F7 Historic Aerial Photograph 1978 03 03 2020 TO

AECOM

HISTORIC AERIAL PHOTOGRAPH 1978

Burrows Industrial Estate
New South Wales

FIGURE 7



KEY

Site boundary

0 200 400m

G:\ENVIGIS\Projects\606 Projects\60623599 Burrows Industrial Estate\FIGURES\60623599 F8 Historic Aerial Photograph 1986 03 03 2020 TO

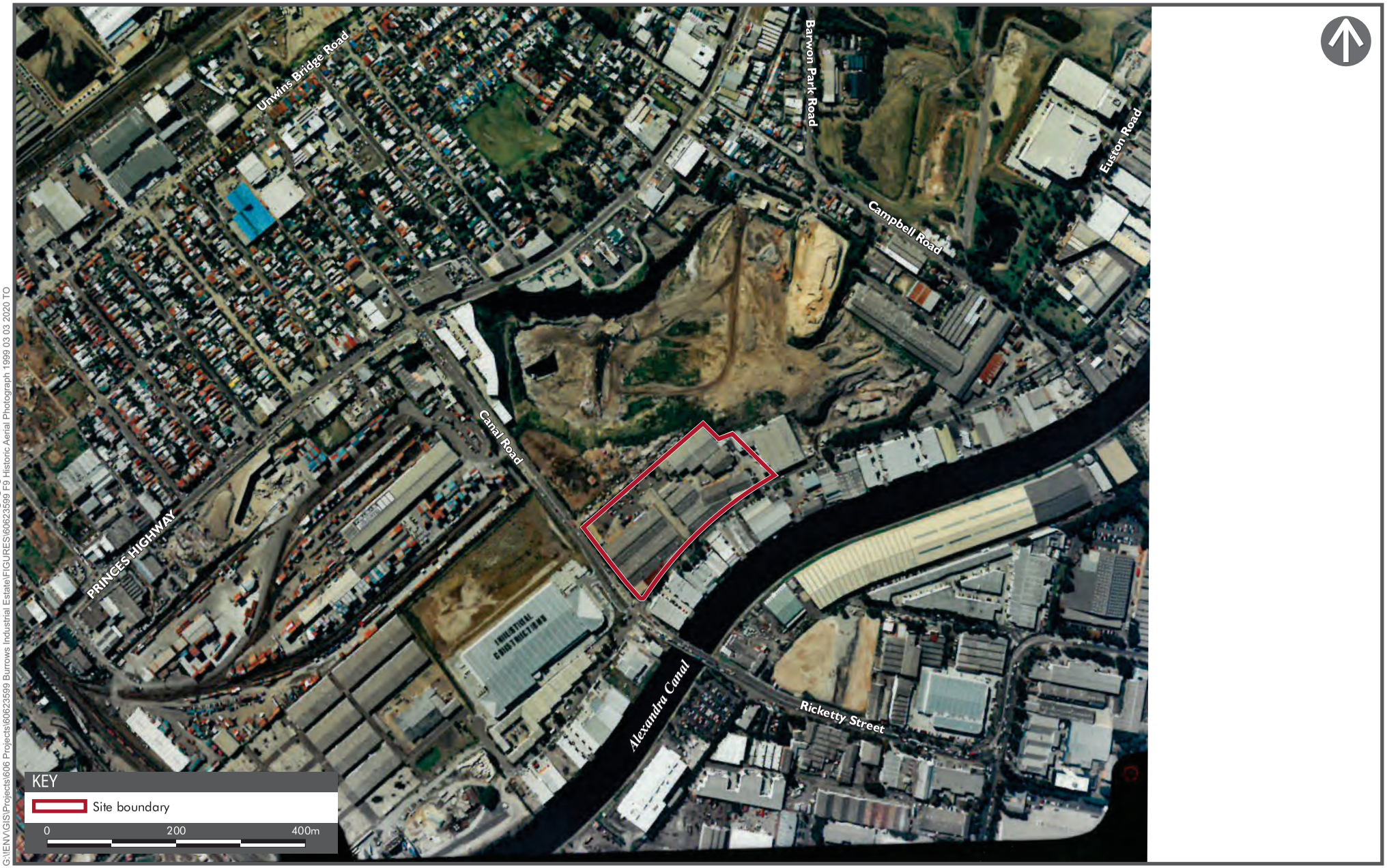
631

AECOM

HISTORIC AERIAL PHOTOGRAPH 1986

Burrows Industrial Estate
New South Wales

FIGURE 8



G:\ENVGIS\Projects\606 Projects\60623599 Burrows Industrial Estate\FIGURES\60623599 F9 Historic Aerial Photograph 1999 03 03 2020 TO

AECOM

HISTORIC AERIAL PHOTOGRAPH 1999
Burrows Industrial Estate
New South Wales

FIGURE 9

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G:\ENVGIS\Projects\606 Projects\60623599 Burrows Industrial Estate\FIGURES\60623599 F10 Historic Aerial Photograph 2004 03 03 2020 TO

AECOM

HISTORIC AERIAL PHOTOGRAPH 2004

Burrows Industrial Estate
New South Wales

FIGURE 10

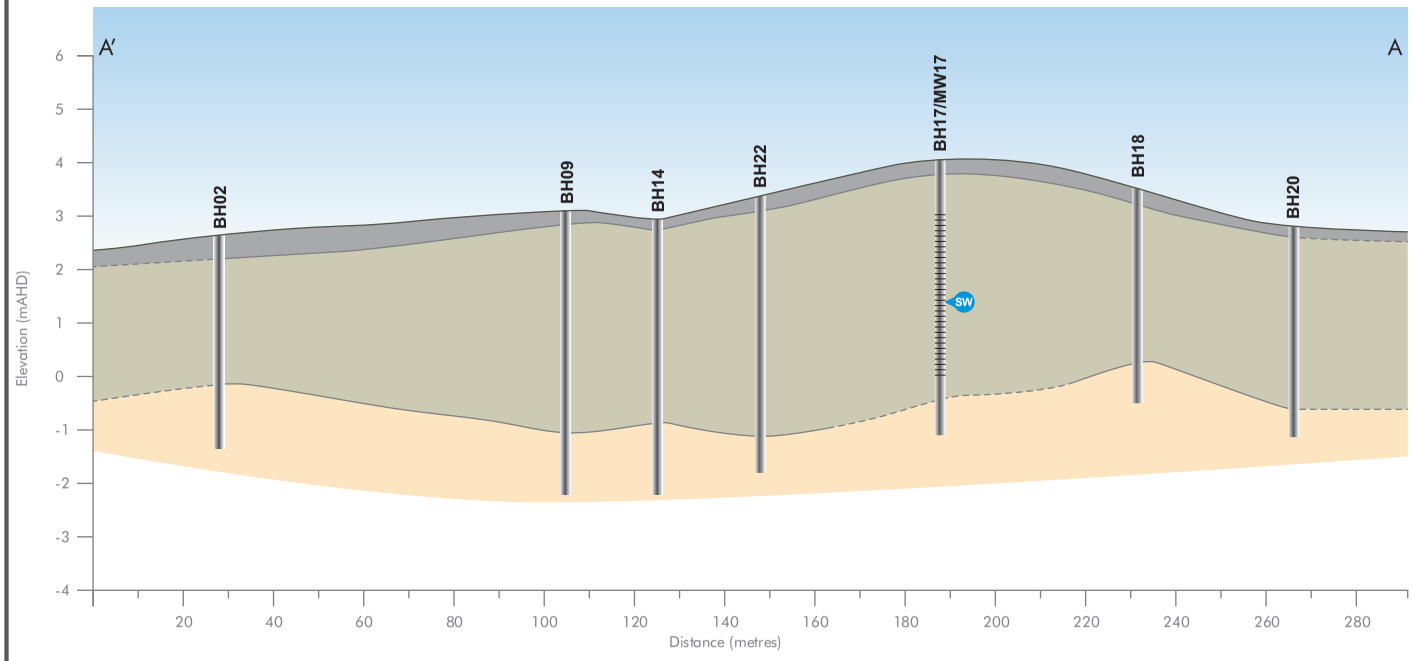
G:\ENVGIS\Projects\606 Projects\60623599 Burrows Industrial Estate\FIGURES\60623599 F11 Historic Aerial Photograph 2014 03 03 2020 TO

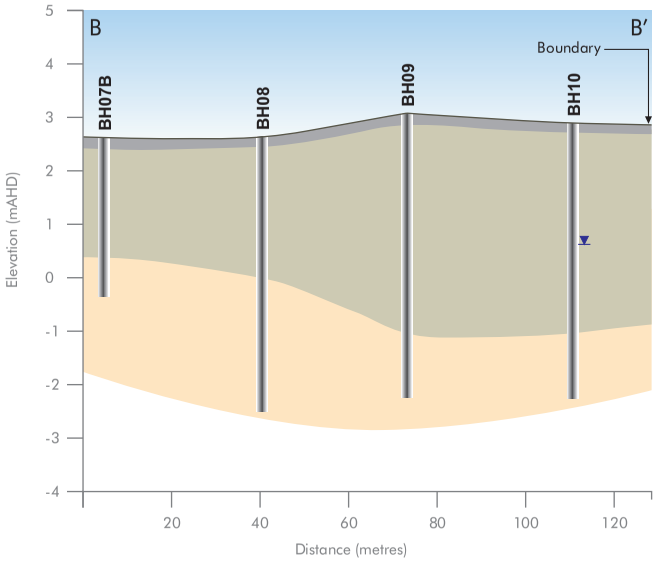
AECOM

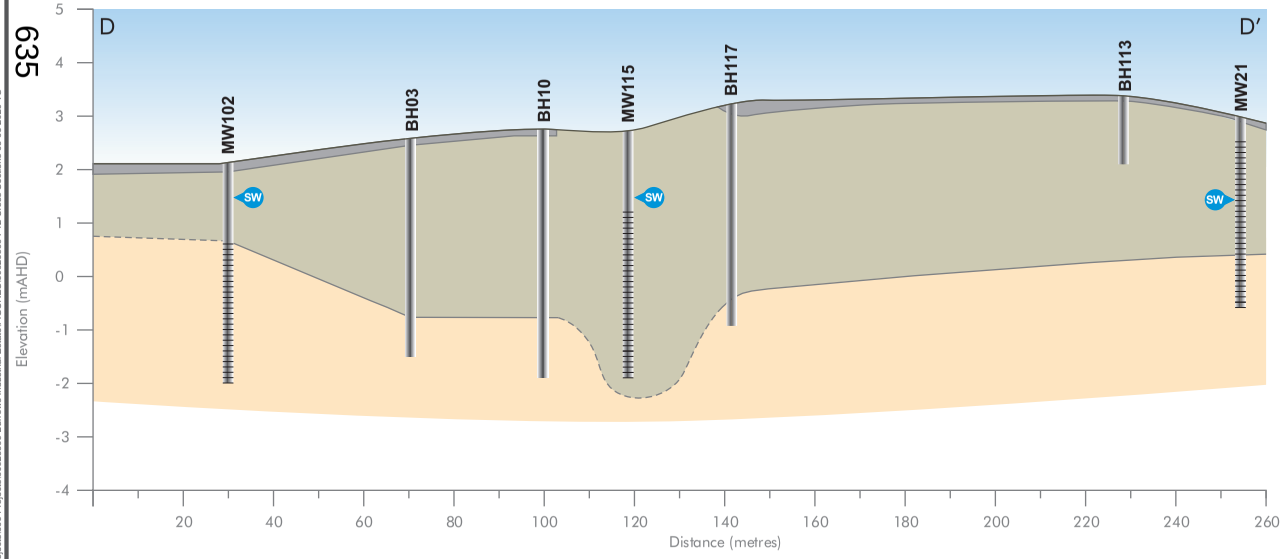
HISTORIC AERIAL PHOTOGRAPH 2014

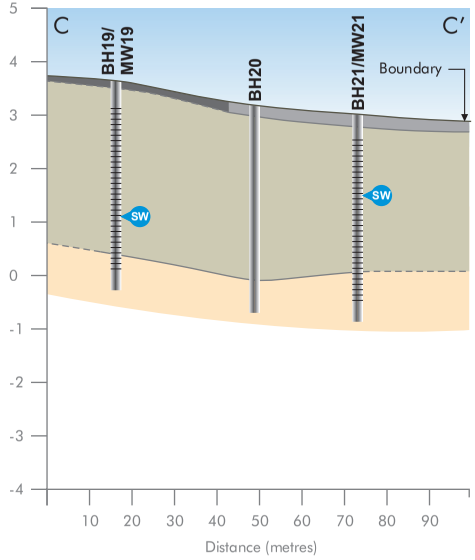
Burrows Industrial Estate
New South Wales

