Appendix C Revised Surface Water Classification

Creek Crossing Locations Creek													Identified Cre	eek Crossings		required (ie. S exists or	d or no works uitable crossing site access ctions)				
Creek Crossin between Angl	g Locations e Positions	Creek Crossing I	Figure References	3	Strahler Classif	ication	Threatened aquatic spp	Threatened Ecological Community		Waterway Asse	ssment Classi	fication	Existing to	b be upgraded		crossing to be	restri	ctions)			
				1st order 2nd	Order 3rd Orde	r DPI Classification (June 2012)		y	Class 1	Class 2 Class		DPI Classification (June 2012)		Off easement			On easement	Off easement	Preliminary site inspection completed?	Further consultatior with DPI required fo this location	
1	2	C1	Figure 2a	1							1		1						✓		To be confirmed (TBC), Sediment and erosion controls to minimise impact of Category 2 access track construction.
2	3	C2	Figure 2a	1		3rd					1					1			✓	✓	No flowing water course identifed at this location. Works required would be construction of Category 2 access track.
2	3	C3	Figure 2a	1							1		1						✓		Upgrade of existing crossing. Nature of works and design TBC
3	4	C4	Figure 2a	1		2nd				1					1				✓		Bed level crossing installation- Nature of works and design TBC
3	4	C5	Figure 2a	1		3rd				1				1					✓	✓	TBC. Recommendation for installation of a piped culvert at minimum.
3	4	C6	Figure 2a	1		3rd				1						1			✓	✓	TBC. Recommendation for installation of a piped culvert at minimum.
3	4	C7	Figure 2a	1		2nd		1		1					1				✓		TBC. Recommendation for installation of a boxed culvert at minimum due to proximity to AECDR).
4	5	C8	Figure 2b	1		3rd				1			1						✓	✓	Field inspection notes minimal works would be required. Nature of works TBC. Recommended guidance suggests installation of a piped culvert at minimum if structure is required.
4	5	C9	Figure 2b	1							1					1			✓		TBC. Bed level crossing installation- Nature of works and design TBC
4	5	C10	Figure 2b	1							1					1			✓		TBC. Bed level crossing installation- Nature of works and design TBC
4	5	C11	Figure 2b	1							1			1					✓		TBC. Bed level crossing installation- Nature of works and design TBC
6	7	C12	Figure 2b	1		3rd					1					1				✓	Not identified during preliminary site walkover. Nature of works and design TBC following further field assessment.
6	7	C13	Figure 2b	1							1			1					✓		Upgrade of existing crossing. Nature of works and design TBC
6	7	C14	Figure 2b	1							1				1				✓		TBC. Bed level crossing installation- Nature of works and design TBC
6	7	C15	Figure 2b	1							1				1				✓		TBC. Bed level crossing installation- Nature of works and design TBC
8	9	C16	Figure 2c		1	4th			1			2		1					✓	✓	Recommendation for a bridge or box culvert installation/ upgrade at this location. Bank protection works required. Design TBC
8	9	C17	Figure 2c	1		1st				1					1				√		Recommendation for a box culvert installation. Bank protection works required. Design TBC Recommendation for a box culvert installation. Bank
8	9	C18	Figure 2c	1	_	2nd				1						1			√		protection works required. Design TBC TBC. Recommendation for installation of a piped culvert at
9	10	C19 TBC*	Figure 2c		1	1st				1						1			√		minimum. Identified as Sandy Creek by DPI (1.06.12). Crossing
																					requirements TBC. Recommendation for a bridge or box culvert installation/
10	11	C20	Figure 2c		1	4th		1	1			2	1						√	√	upgrade at this location. Bank protection works required. Design TBC TBC. Bed level crossing installation- Nature of works and
11	12	C21	Figure 2d	1		1st					1				1						design TBC TBC. Bed level crossing installation- Nature of works and
11	12	C22	Figure 2d	1		1st					1				1						design TBC
11	12	C23	Figure 2d	1							1			1					✓		TBC. Bed level crossing installation- Nature of works and design TBC
11	12	C24	Figure 2d	1							1		1						✓		TBC. Bed level crossing installation- Nature of works and design TBC

		Identified Creek Crossings Threatened Threatened						required (ie. S exists or	d or no works uitable crossing site access ctions)														
Cree betv	k Crossing I veen Angle I	Locations Positions	Creek Crossing ID	Figure References		Strahl	er Classification	Threatened	Ecological		Mataurra		- out Classifi	landinu	Forballo or to	ha ana ana da d		crossing to be					
					1st order	2nd Order	3rd Order DPI Classificatio (June 2012)	aquatic spp	Community	Class 1	Class 2		nent Classifi Class 4	DPI Classification (June 2012)		off easement		off easement	On easement	Off easement	Preliminary site inspection completed?	Further consultation with DPI required for this location	
	12	13	C25	Figure 2d	1								1				1				✓		TBC. Bed level crossing installation- Nature of works and design TBC
	13	14	C26	Figure 2d	1		3rd						1				1				✓	✓	TBC. Nature of works and design TBC
	13	14	C27	Figure 2d		1	4th					1		2			1				✓	✓	Detailed site inspection pending TBC. Recommendation for installation of a piped culvert at minimum.
