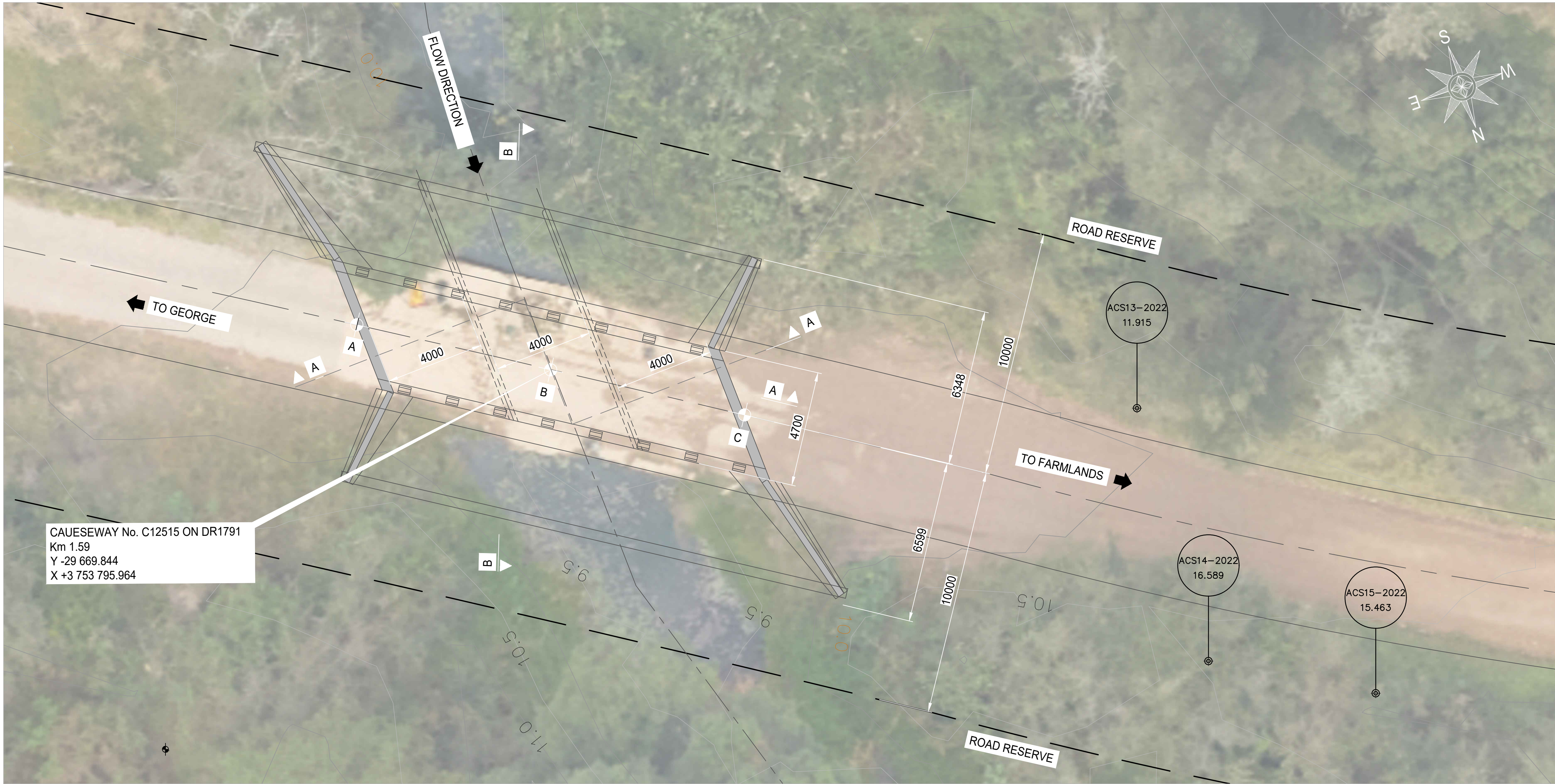
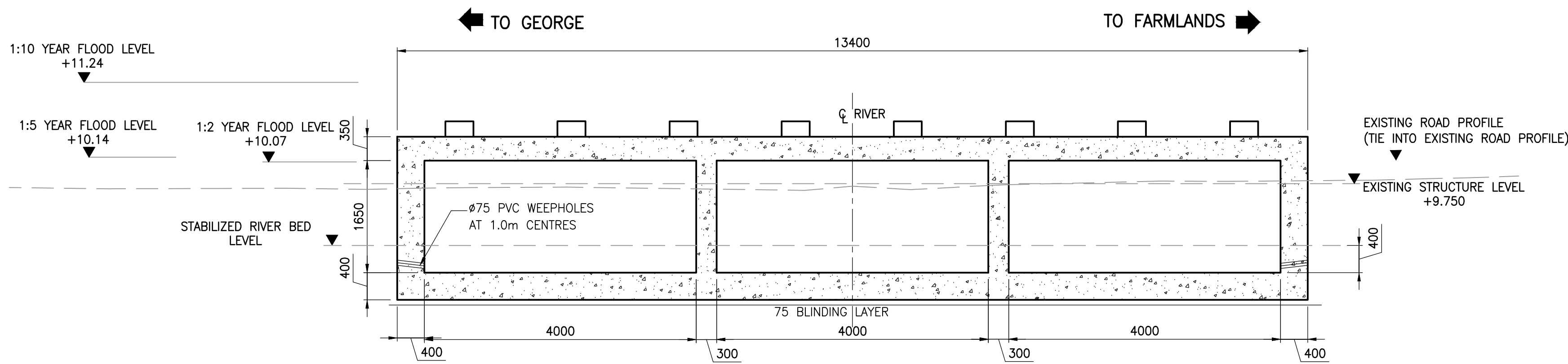