FIGURE 11









635

G:\ENVGIS\Projects\606 Projects\60623599 Burrows Industrial Estate\FIGURES\60623599 F12 Cross Sections 03 03 2020 TO

Scale: See figured dimensions

AECOM

KEY

- Asphalt
- Concrete
- Fill
- Natural (clay, sandy clay, sand, clayey sand, sandy silt)
- Screened interval
- SW Stabilised groundwater level (Feb, 2020)

CROSS SECTIONS

Burrows Industrial Estate
New South Wales

FIGURE 12

G:\ENVGIS\Projects\606 Projects\60623599 Burrows Industrial Estate\FIGURES\60623599 F13 Groundwater Elevation Plan 03 03 2020 TO

AECOM

GROUNDWATER ELEVATION PLAN

Burrows Industrial Estate
New South Wales

Note: Unit areas are approximate and inferred only

FIGURE 13

Appendix B

Tables

Table 1 - Sample Register

Sample Location & Depth	Sample Date	Sample Type	PID (ppm)	Rationale (fill description)	Analyses															
					TRH C6-C40, BTEXN	TRH C6-C10, BTEX(N)	PAH	Metals	OCP, OPP, PCB	Phenols	Asbestos	Asbestos (quant)	VHC	TCLP - As	TCLP - Pb	TCLP - B(a)P	TCLP - Hg	TCLP - Cr VI	TCLP - Cd	TCLP - Ni
BH01_0.3-0.4	21/08/2015	Fill	0.1	AFM (dark brown-orange sand, FeSt & porcelain)							1									
BH01_1.0-1.1	21/08/2015	Fill	-	AFM (dark brown-orange sand, FeSt & porcelain)	1		1	1	1											
BH01_3.8-3.9	21/08/2015	Sandy Clay	-	Assess natural	1		1													
BH02_0.4-0.5	29/08/2015	Fill	0.2	AFM (crushed SST, concrete, glass & ceramics)	1		1	1			1									
BH02_2.0-2.1	29/08/2015	Fill	2.9	AFM (sand with slag & ceramics)				1												
BH02_3.0-3.1	29/08/2015	Silty Clay	14.1	Assess natural, PID	1															
BH03_0.2-0.3	29/08/2015	Fill	0.1	AFM (SST & RB)			1	1			1									
BH03_1.0-1.2	29/08/2015	Fill	2.1	AFM (crushed SST with slag & ceramics)	1		1	1			1									
BH03_3.0-3.1	29/08/2015	Sandy Clay	19.5	Assess natural, PID	1			1												
BH04_0.5-0.6	20/08/2015	Fill	0.5	AFM (mottled brown-grey sand with RB & slag), HCO	1		1	1												
BH04_1.0-1.1	20/08/2015	Fill	0.6	AFM (black-brown-orange mottled sand, ceramics, aluminium, FeSt, slag)			1	1						1	1	1				
BH04_2.3-2.4	20/08/2015	Silty Clay	0.1	Assess natural	1			1												
BH05_0.5-0.6	20/08/2015	Fill	1.8	AFM (orange and black mottled clay with crushed sandstone, nails)	1		1	1	1	1			1							
BH05_1.0-1.1	20/08/2015	Fill	0.4	AFM (black sand with crushed SST, glass, ceramics, bone, slag & metal)			1	1												
BH05_2.3-2.4	20/08/2015	Sandy Silt	0.7	Assess natural	1			1												
BH06_1.0-1.1	21/08/2015	Fill	0.2	AFM (grey-white crushed SST)				1	1		1									
BH07A_0.5-0.6	20/08/2015	Fill	0.1	AFM (black sand with metal, glass, slag, bricks)			1	1	1		1									
BH07B_1.2-1.3	21/08/2015	Fill	0.9	AFM (brown-black sand, FeSt, metal, ceramics, glass & slag)	1		1	1	1		1									
BH07B_2.3-2.4	21/08/2015	Silty Clay	0.4	Assess natural	1			1												
BH08_0.17-0.18	20/08/2015	Fill	0.5	AFM (black-orange-yellow mottled sand with crushed SST & FeSt)				1	1											
BH08_1.0-1.1	20/08/2015	Fill	0.2	AFM (black-orange mottled sand with crushed SST, metal, slag)	1		1	1												
BH08_2.5-2.6	20/08/2015	Fill	0.3	AFM (black sand with slag)			1	1												
BH08_3.7-3.8	20/08/2015	Silty Sand	0.5	Assess natural	1			1												
BH09_0.25-0.35	21/08/2015	Fill	0.1	AFM (pink crushed SST)			1	1												
BH09_4.0-4.2	21/08/2015	Fill	0.4	AFM (black-brown to green-brown sand with SST, FeSt, ash & slag)			1	1												
BH09_4.5-4.6	21/08/2015	Sandy Clay	390.1	Assess natural, PID	1		1	1		1			1							
BH10_0.15-0.25	21/08/2015	Fill	0.1	AFM (yellow crushed SST)					1											
BH10_4.0-4.1	21/08/2015	Clayey Sand	20.1	Assess natural, PID	1			1												
BH11_0.2-0.3	20/08/2015	Fill	0.1	AFM (dark brown-black gravelly sand with ash)			1	1												
BH11_2.3-2.4	20/08/2015	Fill	0.8	AFM (black-orange mottled silt with FeSt & slag)	1		1	1												
BH11_3.3-3.4	20/08/2015	Sandy Silt	0.5	Assess natural, HCO	1			1												
BH12_0.15-0.25	21/08/2015	Fill	0.1	AFM (black and white sand with SST, ash, slag & glass)			1	1												
BH12_1.0-1.1	21/08/2015	Fill	0.1	AFM (black-red-yellow mottled sand with ash, SST, slag & glass)				1												
BH12_1.8-1.9	21/08/2015	Fill	0.4	AFM (brown sand with slag)							1									
BH12_3.6-3.7	21/08/2015	Fill	3.5	AFM (grey sand), PID	1			1												
BH13_0.4-0.5	20/08/2015	Fill	0.1	AFM (dark brown-black sand with SST, FeSt, glass & ceramics)			1	1												
BH13_3.6-3.7	20/08/2015	Silty Sand	6.6	Assess natural					1											
BH14_0.45-0.55	21/08/2015	Fill	-	AFM (brown sand and RB), below concrete slab					1											
BH14_1.8-1.9	21/08/2015	Fill	0.6	AFM (dark brown sand with slag)			1	1	1											
BH14_4.0-4.1	21/08/2015	Sandy Clay	150.1	Assess natural, PID	1					1			1							
BH15_0.4-0.5	21/08/2015	Fill	0.1	AFM (RB with minor clay)			1	1			1									
BH16_0.7-0.8	21/08/2015	Fill	0	AFM (yellow-grey-black-orange sand with bricks, SST, glass, slag & ash)	1		1	1	1											
BH16_2.0-2.1	22/08/2015	Fill	0.9	AFM (dark brown sand with clay, FeSt, RB, slag, glass & metal)	1			1									1			
BH16_3.0-3.1	22/08/2015	Fill	4.3	AFM (dark brown sand with clay, FeSt, RB, slag, glass & metal)				1												
BH17_1.0-1.1	21/08/2015	Fill	0.1	AFM (sand, mottled brown with black)	1			1												
BH17_2.0-2.1	22/08/2015	Fill	15.2	AFM (grey-brown sand with slag, SST, FeSt, concrete, metal), PID, HCO	1		1	1										1		
BH18_0.7-0.8	29/08/2015	Fill	0	AFM (dark brown-black sand with bricks)	1		1	1			1									
BH18_2.0-2.1	29/08/2015	Fill	0.2	AFM (red-brown-yellow-black sand with FeSt & SST)			1	1												
BH19_2.0-2.2	22/08/2015	Fill	1.9	AFM (orange-brown sand with FeSt & slag)	1			1												
BH20_0.5-0.6	29/08/2015	Fill	0.2	AFM (brown sand with RB)			1	1			1									
BH20_1.0-1.1	29/08/2015	Fill	0.4	AFM (red-brown and black sand with slag & crushed SST)			1	1			1									
BH20_2.0-2.1	29/08/2015	Fill	0.3	AFM (dark brown sand with slag & crushed SST), GWE	1															
BH21_0.7-0.8	21/08/2015	Fill	0.1	AFM (yellow-black mottled sand with SST, concrete & bricks)	1		1	1			1					1				
BH21_2.7-2.8	22/08/2015	Fill	0.2	AFM (brown sand with metal & slag)	1			1												
BH21_3.0-3.1	22/08/2015	Sand	2.1	Assess natural	1		1	1												
BH22_0.3-0.4	21/08/2015	Fill	0.1	assess for asbestos (red-brown to grey-brown sand with FeSt & RB)							1									
BH22_0.45	21/08/2015	Fragment	-	assess for asbestos							1									
BH22_0.8-0.9	21/08/2015	Fill	0.1	AFM (dark brown sand with organic matter (peat?) & slag)			1	1												
BH22_2.2-2.3	21/08/2015	Fill	0.1	AFM (slag)	1		1	1						1	1					1
BH22_4.5-4.7	21/08/2015	Sandy Clay	26.7	Assess natural, PID	1		1	1												
SS01	29/08/2015	Fill	-	assess for asbestos (surface soil/fill)							1									
SS02	29/08/2015	Fill	-	assess for asbestos (surface soil/fill)							1									
SS04_Frag	29/08/2015	Fragment	-	assess for asbestos							1									
BH100_0.7-0.8	03/02/2020	Fill	0	AFM (brown-grey sand with FeSt, glass & ceramics)	1		1	1				1								
BH100_0.8-0.9	03/02/2020	Fill	0.6	AFM (orange-brown brittle fragments and sponge-like material)	1		1	1				1								
BH101_0.16-0.26	31/01/2020	Fill	NR	AFM (crushed SST with slag & FeSt), beneath slab					1											
BH101_0.7-0.8	31/01/2020	Fill	NR	AFM (sand with FeSt, glass & bricks)	1		1	1												
BH101_1.3-1.4	31/01/2020	Fill	0	AFM (sand with RB, ceramics, metal, glass & cotton buds)								1								
BH101_2.2-2.3	31/01/2020	Fill	0	AFM (sand with RB, brick, metal, ceramics & glass), GWE	1		1	1												
BH102_0.3-0.4	31/01/2020	Fill	0.3	AFM (orange-brown sand with SST, FeSt & glass)			1	1												
BH102_0.5-0.6	31/01/2020	Fill	0	AFM (brown sand with SST, FeSt & slag)	1		1	1				1			1	1	1			
BH103_0.15-0.25	03/02/2020	Fill	0.1	AFM (crushed sandstone), beneath slab	1		1	1				1								
BH103_0.85-0.95	03/02/2020	Fill	0.1	AFM (sand with FeSt & ceramics)			1	1												
BH103_2.0-2.1	03/02/2020	Fill	0	AFM (sand with RB, bricks & ceramics), GWE			1	1				1								
BH104_0.8-0.9	03/02/2020	Fill	0.1	AFM (black sand with RB & tiles)	1		1	1				1								
BH104_1.6-1.7	03/02/2020	Fill	0.2	AFM (black sand with RB, tiles & metal)	1		1	1				1								
BH104_2.0-2.2	03/02/2020	Fill	0.1	AFM (black sand with RB), GWE	1															
BH105_0.4-0.5	31/01/2020	Fill	0.1	AFM (black sand with RB & slag)	1		1	1				1								
BH105_0.85-0.95	31/01/2020	Fill	0.1	AFM (orange-brown sand with FeSt, glass, ash, charcoal & ceramics)	1		1	1							1	1				
BH105_1.7-1.8	31/01/2020	Fill	0.1	AFM (orange sand with FeSt)			1	1							1					1
BH106_0.2-0.3	28/01/2020	Fill	1.7	AFM (sand with FeSt & slag)	1		1	1	1			1			1	1				
BH106_4.0-4.1	28/01/2020	Sandy Clay	3.2	Assess natural	1		1	1												
BH107_0.4-0.5	29/01/2020	Fill	0.2	AFM (black-grey-orange sand with bricks)								1								
BH107_0.5-0.6	29/01/2020	Fill	0.3	AFM (sand with slag, brick & ceramics)	1		1	1												
BH107_1.5-1.7	29/01/2020	Fill	3.5	AFM (sand with glass, ash, ceramics & bricks), GWE	1		1	1							1			1		1
BH108_0.15-0.25	28/01/2020	Fill	1.7	AFM (sand with RB)								1								
BH108_0.35-0.45	28/01/2020	Fill	1.5	AFM (sand with RB, FeSt, ceramics & glass)			1	1				1								
BH108_1.3-1.4	28/01/2020	Fill	2.4	AFM (sand with ash & slag)	1		1	1				1			1			1	1	1
BH108_2.3-2.4	28/01/2020	Fill	0.7	AFM (red-orange sand with FeSt & slag)	1		1	1				1								
BH108_4.1-4.2	28/01/2020	Fill	3.8	AFM (red sand with FeSt & slag), PID	1															
BH109_0.3-0.4	29/01/2020	Fill	0.3	AFM (dark grey sand with brick, ceramics & FeSt)	1		1	1				1								
BH109_0.9-1.0	29/01/2020	Fill	0.4	AFM (crushed SST with glass, ceramics & slag)	1		1	1							1			1		1
BH110_0.35-0.36	29/01/2020	Fill	0.5	AFM (dark grey sand with FeSt & slag)	1		1	1	1			1								
BH110_0.4-0.6	29/01/2020	Fill	0.4	AFM (dark grey sand with FeSt, slag, metal, brick & glass)			1	1				1								
BH110_1.2-1.3	29/01/2020	Fill	0.7	AFM (dark grey sand with SST)			1	1												
BH111_0.3-0.4	30/01/2020	Fill	0.2	AFM (sand with FeSt, RB, slag & ceramics)	1		1	1				1								
BH111_0.65-0.75	30/01/2020	Fill	0.1	AFM (red-brown sand with FeSt & ceramics)			1	1				1			1					
BH113_0.2-0.3	29/01/2020	Fill	1.3	AFM (dark brown sand with slag & tiles)	1		1	1	1			1								