	13	14	C28	Figure 2d	1		2nd					1					1						Detailed site inspection pending TBC. Recommendation for installation of a piped culvert at minimum.
	14	15	C29	Figure 2e		1	4th		1	1				1					1		✓	√	No crossing requirements identified as existing crossing on Reedy Creek Road assessed as adequate, however bank protection works would be requried to ensure no construction impacts to Reedy Creek. Details TBC
	15	16	C30	Figure 2e	1		4th						1	2	1						\checkmark	✓	TBC. Nature of works and design TBC
	15	16	C31	Figure 2e	1		4th					1		2		1					✓	✓	TBC. Nature of works and design TBC
	15	16	C32	Figure 2e	1		2nd						1		1								Detailed site inspection pending. Believed to be an existing crossing which could be upgraded TBC. Nature of works and design TBC
	15	16	C33	Figure 2e/f	1		2nd						1						1				Detailed site inspection pending as owner restricted entry. Nature of works and design TBC
	16	17	C34	Figure 2f		1	3rd					1							1				Detailed site inspection pending as owner restricted entry. Nature of works and design TBC
	16	17	C35	Figure 2f		1	5th	1		1				1						1			Owner restricted access. Detailed investigation pending. Proposed construction of category 2 access track crossing Mole River with recorded threatened aquatic spp. Tandanus tandanus. Exisiting crossing arrangments potentially appropriate however site access required to confirm. Bank protection works would be requried to ensure no construction impacts and a box culvert installation at minimum. Details TBC
			TBC*				3rd																Identified by DPI (1.06.12). Crossing requirements TBC.
	20	21	C36	Figure 2g	1		3rd						1			1					✓	✓	TBC. Nature of works and design TBC
	20	21	C37	Figure 2g	1								1			1					✓		TBC. Nature of works and design TBC
	22	23	C38	Figure 2-h	1			1			1					1					√		Proposed upgrade of existing crossing as part of construction of category 2 access track in close proximity to Tenterfield Creek (with records of threatened aquatic species). Crossing structure design TBA, recommend as a minimum, installation of box culvert and adequate sediment and erosion measures and bank protection works to minimise construction impacts at this location. Details TBC
	22	23	C39	Figure 2-h	1		3rd				1						1				✓	✓	TBC. Recommendation for installation of a boxed culvert at minimum.
	24	25	C40	Figure 2-h	1		3rd	1		1				1	1						✓	1	Category 2 access track to cross tributary of Tenterfield Creek. Due to known record of threatened spp. Mogurnda adspersa. Box culvert installation requirement as minimum. Design subject to further consultation with DPI. Adequate sediment and erosion controls and bank protection works required at this location.
	25	26	C41	Figure 2i, 2j	1		3rd	1		1				1					1		√	√	Crossing may be avoided altogether. Arrangements to be confirmed. Known record of threatened spp. Mogurnda adspersa and Tandanus tandanus. Box culvert installation requirement as minimum. Adequate sediment and erosion controls and bank protection works required at this location.