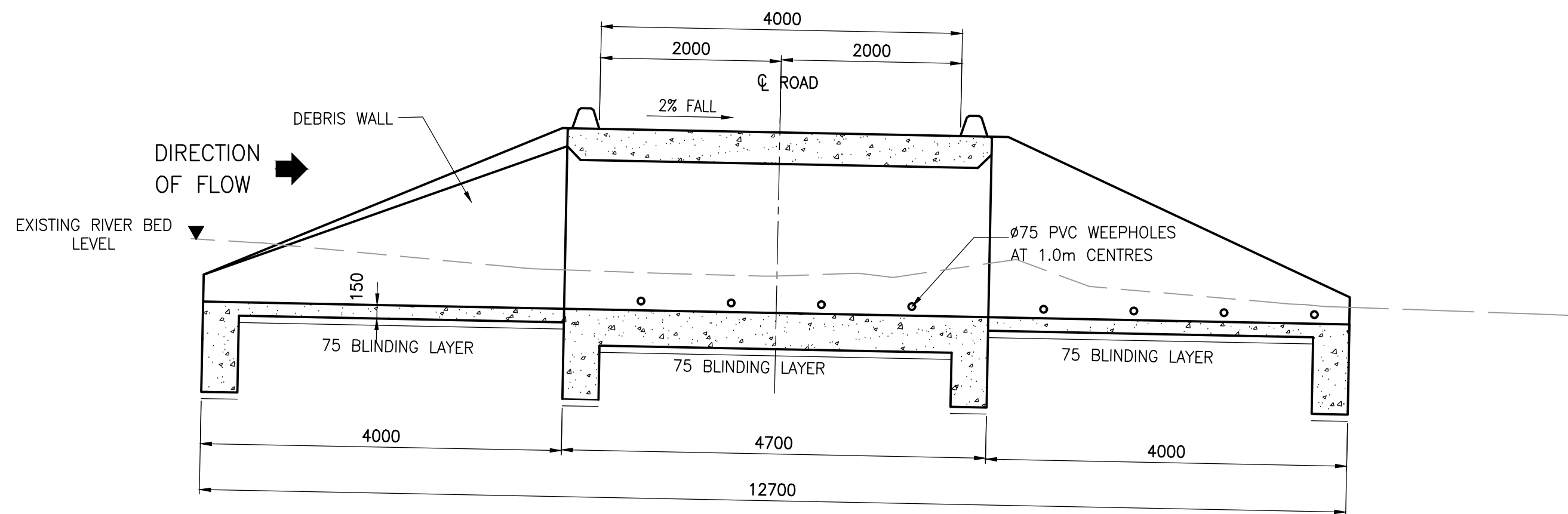