Table 1 - Sample Register

Sample Location & Depth	Sample Date	Sample Type	PID (ppm)	Rationale (fill description)	Analyses															
					TRH C6-C40, BTEXN	TRH C6-C10, BTEX(N)	PAH	Metals	OCP, OPP, PCB	Phenols	Asbestos	Asbestos (quant)	VHC	TCLP - As	TCLP - Pb	TCLP - B(a)P	TCLP - Hg	TCLP - Cr VI	TCLP - Cd	TCLP - Ni
BH113_0.6-0.7	29/01/2020	Fill	0.2	AFM (yellow/brown and orange sand with FeSt & glass)	1		1	1				1								
BH114_0.45-0.55	03/02/2020	Fill	0.1	AFM (black sand with FeSt, slag, bricks, ceramics & plastic)	1		1	1				1								
BH114_1.3-1.4	03/02/2020	Fill	0	AFM (brown sand with RB & FeSt), GWE	1		1	1										1		
BH115_0.6-0.7	29/01/2020	Fill	0.2	AFM (dark grey sand with FeSt and slag)	1		1	1	1			1								
BH115_2.5-2.6	29/01/2020	Fill	NR	AFM (brown sand with RB, slag & ceramics)	1		1	1						1	1					1
BH116_0.3-0.4	30/01/2020	Fill	0.2	AFM (brown sand with FeSt, brick & glass)	1		1	1	1			1								
BH116_0.6-0.65	30/01/2020	Fill	0.3	AFM (black sand with slag, FeSt, brick & SST)	1		1	1				1								
BH117_0.3-0.4	30/01/2020	Fill	0.1	AFM (orange & grey sand with FeSt & SST)			1	1				1								
BH117_1.3-1.4	30/01/2020	Fill	0.4	AFM (black sand with FeSt, metal & glass)			1	1				1								
BH117_2.2-2.3	30/01/2020	Fill	0.3	AFM (brown sand with RB, metal, glass & ceramics), GWE	1		1	1								1				
Subtotal, Primary Soil Samples					**63**	**0**	**72**	**88**	**17**	**3**	**18**	**28**	**3**	**3**	**11**	**6**	**2**	**5**	**1**	**6**
QC100	21/08/2015	Split	-	BH22_4.5-4.7	1		1	1												
QC201	21/08/2015	Split	-	BH07B_1.2-1.3	1		1	1	1	1			1							
QC105	29/01/2020	Split	-	BH107_0.5-0.6	1		1	1												
QC102	29/01/2020	Split	-	BH109_0.9-1.0	1		1	1												
QC106	29/01/2020	Split	-	BH113_0.2-0.3	1		1	1												
QC101	21/08/2015	Duplicate	-	BH09_4.0-4.2			1	1												
QC200	20/08/2015	Duplicate	-	BH05_1.0-1.1			1	1												
QC202	21/08/2015	Duplicate	-	BH21_0.7-0.8	1		1	1												
QC102	21/08/2015	Duplicate	-	BH01_3.8-3.9	1															
QC111	29/08/2015	Duplicate	-	BH03_1.0-1.2	1		1	1												
QC111	03/02/2020	Duplicate	-	BH104_1.6-1.7	1		1	1												
QC100	28/01/2020	Duplicate	-	BH106_0.2-0.3	1		1	1	1											
QC114	03/02/2020	Duplicate	-	BH114_0.45-0.55	1		1	1												
Sub-total, Split Duplicates					5	0	5	5	1	1	0	0	1	0	0	0	0	0	0	0
Sub-total, Duplicates					6	0	7	7	1	0	0	0	0	0	0	0	0	0	0	0
Total Soil Samples					**74**	**0**	**84**	**100**	**19**	**4**	**18**	**28**	**4**	**3**	**11**	**6**	**2**	**5**	**1**	**6**
MW01	31/08/2015	Primary	-		1		1	1					1							
MW16	31/08/2015	Primary	-		1		1	1					1							
MW17	31/08/2015	Primary	-	Assess Groundwater	1		1	1					1							
MW19	31/08/2015	Primary	-		1		1	1					1							
MW21	31/08/2015	Primary	-		1		1	1					1							
QC200	31/08/2015	Split	-	MW01	1		1	1					1							
Total Groundwater Samples, 2015 GME					6	0	6	6	0	0	0	0	6	0	0	0	0	0	0	0
MW01	12/02/2020	Primary	-		1			1					1							
MW16	12/02/2020	Primary	-		1			1					1							
MW17	12/02/2020	Primary	-		1			1					1							
MW19	12/02/2020	Primary	-	Assess Groundwater	1			1					1							
MW21	12/02/2020	Primary	-		1			1					1							
MW102	12/02/2020	Primary	-		1			1					1							
MW105	12/02/2020	Primary	-		1			1					1							
MW115	12/02/2020	Primary	-		1			1					1							
QC306	12/02/2020	Split	-	MW102	1			1					1							
Total Groundwater Samples, 2020 GME					9	0	0	9	0	0	0	0	9	0	0	0	0	0	0	0
TB	31/08/2015	TB	-	QC - groundwater sampling		1														
QC201	31/08/2015	Rinsate	-	QC - groundwater sampling	1															
QC300	28/01/2020	TB	-	QC - soil sampling		1														
QC302	30/01/2020	Rinsate	-	QC - soil sampling		1														
QC303	31/01/2020	Rinsate	-	QC - soil sampling		1														
QC304	03/02/2020	Rinsate	-	QC - soil sampling		1														
QC304	12/02/2020	Rinsate	-	QC - groundwater sampling		1														
QC305	12/02/2020	TB	-	QC - groundwater sampling		1														

Notes:
AFM = assess fill material TB = trip blank GWE = groundwater encountered
NR = not recorded FeSt = ironstone-like gravels (red-orange). Possible foundry/casting sands
RB = road base gravel SST = sandstone HCO = hydrocarbon odour

Table 2 - Groundwater Elevation

Well ID	Easting	Northing	Gauging Date	Total Well Depth	TOC Elevation	SWL	GWE
				(m btoc)	(mAHD)	(m btoc)	(mAHD)
MW01	331543.404	6245408.202	31/08/2015	3.454	2.12	1.096	1.024
MW16	331688.598	6245470.9	31/08/2015	4.441	4.15	3.16	0.990
MW17	331700.452	6245465.954	31/08/2015	4.091	4.04	3.065	0.975
MW19	331743.935	6245525.412	31/08/2015	3.920	3.44	2.449	0.991
MW21	331791.781	6245494.973	31/08/2015	3.895	3.04	2.026	1.014
MW01	331543.404	6245408.202	11/02/2020	3.275	2.12	0.677	1.443
MW16	331688.598	6245470.9	11/02/2020	4.22	4.15	2.749	1.401
MW17	331700.452	6245465.954	11/02/2020	3.99	4.04	2.647	1.393
MW19	331743.935	6245525.412	11/02/2020	3.425	3.44	2.034	1.406
MW21	331791.781	6245494.973	11/02/2020	3.415	3.04	1.643	1.397
MW102	331627.004	6245313.221	11/02/2020	4.42	2.3	0.941	1.359
MW105	331627.489	6245463.586	11/02/2020	4.39	3.202	1.811	1.391
MW115	331673.5	6245404.4	11/02/2020	4.42	2.843	1.438	1.405

Notes
m btoc = metres below top of casing
SWL = standing water level
TOC = top of casing
AHD = Australian Height Datum

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Table 3 - Geochemical Parameters

