



Appendix 5 MA PAD 1 Artefact Attributes

ID	PIT #	SPIT	TECHNOLOGICAL CLASS	RAW MATERIAL	BREAKAGE	BI-POLAR	HEAT	USE WEAR	TERMINATION	CORTE X %	CORTE % Platform	2 SCARS PLAT	OH R
MAPAD1PIT1SPIT8/1	1	8	Flake Piece	Ind Mud	N/A	N	N	Y	N/A	0	N/A	N/A	N/A
MAPAD1PIT2SPIT2/1	2	2	Flake	Quartz	MARGINAL	Y	N	N	Feather	0	0	Y	N
MAPAD1PIT2SPIT2/10	2	2	Flake Piece	Quartz	N/A	N	N	N	N/A	0	N/A	N/A	N/A
MAPAD1PIT2SPIT2/11	2	2	Flake	Silcrete	LCS	N	N	N	Feather	65	0	N	N
MAPAD1PIT2SPIT2/12	2	2	Flake Piece	Silcrete	N/A	N	N	N	N/A	0	N/A	N/A	N/A
MAPAD1PIT2SPIT2/13	2	2	Flake	Silcrete	Proximal	N	N	N	Feather	0	N/A	N/A	N/A
MAPAD1PIT2SPIT2/2	2	2	Flake	Quartz	Distal	N	N	N	N/A	0	0	N	N
MAPAD1PIT2SPIT2/3	2	2	Flake	Quartz	MARGINAL	N	N	N	Feather	0	0	Y	N
MAPAD1PIT2SPIT2/4	2	2	Flake	Quartz	LCS	N	N	N	Feather	0	100	N	N
MAPAD1PIT2SPIT2/5	2	2	Flake Piece	Quartz	N/A	N	N	N	N/A	0	N/A	N/A	N/A
MAPAD1PIT2SPIT2/6	2	2	Flake Piece	Quartz	N/A	N	N	N	N/A	0	N/A	N/A	N/A
MAPAD1PIT2SPIT2/7	2	2	Flake Piece	Quartz	N/A	N	N	N	N/A	0	N/A	N/A	N/A
MAPAD1PIT2SPIT2/8	2	2	Flake Piece	Quartz	N/A	N	N	N	N/A	0	N/A	N/A	N/A
MAPAD1PIT2SPIT2/9	2	2	Flake Piece	Quartz	N/A	N	N	N	N/A	0	N/A	N/A	N/A
MAPAD1PIT2SPIT3/1	2	3	Retouched flake	FGS	N/A	Y	N	Y	N/A	0	N/A	N/A	N/A
MAPAD1PIT2SPIT3/10	2	3	Flake Piece	Quartz	N/A	N	N	N	N/A	0	N/A	N/A	N/A
MAPAD1PIT2SPIT3/11	2	3	Flake Piece	Quartz	N/A	N	N	N	N/A	0	N/A	N/A	N/A
MAPAD1PIT2SPIT3/2	2	3	Flake	QTZE	Proximal	N	N	N	Feather	100	N/A	N/A	N/A



ID	PIT #	SPIT	TECHNOLOGICAL CLASS	RAW MATERIAL	BREAKAGE	BI-POLAR	HEAT	USE WEAR	TERMINATION	CORTE X %	CORTEX % Platform	2 SCARS PLAT	OH R
MAPAD1PIT2SPIT3/3	2	3	Flake	QTZE	Complete	N	N	N	Feather	20	0	N	N
MAPAD1PIT2SPIT3/4	2	3	Flake	Quartz	Distal	N	N	N	N/A	0	100	N	N
MAPAD1PIT2SPIT3/5	2	3	Flake Piece	Quartz	N/A	N	N	N	N/A	0	N/A	N/A	N/A
MAPAD1PIT2SPIT3/6	2	3	Flake Piece	Quartz	N/A	N	N	N	N/A	0	N/A	N/A	N/A
MAPAD1PIT2SPIT3/7	2	3	Flake	Quartz	N/A	N	N	N	Feather	0	0	N	N
MAPAD1PIT2SPIT3/8	2	3	Flake	Quartz	Proximal	N	N	N	Feather	0	N/A	N/A	N/A
MAPAD1PIT2SPIT3/9	2	3	Flake Piece	Quartz	N/A	N	N	N	N/A	0	N/A	N/A	N/A
MAPAD1PIT3SPIT10/1	3	10	Core	Basalt	N/A	N	N	N	N/A	45	N/A	N/A	N/A
MAPAD1PIT3SPIT11/1	3	11	Hammerstone Frag	Basalt	N/A	N	N	N	N/A	40	N/A	N/A	N/A
MAPAD1PIT3SPIT11/1	3	11	Hammerstone Frag	Basalt	N/A	N	N	N	N/A	50	N/A	N/A	N/A
MAPAD1PIT3SPIT2/1	3	2	Utilised flake	Silcrete	Distal	N	N	Y	N/A	0	0	Y	Y
MAPAD1PIT3SPIT2/2	3	2	Core	Silcrete	N/A	N	N	N	N/A	20	N/A	N/A	N/A
MAPAD1PIT3SPIT2/3	3	2	Hammerstone	FGI 1	Fragment	N	N	Y	N/A	30	N/A	N/A	N/A
MAPAD1PIT3SPIT3/1	3	3	Hammerstone	Quartz	Complete	N	N	Y	N/A	90	N/A	N/A	N/A
MAPAD1PIT3SPIT3/2	3	3	Flake	QTZE	Complete	N	N	N	Feather	20	0	Y	N
MAPAD1PIT3SPIT4/1	3	4	Utilised Core	Chert	Complete	Y	N	Y	N/A	30	N/A	N/A	N/A
MAPAD1PIT3SPIT4/2	3	4	Flake	Silcrete	Distal	N	N	N	N/A	0	0	N	N
MAPAD1PIT3SPIT4/3	3	4	Flake	Silcrete	Distal	N	N	N	N/A	0	0	N	N
MAPAD1PIT3SPIT6/1	3	6	Flake	Tuff	Distal	N	N	N	N/A	0	0	N	N
MAPAD1PIT3SPIT8/1	3	8	Flake	Quartz	Complete	N	N	N	Feather	0	0	N	N



ID	PIT #	TECHNOLOGICAL CLASS	RAW MATERIAL	BREAKAGE	BI-POLAR	HEAT	USE WEAR	TERMINATION	CORTE X %	CORTEX % Platform	2 SCARS PLAT	OH R
MAPAD1PIT3SPIT8/2	3	Flake	Silcrete	LCS	N	N	N	Feather	0	0	N	N
MAPAD1PIT3SPIT9/1	3	Core	QTZE	N/A	N	N	N	N/A	0	N/A	N/A	N/A
MAPAD1PIT4SPIT1/1	4	Flake	Quartz	Complete	N	N	N	Feather	75	0	N	N
MAPAD1PIT4SPIT2/1	4	Flake	Quartz	Complete	N	N	N	Feather				
MAPAD1PIT4SPIT2/2	4	Retouched flake	QTZE	N/A	N	N	Y	N/A	80	0	N	N
MAPAD1PIT4SPIT2/3	4	Retouched flake	Silcrete	N/A	N	N	Y	N/A	0	0	N	N
MAPAD1PIT4SPIT2/4	4	Flake	Silcrete	Complete	N	N	N	Feather	0	0	Y	N
MAPAD1PIT4SPIT2/5	4	Flake Piece	Silcrete	N/A	N	N	N	N/A	0	N/A	N/A	N/A
MAPAD1PIT4SPIT2/6	4	Flake Piece	Silcrete	N/A	N	N	N	N/A	0	N/A	N/A	N/A
MAPAD1PIT4SPIT3/1	4	Core	Silcrete	N/A	N	N	N	N/A	0	N/A	N/A	N/A
MAPAD1PIT4SPIT3/2	4	Flake	Silcrete	Complete	N	N	N	Feather	0	0	N	N
MAPAD1PIT4SPIT3/3	4	Flake	Silcrete	Complete	N	N	N	Feather	0	0	N	N
MAPAD1PIT4SPIT3/4	4	Flake	Quartz	Complete	N	N	N	Feather	0	0	N	N
MAPAD1PIT4SPIT3/5	4	Core	Quartz	N/A	N	N	N	N/A	70	N/A	N/A	N/A
MAPAD1PIT4SPIT4/1	4	Core	Silcrete	N/A	N	N	N	N/A	0	N/A	N/A	N/A
MAPAD1PIT4SPIT4/2	4	Flake	Silcrete	Distal	N	N	N	N/A	0	0	N	N
MAPAD1PIT4SPIT4/3	4	Flake	Silcrete	Proximal	N	N	N	Feather	0	0	N/A	N/A
MAPAD1PIT4SPIT4/4	4	Flake Piece	Silcrete	N/A	N	N	N	N/A	0	N/A	N/A	N/A
MAPAD1PIT4SPIT4/5	4	Flake	QTZE	Complete	N	N	N	Feather	0	0	N	N
MAPAD1PIT4SPIT5/1	4	Flake	Silcrete	Distal	N	N	N	N/A	0	0	N	N



ID	PIT #	TECHNOLOGICAL CLASS	RAW MATERIAL	BREAKAGE	BI-POLAR	HEAT	USE WEAR	TERMINATION	CORTE X %	CORTEX % Platform	2 SCARS PLAT	OH R
MAPAD1PIT4SPIT5/2	4	Flake	Silcrete	Complete	N	N	N	Hinge	0	0	Y	Y
MAPAD1PIT4SPIT5/1	4	Flake	Quartz	Complete	N	N	N	Feather	0	0	N	N
MAPAD1PIT4SPIT5/1	4	Flake	Silcrete	Complete	N	N	N	Feather	0	0	N	N
MAPAD1PIT4SPIT5/1	4	Flake	Quartz	Complete	N	N	N	Feather	0	0	N	N
MAPAD1PIT4SPIT6/1	4	Flake	Dolerite	Complete	N	N	N	Feather	0	0	Y	N
MAPAD1PIT4SPIT7/1	4	Flake	Quartz	Complete	N	N	N	Feather	0	100	N	N
MAPAD1PIT4SPIT8/1	4	Flake	QTZE	Proximal	N	N	N	Feather	0	0	N/A	N/A
MAPAD1PIT4SPIT8/2	4	Flake	Quartz	Complete	N	N	N	Feather	20	0	N	N
MAPAD1PIT4SPIT9/1	4	Flake	QTZE	Complete	N	N	N	Feather	0	0	Y	N
MAPAD1PIT5SPIT1/1	5	Flake	Silcrete	Distal	N	N	N	N/A	0	0	Y	Y
MAPAD1PIT5SPIT1/2	5	Flake	Quartz	Complete	N	N	N	Feather	0	0	N	N
MAPAD1PIT5SPIT2/1	5	Flake	Basalt	Proximal	N	N	N	Feather	0	0	N/A	N/A
MAPAD1PIT5SPIT2/2	5	Flake	Silcrete	Complete	N	N	N	Hinge	0	0	Y	N
MAPAD1PIT5SPIT2/3	5	Flake	Silcrete	Complete	N	N	N	Feather	0	0	N	N
MAPAD1PIT5SPIT2/4	5	Flake	Silcrete	LCS	N	N	N	Feather	0	0	N	N
MAPAD1PIT5SPIT2/4	5	Flake Piece	Silcrete	N/A	N	N	N	N/A	0	N/A	N/A	N/A
MAPAD1PIT5SPIT2/5	5	Flake	Silcrete	LCS	N	N	N	Feather	20	0	N	N
MAPAD1PIT5SPIT2/6	5	Flake Piece	Silcrete	N/A	N	N	N	N/A	0	N/A	N/A	N/A
MAPAD1PIT5SPIT2/7	5	Flake	Quartz	Complete	N	N	N	Hinge	0	0	N	N
MAPAD1PIT5SPIT4/1	5	Core	Silcrete	N/A	N	N	N	N/A	20	N/A	N/A	N/A



ID	PIT #	SPIT	TECHNOLOGICAL CLASS	RAW MATERIAL	BREAKAGE	BI-POLAR	HEAT	USE WEAR	TERMINATION	CORTE X %	CORTEX % Platform	2 SCARS PLAT	OH R
MAPAD1PIT5SPIT4/2	5	4	Flake	QTZE	Complete	N	N	N	Feather	0	0	N	N
MAPAD1PIT5SPIT5/1	5	5	Flake	Silcrete	Complete	N	N	N	Feather	0	0	Y	N
MAPAD1PIT5_Auger/1	5	Auger	Core	Silcrete	N/A	N	N	N	N/A	30	N/A	N/A	N/A
MAPAD1PIT6SPIT2/1	6	2	Flake	Ind Mud	Complete	N	N	N	Feather	50	100	N	N
MAPAD1PIT6SPIT2/2	6	2	Flake Piece	Silcrete	N/A	N	N	N	N/A	30	N/A	N/A	N/A
MAPAD1PIT6SPIT2/3	6	2	Flake Piece	FGS	N/A	N	N	N	N/A	80	N/A	N/A	N/A
MAPAD1PIT6SPIT6/1	6	6	Flake	Quartz	Complete	Y	N	N	Feather	0	0	N	N
MAPAD1PIT7SPIT1/1	7	1	Retouched flake	Basalt	Complete	N	N	N	N/A	0	0	Y	N
MAPAD1PIT7SPIT1/2	7	1	Flake	Basalt	Complete	N	N	N	Step	0	0	N	N
MAPAD1PIT7SPIT1/3	7	1	Flake	Basalt	Complete	N	N	N	Outrepassé	0	0	Y	N
MAPAD1PIT7SPIT1/4	7	1	Retouched flake	Basalt	Complete	N	N	N	Feather	0	0	N	N
MAPAD1PIT7SPIT1/5	7	1	Flake	FGI 1	Distal	N	N	N	N/A	0	0	N	N
MAPAD1PIT7SPIT1/6	7	1	Flake Piece	Dolerite	N/A	N	N	N	N/A	0	N/A	N/A	N/A
MAPAD1PIT7SPIT1/7	7	1	Flake Piece	FGS	N/A	N	N	N	N/A	0	N/A	N/A	N/A
MAPAD1PIT7SPIT2/1	7	2	Flake	Silcrete	Proximal	N	Y	N	Feather	0	0	N/A	N/A
MAPAD1PIT7SPIT2/2	7	2	Flake	QTZE	Distal	N	N	N	N/A	0	0	N	N
MAPAD1PIT7SPIT2/3	7	2	Flake Piece	Silcrete	N/A	N	N	N	N/A	0	N/A	N	N
MAPAD1PIT7SPIT2/4	7	2	Retouched flake	Silcrete	Proximal	N	N	N	Feather	0	N/A	N/A	N/A
MAPAD1PIT7SPIT2/5	7	2	Flake	Quartz	Complete	N	N	N	Feather	0	N	N	N
MAPAD1PIT7SPIT3/1	7	3	Core	Silcrete	N/A	N	N	N	N/A	60	N/A	N/A	N/A



ID	PIT #	SPT #	TECHNOLOGICAL CLASS	RAW MATERIAL	BREAKAGE	BI-POLAR	HEAT	USE WEAR	TERMINATION	CORTE X %	CORTE X % Platform	2 SCARS PLAT	OH R
MAPAD1PIT7SPT3/2	7	3	Flake	Chert	Medial	N	N	N	N/A	0	N/A	N/A	N/A
MAPAD1PIT8SPT1/1	8	1	Flake	Silcrete	Distal	N	N	N	N/A	0	0	N	N
MAPAD1PIT8SPT2/1	8	2	Flake Piece	Silcrete	N/A	N	Y	N	N/A	0	N/A	N/A	N/A
MAPAD1PIT8SPT3/1	8	3	Flake	Tuff	Complete	N	N	N	Feather	80	0	Y	N
MAPAD1PIT8SPT3/2	8	3	Flake	QTZE	Distal	N	N	N	N/A	0	N	Y	N
MAPAD1PIT8SPT3/3	8	3	Flake Piece	Basalt	N/A	N	N	N	N/A	65	N/A	N/A	N/A
MAPAD1PIT8SPT3/4	8	3	Flake	Basalt	Distal	N	N	N	N/A	0	0	N	N
MAPAD1PIT8SPT3/5	8	3	Flake Piece	Silcrete	N/A	N	N	N	N/A	0	N/A	N/A	N/A
MAPAD1PIT8SPT5/1	8	5	Flake	FGS	Proximal	N	N	N	Feather	0	N/A	N/A	N/A
PAD1PIT9SPT1/1	9	1	Core	Silcrete	N/A	N	Pottid	N	N/A	0	N/A	N/A	N/A
PAD1PIT9SPT1/2	9	1	Flake	Silcrete	Complete	N	N	N	Feather	0	0	Y	N
PAD1PIT9SPT1/3	9	1	Flake	QTZE	Complete	N	N	N	Feather	0	100	0	N
PAD1PIT9SPT1/4	9	1	Flake Piece	Quartz	N	Y	N	N	N/A	0	N/A	N/A	N/A
PAD1PIT9SPT1/5	9	1	Flake Piece	Quartz	N	N	N	N	N/A	0	N/A	N/A	N/A
PAD1PIT9SPT2/1	9	2	Flake	QTZE	MARGINAL	N	N	N	Feather	20	0	Y	N
PAD1PIT9SPT2/2	9	2	Core	QTZE	N/A	N	N	N	N/A	15	N/A	N/A	N/A
PAD1PIT9SPT3/1	9	3	Flake	TUFF	N	N	N	Y	Feather	0	0	Y	Y
PAD1PIT9SPT3/2	9	3	Flake	QTZE	Complete	N	N	N	Hinge	0	0	Y	N
PAD1PIT9SPT3/3	9	3	Flake Piece	QTZE	N	N	N	N	N/A	10	N/A	N/A	N/A
PAD1PIT9SPT3/4	9	3	Flake	QTZE	Complete	N	N	N	Feather	0	0	N	N
PAD1PIT9SPT3/5	9	3	Flake Piece	QTZE	N/A	N	N	N	N/A	0	N/A	N/A	N/A
PAD1PIT9SPT3/6	9	3	Flake Piece	QTZE	N/A	N	N	N	N/A	0	N/A	N/A	N/A
PAD1PIT9SPT3/7	9	3	Flake	QTZE	LCS	N	N	N	Feather	0	N/A	N/A	N/A
PAD1PIT9SPT3/8	9	3	Flake Piece	QTZE	N/A	N	N	N	N/A	0	N/A	N/A	N/A
PAD1PIT9SPT3/9	9	3	Flake	QTZE	Complete	N	N	N	Feather	0	0	N	N
MAPAD1PIT9ASPT1/1	9A	1	Flake	Silcrete	Complete	N	N	N	Feather	0	0	N	N
MAPAD1PIT9ASPT1/2	9A	1	Flake	QTZE	Proximal	N	N	N	Feather	0	0	N	N
MAPAD1PIT9ASPT2/1	9A	2	Utilised Flake	Porcelain	Complete	N	N	Y	Feather	0	0	Y	Y



ID	PIT #	SPIT	TECHNOLOGICAL CLASS	RAW MATERIAL	BREAKAGE	BI-POLAR	HEAT	USE WEAR	TERMINATION	CORTE X %	CORTE X % Platform	2 SCARS PLAT	OH R
MAPAD1PIT9ASPT 2/2	9A	2	Flake	Silcrete	Complete	N	N	N	Feather	0	0	N	N
MAPAD1PIT9ASPT 2/3	9A	2	Flake Piece	Quartz	N/A	N	N	N	N/A	0	N/A	N/A	N/A
MAPAD1PIT9ASPT 2/4	9A	2	Flake	Silcrete	Complete	N	N	N	Feather	0	0	Y	N
MAPAD1PIT9ASPT 2/5	9A	2	Flake Piece	Silcrete	N/A	N	N	N	N/A	0	N/A	N/A	N/A

