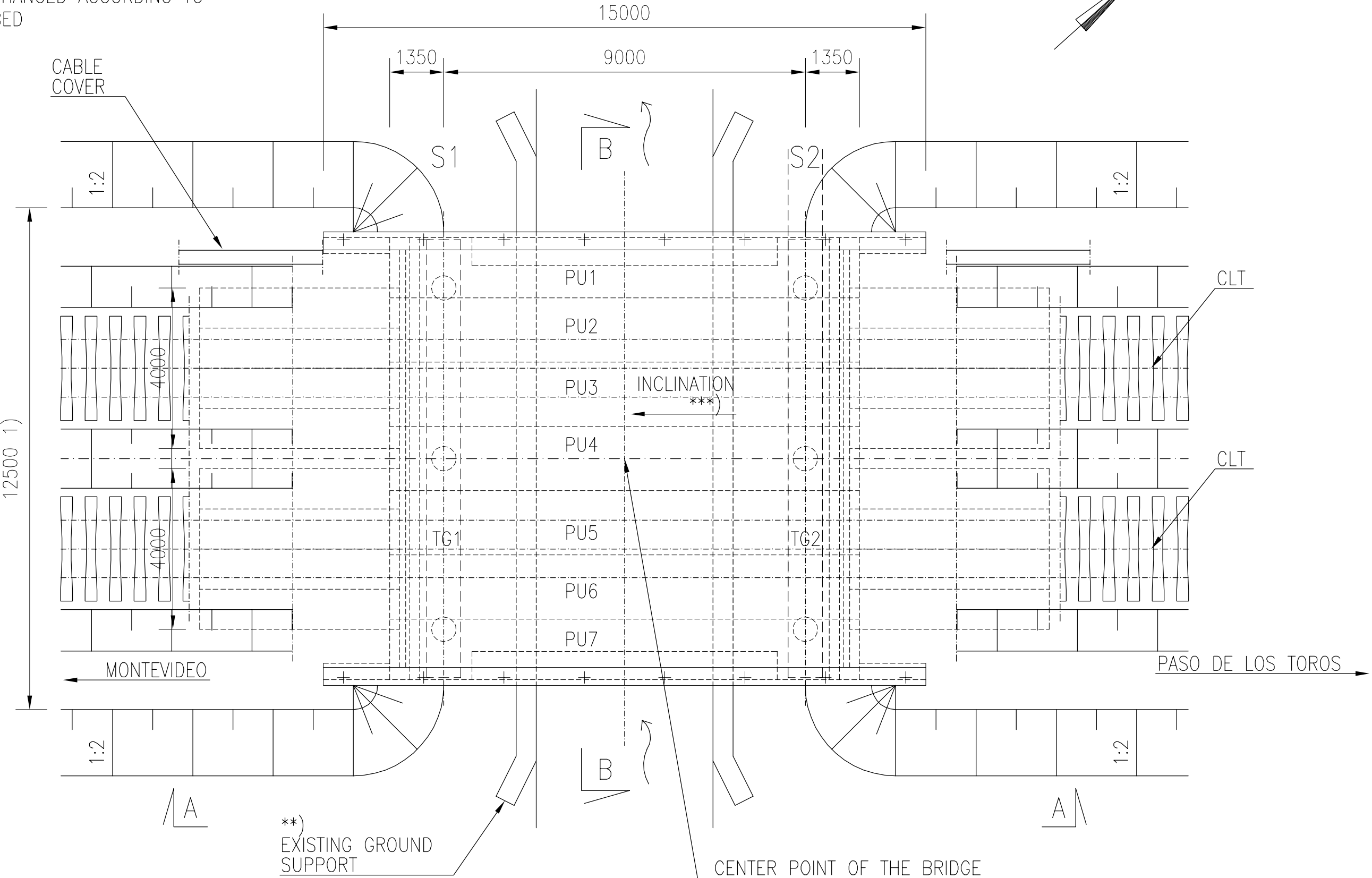


1) THE WIDTH OF THE TRACK BED 12.5 m
IN THE END OF THE BRIDGE, AFTER 10 m
WIDTH WILL BE CHANGED ACCORDING TO
NORMAL TRACK BED