Well ID	Date	Well Depth (m)	Pump Intake Depth (m)	Purge Volume (L)	DO (mg/L)	EC (µScm-1)	pH	Eh (mV)	Temp' (°C)	Comments
Development										
MW01	25/08/2015	3.454	3.2	10	0.48	1019	7.05	102.2	19.5	Clear at 3L water removed, paramaters stabilised at 10L water removed
MW16	25/08/2015	4.441	4.2	11	1.36	2415	6.94	152.9	22.0	Purged dry at 4L, wait for recharge and again at 8L (sample tubing blocked with PVC cuttings). Parameters stabilised and water clear at 11L water removed.
MW17	25/08/2015	4.091	3.9	9	0.18	1357	6.82	108.0	21.8	Parameters stabilised and water clear at 9L water removed
MW19	25/08/2015	3.92	3.7	9	0.28	1067	6.71	283.7	19.0	Parameters stabilised and water clear at 9L water removed
MW21	25/08/2015	3.895	3.6	8	0.96	957	7.04	160.1	17.7	Parameters stabilised and water clear at 8L water removed
MW102	7/02/2020	4.28	~4	80	0.20	1840	7.29	81.9	23.3	Parameters stabilised and water clear at 80L water removed
MW105	7/02/2020	4.39	~4.1	45	-	-	-	-	-	Parameters not measured due to high rainfall and potential for ingress of surface water into monitoring well. Turbidity decreased during purging.
MW115	7/02/2020	4.398	~4.1	60	0.54	909	6.74	146.6	23.4	Parameters stabilised and water clear at 60L water removed
Purging										
MW01	31/08/2015	3.454	NR	3	-	1000	6.79	140.0	19.6	Clear, low turbidity, no odour or sheen observed. DO probe malfunction
MW16	31/08/2015	4.441	NR	4	0.92	2206	6.88	222.6	21.7	Clear, low turbidity, no odour or sheen observed
MW17	31/08/2015	4.091	NR	3	-	1259	6.68	158.4	21.0	Clear, low turbidity, no odour or sheen observed. DO probe malfunction
MW19	31/08/2015	3.92	NR	4	0.02	820	6.58	268.4	18.4	Clear, low turbidity, no odour or sheen observed
MW21	31/08/2015	3.895	NR	4.0	0.07	806	6.73	216.2	16.9	Clear, low turbidity, no odour or sheen observed
MW01	12/02/2020	3.275	2.7	3.0	0.05	485.7	6.95	164.9	25.7	No odour, clear, low turbidity
MW16	12/02/2020	4.22	2.7	3.0	1.7	1385	6.54	316.4	24.1	No odour, clear, low turbidity
MW17	12/02/2020	3.99	3.5	2.0	0.21	1334	6.72	300.4	24	No odour, clear, low turbidity
MW19	12/02/2020	3.425	3	1.5	2.35	1655	6.73	297.9	24.8	No odour, clear, low turbidity
MW21	12/02/2020	3.415	2.9	4.0	1.3	549	6.87	213.7	24.8	No odour, clear, low turbidity
MW102	12/02/2020	4.42	3.9	5.5	0	3053	7.51	32.4	23	Hydrogen sulphide odour, light grey, low turbidity
MW105	12/02/2020	4.39	3.9	3.0	0.34	1403	6.59	204.1	24.6	No odour, clear, low turbidity
MW115	12/02/2020	4.42	4	2.5	0.14	1079	6.84	134.9	23.1	No odour, clear, low turbidity

Notes
DO = dissolved oxygen
EC = electrical conductivity
Eh = Redox potential
Redox Correction factor = +205 mV (applied to field readings)

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Table 4 - Soil Results

Sample Location & Depth	Sample Date	Sample Type	PID	BTEX				TRH						PAH				Metals							OCP and OPP											VHC				Phenols		PCB
				Benzene	Toluene	Ethylbenzene	Xylenes	C6 - C10	C6 - C10 minus BTEX (F1)	>C10 - C16	>C10 - C16 minus Naphthalene (F2)	>C16 - C34 (F3)	>C34 - C40 (F4)	Naphthalene	Benzo(a)pyrene	Benzo(a)pyrene TEQ (LOR)	Sum of PAH	Arsenic	Cadmium	Chromium	Copper	Lead	Nickel	Zinc	Mercury	Aldrin + Dieldrin	Chlordane	Endosulfan	Endrin	DDD + DDE + DDT	Heptachlor	Hexachlorobenzene (HCB)	Methoxychlor	Chlorpyrifos	Tetrachloroethene (PCE)	Trichloroethene (TCE)	Vinyl chloride	Carbon Tetrachloride	Phenol	Pentachlorophenol	PCB
ASC NEPM 2013 - HIL D																40	4000	3000	900	3600	240000	1500	6000	400000	730	45	530	2000	100	3600	50	80	2500	2000					240000	660	7
HSL D, Vapour Intrusion (sand)			0-<1m	3	NL	NL	230		260		NL			NL																									
			1m-<2m	3	NL	NL	NL		370		NL			NL																										
			2m-<4m	3	NL	NL	NL		630		NL			NL																										
			> 4m	3	NL	NL	NL		NL		NL			NL																										
CRC Care IMW, DIRECT CONTACT				1100	280000	85000	230000		82000		82000	85000	120000	29000																										
CRC Care HSL D, DIRECT CONTACT				430	99000	27000	81000		26000		20000	27000	38000	11000																										
NSW EPA (2014) - GSW (CT1)				10	288	600	1000								0.8		200	100	20	100		100	40		4	<50	<50	60	<50	<50	<50	<50	<50	4	14	10	4	10	288	<50	<50
NSW EPA (2014) - RSW (CT2)				40	1152	2400	4000								3.2		800	400	80	400		400	160		16	<50	<50	240	<50	<50	<50	<50		16	56	40	16	40	1152	<50	<50
BH01_1.0-1.1	21/08/2015	Fill	-	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	910	240	0.6	29.1	41.9	278	14	2	58	3040	1510	26	1560	2.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05							<0.1
BH01_3.8-3.9	21/08/2015	Sandy Clay	-	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<0.5	<0.5	1.2	<0.5																							
QC102	21/08/2015	BH01_3.8-3.9		<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100																										
RPD				nc	nc	nc	nc	nc	nc	nc	nc	nc	nc																										
BH02_0.4-0.5	29/08/2015	Fill	0.2	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<0.5	<0.5	1.2	<0.5	<5	<1	7	140	79	3	106	0.2														
BH02_2.0-2.1	29/08/2015	Fill	2.9															59	<1	33	783	1410	28	815	0.6														
BH02_3.0-3.1	29/08/2015	Silty Clay	14.1	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	380	160																										
BH03_0.2-0.3	29/08/2015	Fill	2.1											<0.5	0.9	1.7	10.7	<5	<1	8	228	338	6	279	1.0														
BH03_1.0-1.2	29/08/2015	Fill	19.5	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	380	110	0.6	6.9	10.1	94.0	6	<1	12	114	731	9	268	0.6														
QC111	29/08/2015	BH03_1.0-1.2		<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	310	<100	<0.5	5.0	7.2	63.3	60	7	68	2240	2230	107	3460	1.0														
RPD				nc	nc	nc	nc	nc	nc	nc	nc	20	nc	nc	**32**	**34**	**39**	**164**	nc	**140**	**181**	**101**	**169**	**171**	**50**														
BH03_3.0-3.1	29/08/2015	Fill	0.1	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100					17	<1	23	14	31	12	85	<0.1														
BH04_0.5-0.6	20/08/2015	Fill	0.5	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	100	<100	<0.5	1.6	2.6	15.7	52	2	28	218	1030	48	1590	1.0														
BH04_1.0-1.1	20/08/2015	Fill	0.6											0.8	13.4	19.8	158	311	1	105	293	10400	24	1170	1.6														
BH04_2.3-2.4	20/08/2015	Silty Clay	0.1	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	230	240					14	<1	26	17	67	4	46	<0.1														
BH05_0.5-0.6	20/08/2015	Fill	1.8	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	140	<100	<0.5	1.1	2.0	11.2	13	3	20	296	1470	26	4070	0.9	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.5	<0.5	<5	<0.5	<0.5	<2	<0.1
BH05_1.0-1.1	20/08/2015	Fill	0.4											<0.5	1.3	2.2	12.5	19	<1	70	321	1000	27	750	2.5														
QC200	20/08/2015	BH05_1.0-1.1												<0.5	<0.5	1.3	4.1	76	4	69	634	3180	42	890	15.2														
RPD														nc	nc	**51**	**101**	**120**	nc	1	**66**	**104**	43	17	**144**														
BH05_2.3-2.4	20/08/2015	Sandy Silt	0.7	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	210	<100					12	<1	14	86	113	4	522	<0.1														
BH06_1.0-1.1	21/08/2015	Fill	0.2															13	<1	8	71	313	6	366	0.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05							<0.1
BH07A_0.5-0.6	20/08/2015	Fill	0.1											<0.5	0.6	1.3	3.0	84	13	121	4410	6310	80	20400	0.7	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<1.0	<0.25							<0.1
BH07B_1.2-1.3	21/08/2015	Fill	0.9	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	850	180	<0.5	1.9	3.0	16.0	8	2	128	85	7530	13	1120	6.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05							<0.1
QC201	21/08/2015	BH07B_1.2-1.3		<0.2	<0.5	<1	<2	<25	<25	<50	<50	730	170	<0.1	1.6	2.2	12	25	3	180	430	14000	30	2600	15	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<1	<1	<1	<5		<0.1
RPD				nc	nc	nc	nc	nc	nc	nc	nc	15	6	nc	17	**31**	29	**103**	40	34	**134**	**60**	**79**	**80**	**83**	nc	nc	nc	nc	nc	nc	nc	nc	nc							
BH07B_2.3-2.4	21/08/2015	Silty Clay	0.4	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	360	100					26	1	19	183	372	22	1460	0.6														
BH08_0.17-0.18	20/08/2015	Fill	0.5															19	1	24	1020	1060	23	1010	0.4	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05							<0.1
BH08_1.0-1.1	20/08/2015	Fill	0.2	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	350	<100	<0.5	0.7	1.5	8.9	52	3	33	396	1930	39	2630	0.7														
BH08_2.5-2.6	20/08/2015	Fill	0.3											<0.5	1.4	2.9	25.2	42	3	200	1280	1470	51	4830	3.4														
BH08_3.7-3.8	20/08/2015	Silty Sand	0.5	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	380	<100					18	<1	20	447	85	17	348	6.0														
BH09_0.25-0.35	21/08/2015	Fill	0.1											<0.5	<0.5	1.2	<0.5	<5	<1	6	7	6	<2	30	<0.1														
BH09_4.0-4.2	21/08/2015	Fill	0.4											<0.8	<0.8	1.2	<0.5	218	25	435	4340	3710	240	14200	2.7														
QC101	21/08/2015	BH09_4.0-4.2												<0.5	<0.5	1.2	<0.5	80	9	106	3150	3480	214	4780	0.8														
RPD														nc	nc	0	nc	**93**	**94**	**122**	32	6	11	**99**	**109**														
BH09_4.5-4.6	21/08/2015	Sandy Clay	390.1	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<0.8	<0.8	1.2	<0.5	19	<1	31	10	13	10	21	<0.1										<0.5	<0.5	<5	<0.5	<0.8	<2	
BH10_0.15-0.25	21/08/2015	Fill	0.1																							<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05							<0.1
BH10_4.0-4.1	21/08/2015	Clayey Sand	20.1	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100					26	<1	31	69	189	16	417	<0.1														
BH11_0.2-0.3	20/08/2015	Fill	0.1											<0.5	0.9	1.7	10.4	26	2	39	482	3480	96	1540	0.5														
BH11_2.3-2.4	20/08/2015	Fill	0.8	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	150	<100	<0.5	<0.5	1.2	<0.5	56	5	125	23300	2590	226	6980	0.1														
BH11_3.3-3.4	20/08/2015	Sandy Silt	0.5	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	650	310					22	<1	23	78	142	15	550	0.3														
BH12_0.15-0.25	21/08/2015	Fill	0.1											<0.5	1.1	2.0	11.1	41	6	36	2460	2290	75	5200	1.7														
BH12_1.0-1.1	21/08/2015	Fill	0.1															34	2	47	12400	1530	57	2040	1.0														
BH12_3.6-3.7	21/08/2015	Fill	3.5	<0.2	<0.5	<0.5	<0.5	<10	<10	70	70	1660	430					385	9	36	576	2770	37	5750	0.9														
BH13_0.4-0.5	20/08/2015	Fill	0.1											<0.5	1.6	2.6	16.0	35	10	258	971	1420	58	3040	0.9														
BH13_3.6-3.7	20/08/2015	Silty Sand	6.6																							<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05							<0.1
BH14_0.45-0.55	21/08/2015	Fill	-																							<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05							<0.1
BH14_1.8-1.9	21/08/2015	Fill	0.6											<0.5	<0.5	1.2	<0.5	30	3	29	298	478	23	2060	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05							<0.1
BH14_4.0-4.1	21/08/2015	Sandy Clay	150.1	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100																						<0.5	<0.5	<5	<0.5	<0.5	<2	
BH15_0.4-0.5	21/08/2015	Fill	0.1											<0.5	<0.5	1.2	<0.5	<5	<1	100	28	5	89	46	<0.1														
BH16_0.7-0.8	21/08/2015	Fill	0	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<0.5	<0.5	1.2	<0.5	49	15	429	5480	2250	520	11600	0.4	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05							<0.1
BH16_2.0-2.1	22/08/2015	Fill	0.9	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	370	220					136	19	109	3520	3290	167	7710	20.4														
BH16_3.0-3.1	22/08/2015	Fill	4.3															71	10	182	7430	4370	254	14000	1.7														
BH17_1.0-1.1	21/08/2015	Fill	0.1	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100					62	16	54	26400	6060	1320	21400	0.1														
BH17_2.0-2.1	22/08/2015	Fill	15.2	<0.2	<0.5	<0.5	<0.5	16	16	2610	2610	22300	1620	<0.5	<0.5	1.2	8.7	62	4	607	12200	1150	738	2560	0.1														
BH18_0.7-0.8	29/08/2015	Fill	0	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<50	<0.5	1.2	<0.5	20	2	28	476	469	68	704	0.1														
BH18_2.0-2.1	29/08/2015	Fill	0.2												<0.5	1.2	<0.5	48	<1	63	294	1610	45	2240	<0.1														
BH19_2.0-2.2	22/08/2015	Fill	1.9	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	440	270					54	1	33	299	559	21	5700	0.7														
BH20_0.5-0.6	29/08/2015	Fill	0.2												<0.5	1.2	<0.5	<5	<1	8	10	29	6	53	<0.1														
BH20_1.0-1.1	29/08/2015	Fill	0.4												<0.5	1.2	<0.5	116	4	9	208	2030	41	4290	<0.1														
BH20_2.0-2.1	29/08/2015	Fill	0.3	<0.2	<0.5	<0.5	<0.5	<10	<10	140	140	3940	780	4860																										
BH21_0.7-0.8	21/08/2015	Fill	0.1	<0.2	<0.5	<0.5	<0.5	<10	<10	7440	7400	**47500**	10100	57.3	102	159	2170	31	1	12	155	234	23	367	0.3														
QC202	21/08/2015	BH21_0.7-0.8		<0.2	<0.5	<0.5	<0.5	<10	<10	3740	3720	**31900**	6230	50.0	106	158	2320	39	1	10	140	201	33	382	0.3														
RPD				nc	nc	nc	nc	nc	nc	**66**	**66**	**39**	**47**	14	4	1	7	23	0	18	10	15	36	4	0														
BH21_2.7-2.8	22/08/2015	Fill	0.2	0.9	<0.5	<0.5	<0.5	<10	<10	80	80	960	500					28	3	244	337	4430	86	3170	3.2														
BH21_3.0-3.1	22/08/2015	Sand	2.1	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	150	<100	<0.5	<0.5	1.2	<0.5	<5	<1	7	11	42	6	90	<0.1														
BH22_0.8-0.9	21/08/2015	Fill	0.1											4.6	50.9	64.1	699	357	1	19	444	554	12	862	0.8														
BH22_2.2-2.3	21/08/2015	Fill	0.1	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<0.5	<0.5	1.2	<0.5	119	3	29	550	6300	2700	14500	0.3														
BH22_4.5-4.7	21/08/2015	Sandy Clay	26.7	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<0.5	<0.5	1.2	<0.5	13	<1	20	6	14	7	26	<0.1														
QC100	21/08/2015	BH22_4.5-4.7		<0.2	<0.5	<1	<2	<25	<25	<50	<50	<100	<100	<0.1	<0.05	<0.5	<0.1	9	<0.4	11	8	29	6	64	<0.1														
RPD				nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	36	nc	**58**	29	**70**	15	**84**	nc														
BH100_0.7-0.8	03/02/2020	Fill	0	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	230	<100	<0.5	3.6	5.2	40.2	32	<1	116	180	1230	23	593	1.7														
BH100_0.8-0.9	03/02/2020	Fill	0.6	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<0.5	<0.5	1.2	<0.5	12	3	8	265	278	11	428	2.5														
BH101_0.16-0.26	31/01/2020	Fill	NR																							<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05							<0.1
BH101_0.7-0.8	31/01/2020	Fill	NR	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	230	<100	<0.5	0.7	1.5	6.2	59	4	50	1310	2490	81	2410	1.2														
BH101_2.2-2.3	31/01/2020	Fill	0	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	280	110	<0.5	2.0	3.1	18.7	56	6	153	1440	2430	138	3410	9.5														
BH102_0.3-0.4	31/01/2020	Fill	0.3											<0.5	<0.5	1.2	<0.5	<5	<1	5	23	71	3	49	0.1														
BH102_0.5-0.6	31/01/2020	Fill	0	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	200	<100	<0.5	3.3	4.7	32.3	9	<1	19	367	2010	12	712	56.4														
BH103_0.15-0.25	03/02/2020	Fill	0.1	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<0.5	<0.5	1.2	<0.5	<5	<1	6	10	19	3	31	<0.1														
BH103_0.85-0.95	03/02/2020	Fill	0.1											<0.5	4.6	6.5	50.8	40	<1	9	93	319	12	304	0.7														
BH103_2.0-2.1	03/02/2020	Fill	0.1											<0.5	3.4	5.1	31.8	66	13	34	2540	1090	39	17500	1.4														
BH104_0.8-0.9	03/02/2020	Fill	0.1	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	580	<100	<0.5	2.3	3.5	25.6	10	<1	8	53	171	19	170	0.7														
BH104_1.6-1.7	03/02/2020	Fill	0.2	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	1000	210	<0.5	3.6	5.2	36.5	31	5	42	540	1610	66	3720	1.1														
QC111	03/02/2020	BH104_1.6-1.7		<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	620	180	<0.5	3.1	4.6	29.9	35	4	32	685	1900	65	3350	1.2														
RPD				nc	nc	nc	nc	nc	nc	nc	nc	**47**	15	nc	15	12	20	12	22	27	24	17	2	10	9														