				Identified Creek Crossings Threatened								required (ie. Se exists or	d or no works uitable crossing site access ctions)										
Creek Co	ossing Locations Angle Positions	Creek Crossing ID	Figure References		Strahl	ler Classificati	ion	Threatened	Ecological		Matarus	N/ Accocom	ant Classifie	ation	Evistina to	haavadad		crossing to be	1331	,			
				1st order	2nd Order	3rd Order	DPI Classification (June 2012)	aquatic spp	Community	Class 1		Class 3	nent Classific	DPI Classification (June 2012)		off easement		Off easement	On easement	Off easement	Preliminary site inspection completed?	Further consultation with DPI required for this location	
25	26	C42	Figure 2i, 2j	1			3rd	1		1				1		1					✓	√	Existing crossing to be upgrade as part of Category 2 access track work to cross tributary of Tenterfield Creek. Known record of threatened spp. Mogurnda adspersa. Box culvert installation recommended as minimum. Adequate sediment and erosion controls and bank protection works required at this location.
25	26	C43	Figure 2i, 2j	1			3rd	1		1				1			1				✓	✓	New crossing to be installed as part of Category 2 access track work to cross tributary of Tenterfield Creek. Known record of threatened spp. in lower reaches of Tenterfield Creek. Box culvert installation recommended as minimum. Adequate sediment and erosion controls and bank protectior works required at this location.
25	26	C44	Figure 2i, 2j	1			3rd	1		1				1	1						✓	✓	New crossing to be installed as part of Category 2 access track work to cross tributary of Tenterfield Creek. Known record of threatened spp. in lower reaches of Tenterfield Creek. Box culvert installation recommended as minimum. Adequate sediment and erosion controls and bank protection works required at this location.
26	27	C45	Figure 2j/k	1			3rd	1		1				1	1						✓	√	Existing crossing to be upgrade as part of Category 2 access track work to cross tributary of Tenterfield Creek. Known record of threatened spp. Tandanus tandanus in lower reaches of Tenterfield Creek. Box culvert installation recommended as minimum. Adequate sediment and erosion controls and bank protection works required at this location.
26	27	C46	Figure 2j/k	1			3rd	1		1				1		1					√	~	Existing crossing to be upgraded as part of Category 2 access track work to cross tributary of Tenterfield Creek. Known record of threatened spp. Tandanus tandanus in lower reaches of Tenterfield Creek. Box culvert installation recommended as minimum. Adequate sediment and erosion controls and bank protection works required at this location.
26	27	C47	Figure 2j/k		1		4th	1		1				1				1			√	✓	New crossing to be installed as part of Category 3 access track work to cross tributary of Tenterfield Creek (Sunnyside Creek). Known record of threatened spp. in lower reaches of Tenterfield Creek. Box culvert installation recommended as minimum. Adequate sediment and erosion controls and bank protection works required at this location given access track has been identifed as Category 3 therefore involving significant ground distrubance and cut and fill.
27	28	C48	Figure 2k/l	1			1st	1		1					1						√	✓	Existing crossing to be upgraded as part of Category 2 access track work to cross tributary of Tenterfield Creek. Known record of threatened spp. Box culvert installation recommended as minimum. Adequate sediment and erosion controls and bank protection works required at this location.
27	28	C49	Figure 2k/l	1			4th	1		1				1	1						✓	✓	Existing crossing to be upgraded as part of Category 2 access track work to cross tributary of Tenterfield Creek (Log Hut Creek). Threatened spp. know in tributaries of Tenterfield Ck. Box culvert installation recommended as minimum. Adequate sediment and erosion controls and bank protection works required at this location.