Appendix 6 MA PAD1 Artefact Metrical Attributes

ID	PIT#	SPIT	TECHNOLOGICAL CLASS	RAW MATERIAL	Platform Facet	Weight	Length	Width	Thick	Platform Width	Platform Thick
MAPAD1PIT1SPIT8/1	1	8	Flake Piece	Ind Mud	N/A	0.2	10.25	9.06	2.15		
MAPAD1PIT2SPIT2/1	2	2	Flake	Quartz	N	0.8	15.65	9.81	4.21	4.94	3.09
MAPAD1PIT2SPIT2/10	2	2	Flake Piece	Quartz	N/A	0.05	7.68	4.46	1.47		
MAPAD1PIT2SPIT2/11	2	2	Flake	Silcrete	N	0.9	15.43	10.14	4.6	7.6	2.4
MAPAD1PIT2SPIT2/12	2	2	Flake Piece	Silcrete	N/A	0.1	7.57	5.9	3.03		
MAPAD1PIT2SPIT2/13	2	2	Flake	Silcrete	N/A	0.05	5.9	4.39	1.26		
MAPAD1PIT2SPIT2/2	2	2	Flake	Quartz	N	0.2	9.99	6.82	2.48	5.02	1.75
MAPAD1PIT2SPIT2/3	2	2	Flake	Quartz	N	0.3	7.59	10.85	3.83	8.88	3.05
MAPAD1PIT2SPIT2/4	2	2	Flake	Quartz	N	0.3	7.62	9.84	4.05	9.6	4.03
MAPAD1PIT2SPIT2/5	2	2	Flake Piece	Quartz	N/A	0.05	7.55	6.16	2.2		
MAPAD1PIT2SPIT2/6	2	2	Flake Piece	Quartz	N/A	0.05	6.97	4.86	1.55		
MAPAD1PIT2SPIT2/7	2	2	Flake Piece	Quartz	N/A	0.05	9.11	3.78	2.11		
MAPAD1PIT2SPIT2/8	2	2	Flake Piece	Quartz	N/A	0.05	6.15	3.98	2.02		
MAPAD1PIT2SPIT2/9	2	2	Flake Piece	Quartz	N/A	0.05	7.93	5.01	2.31		
MAPAD1PIT2SPIT3/1	2	3	Retouched flake	FGS	N/A	6.3	33.83	20.19	11.52		



ID	PIT#	SPIT	TECHNOLOGICAL CLASS	RAW MATERIAL	Platform Facet	Weight	Length	Width	Thick	Platform Width	Platform Thick
MAPAD1PIT2SPIT3/10	2	3	Flake Piece	Quartz	N/A	0.1	6.33	5.34	2.34		
MAPAD1PIT2SPIT3/11	2	3	Flake Piece	Quartz	N/A	0.05	5.25	5.24	3.07		
MAPAD1PIT2SPIT3/2	2	3	Flake	QTZE	N/A	1.1	8.1	16.08	8.57		
MAPAD1PIT2SPIT3/3	2	3	Flake	QTZE	N	0.2	8.87	8.88	2.54		
MAPAD1PIT2SPIT3/4	2	3	Flake	Quartz	N	0.5	8.39	14.8	4.76	4.25	2.42
MAPAD1PIT2SPIT3/5	2	3	Flake Piece	Quartz	N/A	0.4	12.3	5.96	3.14	10.36	3.38
MAPAD1PIT2SPIT3/6	2	3	Flake Piece	Quartz	N/A	0.1	9.04	5.99	4.4		
MAPAD1PIT2SPIT3/7	2	3	Flake	Quartz	N	0.1	9.26	4.14	2.9	3.78	1.85
MAPAD1PIT2SPIT3/8	2	3	Flake	Quartz	N/A	0.1	5.73	7.25	1.21		
MAPAD1PIT2SPIT3/9	2	3	Flake Piece	Quartz	N/A	0.1	8.71	6.42	2.33		
MAPAD1PIT3SPIT10/1	3	10	Core	Basalt	N/A	12.6	31.3	19.05	17.58		
MAPAD1PIT3SPIT11/1	3	11	Hammerstone Frag	Basalt	N/A	46.6	37.9	33.81	31.98		
MAPAD1PIT3SPIT11/1	3	11	Hammerstone Frag	Basalt	N/A	15.1	40.09	29.44	8.27		
MAPAD1PIT3SPIT2/1	3	2	Utilised flake	Silcrete	N	5.3	26.84	21.65	10.32	11.58	5.36
MAPAD1PIT3SPIT2/2	3	2	Core	Silcrete	N/A	8.1	16.15	25.38	17.19		
MAPAD1PIT3SPIT2/3	3	2	Hammerstone	FGI 1	N/A	6.4	17.98	20.74	17.63		
MAPAD1PIT3SPIT3/1	3	3	Hammerstone	Quartz	N/A	2.5	14.44	12.17	10.4		
MAPAD1PIT3SPIT3/2	3	3	Flake	QTZE	N	1.3	11.93	17.66	5.25	17.66	4.62
MAPAD1PIT3SPIT4/1	3	4	Utilised Core	Chert	N/A	3.4	25.73	15.45	8.54		
MAPAD1PIT3SPIT4/2	3	4	Flake	Silcrete	N	1.1	15.69	12.85	5.87	7.68	2.25
MAPAD1PIT3SPIT4/3	3	4	Flake	Silcrete	N	0.1	6.42	6.94	2.59	5.1	2.7
MAPAD1PIT3SPIT6/1	3	6	Flake	Tuff	N	0.9	11.61	16.51	5.21	11.34	2.93
MAPAD1PIT3SPIT8/1	3	8	Flake	Quartz	N	0.1	6.86	7.7	2.02	6.89	1.94
MAPAD1PIT3SPIT8/2	3	8	Flake	Silcrete	N	0.2	10.22	8.53	3.26	8.3	3.26
MAPAD1PIT3SPIT9/1	3	9	Core	QTZE	N/A	6	22.54	20.69	12.69		
MAPAD1PIT4SPIT1/1	4	1	Flake	Quartz	N	1.4	17.73	12.6	7.55	8.73	8.53
MAPAD1PIT4SPIT2/1	4	2	Flake	Quartz							
MAPAD1PIT4SPIT2/2	4	2	Retouched flake	QTZE	N	1.9	21.9	11	6.97	8.3	2.6
MAPAD1PIT4SPIT2/3	4	2	Retouched flake	Silcrete	N	1.5	20.11	16.7	5.27	16.5	5.3
MAPAD1PIT4SPIT2/4	4	2	Flake	Silcrete	N	0.1	6.34	12.28	2.29	7.05	2.15



ID	PIT#	SPIT	TECHNOLOGICAL CLASS	RAW MATERIAL	Platform Facet	Weight	Length	Width	Thick	Platform Width	Platform Thick
MAPAD1PIT4SPIT2/5	4	2	Flake Piece	Silcrete	N/A	0.05	4.9	4.66	1.45		
MAPAD1PIT4SPIT2/6	4	2	Flake Piece	Silcrete	N/A	0.05	5.99	5.53	1.8		
MAPAD1PIT4SPIT3/1	4	3	Core	Silcrete	N/A	6.9	27.5	23.12	12.3		
MAPAD1PIT4SPIT3/2	4	3	Flake	Silcrete	N	0.3	15.08	10.96	2.6	7.02	2.5
MAPAD1PIT4SPIT3/3	4	3	Flake	Silcrete	N	0.05	5.4	7.5	1.45	4.7	1.1
MAPAD1PIT4SPIT3/4	4	3	Flake	Quartz	N	0.05	9.8	6.5	3.8	5.03	2.2
MAPAD1PIT4SPIT3/5	4	3	Core	Quartz	N/A	0.7	11.7	8.3	6.2		
MAPAD1PIT4SPIT4/1	4	4	Core	Silcrete	N/A	1.3	13.06	11.46	6.65		
MAPAD1PIT4SPIT4/2	4	4	Flake	Silcrete	N	0.1	10.95	6.46	3.21	3.2	2.3
MAPAD1PIT4SPIT4/3	4	4	Flake	Silcrete	N/A	0.1	11.07	8.86	1.96		
MAPAD1PIT4SPIT4/4	4	4	Flake Piece	Silcrete	N/A	0.05	10.24	4.3	3.2		
MAPAD1PIT4SPIT4/5	4	4	Flake	QTZE	N	0.1	7.17	10.4	3.61	5.5	1.8
MAPAD1PIT4SPIT5/1	4	5	Flake	Silcrete	N	0.7	17.23	11.43	4.02	8.1	3.5
MAPAD1PIT4SPIT5/2	4	5	Flake	Silcrete	N	1	11.9	19.2	5.8	10.1	3.5
MAPAD1PIT4SPIT5/1	4	5	Flake	Quartz	N	0.05	4.24	6.56	3.4	2.9	1.6
MAPAD1PIT4SPIT5/1	4	5	Flake	Silcrete	N	0.05	6.35	5.58	1.46	2.68	1.3
MAPAD1PIT4SPIT5/1	4	5	Flake	Quartz	N	0.05	5.3	4.65	1.5	4.1	1.5
MAPAD1PIT4SPIT6/1	4	6	Flake	Dolerite	N	0.8	17.6	7.34	5.9	4.3	5.01
MAPAD1PIT4SPIT7/1	4	7	Flake	Quartz	N	0.05	4.6	4.6	1.1	4.5	1.1
MAPAD1PIT4SPIT8/1	4	8	Flake	QTZE	N/A	0.1	9.4	5.1	1.98		
MAPAD1PIT4SPIT8/2	4	8	Flake	Quartz	N	0.05	8.7	3.7	2.7	3.2	2.5
MAPAD1PIT4SPIT9/1	4	9	Flake	QTZE	N	0.1	7.65	14.5	2.65	13.8	2.1
MAPAD1PIT5SPIT1/1	5	1	Flake	Silcrete	N	1.2	17.38	15.8	4.9	8.9	1.9
MAPAD1PIT5SPIT1/2	5	1	Flake	Quartz	N	0.1	6.21	5.8	3.3	3.6	1.9
MAPAD1PIT5SPIT2/1	5	2	Flake	Basalt	N/A	3.7	22.8	16.9	11.4		
MAPAD1PIT5SPIT2/2	5	2	Flake	Silcrete	N	0.3	14.8	7.4	3.7	6.2	3.2
MAPAD1PIT5SPIT2/3	5	2	Flake	Silcrete	N	0.05	8.5	8.06	2.15	4.1	1.4
MAPAD1PIT5SPIT2/4	5	2	Flake	Silcrete	N	0.05	8.4	7.3	1.4	2.4	1.2
MAPAD1PIT5SPIT2/4	5	2	Flake Piece	Silcrete	N/A	0.1	11.3	6.25	2.24		
MAPAD1PIT5SPIT2/5	5	2	Flake	Silcrete	N	0.2	8.1	10.4	5.5	4.3	2.7



ID	PIT#	SPIT	TECHNOLOGICAL CLASS	RAW MATERIAL	Platform Facet	Weight	Length	Width	Thick	Platform Width	Platform Thick
MAPAD1PIT5SPIT2/6	5	2	Flake Piece	Silcrete	N/A	0.1	11.6	5.4	3.6		
MAPAD1PIT5SPIT2/7	5	2	Flake	Quartz	N	0.05	8.5	3.9	3.7	3.3	3.5
MAPAD1PIT5SPIT4/1	5	4	Core	Silcrete	N/A	4	20.38	18.7	11.25		
MAPAD1PIT5SPIT4/2	5	4	Flake	QTZE	N	0.05	7.4	4.8	1.75	2.5	1.7
MAPAD1PIT5SPIT5/1	5	5	Flake	Silcrete	N	2.1	18.31	18.7	7.87	18.7	7.9
MAPAD1PIT5_Auger/1	5	Auger	Core	Silcrete	N/A	1.9	20.10	13.3	8.8		
MAPAD1PIT6SPIT2/1	6	2	Flake	Ind Mud	N	4.4	41.6	14.68	7.6	8.8	4.9
MAPAD1PIT6SPIT2/2	6	2	Flake Piece	Silcrete	N/A	1.7	24.01	9.4	6.3		
MAPAD1PIT6SPIT2/3	6	2	Flake Piece	FGS	N/A	0.8	16.6	12.9	4.6		
MAPAD1PIT6SPIT6/1	6	6	Flake	Quartz	N	0.3	15.1	5.36	3.58	3.54	3.15
MAPAD1PIT7SPIT1/1	7	1	Retouched flake	Basalt	N	9.6	45.83	2.307	9.88	18.53	5.97
MAPAD1PIT7SPIT1/2	7	1	Flake	Basalt	N	4.5	17.78	24.01	8.4	10.51	8.35
MAPAD1PIT7SPIT1/3	7	1	Flake	Basalt	N	5	36.34	21.79	14.68	8.1	3.01
MAPAD1PIT7SPIT1/4	7	1	Retouched flake	Basalt	N	7.3	30.4	22.74	8.66	10.47	7.42
MAPAD1PIT7SPIT1/5	7	1	Flake	FGI 1	N	0.4	11.32	16.66	3.02	12.4	3.02
MAPAD1PIT7SPIT1/6	7	1	Flake Piece	Dolerite	N/A	0.1	8.63	6.56	2.09		
MAPAD1PIT7SPIT1/7	7	1	Flake Piece	FGS	N/A	1	16.17	8.51	8.46		
MAPAD1PIT7SPIT2/1	7	2	Flake	Silcrete	N/A	1.9	23.38	12.09	9.92		
MAPAD1PIT7SPIT2/2	7	2	Flake	QTZE	N	1.2	12.95	14.88	7.21	14.76	4.47
MAPAD1PIT7SPIT2/3	7	2	Flake Piece	Silcrete	N	0.1	7.6	7.01	2.17		
MAPAD1PIT7SPIT2/4	7	2	Retouched flake	Silcrete	N/A	0.4	6.45	19.75	2.89		
MAPAD1PIT7SPIT2/5	7	2	Flake	Quartz	N	0.1	10.11	4.86	2.14	4.17	1.7
MAPAD1PIT7SPIT3/1	7	3	Core	Silcrete	N/A	5.3	24.82	20.4	8.82		
MAPAD1PIT7SPIT3/2	7	3	Flake	Chert	N/A	0.5	10.36	9.49	3.58		
MAPAD1PIT8SPIT1/1	8	1	Flake	Silcrete	N	0.4	15.18	7.21	3.47	4.93	2.02
MAPAD1PIT8SPIT2/1	8	2	Flake Piece	Silcrete	N/A	1.6	14.4	12.48	7.87		
MAPAD1PIT8SPIT3/1	8	3	Flake	Tuff	N	5	18.95	33.89	9.75	18.33	8.18
MAPAD1PIT8SPIT3/2	8	3	Flake	QTZE	N	1.7	16.52	20.29	4.95	10.3	5.1
MAPAD1PIT8SPIT3/3	8	3	Flake Piece	Basalt	N/A	1.2	19.82	18.02	5.65		
MAPAD1PIT8SPIT3/4	8	3	Flake	Basalt	N	0.3	13.03	7.18	4.07	5.86	3.66



ID	PIT#	SPIT	TECHNOLOGICAL CLASS	RAW MATERIAL	Platform Facet	Weight	Length	Width	Thick	Platform Width	Platform Thick
MAPAD1PIT8SPIT3/5	8	3	Flake Piece	Silcrete	N/A	0.3	11.64	9.76	3.63		
MAPAD1PIT8SPIT5/1	8	5	Flake	FGS	N/A	0.05	8.58	4.11	1.57		
PAD1PIT9SPIT1/1	9	1	Core	Silcrete		7.4	27.43	23.65	10.05		
PAD1PIT9SPIT1/2	9	1	Flake	Silcrete	N	0.2	11.66	11.44	2.53	10.44	1.22
PAD1PIT9SPIT1/3	9	1	Flake	QTZE	N	0.1	4.31	10.05	2.37	9.23	2.37
PAD1PIT9SPIT1/4	9	1	Flake Piece	Quartz	N/A	0.1	9.52	4.17	4.17		
PAD1PIT9SPIT1/5	9	1	Flake Piece	Quartz	N/A	0.1	6.92	5.99	2.87		
PAD1PIT9SPIT2/1	9	2	Flake	QTZE	N	3.5	21.46	27.85	6.69	27.48	6.34
PAD1PIT9SPIT2/2	9	2	Core	QTZE	N/A	4.8	23.12	17.6	11.97		
PAD1PIT9SPIT3/1	9	3	Flake	TUFF	N	3.1	33.94	14	9.75	11.53	3.4
PAD1PIT9SPIT3/2	9	3	Flake	QTZE	N	1.3	18.12	14.74	5.7	7.09	5.7
PAD1PIT9SPIT3/3	9	3	Flake Piece	QTZE	N/A	0.8	15.28	11.48	4.87		
PAD1PIT9SPIT3/4	9	3	Flake	QTZE	N	0.2	15.85	6.55	3.8	6.22	2.36
PAD1PIT9SPIT3/5	9	3	Flake Piece	QTZE	N/A	0.3	18.54	12.33	3.83		
PAD1PIT9SPIT3/6	9	3	Flake Piece	QTZE	N/A	0.09	9.94	4.98	2.21		
PAD1PIT9SPIT3/7	9	3	Flake	QTZE	N/A	0.4	12.37	9.32	3.85		
PAD1PIT9SPIT3/8	9	3	Flake Piece	QTZE	N/A	0.2	11.74	6.16	5.26		
PAD1PIT9SPIT3/9	9	3	Flake	QTZE	N	0.05	7.3	5.5	1.32	3.8	1.1
MAPAD1PIT9ASPT1/1	9A	1	Flake	Silcrete	N	0.05	11.4	8.64	2.09	3.64	2.09
MAPAD1PIT9ASPT1/2	9A	1	Flake	QTZE	N	0.1	9.18	9.45	2.47	5.89	1.8
MAPAD1PIT9ASPT2/1	9A	2	Utilised Flake	Porcelain	N	0.1	6.08	11.03	2.49	3.5	1.06
MAPAD1PIT9ASPT2/2	9A	2	Flake	Silcrete	N	0.2	14.5	9.43	1.86	6.08	1.8
MAPAD1PIT9ASPT2/3	9A	2	Flake Piece	Quartz	N/A	0.5	11.47	7.28	5.56		
MAPAD1PIT9ASPT2/4	9A	2	Flake	Silcrete	N	0.05	5.89	10.01	2.25	6.99	2.25
MAPAD1PIT9ASPT2/5	9A	2	Flake Piece	Silcrete	N/A	0.3	8.76	6.93	4.23		



Appendix 7 MA5 Artefact Attributes

ID	PIT#	SPT	TECHNOLOGICAL CLASS	RAW MATERIAL	BREAKAGE	BIPOLAR	HEAT TREATMENT	USEWEAR	CORE #Platforms	TERMINATION	CORTEX %	CORTEX % Platform	2 SCARS PLAT	OHR
MA5PIT2SPT5/1	2	5	Flake	FGS	LCS	N	N	N		Feather	0	100	N	N
MA5PIT2SPT5/1	2	5	Flake	Siltstone	Distal	N	N	N		N/A	0	100	N	N
MA5PIT4SPT1/1	4	1	Flake	QTZE	Distal	N	N	Y		N/A	0	0	Y	N
MA5PIT4SPT1/2	4	2	Flake	QTZE	Distal	N	N	N		N/A	0	0	Y	N
MA5PIT5SPT1/1	5	1	Flake	FGI	Complete	N	N	N		Feather	0	0	N	N
MA5PIT5SPT2/1	5	2	Retouched flake	Silcrete	Hinge termination	N	N	Y		N/A	0	0	Y	Y
MA5PIT5SPT2/2	5	2	Flake Piece	Silcrete	N/A	N	N	N		N/A	10	N/A	N/A	N/A
MA5PIT5SPT2/3	5	2	Flake	Silcrete	Complete	N	N	N		Hinge	0	0	N	N
MA5PIT5SPT2/4	5	2	Flake	Silcrete	Proximal	N	N	N		Feather	0	N/A	N/A	N/A
MA5PIT5SPT2/5	5	2	Flake Piece	Silcrete	N/A	N	N	N		N/A	0	N/A	N/A	N/A
MA5PIT5SPT2/6	5	2	Flake	Quartz	Complete	N	N	N		Feather	0	0	N	N
MA5PIT5SPT2/7	5	2	Flake	Quartz	Complete	Y	N	N		Feather	30	0	N	N
MA5PIT5SPT2/8	5	2	Flake Piece	Quartz	N/A	N	N	N		N/A	0	N/A	N/A	N/A
MA5PIT5SPT3/1	5	3	Flake	Silcrete	Longitudinal	N	N	N		Feather	0	0	N	N
MA5PIT5SPT3/2	5	3	Flake Piece	Quartz	N/A	N	N	N		N/A	0	N/A	N/A	N/A
MA5PIT5SPT3/3	5	3	Flake Piece	Silcrete	N/A	N	Possible	N		N/A	20	N/A	N/A	N/A
MA5PIT6SPT1/1	6	1	Flake	Chert	Proximal	N	N	N		Feather	0	N/A	N/A	N/A
MA5PIT6SPT1/2	6	1	Flake	Silcrete	Complete	N	N	N		Feather	0	0	N	N
MA5PIT6SPT2/1	6	2	Flake Piece	QTZE	N/A	N	N	N		N/A	0	N/A	N/A	N/A
MA5PIT6SPT2/2	6	2	Flake	Silcrete	Complete	N	N	N		Feather	0	0	N	N
MA5PIT6SPT2/3	6	2	flake	Silcrete	Complete	N	N	N		Feather	0	0	N	N
MA5PIT6SPT3/1	6	3	Flake Piece	Silcrete	N/A	N	N	N		N/A	30	N/A	N/A	N/A
MA5PIT6SPT4/1	6	4	Flake	QTZE	Longitudinal	N	N	N		Feather	0	100	N	Y
MA5PIT6SPT4/2	6	4	Flake Piece	QTZE	N/A	N	N	N		N/A	0	N/A	N/A	N/A
MA5PIT6SPT4/3	6	4	Flake Piece	QTZE	N/A	N	N	N		N/A	0	N/A	N/A	N/A
MA5PIT7SPT1/1	7	1	Flake Piece	QTZE	N/A	N	N	N		N/A	0	N/A	N/A	N/A
MA5PIT7SPT2/1	7	2	Retouched flake	QTZE	Proximal	N	N	N		N/A	0	N/A	N/A	N/A