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Table 4 - Soil Results

Sample Location & Depth	Sample Date	Sample Type	PID	BTEX				TRH							PAH				Metals								OCP and OPP											VHC				Phenols		PCB
				Benzene	Toluene	Ethylbenzene	Xylenes	C6 - C10	C6 - C10 minus BTEX (F1)	>C10 - C16	>C10 - C16 minus Naphthalene (F2)	>C16 - C34 (F3)	>C34 - C40 (F4)	Naphthalene	Benzo(a)pyrene	Benzo(a)pyrene TEQ (LOR)	Sum of PAH	Arsenic	Cadmium	Chromium	Copper	Lead	Nickel	Zinc	Mercury	Aldrin + Dieldrin	Chlordane	Endosulfan	Endrin	DDD + DDE + DDT	Heptachlor	Hexachlorobenzene (HCB)	Methoxychlor	Chlorpyrifos	Tetrachloroethene (PCE)	Trichloroethene (TCE)	Vinyl chloride	Carbon Tetrachloride	Phenol	Pentachlorophenol	PCB
ASC NEPM 2013 - HIL D																40	4000	3000	900	3600	240000	1500	6000	400000	730	45	530	2000	100	3600	50	80	2500	2000					240000	660	7
HSL D, Vapour Intrusion (sand)			0-<1m	3	NL	NL	230		260		NL			NL																										
			1m-<2m	3	NL	NL	NL		370		NL			NL																											
			2m-<4m	3	NL	NL	NL		630		NL			NL																											
			> 4m	3	NL	NL	NL		NL		NL			NL																											
CRC Care IMW, DIRECT CONTACT				1100	280000	85000	230000		82000		82000	85000	120000	29000																										
CRC Care HSL D, DIRECT CONTACT				430	99000	27000	81000		26000		20000	27000	38000	11000																										
NSW EPA (2014) - GSW (CT1)				10	288	600	1000								0.8		200	100	20	100		100	40		4	<50	<50	60	<50	<50	<50	<50		4	14	10	4	10	288	<50	<50
NSW EPA (2014) - RSW (CT2)				40	1152	2400	4000								3.2		800	400	80	400		400	160		16	<50	<50	240	<50	<50	<50	<50		16	56	40	16	40	1152	<50	<50
BH104_2.0-2.2	03/02/2020	Fill	0.1	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	930	200	<1																											
BH105_0.4-0.5	31/01/2020	Fill	0.1	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	210	140	<0.5	<0.5	1.2	<0.5	8	<1	16	336	606	20	676	0.1															
BH105_0.85-0.95	31/01/2020	Fill	0.1	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	330	150	<0.5	3.4	5.3	31.2	25	3	20	2130	2260	135	4890	0.4															
BH105_1.7-1.8	31/01/2020	Fill	0.1											<0.5	<0.5	1.2	<0.5	66	7	76	431	11800	283	1320	0.3															
BH106_0.2-0.3	28/01/2020	Fill	1.7	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	180	<100	<0.5	1.9	2.9	14.8	6	2	9	86	232	12	426	0.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05							<0.1
QC100	28/01/2020	BH106_0.2-0.3		<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	170	<100	<0.5	3.1	4.5	28.9	6	<1	8	46	113	10	106	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05							<0.1
RPD				nc	nc	nc	nc	nc	nc	nc	nc	6	nc	nc	**48**	**43**	**65**	0	nc	12	**61**	**69**	18	**120**	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc							nc
BH106_4.0-4.1	28/01/2020	Sandy Clay	3.2	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<0.5	<0.5	1.2	<0.5	8	<1	6	7	18	3	111	<0.1															
BH107_0.5-0.6	28/01/2020	Fill	0.3	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	150	<100	<0.5	<0.5	1.2	<0.5	8	6	29	785	280	179	307	0.6															
QC 105	29/01/2020	BH107_0.5-0.6		<0.2	<0.5	<1	<3	<25	<25	<50	<50	140	<100	<0.1	0.1	<0.5	1.6	7	4.4	22	530	260	170	350	0.4															
RPD				nc	nc	nc	nc	nc	nc	nc	nc	7	nc	nc	nc	nc	nc	13	**31**	27	**39**	7	5	13	**40**															
BH107_1.5-1.7	28/01/2020	Fill	3.5	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<0.5	<0.5	1.2	<0.5	94	2	180	986	5350	185	1110	1.0															
BH108_0.35-0.45	28/01/2020	Fill	1.5											<0.5	<0.5	1.2	<0.5	6	<1	46	171	255	95	238	<0.1															
BH108_1.3-1.4	28/01/2020	Fill	2.4	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<0.5	<0.5	1.2	<0.5	30	96	320	15500	3160	823	23400	<0.1															
BH108_2.3-2.4	28/01/2020	Fill	0.7	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<0.5	<0.5	1.2	<0.5	48	5	300	5050	3880	65	4280	<0.1															
BH108_4.1-4.2	28/01/2020	Fill	3.8	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100																											
BH109_0.3-0.4	28/01/2020	Fill	0.3	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	160	<100	<0.5	<0.5	1.2	<0.5	9	1	16	369	435	49	820	0.4															
BH109_0.9-1.0	28/01/2020	Fill	0.4	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<0.5	<0.5	1.2	<0.5	28	13	241	10800	3780	241	12400	2.2															
QC 102	29/01/2020	BH109_0.9-1.0		<0.2	<0.5	<1	<3	<25	<25	<50	<50	<100	<100	<0.1	<0.05	<0.5	<0.05	44	10	260	42000	4500	230	12000	2.8															
RPD				nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	**44**	26	8	**118**	17	5	3	24															
BH110_0.35-0.36	28/01/2020	Fill	0.5	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	740	340	<0.5	1.8	2.9	19.2	18	5	30	395	2520	71	4030	0.4	1.32	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05							<0.1
BH110_0.4-0.6	28/01/2020	Fill	0.4											<0.5	<0.5	1.2	6.3	48	6	60	1260	3960	91	2120	1.4															
BH110_1.2-1.3	28/01/2020	Fill	0.7											<0.5	2.8	4.1	25.7	32	2	20	336	1350	16	828	0.2															
BH111_0.3-0.4	30/01/2020	Fill	0.2	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<0.5	<0.5	1.2	<0.5	41	7	210	3350	4530	337	3400	<0.1															
BH111_0.65-0.75	30/01/2020	Fill	0.1											<0.5	<0.5	1.2	<0.5	102	12	120	4920	8960	179	14000	<0.1															
BH113_0.2-0.3	29/01/2020	Fill	1.3	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<0.5	<0.5	1.2	<0.5	46	2	28	776	4840	69	1160	1.0	0.34	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05							<0.1
QC 106	29/01/2020	BH113_0.2-0.3		<0.2	<0.5	<1	<3	<25	<25	<50	<50	210	<100	<0.1	0.5	0.7	4.5	12	1	16	110	330	17	450	0.4															
RPD				nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	**53**	nc	**117**	**67**	**55**	**150**	**174**	**121**	**88**	**86**															
BH113_0.6-0.7	29/01/2020	Fill	0.2	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	240	<100	<0.5	<0.5	1.2	1.5	18	1	22	732	336	21	752	0.4															
BH114_0.45-0.55	03/02/2020	Fill	0.1	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	390	110	<0.5	0.6	1.4	3.6	30	16	186	1190	4520	592	2890	1.0															
QC114	03/02/2020	BH114_0.45-0.55		<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	290	<100	<0.5	<0.5	1.2	2.1	33	55	234	1570	6150	456	3310	1.3															
RPD				nc	nc	nc	nc	nc	nc	nc	nc	29	nc	nc	nc	15	**53**	10	**110**	23	28	**31**	26	14	26															
BH114_1.3-1.4	3/02/2020	Fill	0	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	240	<100	<0.5	<0.5	1.2	<0.5	55	23	1240	2870	4600	885	9880	2.8															
BH115_0.6-0.7	29/01/2020	Fill	0.2	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	170	<100	<0.5	<0.5	1.2	1.0	45	1	90	407	522	160	776	0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05							<0.1
BH115_2.5-2.6	29/01/2020	Fill	NR	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<0.5	<0.5	1.2	<0.5	117	13	38	872	6390	145	2930	<0.1															
BH116_0.3-0.4	30/01/2020	Fill	0.2	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<0.5	<0.5	1.2	<0.5	23	<1	11	83	192	20	217	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05							<0.1
BH116_0.6-0.65	30/01/2020	Fill	0.3	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	180	<100	<0.5	0.6	1.3	3.2	32	<1	26	384	1280	28	915	0.6															
BH117_0.3-0.4	30/01/2020	Fill	0.1											<0.5	<0.5	1.2	<0.5	<5	<1	6	6	30	8	21	<0.1															
BH117_1.3-1.4	30/01/2020	Fill	0.4											<0.5	6.6	9.6	62.3	27	2	51	964	2260	55	1430	2.0															
BH117_2.2-2.3	30/01/2020	Fill	0.3	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	1310	260	<0.5	8.7	12.6	95.5	52	7	90	1250	2240	64	3720	1.0															

