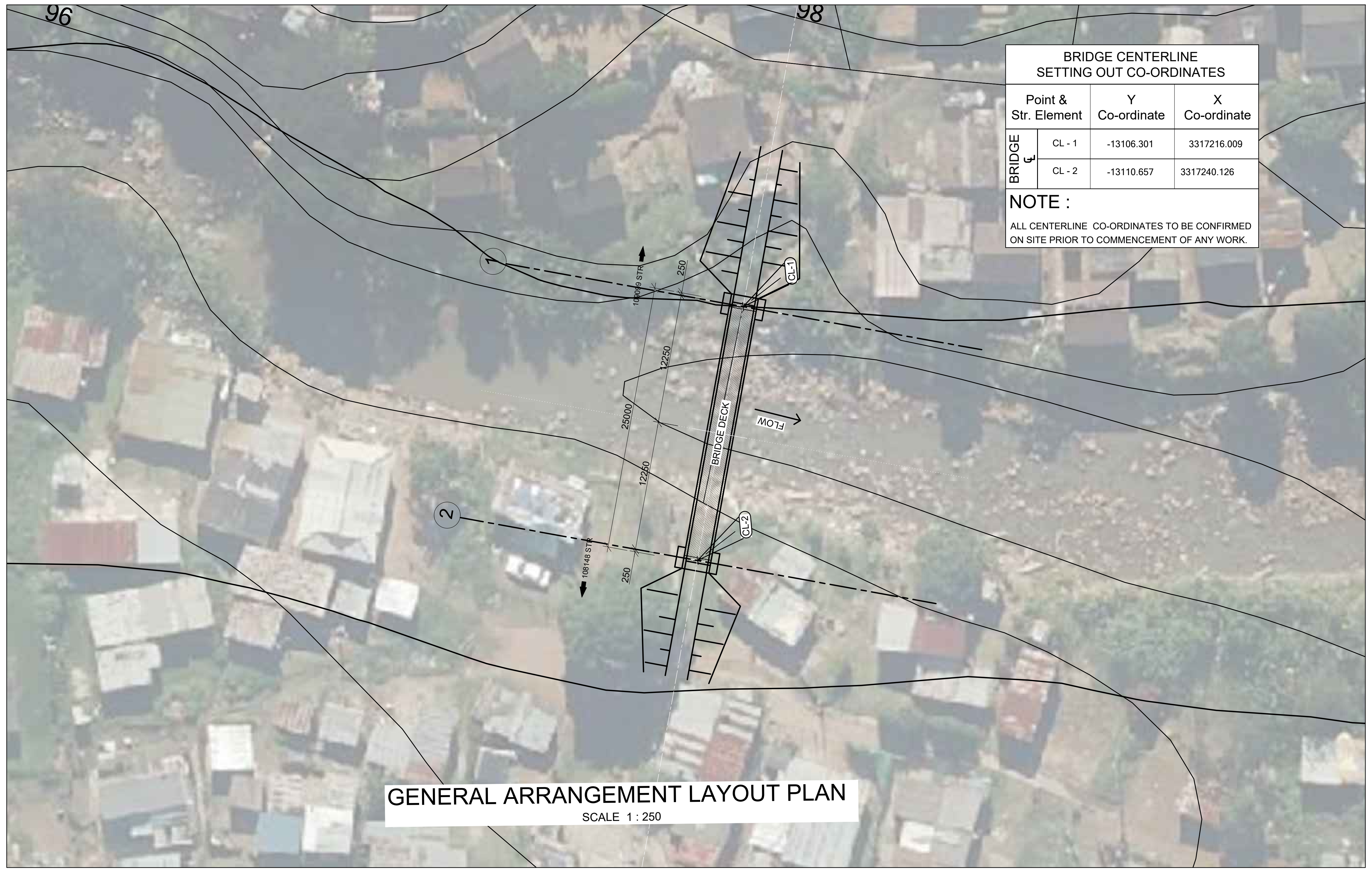


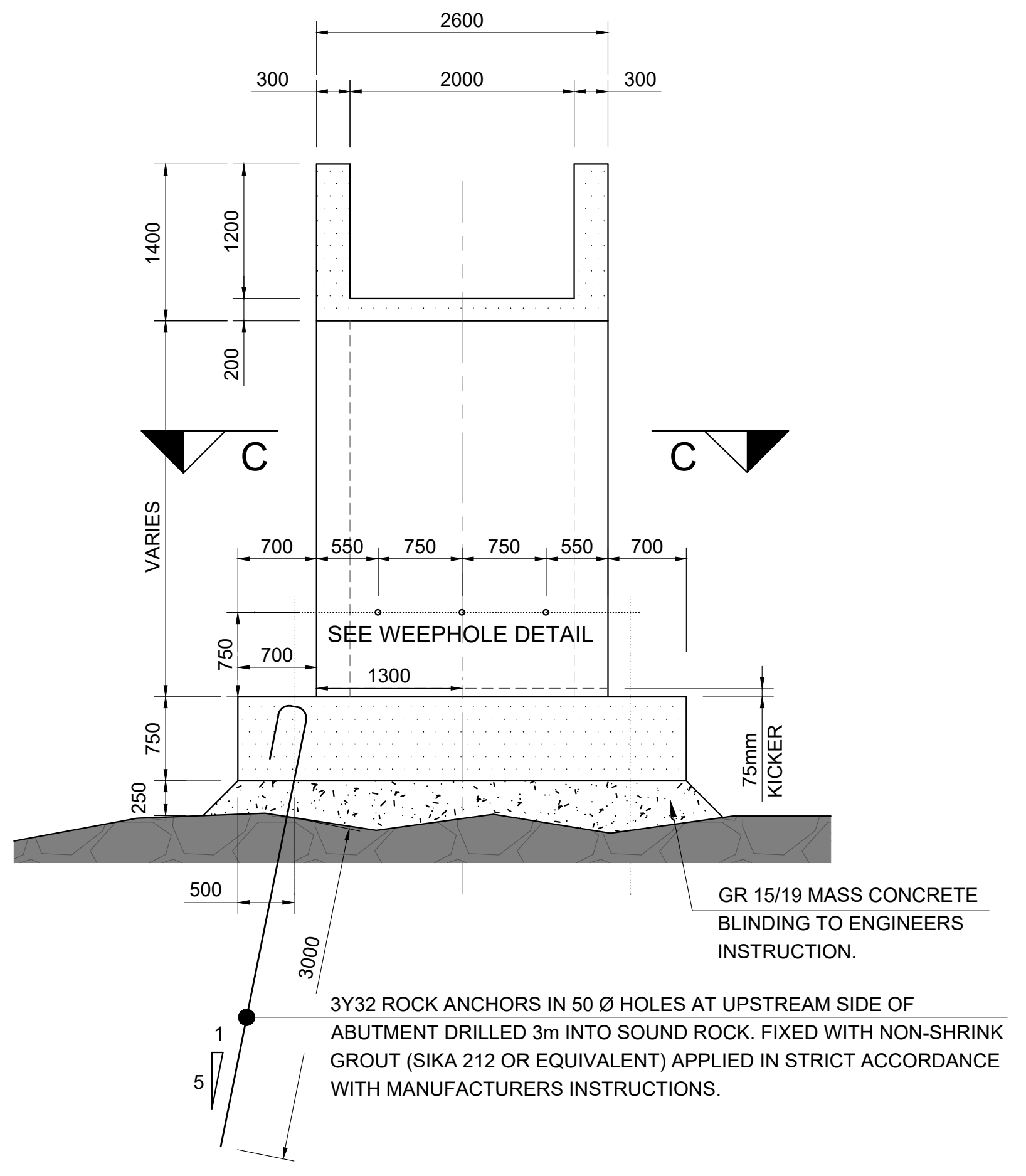
BRIDGE CENTERLINE SETTING OUT CO-ORDINATES			
Point & Str. Element		Y Co-ordinate	X Co-ordinate
BRIDGE ℄	CL - 1	-13106.301	3317216.009
	CL - 2	-13110.657	3317240.126

NOTE :

ALL CENTERLINE CO-ORDINATES TO BE CONFIRMED ON SITE PRIOR TO COMMENCEMENT OF ANY WORK.