ID	PIT#	SPIT	TECHNOLOGICAL CLASS	RAW MATERIAL	BREAKAGE	BIPOLAR	HEAT TREATMENT	USEWEAR	CORE #Platforms	TERMINATION	CORTEX %	CORTEX % Platform	2 SCARS PLAT	OHR
MA5PIT7SPIT2/2	7	2	Flake	QTZE	Complete	N	N	N		Feather	0	0	N	N
MA5PIT7SPIT2/3	7	2	Flake	QTZE	Proximal	N	N	N		Hinge	0	N/A	N/A	N/A
MA5PIT7SPIT2/4	7	2	Flake	QTZE	Complete	N	N	N		Feather	0	0	Y	Y
MA5PIT7SPIT2/5	7	2	Flake	Silcrete	Complete	N	N	N		Feather	0	0	Y	N
MA5PIT7SPIT2/6	7	2	Flake Piece	Silcrete	N/A	N	N	N		N/A	0	N/A	N/A	N/A
MA5PIT7SPIT2/7	7	2	Flake	Silcrete	Complete	N	N	N		Feather	0	0	N	N
MA5PIT7SPIT3/1	7	3	Utilised flake	FGS	LCS	N	N	Y		Feather	0	100	N	N
MA5PIT7SPIT3/2	7	3	Retouched flake	Silcrete	Distal	N	N	N		N/A	100	0	Y	N
MA5PIT7SPIT3/3	7	3	Utilised flake	Silcrete	Complete	N	N	N		Feather	0	0	N	N
MA5PIT7SPIT3/4	7	3	Flake	Silcrete	LCS	N	N	N		Feather	0	0	N	N
MA5PIT7SPIT3/5	7	3	Flake	Silcrete	Complete	N	N	N		Feather	0	0	Y	Y
MA5PIT7SPIT3/6	7	3	Retouched flake	Silcrete	Complete	N	N	N		N/A	0	0	Y	Y
MA5PIT7SPIT3/7	7	3	Flake	Silcrete	Complete	N	N	N		Feather	0	0	Y	Y
MA5PIT7SPIT3/8	7	3	Flake	Silcrete	LCS	N	N	N		Feather	0	0	N	N
MA5PIT7SPIT3/9	7	3	Flake	Silcrete	Complete	N	N	N		Feather	0	0	N	N
MA5PIT7SPIT3/10	7	3	Flake	Silcrete	Complete	N	N	N		Feather	0	0	Y	N
MA5PIT7SPIT3/11	7	3	Flake	Silcrete	MARGINAL	N	N	N		Feather	0	0	Y	Y
MA5PIT7SPIT3/12	7	3	Flake	Silcrete	LCS	N	N	N		Hinge	0	0	N	N
MA5PIT7SPIT3/13	7	3	Flake	Silcrete	Complete	N	N	N		Feather	60	10	N	N
MA5PIT7SPIT3/14	7	3	Flake	Silcrete	Distal	N	N	N		N/A	0	0	N	N
MA5PIT7SPIT3/15	7	3	Flake	Silcrete	Proximal	N	N	N		Feather	20	N/A	N/A	N/A
MA5PIT7SPIT3/16	7	3	Flake	Silcrete	Distal	N	N	N		N/A	0	0	Y	N
MA5PIT7SPIT3/17	7	3	Flake Piece	Silcrete	N/A	N	N	N		N/A	0	N/A	N/A	N/A
MA5PIT7SPIT3/18	7	3	Flake	Silcrete	Proximal	N	N	N		Feather	5	N/A	N/A	N/A
MA5PIT7SPIT3/19	7	3	Flake	Silcrete	Distal	N	N	N		N/A	0	0	N	N
MA5PIT7SPIT3/20	7	3	Flake	Silcrete	Complete	N	N	N		Feather	0	0	N	N
MA5PIT7SPIT3/21	7	3	Flake Piece	Silcrete	N/A	N	N	N		N/A	0	N/A	N/A	N/A
MA5PIT7SPIT3/22	7	3	Flake	Silcrete	Complete	N	N	N		Feather	0	0	N	N
MA5PIT7SPIT3/23	7	3	Flake	Silcrete	Complete	N	N	N		Feather	0	0	N	N



ID	PIT#	SPT	TECHNOLOGICAL CLASS	RAW MATERIAL	BREAKAGE	BIPOLAR	HEAT TREATMENT	USEWEAR	CORE #Platforms	TERMINATION	CORTEX % Platform	CORTEX %	2 SCARS PLAT	OHR
MASPT7SPIT3/24	7	3	Flake	Silcrete	Complete	N	N	N		Feather	0	0	N	N
MASPT7SPIT3/25	7	3	Flake	Silcrete	Complete	N	N	N		Feather	0	0	N	N
MASPT7SPIT3/26	7	3	Flake	Silcrete	Complete	N	N	N		Feather	0	0	N	N
MASPT7SPIT3/27	7	3	Flake	Silcrete	Complete	N	N	N		Feather	0	0	N	N
MASPT7SPIT3/28	7	3	Flake	Silcrete	Complete	N	N	N		Feather	0	0	N	N
MASPT7SPIT3/29	7	3	Flake	Silcrete	Distal	N	N	N		N/A	0	0	N	N
MASPT7SPIT3/30	7	3	Flake	Silcrete	Complete	N	N	N		Feather	0	0	N	N
MASPT7SPIT3/31	7	3	Flake	Silcrete	MARGINAL	N	N	N		Feather	0	0	N	N
MASPT7SPIT3/32	7	3	Flake	Silcrete	Complete	N	N	N		Feather	40	0	Y	N
MASPT7SPIT3/33	7	3	Flake	Silcrete	Complete	N	N	N		Feather	0	0	N	N
MASPT7SPIT3/34	7	3	Flake	Silcrete	Distal	N	N	N		N/A	0	0	N	N
MASPT7SPIT3/35	7	3	Flake	Silcrete	Complete	N	N	N		Feather	0	0	N	N
MASPT7SPIT3/36	7	3	Backed Artefact	Silcrete	Complete	N	N	N		N/A	0	N/A	N/A	N/A
MASPT7SPIT3/37	7	3	Retouched flake	Silcrete	Complete	N	N	N		Feather	0	0	Y	Y
MASPT7SPIT3/38	7	3	Backed Artefact	Silcrete	Complete	N	N	N		N/A	0	0	Y	N
MASPT7SPIT3/39	7	3	Backed Artefact	Silcrete	Complete	N	N	N		N/A	0	0	Y	N
MASPT7SPIT3/40	7	3	Backed Artefact	Silcrete	Complete	N	N	Y		N/A	0	N/A	N/A	N/A
MASPT7SPIT4/1	7	4	Flake	Silcrete	Complete	N	N	N		Step	0	0	Y	Y
MASPT7SPIT4/2	7	4	Flake	Silcrete	Proximal	N	N	N		Outrepassé	0	N/A	N/A	N/A
MASPT7SPIT4/3	7	4	Flake	Silcrete	Marginal	N	N	N		Feather	0	0	N	N
MASPT7SPIT4/4	7	4	Flake	Silcrete	Complete	N	N	N		Feather	0	0	Y	Y
MASPT7SPIT4/5	7	4	Flake	Silcrete	Complete	N	N	N		Feather	0	0	Y	Y
MASPT7SPIT4/6	7	4	Flake	Silcrete	Marginal	N	N	N		Feather	0	0	N	N
MASPT7SPIT4/7	7	4	Flake	Silcrete	Proximal	N	N	N		Feather	0	N/A	N/A	N/A
MASPT7SPIT4/8	7	4	Flake	Silcrete	Complete	N	N	N		Step	0	0	N	N
MASPT7SPIT4/9	7	4	Flake Piece	Silcrete	N/A	N	N	N		N/A	0	N/A	N/A	N/A
MASPT7SPIT4/10	7	4	Flake	Silcrete	Complete	N	N	N		Feather	0	0	N	N
MASPT7SPIT4/11	7	4	Flake	Silcrete	Complete	N	N	N		Feather	0	0	N	N
MASPT7SPIT4/12	7	4	Flake	Silcrete	Complete	N	N	N		Feather	0	0	N	N



ID	PIT#	SPT	TECHNOLOGICAL CLASS	RAW MATERIAL	BREAKAGE	BIPOLAR	HEAT TREATMENT	USEWEAR	CORE #Platforms	TERMINATION	CORTEX %	CORTEX % Platform	SCARS PLAT	OHR
MA5PT7SPT5/1	7	5	Backed Artefact	Silcrete	Distal	N	N	N		N/A	0	N/A	N/A	N/A
MA5PT7SPT5/2	7	5	Flake	Silcrete	Complete	N	N	N		Feather	0	0	Y	N
MA5PT8SPT1/1	8	SPOIL	Hammerstone	Dolerite	Longitudinal	N	N	Y		N/A	75	N/A	N/A	N/A
MA5PT8SPT1/1	8	1	Flake	Dolerite	Distal	N	N	N		N/A	0	0	N	N
MA5PT8SPT1/2	8	1	Flake Piece	Tuff	N/A	N	N	N		N/A	0	N/A	N	N
MA5PT8SPT1/3	8	1	Flake	Silcrete	LCS	N	N	N		Feather	0	0	N	N
MA5PT8SPT1/4	8	1	Flake	Silcrete	Complete	N	N	N		Feather	0	0	N	N
MA5PT8SPT1/5	8	1	Flake	QTZE	Complete	N	N	N		Feather	0	0	N	N
MA5PT8SPT1/6	8	1	Flake Piece	QTZE	N/A	N	N	N		N/A	0	N/A	N/A	N/A
MA5PT8SPT2/1	8	2	Flake	Silcrete	MARGINAL	N	N	N		Feather	0	0	N	N
MA5PT8SPT2/2	8	2	Flake	Silcrete	Complete	N	N	N		Feather	0	0	N	N
MA5PT8SPT2/3	8	2	Fragment	Limestone	N/A	N	N	N		N/A	0	N/A	N/A	N/A
MA5PT8SPT3/1	8	3	Flake	Quartz	Complete	N	N	N		Feather	0	0	N	N
MA5PT8SPT3/2	8	3	Fragment	Limestone	N/A	N	N	N		N/A	0	N/A	N/A	N/A
MA5PT8SPT3/3	8	3	Flake	QTZE	Distal	N	N	N		N/A	0	0	Y	Y
MA5PT8SPT3/4	8	3	Flake Piece	QTZE	N/A	N	N	N		N/A	0	N/A	N/A	N/A
MA5PT8SPT4/1	8	4	Flake	QTZE	Complete	N	N	N		Feather	0	0	N	N
MA5PT8SPT4/2	8	4	Flake	Silcrete	Complete	N	N	N		Feather	0	0	N	Y
MA5PT8SPT4/3	8	4	Retouched flake	Quartz	Complete	N	N	N		N/A	0	0	Y	N
MA5PT8SPT7/1	8	7	Retouched flake	Quartz	Proximal	N	N	N		N/A	5	N/A	N/A	N/A
MA5PT9SPT1/1	9	1	Flake	Ind Mud	Complete	N	N	N		Hinge	0	0	Y	Y
MA5PT9SPT3/1	9	3	Retouched flake	Ind Mud	Complete	N	N	N		Hinge	15	0	Y	Y
MA5PT9SPT2/1	9	2	Utilised flake	Ind Mud	N/A	N	N	Y		N/A	35	N/A	N/A	N/A
MA5PT11SPT2/1	11	2	Flake	Silcrete	LCS	N	N	N		Feather	0	0	N	N
MA5PT11SPT3/1	11	3	Flake	Silcrete	Marginal	N	N	N		Feather	0	0	Y	Y



Appendix 8 MA5 Artefact Metrical Attributes

ID	SITE	PIT#	SPIT	TECHNOLOGICAL CLASS	RAW MATERIAL	Weight	Length	Width	Thick	Platform Width	Platform Thick
MA5PIT2SPIT5/1	MA 5	2	5	Flake	FGS	17.4	30.22	45.36	16.41	42.72	16.41
MA5PIT2SPIT5/1	MA 5	2	5	Flake	Siltstone	17.2	34.95	47.07	16.92	42.73	16.6
MA5PIT4SPIT1/1	MA 5	4	1	Flake	QTZE	5	32.23	16.84	10.02	8.9	6.3
MA5PIT4SPIT1/2	MA 5	4	2	Flake	QTZE	8.1	26.48	35.94	9.54	34.53	9.15
MA5PIT5SPIT1/1	MA 5	5	1	Flake	FGI	0.2	8.42	9.86	4.02	8.1	4.01
MA5PIT5SPIT2/1	MA 5	5	2	Retouched flake	Silcrete	1.2	15.45	14.66	5.96	11.24	3.67
MA5PIT5SPIT2/2	MA 5	5	2	Flake Piece	Silcrete	0.9	14.1	12.1	6.3		
MA5PIT5SPIT2/3	MA 5	5	2	Flake	Silcrete	0.1	8.29	8.12	1.52	5.1	1.28
MA5PIT5SPIT2/4	MA 5	5	2	Flake	Silcrete	0.05	6.85	9.74	2.16		
MA5PIT5SPIT2/5	MA 5	5	2	Flake Piece	Silcrete	0.1	8.93	5.93	4.25		
MA5PIT5SPIT2/6	MA 5	5	2	Flake	Quartz	0.05	6.32	4.59	1.14	3.6	1.1
MA5PIT5SPIT2/7	MA 5	5	2	Flake	Quartz	0.3	12.75	5.18	4.3	4.02	3.2
MA5PIT5SPIT2/8	MA 5	5	2	Flake Piece	Quartz	0.1	8.8	7.6	1.75		
MA5PIT5SPIT3/1	MA 5	5	3	Flake	Silcrete	0.8	23.07	12.01	4.04	4.4	3.86
MA5PIT5SPIT3/2	MA 5	5	3	Flake Piece	Quartz	0.1	11.27	7.15	2.52		
MA5PIT5SPIT3/3	MA 5	5	3	Flake Piece	Silcrete	0.8	11.21	10.58	7.8		
MA5PIT6SPIT1/1	MA 5	6	1	Flake	Chert	0.05	7.4	8.42	1.4		
MA5PIT6SPIT1/2	MA 5	6	1	Flake	Silcrete	0.05	5.93	6.54	1.78	3.32	1.75
MA5PIT6SPIT2/1	MA 5	6	2	Flake Piece	QTZE	0.4	11.11	10.12	4.6		
MA5PIT6SPIT2/2	MA 5	6	2	Flake	Silcrete	0.1	8.56	7.18	1.9	3.76	1.76
MA5PIT6SPIT2/3	MA 5	6	2	flake	Silcrete	0.1	5.36	5.7	1.9	4.24	1.8
MA5PIT6SPIT3/1	MA 5	6	3	Flake Piece	Silcrete	0.6	14.11	11.41	5.22		
MA5PIT6SPIT4/1	MA 5	6	4	Flake	QTZE	1.7	18.01	16	7.18	15.03	5.63
MA5PIT6SPIT4/2	MA 5	6	4	Flake Piece	QTZE	0.05	6.45	4.45	1.4		
MA5PIT6SPIT4/3	MA 5	6	4	Flake Piece	QTZE	0.05	5.98	6.31	1.3		
MA5PIT7SPIT1/1	MA 5	7	1	Flake Piece	QTZE	0.05	9.32	5.03	1.74		
MA5PIT7SPIT2/1	MA 5	7	2	Retouched flake	QTZE	4.2	24.73	23.33	9.52		
MA5PIT7SPIT2/2	MA 5	7	2	Flake	QTZE	1.2	15.04	14.37	7.05	5.76	3.55



ID	SITE	PIT#	SPIT	TECHNOLOGICAL CLASS	RAW MATERIAL	Weight	Length	Width	Thick	Platform Width	Platform Thick
MA5PIT7SPIT2/3	MA5	7	2	Flake	QTZE	0.8	16.22	17.21	3.45		
MA5PIT7SPIT2/4	MA5	7	2	Flake	QTZE	0.7	9.7	19.01	5.9	9.45	5.36
MA5PIT7SPIT2/5	MA5	7	2	Flake	Silcrete	0.1	8.76	8.19	2.49	4.78	2.01
MA5PIT7SPIT2/6	MA5	7	2	Flake Piece	Silcrete	0.1	12.8	4.1	3.85		
MA5PIT7SPIT2/7	MA5	7	2	Flake	Silcrete	0.05	7.8	4.16	1.36	3.08	0.95
MA5PIT7SPIT3/1	MA5	7	3	Utilised flake	FGS	0.8	10.82	11.36	5.39	11.48	5.39
MA5PIT7SPIT3/2	MA5	7	3	Retouched flake	Silcrete	4	21.04	28.75	9.67	13.98	5.45
MA5PIT7SPIT3/3	MA5	7	3	Utilised flake	Silcrete	1.4	19.99	16.48	4.92	10.39	2.58
MA5PIT7SPIT3/4	MA5	7	3	Flake	Silcrete	1.8	19.54	21.58	5.26	6.48	4.35
MA5PIT7SPIT3/5	MA5	7	3	Flake	Silcrete	0.5	10.05	16.8	3.17	9.86	2.38
MA5PIT7SPIT3/6	MA5	7	3	Retouched flake	Silcrete	2.6	29.05	13.2	8.6	12.29	7.55
MA5PIT7SPIT3/7	MA5	7	3	Flake	Silcrete	0.2	12.75	9.75	2.72	5.2	2.34
MA5PIT7SPIT3/8	MA5	7	3	Flake	Silcrete	0.1	9.36	6.12	2.15	5.22	1.85
MA5PIT7SPIT3/9	MA5	7	3	Flake	Silcrete	0.05	8.08	7.88	1.7	4.07	1.53
MA5PIT7SPIT3/10	MA5	7	3	Flake	Silcrete	0.3	18.72	14.81	3.28	6.51	1.81
MA5PIT7SPIT3/11	MA5	7	3	Flake	Silcrete	0.3	10.77	15.03	2.23	9.45	2.01
MA5PIT7SPIT3/12	MA5	7	3	Flake	Silcrete	0.3	12.83	8.95	2.67	4.24	2.38
MA5PIT7SPIT3/13	MA5	7	3	Flake	Silcrete	0.05	3.75	11.18	2.07	11.18	2.07
MA5PIT7SPIT3/14	MA5	7	3	Flake	Silcrete	0.1	7.18	7.49	3.11	7.02	3.12
MA5PIT7SPIT3/15	MA5	7	3	Flake	Silcrete	0.1	7.47	9.67	2.8		
MA5PIT7SPIT3/16	MA5	7	3	Flake	Silcrete	0.1	9.66	9.4	2.3	8.6	2.3
MA5PIT7SPIT3/17	MA5	7	3	Flake Piece	Silcrete	0.05	10.1	4.83	2.31		
MA5PIT7SPIT3/18	MA5	7	3	Flake	Silcrete	0.05	8.07	9.33	1.95		
MA5PIT7SPIT3/19	MA5	7	3	Flake	Silcrete	0.05	7.21	9.75	1.82	4.55	1.47
MA5PIT7SPIT3/20	MA5	7	3	Flake	Silcrete	0.05	9.13	5.14	2.12	3.78	1.34
MA5PIT7SPIT3/21	MA5	7	3	Flake Piece	Silcrete	0.05	7.2	5.69	1.15		
MA5PIT7SPIT3/22	MA5	7	3	Flake	Silcrete	0.05	4.05	6.4	1.57	3.95	1.42
MA5PIT7SPIT3/23	MA5	7	3	Flake	Silcrete	0.05	5.45	6.45	1.21	2.66	1.21
MA5PIT7SPIT3/24	MA5	7	3	Flake	Silcrete	0.05	7.41	4.57	2.15	3.08	1.02
MA5PIT7SPIT3/25	MA5	7	3	Flake	Silcrete	0.1	7.02	7.93	1.37	5.03	1.23