n samples				74						74					84			100							19									4				4		19
n > criteria				0				n/a	0	n/a	0	**2**	0	0	n/a	**4**	0	0	0	0	0	**46**	0	0	0								0				n/a		0		0
minimum				<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<0.5	<0.5	<0.5	<0.5	<5	<0.4	6	6	5	<2	21	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.5	<0.5	<1	<0.5	<0.5	<2	<0.1
maximum				0.9	<0.5	<1	<2	<25	16	7440	7400	47500	10100	4860	106	159	2320	385	96	1240	42000	14000	2700	23400	56.4	1.32	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.25	<1	<1	<5	<1	<5	<2	<0.1

Notes
Results = mg/kg
LOR = limit of reporting
< # = not detected above LOR
RPD = Relative Percent Difference
nc = not calculated, result(s) < LOR
Bold RPD = RPD > DQI
HSL D / HIL D = commercial/industrial land use
Shade + Bold = result > criteria
NL = not limiting

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Table 5 - Asbestos

Sample Location_Depth	Sample Date	Sample Type	Asbestos Detected	Asbestos (trace)(fibres)	Asbestos Type	Asbestos Containing Material (as 15% Asbestos in ACM >7mm)	Asbestos (Fines and Fibrous FA+AF)	Description
ASC NEPM 2013 - HSL D						**0.05**	**0.001**	
		Units	g/kg	Fibres		% w/w	% w/w	
		LOR	0.1	5		0.01	0.001	
BH01_0.3-0.4	21/08/2015	Fill	**Yes**		Ch			One loose bundle of friable asbestos fibres approximately 3 x 1 x 0.5mm.
BH02_0.4-0.5	29/08/2015	Fill	No					
BH03_0.2-0.3	29/08/2015	Fill	No					
BH03_1.0-1.2	29/08/2015	Fill	**Yes**		Ch			Several friable asbestos fibre bundles approx 5 x 2 x 2mm
BH06_1.0-1.1	21/08/2015	Fill	No					
BH07A_0.5-0.6	20/08/2015	Fill	**Yes**		Ch			One loose bundle of friable asbestos fibres approximately 4 x 1 x 0.5mm.
BH07B_1.2-1.3	21/08/2015	Fill	No					
BH12_1.8-1.9	21/08/2015	Fill	No					
BH15_0.4-0.5	21/08/2015	Fill	No					
BH18_0.7-0.8	29/08/2015	Fill	No					
BH20_0.5-0.6	29/08/2015	Fill	No					
BH20_1.0-1.1	29/08/2015	Fill	No					
BH21_0.7-0.8	21/08/2015	Fill	**Yes**		Ch			Several pieces of heavily degraded and friable asbestos fibre board approximately 60 x 30 x 3mm. Soil debris containing several loose bundles of friable asbestos fibres approximately 2 x 1 x 0.5mm.
BH22_0.3-0.4	21/08/2015	Fill	**Yes**		Ch, Am			Two pieces of bonded abestos cement sheeting approximately 45 x 35 x 5mm plus several pieces of friable asbestos cement sheeting approximately 4 x 4 x
BH22_0.45	21/08/2015	Fragment	**Yes**		Ch, Am			One piece of bonded asbestos cement sheeting approx 90 x 60 x 5 mm.
SS01	29/08/2015	Fill	**Yes**		Ch, Am			Two pieces of friable asbestos fibre board approx 4 x 3 x 2 mm and several loose bundles of friable asbestos fibres approx 2 x 1 x 0.5 mm.
SS02	29/08/2015	Fill	**Yes**		Ch, Cr			Four pieces of bonded asbestos cement sheeting approx 40 x 40 x 5 mm, several pieces of friable asbestos cement sheeting approx 7 x 6 x 4 mm and several loose bundles of friable asbestos fibres approx 2 x 1 x 0.5 mm.
SS04-FRAG	29/08/2015	Fragment	**Yes**		Ch, Am			Five pieces of bonded asbestos cement sheeting approx 50 x 30 x 5 mm.
BH100_0.7-0.8	03/02/2020	Fill	No	No		<0.01	<0.001	
BH100_0.8-0.9	03/02/2020	Fill	No	No		<0.01	<0.001	
BH101_1.3-1.4	31/01/2020	Fill	**Yes**	No	Ch	<0.01	**0.031**	Many large asbestos fibre bundles approximately 10x4x2mm.
BH102_0.5-0.6	31/01/2020	Fill	No	No		<0.01	<0.001	
BH103_0.15-0.25	03/02/2020	Fill	No	No		<0.01	<0.001	
BH103_2.0-2.1	03/02/2020	Fill	No	No		<0.01	<0.001	
BH104_0.8-0.9	03/02/2020	Fill	No	No		<0.01	<0.001	
BH104_1.6-1.7	03/02/2020	Fill	No	No		<0.01	<0.001	
BH105_0.4-0.5	31/01/2020	Fill	No	No		<0.01	<0.001	
BH106_0.2-0.3	28/01/2020	Fill	No	No		<0.01	<0.001	
BH107_0.4-0.5	28/01/2020	Fill	**No***	No	Ch	<0.01	**0.002**	One fragment of degraded asbestos fibre board approximately 10x5x2 mm.
BH108_0.15-0.25	28/01/2020	Fill	No	No		<0.01	<0.001	
BH108_0.35-0.45	28/01/2020	Fill	No	No		<0.01	<0.001	
BH108_1.3-1.4	28/01/2020	Fill	No	No		<0.01	<0.001	
BH108_2.3-2.4	28/01/2020	Fill	No	No		<0.01	<0.001	
BH109_0.3-0.4	28/01/2020	Fill	**Yes**	No	Ch, Am, Cr	<0.01	**0.029**	Many fragments of degraded asbestos cement sheeting and large loose asbestos fibre bundles approximately 10x5x2 mm.

Table 5 - Asbestos

Sample Location_Depth	Sample Date	Sample Type	Asbestos Detected	Asbestos (trace)(fibres)	Asbestos Type	Asbestos Containing Material (as 15% Asbestos in ACM >7mm)	Asbestos (Fines and Fibrous FA+AF)	Description
ASC NEPM 2013 - HSL D						**0.05**	**0.001**	
		Units	g/kg	Fibres		% w/w	% w/w	
		LOR	0.1	5		0.01	0.001	
BH110_0.35-0.36	28/01/2020	Fill	**Yes**	No	Ch, Am, Cr	**0.50**	**0.020**	Two pieces of asbestos cement sheeting approximately 40x30x5 mm, one fragment of asbestos cement debris approximately 10x5x2 mm and loose asbestos fibre bundles.
BH110_0.4-0.6	28/01/2020	Fill	**Yes**	Yes	Ch, Am, Cr	0.03	**0.038**	Two pieces of asbestos cement sheeting approximately 20x15x2 mm and plenty of loose asbestos fibre bundles throughout.
BH111_0.3-0.4	30/01/2020	Fill	No	No		<0.01	<0.001	
BH111_0.65-0.75	30/01/2020	Fill	No	No		<0.01	<0.001	
BH113_0.2-0.3	29/01/2020	Fill	**Yes**	No	Ch	<0.01	**0.012**	Several fragments of degraded asbestos fibre board debris and several loose asbestos fibre bundles.
BH113_0.6-0.7	29/01/2020	Fill	No	No		<0.01	<0.001	
BH114_0.45-0.55	03/02/2020	Fill	**Yes**	No	Ch, Am	**0.20**	**0.110**	One piece of fibrous asbestos fibre board approximately 20x10x5 mm, several pieces of asbestos cement sheeting approximately 30x30x5 mm and plenty of smaller fragments of fibrous asbestos fibre board.
BH115_0.6-0.7	29/01/2020	Fill	**Yes**	No	Ch, Am	<0.01	**0.011**	One piece of asbestos rope-like material approximately 15x2x2 mm and one piece of asbestos cement sheeting approximately 5x5x2 mm with loose asbestos fibre bundles.
BH116_0.3-0.4	30/01/2020	Fill	No	No		<0.01	<0.001	
BH116_0.6-0.65	30/01/2020	Fill	No	No		<0.01	<0.001	
BH117_0.3-0.4	30/01/2020	Fill	No	No		<0.01	<0.001	
BH117_1.3-1.4	30/01/2020	Fill	**No***	No	Ch	<0.01	<0.001	One asbestos fibre bundle approximately 5x1x0.5 mm.

