PROJECT DESCRIPTION:	NTHD-1284 Townsville Ring Road Section 4					
LOCATION: DEERAGUN	**Road:**	**Bruce H/way**	**Start Chg:**	**18,530**	**End Chg:**	**29,400**

Erosion and sediment control plan for the month of **FEBRUARY 2016**:			
Completed by:	Stephen Mount	Date:	02/03/2016
Reviewed by:	Campbell McCall	Date:	02/03/2016

1. Review of Past Month (February)

Rainfall:	No. of days: 5	Rainfall total: 147 mm
E&S Events:	Issues/non-conformances	Corrective Actions
	• Minor scouring of bridge abutments and steep (1:2) batters across the site. • Minor to moderate scouring has occurred in exposed open drains through the site	• Environmental Audit conducted at the end of February identified non-compliance around maintenance of ERSED controls post-christmas.

2. Upcoming Month (March)

Rainfall outlook:

5 days with Low (25-50%) chance of rain.
3 days with Medium (50-75%) chance of rain.
6 days with High (≥75%) chance of rain.

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					4 *high*	5 *high*
6 *high*	7 *high*	8 *high*	9 *high*	10 *med*	11	12
13	14	15 *low*	16	17	18 *low*	19
20	21	22	23	24	25	26 *low*
27	28 *low*	29 *low*	30 *med*	31 *med*		

Chance of rainfall within district

nil	low	med	high
< 25%	25% to 50%	50% to 75%	≥ 75%

Source: www.weatherzone.com.au

Table 1. Emerging E&S Risks – the following site characteristic or activity related specific risks will/are likely to present in the coming month (*note: these are risks that have not previously been identified and addressed. Previous controls may still be in place, but do not require recapture within this report unless circumstances have significantly changed from when they were first identified. Reference numbers should continue from the previous count.*)

Qualitative Risk Assessment – Specific Risks	**Y/N**	**Describe (location and nature of risk)**	**Reference**
Site Characteristics: *where any aspect of the site meets the following criteria, it shall be deemed a specific risk*[1]			
• Disturbance within or	Y	Location:	Refer to

immediately adjacent to a waterway/body		1. Culvert 6B (Green – ch. 21050), 2. Culvert 7B (Orange – ch. 21600), 3. Culvert 10B (Orange – ch. 23160), 4. BR30 and 35 (Green - Saunders Ck – ch. 23540), 5. BR40 (Green - Stony Ck – ch. 26020) Nature of Risk: High chance of rain early in the month of March related to rain depression from ex-TC Winston. Maintenance to existing controls and installation of new controls currently underway. Action to be completed in March is for SM to make plan mark-up match what is in place in the field – current plans to not fully reflect this.	attached general plans
• Direct discharge point to a watercourse or water body	Y	Location: 1. Culvert 6B (Green – ch. 21050), 2. Culvert 7B (Orange – ch. 21600), 3. Culvert 10B (Orange – ch. 23160), 4. BR30 and 35 (Green - Saunders Ck – ch. 23540), 5. BR40 (Green - Stony Ck – ch. 26020) Nature of Risk: As above	
• Disturbance upland of an adjoining sensitive environmental area (e.g. national park, listed place)	N	Location: Nature of Risk:	
• Concentrated drainage flows/table drains in excess of: (i) 3% grade and 25m in length, or (ii) 5% grade	N	Location: Nature of Risk:	
• Disturbance to sloped, sheet flow areas greater than 2% grade	N	Location: Nature of Risk:	
• Sodic, dispersive or other highly susceptible soil types	Y	Location: Majority of the site Nature of Risk: Extreme risk of erosion of exposed surfaces for majority of the alignment which may lead to batter de-stabilisation and scouring around structures.	Refer to attached general plans and plan mark-up
Activity Related: *where any activity meets the following criteria, it shall be deemed a specific risk*[1]			
• Any activity involving ground disturbance, storage of materials in a manner that could reasonably enter drainage systems, significantly modifies stormwater flows or otherwise increases the likelihood of environmental harm (erosion or sediment) and, is not suitably contained or management by control measures already installed on site	N	Location: Nature of Risk:	

[1] "specific" risk refers to circumstances that require specific planning, documentation and communication

Table 2 Control Strategies – E&S risks identified in Table 1 shall be controlled in accordance with the following:

Reference	Stage of Works	Control Strategies, Comments & Diagrams
SWC-TRR4-ESCP attached	Earthworks, drainage and batter stabilisation works	• Divert clean water away from work areas;
		• Wet Weather ESCP Action Plan – seal off pads, diversion bunds at entry/exit points to direct dirty water, temporary drainage lines, geofabric and crushed rock to protect outlets and steep sections.
		• Regularly inspections with SWC Enviro Rep / Supervisors.
		• In accordance with IECA 2008 Guidelines
	Wet Season works	• Complete maintenance / tidy up works – sed fences to be re-instated as required, sand bags and coir logs to be cleaned out, scours to be repaired and re-compacted, etc