29	30	C50	Figure 2l/m	1			2nd	1		1						1					✓	✓	TBC. Nature of works and design TBC. Threatened spp. know in tributaries of Tenterfield Ck. Box culvert installation recommended as minimum. Adequate sediment and erosion control

																Identified Creek Crossings			required (ie. Si	d or no works uitable crossing site access			
Creek Cross between An	ng Locations gle Positions	Creek Crossing ID	Figure References		Strahl	ler Classificat	tion	Threatened aquatic spp	Threatened Ecological Community		Waterwa	av Assessm	nent Classifi	ication	Existing to	be upgraded		crossing to be	restri	ctions)			
				1st order	2nd Order	3rd Order	DPI Classification (June 2012)		,	Class 1		Class 3		DPI Classification (June 2012)					On easement	Off easement	Preliminary site inspection completed?	Further consultation with DPI required for this location	
31	32	C51	Figure 2m		1		3rd				1			1			1				√		New crossing to be installed as part of Category 2 access track work to cross Gosling Swamp Ck. Known record of threatened spp. in upper reaches towards Tenterfield Creek. Box culvert installation recommended as minimum. Adequate sediment and erosion controls required.
33	34	C52	Figure 2m	1			1st				1										√	✓	Existing crossing to be upgrade as part of Category 2 access track work to cross tributary of Tenterfield Creek. Known record of threatened spp. in lower reaches of Tenterfield Creek. Box culvert installation recommended as minimum. Adequate sediment and
34	35	C53	Figure 2n		2		3rd				1			1		1					√	✓	Existing crossing to be upgraded as part of Category 3 access track work to cross Ram Swamp Creek. Known record of threatened spp. in lower reaches of Tenterfield Creek. Box culvert installation recommended as minimum. A
34	35	C54	Figure 2n	1			3rd						1					1			✓	✓	TBC. Bed level crossing installation- Nature of works and design TBC
34	35	C55	Figure 2n	1			3rd						1							1		✓	Further inspection required to determine requirements. Nature of works and design TBC
35	36	C56	Figure 2n		1		3rd						1			1					✓	✓	TBC. Nature of works and design TBC
35	36	C57	Figure 2o	1			1st					1					1				✓		New crossing potentially required, however area appeared generally wet/ swampy rather than with defined water channel. Recommendations within guidance suggests Pipe or Box culvert installation recommended as minimum.
36	37	C58	Figure 2o	1			3rd					1						1			✓	√	New crossing to be installed as part of Category 2 access track work Pipe or Box culvert installation recommended as minimum.
37	38	C59	Figure 2o/p	1			3rd				1							1			✓	✓	New crossing to be installed as part of Category 2 access track work. Box culvert installation recommended as minimum.
38	39	C60	Figure 2p	1			3rd					1						1			√	✓	New crossing to be installed as part of Category 3 access track work to cross Black Swamp Ck. Box culvert installation recommended as minimum. Adequate sediment and erosion controls and bank protection works required at this location given access track has been identifed as Category 3 therefore involving significant ground distrubance and cut and fill.
40	41	C61	Figure 2p	1			4th						1	2					1			√	TBC. Temporary access arrangements to be negotiated with landholders across prime agriculutural land. Access would preferentially avoid crossing any watercourses therefore potentially no works at this location.
40	41	C62	Figure 2p	1			4th						1	2					1			√	TBC. Temporary access arrangements to be negotiated with landholders across prime agriculutural land. Access would preferentially avoid crossing any watercourses therefore potentially no works at this location.
40	41	C63	Figure 2p	1			2nd						1						1				TBC. Temporary access arrangements to be negotiated with landholders across prime agriculutural land. Access would preferentially avoid crossing any watercourses therefore potentially no works at this location.
40	41	C64	Figure 2p/q	1			3rd						1						1			•	TBC. Temporary access arrangements to be negotiated with landholders across prime agriculutural land. Access would preferentially avoid crossing any watercourses therefore potentially no works at this location.

