

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

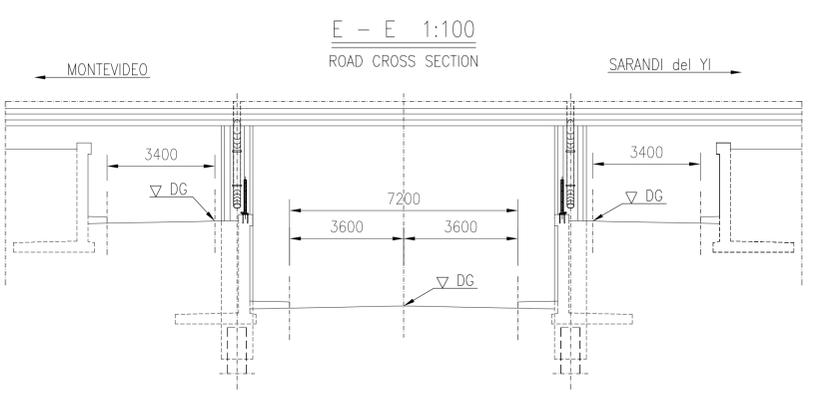
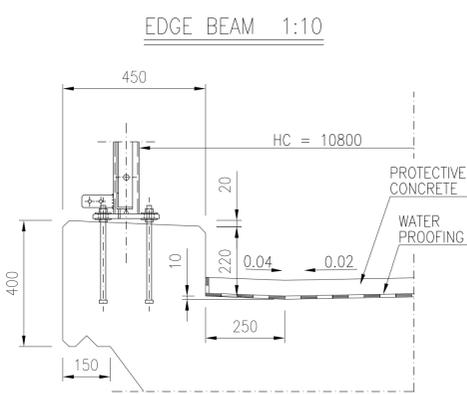
CONSTRUCTIONAL STEEL: S355 J2, HOT-DIP ZINC COATED