PREFABRICATED BRIDGE 2Tr 9 m 1:100



***) BRIDGE WILL BE BUILT MIN. 1 %
INCLINATION ACCORDING TO VERTICAL
GEOMETRY OF TRACK

CENTER POINT OF THE BRIDGE
NEW km = xxx+xxx
OLD km = xxx+xxx

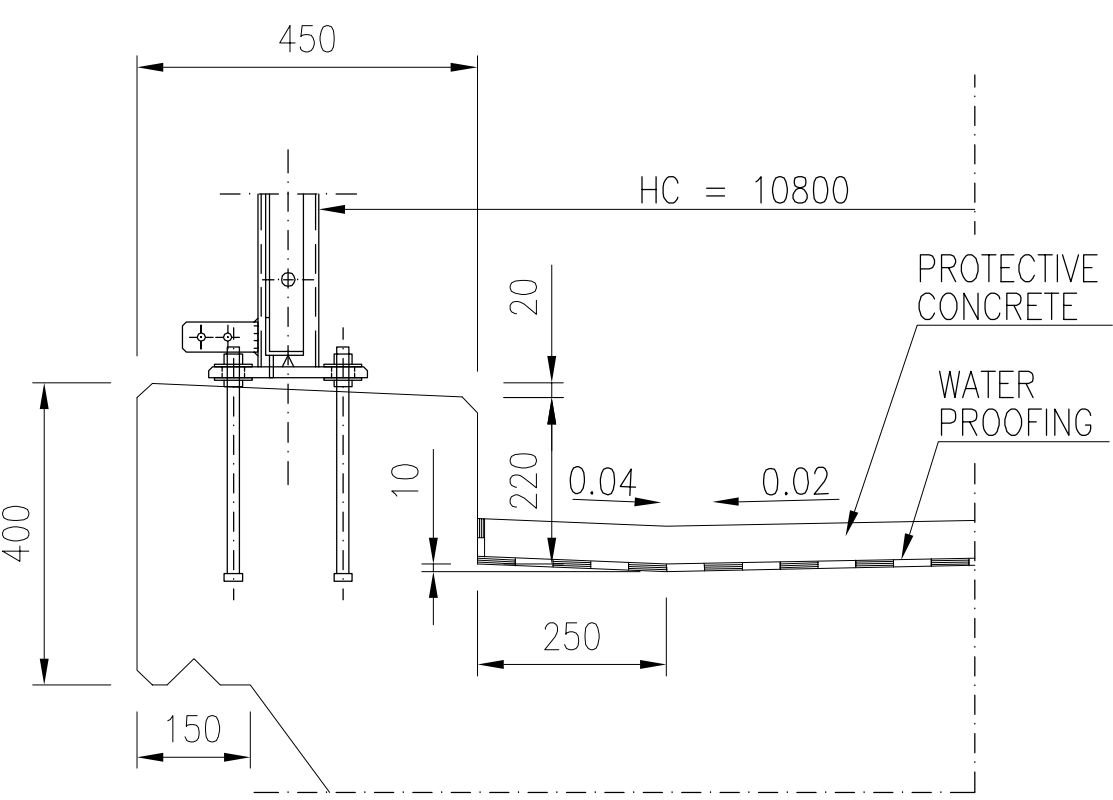
PU = PRECAST UNIT
TG = TRANSVERSE GIRDER

ESTIMATED AMOUNT OF CONCRETE
PILES: 17 m³
TRANSVERSE GIRDER: 20 m³
SUPERSTRUCTURE: 109 m³

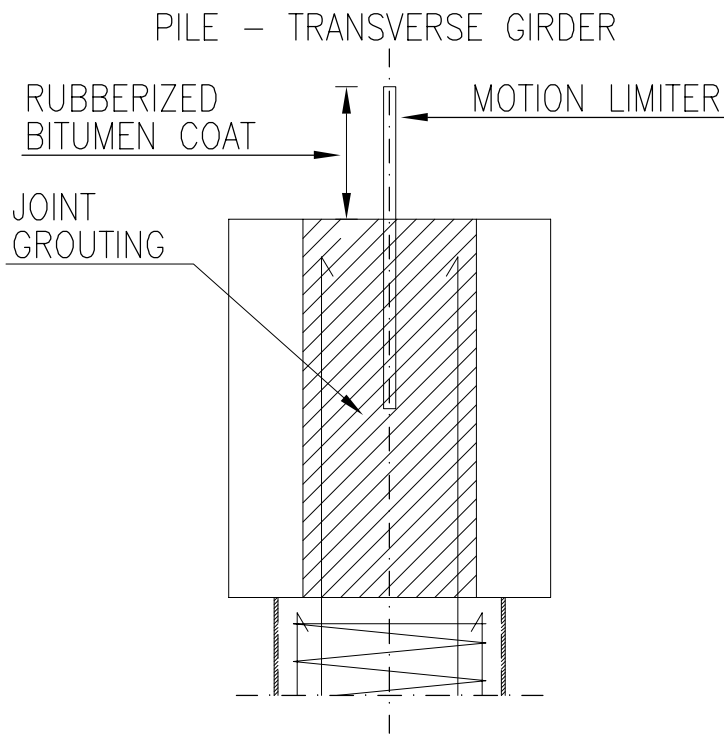
ESTIMATED REINFORCING STEEL
PILES: 1800 kg
TRANSVERSE GIRDER: 200 kg/m³ (CONCRETE)
SUPERSTRUCTURE: 190 kg/m³ (CONCRETE)
TRANSITION SLABS: 325 kg/m³ (CONCRETE)