																	Identified Cre	ek Crossings		required (ie. Se exists or	d or no works uitable crossing site access ctions)			
Creek (Crossing Loc en Angle Pos	cations sitions	Creek Crossing ID	Figure References		Strah	ler Classifica	tion	Threatened aquatic spp	Threatened Ecological Community		Waterwa	av Assessm	nent Classific	ation	Existing to	be upgraded		rossing to be	16301	ctions,			
					1st order	2nd Order	3rd Order	DPI Classification (June 2012)	aquano spp	Community	Class 1		Class 3		DPI Classification (June 2012)		Off easement			On easement	Off easement	Preliminary site inspection completed?	Further consultation with DPI required for this location	
40) 4	41	C65	Figure 2p/q	1			3rd						1						1			✓	TBC. Temporary access arrangements to be negotiated with landholders across prime agriculutural land. Access would preferentially avoid crossing any watercourses therefore potentially no works at this location. Noted that this crossing has been identified by DPI from 1:25,000 mapping as the same as C66 (DPI 1.06.12)
40) 4	41	C66	Figure 2p/q	1			3rd					1							1			√	TBC. Temporary access arrangements to be negotiated with landholders across prime agriculutural land. Access would preferentially avoid crossing any watercourses therefore potentially no works at this location. Noted that this crossing has been identified by DPI from 1:25,000 mapping as the same as C65 (DPI 1.06.12)
41		42	C67	Figure 2q		1		5th				1			1					1				TBC. Temporary access arrangements to be negotiated with landholders across prime agriculutural land. Access would preferentially avoid crossing any watercourses therefore potentially no works at this location.
41	1 4	42	C68	Figure 2q		1		4th					1		2					1		✓	√	As yet, no crossing identified as a requirement, although category 1 access track crosses Sandy Ck at this location. Recommended that pipe or box culvert to be installed as a minimum. Design to be confirmed following site inspection.
41	1 4	42	C69	Figure 2r		1		4th					1		2					1		✓	√	As yet, no crossing identified as a requirement, although category 1 access track crosses Sheep Yard Creek at this location. Recommended that pipe or box culvert to be installed as a minimum. Design to be confirmed following site inspection.
41	1 4	42	C70	Figure 2r	1			3rd					1							1		✓	✓	As yet, no crossing identified as a requirement, although category 2 access track crosses Slaty Creek at this location. Recommended that pipe or box culvert to be installed as a minimum. Design to be confirmed following site inspection.
42	2 4	43	C71	Figure 2r	1			4th						1	2						1	✓	✓	As yet, no crossing identified as a requirement, although category 1 access track crosses minor stream. Bed level crossing installation- Nature of works and design TBC
42	2 4	43	C72	Figure 2r	1			3rd						1	2					1		✓	✓	As yet, no crossing identified as a requirement, although category 1 access track crosses minor stream. Bed level crossing installation- Nature of works and design TBC
43	3 4	44	C73	Figure 2s	1			4th						1	2					1		✓	√	As yet, no crossing identified as a requirement, although category 2 access track crosses minor stream. Bed level crossing installation- Nature of works and design TBC
44	1 4	45	C74	Figure 2s		1		4th	1			1			2					1		✓		As yet, no crossing identified as a requirement, although category 2 access track crosses Plumbago Ck, and record of Eastern Freshwater Cod Stocking is recorded in close proximity to this location. Nature of works and design TBC; minimum recommendation Box Culvert crossing and bank protection works and sediment controls to minimise construction impacts to waterway.
44	1 4	45	C75	Figure 2s	1			3rd	1				1							1		√		As yet, no crossing identified as a requirement, although category 1 access track crosses minor stream and record of Eastern Freshwater Cod Stocking in close proximity. Minimum recommendation Box Culvert crossing and bank stablitity works and sediment controls to minimise construction impacts to waterway.

														Identified Cre	eek Crossings		required (ie. S exists or	d or no works uitable crossing site access ctions)			
Creek Crossi between An	ng Locations gle Positions	Creek Crossing	Figure Refe	erences		Strahler Clas	sification	Threatened aquatic spp	Threatened Ecological Community		Waterway Assessment Classi	fication	Existing	be upgraded		crossing to be					
				1	st order 2nd	d Order 3rd Or	DPI Classification (June 2012)	aquant spp	Community	Class 1	Class 2 Class 3 Class 4	DPI Classification (June 2012)		Off easement			On easement	Off easement	Preliminary site inspection completed?	Further consultation with DPI required fo this location	
45	46	C76	Figure 2t		1		3rd				1						1		✓	√	As yet, no crossing identified as a requirement, although category 1 access track crosses minor stream. Bed level crossing installation if required - Nature of works and design TBC
45	46	C77	Figure 2t	:	1		2nd				1						1		✓		As yet, no crossing identified as a requirement, although category 1 access track crosses minor stream. Bed level crossing installation if required - Nature of works and design TBC
46	47	C78	Figure 2t		1		3rd				1						1		✓	✓	As yet, no crossing identified as a requirement, although category 1 access track crosses minor stream. Bed level crossing installation if required - Nature of works and design TBC
46	47	C79	Figure 2t		1		3rd				1						1		✓	√	As yet, no crossing identified as a requirement, although category 2 access track crosses minor stream. Bed level crossing installation if required - Nature of works and design TBC
46	47	C80	Figure 2t	:		1	4th				1	2					1		✓	✓	As yet, no crossing identified as a requirement, although category 2 access track crosses Tea Tree Creek which potentially provides significant aquatic habitat. Recommended box culvert at a minimum - Nature of works and design TBC.