GENERAL ARRANGEMENT LAYOUT PLAN

SCALE 1 : 250

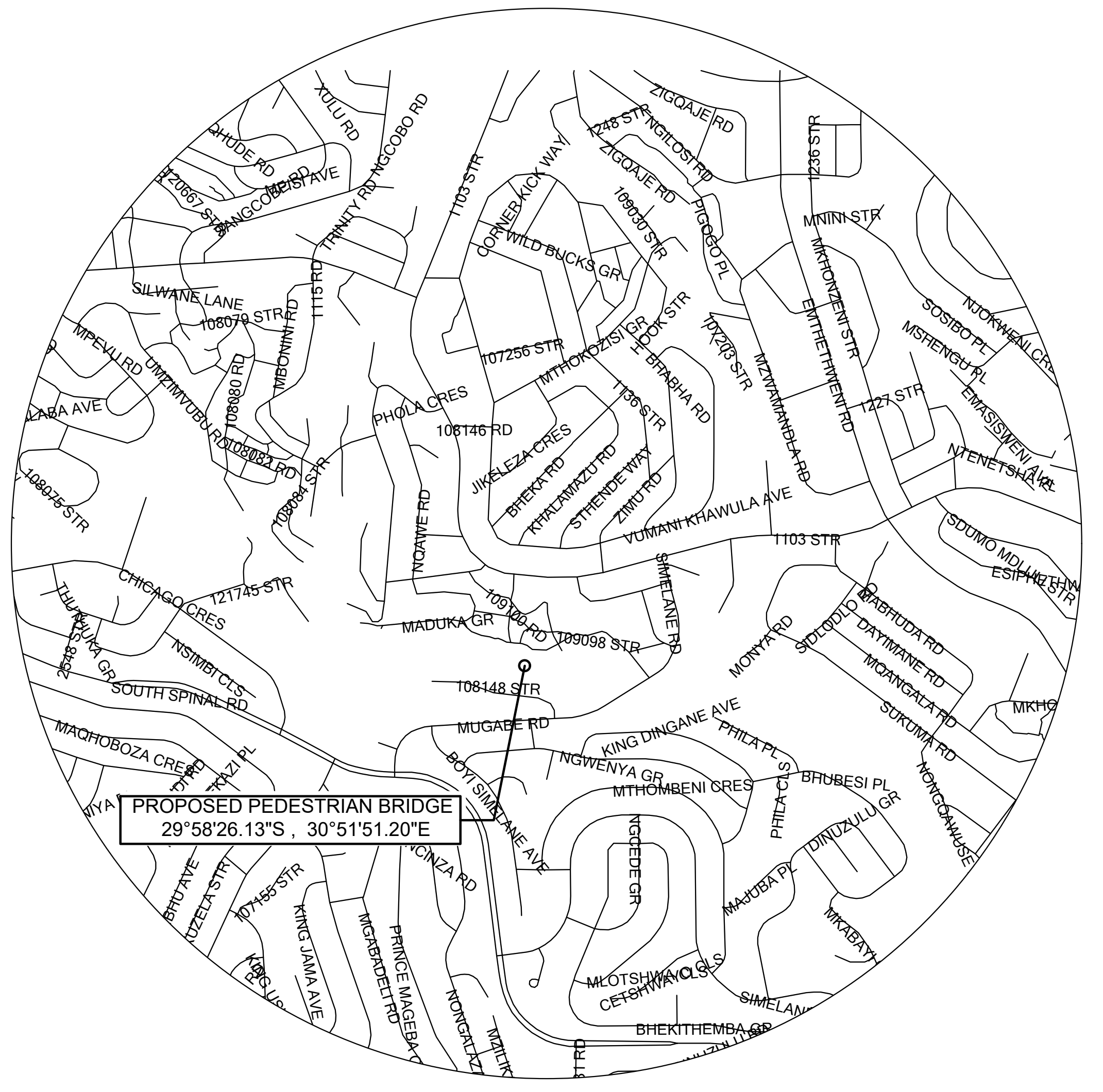


GR 15/19 MASS CONCRETE BLINDING TO ENGINEERS INSTRUCTION.