PROTECTIVE CONCRETE: 3 kg/m²

EDGE BEAM 1:10

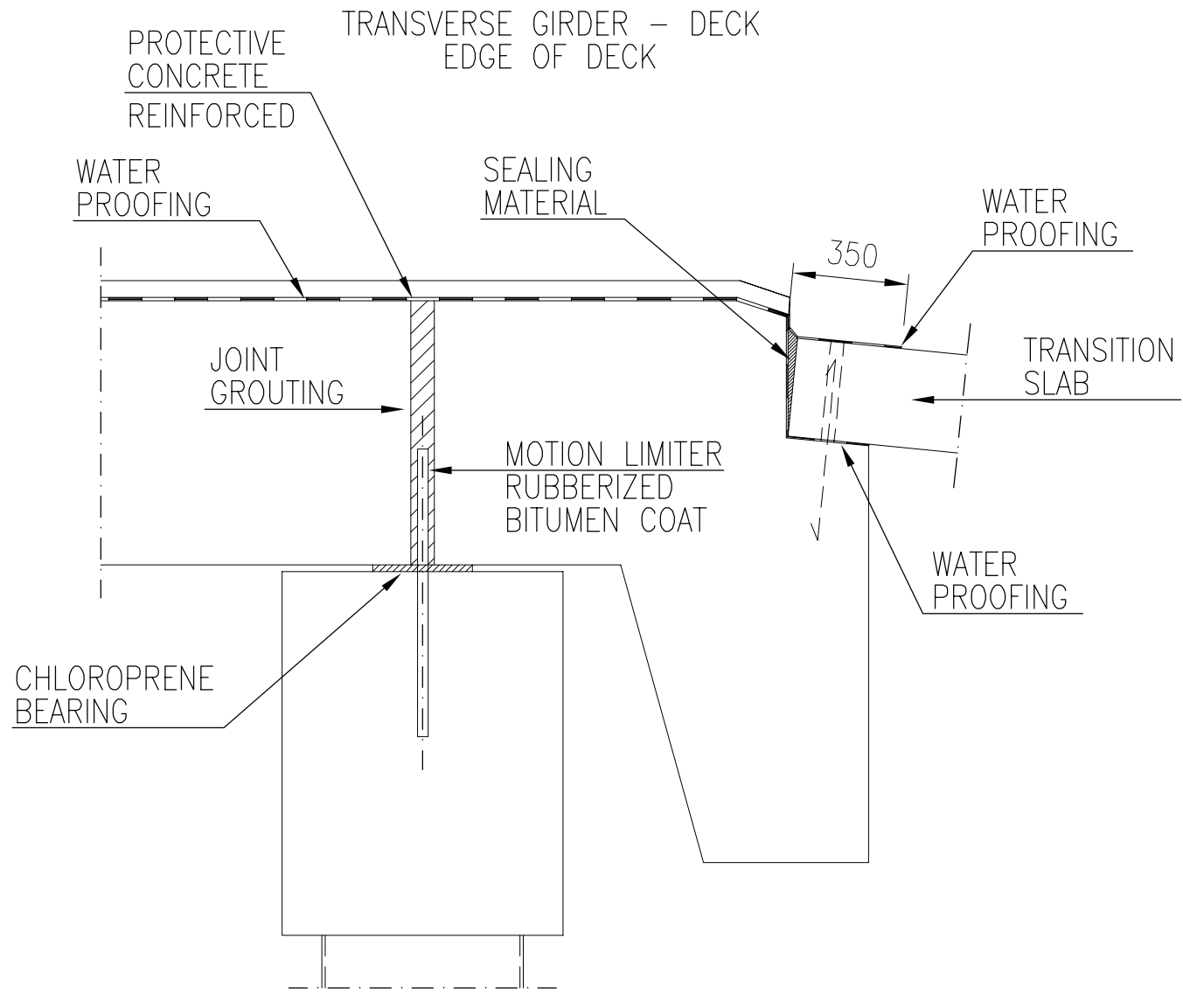


JOINTS 1:20

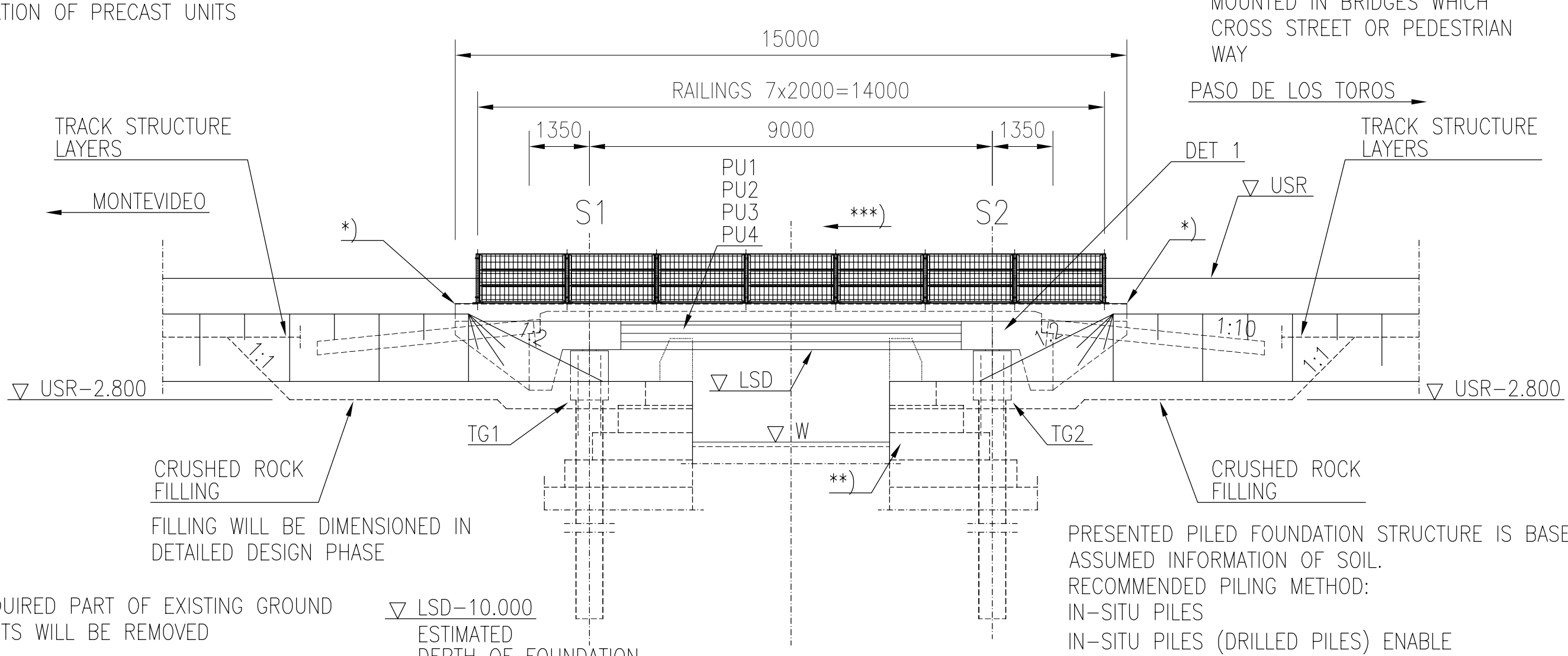


POSSIBLE REINFORCING WILL BE
DIMENSIONED IN DETAILED DESIGN
PHASE

DET 1 1:20



A - A 1:100

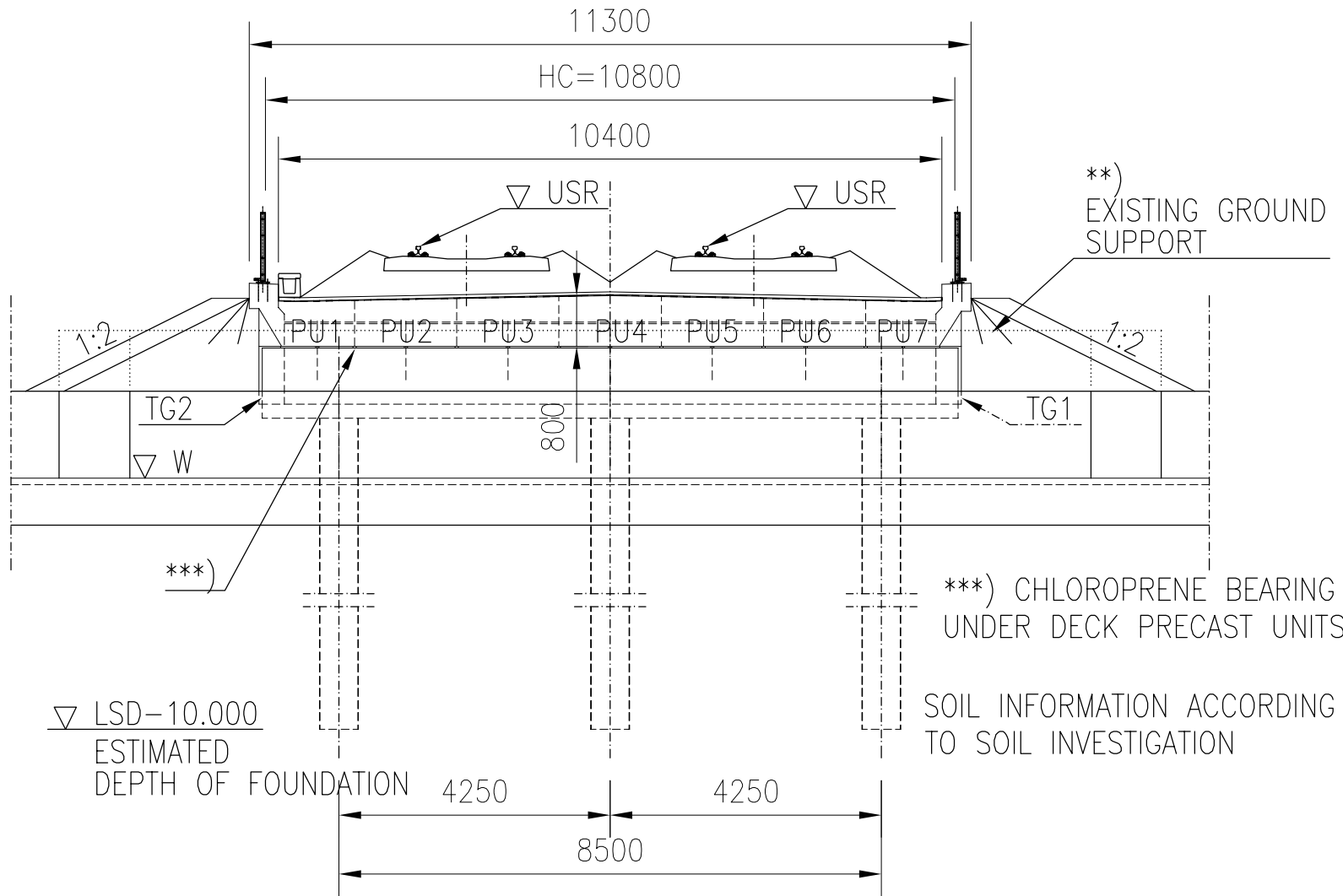


**) REQUIRED PART OF EXISTING GROUND
SUPPORTS WILL BE REMOVED

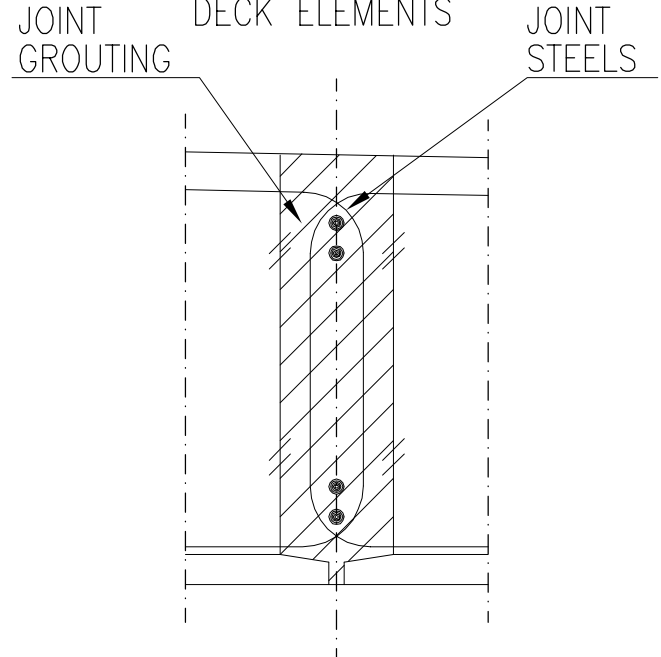