46	47	C81	Figure 2t		1		3rd				1						1		✓	√	As yet, no crossing identified as a requirement, although category 1 access track crosses minor stream. Bed level crossing installation if required - Nature of works and design TBC
46	47	C82	Figure 2u	ı	1		2nd				1							1	✓		As yet, no crossing identified as a requirement, although category 1 access track crosses minor stream. Bed level crossing installation if required - Nature of works and design TBC
47	48	C83	Figure 2u	ı	1		3rd				1						1		✓	✓	As yet, no crossing identified as a requirement, although category 1 access track crosses minor stream. Bed level crossing installation if required - Nature of works and design TBC
47	48	C84	Figure 2u	ı	1		3rd				1						1		√	✓	As yet, no crossing identified as a requirement, although category 1 access track crosses minor stream. Bed level crossing installation if required - Nature of works and design TBC
47	48	C85	Figure 2u	ı	1		3rd				1							1	✓	✓	As yet, no crossing identified as a requirement, although category 1 access track crosses minor stream. Bed level crossing installation if required - Nature of works and design TBC
47	48	C86	Figure 2u	ı	1		4th				1	2					1		✓	√	As yet, no crossing identified as a requirement, although category 2 access track crosses minor stream. Bed level crossing installation if required - Nature of works and design TBC
48	49	C87	Figure 2u	ı	1		5th				1	2	1						✓	✓	Upgrade of existing crossing. Nature of works and design TBC
48	49	C88	Figure 2u	ı	1		5th				1	3							✓	√	As yet, no crossing identified as a requirement, although category 1 access track crosses minor stream. Bed level crossing installation if required - Nature of works and design TBC
49	50	C89	Figure 2v	,	1		3rd				1						1		√	√	As yet, no crossing identified as a requirement, although category 1 access track crosses minor stream. Bed level crossing installation if required - Nature of works and design TBC
49	50	C90	Figure 2v	/	1		2nd				1							1	✓		As yet, no crossing identified as a requirement, although category 1 access track crosses minor stream. Bed level crossing installation if required - Nature of works and design TBC

																Identified Cre	ek Crossings		required (ie. S exists or	d or no works uitable crossing site access			
Creek Cr betweer	ossing Locatior Angle Position	s Creek S Crossing IE	Figure References		Strahl	ler Classificat	tion	Threatened	Threatened Ecological Community		Wotorw	ov Accessm	nent Classifi	action	Eviatina ta	ha unavadad		rossing to be	restri	ctions)			
				1st order	2nd Order	3rd Order	DPI Classification (June 2012)	aquatic spp	Community	Class 1		Class 3		DPI Classification (June 2012)		be upgraded Off easement			On easement	Off easement	Preliminary site inspection completed?	Further consultation with DPI required for this location	
51	52	C91	Figure 2w		1		5th					1		1						1	✓	✓	As yet, no crossing identified as a requirement, although category 1 access track crosses minor stream. Bed level crossing installation or culvert if required - Nature of works and design TBC
51	52	C92	Figure 2w	1			3rd						1						1		✓		As yet, no crossing identified as a requirement, although category 1 access track crosses minor stream. Bed level crossing installation or culvert if required - Nature of works and design TBC
52	53	C93	Figure 2x	1			1st						1		1						✓		Upgrade of existing crossing. Nature of works and design; potentially a bed level crossing. TBC
52	53	C94	Figure 2x	1			1st						1		1						✓		Upgrade of existing crossing. Nature of works and design; potentially a bed level crossing. TBC
52	53	C95	Figure 2x	1			1st						1		1						✓		Upgrade of existing crossing. Nature of works and design; potentially a bed level crossing. TBC