3Y32 ROCK ANCHORS IN 50 Ø HOLES AT UPSTREAM SIDE OF ABUTMENT DRILLED 3m INTO SOUND ROCK. FIXED WITH NON-SHRINK GROUT (SIKA 212 OR EQUIVALENT) APPLIED IN STRICT ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.

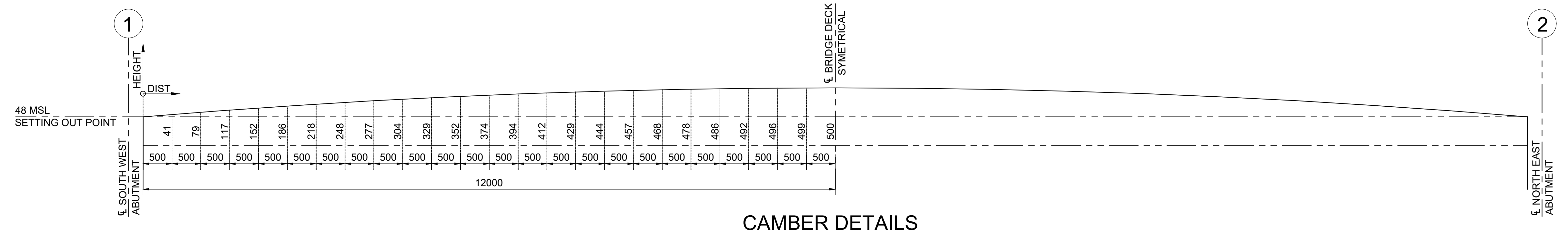
SECTION B - B

SCALE 1 : 50



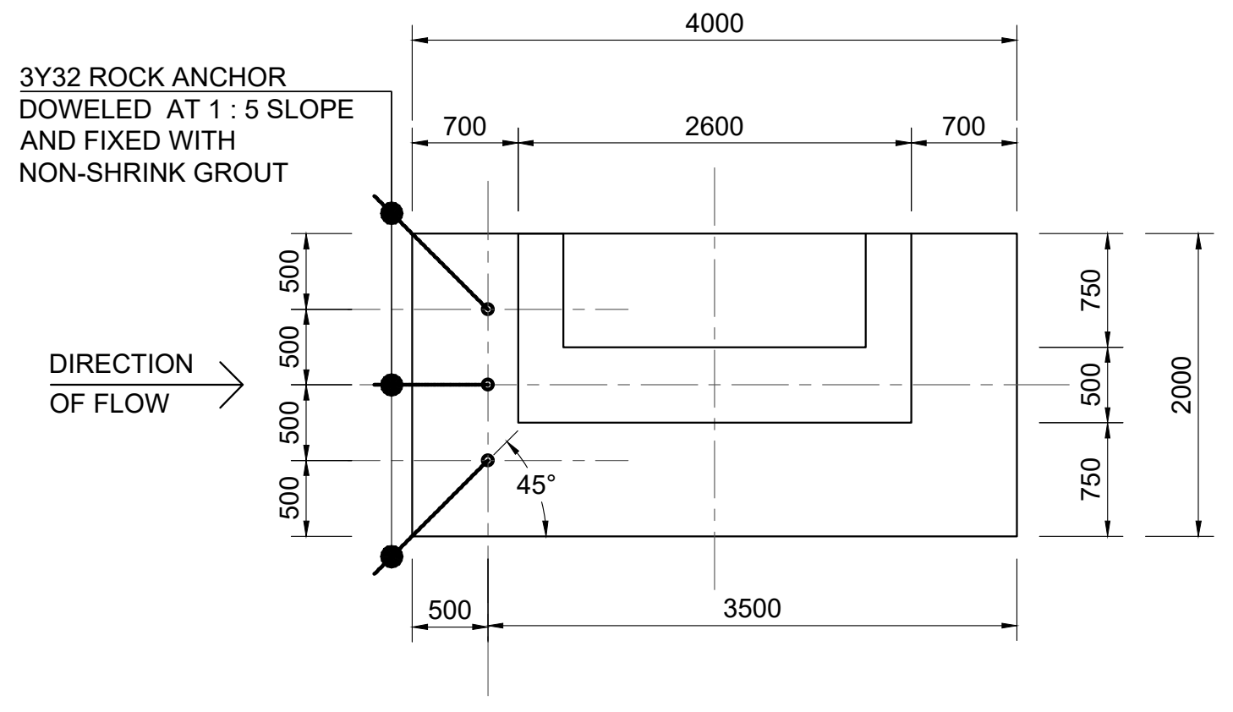
LOCALITY LAYOUT PLAN

SCALE 1 : 10 000



CAMBER DETAILS

SCALE 1 : 50



