

Appendix C Geotechnical Information

Figures:

- F001_Site Location
- F002_Areas of Geotechnical Concern (AGC)
- F003A_Site Detail – Eastern Portion of Site
- F003A_Site Detail – Central Portion of Site
- F003A_Site Detail – Western Portion of Site
- F004_AEC
- AGC - List and Complied Photos
- Geotechnical Sites - List and Complied Photos

Geotechnical Site Observations (GSO) - Descriptions and Photo Reference List

Site Location	GSO Description	GSO Comments	Photo 1	Photo 2	Photo 3	Photo 4
1	Cutting west of Tuggeranong Parkway	Cutting estimated as 3m to 5m high, comprising orange residual soil, no significant topsoil, no obvious rock outcrops, about 2h:1v to 1.5h:1v.	SITE1_ATT35_Photo_1.jpg			
2	Pine plantation	As per previous observation	SITE2_ATT38_Photo_1.jpg			
3	View west along alignment area		SITE3_ATT12_Photo_1.jpg	SITE3_ATT17_Photo_2.jpg		
4	Filled ground		SITE4_ATT8_Photo_1.jpg			
5	Shallow to rock on western side of Molonglo River	Weathered Dacite, moderately weathered, very to extremely high strength	SITE5_ATT32_Photo_1.jpg	SITE5_ATT4_Photo_2.jpg	SITE5_ATT10_Photo_3.jpg	SITE5_ATT41_Photo_4.jpg
6	View to weathered rock in Molonglo River bed		SITE6_ATT28_Photo_1.jpg	SITE6_ATT49_Photo_2.jpg	SITE6_ATT51_Photo_3.jpg	
7	Southern end of cutting west of Tuggeranong parkway	Cutting estimated as 5m to 6m high at highest point...other observations as per northern end of cut. View south shows Tuggeranong Parkway in up to 4m of fill	SITE7_ATT26_Photo_1.jpg	SITE7_ATT30_Photo_2.jpg	SITE7_ATT34_Photo_3.jpg	
8	Pine plantation - shallow creek line	Creek has estimated 1m to 2m alluvial soil, over residual then weathered rock	SITE8_ATT7_Photo_1.jpg			
9	Western end of project, view looking east towards fill mounds		SITE9_ATT42_Photo_1.jpg	SITE9_ATT36_Photo_2.jpg	SITE9_ATT11_Photo_3.jpg	
10	View towards east over planned crossing of Molonglo River	Note: shallow to weathered rock beneath ridge line.	SITE10_ATT44_Photo_1.jpg	SITE10_ATT25_Photo_2.jpg	SITE10_ATT18_Photo_3.jpg	SITE10_ATT21_Photo_4.jpg
11	View east along alignment corridor		SITE11_ATT13_Photo_1.jpg			
12	Weathered rock exposure	Volcanic rock origin, fine grained, orange brown to brown, very high strength	No Photos			
13	View west to Molonglo River valley	Shallow to rock estimated 0.5m to 1m to weathered rock	SITE13_ATT37_Photo_1.jpg	SITE13_ATT27_Photo_2.jpg		
14	Creek line exposure	Soil thickness at least 3m thick. Possible weathered rock in base, not confirmed. Rock is likely Dacite, some coarse sand phenocrysts and quartz veins. Some concrete in base of creek...possible sewer alignment nearby.	SITE14_ATT31_Photo_1.jpg	SITE14_ATT5_Photo_2.jpg	SITE14_ATT3_Photo_3.jpg	SITE14_ATT45_Photo_4.jpg
15	View west down creek to sewer vent		SITE14_ATT39_Photo_5.jpg			
16	Monitoring well with standpipe	Stickup 0.65m, depth to standing water from top of casing 3.05m, depth to base of well 10.05m. Depth below ground level to standing water is 2.40m	SITE15_ATT15_Photo_1.jpg			
17	Weathered Dacite exposed at ground surface	Porphyritic, very to extremely high strength, many quartz veins, moderately weathered	SITE16_ATT20_Photo_1.jpg	SITE16_ATT33_Photo_2.jpg		
18	View to bend of Molonglo River with rock exposed in bed of river		SITE17_ATT23_Photo_1.jpg	SITE17_ATT50_Photo_2.jpg	SITE17_ATT48_Photo_3.jpg	
19	Molonglo River bed area of likely bridge crossing	Weathered rock exposed in River bed area	SITE18_ATT52_Photo_1.jpg	SITE18_ATT24_Photo_2.jpg		
20	Pine Plantation	Estimated soil thickness 0.5m-1m over weathered rock, numerous pine trees to 15m high	SITE19_ATT16_Photo_2.jpg	SITE19_ATT22_Photo_3.jpg	SITE19_ATT47_Photo_3.jpg	
21	Soil exposure about 1.5m thick over weathered Dacite	Some alluvial soil with residual towards base of soil exposure	SITE20_ATT6_Photo_1.jpg			
22	Weathered rock exposure	Weathered dacite, porphyritic, orange brown, very high to extremely high strength, block size 0.1m to 0.5m diameter, dipping discontinuities and evidence of tech tonic faulting	SITE21_ATT9_Photo_1.jpg			
23	Weathered rock exposure	Volcanic rock origin, fine grained, orange brown to brown, very high strength	SITE22_ATT46_Photo_1.jpg	SITE22_ATT53_Photo_2.jpg	SITE22_ATT19_Photo_3.jpg	
24	View east over Molonglo River, with SPS in view.	Note weathered rock exposures in floor of River bed of Molonglo River	SITE23_ATT29_Photo_1.jpg	SITE23_ATT14_Photo_2.jpg		
25	Filled creek line		SITE24_ATT40_Photo_1.jpg			
			SITE25_ATT43_Photo_1.jpg			



SITE1_ATT35_Photo_1



SITE2_ATT38_Photo_1



SITE3_ATT12_Photo_1



SITE3_ATT17_Photo_2



SITE4_ATT8_Photo_1



SITE5_ATT4_Photo_2



SITE5_ATT10_Photo_3



SITE5_ATT32_Photo_1



SITE5_ATT41_Photo_4



SITE6_ATT28_Photo_1



SITE6_ATT49_Photo_2



SITE6_ATT51_Photo_3



SITE7_ATT26_Photo_1



SITE7_ATT30_Photo_2



SITE7_ATT34_Photo_3



SITE8_ATT7_Photo_1



SITE9_ATT11_Photo_3



SITE9_ATT36_Photo_2