

CULVERT BRIDGE 3 m 1:100

RICAURTE

CONNECTION TO EXISTING
DRAINAGE SYSTEM

CONCRETE WALL

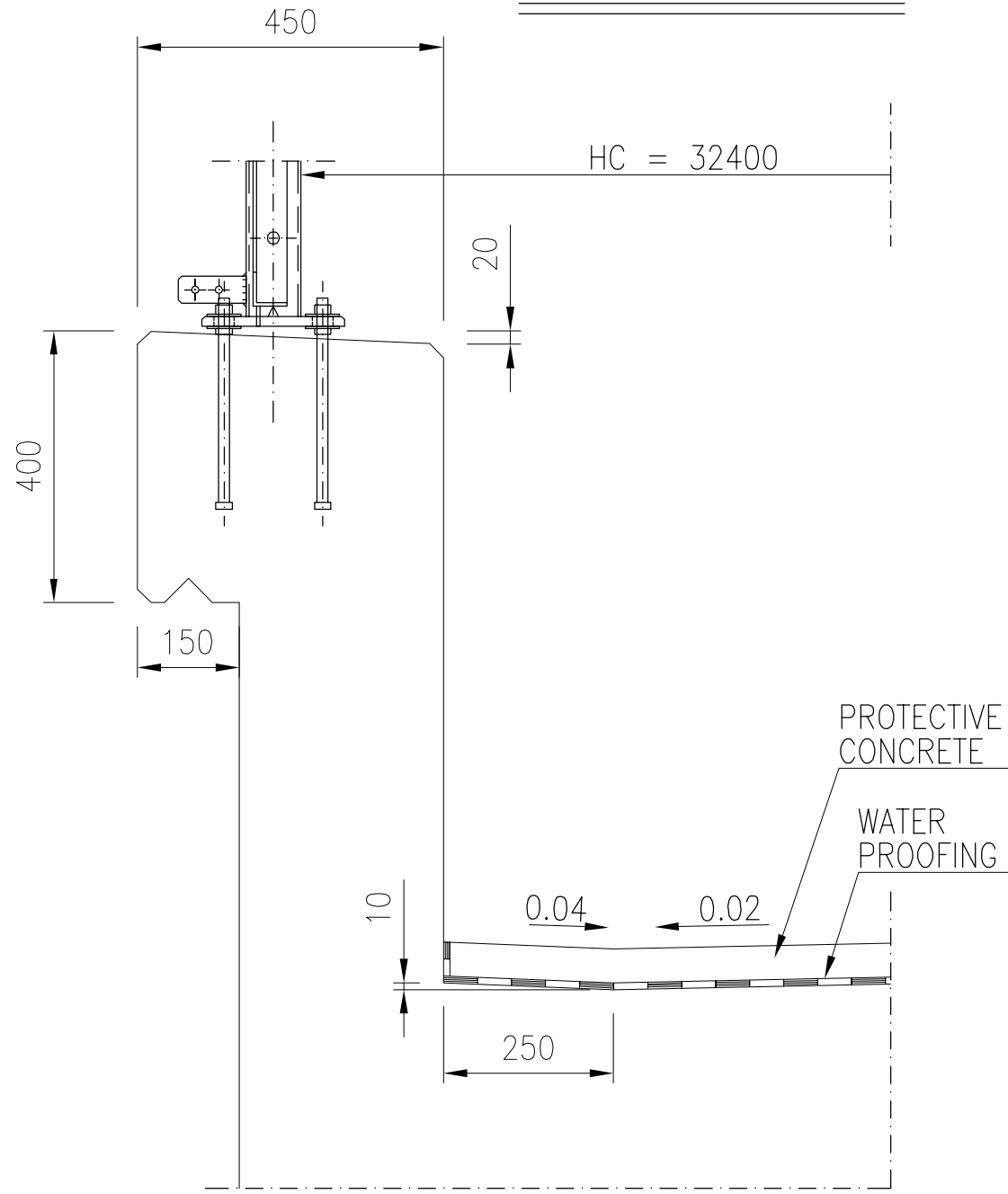
EXISTING TRACK

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EXISTING CULVERT WILL BE
REMOVED