ID	SITE	PIT#	SPIT	TECHNOLOGICAL CLASS	RAW MATERIAL	Weight	Length	Width	Thick	Platform Width	Platform Thick
MA5PIT7SPIT3/26	MA5	7	3	Flake	Silcrete	0.05	8.57	5.56	1.09	3.8	0.9
MA5PIT7SPIT3/27	MA5	7	3	Flake	Silcrete	0.05	5.9	7.83	2.44	5.89	1.63
MA5PIT7SPIT3/28	MA5	7	3	Flake	Silcrete	0.05	4.97	6.23	1.12	3.72	1.08
MA5PIT7SPIT3/29	MA5	7	3	Flake	Silcrete	0.05	6.1	8.01	1.84	8.01	1.84
MA5PIT7SPIT3/30	MA5	7	3	Flake	Silcrete	0.05	6.7	6.38	0.96	5.49	0.92
MA5PIT7SPIT3/31	MA5	7	3	Flake	Silcrete	0.05	6.23	5.55	0.98	5.09	0.98
MA5PIT7SPIT3/32	MA5	7	3	Flake	Silcrete	0.05	7.05	3.8	2.85	2.72	2.85
MA5PIT7SPIT3/33	MA5	7	3	Flake	Silcrete	0.05	4.78	7.01	1.52	3.18	1.56
MA5PIT7SPIT3/34	MA5	7	3	Flake	Silcrete	0.05	5.18	4.93	0.85	3.56	0.75
MA5PIT7SPIT3/35	MA5	7	3	Flake	Silcrete	0.05	4.4	6.16	1.18	4.07	1.03
MA5PIT7SPIT3/36	MA5	7	3	Backed Artefact	Silcrete	1.3	28.71	7.46	6.01		
MA5PIT7SPIT3/37	MA5	7	3	Retouched flake	Silcrete	1.2	21.71	11.79	4.36	5.56	3.32
MA5PIT7SPIT3/38	MA5	7	3	Backed Artefact	Silcrete	1.4	27.69	8.84	5.78	6.27	4.27
MA5PIT7SPIT3/39	MA5	7	3	Backed Artefact	Silcrete	1.2	28.47	8.05	5.39	4.51	4.69
MA5PIT7SPIT3/40	MA5	7	3	Backed Artefact	Silcrete	1.4	28.51	9.03	6.16		
MA5PIT7SPIT4/1	MA5	7	4	Flake	Silcrete	0.8	18.32	12.11	3.9	6.9	3.56
MA5PIT7SPIT4/2	MA5	7	4	Flake	Silcrete	0.6	8.46	17.16	4.09		
MA5PIT7SPIT4/3	MA5	7	4	Flake	Silcrete	0.5	8.31	16.81	3.98	16.03	3.51
MA5PIT7SPIT4/4	MA5	7	4	Flake	Silcrete	0.2	8.98	12.16	2.34	6.32	1.41
MA5PIT7SPIT4/5	MA5	7	4	Flake	Silcrete	0.1	12.19	6.54	2.03	3.72	1.93
MA5PIT7SPIT4/6	MA5	7	4	Flake	Silcrete	0.05	5.39	7.31	2.03	5.87	1.85
MA5PIT7SPIT4/7	MA5	7	4	Flake	Silcrete	0.1	5.56	8.87	2.95		
MA5PIT7SPIT4/8	MA5	7	4	Flake	Silcrete	0.1	7.2	6.82	2.83	7.18	2.57
MA5PIT7SPIT4/9	MA5	7	4	Flake Piece	Silcrete	0.05	5.02	4.08	2.52		
MA5PIT7SPIT4/10	MA5	7	4	Flake	Silcrete	0.02	4.84	2.51	0.99	1.4	0.55
MA5PIT7SPIT4/11	MA5	7	4	Flake	Silcrete	0.02	5.27	3.71	0.92	2.14	0.75
MA5PIT7SPIT4/12	MA5	7	4	Flake	Silcrete	0.02	3.78	5.19	1	2.62	1
MA5PIT7SPIT5/1	MA5	7	5	Backed Artefact	Silcrete	0.7	20.19	7.21	5.64		
MA5PIT7SPIT5/2	MA5	7	5	Flake	Silcrete	0.2	12.87	12.17	2.7	10.09	3.26
MA5PIT8SPOIL/1	MA 5	8	SPOIL	Hammerstone	Dolerite	212.9	73.85	48.34	45.8		



ID	SITE	PIT#	SPIT	TECHNOLOGICAL CLASS	RAW MATERIAL	Weight	Length	Width	Thick	Platform Width	Platform Thick
MA5PIT8SPIT1/1	MA5	8	1	Flake	Dolerite	3.3	24.77	17.48	5.87	8.01	2.67
MA5PIT8SPIT1/2	MA5	8	1	Flake Piece	Tuff	1.6	15.71	11.06	6.9		
MA5PIT8SPIT1/3	MA5	8	1	Flake	Silcrete	0.1	6.09	8.58	2.44	5.2	1.4
MA5PIT8SPIT1/4	MA5	8	1	Flake	Silcrete	0.05	7.08	9.75	1.93	6.87	1.72
MA5PIT8SPIT1/5	MA5	8	1	Flake	QTZE	0.1	7.91	7.21	1.2	3.07	1.2
MA5PIT8SPIT1/6	MA5	8	1	Flake Piece	QTZE	0.05	9.44	5.08	3.24		
MA5PIT8SPIT2/1	MA5	8	2	Flake	Silcrete	0.8	9.7	19.4	4.4	10.25	4.26
MA5PIT8SPIT2/2	MA5	8	2	Flake	Silcrete	0.05	7.6	6.45	2.65	6	0.8
MA5PIT8SPIT2/3	MA5	8	2	Fragment	Limestone	1.2	13.8	12.9	9.4		
MA5PIT8SPIT3/1	MA5	8	3	Flake	Quartz	0.05	4.42	8.53	2.36	4.97	2.29
MA5PIT8SPIT3/2	MA5	8	3	Fragment	Limestone	1.5	18.53	14.8	6.5		
MA5PIT8SPIT3/3	MA5	8	3	Flake	QTZE	0.2	13.73	7.03	3.33	4.38	2.03
MA5PIT8SPIT3/4	MA5	8	3	Flake Piece	QTZE	0.05	5.83	5.01	1.55		
MA5PIT8SPIT4/1	MA5	8	4	Flake	QTZE	5.28	5.65	6.06	1.27	3.7	1.25
MA5PIT8SPIT4/2	MA5	8	4	Flake	Silcrete	0.3	10.59	11.84	3.94	7.7	2.64
MA5PIT8SPIT4/3	MA5	8	4	Retouched flake	Quartz	1.5	11.92	18.64	6.6	18.6	4.26
MA5PIT8SPIT7/1	MA5	8	7	Retouched flake	Quartz	14.6	36.13	39.31	14.14		
MA5PIT9SPIT1/1	MA 5	9	1	Flake	Ind Mud	0.8	16.03	15.2	3.65	8.73	3.3
MA5PIT9SPIT3/1	MA 5	9	3	Retouched flake	Ind Mud	6	23.43	21.8	10.35	15.4	8.05
MA5PIT9SPIT2/1	MA 5	9	2	Utilised flake	Ind Mud	0.3	12.04	9.29	4.54		
MA5PIT11SPIT2/1	MA 5	11	2	Flake	Silcrete	0.05	6.42	6.67	1.5	3.95	1.4
MA5PIT11SPIT3/1	MA 5	11	3	Flake	Silcrete	5.2	27.01	30.77	9.75	29.02	9.4



Appendix 9 European Artefacts

ID	SITE	PIT#	SPIT	Comment	TECHNOLOGICAL CLASS	RAW MATERIAL	Fragments
MA5PIT8SPIT1/1	MA5	8	1	conjoined frags, decorative glazing	polsherd	stoneware	2
MAPAD1SPIT4/1	PAD1	3	4	single small with blue ceramic	polsherd	porcelain	1
MAPAD1PIT4SPIT2/1	PAD1	4	2	fragment of clay brick	brick fragment	clay brick	1
MAPAD1PIT7SPIT1/1	PAD1	7	2	brown glazed stoneware	polsherd	stoneware	1
MAPAD1PIT8SPIT1/1	PAD1	8	1	fragment of lime mortar	masonry fragment	Lime mortar	1
MRSA1PIT5SPIT1/1	MRSA1	5	1	fragment of glazed earthenware	polsherd	earthenware	1
MA1PIT1PIT1/1	MA1	1	1	shard of clear glass	shard	glass	1
MA1PIT1PIT1/2	MA1	1	1	corroded iron nail	nail	iron	1



Generic information:

Artefact ID, Site, Pit, Spit and Date

Comment:

Any extra details regarding the artefact

Raw material

Silcrete; quartzite (QTZE); Quartz; fine grained igneous (FGI); Basalt; fine grained siliceous (FGS); Indurated Mudstone (Ind Mud); Limestone; Dolerite; Tuff

Technological Class:

e.g. flake; retouched flake, core, flaked piece, hammerstone, backed artefact, utilised flake (displays usewear)

Breakage 1 (where present):

Proximal; Distal; Marginal; Medial; Longitudinal cone split (LCS)

Breakage 2 (where present):

Other breakage present

Bipolar:

Presence/Absence; evidence of bipolar flaking

Heat treatment:

Presence/Absence; Potlid, crazing, crenation

Usewear:

Presence/Absence

Termination:

Feather, Hinge, Step, Outrépassé

Cortex%:

Estimate of the percentage of cortex on the ventral surface

Cortex% on platform:

Estimate of percentage cortex on the platform surface

Platform scars:

Presence/Absence of two or more negative flake scars on the platform surface

Overhang removal (OHR):

Presence/Absence;

Platform Faceting:

Presence/Absence of faceting on the platform surface of flakes

Number of Platforms (for cores):

Number of striking platforms on a core



APPENDIX 5

RECORD OF ABORIGINAL CULTURAL HERITAGE CONSULTATION



Consultation Log

Date of communication	Type	Persons involved	Key points discussed	Documentary Record
22/10/2010	letter	From Navin Officer to Tharawal LALC	letter inviting registration of interest in the project	Electronic copy
8/11/2010	letter	From Navin Officer to Tharawal LALC	Registration of interest in project	Hard copy of letter
5/12/2010	email	From Nicola Hayes (Navin Officer) to Glenda Chalker (CBNTCC)	Registration of interest in project	Hard and electronic copy
10/01/2011	letter	From Navin Officer to Tharawal LALC, CBNTCC, DCAC, DTAC, DACHA, DLO, DALI, Yarrawalk, Peter Faulk	Letter with methodology for 2011 field survey and inviting registration of interest in the project	Electronic Copies of letters
18/01/2011	letter	From Navin Officer to DLO, DCAC,	Registration of interest in project, agreed with methodology	Hard copy of letter
25/01/2011	Letter/fax	From Navin Officer to DACHA	Registration of interest in project, support the methodology	Hard copy of letter
27/01/2011	Letter/fax	From Navin Officer to DALI	Registration of interest in project, agreed with methodology	Hard copy of letter
29/01/2011	letter	From Navin Officer to CBNTCC	Agreed with methodology but questions the use of the 2005 Interim guidelines	Hard copy of letter
25/06/2012	letter	From Navin Officer to Tharawal LALC, CBNTCC, DCAC, DACHA, DLO, DALI, Frances Bodkin	Informing RAPs implementing the 2010 guidelines	Electronic Copies of letters



Date of communication	Type	Persons involved	Key points discussed	Documentary Record
20/07/2012	letter	From Navin Officer to Norma Burrows, DTAC, Yarrawalk, GCHAC, Gandangara LALC,	inviting registration of interest in the project	Electronic Copies of letters
20/07/2012	letter	From Navin Officer to Tharawal LALC, CBNTCC, DCAC, DACHA, DLO, DALI, Frances Bodkin	Informing RAPs of European excavation program commencement	Electronic Copies of letters
23/07/2012	letter	From Navin Officer to Tharawal LALC, CBNTCC, DCAC, DACHA, DLO, DALI, Frances Bodkin	Informing RAPs of site inspection and subsurface investigation dates	Electronic Copies of letters
23/07/2012	email	From Nicola Hayes (Navin Officer) to Gandangara LALC	Registering an interest in the project	Electronic and hard Copies of letters
30/07/2012	Email	From Nicola Hayes (Navin Officer) to France Bodkin	Formal registration of interest	Hard copy
3/08/2012	letter	From Navin Officer to Tocomwall	Registering an interest in the project	Electronic and hard Copies of letters
7/08/2012	email	From Nicola Hayes (Navin Officer) to Tocomwall	Informing RAPs of site inspection and subsurface investigation dates	Electronic Copies of letters



Date of communication	Type	Persons involved	Key points discussed	Documentary Record
7/08/2012	email	From Nicola Hayes (Navin Officer) to DLO, DCAC, Tharawal LALC, Gandangara LALC,	ID card applications and nomination of site workers	Electronic Copies of letters
9/08/2012	email	From Nicola Hayes (Navin Officer) to DALI	ID card	Electronic Copies of letters
10/08/2012	Email	From Nicola Hayes (Navin Officer) to DALI	ID card	Electronic Copies of letters
14/08/2012	email	From Nicola Hayes (Navin Officer) to Tocomwal, DALI, Gandangara LALC, Frances Bodkin, DCAC, DLO, Tharawal LALC	Postponement of site visit	Electronic Copies of letters
14/08/2012	Phone call	From Nicola Hayes (Navin Officer) to Glenda Chalker (CBNTCC), Gordon Morton (DACHA)	Postponement of site visit	Phone call log
14/08/2012	email	From Nicola Hayes (Navin Officer) to Scott Franks (Tocomwal)	Postponement of site visit	Electronic Copies of letters



Date of communication	Type	Persons involved	Key points discussed	Documentary Record
8/09/2012	letter	From Navin Officer to Tocomwal, DALI, Gandangara LALC, Frances Bodkin, DCAC, DLO, Tharawal LALC, CBNTCC, DACHA	Draft subsurface testing methodology for comment and site visit invitation	Electronic Copies of letters
14/09/2012	letter	From Navin Officer to Tocomwal, DALI, Gandangara LALC, Frances Bodkin, DLO, Tharawal LALC, CBNTCC, DACHA	Change of date for site visit	Electronic and hard Copies of letters
18/09/2012	letter	From Navin Officer to CBNTCC	Questions regarding methodology	Hard copy of letter
20/09/2012	fax	From Navin Officer to DACHA	Agreed with methodology	
21/09/2012	email	From Nicola Hayes (Navin Officer) to Leanne Watson (DCAC)	Agrees with methodology	Hard and electronic copy



Date of communication	Type	Persons involved	Key points discussed	Documentary Record
26/09/2012	Site visit	NOHC, MPO, PB, DLO, DALI, CBNTCC, DACHA, DCAC, Gandangara LALC, Tharawal LALC	Site walkover, methodology and project discussion	Summary note from RAP site visit (copy circulated to Aboriginal Land Issues Working Group by Emma Taylor (Parsons Brinckerhoff) on 15 November 2012). Powerpoint slide presentation "Moorebank Intermodal Terminal Project - Registered Aboriginal Parties Briefing; September 2012"
27/09/2012	phone	From Nicola Hayes (Navin Officer) to Glenda Chalker (CBNTCC)	Methodology questions	Summary note from RAP site visit (copy circulated to Aboriginal Land Issues Working Group by Emma Taylor (Parsons Brinckerhoff) on 15 November 2012)
27/09/2012	Fax/letter	From Navin Officer to DALI	Supports methodology	Hard copy
3/10/2012	email	From Nicola Hayes (Navin Officer) to Leanne Watson (DCAC)	Concerns regarding pond and scarred tree and fitness of site workers	Hard and electronic copy
25/01/2013	letter	From Navin Officer to Tocomwal, DALI, Gandangara LALC, DLO, Tharawal LALC, CBNTCC, DACHA	Draft report sent to RAPs for comment	Hard and electronic copy



Date of communication	Type	Persons involved	Key points discussed	Documentary Record
4/02/2013	letter	From Navin Officer to Tocomwal, DALI, Gandangara LALC, DLO, Tharawal LALC, CBNTCC, DACHA	Letter inviting to LCC survey	Hard and electronic copy
4/02/2013	email	From Nicola Hayes (Navin Officer) to Frances Bodkin	Letter inviting to LCC survey	electronic copy
6/02/2013	email	From Nicola Hayes (Navin Officer) to Scott Franks (Tocomwal), Des Dyer (DALI), Mikael Smith (Gandangara LALC), Gordon Workman (DLO), Elwyn Brown (Tharawal LALC), Glenda Chalker (CBNTCC)	Change of survey day	electronic copy
6/02/2013	Phone call	From Nicola Hayes (Navin Officer) to Gordon Morton (DACHA)	Change of survey day	Phone log note
6/02/2013	Email	From Nicola Hayes (Navin Officer) to Frances Bodkin	Unable to make survey provided postal address	electronic copy



Date of communication	Type	Persons involved	Key points discussed	Documentary Record
12/02/2013	email	From Nicola Hayes (Navin Officer) to Scott Franks (Tocomwal), Des Dyer (DALI), Mikael Smith (Gandangara LALC), Gordon Workman (DLO), Elwyn Brown (Tharawal LALC), Glenda Chalker (CBNTCC), Frances Bodkin	Site visit details	electronic copy
12/02/2013	Phone call	From Nicola Hayes (Navin Officer) to Glenda Chalker (CBNTCC), Gordon Morton (DACHA)	Site visit details	Phone log note
12/02/2013	email	From Nicola Hayes (Navin Officer) to Frances Bodkin	Can provide details on plant use	Electronic copy
13/02/2013	site visit	NOHC, DACHA, Tharawal LALC, DCAC, Tocomwal, DLO	LCC lands survey and site visit	signed site participation register
19/02/2013	email	From Nicola Hayes (Navin Officer) to TLALC	Invoicing details	Electronic copy



Date of communication	Type	Persons involved	Key points discussed	Documentary Record
20/02/2013	Email/ letter	From Nicola Hayes (Navin Officer) to Tocomwal, DALI, Gandangara LALC, DLO, Tharawal LALC, CBNTCC, Frances Bodkin	Letter outlining result of LCC land survey and no change to draft report	Electronic copy
20/02/2013	fax	From Navin Officer to DACHA	Letter outlining result of LCC land survey and no change to draft report	Electronic copy
20/02/2013	email	From Nicola Hayes (Navin Officer) to Tocumwal	Supports recommendations in the report	Hard and electronic copy
25/02/2013	email	From Nicola Hayes (Navin Officer) to DCAC – Leanne Watson	Letter stating the high cultural significance of the study area and the DCAC stance that the scarred trees should be conserved.	Hard and Electronic copy
28/02/2013	email and phone	From Nicola Hayes (Navin Officer) to Elwyn Brown (Tharawal LALC)	Question regarding invoicing	Electronic copy Phone log note
4/03/2013	email	From Nicola Hayes (Navin Officer) to Gordon Workman DLO	Question regarding invoicing	Electronic copy
5/03/2013	email	From Nicola Hayes (Navin Officer) to Gordon Workman DLO	Question regarding invoicing	Electronic copy
9/07/2013	post	From Nicola Hayes (Navin Officer) to all RAPS	inviting representatives to LCC lands subsurface testing program	Electronic copy



Date of communication	Type	Persons involved	Key points discussed	Documentary Record
16/07/2013	phone	from Gordon Workman (DLO)	has not received letter inviting representatives to LCC lands subsurface testing program	consultation log
16/07/2013	email	from Nicola Hayes (Navin Officer) to Gordon workman (DLO)	sending letter inviting representatives to LCC lands subsurface testing program	electronic copy
16/07/2013	phone	from Scott Franks (Tocomwall)	has not received letter inviting representatives to LCC lands subsurface testing program - discussed the fact that we would be meeting Monday 22 July 2013 at 9am and advised him to get in touch if he does not receive his letter in the coming days.	consultation log
22/7-1/8/2013	field attendance	CBNTC, DLO, DACHA, DCAC, TLALC, Toc., DALC	representatives attended subsurface testing program	separate attendance log
6/09/2013	email	Sharyl Halls Gundungurra	new registration of interest from Gundungurra Aboriginal Heritage Association Inc.	electronic copy
	post	CBNTC, DLO, DACHA, DCAC, TLALC, Toc., DALC, GAHAI, GLALC,	Draft LCC Northern Powerhouse excavation report sent out for comment	electronic copy
9/12/2013	phone	Glenda Chalker (CBNTC) to Rebecca Parkes (Navin Officer)	Rang to clarify if the report was saying that all the artefacts came from somewhere else. It was confirmed that the artefacts were not thought to be found in situ.	consultation log



