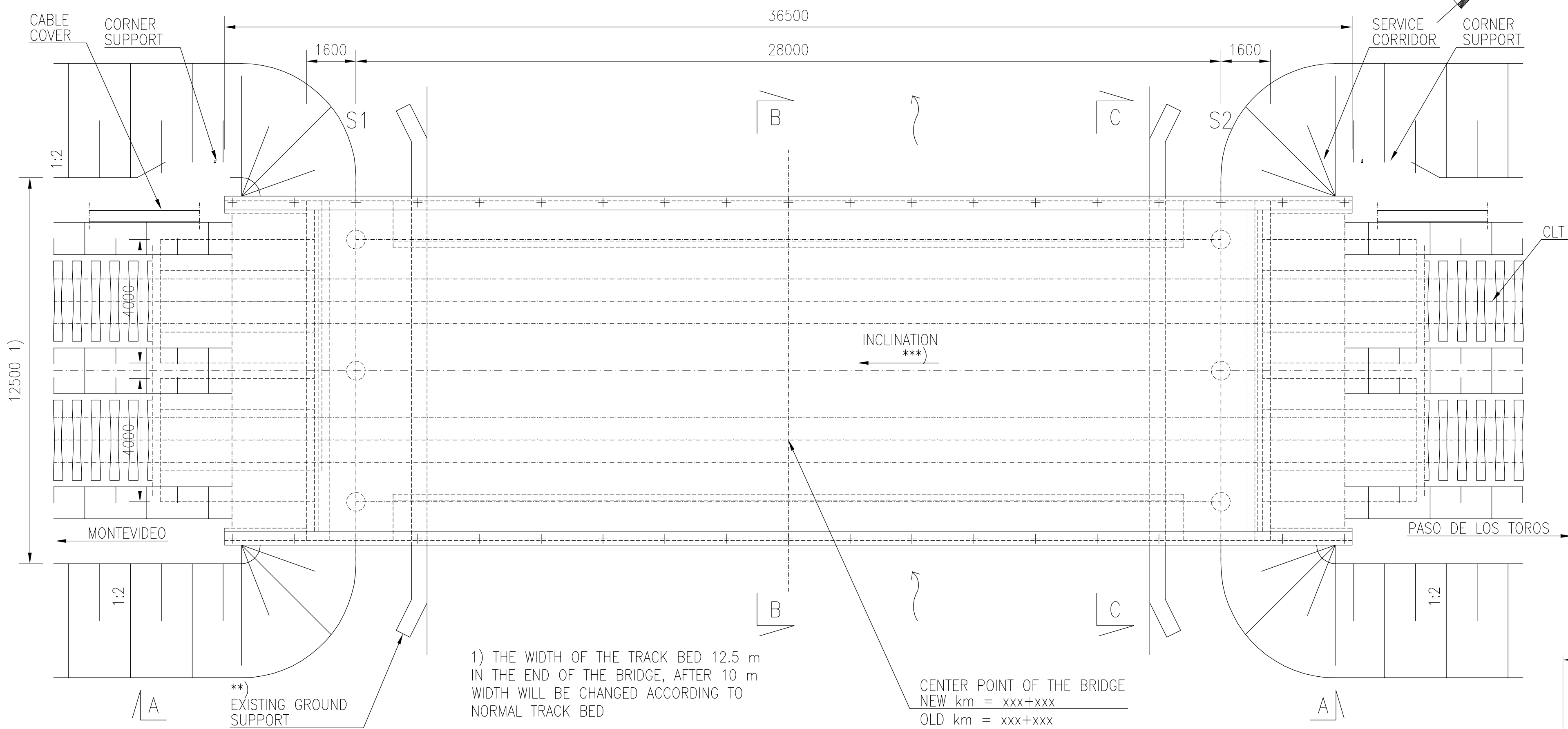


PRESTRESSED CONCRETE BRIDGE 2Tr 28 m 1:100

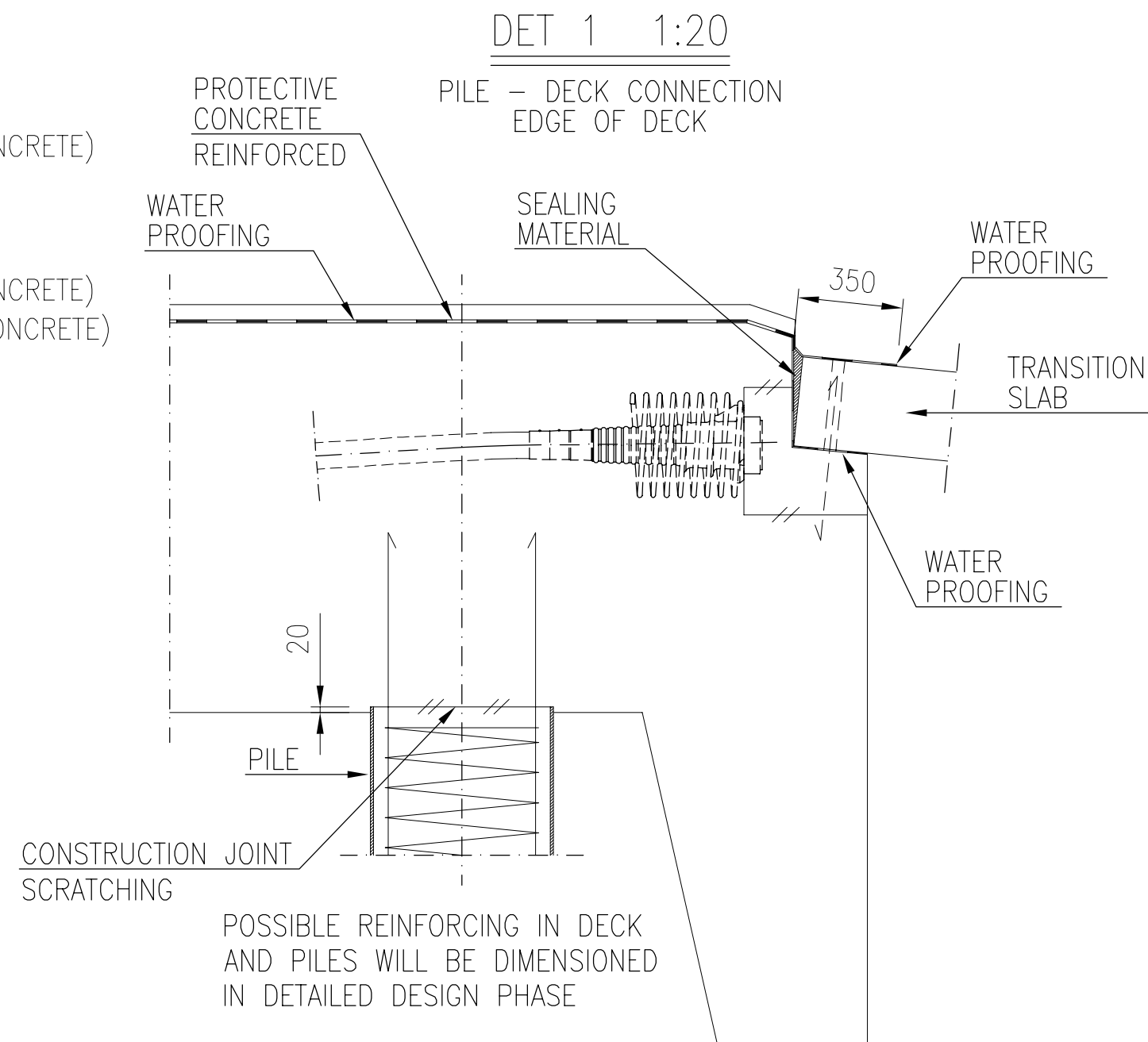


ESTIMATED AMOUNT OF CONCRETE
PILES: 17 m³
SUPERSTRUCTURE: 471 m³

ESTIMATED PRESTRESSING STEEL
SUPERSTRUCTURE: 23 kg/m³ (CONCRETE)

ESTIMATED REINFORCING STEEL
PILES: 1800 kg
SUPERSTRUCTURE: 90 kg/m³ (CONCRETE)
TRANSITION SLABS: 325 kg/m³ (CONCRETE)

PROTECTIVE CONCRETE: 3 kg/m²



CONCRETE: C35/45
C_{min}=40 mm

PRESTRESSING STEEL: St 1570 / 1770
REINFORCING STEEL: B500B
REINFORCING MESH: B500K

PILES / FOUNDATION: DRILLED PILES D610x14,2 S355J2H

TRANSITION SLABS: PREFABRICATED TRANSITION SLABS
2 x 2 x 4 x 1.0 m x 5,0 m
OR CAST IN SITU 2 x 2 x 4,0 m x 5,0 m
CONCRETE C35/45