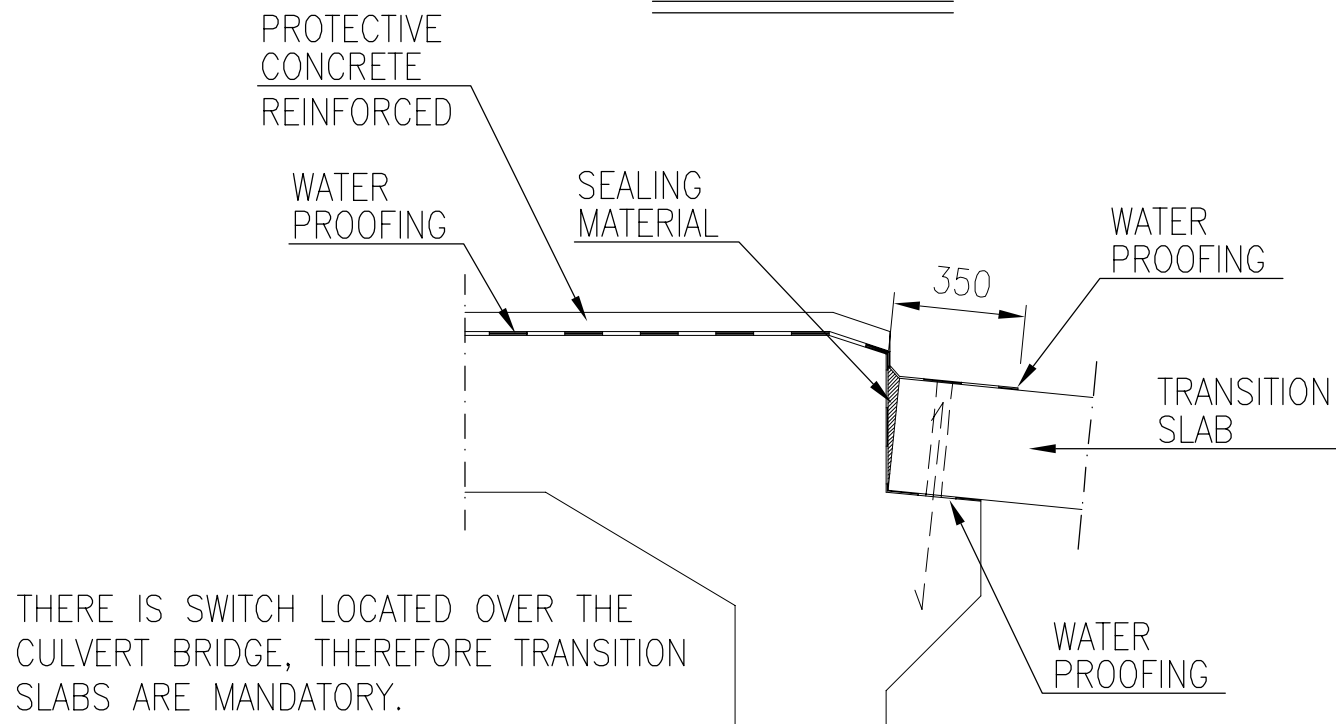
THERE IS SWITCH LOCATED OVER THE CULVERT
BRIDGE, THEREFORE TRANSITION SLABS ARE
MANDATORY.

EDGE BEAM 1:10



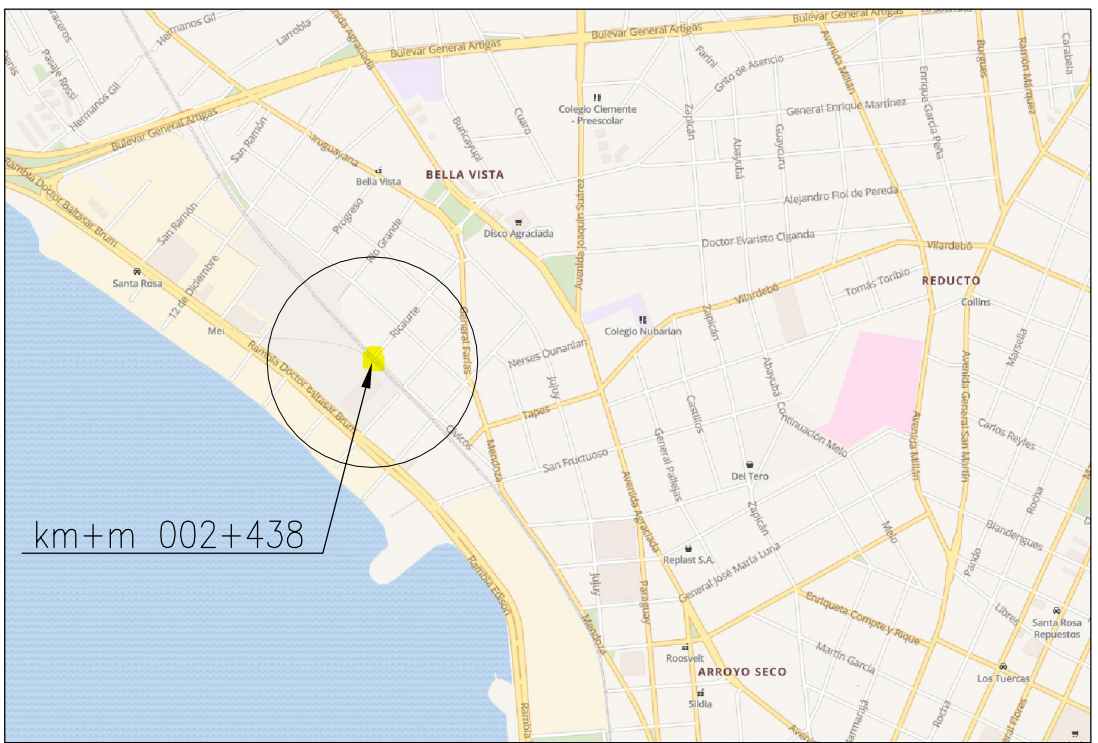
ESTIMATED AMOUNT OF CONCRETE	
FOUNDATION SLAB:	72 m3
FRAME:	132 m3
ESTIMATED REINFORCING STEEL	
FOUNDATION SLAB:	100 kg
FRAME:	190 kg/m3 (CONCRETE)
TRANSITION SLABS:	325 kg/m3 (CONCRETE)