Date of communication	Type	Persons involved	Key points discussed	Documentary Record
11/12/2013	fax	Gordon Morton/ C.Everingham from DACHA	Have reviewed our excavation report for the Northern Powerhouse Lands and are in full support of our aims, objectives and recommendations.	digital and hard copy
22/04/2014	phone	Rebecca Parkes to Olivia (GLALC)	inquired who was likely to participate in the rail spur survey, advised that Ivan was on another call so I should email him at temp1@sasl.org.au	consultation log
22/04/2014	email	Rebecca Parkes to Ivan Simon (GLALC)	Request of name of individual for upcoming rail spur survey	electronic copy
22/04/2014	phone	Rebecca Parkes to Glenda Chalker (CBNTCAC)	Request of name of individual for upcoming rail spur survey - likely to be Glenda Chalker or Kirsty Lee Chalker	consultation log
22/04/2014	phone	Rebecca Parkes to Abbi Whillock (TLALC)	Request of name of individual for upcoming rail spur survey - likely to be Abbi Whillock	consultation log
22/04/2014	phone	Rebecca Parkes to DACHA C.Everingham from DACHA	Request of name of individual for upcoming rail spur survey - likely to be Gordon Morton or Timothy Wells	consultation log
22/04/2014	phone	Rebecca Parkes to Gordon Workman (DLO)	Left voice message requesting call back to discuss name of individual for upcoming rail spur survey	consultation log
22/04/2014	phone	Rebecca Parkes to Des Dyer (Uncle Des)	Request of name of individual for upcoming rail spur survey - likely to be Des Dyer or Shaun Ling	consultation log
22/04/2014	phone	Rebecca Parkes to Leanne Watson (DCAC)	Request of name of individual for upcoming rail spur survey - likely to be Justine Coplin	consultation log



Date of communication	Type	Persons involved	Key points discussed	Documentary Record
22/04/2014	phone	Rebecca Parkes to Tocomwal	Left voice message requesting call back to discuss name of individual for upcoming rail spur survey	consultation log
22/04/2014	phone	Rebecca Parkes to Sharyn Halls (GAHAI)	Left voice message requesting call back to discuss name of individual for upcoming rail spur survey	consultation log
22/04/2014	phone	Scott Franks (Tocomwal) to Rebecca Parkes	Discussed upcoming survey - likely to be Jennifer Norfolk attending	consultation log
22/04/2014	phone	Ivan Smith (GLALC) to Rebecca Parkes	Discussed upcoming fieldwork, advised that there has been a change of CEO at GLALC and he wants details of previous employment arrangements for Moorebank. Also advised that he was the probable field participant	consultation log
22/04/2014	email	Rebecca Parkes to DLO, CBNTCAC, Uncle Des, GLALC, Tocomwal, GAHAI and DCAC	Request to fill out and return defence pass form and copy of photo ID for nominated survey participants for Rail Spur survey	electronic copy
22/04/2014	Fax	Rebecca Parkes to DACHA	Request to fill out and return defence pass form and copy of photo ID for nominated survey participants for Rail Spur survey	electronic and hard copies
22/04/2014	Phone	Rebecca Parkes to Abbi Whillock (TLALC)	Checked the correct email address and discussed the Defence Pass form requirements (email is heritage@tharawal.com.au)	consultation log
22/04/2014	Email	Rebecca Parkes to Abbi Whillock (TLALC)	Request to fill out and return defence pass form and copy of photo ID for nominated survey participants for Rail Spur survey	electronic copy



Date of communication	Type	Persons involved	Key points discussed	Documentary Record
22/04/2014	Phone	Sharyn Halls (GAHAI) to Rebecca Parkes	Discussed survey and the email requesting the Defence pass form to be completed.	consultation log
28/04/2014	phone	Nicola Hayes to Celestine Everingham (DACHA)	Request to fill out and return defence pass form and copy of photo ID for nominated survey participants for Rail Spur survey by 10 am	consultation log
28/04/2014	phone	Nicola Hayes to Leanne Watson (DCAC)	Request to fill out and return defence pass form and copy of photo ID for nominated survey participants for Rail Spur survey by 10 am	consultation log
8/05/2014	field attendance	CBNTC, DLO, DACHA, DCAC, TLALC, Toc., Uncle Des	representatives attended survey	separate attendance log

LALC = Local Aboriginal Land Council

CBNTCAC = Cubbitch Barta Native Title Claimant Corporation

DCAC = Darug Custodial Aboriginal Corporation

DTAC = Darug Tribal Aboriginal Corporation

DACHA = Darug Aboriginal Cultural Heritage Assessments

DLO = Darug Land Observations

DALI = Darug Aboriginal Landcare Incorporated

Yarrawalk = Tocomwall

GCHAC = Gunjeewong Cultural Heritage Aboriginal Corporation



2005 Interim Guidelines Registration of Interest and Responses to Field Survey Methodology

Kelvin Officer

From: Glenda Chalker [kgchalker@bigpond.com]
Sent: Sunday, 5 December 2010 4:51 PM
To: Kelvin Officer
Subject: RE: Moorebank Assessment Regn of Int

Cubbitch Barta wishes to express an interest in the Aboriginal Heritage Assessment for the Moorebank Intermodal Freight Terminal Project

From: Kelvin Officer [mailto:kofficer@nohc.com.au]
Sent: Wednesday, 1 December 2010 5:05 PM
To: kgchalker@bigpond.com
Subject: Moorebank Assessment Regn of Int

Hi Glenda,

Here is the Public notice, about the Moorebank Assessment, for your consideration, as discussed by phone today. I will provide some info. on our planned survey/inspection for you tomorrow, my apologies for the short notice.

Regards

Kelvin
Director



Navin Officer Heritage Consultants

Number 4, Kingston Warehouse
71 Leichhardt St, Kingston ACT 2604
ph 02 6282 9415 fax 02 6282 9416 m 0419 296 868
kofficer@nohc.com.au

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Before opening or using attachments please check them for viruses and defects. Our liability is limited to re-supplying the email and attached files.



Cubbitch Barta Native Title
Claimants Aboriginal Corporation
55 Nightingale Road,
PHEASANTS NEST. N.S.W. 2574.
29th January, 2011.

Navin Officer Heritage Consultants Pty Ltd.
Number 4, Kingston Warehouse,
71 Leichardt Street,
KINGSTON. ACT 2604.

Dear Kelvin,

Re; MOOREBANK INTERMODAL
FREIGHT TERMINAL

Thank you for the opportunity of commenting on the methodology for the proposed works at Moorebank. It always amazes me that new requirements have been bought in for consultation, and yet the Department of Planning chooses to go along with the old Interim Guidelines, which are now obsolete. WHY? The Interim Guidelines were a mess, and caused untold angst among the Aboriginal stakeholders, because it allowed for anyone and everybody to be "consulted", which was interpreted as "work". They allowed anyone to talk for Country, even when it was not their Country to be talked about.

The methodology for the project is fine, but I do question the reasons why they have chosen to go with the Interim Guidelines. There are areas within the proposed development area that have cultural significance to Cubbitch Barta, and some of them have been identified in previous surveys that have taken place over the years.

Who are the identified parties to the project? I would like to be sent a list, and also their involvement in the project.

Yours faithfully,

Glenda Chalker
Hon. Chairperson
Phone/Fax 02 46841129 0427218425



08-11-10:15:24

1/1



THARAWAL LOCAL ABORIGINAL LAND COUNCIL

Gibbergunyah (Formerly Stonequarry Lodge)
50 Matthews Lane, Picton NSW 2571

8th November 2010

Navin Officer Heritage Consultant
4/71 Leichhardt Street
Kingston ACT 2604

Dear Kerry

**RE: Implementation of the DECCW Interim Community Consultation Requirements for
Applicants for the proposed Moorebank Intermodal Freight Terminal**

We wish to express our interest in the Aboriginal Heritage Assessment that is being prepared by Navin Officer Heritage Consultants Pty Ltd and wish to have an active involvement in this project.

Tharawal LALC's representative will be our Cultural Heritage Officer Alfred Fazldeen who holds cultural knowledge relevant to determining the cultural significance of Aboriginal objects.

We can be contacted on the contact details listed below. Tharawal LALC looks forward to working with you in the future.

Yours in unity

Alfred Fazldeen
Cultural Heritage Officer
Tharawal Local Aboriginal Land Council

PO Box 168
Picton NSW 2571
Phone: 02 4681 0059 Fax: 02 4683 1375
tharawa@bigpond.net.au



Darug Aboriginal Cultural Heritage Assessments

ABN 51734106483

Gordon Morton

Mob: 0422 865 831
Fax: 45 677 421

Celestine Everingham
90 Hermitage Rd., Kurrajong Hills, 2758
Ph/Fax: 45677 421
Mob: 0432 528 896

25.1.11

Attention

Navin Officer
Heritage Consultants P/L

re Moorebank Intermodal Freight Terminal
Darug Assessment methodology.

DACHA wish to register their interest in
this project and wish to be consulted at all
times and be involved in all fieldwork.
We have reviewed your proposed methodology
on the Darug cultural heritage of the area and
we support your proposal. We look forward
to hearing from you.

Yours Sincerely,
C. Everingham

Cultural Heritage – Building respect for the past and Conservation for the future



Darug Aboriginal Landcare Incorporated

18a Perigee Close

Doonside 2767

NSW

ABN: 7130 1006 047

The Secretary
Navin Officer Heritage Consultants Pty Ltd
4/71 Leichhardt Street
Kingston ACT 2604

Re: Moorebank Intermodal Freight Terminal

The Darug Aboriginal Landcare Incorporated would like to register to participate in this project.

We would also like to be in consultation assessments and take part in the field work that will be carried out, for any Aboriginal Heritage or artifacts.

The Darug Aboriginal Landcare Incorporated agree with the methodology that will be carried out on the study area.

Thank you.

D. Dyer 27-1-2011

Des Dyer
Public Officer
Darug Aboriginal Land care Incorporated
Mobile 0408 360 814
Fax (02) 88149547
E-mail desmond4552@hotmail.com

PAGE. 2 / 2

27.01.2011 11:47



DARUG CUSTODIAN ABORIGINAL
CORPORATION

PO BOX 81 WINDSOR 2756

PH: 45775181 FAX: 45775098 MOB: 0415770163

ABN: 81935722930

mulgokiwj@bigpond.com

18th January 2011.

ATTENTION: Kelvin Officer.

SUBJECT: Moorebank Intermodal Freight Terminal – Assessment Methodology.

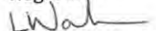
Dear Kelvin,

The Darug Custodian Aboriginal Corporation have received and reviewed the correspondence for the proposed Aboriginal Cultural Heritage assessment and methodology for the proposed Moorebank Intermodal Freight Terminal.

This area is significant to our people due to the area and also the resources that would have been in this area. The interesting aspect of this project is the discrepancy of the boundaries of our people areas such as this if investigated sufficiently can give us some of the answers that our people need. Our group has discussed the boundaries of the Darug people many times and agree that we had large areas that were shared areas, as the Georges river would have also been shared.

We support the methodology proposed for this project and wish to be involved in this project.

Regards


Leanne Watson

c.c. DECCW



18 Jan 11 11:49a

Gordon Workman

02 98318868

p.1

DARUG - LAND - OBSERVATIONS



ABN: 87239202455
E-MAIL: gordow51@bigpond.net.au
PO BOX: 571 Plumpton, NSW 2761
Phone: 029831 8868 or 0415 663 763



18-1-2011

Mr. Kelvin Officer
Director, Navin Officer Heritage Consultants Pty Ltd

Notification and Registration of ALL Aboriginal Interests
Re: Moorebank Intermodal Freight Terminal

Please be advice that D.L.O is seeking to be involved in any and all consultation meetings and field work.

This office specializes in Aboriginal and community consultation. An has a membership that comprises of Traditional owners from the area in question those retain strong story and song lines and oral history and continued contact. We would also like to state that we do not except or support any person or organization that are NOT from the DARUG Nation that comments regarding the said area.

Please also be advised that this aboriginal Organization does not do volunteer work or attend unpaid meetings. I hope that you advise your client of this so that, This Group will not be discriminated against and refused paid field work.

All Correspondence should be emailed to the following
gordow51@bigpond.net.au

Yours faithfully

Uncle
Gordon Workman
Darug Elder

Sites Officer



2010 Guidelines Registrations of Interest

Nicola Hayes

From: Mikael Smith [MSmith@sasl.org.au]
Sent: Monday, 23 July 2012 11:39 AM
To: Navin Officer
Cc: Luke Masters
Subject: Interested group

Dear Nicola,

I write to you in response to your letter regarding the proposed Moorebank Intermodal Terminal confirming Gandangara Local Aboriginal Land Council interest in the project.

Should you wish to discuss this matter please feel free to contact me.

Kind regards

Mikael Smith | Operations Manager
Gandangara Management Services Ltd
103 Moore St LIVERPOOL, NSW, 2170 | PO Box 1038 Liverpool BC 1871
Ph: (02) 9602 5280 | Fax: (02) 9602 2741 E: msmith@sasl.org.au | www.glaic.org.au



This message is intended for the addressee named and may contain privileged information, private information or confidential information. If you are not the intended recipient please delete it and notify the sender.



Tocomwall Pty Ltd

PO Box 76 Caringbah NSW 1495

Tel: 02 9542 7714 Fax: 02 9524 4146

Email: info@tocomwall.com.au www.tocomwall.com.au

ABN: 13 137 694 618

03 August 2012

The Secretary
Navin Officer Heritage Consultants Pty Ltd
4/71 Leichhardt Street
KINGSTON ACT 2604

Via fax: 02 6282 9416

RE: Proposed Moorebank Intermodal Terminal

Tocomwall is seeking *primary involvement* in all consultation meetings and field work for the above mentioned project.

Tocomwall represents traditional owners from this area and retains local and oral history on behalf of its membership. We do not accept or support any person or organisation that comments regarding the said area unless confirmed in writing by myself.

Please also be advised that this Aboriginal organisation does not do volunteer work or attend unpaid meetings.

All correspondence should be emailed to scott@tocomwall.com.au & sarah@tocomwall.com.au or to the above postal address.

Yours faithfully

Scott Franks
Director & Aboriginal Heritage Manager

Integrating Landscape Science & Aboriginal Cultural Knowledge for our Sustainable Future



RAP Responses to the Subsurface Testing Methodology

Cubbitch Barta Native Title Claimants
Aboriginal Corporation
55 Nightingale Road,
PHEASANTS NEST. N.S.W.
18th September, 2012.

Mr. Kelvin Officer,
Navin Officer Heritage Consultants Pty Ltd.
4/71 Leichardt Street,
KINGSTON. ACT. 2604.

Dear Kelvin,

RE; MOOREBANK INTERMODAL PROJECT

Thank you for the opportunity of commenting on the methodology for the above project. I have reviewed the document and have a few concerns in regards to some of the methodology, they are as follows;

1. I cannot find anywhere if this testing, or a salvage.
2. If it is only testing, what is the damage that may be done to deposit using mechanical means of excavation? Further to that is there an opportunity of salvaging deposits in the future?
3. I would be concerned if we were only sampling part of the excavated deposit mechanically removed. All material is to be sieved, not just selections as possibly indicated in Figure 18 and 20.
4. I agree with any artefacts to be returned to Country within an open space, recorded and replaced on AHIMS.

I have recently submitted the requirements for security purposes, but would like to add than any representative that we have in the field and during excavations has a high level of expertise and experience in excavations and identification of any artefactual materials. Glenda Chalker has worked as a sites officer for over 20 years, and has participated in field work, excavations and salvages within the Holsworthy, Moorebank area for that 20 years, and participated in both of the more recent surveys for this project.

Yours faithfully,

Glenda Chalker
Hon. Chairperson
Phone/Fax 0246841129 0427218425
?



Darug Aboriginal Cultural Heritage Assessments

ABN 51734106483

Gordon Morton & Associates

Mob: 0422 865 831
Fax: 45 677 421

Attention
Nicola Hayes
Navin Officer

Celestine Everingham
90 Hermitage Rd., Kurrajong Hills, 2758
Ph/Fax: 45677 421
Mob: 0432 528 896

20.9.12

re Moorebank Intermodal Terminal Project.

DACHA have reviewed your Darug Test Excavation Program for our cultural heritage and we support your aims and objectives. We look forward to working with you on this important project.

Yours Sincerely,
C. Everingham

Cultural Heritage – Building respect for the past and Conservation for the future



Nicola Hayes

From: mulgokiwi@bigpond.com
Sent: Friday, 21 September 2012 5:38 PM
To: Nicola Hayes
Subject: Re: Moorebank site visit

Dear Nicola,
I will organise a site officer for wednesday and will send over the licence Monday morning. Darug Custodian Aboriginal Corporation have no issues with the methodology.

Regards
Leanne Watson

On 21/09/2012 2:15 PM Nicola Hayes wrote:

Leanne

As you are aware the Moorebank site visit is scheduled for Wednesday next week.

Are you able to give me an indication if someone from your organisation will be able to attend and if so who this may be by Monday morning at the latest. We will also need a copy of their drivers licence for security purposes.

Please find attached the letter and document posted to you last week with the details of the Moorebank site visit.

The letter states that the test excavation program is planned to occur between 11th October and approximately 21st November 2012. It can now be confirmed that the start date will be Monday 15th October. This will allow for a full work week, and any revisions to the methodology to address comments on the draft, prior to starting.

Please also note that the letter states the end date for the submission of comments on the draft methodology was Monday 11th October 2012. The 11th of October is in fact a Thursday, not a Monday. The 11th October date however remains correct.

Please contact me if you have any questions.

Sincerely



Nicola Hayes

From: mulgokiwi@bigpond.com
Sent: Wednesday, 3 October 2012 9:34 AM
To: Nicola Hayes
Subject: Re: FW: Moorebank site visit

Dear Nicola,

The Darug Custodian Aboriginal Corporation have concerns about the pond and the scarred tree at the Moore Bank site and would like further consultation on the management of these areas.

We also have concerns that during excavations workers need to be fit and able to do set tasks this is a concern of ours as this seems to be quite usual on recent excavations and with the time and budget factors on these projects this impacts on our cultural heritage.

These concerns have been brought up during Justines site visit and the area of the ponds and scarred tree was an area that she new as very high significant areas.

Regards
Leanne Watson.

On 25/09/2012 8:57 AM Nicola Hayes wrote:

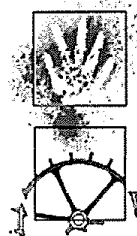
Leanne

Please ignore my last email I have received Justine's details.

Thanks

Nicola Hayes

BA/BSc Grad Dip (Archaeology)
Principal Archaeologist



**Navin
Officer**

heritage
consultants Pty Ltd

Number 4
Kingston Warehouse
71 Leichhardt St.
Kingston ACT 2604

ph 02 6282 9415
fx 02 6282 9416

NOHC is a proud sponsor of
the Corroboree Frog
conservation and captive
breeding program



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From: Nicola Hayes
Sent: Tuesday, 25 September 2012 8:31 AM
To: 'mulgokiwi@bigpond.com'
Subject: RE: Moorebank site visit



Darug Aboriginal Landcare Incorporated

18a Perigee Close
Doonside 2767

Nicola Hayes
Navin Officer
Archaeologist

Re: Moorebank Intermodal Terminal .

Dear Nicola,

The Darug Aboriginal Landcare has no objections to the proposed development to this area.

Our organization has read the report and agree with the recommendations and Methodology. We would also like to monitor the removal of the topsoil, and take part in the excavation.

We would like to see if the scared trees can be protected in someway. As looking were they are at some point in time that area would have been a camp site or a ceremonial site. Before the land was what it is today.

We ask that any Aboriginal Heritage artifices can be salvaged and taken to a safe place or put back once the development is finished. Or kept some were safe with a land council or museum

Kind regards

Des Dyer
Public Officer
Darug Aboriginal Landcare Incorporated
Mobile 0408 360 814

Email desmond4552@hotmail.com



RAP Responses to the Draft Report

Darug Aboriginal Cultural Heritage Assessments

ABN 51734106483

Gordon Morton & Associates

Mob: 0422 865 831
Fax: 45 677 421

Celestine Everingham
90 Hermitage Rd., Kurrajong Hills, 2758
Ph/Fax: 45677 421
Mob: 0432 528 896

13. 2. 13

Attention

Nicola Hayes
Navin Officer

re: Moorebank Intermodal Terminal

DACHA have reviewed your report and we support your findings and we wish to be involved in all future investigations in this important cultural area. We look forward to hearing from you.

Yours Sincerely,
C. Everingham

Cultural Heritage – Building respect for the past and Conservation for the future



Nicola Hayes

From: Scott Franks [scott@tocomwall.com.au]
Sent: Wednesday, 20 February 2013 4:27 PM
To: Nicola Hayes
Subject: RE: Moorebank - letter following site survey

Nicola,

Thank you for the update and further information, Based on the survey and your recommendation Tocomwall is more than happy to except and support the recommendations.