PLAN ON CAUSEWAY
SCALE 1:100



ROAD CROSS SECTION A-A
SCALE 1:50



RIVER CROSS SECTION B-B
SCALE 1:50



KEY PLAN
SCALE N.T.S

CO-ORDINATES WGS84			
POINT	Y	X	
A	-29 677.957	+3 763 797.832	
B	-29 670.056	+3 763 796.014	
C	+4 307298.4	+3 763 794.151	

BENCHMARK COORDINATES			
POINT	Y	X	LEVEL
ACS13-2022	-29 828.18	+3 763 816.207	11.915
ACS14-2022	-29 959.21	+3 763 855.534	16.589
ACS15-2022	-30 068.099	+3 763 900.662	15.463

GENERAL NOTES

- GENERAL
 - THE SETTING OUT OF THE STRUCTURE TO BE AS PER CO-ORDINATES.
 - ALL WORK TO BE EXECUTED AS PER COLTO STANDARDS
- DESIGN LOADING
 - NA AND NB36 TO TMH7 AND CONFORMS TO STANDARD DRAWINGS OF THE WESTERN CAPE GOVERNMENT.
- CHARACTERISTIC STRENGTH OF MATERIALS
 - CONCRETE:

ELEMENT	CHARACTERISTIC STRENGTH (MPa)	CONCRETE CLASS
BLINDING	15	15MPa/20mm
MASS CONCRETE	15	15MPa/20mm
REINF. CONCRETE	30	30MPa/20mm
GABION TOPPING	30	30MPa/14mm
GROUTED PLUMS	30	30MPa/20mm
- STRUCTURE
 - ALL EXPOSED CORNERS HAVE 20X20 CHAMFERS
 - COVER TO REBAR 50mm
 - CONCRETE FINISHES:
- EARTHWORKS
 - MINIMUM BEARING CAPACITY OF FOUNDATION TO BE 150kPa. FOUNDATIONS TO BE INSPECTED BY ENGINEER BEFORE BLINDING CONCRETE IS POURED.
- HYDRAULICS
 - THE OPENING IS SIZED TO ALLOW THE 1 IN 2 YEAR FLOOD REPORT THROUGH WITH ZERO FREEBOARD.
 - CATCHMENT AREA: 20.707km²
 - HYDROLOGICAL METHOD OF FLOOD ANALYSIS: RATIONAL ALT 3
 - MEAN SLOPE OF RIVER BED: 0.04m/m
 - DATA

3.2 REINFORCEMENT	
DESCRIPTION	CHARACTERISTIC STRENGTH (MPa)
MILD STEEL	250
HIGH TENSILE STEEL	450
WELDED MESH TO SANS 1024	485

MEAN RETURN PERIOD	FLOOD VOLUME (m ³ /s)	FLOOD VELOCITY (m/s)	FROUDE NUMBER	FLOOD HEIGHT RELATIVE TO TOP OF DECK
1:2 YEAR	13.44	1.34	0.55	-0.37
1:5 YEAR	21.75	1.66	0.63	-0.30
1:10 YEAR	29.20	1.95	0.90	0.80

NO.	DATE	ADDITIONS, AMENDMENTS AND REVISIONS	PROVINCIAL CHIEF ENG.	CONSULT. ENG.	DESIGNED BY:	DETAILED BY:	CONSULTANT'S APPROVAL		ACCEPTANCE		P.R.E.'s FILE NO.		SCALE	AS SHOWN	ORIGINAL PAPER SIZE
VB	04/2025	FOR TENDER	M.PETERSEN	D. MALAN	A. HEARNE	B. MEYER	SIGN		THIS APPROVAL IS FOR PROCEDURAL AND ADMINISTRATIVE REVIEW PURPOSES ONLY AND DOES NOT ATTRACT LEGAL LIABILITY OF ANY KIND FROM WHATSOEVER OR HOWEVER ARISING	PROVINCIAL ROADS ENGINEER	DOI16/6/4/1/4/C1157.02		SHEETS	OF	A0
					CHECKED BY:	CHECKED BY:	NAME	DAWIE MALAN			CONTRACT NO. C1157.02		WCG STRUCTURE PLAN C12515/01		
					D. MALAN	A. HEARNE	ECDA P/N No.	94005Z			CONSULTANTS DWG NO. H36196-00000-220-270-1791-0001		WCG INDEX NO. A99131		VER
							DATE	APRIL 2025			GENERAL ARRANGEMENT				VB