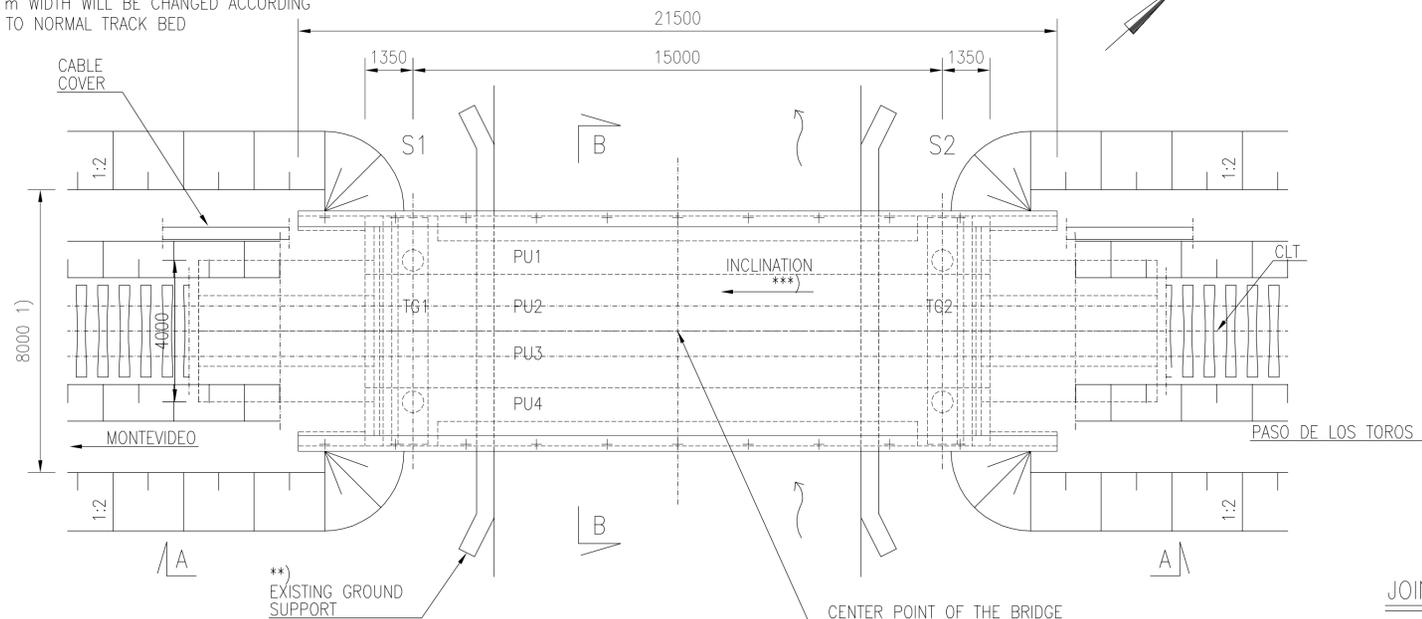


1) THE WIDTH OF THE TRACK BED 8.0 m IN THE END OF THE BRIDGE, AFTER 10 m WIDTH WILL BE CHANGED ACCORDING TO NORMAL TRACK BED

PREFABRICATED BRIDGE 15 m 1:100



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

PU = PRECAST UNIT
TG = TRANSVERSE GIRDER

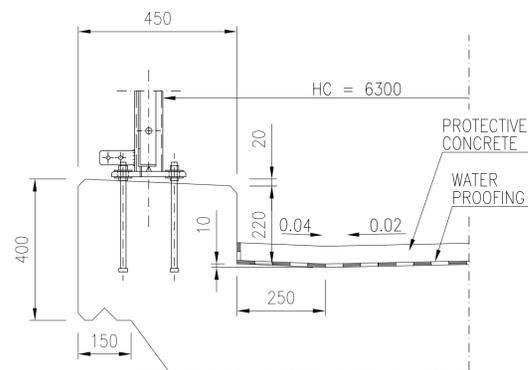
ESTIMATED AMOUNT OF CONCRETE
PILES: 11 m³
TRANSVERSE GIRDER: 14 m³
SUPERSTRUCTURE: 137 m³