DET 1 1:20

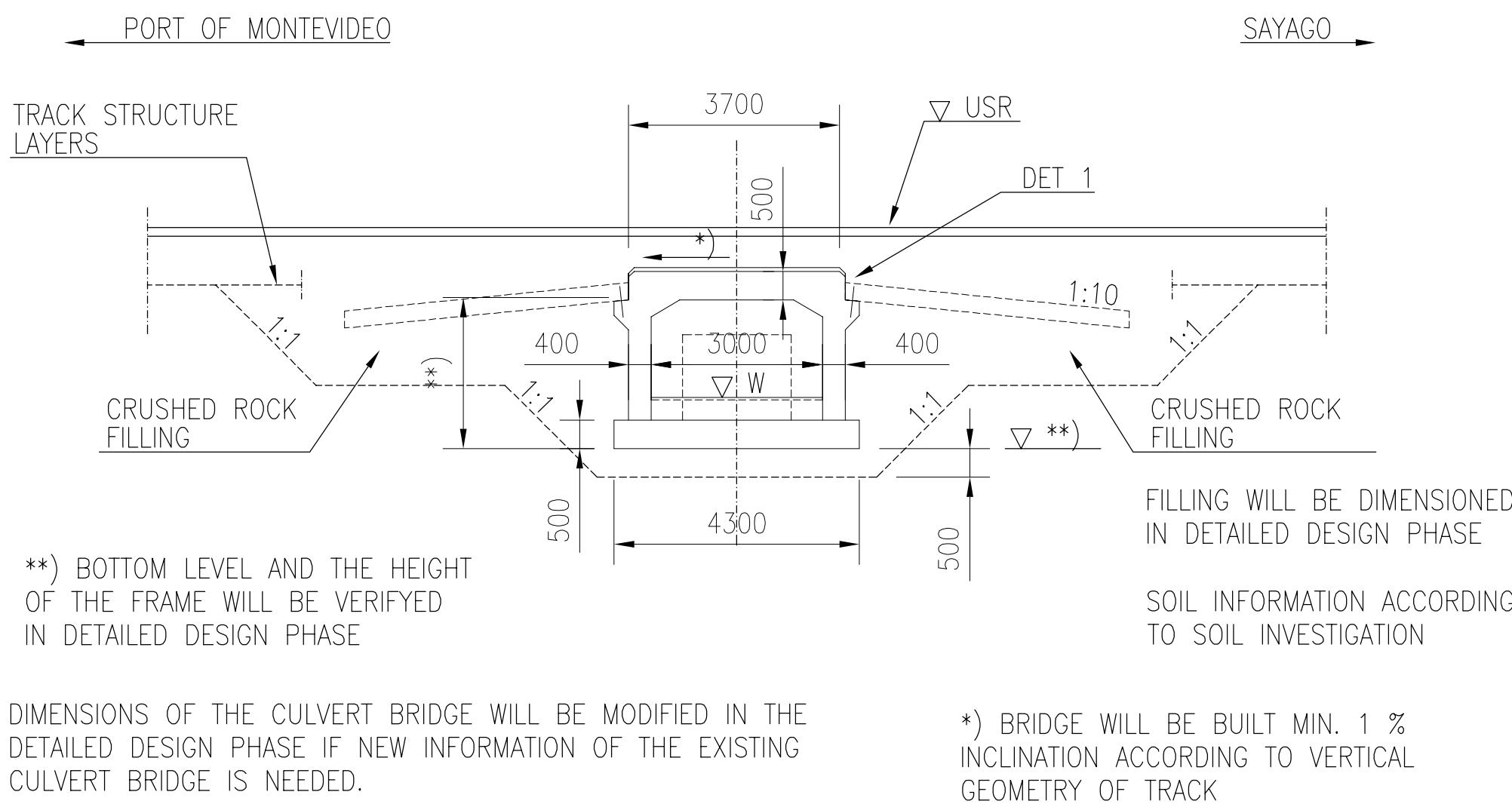


CONCRETE:	C35/45 Cmin=40 mm
REINFORCING STEEL:	B500P
REINFORCING MESH:	B500K
TRANSITION SLABS:	PREFABRICATED TRANSITION SLABS 2 x 2 x 4 x 1.0 m x 5.0 m + 6 x 1.0 m x 5.0 m + 8 x 1.0 m x 5.0 m OR CAST IN SITU 2 x 2 x 4.0 m x 5.0 m + 6.0 m x 5.0 m + 8.0 m x 5.0 m
CONCRETE C35/45	
CONSTRUCTIONAL STEEL:	S355 J2, HOT-DIP ZINC COATED
RAILING / FENCE:	h = 1.1 m S355J2H HORIZONTAL LINE LOAD 1.0 KN/m VERTICAL POINT LOAD 1.0 KN
SURFACE STRUCTURE:	WATER PROOFING MATERIAL 10 mm PROTECTIVE CONCRETE 50 mm (BALLAST 550 mm)
FILLING:	REQUIREMENTS ACCORDING TO TRACK INTERMEDIATE LAYER

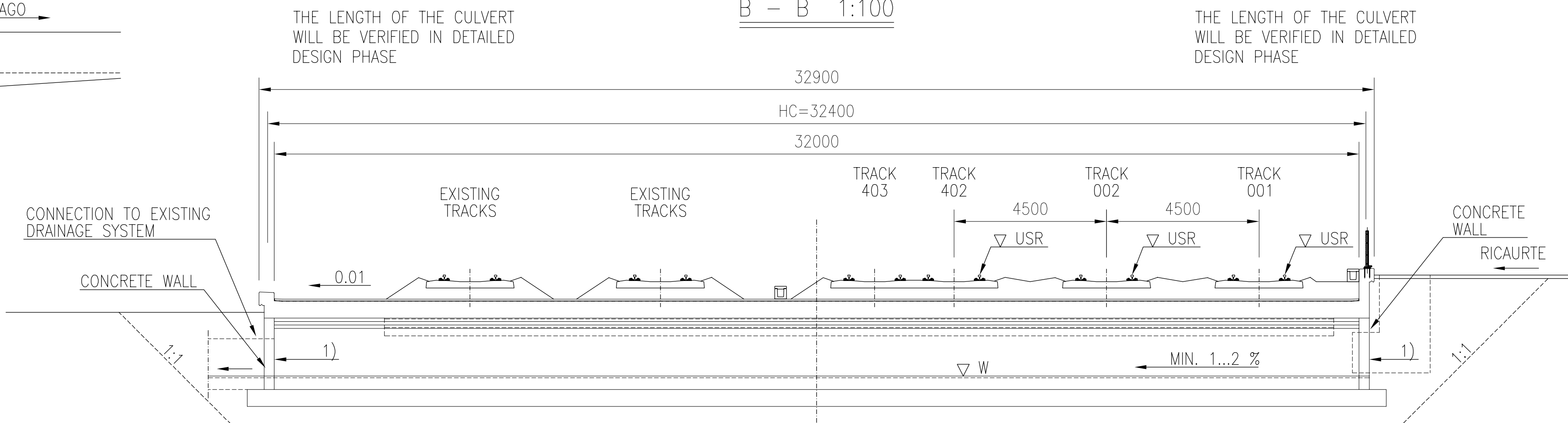
CLT = CENTER LINE of the TRACK
HC = HORIZONTAL CLEARANCE
LSD = LOWER SURFACE of the DECK
USR = UPPER SURFACE of the RAIL



A - A 1:100



B - B 1:100



1) CULVERT IS FOR RICAURTE STREET WATERS.
CONCRETE WALLS IN THE END OF THE CULVERT.
STORM WATER DRAINAGE THROUGH THE WALL.
CONNECTION TO EXISTING DRAINAGE SYSTEM WILL BE VERIFIED IN
DETAIL DESIGN PHASE.

BRIDGETYPE	REINFORCED CONCRETE BRIDGE
FRAME PLATE	
SPANS	3.00 m
HORIZONTAL CLEAR SPAN	—
HORIZONTAL CLEARANCE	32.40 m;

VERSION
15.12.2017

Revision	Explanation	Date	Designer	Date	Acceptor
Customer	Project Railway Project				
Supplier	Design phase Pre-engineering, Phase 2				
	Content Railway bridge Ricaurte Preliminary general drawing Km+m 002+438				
Drawer	14.12.2017	Ilkka Tiito	Loading		
Designer	14.12.2017	Ilkka Tiito	Coordinate and elevation reference system		
Supervisor	14.12.2017	Reima Niklander	Railway line		
Accept.	-	-	Archive	Type	Number
Cust. acc.	-	-	RB	-	1