3Y32 ROCK ANCHOR DOWELED AT 1 : 5 SLOPE AND FIXED WITH NON-SHRINK GROUT

DIRECTION OF FLOW

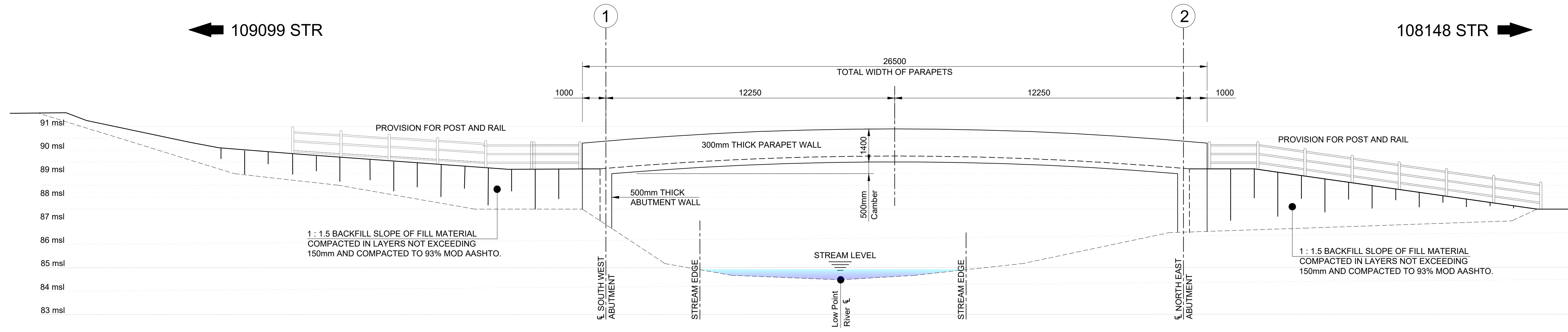
SECTION C - C

SCALE 1 : 50

ALL DIMENSIONS TO BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF ANY WORK.

ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER IMMEDIATELY.

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELATED STRUCTURAL DRAWINGS.