ESTIMATED REINFORCING STEEL
PILES: 1200 kg
TRANSVERSE GIRDER: 200 kg/m³ (CONCRETE)
SUPERSTRUCTURE: 140 kg/m³ (CONCRETE)
TRANSITION SLABS: 325 kg/m³ (CONCRETE)

PROTECTIVE CONCRETE: 3 kg/m²

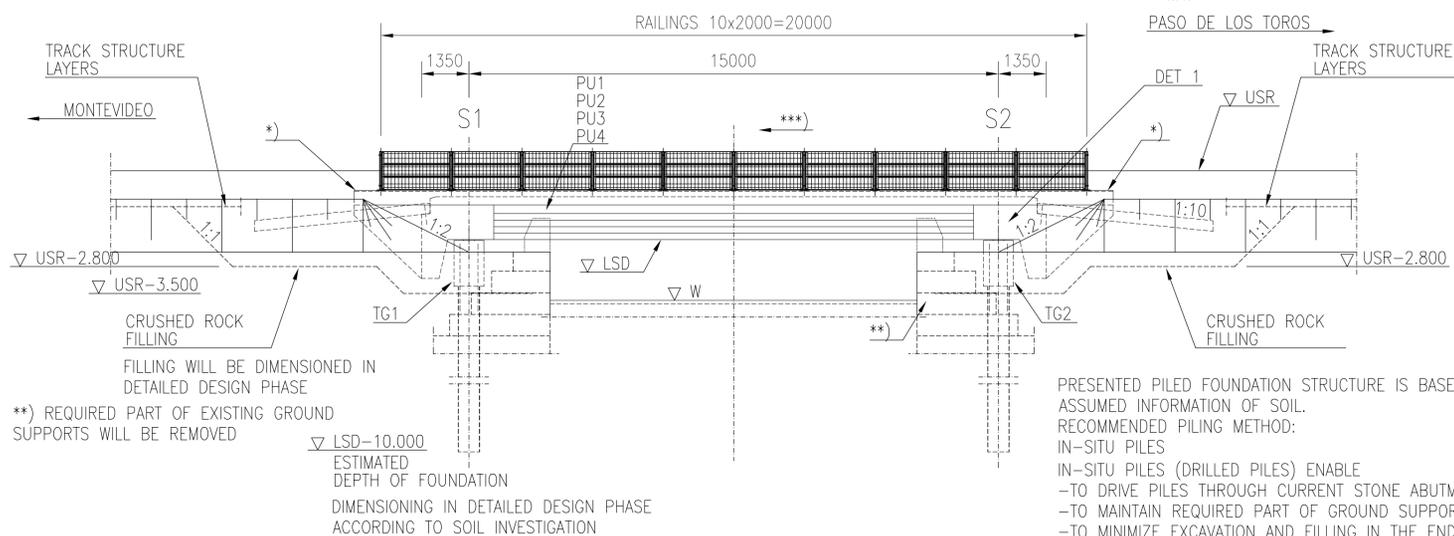
*) THE LENGTH OF THE WING WALLS WILL BE VERIFIED IN DETAILED DESIGN PHASE OR BEFORE FABRICATION OF PRECAST UNITS

