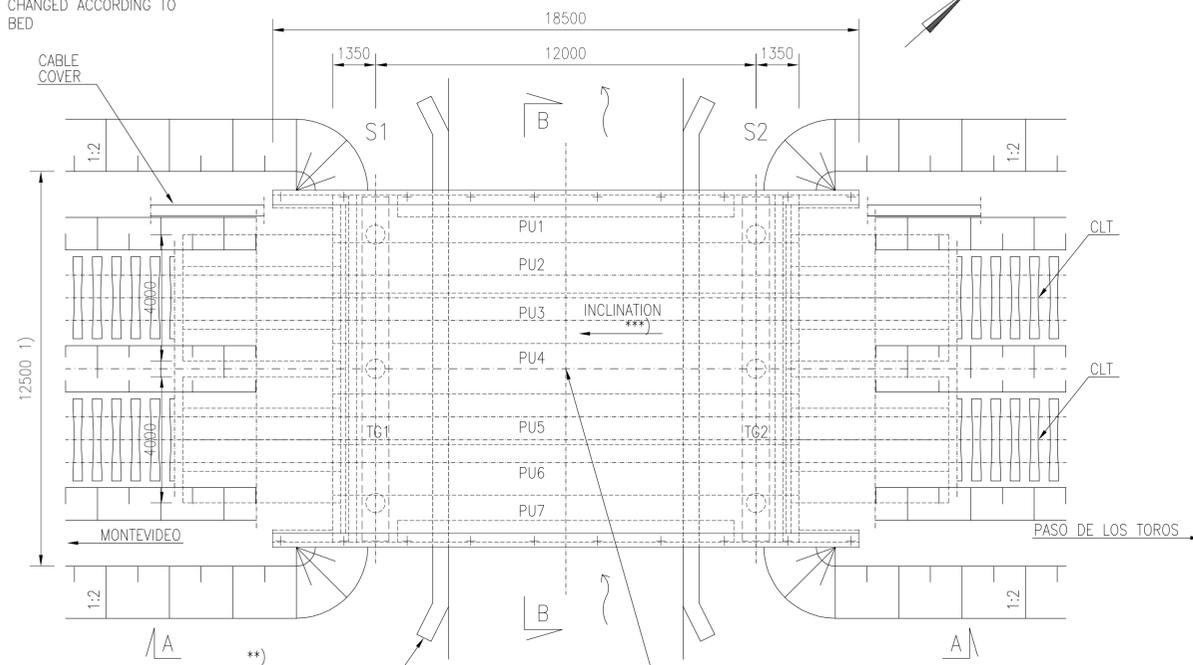


1) THE WIDTH OF THE TRACK BED 12.5 m
IN THE END OF THE BRIDGE, AFTER 10 m
WIDTH WILL BE CHANGED ACCORDING TO
NORMAL TRACK BED

PREFABRICATED BRIDGE 2Tr 12 m 1:100



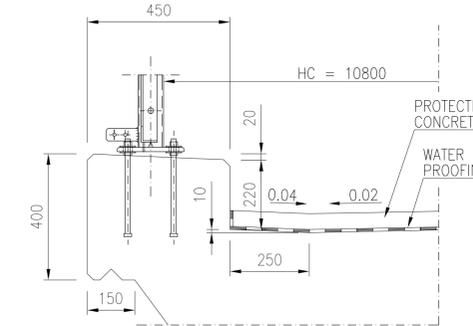
PU = PRECAST UNIT
TG = TRANSVERSE GIRDER

ESTIMATED AMOUNT OF CONCRETE
PILES: 17 m³
TRANSVERSE GIRDER: 22 m³
SUPERSTRUCTURE: 161 m³

ESTIMATED REINFORCING STEEL
PILES: 1800 kg
TRANSVERSE GIRDER: 200 kg/m³ (CONCRETE)
SUPERSTRUCTURE: 170 kg/m³ (CONCRETE)
TRANSITION SLABS: 325 kg/m³ (CONCRETE)

PROTECTIVE CONCRETE: 3 kg/m²

EDGE BEAM 1:10



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

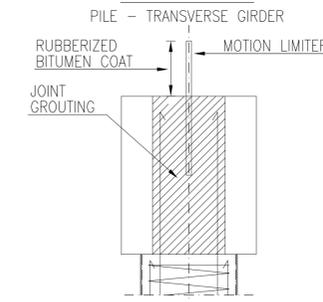
RAILING / FENCE: h = 1.1 m
S355J2H
HORIZONTAL LINE LOAD 1,0 KN/m
VERTICAL POINT LOAD 1,0 KN

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

FILLING: REQUIREMENTS ACCORDING TO TRACK INTERMEDIATE LAYER

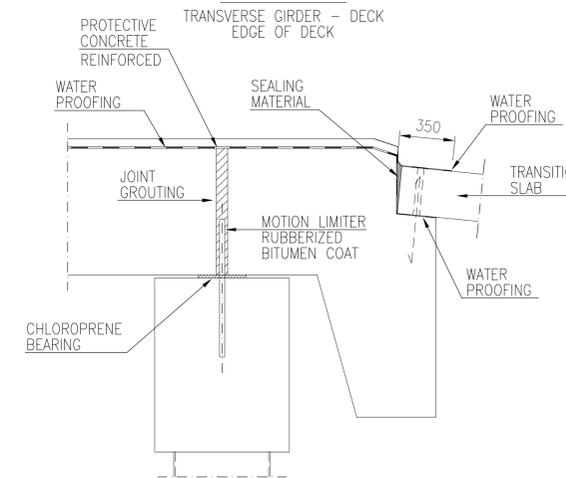
CLT = CENTER LINE of the TRACK
HC = HORIZONTAL CLEARANCE
LSD = LOWER SURFACE of the DECK
USR = UPPER SURFACE of the RAIL