CONSTRUCTIONAL STEEL: S355 J2, HOT-DIP ZINC COATED

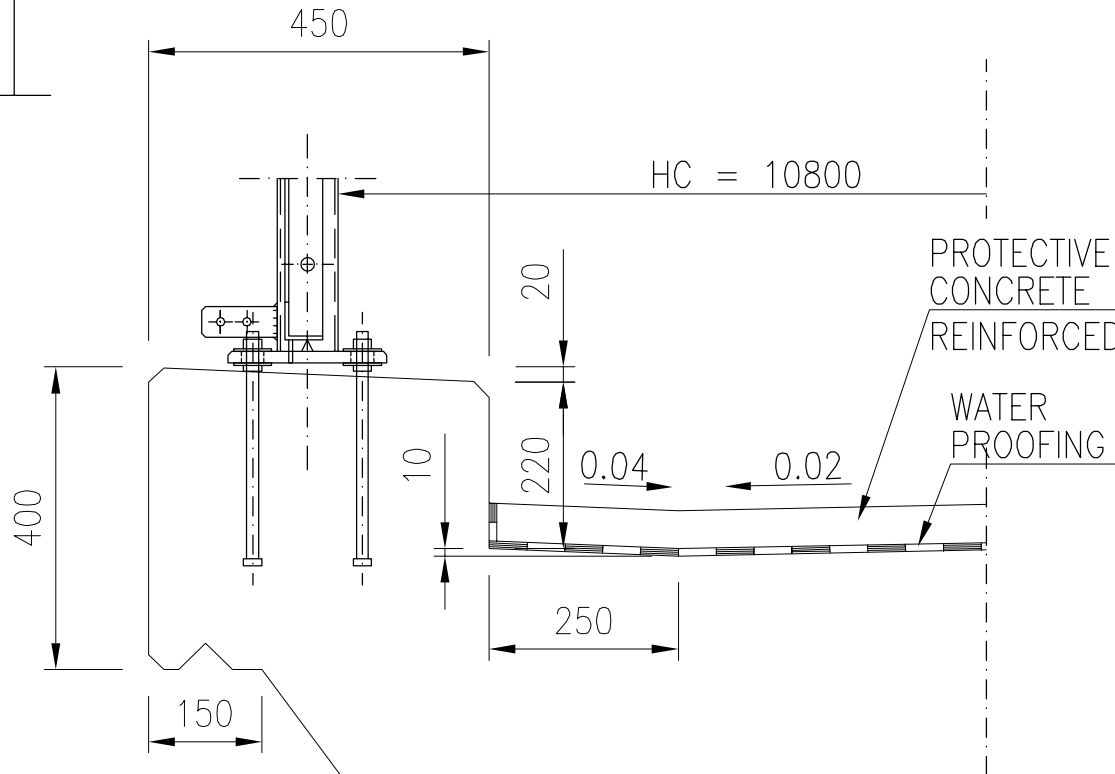
RAILING / FENCE: h = 1.1 m
S355J2H
HORIZONTAL LINE LOAD 1.0 kN/m
VERTICAL POINT LOAD 1.0 kN