EDGE BEAM 1:10



A - A 1:100

SAFETY NET IN RAILS WILL BE MOUNTED IN BRIDGES WHICH CROSS STREET OR PEDESTRIAN WAY

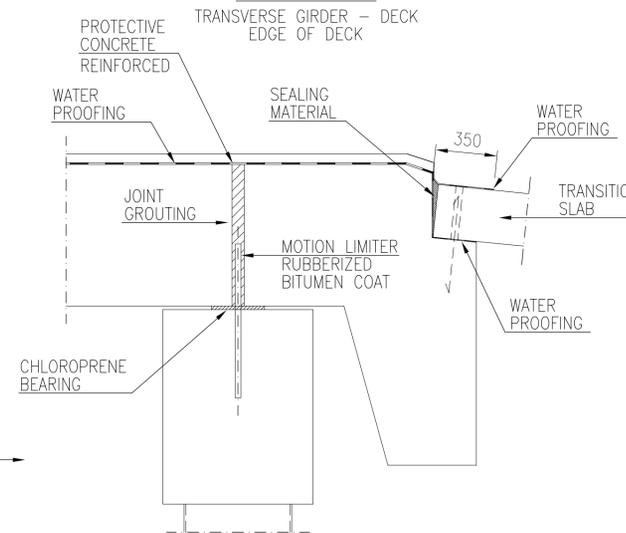


***) REQUIRED PART OF EXISTING GROUND SUPPORTS WILL BE REMOVED

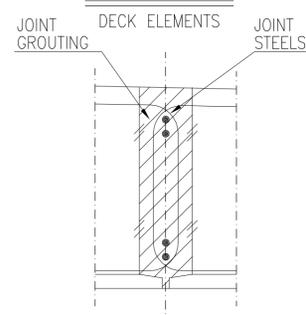
ESTIMATED DEPTH OF FOUNDATION DIMENSIONING IN DETAILED DESIGN PHASE ACCORDING TO SOIL INVESTIGATION

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

DET 1 1:20

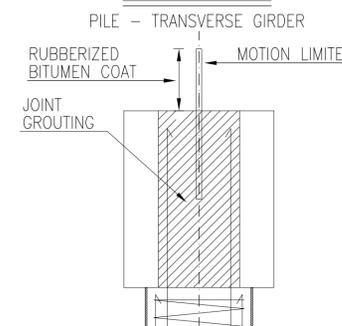


JOINTS 1:10



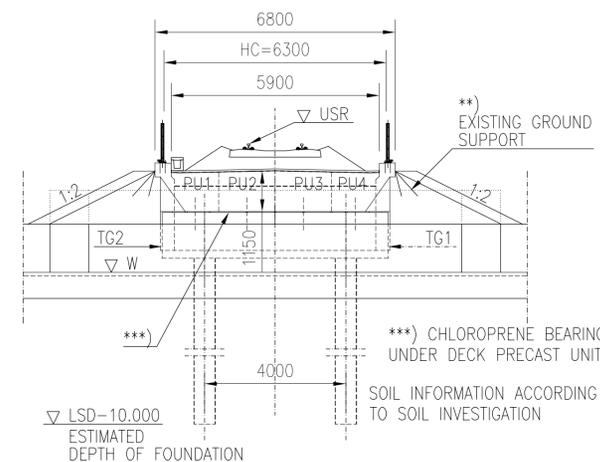
ELEMENTS ARE JOINED TOGETHER TO STRENGTHEN THE DECK STRUCTURE
REINFORCING STEELS IN JOINTS WILL BE DEFINED IN DETAIL DESIGN PHASE

JOINTS 1:20



POSSIBLE REINFORCING WILL BE DIMENSIONED IN DETAILED DESIGN PHASE
SUPPORTING FOR TRANSVERSE GIRDER DURING ASSEMBLY WILL BE DEFINED IN DETAIL DESIGN PHASE

B - B 1:100



***) CHLOROPRENE BEARING UNDER DECK PRECAST UNITS
SOIL INFORMATION ACCORDING TO SOIL INVESTIGATION

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 4 x 1.0 m x 5,0 m
OR CAST IN SITU 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

BRIDGE TYPE	PREFABRICATED BRIDGE
SPANS	1.35 m + 15.00 m + 1.35 m
HORIZONTAL CLEAR SPAN	—
VERTICAL CLEARANCE	—
HORIZONTAL CLEARANCE	6.30 m

VERSION
23.10.2017

Revision	Explanation	Date	Designer	Date	Acceptor
Customer	Project				
 MINISTERIO DE TRANSPORTE Y OBRAS PÚBLICAS		Railway Project			
		Design phase Pre-engineering, Phase 2			
Supplier		Content			
		Prefabricated bridge 15 m Preliminary general drawing Km+m +-+			
		Loading			LM71-25
		Coordinate and elevation reference system			WGS 84 UTM 21
Drawer	23.10.2017	Ilkka Tiuro			
Designer	23.10.2017	Ilkka Tiuro			
Supervisor	23.10.2017	Reima Niklander			
Accept.	-	-			
Cost. acc.	-	-			
		Archive	Type	Number	Rev. Sheet
				RB	- 1