Notes
LOR = limit of reporting
< # = not detected above LOR
HSL D = commercial/industrial land use
Shade + Bold = result > HSL D
Not applicable due to the laboratory method
Ch = chrysotile, Cr = crocidolite, A = amosite
No* = asbestos present at concentrations below the LOR

n samples	28	28
n > criteria	**2**	**8**

NB: n samples and results > criteria applies to 2020 samples only

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Table 6 - MLs and ESLs

Sample Location & Depth	Sample Date	Sample Type	PID	BTEX				TRH					
				Benzene	Toluene	Ethylbenzene	Xylenes	C6 - C10	C6 - C10 minus BTEX (F1)	>C10 - C16	>C10 - C16 minus Naphthalene (F2)	>C16 - C34 (F3)	>C34 - C40 (F4)
ESL - coarse soil (C/I)				**75**	**135**	**165**	**180**		**215**		**170**	**1700**	**3300**
Management Limits - coarse soil (C/I)									**700**		**1000**	**3500**	**10000**
BH01_1.0-1.1	21/08/2015	Fill	-	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	910	240
BH01_3.8-3.9	21/08/2015	Sandy Clay	-	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100
QC102	21/08/2015	BH01_3.8-3.9		<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100
BH02_0.4-0.5	29/08/2015	Fill	0.2	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100
BH02_3.0-3.1	29/08/2015	Silty Clay	14.1	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	380	160
BH03_3.0-3.1	29/08/2015	Fill	0.1	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100
BH03_1.0-1.2	29/08/2015	Sandy Clay	19.5	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	380	110
QC111	29/08/2015	BH03_1.0-1.2		<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	310	<100
BH04_0.5-0.6	20/08/2015	Fill	0.5	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	100	<100
BH04_2.3-2.4	20/08/2015	Silty Clay	0.1	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	230	240
BH05_0.5-0.6	20/08/2015	Fill	1.8	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	140	<100
BH05_2.3-2.4	20/08/2015	Sandy Silt	0.7	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	210	<100
BH07B_1.2-1.3	21/08/2015	Fill	0.9	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	850	180
QC201	21/08/2015	BH07B_1.2-1.3		<0.2	<0.5	<1	<2	<25	<25	<50	<50	730	170
BH07B_2.3-2.4	21/08/2015	Silty Clay	0.4	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	360	100
BH08_1.0-1.1	20/08/2015	Fill	0.2	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	350	<100
BH08_3.7-3.8	20/08/2015	Silty Sand	0.5	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	380	<100
BH09_4.5-4.6	21/08/2015	Sandy Clay	390.1	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100
BH10_4.0-4.1	21/08/2015	Clayey Sand	20.1	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100
BH11_2.3-2.4	20/08/2015	Fill	0.8	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	150	<100
BH11_3.3-3.4	20/08/2015	Sandy Silt	0.5	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	650	310
BH12_3.6-3.7	21/08/2015	Fill	3.5	<0.2	<0.5	<0.5	<0.5	<10	<10	70	70	1660	430
BH14_4.0-4.1	21/08/2015	Sandy Clay	150.1	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100
BH16_0.7-0.8	21/08/2015	Fill	0	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100
BH16_2.0-2.1	22/08/2015	Fill	0.9	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	370	220
BH17_1.0-1.1	21/08/2015	Fill	0.1	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100
BH17_2.0-2.1	22/08/2015	Fill	15.2	<0.2	<0.5	<0.5	<0.5	16	16	2610	**2610**	**22300**	1620
BH18_0.7-0.8	29/08/2015	Fill	0	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100
BH19_2.0-2.2	22/08/2015	Fill	1.9	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	440	270
BH20_2.0-2.1	29/08/2015	Fill	0.3	<0.2	<0.5	<0.5	<0.5	<10	<10	140	140	**3940**	780
BH21_0.7-0.8	21/08/2015	Fill	0.1	<0.2	<0.5	<0.5	<0.5	<10	<10	7440	**7400**	**47500**	**10100**
QC202	21/08/2015	BH21_0.7-0.8		<0.2	<0.5	<0.5	<0.5	<10	<10	3740	**3720**	**31900**	**6230**
BH21_2.7-2.8	22/08/2015	Fill	0.2	0.9	<0.5	<0.5	<0.5	<10	<10	80	80	960	500
BH21_3.0-3.1	22/08/2015	Sand	2.1	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	150	<100
BH22_2.2-2.3	21/08/2015	Fill	0.1	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100
BH22_4.5-4.7	21/08/2015	Sandy Clay	26.7	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100
QC100	21/08/2015	BH22_4.5-4.7		<0.2	<0.5	<1	<2	<25	<25	<50	<50	<100	<100
BH100_0.7-0.8	03/02/2020	Fill	0	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	230	<100
BH100_0.8-0.9	03/02/2020	Fill	0.6	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100
BH101_0.7-0.8	31/01/2020	Fill	NR	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	230	<100
BH101_2.2-2.3	31/01/2020	Fill	0	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	280	110
BH102_0.5-0.6	31/01/2020	Fill	0	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	200	<100
BH103_0.15-0.25	03/02/2020	Fill	0.1	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100
BH104_0.8-0.9	03/02/2020	Fill	0.1	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	580	<100
BH104_1.6-1.7	03/02/2020	Fill	0.2	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	1000	210
QC111	03/02/2020	BH104_1.6-1.7		<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	620	180
BH104_2.0-2.2	03/02/2020	Fill	0.1	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	930	200
BH105_0.4-0.5	31/01/2020	Fill	0.1	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	210	140
BH105_0.85-0.95	31/01/2020	Fill	0.1	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	330	150
BH106_0.2-0.3	28/01/2020	Fill	1.7	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	180	<100
QC100	28/01/2020	BH106_0.2-0.3		<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	170	<100
BH106_4.0-4.1	28/01/2020	Sandy Clay	3.2	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100
BH107_0.5-0.6	28/01/2020	Fill	0.3	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	150	<100
QC 105	29/01/2020	BH107_0.5-0.6		<0.2	<0.5	<1	<3	<25	<25	<50	<50	140	<100
BH107_1.5-1.7	28/01/2020	Fill	3.5	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100
BH108_1.3-1.4	28/01/2020	Fill	2.4	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100
BH108_2.3-2.4	28/01/2020	Fill	0.7	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100

Table 6 - MLs and ESLs

Sample Location & Depth	Sample Date	Sample Type	PID	BTEX				TRH					
				Benzene	Toluene	Ethylbenzene	Xylenes	C6 - C10	C6 - C10 minus BTEX (F1)	>C10 - C16	>C10 - C16 minus Naphthalene (F2)	>C16 - C34 (F3)	>C34 - C40 (F4)
ESL - coarse soil (C/I)				**75**	**135**	**165**	**180**		**215**		**170**	**1700**	**3300**
Management Limits - coarse soil (C/I)									**700**		**1000**	**3500**	**10000**
BH108_4.1-4.2	28/01/2020	Fill	3.8	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100
BH109_0.3-0.4	28/01/2020	Fill	0.3	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	160	<100
BH109_0.9-1.0	28/01/2020	Fill	0.4	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100
QC 102	29/01/2020	BH109_0.9-1.0		<0.2	<0.5	<1	<3	<25	<25	<50	<50	<100	<100
BH110_0.35-0.36	28/01/2020	Fill	0.5	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	740	340
BH111_0.3-0.4	30/01/2020	Fill	0.2	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100
BH113_0.2-0.3	29/01/2020	Fill	1.3	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100
QC 106	29/01/2020	BH113_0.2-0.3		<0.2	<0.5	<1	<3	<25	<25	<50	<50	210	<100
BH113_0.6-0.7	29/01/2020	Fill	0.2	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	240	<100
BH114_0.45-0.55	03/02/2020	Fill	0.1	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	390	110
QC114	03/02/2020	BH114_0.45-0.55		<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	290	<100
BH114_1.3-1.4	03/02/2020	Fill	0	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	240	<100
BH115_0.6-0.7	29/01/2020	Fill	0.2	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	170	<100
BH115_2.5-2.6	29/01/2020	Fill	NR	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100
BH116_0.3-0.4	30/01/2020	Fill	0.2	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100
BH116_0.6-0.65	30/01/2020	Fill	0.3	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	180	<100
BH117_2.2-2.3	30/01/2020	Fill	0.3	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	1310	260

Notes	**n samples**	74				74					
Results = mg/kg	**n > ESL**	0	0	0	0	n/a	0	n/a	**3**	**4**	**2**
LOR = limit of reporting	**n > ML**	n/a	n/a	n/a	n/a	n/a	0	n/a	**3**	**4**	**1**
< # = not detected above LOR	**minimum**	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100
Shade + Bold = result > criteria	**maximum**	0.9	<0.5	<1	<3	16	16	7440	7400	47500	10100

ESL: apply to 2 m. low reliability, except F1 & F2 (moderate reliability)

Table 7 - TCLP Results

Sample ID_Depth	NSW EPA (2014) Waste Classification						BH04_1.0-1.1		BH16_2.0-2.1		BH17_2.0-2.1		BH21_0.7-0.8		BH22_2.2-2.3		BH102_0.5-0.6	
Sample Type							Soil	TCLP	Soil	TCLP	Soil	TCLP	Soil	TCLP	Soil	TCLP	Soil	TCLP
Material Type	GSW			RSW			Fill		Fill		Fill		Fill		Fill		Fill	
Date Sampled	CT1	TCLP1	SCC1	CT2	TCLP2	SCC2	20/08/2015		22/08/2015		22/08/2015		21/08/2015		21/08/2015		31/01/2020	
Units	mg/kg	mg/L	mg/kg	mg/kg	mg/L	mg/kg	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
Arsenic	100	5	500	400	20	2000	311	0.4	136		62		31		119	<0.1	9	
Cadmium	20	1	100	80	4	400	1		19		4		1		3		<1	
Chromium	100	5	1900	400	20	7600	105		109		607	<0.05	12		29		19	
Copper	-	-	-	-	-	-	293		3520		12200		155		550		367	
Lead	100	5	1500	400	20	6000	**10400**	15.9	**3290**		**1150**		234		**6300**	**47.1**	2010	0.9
Nickel	40	2	1050	160	8	4200	24		**167**		**738**		23		2700	0.6	12	
Zinc	-	-	-	-	-	-	1170		7710		2560		367		14500		712	
Mercury	4	0.2	50	16	0.8	200	1.6		20.4	<0.001	0.1		0.3		0.3		56.4	<0.0010
Benzo(a)pyrene	0.8	0.04	10	3.2	0.16	23	13.4	<0.0005			<0.5		**102**	<0.0005	<0.5		3.3	<0.0005
Sum of reported PAH	-	-	200	-	-	800	158				8.7		**2170**		<0.5		32.3	
Asbestos													**Yes**				No	
TPH C6-C9			650			2600			<10		<10		<10		<10		<10	
TPH C10-C36			10000			40000			450		25400		**58500**		<50		250	
Benzene	10	0.5	18	40	2	72			<0.2		<0.2		<0.2		<0.2		<0.2	
Toluene	288	14.4	518	1152	57.6	2073			<0.5		<0.5		<0.5		<0.5		<0.5	
Ethylbenzene	600	30	1080	2400	120	4320			<0.5		<0.5		<0.5		<0.5		<0.5	
Xylenes	1000	50	1800	4000	200	7200			<0.5		<0.5		<0.5		<0.5		<0.5	
Scheduled Chemicals			<50			<50												
PCB			<50			<50												

648

Notes:
mg/kg = milligrams per kilogram.
mg/L = milligrams per litre
< = not detected above LOR
- = not analysed and/or no criteria
Shading = Interpreted Classification
Red = interpreted Hazardous Waste