SURFACE STRUCTURE: WATER PROOFING MATERIAL 10 mm
PROTECTIVE CONCRETE 50 mm
BALLAST 550 mm

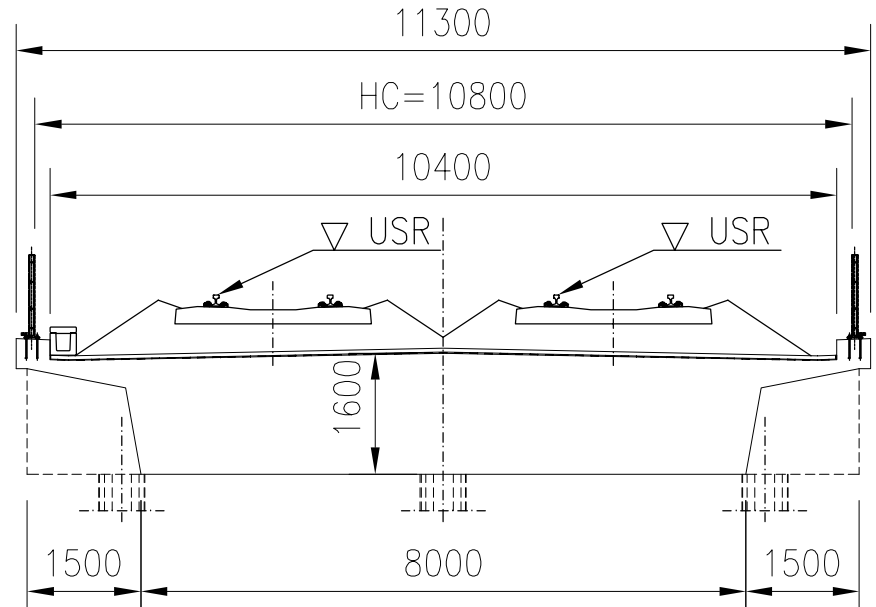
FILLING: REQUIREMENTS ACCORDING TO TRACK INTERMEDIATE LAYER

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

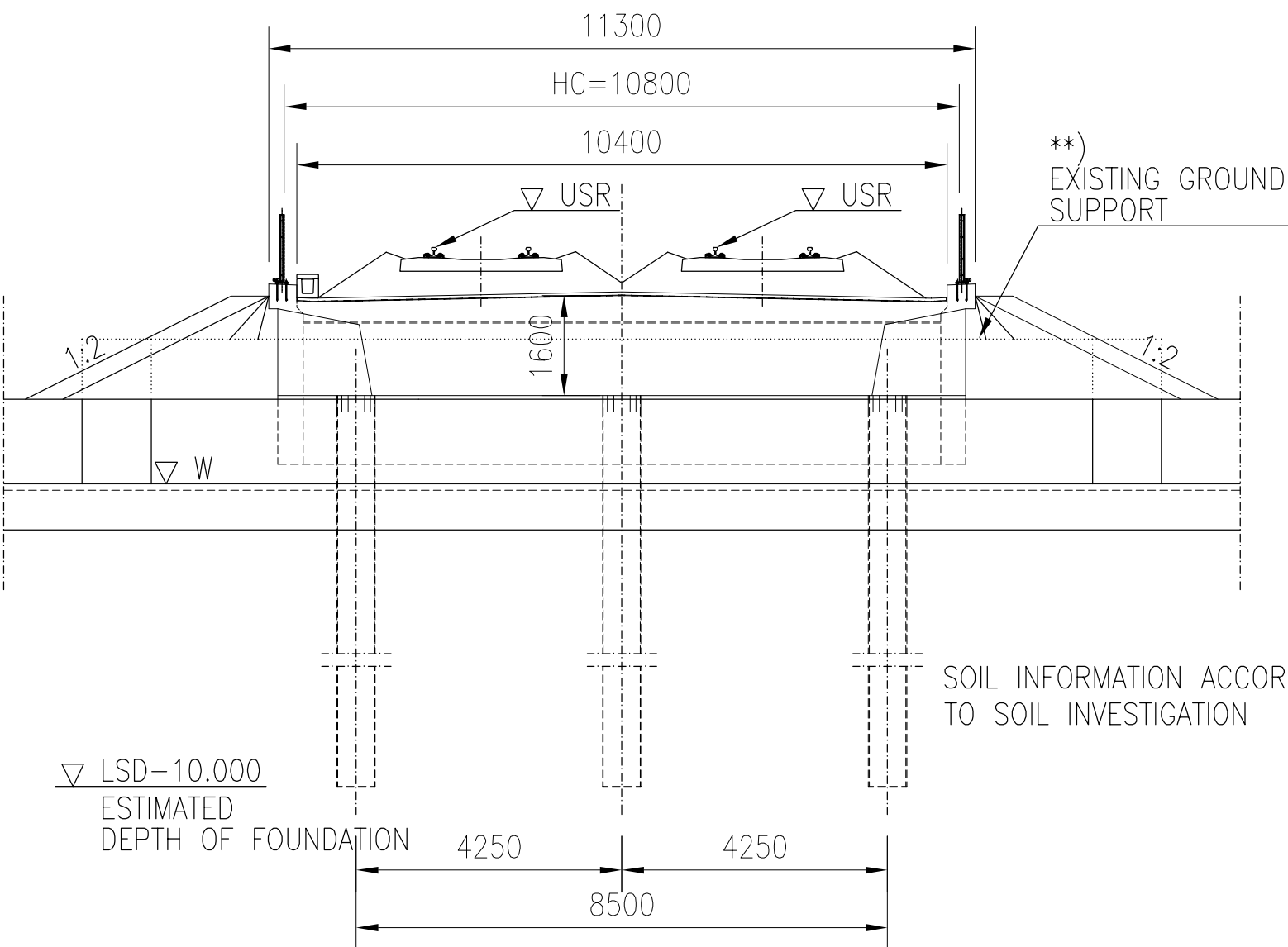
EDGE BEAM 1:10



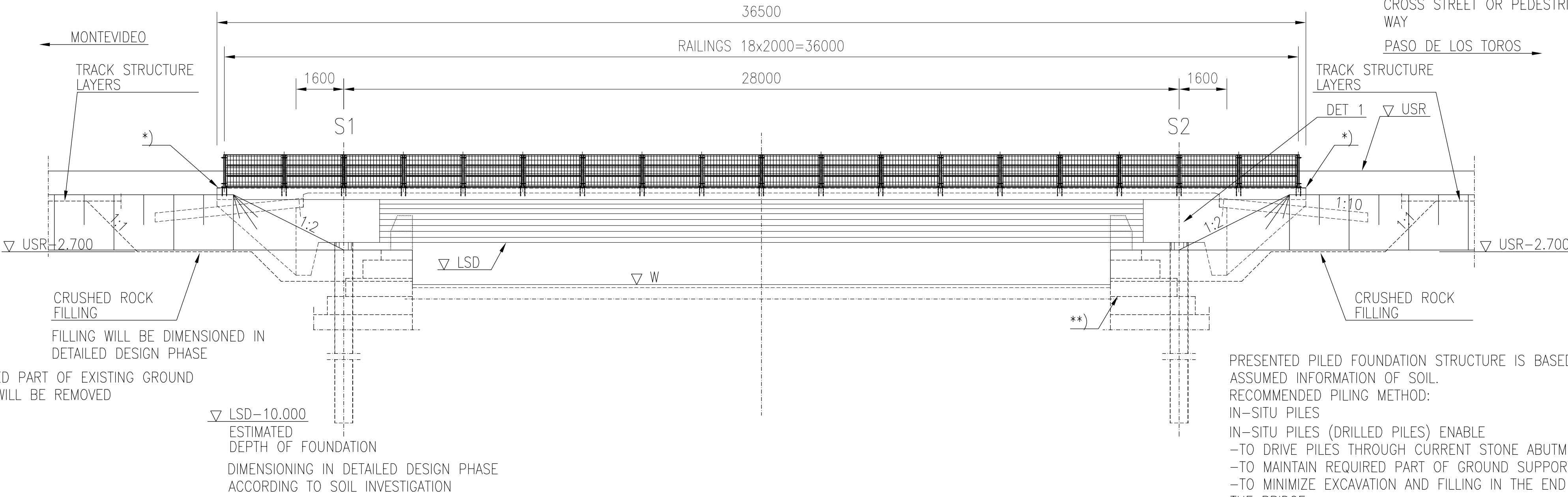
B - B 1:100



C - C 1:100



A - A 1:100



PRESENTED PILED FOUNDATION STRUCTURE IS BASED ON ASSUMED INFORMATION OF SOIL.
RECOMMENDED PILING METHOD:
IN-SITU PILES
IN-SITU PILES (DRILLED PILES) ENABLE
-TO DRIVE PILES THROUGH CURRENT STONE ABUTMENT
-TO MAINTAIN REQUIRED PART OF GROUND SUPPORT
-TO MINIMIZE EXCAVATION AND FILLING IN THE END OF THE BRIDGE
-TO SHORTEN THE NEEDED CONSTRUCTION TIME

MAP

BRIDGETYPE	PRESTRESSED CONCRETE BRIDGE
	CANTILEVER PLATE
SPANS	1.60 m + 28.00 m + 1.60 m
HORIZONTAL CLEAR SPAN	—
HORIZONTAL CLEARANCE	10.80 m

VERSION
23.10.2017

Revision	Explanation	Date	Designer	Date	Acceptor
Customer	MTOP				
Project	Railway Project				
Design phase	Pre-engineering, Phase 2				
Content	Prestressed concrete bridge 28 m Double track Preliminary general drawing Km+m +-+				
Supplier	VR TRACK				
Drawer	23.10.2017	Ilkka Tiito			LM71-25
Designer	23.10.2017	Ilkka Tiito			WGS 84 UTM 21
Supervisor	23.10.2017	Reima Nikander			Railway line
Accept.	-	-			Archive
Cust. acc.	-	-			Type
					Number
					Rev.
					Sheet
					1