JOINTS 1:20



POSSIBLE REINFORCING WILL BE
DIMENSIONED IN DETAILED DESIGN
PHASE

DET 1 1:20



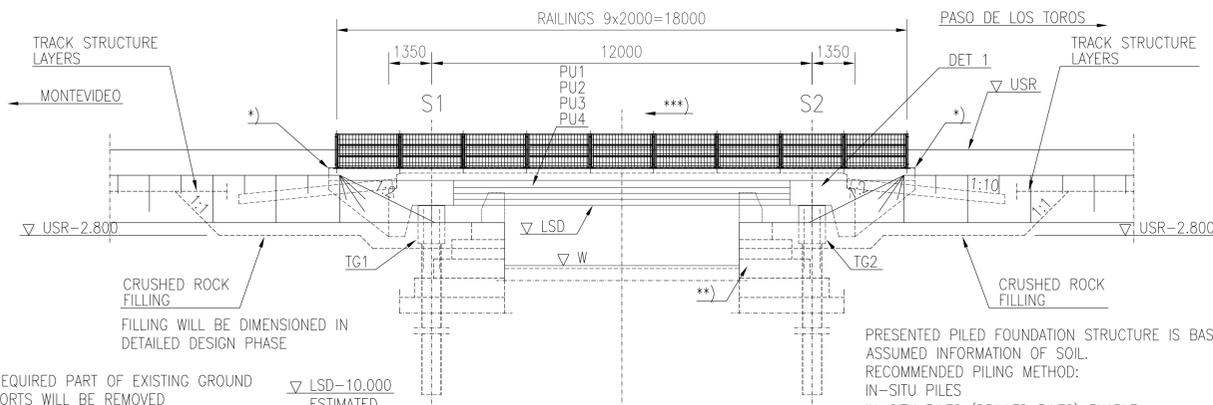
***) BRIDGE WILL BE BUILT MIN. 1 %
INCLINATION ACCORDING TO VERTICAL
GEOMETRY OF TRACK

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

A - A 1:100

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

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

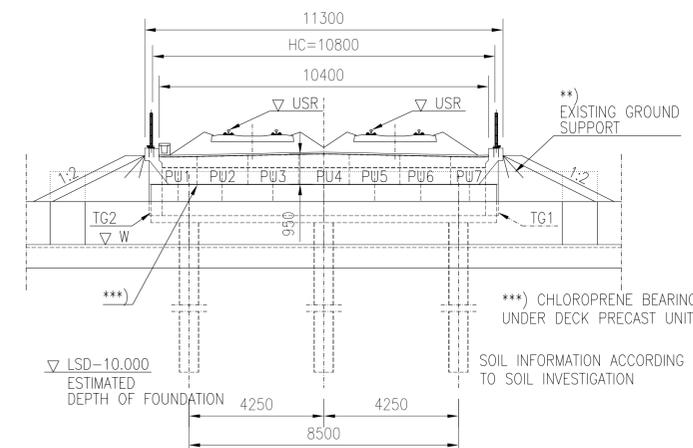


***) REQUIRED PART OF EXISTING GROUND
SUPPORTS WILL BE REMOVED

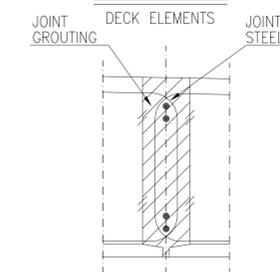
ESTIMATED
DEPTH OF FOUNDATION
DIMENSIONING IN DETAILED DESIGN PHASE
ACCORDING TO SOIL INVESTIGATION

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

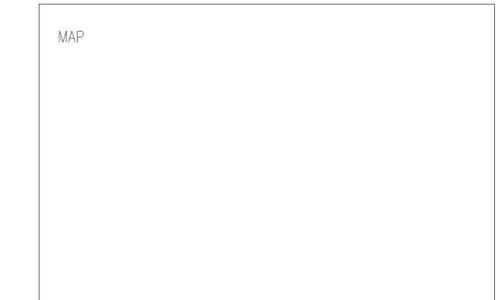
B - B 1:100



JOINTS 1:10



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



| | |
|-----------------------|---------------------------|
| BRIDGE TYPE | PREFABRICATED BRIDGE |
| SPANS | 1.35 m + 12.00 m + 1.35 m |
| HORIZONTAL CLEAR SPAN | — |
| 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 | | | |
| Supplier | | Design phase Pre-engineering, Phase 2 Content Prefabricated bridge 12 m Double track Preliminary general drawing Km+m +-+ | | | |
| Drawer | 23.10.2017 | Ilkka Tiito | Loading LM71-25 | | |
| Designer | 23.10.2017 | Ilkka Tiito | Coordinate and elevation reference system WGS 84 UTM 21 | | |
| Supervisor | 23.10.2017 | Reima Niklander | Railway line | | |
| Accept. | - | - | Archive | Type | Number |
| Cust. acc. | - | - | RB | - | 1 |