52	53	C96	Figure 2x	1			2nd						1		1						√		Upgrade of existing crossing. Nature of works and design; potentially a bed level crossing. TBC
53	54	C97	Figure 2x	1			3rd						1			1					✓	✓	Upgrade of existing crossing. Nature of works and design; potentially a bed level crossing. TBC
53	54	C98	Figure 2x	1			3rd						1		1						√	✓	Upgrade of existing crossing. Nature of works and design; potentially a bed level crossing. TBC
53	54	C99	Figure 2x	1			2nd						1		1						✓		Upgrade of existing crossing. Nature of works and design; potentially a bed level crossing. TBC
54	55	C100	Figure 2y	1			5th					1		1						1	✓	✓	As yet, no crossing identified as a requirement, although category 2 access track crosses tributary of Deep Ck. Given permanent flow, consideration would be given to pipe or box culvert at this location following field inspection.
55	56	C101	Figure 2y/z	1			2nd						1			1					✓		Upgrade of existing crossing. Nature of works and design; potentially a bed level crossing. TBC
57	58	C102	Figure 2y/z		1		5th					1		1		1					√		Crossing upgrade identified as a requirement. Given permanent flow and riparian habitat, consideration would be given to pipe or box culvert at this location following field inspection and confirmation of requirements. TBC
58	59	C103	Figure 2z	1			3rd					1			1						√	./	Crossing upgrade identified as a requirement. Given permanent flow and riparian habitat, consideration would be given to pipe or box culvert at this location following field inspection and confirmation of requirements. TBC
59	60	C104	Figure 2aa	1			3rd					1							1		√	✓	As yet undetermined whether crossing is required to be installed as part of Category 3 access track work. Adequate sediment and erosion controls required at this location given access track has been identifed as Category 3. TBC

	Creek Crossing Locations Creek Figure References Strahler Classification between Angle Positions Crossing ID													Identified Cre	ek Crossings		required (ie. S exists or	d or no works uitable crossing site access					
Cre bet	ek Crossing ween Angle	Locations Positions	Creek Crossing ID	Figure References		Strahl	ler Classification	Threatened aquatic spp	Threatened Ecological Community		Waterw	ay Assessm	ent Classific	cation	Existing to	be upgraded		rossing to be	restri	ctions)			
					1st order	2nd Order	3rd Order DPI Classific (June 201			Class 1	Class 2	Class 3	Class 4	DPI Classification (June 2012)	On easement	Off easement	On easement	Off easement	On easement	Off easement	Preliminary site inspection completed?	Further consultation with DPI required for this location	
	61	62	C105	Figure 2ab	1		1st						1						1		✓		TBC. Nature of works and design TBC
	61	62	C106	Figure 2ac	1		2nd						1						1		√		As yet, no crossing identified as a requirement, although category 3 access track crosses minor stream. Bed level crossing installation or culvert if required - Nature of works and design TBC. Sediment and erosion controls important due to significant potential earthworks.
	65	66	C107	Figure 2ad	1		2nd						1								√		TBA. Access arrangements would preferentially avoid crossing any watercourses therefore potentially no works at this location.
	66	67	C108	Figure 2ae			1 6th			1				1							√	✓	TBA. Access arrangements would preferentially avoid crossing any watercourses. Unlikely that TG would propose a water course crossing at this location over the Richmond River given a minimum requirement would be construction of a bridge crossing.
	67	68	C109	Figure 2ae		1	4th				1			2							✓	✓	TBA. Access arrangements would preferentially avoid crossing any watercourses. Unlikely that TG would propose a water course crossing at this location over Ealshs Ck given a minimum requirement would be construction of a box culvert crossing or bridge.









