Regards,

Scott Franks
Native Title & Environmental Services Manager

TOCOMWALL PTY LTD
Po Box 76
CARINGBAH NSW 1495
p: 02 9542 7714
f: 02 9524 4146
m: 0404 171544
e: scott@tocomwall.com.au
w: www.tocomwall.com.au

From: Nicola Hayes [<mailto:NHayes@nohc.com.au>]
Sent: Wednesday, 20 February 2013 2:24 PM
To: Scott Franks
Subject: Moorebank - letter following site survey

Scott

Please find attached a letter outlining the results of last week's survey and the draft assessment report.

Please contact me with any questions or comments.

Sincerely



DCAC



DARUG CUSTODIAN ABORIGINAL CORPORATION

PO BOX 81 WINDSOR 2756
PHONE: 0245775181 FAX: 0245775098
MOBILE: 0415770163
EMAIL: mulgokiwi@bigpond.com

Date: 12TH December 2012

ATTENTION: Nicola Hayes – Navin Officer.

Subject: Moorebank Intermodal Terminal Project – Draft Aboriginal Cultural Heritage assessment.

Dear Nicola,

The Darug Custodian Aboriginal Corporation have reviewed the Draft Aboriginal Cultural Heritage Assessment Report for the Moorebank Intermodal Terminal Project.

Our group is a non- profit organisation that has been active for over forty years in Western Sydney, we are a Darug community group with over three hundred members. The main aim in our constitution is the care of Darug sites, places and to education on the Darug history.

This area is highly significant to the Darug people due to the evidence of continued occupation, within this development there is a complex of highly significant sites, this is an Aboriginal (Darug) landscape. The Georges River is part of the landscape that is traditionally known as a border for our traditional area, our group believes that areas that border our boundaries are large shared areas, as this area is the significance for us is very high.

Sites are significant to us for the information that they hold and the connection to Darug people. Aboriginal people (Darug) had a complex lifestyle that was based on respect and belonging to the land, all aspects of life and survival did not impact on the land but helped to care for and conserve land and the sustenance that the land provided. As Darug people moved through the land there were no impacts left, although there was evidence of movement and lifestyle, the people moved through areas with knowledge of their areas and followed signs that were left in the landscape. Darug people knew which areas were not to be entered and respected the areas that were sacred. The signs and evidence of this lifestyle is what has been found by the studies of this area.

Darug Country is From over the Blue Moutains in the West to the ocean in the East from the Hawkesbury River in the North to Appen in the south. Respect is given to the Elders past and present.



DCAC

The scarred trees are within an area that they definitely would have been utilised by aboriginal people, these trees need to be protected. It is suggested in the report that specialists will be assessing these trees, as they follow all criteria for the identification of scarred trees they need protection the Aboriginal groups have all agreed that these trees are significant, this is for aboriginal people to decide. If a specialist assess the trees there will not be a 100% conclusive definition either way.

We are pleased that two of the trees are within the conservation area but are concerned about the third tree, a management plan will need to address the future impacts and mitigation options for all three of the trees and the significant areas within this area.

We understand that parts of this area will be developed and in all developments conservation and education should be a part of the planning process, interpretive strategies are extremely important to our group.

Please contact us with all further enquiries or information by email mulgokiwi@bigpond.com or phone 0415770163.

Regards


Leanne Watson

Darug Country is From over the Blue Moutains in the West to the ocean in the East from the Hawkesbury River in the North to Appen in the south. Respect is given to the Elders past and present.



Cubbitch Barta Native Title Claimants
Aboriginal Corporation
55 Nightingale Road,
PHEASANTS NEST. N.S.W. 2574.
10th December, 2013.

Navin Officer Heritage Consultants Pty Ltd.
Number 4 Kingston Warehouse,
71 Leichardt Street,
KINGSTON. ACT. 2604.

Dear Jo & Bec,

RE; MOOREBANK INTERMODAL
POWERHOUSE CASULA

Thank you for the opportunity of participating in the above proposed project, and for the opportunity of commenting on the DRAFT Subsurface Testing Report.

This is probably the most unusual report which I have been asked to comment on in the time I have been participating in such projects for over 20 years.

It is hard to put a significance to something that is as unknown as this appears to be. Excited that the possibilities of such deep deposits, that may or may not have Aboriginal cultural significance and also historical significance. Deposits that pre date the Liverpool weir being built in 1836, as having the potential to contain significant materials is important.

However I feel that it is highly unlikely that any kind of development will allow for excavations to the scope that you have described in the report. Yes there may be impacts to that lower level by the construction of the overbridge, but will it allow for testing the deposit prior to that works. It may prove your theory, but will it potentially ever be allowed to happen. At this point in time the testing that has recently been carried out shows no reason why the works cannot proceed. The few artefacts that were excavated appear to have come from some other source, than being in situ from use by Aboriginal people in the past.

I would recommend that those artefacts recovered be allowed to be reburied somewhere within the proposed development, where they will be recorded, and not be impacted by any future development.

Yours faithfully,

Glenda Chalker
Hon. Chairperson
Phone/Fax 02 46841129 0427218425



Darug Aboriginal Cultural Heritage Assessments

ABN 51734106483

Gordon Morton

Mob: 0422 865 831
Fax: 45 677 421

Celestine Everingham
90 Hermitage Rd.,
Ph/Fax: 45677 421
Mob: 0432 528 891

11. 12 13

Attention

Jo Diddens
Navin Officer

re: Moorebank Intermodal Terminal - 'unpolluted'
City Council Northern Powerhouse, and.

DACHA have reviewed your comprehensive
report on your findings, management
and mitigation strategies and recommendations
and we are in full support of your aims
and objectives for this important Darug area.
We wish to be consulted at all times and be
involved in any future fieldwork.
Yours Sincerely,
C. Everingham

Cultural Heritage - Building respect for the past and Conservation for the future



DARUG CUSTODIAN
ABORIGINAL
CORPORATION

PO BOX 81 WINDSOR 2756
PHONE: 0245775181 FAX: 0245775098
MOBILE: 0415770163
EMAIL: mulgokiwi@bigpond.com

Attention: Jo Dibden.

Subject: Moorebank Intermodal Terminal Draft Aboriginal subsurface testing Report.

Dear Jo,

The Darug Custodian Aboriginal Corporation have received and reviewed the draft report for Moorebank Intermodal Terminal.

We support the research methodologies that were investigated during these works, the draft report has recorded the findings accurately and extensively for this project.

Our group finds all of our sites and objects significant and support the recommendations set out in this report.

The main aim of our group is to conserve and protect our sites, where this is not possible we strongly recommend interpretive strategies. Interpretive strategies that work well in development areas such as this is an information booklet that is given to visitors. Public art and interpretive signs are also important for areas such as this.

Please contact us with all further enquiries on the above contacts.

Regards

Leanne Watson



APPENDIX 6

AHIMS SITE SEARCH



AHIMS Web Services (AWS) Search Result

Your Ref Number :

Client Service ID : 85420

Date: 15 November 2012

Navin Officer Heritage Consultants Pty Ltd
4/71 Leichhardt Street
Kingston Australian Capital Territory 2604
Attention: Rebecca Parkes
Email: rparkes@nohc.com.au

Dear Sir or Madam:

AHIMS Web Service search for the following area at Datum :GDA, Zone : 56, Eastings : 303000 - 312000, Northings : 6236000 - 6246000 with a Buffer of 50 meters. conducted by Rebecca Parkes on 15 November 2012

A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

80 Aboriginal sites are recorded in or near the above location.	
1 Aboriginal places have been declared in or near the above location.*	
ID	Aboriginal Place Name
0	Collingwood Precinct

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the [NSW Government Gazette](http://www.nsw.gov.au/gazette) (<http://www.nsw.gov.au/gazette>) website. Gazettal notices published prior to 2001 can be obtained from Office of Environment and Heritage's Aboriginal Heritage Information Unit upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not to be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Office of Environment and Heritage and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.

PO BOX 1967 Hurstville NSW 2220
43 Bridge Street HURSTVILLE NSW 2220
Tel: (02)9585 6345 (02)9585 6741 Fax: (02)9585 6094

ABN 30 841 387 271
Email: ahims@environment.nsw.gov.au
Web: www.environment.nsw.gov.au



Collingwood Precinct

[View map showing all Aboriginal Places](#)

Why is it an Aboriginal Place?

Collingwood Precinct was a 'high ground' meeting place for Dharawal, *Gandangara* and *Dharug* Aboriginal people, and a vantage point from which to observe Country.

Why is it important to Aboriginal people?

Collingwood Precinct is a significant part of the landscape for Dharawal, *Gandangara* and *Dharug* people. The hill top and ridge line was a meeting place for Aboriginal groups and also a vantage point during the pre-contact era enabling Country to be observed and monitored. The lookout provided views across the landscape, which allowed for observations of weather patterns, movements, threats from fire and changes in seasonal vegetation. The 'vista' from the high ground provides a view corridor southeast to the Georges River. Gavin Andrews explains: 'The area was important because it's a high point and it was a place where different nations would meet, but also where people would look over the country...you could see everything in all directions from there...[and] it's right near the Georges River, which was the major method of transportation in the area.'

The Aboriginal Place is associated with early engagement, and at times conflict, between colonial settlers and Aboriginal people. The American whaler, Captain Eber Bunker, constructed a large house, Collingwood House, in this location in 1810.

Today, the Collingwood Precinct Aboriginal Place is important to Aboriginal people because the location and outlook provide a connection to Country and culture. The site also continues to be used as a meeting place for Aboriginal people.

What's on the ground?

There are no physical traces of past Aboriginal presence within the Collingwood Precinct Aboriginal Place, though a stone ground-edge hatchet (axe) has previously been recovered from the area. The value of the place lies in people's stories and knowledge of the location and in the relationships that Aboriginal people have with this landscape.

Nature of the environment

The Collingwood Precinct Aboriginal Place is surrounded by urban residential development. The high ground ridgeline, which retains views to the south east, is made up of open space parkland. Collingwood House colonial estate and the Liverpool Regional Museum lie adjacent to the Aboriginal Place.

What's the land used for?

Collingwood Precinct Aboriginal Place is located on land zoned as 'Community Open Space', which includes mixed-use parkland.

Land status

The Collingwood Precinct Aboriginal Place is located on public land owned and managed by the Liverpool City Council.

Quotes

Gavin Andrews 2009: 'I'm so proud to see this land recognised because it's a very significant site for the Aboriginal people in this area.' Aunty Norma Shelley 2009: In reference to future land use: 'But mostly we want nothing to be done with it at all, we want it to be left alone.'

Further information

McDonald, A 2009, Collingwood Precinct Aboriginal Place, Parliament of NSW, Parliamentary Secretary, Legislative Assembly, Macquarie Fields. [www.parliament.nsw.gov.au/Prod/parliament/hansart.nsf/V3Key/LA20090901007#]

Tarasov, A 2009, 'Place recognised as significant', *Liverpool City Champion, Local News*. [www.liverpoolchampion.com.au/news/local/news/general/place-recognised-as-significant/1460224.aspx#]



View across parkland of Collingwood Precinct Aboriginal Place



Part of audience at Collingwood Precinct Aboriginal Place declaration celebration



Map of Collingwood Aboriginal Place (NSW Government Gazette, 2009)

About this place

Location:

Latitude:
-33.9332851845
Longitude:
150.918346069

Size (approx):
4.7 hectares

Date created:

6 March 2009
See [gazettal notice p. 1338](#)

Local Aboriginal land council:
Dharawal

Local government area:
Liverpool

Contact:

Community Operations
Branch, Central
Region: (02) 9995 5000



2012 Search

AHIMS Web Services (AWS) Extensive search - Site list report



Your Ref Number : MJMT
Client Service ID : 85420

SiteID	SiteName	Datum	Zone	Eastings	Northings	Context	Site Status	Site Features	Site Types	Reports
45-5-2537	HPR-OS-1	AGD	56	303150	6243640	Open site	Valid	Artefact :-	Open Camp Site	98369,98370,9837 1,98443,98739
Contact										
45-5-2538	HPR-ST-1	AGD	56	306810	6243650	Open site	Valid	Modified Tree (Carved or Scarred) :-	1431 Scarred Tree	98443
Contact										
45-5-2540	Liverpool Weir ocs 1	AGD	56	308420	6244040	Open site	Valid	Artefact :-	Open Camp Site	98443
Contact										
45-5-2534	BR IF 1	AGD	56	303150	6243850	Open site	Valid	Artefact :-	Isolated Find	98369,98370,9837 1,98443,98739
Contact										
45-5-2495	MFH 2	AGD	56	304300	6238300	Open site	Valid	Artefact :-	Open Camp Site	
Contact										
45-5-2479	IF 1 (Isolated find)	AGD	56	303680	6241600	Open site	Valid	Artefact :-	Isolated Find	98369,98370,9837 1,98443,98739
Contact										
45-5-2481	Maxwells Creek 11 (MC11)	AGD	56	303720	6241600	Open site	Valid	Artefact :-	Open Camp Site	98369,98370,9837 1,98443,98739
Contact										
45-5-2482	Maxwells Creek 10 (MC10)	AGD	56	303490	6241050	Open site	Valid	Artefact :-	Open Camp Site	98369,98370,9837 1,98443,98739
Contact										
45-5-2483	Maxwells Creek 9 (MC9)	AGD	56	303050	6241080	Open site	Valid	Artefact :-	Open Camp Site	98369,98370,9837 1,98443,98739
Contact										
45-5-2469	IF1	AGD	56	303830	6241020	Open site	Valid	Artefact :-	Isolated Find	98369,98370,9837 1,98443
Contact										
45-5-2470	IF2	AGD	56	303370	6242320	Open site	Valid	Artefact :-	Isolated Find	98369,98370,9837 1,98443,98739
Contact										
45-4-0936	Crossroad 1	AGD	56	303780	6240070	Open site	Valid	Artefact :-	Open Camp Site	98369,98370,9837 1,98443,98739
Contact										
45-4-0937	Crossroad 2	AGD	56	303750	6240070	Open site	Valid	Artefact :-	Open Camp Site	98369,98370,9837 1,98443,98739
Contact										

Report generated by AHIMS Web Service on 15/11/2012 for Rebecca Parkes for the following area at Datum: GDA, Zone: 56, Eastings: 303000 - 312000, Northings: 6236000 - 6246000 with a

Buffer of 50 meters. Additional Info: Background information for cultural heritage assessment. Number of Aboriginal sites and Aboriginal objects found is 80

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SiteID	SiteName	Datum	Zone	Eastings	Northings	Context	Site Status	SiteFeatures	SiteTypes	Reports
52-2-0086	Contact Long Point: Matthews No 1 Shelter;	Recorders AGD	Kerry Navin, Mr Kelvin Officer	56 308300	6237700	Closed site	Valid	Art (Pigment or Engraved) :-	986	Shelter with Art
45-5-0890	Contact WG3 (Wattle Grove)	Recorders AGD	Margrit Roettig	56 309100	6240030	Open site	Valid	Artefact :-	Permits	Open Camp Site 2474
45-5-0891	Contact WG2 (Wattle Grove)	Recorders AGD	Philip Boot	56 309020	6239950	Open site	Valid	Artefact :-	Permits	Open Camp Site 2474
45-5-0892	Contact WG1 (Wattle Grove)	Recorders AGD	Philip Boot	56 309070	6239950	Open site	Valid	Artefact :-	Permits	Open Camp Site 2474
45-5-2301	Contact P-CP1	Recorders AGD	Philip Boot	56 303690	6241790	Open site	Valid	Artefact :-	Permits	Open Camp Site 98369, 98370, 98371, 98443, 98739
45-5-2302	Contact GP-CP2;	Recorders AGD	Helen Brayshaw	56 303750	6241950	Open site	Valid	Artefact :-	Permits	Open Camp Site 98369, 98370, 98371, 98443
45-5-2303	Contact P-CP3	Recorders AGD	Helen Brayshaw	56 303400	6242200	Open site	Valid	Artefact :-	Permits	Open Camp Site 850
45-5-0337	Contact Greenwood L: Freeway No.5;	Recorders AGD	Helen Brayshaw	56 311800	6241530	Open site	Valid	Artefact :-	Permits	Open Camp Site 98369, 98370, 98371, 98443, 98739
45-5-0971	Contact WG03-2	Recorders AGD	F Cain, Ms Laila Haglund	56 310430	6239900	Open site	Valid	Artefact :-	Permits	Open Camp Site 260, 824, 1018, 2132
45-5-0972	Contact WG03-1	Recorders AGD	Philip Boot	56 310620	6239950	Open site	Valid	Artefact :-	Permits	Open Camp Site 2826
45-5-2344	Contact Holsworthy IF 4;	Recorders AGD	Philip Boot	56 311200	6240380	Open site	Valid	Artefact :-	Permits	Open Camp Site 702, 905
45-5-2345	Contact Holsworthy IF 2.3;	Recorders AGD	Robynne Mills	56 311900	6240480	Open site	Valid	Artefact :-	Permits	Isolated Find
45-5-2346	Contact Holsworthy IF 1;	Recorders AGD	Robynne Mills	56 311810	6240410	Open site	Valid	Artefact :-	Permits	Isolated Find
45-5-0844	Contact Prestons L;	Recorders AGD	Robynne Mills	56 303570	6243200	Open site	Valid	Artefact :-	Permits	Open Camp Site 2165, 98369, 98370, 98371, 98443, 98739
	Contact	Recorders	Kerry Navin						Permits	311

Report generated by AHIMS Web Service on 15/11/2012 for Rebecca Parkes for the following area at Datum: GDA, Zone: 56, Eastings: 303000 - 312000, Northings: 6236000 - 6246000 with a Buffer of 50 meters. Additional Info: Background information for cultural heritage assessment. Number of Aboriginal sites and Aboriginal objects found is 80

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& Heritage

AHIMS Web Services (AWS) Extensive search - Site list report

Your Ref Number : MJMT
Client Service ID : 85420

SiteID	SiteName	Datum	Zone	Eastings	Northings	Context	Site Status	SiteFeatures	SiteTypes	Reports
45-6-2428	Glenfield ST.	AGD	56	306200	6239600	Open site	Valid	Modified Tree (Carved or Scarred) :	Scarred Tree	
45-5-0123	Contact George's River;	Recorders AGD	Anthony English 56	307040	6236964	Closed site	Valid	Permits Art (Pigment or Engraved) :-	Shelter with Art	
45-5-0124	Contact Harris Creek	Recorders AGD	R Etheridge 56	307040	6236964	Closed site	Valid	Permits Art (Pigment or Engraved) :-	Shelter with Art	
45-5-2355	Contact WGO 3-1; (duplicate copy 45-5-0972)	Recorders AGD	B McLean 56	310620	6239950	Open site	Valid	Permits Artefact :-	Open Camp Site	
45-5-2369	Contact WGO 3-2 (REFER TO 45-5-0971)	Recorders AGD	Philip Boot 56	310430	6239900	Open site	Valid	Permits Artefact :-	Open Camp Site	
45-5-2376	Contact P-CP 10	Recorders AGD	Philip Boot 56	303640	6241560	Open site	Valid	Permits Artefact :-	Open Camp Site	3726,98369,98370, 98371,98443,9873 9
45-5-0720	Contact Klawaka 3	Recorders AGD	Helen Brayshaw, Elizabeth Rich 56	305980	6240600	Open site	Valid	Permits Modified Tree (Carved or Scarred) :	1564 Scarred Tree	1360
45-5-0721	Contact Klawaka 4	Recorders AGD	Mary Dallas Consulting Archaeologists 56	306000	6240660	Open site	Valid	Permits Modified Tree (Carved or Scarred) :	264 Scarred Tree	1360
45-5-0722	Contact Klawaka 5	Recorders AGD	Mary Dallas Consulting Archaeologists 56	306300	6240340	Open site	Valid	Permits Modified Tree (Carved or Scarred) :	Scarred Tree	1360
45-5-0723	Contact Klawaka 2	Recorders AGD	Mary Dallas Consulting Archaeologists 56	306250	6240150	Open site	Valid	Permits Artefact :-	2521 Open Camp Site	1360
45-5-0724	Contact Klawaka 1	Recorders AGD	Mary Dallas Consulting Archaeologists 56	305950	6240270	Open site	Valid	Permits Artefact :-	Open Camp Site	1360
45-5-0837	Contact Toll Plaza Site 1; TPS 1;	Recorders AGD	Mary Dallas Consulting Archaeologists 56	311900	6241580	Open site	Valid	Permits Artefact :-	Open Camp Site	2132
	Contact	Recorders	F Cain				Valid	Permits		

Report generated by AHIMS Web Service on 15/11/2012 for Rebecca Parkes for the following area at Datum: GDA, Zone: 56, Eastings: 303000 - 312000, Northings: 6236000 - 6246000 with a

