

## NOTES:

- 1. PLANTING AND SURFACE TREATMENTS SHOWN WITHIN LOW FLOW CHANNEL ARE INDICATIVE AND WILL VARY ACCORDING TO SITE SPECIFIC CONDITIONS. HYDRAULIC MODELLING IS REQUIRED INCLUDING SHEAR STRESS AND VELOCITY AS A MINIMUM. RESULTS TO BE COMPARED WITH THRESHOLD VALUES TO GUIDE SURFACE TREATMENT SELECTION WITH A SUITABLE MANNINGS N VALUE. REFER QUDM FOR FURTHER DETAILS
- ROCK USED FOR BEACHING SHALL BE RIVERROCK SIZED IN ACCORDANCE WITH QUDM SECTION 9.9.2
- PLANT SPECIES LIST IS TO BE DETERMINED ON A SITE SPECIFIC BASIS TO REPLICATE LOCAL NATURAL RIPARIAN ECOSYSTEMS. INCLUDE A MINIMUM 12 DIFFERENT SUITABLE SPECIES INCLUDING BOTH TREES AND SHRUBS AND GROUND COVERS
- INDICATIVE PLANTING DENSITY (CAN INCLUDE A COMBINATION OF BOTH OR ONE OF THE BELOW):
  - TREES AND SHRUBS: 1 PER 10 SQM
  - GROUNDCOVERS: 6 PER SQM
- PLANTED AREAS TO BE FINISHED WITH MULCH OR JUTEMATTING (ONLY TO BE USED WHERE REQUIRED FOR EROSION PROTECTION) OVER TOPSOIL
- ALL LANDSCAPE WORKS TO BE IN ACCORDANCE WITH MRC SUPPLEMENTARY SPECIFICATION 8300 LANDSCAPE AND HORTICULTURAL TREATMENT
- GRADE CONTROL METHODS FOR REDUCING CHANNEL VELOCITY, SUCH AS CHECK DAMS AND / OR SMALL ROCK WEIRS, MAY BE CONSIDERED ON A SITE SPECIFIC BASIS

- 8. BED WIDTH AND LOWER BATTER HEIGHT TO BE SIZED SUCH THAT LOW FLOW CHANNEL HAS CAPACITY TO CONVEY Q2 FLOWS
- 9. CONCRETE MOWING EDGE REQUIRED AT INTERFACE OF ALL PLANTED AREAS WITH GRASS / TURF AREAS
- 10. ALL ROCKWORK TO BE UNDERLAIN BY GEOTEXTILE OR GRANULAR FILTER MATERIAL. GEOTEXTILE SHALL MEET REQUIREMENTS OF STRENGTH CLASS D IN ACCORDANCE WITH MRTS 27
- 11. ENSURE THAT CHANNEL DESIGN ALLOWS FOR CURRENT FREEBOARD ABOVE Q100 FLOOD LEVELS FOR BOUNDING INFRASTRUCTURE / PRIVATE PROPERTY TO BE MAINTAINED
- 12. MAINTENANCE VEHICLE ACCESS TO CHANNEL BED WILL BE REQUIRED AT LOCATIONS ALONG THE CHANNEL LENGTH, AT THESE LOCATIONS THE LOWER BATTER GRADE MAY NEED TO BE LESSENED ACCORDING TO VEHICULAR CONSTRAINTS
- 13. SAFETY FEATURES TO PREVENT PEDESTRIAN ACCESS TO WITHIN THE FLOOD EXTENTS OF THE CHANNEL DURING HIGH FLOW EVENTS MAY NEED TO BE CONSIDERED ON A SITE SPECIFIC BASIS
- 14. PEDESTRIAN WALKWAY SHALL MEET THE REQUIREMENTS OF AS1428.1 & AUSTROADS PART 13 & 14. REST AREAS MAY BE REQUIRED ALONG SHARED PATHWAY. THIS MAY REQUIRE LOCAL WIDENING OF BENCH IN THESE LOCATIONS. ENSURE CHANNEL CAPACITY IS MAINTAINED
- 15. MRC STANDARD NATURALISED WATERWAY CROSS SECTION MAY BE CONSIDERED APPLICABLE WHERE THE WATERWAY HAS GRADES STEEPER THAN 1%. WHERE THERE ARE GRADES FLATTER THAN 1%. CONSIDERATION SHOULD BE GIVEN TO THE APPLICATION OF MRC STANDARD TYPICAL OPEN CHANNEL CROSS SECTION (A3-00868C) OR STANDARD TYPICAL VEGETATED WATERWAY WITH CONCRETE INVERT CROSS SECTION (A3-00903)

VERIFIED:	CERTIFIED:	APPROVED:		
DK	KF	KF		
	RPEQ NO.: 10509			
DATE: 05/05/15	DATE: 05/05/15	DATE: 05/05/15		

				SURVEY	DRAWN	SIGNED	DATE	D
					JD	JD	05/05/15	E
				SURVEY FILE No	DESIGNED	SIGNED	DATE	C
В	16/04/18	REVISED FORMAT & MINOR MODIFICATIONS	Graeme ty Games Hawes Gaw Strange	SURVET FILE NO	JD	JD	05/05/15	
		ORIGINAL ISSUE REV A		LEVEL DATUM	CHECKED	SIGNED	DATE	
	DATE	DESCRIPTION	APPVD	LEVEL DATOW	DK	DK	05/05/15	J
				MANAGER TECHNICAL SERVICES				
AMENDMENTS AND REVISIONS		MERIDIAN	ORIGINAL	SIGNED BY	03/06/15			
STANDARD DRAWINGS\STORMWATER\A3-08370.DWG				G. HAWES		DATE		

DIRECTOR COMMERCIAL INFRASTRUCTUR ORIGINAL SIGNED BY JASON DEVITT

03/06/15

DATE

**STANDARD** TYPICAL NATURALISED WATERWAY **CROSS SECTION** 

SHEET 1 OF 1 WORKS JOB No. DRAWING No. AMEND. A3-08370 В