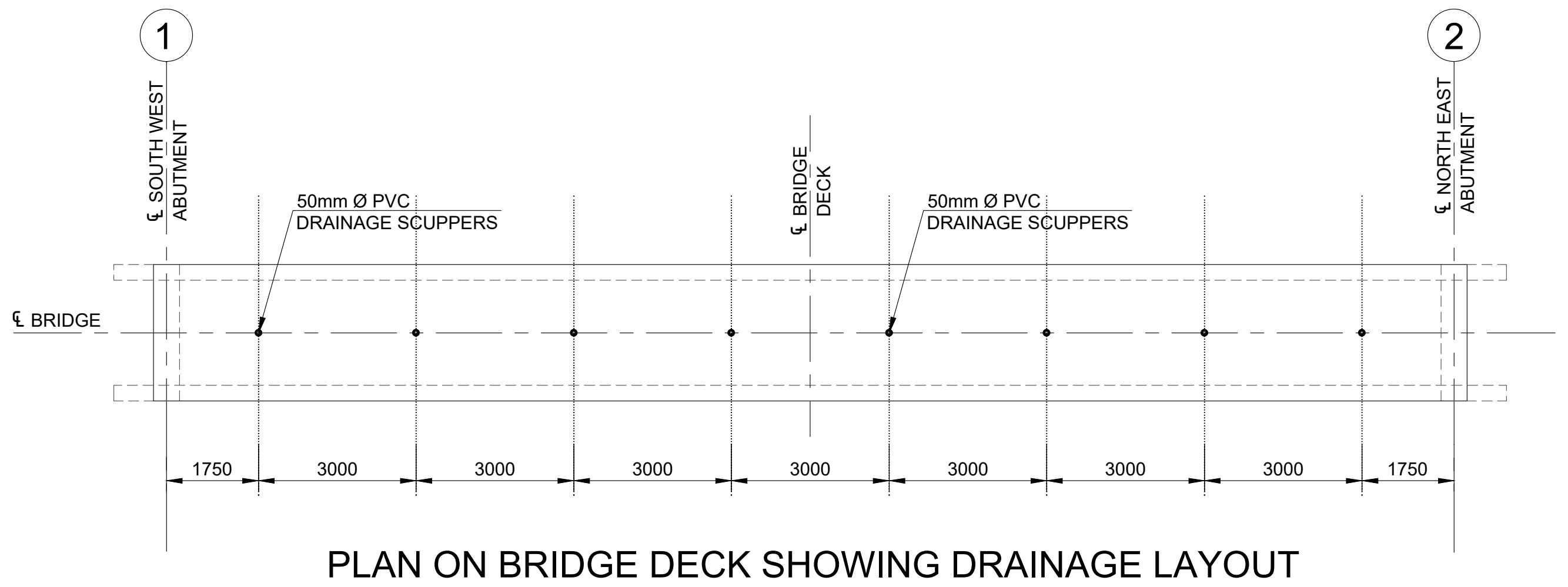


1 : 1.5 BACKFILL SLOPE OF FILL MATERIAL COMPACTED IN LAYERS NOT EXCEEDING 150mm AND COMPACTED TO 93% MOD AASHTO.

1 : 1.5 BACKFILL SLOPE OF FILL MATERIAL COMPACTED IN LAYERS NOT EXCEEDING 150mm AND COMPACTED TO 93% MOD AASHTO.