Buffer of 50 meters. Additional Info: Background information for cultural heritage assessment. Number of Aboriginal sites and Aboriginal objects found is 80

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Office of
Environment
& Heritage

AHIMS Web Services (AWS) Extensive search - Site list report

Your Ref Number : MJMT
Client Service ID : 85420

SiteID	SiteName	Datum	Zone	Eastings	Northings	Context	Site Status	SiteFeatures	SiteTypes	Reports
45-5-0778	MC-1 (Maxwells Creek)	AGD	56	304040	6242410	Open site	Valid	Artefact :-	Open Camp Site	1727,97544
45-5-0779	MC-2 (Maxwells Creek)	Contact								
		AGD	56	303870	6242530	Open site	Valid	Artefact :-	Open Camp Site	1727,98369,98370, 98371,98443,9873 9
45-5-0780	MC-3 (Maxwells Creek)	Contact								
		AGD	56	303350	6239250	Open site	Valid	Artefact :-	Open Camp Site	1727,98369,98370, 98371,98443,9873 9
45-5-0781	MC-4 (Maxwells Creek)	Contact								
		AGD	56	303400	6239350	Open site	Valid	Artefact :-	Open Camp Site	1727,98369,98370, 98371,98443,9873 9
45-5-0782	MC-5 (Maxwells Creek)	Contact								
		AGD	56	303530	6239640	Open site	Valid	Artefact :-	Open Camp Site	1727,98369,98370, 98371,98443,9873 9
45-5-0783	MC-6:	Contact								
		AGD	56	303400	6239550	Open site	Valid	Artefact :-	Open Camp Site	1727,98369,98370, 98371,98443,9873 9
45-5-0784	MC-7:	Contact								
		AGD	56	302900	6239240	Open site	Valid	Artefact :-	Open Camp Site	1727,98369,98370, 98371,98443,9873 9
45-5-0785	MC-8:	Contact								
		AGD	56	303710	6240550	Open site	Valid	Artefact :-	Open Camp Site	1727,98369,98370, 98371,98443,9873 9
45-5-0001	Macquarie Fields:Three Hand Allover:	Contact								
		AGD	56	306885	6236409	Closed site	Valid	Art (Pigment or Engraved) :-	Shelter with Art	1976
45-5-2725	PAD-OS-1	Contact								
		AGD	56	303720	6241200	Open site	Valid	Artefact :-		98369,98370,9837 1,98443,98739
45-5-2744	MLE1	Contact								
		AGD	56	303500	6238550	Open site	Valid	Artefact :-	1396	98739

Report generated by AHIMS Web Service on 15/11/2012 for Rebecca Parkes for the following area at Datum : GDA, Zone : 56, Eastings : 303000 - 312000, Northings : 6236000 - 6246000 with a Buffer of 50 meters. Additional Info : Background information for cultural heritage assessment. Number of Aboriginal sites and Aboriginal objects found is 80

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AHIMS Web Services (AWS) Extensive search - Site list report

Your Ref Number : MIMT
Client Service ID : 85420

SiteID	SiteName	Daum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
45-5-2800	<u>Contact</u>	<u>Recorders</u>	56	303760	6241880	Open site	Valid	Art (Pigment or Engraved) :-	Permits	98369,98370,98371,98443,98739
		AGD								
45-5-2709	<u>Contact</u>	<u>Recorders</u>	56	303900	6241890	Open site	Valid	Artefact :-	Permits	3726,98369,98370,98371,98443,98739
		AGD								
45-5-2761	<u>Contact</u>	<u>Recorders</u>	56	303750	6241690	Open site	Valid	Artefact :-	Permits	3726,98369,98370,98371,98443,98739
		AGD								
45-5-2853	<u>Contact</u>	<u>Recorders</u>	56	303510	6240920	Open site	Valid	Potential Archaeological Deposit (PAD) :-	Permits	1398
		AGD								
45-5-2883	<u>Contact</u>	<u>Recorders</u>	56	308700	6241700	Open site	Valid	Artefact :-	Permits	1638
		AGD								
45-5-2912	<u>Contact</u>	<u>Recorders</u>	56	307950	6245250	Open site	Destroyed	Artefact : 8	Permits	
		AGD								
45-5-2875	<u>Contact</u>	<u>Recorders</u>	56	303610	6240840	Open site	Valid	Potential Archaeological Deposit (PAD) :-	Permits	
		AGD								
45-5-2919	<u>Contact</u>	<u>Recorders</u>	56	306990	6237370	Open site	Valid	Artefact :-	Permits	1737
		AGD								
45-5-2934	<u>Contact</u>	<u>Recorders</u>	56	307600	6237325	Open site	Valid	Potential Archaeological Deposit (PAD) :-	Permits	
		AGD								
45-5-2935	<u>Contact</u>	<u>Recorders</u>	56	308500	6235975	Open site	Valid	Grinding Groove :-	Permits	
		AGD								
52-2-2324	<u>Contact</u>	<u>Recorders</u>	56	307050	6235850	Open site	Valid	Art (Pigment or Engraved) :-	Permits	
		AGD								
	<u>Contact</u>	<u>Recorders</u>						Artefact :-	Permits	

Report generated by AHIMS Web Service on 15/11/2012 for Rebecca Parkes for the following area at Datum: GDA, Zone: 56, Eastings: 303000 - 312000, Northings: 6236000 - 6246000 with a Buffer of 50 meters. Additional Info: Background information for cultural heritage assessment. Number of Aboriginal sites and Aboriginal objects found is 80

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AHIMS Web Services (AWS) Extensive search - Site list report

Your Ref Number : MJMT
Client Service ID : 85420

SiteID	SiteName	Datum	Zone	Eastings	Northings	Contact	Site-Status	SiteFeatures	SiteTypes	Reports
45-5-2931	H581	AGD	56	306850	6237490	Open site	Valid	Artefact :-		
	Contact									
45-5-2957	799	AGD	56	308500	6236240	Open site	Valid	Potential Archaeological Deposit (PAD) :-	Permits	
	Contact									
45-5-2963	Site H928	AGD	56	306840	6237510	Open site	Valid	Modified Tree (Carved or Scarred) :-	Permits	
	Contact									
45-5-2968	Site H1025	AGD	56	307280	6237500	Open site	Valid	Artefact :-	Permits	
	Contact									
45-5-2946	H363	AGD	56	307050	6237560	Open site	Valid	Artefact :-	Permits	
	Contact									
45-5-2947	H362	AGD	56	307130	6238300	Open site	Valid	Artefact :-	Permits	
	Contact									
45-5-2915	H684	AGD	56	311600	6236050	Open site	Valid	Potential Archaeological Deposit (PAD) :-	Permits	
	Contact									
45-5-2916	H683	AGD	56	311650	6236820	Open site	Valid	Potential Archaeological Deposit (PAD) :- Grinding Groove :-	Permits	
	Contact									
45-5-2914	H820	AGD	56	308510	6236650	Open site	Valid	Artefact :-	Permits	
	Contact									
45-5-2964	Site H970	AGD	56	307130	6236550	Open site	Valid	Potential Archaeological Deposit (PAD) :-	Permits	
	Contact									
45-5-2969	Site H1029	AGD	56	308200	6236700	Open site	Valid	Grinding Groove :-	Permits	
	Contact									
45-5-2480	Maxwells Creek 12 (MC12)	AGD	56	303700	6241700	Open site	Valid	Artefact :-	Permits	98369 98370 9837 1,98443 98739
	Contact									
		Recorders	Ms.Elizabeth White							

Report generated by AHIMS Web Service on 15/11/2012 for Rebecca Parkes for the following area at Datum : GDA, Zone : 56, Eastings : 303000 - 312000, Northings : 6236000 - 6246000 with a Buffer of 50 meters. Additional Info : Background information for cultural heritage assessment. Number of Aboriginal sites and Aboriginal objects found is 80

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AHIMS Web Services (AWS) Extensive search - Site list report

Your Ref Number : MIMT
Client Service ID : 85420

SiteID	SiteName	Datum	Zone	Eastings	Northings	Context	Site Status	SiteFeatures	SiteTypes	Reports
45-5-0889	WG 4 (Wattle Grove)	AGD	56	309130	6240170	Open site	Valid	Artefact :-	Open Camp Site	2474
	Contact	Recorders	Philip Boot					Permits	465	
45-5-0794	Holsworthy (H) 2:	AGD	56	309550	6240200	Open site	Valid	Artefact :-	Open Camp Site	1934
	Contact	Recorders	Philip Boot					Permits	456	
45-5-3531	Glenfield 1	GDA	56	306252	6239702	Open site	Valid	Artefact : 1		
	Contact	Recorders	Australian Museum Business Services (AMBS)					Permits		
45-5-0795	Holsworthy (H) 1:	AGD	56	309300	6240120	Open site	Valid	Artefact :-	Open Camp Site	1934
	Contact	Recorders	Philip Boot					Permits	456	
45-5-3639	BC1 (Liverpool)	GDA	56	305214	6237770	Open site	Valid	Artefact : 1		101368
	Contact	Recorders	Mr.Oliver Brown					Permits		
45-5-3629	Collingwood Park (CW 1)	GDA	56	307600	6243160	Open site	Valid	Artefact :- Potential Archaeological Deposit (PAD) :-		101316
	Contact	Recorders	Mr.Oliver Brown					Permits	3184	
45-5-0257	Liverpool Chipping Norton	AGD	56	310540	6245081	Open site	Valid	Modified Tree (Carved or Scarred) :-	Scarred Tree	260,1018
	Contact	Recorders	David Bell					Permits		

Report generated by AHIMS Web Service on 15/11/2012 for Rebecca Parkes for the following area at Datum :GDA, Zone : 56, Eastings : 303000 - 312000, Northings : 6236000 - 6246000 with a Buffer of 50 meters.Additional Info : Background information for cultural heritage assessment. Number of Aboriginal sites and Aboriginal objects found is 80

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2014 Search

AHIMS Web Services (AWS) Extensive search - Site list report



Your Ref Number : Moorebank
Client Service ID : 132687

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
45-5-0890	WC3 (Wattle Grove)	AGD	56	309100	6240030	Open site	Valid	Artefact :-	Open Camp Site	2474
	Contact	Recorders	Philip Root					Permits	465	
45-5-0891	WG2 (Wattle Grove)	AGD	56	309020	6239950	Open site	Valid	Artefact :-	Open Camp Site	2474
	Contact	Recorders	Philip Root					Permits	465	
45-5-0892	WG1 (Wattle Grove)	AGD	56	309070	6239950	Open site	Valid	Artefact :-	Open Camp Site	2474
	Contact	Recorders	Philip Root					Permits	465	
45-6-2428	Glenfield S.T.	AGD	56	306200	6239600	Open site	Valid	Modified Tree (Carved or Scarred) :-	Scarred Tree	
	Contact	Recorders	Anthony English					Permits		
45-5-0720	Kiawaka 3	AGD	56	305980	6240600	Open site	Valid	Modified Tree (Carved or Scarred) :-	Scarred Tree	1360
	Contact	Recorders	Mary Dallas Consulting Archaeologists					Permits	264	
45-5-0721	Kiawaka 4	AGD	56	306000	6240600	Open site	Valid	Modified Tree (Carved or Scarred) :-	Scarred Tree	1360
	Contact	Recorders	Mary Dallas Consulting Archaeologists					Permits		
45-5-0722	Kiawaka 5	AGD	56	306300	6240340	Open site	Valid	Modified Tree (Carved or Scarred) :-	Scarred Tree	1360
	Contact	Recorders	Mary Dallas Consulting Archaeologists					Permits		
45-5-0723	Kiawaka 2	AGD	56	306250	6240150	Open site	Valid	Artefact :-	Open Camp Site	1360
	Contact	Recorders	Mary Dallas Consulting Archaeologists					Permits		
45-5-0724	Kiawaka 1	AGD	56	305950	6240270	Open site	Valid	Artefact :-	Open Camp Site	1360
	Contact	Recorders	Mary Dallas Consulting Archaeologists					Permits		
45-5-2883	MR.1	AGD	56	308700	6241700	Open site	Valid	Artefact :-		
	Contact	Recorders	Mary Dallas Consulting Archaeologists					Permits		
45-5-0889	WC 4 (Wattle Grove)	AGD	56	309130	6240170	Open site	Valid	Artefact :-	Open Camp Site	2474
	Contact	Recorders	Philip Root					Permits	465	
45-5-3531	Glenfield 1	GDA	56	306252	6239702	Open site	Valid	Artefact : 1		
	Contact	Recorders	Australian Museum Consulting (AM Consulting)					Permits		
45-5-0795	Holsworthy (H) 1:	AGD	56	309300	6240120	Open site	Valid	Artefact :-	Open Camp Site	1934
	Contact	Recorders	Philip Root					Permits	456	
45-5-4273	MA2A	GDA	56	307826	6240593	Open site	Valid	Artefact : 1		
	Contact	Recorders	Navin Officer Heritage Consultants Pty Ltd					Permits		
45-5-4274	MA3A	GDA	56	307456	6241375	Open site	Valid	Artefact : 1		

Report generated by AHIMS Web Service on 28/04/2014 for Nicola Hayes for the following area at Lat, Long From : -33.9657, 150.8946 - Lat, Long To : -33.9385, 150.9378 with a Buffer of 50 meters. Additional Info : EIS updated assessment. Number of Aboriginal sites and Aboriginal objects found is 24

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AHIMS Web Services (AWS) Extensive search - Site list report

Your Ref Number : Moorebank
Client Service ID : 132687

SiteID	SiteName	Date	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
45-5-4275	Contact MA4A	Recorders GDA	56	307489	6241489	Open site	Valid	Artefact : 1	Permits	
45-5-4276	Contact MA5A	Recorders GDA	56	307396	6241118	Open site	Valid	Artefact : 1	Permits	
45-5-4277	Contact MA7A	Recorders GDA	56	307758	6242040	Open site	Valid	Modified Tree (Carved or Scarred) : 1	Permits	
45-5-4278	Contact MA8A	Recorders GDA	56	307162	6240648	Open site	Valid	Modified Tree (Carved or Scarred) : 1	Permits	
45-5-4279	Contact MA6A	Recorders GDA	56	307774	6241842	Open site	Valid	Modified Tree (Carved or Scarred) : 1	Permits	
45-5-4280	Contact MA PAD1	Recorders GDA	56	308063	6242558	Open site	Valid	Potential Archaeological Deposit (PAD) : 1	Permits	
45-5-4281	Contact MA PAD2	Recorders GDA	56	307591	6242466	Open site	Valid	Potential Archaeological Deposit (PAD) : 1	Permits	
45-5-4282	Contact MA10	Recorders GDA	56	307801	6242087	Open site	Valid	Artefact : 1, Potential Archaeological Deposit (PAD) : 1	Permits	
45-5-4283	Contact MA1A	Recorders GDA	56	307309	6240020	Open site	Valid	Artefact : 1, Potential Archaeological Deposit (PAD) : 1	Permits	
45-5-4284	Contact MA11	Recorders GDA	56	307309	6240020	Open site	Valid	Artefact : 1, Potential Archaeological Deposit (PAD) : 1	Permits	

Report generated by AHIMS Web Service on 28/04/2014 for Nicola Hayes for the following area at Lat, Long From : -33.9657, 150.8946 - Lat, Long To : -33.9385, 150.9378 with a Buffer of 50 meters. Additional Info : EIS updated assessment. Number of Aboriginal sites and Aboriginal objects found is 24

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APPENDIX 7

PIT DESCRIPTIONS



MA1

Pit Number	Spit Number	Depth (cm)	Description	Artefacts
1	GPS Location: 307301.6240028 GDA			
	1	23-37	Coarse yellow-orange brown sand with charcoal flecks -spit 1 starts at 23cm - this is about 5-10cm into natural on east side - had to cut through fill and potential asbestos on west side - ground slopes down to west	1
	2	37-47	As above, decreasing charcoal	0
	3	47-58	As above	0
	4	58-68	As above with occasional coffee rock pieces/gravels at base	1
	5	68-80	Becoming paler with depth, no gravels	0
	6	80-91	Becoming paler, coffee rock coming through at base	0
	7	91-100	As above, mottled brown yellow and grey clayey sand coming through at base	0
	8	100-108	Mottled yellow, red-brown and green grey clayey sand to sandy clay	0
2	GPS Location: 307297.6239955 GDA			
	1	15/20-30	Coarse orange brown sand - spit 1 starts at 15-20cm - fill above this	0
	2	30-40	Becoming more orange with sandstone gravels coming through at base	2
	3	40-50	As above with mottled red--brown clayey sand coming through at base	0
		50-60	Grading to mottled red-brown, orange and grey clayey sand to sandy clay, increasing clay with depth	0
3	GPS Location: 307297.6240040 GDA			
	1	3-15	Dark brown sandy loam - no sign of disturbance - disturbed by machine to 3cm	0
	2	15-25	Grading to mottled yellow brown sand with increasing compaction - rectilinear feature at base of pit in southwest - full of fill, extended pit to north to avoid this	0
	3	25-34	continuation of mottled yellow brown to orange brown sand with occasional charcoal flecks	0
	4	34-43	As above with evidence of an old trench along western side - ca.30cm wide	1
	5	43-51	Coarse loose orange brown sand - feature in west dissipating	2



Pit Number	Spit Number	Depth (cm)	Description	Artefacts
	6	51-60	As above with occasional organic pellets/pebbles	0
	7	60-71	Becoming paler with depth - soft/loose sand with occasional orange concretions - feature in west absent at this depth	0
	8	71-81	As above with increasing red brown clayey sand coming through at base	0
	9	81-93	Grading to mottled red brown and orange sandy clay	0
4	GPS Location: 307299.6239964 GDA			
	1	25-35	Orange brown sand with occasional charcoal - begins at 25cm - fill above this	0
	2	35-46	Increasing red brown clayey sand at base of pit	1
	3	46-59	Decreasing red brown clayey sand - loose orange brown sand	0
	4	59-71	Grading to mottled red brown and orange brown sandy clay	0



Figure A1.1 Eastern wall of MA1-Pit 3-Spit 9 showing relatively intact profile.



Figure A1.2 Southwest wall of MA1-Pit 4-Spit 4 showing truncated profile with introduced fill.