Table 7 - TCLP Results

Sample ID_Depth	NSW EPA (2014) Waste Classification						BH105_0.8-0.95		BH105_1.7-1.8		QC100 (BH106_0.2-0.3)		BH107_1.5-1.7		BH108_1.3-1.4		BH109_0.9-1.0	
Sample Type							Soil	TCLP	Soil	TCLP	Soil	TCLP	Soil	TCLP	Soil	TCLP	Soil	TCLP
Material Type	GSW			RSW			Fill		Fill		Fill		Fill		Fill		Fill	
Date Sampled	CT1	TCLP1	SCC1	CT2	TCLP2	SCC2	31/01/2020		31/01/2020		28/01/2020		28/01/2020		28/01/2020		28/01/2020	
Units	mg/kg	mg/L	mg/kg	mg/kg	mg/L	mg/kg	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
Arsenic	100	5	500	400	20	2000	25		66		6		94		30		28	
Cadmium	20	1	100	80	4	400	3		7		<1		2		96	1.73	13	
Chromium	100	5	1900	400	20	7600	20		76		8		180	0.02	320	<0.01	241	<0.01
Copper	-	-	-	-	-	-	2130		431		46		986		15500		10800	
Lead	100	5	1500	400	20	6000	2260	8.6	**11800**	**20.6**	113	0.2	5350	8.7	3160	**33.7**	3780	2.3
Nickel	40	2	1050	160	8	4200	135		283	0.2	10		185	<0.1	823	2.0	241	0.6
Zinc	-	-	-	-	-	-	4890		1320		106		1110		23400		12400	
Mercury	4	0.2	50	16	0.8	200	0.4		0.3		<0.1		1.0		<0.1		2.2	
Benzo(a)pyrene	0.8	0.04	10	3.2	0.16	23	3.4	<0.0005	<0.5		3.1	<0.0005	<0.5		<0.5		<0.5	
Sum of reported PAH	-	-	200	-	-	800	31.2		<0.5		28.9		<0.5		<0.5		<0.5	
Asbestos											No				No			
TPH C6-C9			650			2600	<10				<10		<10		<10		<10	
TPH C10-C36			10000			40000	400				110		<50		<50		<50	
Benzene	10	0.5	18	40	2	72	<0.2				<0.2		<0.2		<0.2		<0.2	
Toluene	288	14.4	518	1152	57.6	2073	<0.5				<0.5		<0.5		<0.5		<0.5	
Ethylbenzene	600	30	1080	2400	120	4320	<0.5				<0.5		<0.5		<0.5		<0.5	
Xylenes	1000	50	1800	4000	200	7200	<0.5				<0.5		<0.5		<0.5		<0.5	
Scheduled Chemicals			<50			<50												
PCB			<50			<50												

649

Notes:
mg/kg = milligrams per kilogram.
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Table 7 - TCLP Results

Sample ID_Depth	NSW EPA (2014) Waste Classification						BH111_0.65-0.75		BH114_1.3-1.4		BH115_2.5-2.6		BH117_2.2-2.3	
Sample Type							Soil	TCLP	Soil	TCLP	Soil	TCLP	Soil	TCLP
Material Type	GSW			RSW			Fill		Fill		Fill		Fill	
Date Sampled	CT1	TCLP1	SCC1	CT2	TCLP2	SCC2	30/01/2020		3/02/2020		29/01/2020		30/01/2020	
Units	mg/kg	mg/L	mg/kg	mg/kg	mg/L	mg/kg	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
Arsenic	100	5	500	400	20	2000	102		55		117	<0.1	52	
Cadmium	20	1	100	80	4	400	12		23		13		7	
Chromium	100	5	1900	400	20	7600	120		1240	<0.01	38		90	
Copper	-	-	-	-	-	-	4920		2870		872		1250	
Lead	100	5	1500	400	20	6000	**8960**	**32.9**	**4600**		**6390**	**54.1**	**2240**	
Nickel	40	2	1050	160	8	4200	**179**		**885**		145	0.2	64	
Zinc	-	-	-	-	-	-	14000		9880		2930		3720	
Mercury	4	0.2	50	16	0.8	200	<0.1		2.8		<0.1		1.0	
Benzo(a)pyrene	0.8	0.04	10	3.2	0.16	23	<0.5		<0.5		<0.5		8.7	<0.0005
Sum of reported PAH	-	-	200	-	-	800	<0.5		<0.5		<0.5		95.5	
Asbestos							No							
TPH C6-C9			650			2600			<10		<10		<10	
TPH C10-C36			10000			40000			280		<50		1450	
Benzene	10	0.5	18	40	2	72			<0.2		<0.2		<0.2	
Toluene	288	14.4	518	1152	57.6	2073			<0.5		<0.5		<0.5	
Ethylbenzene	600	30	1080	2400	120	4320			<0.5		<0.5		<0.5	
Xylenes	1000	50	1800	4000	200	7200			<0.5		<0.5		<0.5	
Scheduled Chemicals			<50			<50								
PCB			<50			<50								

650

Notes:
mg/kg = milligrams per kilogram.
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< = not detected above LOR
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Red = interpreted Hazardous Waste

Table 8 - Groundwater Results

Sample Location	Sample Type	Sample Date	SWL (m)	BTEXN							TRH							Metals								PAH	VHC							
				Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	Xylene Total	Naphthalene	C6 - C10	C6 - C10 minus BTEX (F1)	>C10 - C16	>C10 - C16 minus Naphthalene (F2)	>C16 - C34	>C34 - C40	Arsenic	Cadmium	Chromium	Copper	Lead	Nickel	Zinc	Mercury	B(a)P	Tetrachloroethene (PCE)	Trichloroethene (TCE)	1,2-Dichloroethene (1,2-DCE)	1,1-Dichloroethene (1,1-DCE)	Chloroethene (Vinyl chloride)	Tetrachloromethane (carbon tetrachloride)	Hexachlorobutadiene
ASC NEPM HSL D (SAND 2-<4m)				5000	NL	NL			NL	NL		6000		NL																			
ASC NEPM Marine Water GIL				500						50								5.5	27	1.3	4.4	70	15	0.1									
ASC NEPM Drinking Water GIL				1	800	300			600								10	2	50	2000	10	20		1	0.01	50		60	30	0.3	3	0.7
MW01	Primary	31/08/2015	1.096	<1	<2	<2	<2	<2	<2	<5	<20	<20	<100	<100	<100	<100	6	<0.1	<1	<1	<1	3	**92**	<0.1	<0.5	<5	<5	<5	<5	<1	<5	<5
QC200	MW01	31/08/2015		<1	<1	<1	<2	<1	<2	<1	<10	<10	<50	<50	<100	<100	5	<0.1	<1	<1	<1	2	**80**	<0.05	<1	<1	<1	<1	<1	<0.3	<1	<1
RPD				nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	**40**	14	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
MW16	Primary	31/08/2015	3.16	<1	<2	<2	<2	<2	<2	<5	<20	<20	<100	<100	<100	<100	8	<0.1	<1	**2**	4	7	**291**	<0.1	<0.5	<5	<5	<5	<5	<1	<5	<5
MW17	Primary	31/08/2015	3.065	<1	<2	<2	<2	<2	<2	<5	<20	<20	<100	<100	<100	<100	9	0.2	<1	**2**	4	**26**	**889**	<0.1	<0.5	<5	<5	<5	<5	<1	<5	<5
MW19	Primary	31/08/2015	2.449	<1	<2	<2	<2	<2	<2	<5	<20	<20	<100	<100	<100	<100	9	**6.1**	<1	**153**	**9**	**128**	**4180**	<0.1	<0.5	<5	<5	<5	<5	<1	<5	<5
MW21	Primary	31/08/2015	2.026	<1	<2	<2	<2	<2	8	<5	<20	<20	170	160	120	<100	1	0.2	<1	1	<1	4	**66**	<0.1	<0.5	<5	<5	<5	<5	<1	<5	<5
QC201	Rinsate	31/08/2015		<1	<2	<2	<2	<2	<2	<5	<20	<20	<100	<100	<100	<100																	
TB	Trip Blank	31/08/2015		<1	<2	<2	<2	<2	<2	<5	<20	<20																					
MW01	Primary	12/02/2020	0.677	<1	<2	<2	<2	<2	<2	<5	<20	<20	<100	<100	<100	<100	2	<0.1	<1	<1	<1	2	**87**	<0.1		<5	<5	<5	<5	<1	<5	<5
MW16	Primary	12/02/2020	2.749	<1	<2	<2	<2	<2	<2	<5	<20	<20	<100	<100	<100	<100	<1	**2.6**	2	**231**	**8**	**45**	**2560**	<0.1		<5	<5	<5	<5	<1	<5	<5
MW17	Primary	12/02/2020	2.647	<1	<2	<2	<2	<2	<2	<5	<20	<20	<100	<100	<100	<100	<1	0.6	<1	**32**	1	**39**	**1280**	<0.1		<5	<5	<5	<5	<1	<5	<5
MW19	Primary	12/02/2020	2.034	<1	<2	<2	<2	<2	<2	<5	<20	<20	<100	<100	<100	<100	**139**	**4.2**	4	**247**	**5**	**294**	**3360**	<0.1		<5	<5	<5	<5	<1	<5	<5
MW21	Primary	12/02/2020	1.643	<1	<2	<2	<2	<2	<2	<5	<20	<20	<100	<100	<100	<100	<1	<0.1	10	<1	<1	2	**59**	<0.1		<5	<5	<5	<5	<1	<5	<5
MW102	Primary	12/02/2020	0.941	<1	<2	<2	<2	<2	<2	<5	<20	<20	<100	<100	<100	<100	2	<0.1	<1	<1	<1	2	6	<0.1		<5	<5	<5	<5	<1	<5	<5
QC306	MW102	12/02/2020		<1	<1	<1	<2	<1	<2	<1	<10	<10	<50	<50	<100	<100	5	<0.1	<1	<1	<1	1	5	<0.05		<1	<1	<1	<1	<0.3	<1	<1
RPD				nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	**86**	nc	nc	nc	nc	**67**	18	nc		nc	nc	nc	nc	nc	nc	nc	nc
MW105	Primary	12/02/2020	1.811	<1	<2	<2	<2	<2	<2	<5	<20	<20	<100	<100	<100	<100	3	0.7	<1	<1	3	**29**	**1760**	<0.1		<5	<5	<5	<5	<1	<5	<5
MW115	Primary	12/02/2020	1.438	<1	<2	<2	<2	<2	<2	<5	<20	<20	<100	<100	<100	<100	**18**	<0.1	<1	<1	4	**23**	**455**	<0.1		<5	<5	<5	<5	<1	<5	<5
QC304	Rinsate	12/02/2020		<1	<2	<2	<2	<2	<2	<5	<20	<20																					
QC305	Trip Blank	12/02/2020		<1	<2	<2	<2	<2	<2	<5	<20	<20																					

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Notes

µg/L = micrograms per litre
All results and criteria = µg/L
LOR = Limit of Reporting
RPD = Relative Percentage Difference
nc = not calculated, result(s)<LOR
NL - Not Limiting – A vapour source concentration for a petroleum mixture could not exceed a level that would result in the maximum allowable vapour risk for the given scenario.
< denotes result less than LOR
Marine water GIL for Cadmium and Nickel: ANZG (2018) DGV, 95% protection level
Bold/Italic = RPD>30%
ES2005113: sample MW11S is MW115 (mislabelled by laboratory)
Shading/bold = result > HSL D or GIL

Table 9 - Soil QC

Sample ID	Sample Type	Sample Date	C6 - C10 Fraction	C6 - C10 Fraction minus BTEX (F1)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene
		Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
QC300	TB	28/01/2020	<20	<20	<1	<2	<2	<2	<5
QC302	RB	30/01/2020	<20	<20	<1	<2	<2	<2	<5
QC303	RB	31/01/2020	<20	<20	<1	<2	<2	<2	<5
QC304	RB	03/02/2020	<20	<20	<1	<2	<2	<2	<5

TB = trip blank
RB = rinsate blank

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