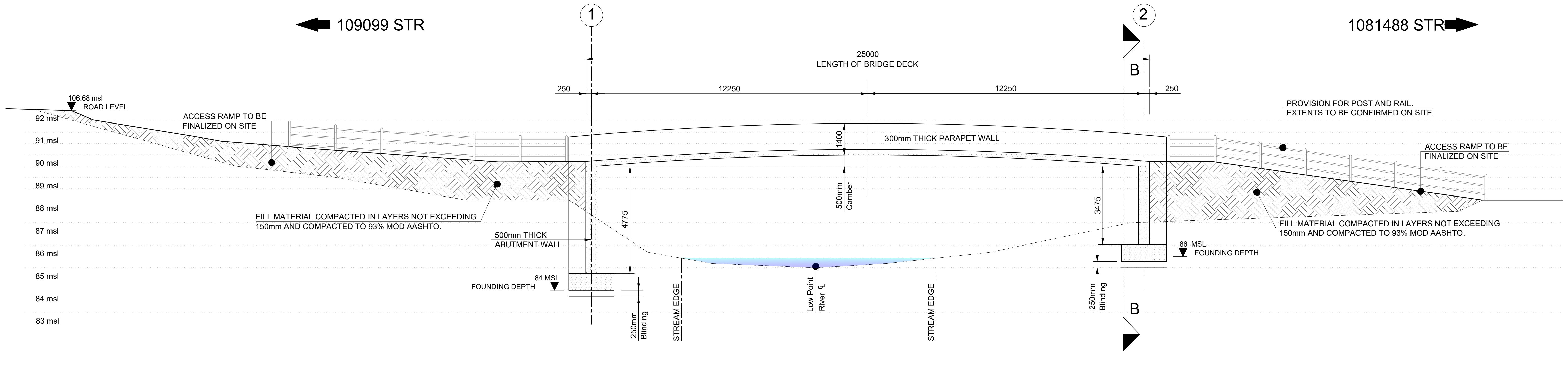
UPSTREAM ELEVATION OF PEDESTRIAN BRIDGE

SCALE 1 : 100



PLAN ON BRIDGE DECK SHOWING DRAINAGE LAYOUT

SCALE 1 : 100

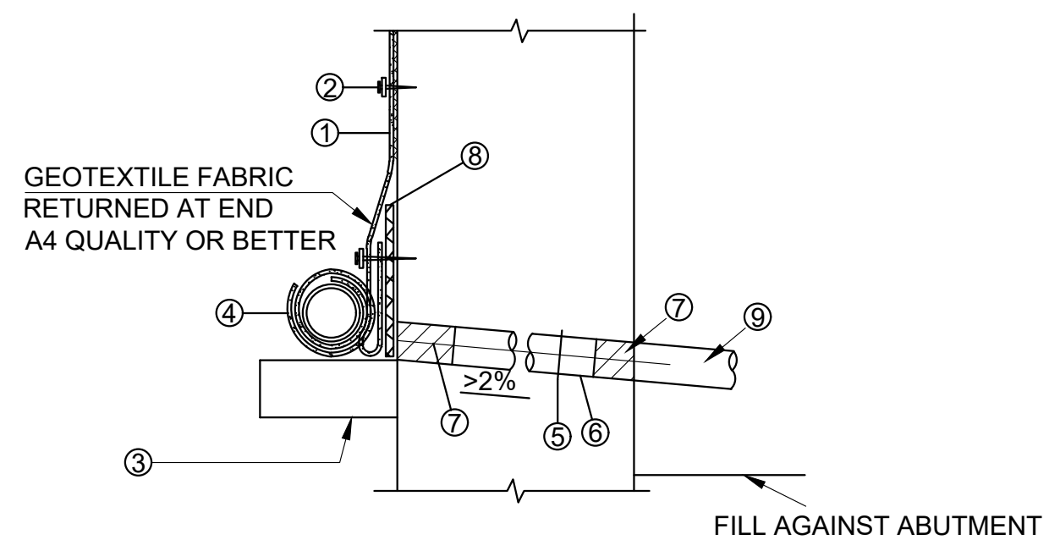


FILL MATERIAL COMPACTED IN LAYERS NOT EXCEEDING 150mm AND COMPACTED TO 93% MOD AASHTO.

FILL MATERIAL COMPACTED IN LAYERS NOT EXCEEDING 150mm AND COMPACTED TO 93% MOD AASHTO.

SECTION A - A

SCALE 1 : 100



GEOTEXTILE FABRIC RETURNED AT END A4 QUALITY OR BETTER

FILL AGAINST ABUTMENT

WEEPHOLE DETAIL

N.T.S

LEGEND

1 - 200mm WIDE FILTER ELEMENTS SECURED TO BACK FACE OF STRUCTURE AT 45° SLOPE.

2 - CONCRETE NAILS WITH 25 x 25mm HOOP IRON WASHERS TO SECURE FILTER ELEMENTS TO STRUCTURE AT ± 1 000mm CENTRES.

3 - CONCRETE SCREED TO GRADE AND LEVEL OF DRAINAGE PIPES PRIOR TO PLACING OF DRAINAGE PIPES.

4 - 65mm dia PERFORATED DRAINAGE PIPES WRAPPED IN GEOTEXTILE. THE GEOTEXTILE SHALL HAVE AN OVERLAP OF NOT LESS THAN 150mm AND BE TIED AT CENTRES NOT GREATER THAN 200mm.