MA5

Pit Number	Spit Number	Depth (cm)	Description	Artefacts
1	GPS Location: 307435.6241202GDA			
	1	0-7	Clay and disturbed fill – discarded, no sample.	0
	2	7-18	Fill, discarded.	0
	3	18-28	Fine yellow brown sand with occasional charcoal flecks.	0
	4	28-30	As above increasing compaction, increasing sandstone gravels.	0
	5	30-43	Increasing compaction, grading to orange brown sand with increasing sandstone gravels.	0
	6	43-45	Highly compacted slightly clayey sand mottling base.	0
	7	45-47	Becoming more clayey with depth.	0
2	GPS Location: 307430.6241179 GDA			
	1	15-20	Yellow brown sandy loam. Removed fill to depth of 15-17cm.	0
	2	20-25	Grading to a yellow sand. Increasing compaction.	0
	3	20-29	As above small flecks charcoal and sparse dark red clay nodules. Artefact found at base of this spit.	0
	4	29-32	Becoming a darker yellow very compact fine sand. Sandstone gravels starting and mottling with bioturbation. Larger charcoal pieces.	0
	5	32-43	As above grading to more compact orange sand with patches of stiff orange red clay at base.	1
	6	43-55	Grades to orange red clay across entire base of pit.	0
3	GPS Location: 307419.6241159 GDA			
	1	25-35	Orange brown compacted sand with sandstone gravels - possibly still in disturbed levels. Spit started 25cm down. Tried 2 locations upslope, they were too disturbed to be viable, moved back to original transect.	0
	2	35-45	As above, grading to a looser and damper version of the same - still disturbed?	0
	3	45-55	At base of pit a darker yellow brown sand with clay is coming through.	0
	4	55-65	Mixed orange brown sand and clay fill.	0
	5	65-110	No sample taken - Excavated down to inspect soil profile - continues as layers of fill. Pit abandoned	0



Pit Number	Spit Number	Depth (cm)	Description	Artefacts
4	GPS Location: 307409.6241141 GDA			
	1	10-20	Compacted brown sand with charcoal flecks and gravels. Natural profile begins at 13cm, spit sample is from 10-20cm.	1
	2	20-30	Grading to yellow sand with occasional broad mottling of brown.	1
	3	30-40	Grading to pale yellow brown compacted sand with occasional orange nodules.	0
	4	40-47	As above, patch of clay in NW corner at base of pit.	0
	5	47-53	Orange brown clay dominates across base.	0
5	GPS Location: 307401.6241119 GDA			
	1	8-18	Brown to grey brown loamy sand, with yellow sand coming through at base. Eight cm of fill removed-some fill still mixed with spit 1.	1
	2	18-26	Mottled yellow and brown sand with charcoal flecks, pocket of darker brown sand across centre (40x70cm).	8
	3	26-35	Grades to yellow brown sand with fine mottling from bioturbation. Feature from above no longer visible.	3
	4	35-45	As above, reduced bioturbation.	0
	5	45-58	Clear transition to orange red clay at base.	0
6	GPS Location: 307395.6241096 GDA			
	1	12-22	Black brown sandy loam with charcoal flecks - mottled yellow brown sand at base. 14 cm of fill, spit includes 2 cm of fill in places.	2
	2	22-35	Mottled yellow brown sand with charcoal flecks and occasional small sandstone gravels.	3
	3	35-46	Grading to clean yellow brown sand.	1
	4	46-57	As above, increasing sandstone gravels.	3
	5	57-69	As above, increasing compaction, grading to more yellow orange colour.	0
	6	69-80	Clear transition to orange red clay at 73cm.	0



Pit Number	Spit Number	Depth (cm)	Description	Artefacts
7	GPS Location: 307390.6241080 GDA			
	1	10-20	Grey brown sandy loam with occasional charcoal flecks. Spit 1 starts at 10cm, immediately below cap of disturbed fill.	1
	2	20-30	Grading to paler yellow brown sand at 25cm with increasing charcoal flecks.	7
	3	30-40	Continuation of same with occasional fine gravels.	40
	4	40-45	Becoming paler and more yellow in colour, decreasing charcoal, increasing black mineral gravels.	12
	5	45-62	As above with coffee rock nodules/pebbles starting to appear.	2
	6	62-73	As above with darker orange sand starting to appear at base. Increasing compaction.	0
	7	73-84	Increasing coffee rock, increasing compaction.	0
	8	84-96	Increasing coffee rock in a yellow sand.	0
	9	96-105	Grading to orange red sandy clay.	0
8	GPS Location: 307389.6241092 GDA			
	1	10-20	Grey brown sandy loam beneath 10cm cap of fill.	6
	2	20-30	Grading to paler grey brown sand.	3
	3	30-40	Pale yellow - yellow grey sand.	4
	4	40-50	As above.	3
	5	50-60	As above, increasing small pieces of coffee rock.	1
	6	60-70	As above with increasing coffee rock - increasing in size and quantity.	1
	7	70-80	As above with increasing coffee rock and increasing compaction.	0
	8	80-90	Increasing compaction and grading to clayey sand.	0
	9	90-95	Grading to compact stiff orange red clay.	0
9	GPS Location: 307405.6241130 GDA			
	1	11-22	Pale yellow brown sand, highly compacted. Fill removed to depth of 11cm. 25cm grey brown posthole at southern end.	1
	2	22-32	Continuation of yellow brown sand with occasional fine gravels; very compacted.	1
	3	32-40	Increasing compaction, grading to more yellow sand.	1



Pit Number	Spit Number	Depth (cm)	Description	Artefacts
	4	40-45	Clear transition to orange red clay at 42cm.	0
10	GPS Location: 307404.6241149 GDA			
	1	15/20-30	Yellow brown sand with some fill intermixed in upper 5 cm. Spit begins at 15-20cm, below a cap of disturbed fill.	0
	2	30-40	Yellow brown sand with some brown mottling from bioturbation.	0
	3	40-48	Grading to a darker yellow with orange red clay coming through at base,	0
11	GPS Location: 307398.6241105 GDA			
	1	5/8-15	Grey brown sandy loam. Traces of clay fill over top, spit 1 starts at 5-8cm.	0
	2	15-25	Grading to yellow brown sand.	1
	3	25-35	As above.	1
	4	35-46	Increasingly pale leached sand, increasing compaction.	0
	5	46-60	As above with orange red clay coming through at base.	0

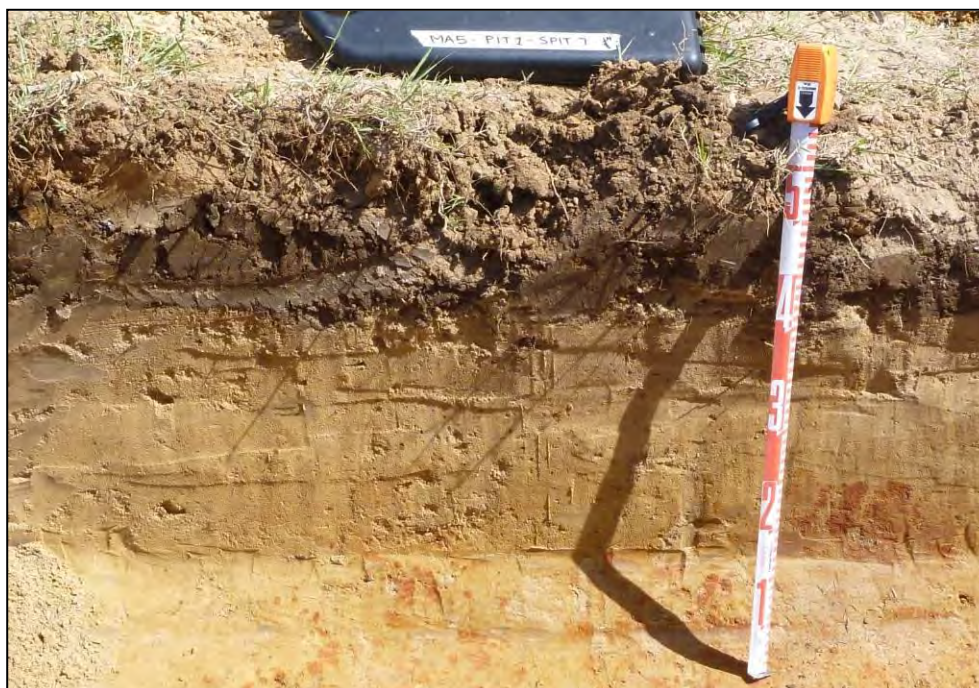


Figure A1.3 Southern wall of MA5-Pit 1-Spit 7 showing truncated profile with introduced fill in top 20 cm.



Figure A1.4 Eastern wall of MA5-Pit 3-Spit 5 showing layers of disturbance and fill.



Figure A1.5 Eastern wall of MA5-Pit 7-Spit 9 showing relatively intact soil profile beneath a cap of disturbed fill.



Figure A1.6 Western wall of MA5-Pit 8-Spit 9 showing relatively intact and undisturbed soil profile.



Figure A1.7 Western wall of MA5-Pit 11-Spit 5 showing truncated soil profile with thin layer of fill.



MRSA1

Pit Number	Spit Number	Depth (cm)	Description	Artefacts
1	GPS Location: 307837.6242005 GDA			
	1	0-12	Grey brown sandy loam with grass roots; insect activity also evidenced; evidence of disturbance in the form of slag and other modern artefacts. <i>Used machine to clean pit down to depth of 15cm, where disturbed fill appeared to terminate.</i>	0
	2	15-28	As above, increasing compaction; very dry; occasional charcoal flecks. Large clumps of dark yellow clay present; grading to mottled pale and dark yellow clay base.	0
2	GPS Location: 307817.6242093 GDA			
	1	0-10	Yellow brown sandy loam with grass roots; insect activity also evidenced, mottled clay coming through at base.	3
	2	10-22	Highly compacted leached silty sand with mottling from bioturbation; charcoal flecks and gravel coming through at base.	4
	3	22-36	As above with increasing gravels and clay coming through, grading to a dark yellow clay base.	0
3	GPS Location: 307797. 6242088 GDA			
	1	0-10	Very dry grey brown sandy silt; grass roots; clumpy and compacted soil, some dark clay patches coming through at base.	2
	2	10-20	As above.	0
	3	20-30	Becoming paler yellow brown with increasing sand content, grading to a solid dark yellow clay base.	0
4	GPS Location: 307776.6242105 GDA			
	1	0-10	Brown sandy silt; grass roots; insect activity also evidenced.	0
	2	10-22	Grading to yellow brown silty sand; mild compaction; charcoal flecks; mottled light yellow base.	1
	3	22-32	Grading to a slightly compacted mottled yellow brown sand; occasional small dark yellow clay nodules; two small tree roots at base; some bioturbation.	0
	4	32-43	As above becoming a pale yellow and slightly more compact, some bioturbation, no tree roots.	1
	5	43-52	As above, increasing compaction and bioturbation	2
	6	50-59	Grading to a dark yellow clay – clay is slightly deeper in western corner.	0



Pit Number	Spit Number	Depth (cm)	Description	Artefacts
5	GPS Location: 307757.6242113 GDA			
	1	0-10	Loose brown silty sand; grading to a more compact yellow silty sand, slight mottling across base of pit.	1
	2	10-20	Grading to mottled yellow and brown sand; fine rootlets and one tree root.	0
	3	20-30	Becoming paler yellow brown sand with occasional charcoal.	0
	4	30-40	As above.	0
	5	40-50	As above - very uniform.	0
	6	50-60	As above with increasing moisture content – one water worn pebble.	1
	7	60-70	Continuation of same.	1
	8	70-80	As above.	0
	9	80-90	As above.	0
	10	90-100	As above with increasing small hard cemented sand nodules.	0
	11	100-110	Increasing cemented sand nodules; nodules becoming dark reddish brown in colour.	0
	12	110-120	As above with nodules increasing in number and size. <i>Pit terminated due to safety concerns.</i>	0
6	GPS Location: 307803. 6242078 GDA			
	1	15-29	Light grey sandy silt, highly compacted – Spit 1 begins at 15cm – upper 15cm was fill that was removed by machine.	0
	2	29-31	as above occasional charcoal; grading into a dark yellow clay across entire base at 31 cm.	0



Figure A1.8 Southern wall of MRSA1-Pit 4-Spit 6.



Figure A1.9 Western wall of MRSA1-Pit 5-Spit 12.



MRSA3

Pit Number	Spit Number	Depth (cm)	Description	Artefacts
1	GPS Location: 307904.6241114 GDA			
	1	0-6	Grey brown friable humic sandy loam. Tree roots and insect burrows.	0
	2	6-15	Grading to yellow brown compacted sand.	0
	3	15-25	Sharp transition to orange brown clay.	0
2	GPS Location: 307916.6241143 GDA			
	1	0-10	Brown humic sandy loam with tree roots.	0
	2	10-20	Yellow brown sand with clear transition to orange brown clay at base.	0
3	GPS Location: 307912.6241165 GDA			
	1	0-10	Compact yellow brown sandy loam with lots of roots	0
	2	10-20	Darker yellow sandy loam with dark yellow clay patches at base, occasional charcoal flecks	0
	3	20-25	Grading to a darker yellow clay	0
4	GPS Location: 307919.6241189 GDA			
	1	0-11	Grey brown humic sandy loam, yellow brown sand coming through at base, with occasional orange clay	0
	2	11-18	Yellow brown sand with increasing orange clay	0
	3	18-23	Grading to stiff orange brown clay	0
5	GPS Location: 307926.6241207 GDA			
	1	0-9	Grey brown humic sandy loam, grading to yellow brown sand at base.	0
	2	9-25	Compacted dark yellow brown sand.	0
	3	25-23	Compacted mottled yellow brown sand.	0
	4	23-28	Highly compacted mottled yellow brown clayey sand at base.	0
6	GPS Location: 307931.6241239 GDA			
	1	0-10	Light yellow brown sandy loam, compact with clay mottling in places. Possibly a truncated surface.	0
	2	10-20	Light yellow compacted clean sand overlaying patches of dark yellow clay at base.	0



Pit Number	Spit Number	Depth (cm)	Description	Artefacts
	3	20-23	Yellow clay extends across whole base of pit.	0
7	GPS Location: 307935.6241260 GDA			
	1	0-7	Truncated soil profile, grey brown sandy loam with sharp transition to orange clay at 5-7cm	0



Figure A1.10 Southern wall of MRSA3-Pit 1-Spit 3.

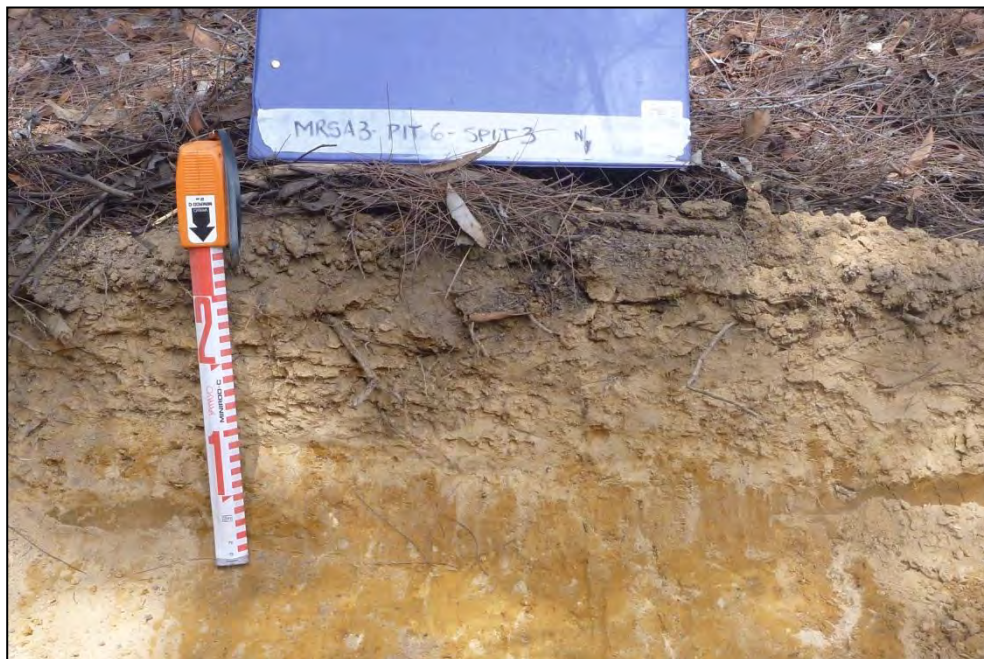


Figure A1.11 Southern wall of MRSA3-Pit 6-Spit 3.



MAPAD1

Pit Number	Spit Number	Depth (cm)	Description	Artefacts
1	GPS Location: 308115.6242505 GDA			
	1	0-2	Grey brown sandy loam.	0
	2	2-10	Brown humic sand - alluvium? Slight darker mottling, occasional water rounded fine gravels.	0
	3	10-20	Becoming compacted giving onto light yellow brown, slightly coarse sand with brown mottling.	0
	4	20-30	Yellow sand with brownish mottling and occasional water worn quartz. Dark orange brown mottling at base - appears to be from decaying iron stained gravel	0
	5	30-40	Yellow sand with orange brown gravels and sandstone pebbles.	0
	6	40-50	Yellow sand with orange brown gravels and sandstone pebbles.	0
	7	50-60	As above with reduced gravels.	0
	8	60-70	As above with subangular quartz gravels and some petrified wood chunks.	1
	9	70-80	Clean orange brown sand.	0
	10	80-90	As above.	0
	11	90-100	Grading to orange brown clayey sand to sandy clay.	0
2	GPS Location: 308105.6242484 GDA			
	1	0-10	Grey brown sandy loam.	0
	2	10-20	As above.	13
	3	20-30	Grading to brown sand with charcoal specks.	11
	4	30-40	Brown sand.	0
	5	40-50	Brown sand.	0
	6	50-60	Brown sand.	0
	7	60-70	Clean brown sand	0
	8	70-80	As above.	0
	9	80-90	Pale brown sand with occasional small subangular gravels.	0
	10	90-100	Grades to orange sandy clay.	0



Pit Number	Spit Number	Depth (cm)	Description	Artefacts
3	GPS Location: 308091.6242450 GDA			
	1	0-10	Grey brown humic sandy loam.	0
	2	10-20	Brown sandy loam with disturbance evidenced by bricks and other 20th century artefacts.	3
	3	20-32	Bricks and tiles continue, also ceramic- had slight wall collapse from removal of the bricks and fill. Removed and isolated wall collapse cleaned and started again - 25cm at east end isolated, continued excavation in a 75x50 cm pit. Grey brown sandy loam across the western 3/4 of pit.	2
	4	32-40	Grading to yellow brown sand - no evidence of disturbance. Looks like spits 3 and 4 relate to old A horizon.	3
	5	40-56	Yellow brown sand.	0
	6	56-65	Clean brown to yellow brown sand.	1
	7	65-76	As above.	0
	8	76-83	As above - tending to paler yellow in east and darker in west.	2
	9	83-90	As above.	1
	10	90-99	As above.	1
	11	99-107	Clean yellow brown sand - pocket of grey brown sand in northeast corner - broken pebble came from here – ie disturbed context. – pit terminated because it was too small to enable excavation at this depth	2
4	GPS Location: 308078.6242448 GDA			
	1	0-5	Dark brown humic sandy loam with some clay nodules - clay looks to be evidence of disturbance.	1
	2	5-10	Grey brown sandy loam.	6
	3	10-20	Grading to brown sand.	5
	4	20-30	Grades to mottled yellow and brown sand.	5
	5	30-40	Grades to yellow brown sand.	5
	6	40-50	Continuation of clean yellow brown sand.	1
	7	50-61	As above.	1
	8	61-70	As above with occasional sandstone pebbles/gravels - appears to be possible pit extending into northeast corner. Pit evidenced by 5cm wide, curved band of grey-brown sand, less compacted.	2



Pit Number	Spit Number	Depth (cm)	Description	Artefacts
	9	70-80	Continuation of yellow brown sand, no gravels - feature in northeast terminates at 74cm , it is about 25 cm deep and 42cm across.	1
	10	80-90	Yellow brown sand with occasional orange clayey sand inclusions.	0
	11	90-100	Grading to paler more compact sand - mottling of orange sandy clay.	0
5	GPS Location: 308069.6242417 GDA			
	1	0-10	Dark grey brown sandy loam - some disturbance from European rubbish disposal.	2
	2	10-20	Grades to mottled yellow brown sand.	8
	3	20-30	Increasing compaction with charcoal flecks. – Artefact from 30cm down from auger probe adjacent pit.	1
	4	30-40	Continuation of yellow brown sand, two grey-brown sand features in east, possibly postholes, one of them is very rectilinear.	2
	5	40-50	Clean yellow brown sand. One feature of grey brown continues in NE, other feature on south side has disappeared.	1
	6	50-60	Clear transition to orange-red sandy clay at base.	0
6	GPS Location: 308053.6242406 GDA			
	1	0-10	Grey brown humic sandy loam.	0
	2	10-20	As above, grading to yellow brown sand with occasional charcoal specks and sandstone nodules.	3
	3	20-29	Grading to a more yellow sand.	0
	4	29-40	As above with increasing sandstone gravels – subrounded.	0
	5	40-51	As above, sharp transition to orange and red clay starting in east.	1
7	GPS Location: 308048.6242387 GDA			
	1	0-10	Dark grey brown humic sandy loam.	7
	2	10-20	Grades to mottled yellow brown sand.	5
	3	20-30	Yellow brown sand with large sandstone gravels.	2
	4	30-40	Yellow brown sand with increasing amounts of large sandstone gravels.	0



Pit Number	Spit Number	Depth (cm)	Description	Artefacts
	5	40-48	Grading to a darker yellow brown sand with large sandstone gravels. Clear transition to orange red sandy clay at base.	0
8	GPS Location: 308032.6242377 GDA			
	1	0-10	Dark brown humic sandy loam. Numerous bricks not in situ.	1
	2	10-20	Grades to mottled yellow brown sand with fewer brick fragments. Piece of timber (paling?) intruding about 5cm in and 15cm down on southwest side.	1
	3	20-30	Largely as above increasing sand and <5cm sandstone gravels.	5
	4	40-50	Yellow brown sand with increasing large sandstone gravels.	0
	5	40-43	Sharp transition to orange red clay at 41-43cm.	1
9a	GPS Location: 308061.6242410 GDA			
	1	0-10	Dark grey brown sandy loam. Pit is located 50cm south of a concrete slab.	2
	2	10-20	Encountered services pipe running east—west.	5
9	GPS Location: 308062.6242410 GDA			
	1	0-10	Black-brown sandy loam, some evidence of disturbance at eastern end: European artefacts & grey sand.	5
	2	10-20	Sandy loam grading to a mottled yellow sand. Mixed sediments highly disturbed clay pipe pieces.	2
	3	20-30	Mixed sandy loam grading to a mixed red clay mottled with yellow sand.	9



Figure A1.12 Northern wall of MAPAD1-Pit 1-Spit 11.



Figure A1.13 Northern wall of MAPAD1-Pit 4-Spit 11 pocket of disturbance in northeastern corner.



Figure A1.14 Northern wall of MAPAD1-Pit 5-Spit 6 showing pocket of disturbance in northeast.



Figure A1.15 Eastern wall of MAPAD1-Pit 7-Spit 5.