▽ LSD=10.000
ESTIMATED
DEPTH OF FOUNDATION
DIMENSIONING IN DETAILED DESIGN PHASE
ACCORDING TO SOIL INVESTIGATION

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

B - B 1:100



JOINTS 1:10



ELEMENTS ARE JOINED TOGETHER TO
STRENGTHEN THE DECK STRUCTURE

REINFORCING STEELS IN JOINTS WILL
BE DEFINED IN DETAIL DESIGN PHASE

CONCRETE: C35/45
Cmin=40 mm

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

MAP

BRIDGETYPE PREFABRICATED BRIDGE

SPANS 1.35 m + 9.00 m + 1.35 m

HORIZONTAL CLEAR SPAN — VERTICAL CLEARANCE —

HORIZONTAL CLEARANCE 10.80 m

VERSION
23.10.2017

Revision	Explanation	Date	Designer	Date	Acceptor
Customer	 MINISTERIO DE TRANSPORTE Y OBRAS PÚBLICAS				
Project	Railway Project				
Design phase	Pre-engineering, Phase 2				
Content	Prefabricated bridge 9 m Double track Preliminary general drawing Km+m +- -				
Supplier					
Drawer	23.10.2017	Ilkka Tiito	Loading		
Designer	23.10.2017	Ilkka Tiito	Coordinate and elevation reference system		
Supervisor	23.10.2017	Reima Niklander	Railway line		
Accept.	-	-	Archive	Type	Number
Cust. acc.	-	-	RB	-	1