5 - 3,15mm dia STAINLESS STEEL WIRE BARRIER.

6 - 50mm dia uPVC WEEPHOLES AT CENTRES SHOWN. THE CONTRACTOR SHALL ENSURE THAT THE WEEPHOLES ARE CLEAR AND APPROVED BY THE ENGINEER BEFORE THE FILTER ELEMENTS ARE INSTALLED.

7 - TEMPORARY POLYSTYRENE PLUG TO PREVENT INGRESS OF GROUT DURING PLACING OF THE CONCRETE.

8 - 200mm WIDE FILTER ELEMENT SECURED TO BACK FACE OF STRUCTURE AT SAME GRADE AS WEEPHOLES

9 - EXTENSION OF WEEPHOLES TO EMBANKMENT

NOTES:

1. GENERAL BRIDGE NOTES

   DESCRIPTION - THE BRIDGE IS A SINGLE SPAN CONVENTIONALLY REINFORCED CONCRETE U-BEAM INTEGRAL WITH ABUTMENTS.

   DESIGN METHOD - LIMIT STATE
   DESIGN CODE - TMH7 PART 3

2. MATERIAL STRENGTHS & STRESSES

CONCRETE:	CLASS(MPa/mm)
BLINDING	- 15/19
PILING	- 30/19
FOUNDATIONS	- 30/19
ABUTMENTS & PIERS	- 30/19
DECK	- 30/19

REINFORCEMENT:	
MILD STEEL	- 250 MPa
HIGH-YIELD-STRESS STEEL	- 450 MPa

3. SUBSTRUCTURE

   a) FOUNDATIONS
   FOUNDING DEPTHS TO BE DETERMINED ON SITE.
   FOUNDATIONS ARE TO BE SECURED WITH 400Ø CFA PILES.
   ALL WORK TO BE IN ACCORDANCE TO ENGINEERS SPECIFICATION AND APPROVAL.

   b) CONCRETE COVER

CAST AGAINST EARTH	- 40mm
FOUNDATIONS (SHUTTERED)	- 40mm
FOUNDATIONS (UNDERNEATH)	- 75mm
EXPOSED SURFACES	- 40mm

   c) CHAMFERS TO ALL EXPOSED SHARP CORNERS 25 x 25mm

FOR INFORMATION

eTHEKWINI
MUNICIPALITY

PROCUREMENT AND
INFRASTRUCTURE CLUSTER

ENGINEERING UNIT

ROADS PROVISION DEPARTMENT
STRUCTURES BRANCH

REDUCED PLAN USE SCALE BELOW

0 10 20 30 40 50 60 70

70mm ON ORIGINAL PLAN

Revision	Date	Description
V1	20/08/2024	FOR INFORMATION

NOTE: No construction work to commence until land and servitude acquisitions have been completed

Acquisitions completed:

Date Engineer

UNDERGROUND SERVICES CHECKED		
SERVICE	DATE	SIGNATURE
S.W DRAINS		
SEWERS		
WATER MAINS		
G.P.O CABLES		
ELECTRIC CABLES		
S.A.R. CABLES		
E.S.C. CABLES		
OIL PIPE LINE		

NOTE:
Only underground services affected by new constuction work are shown. Care must be taken during excavations for road foundations, trenches etc, to avoid damage to underground services such as sewers, drains, cables, water mains and connections. Wherever possible these must be located before work proceeds.

Contract No. 1R-----

Project Title

WARD 83 - PEDESTRIAN
BRIDGE, 109097 STREET

Drawing Title

GENERAL ARRANGEMENT

Scales : AS SHOWN	Date : 20/08/2024
Designed : X. MKATI	Checked :
Drawn : X. MKATI	Surveyed :

Manager : Structures
P G Fenton

Deputy Head : Roads Provision
S Masondo

T Zulu Act.HEAD : ENGINEERING

Drawing No.	Sheet of	Rev.
------	01 01	V1

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