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



ESTIMATED AMOUNT OF CONCRETE

PILES: 34 m³

COLUMNS: 26 m³

SUPERSTRUCTURE: 299 m³

ESTIMATED REINFORCING STEEL

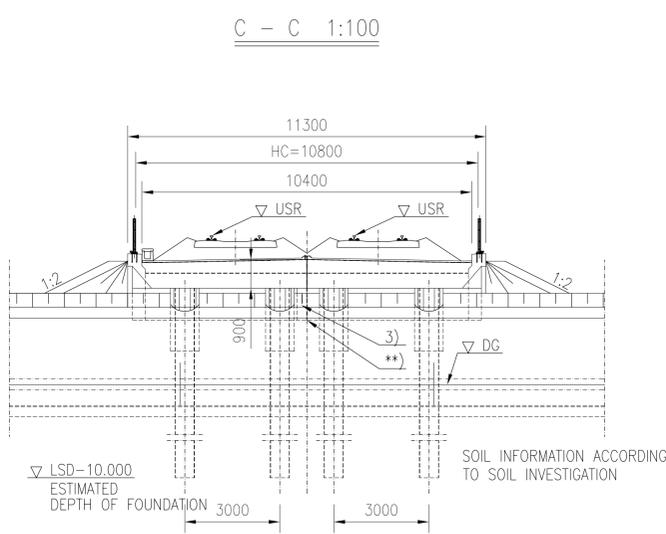
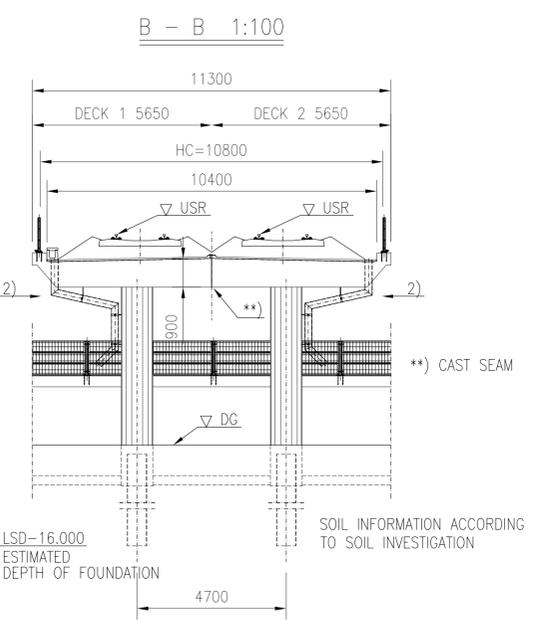
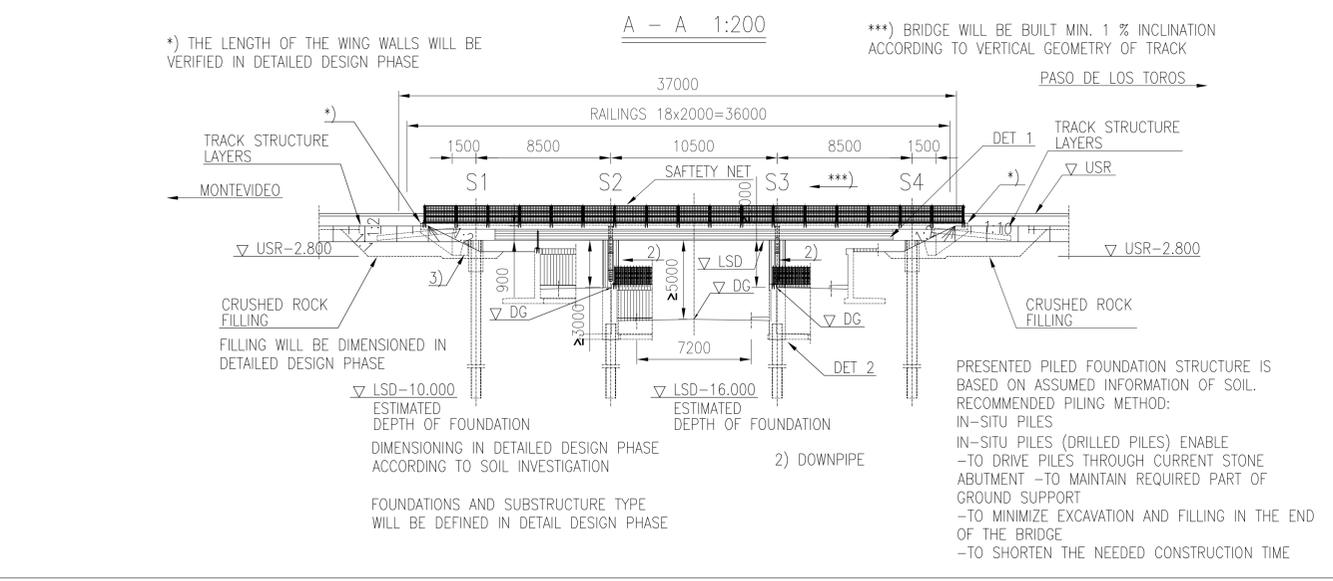
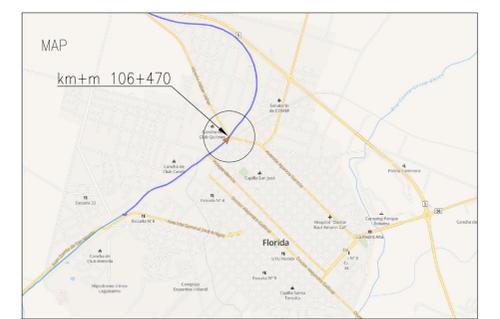
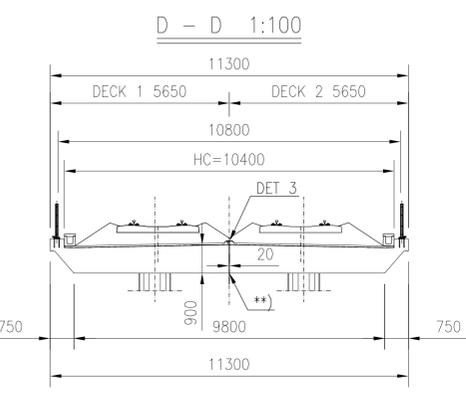
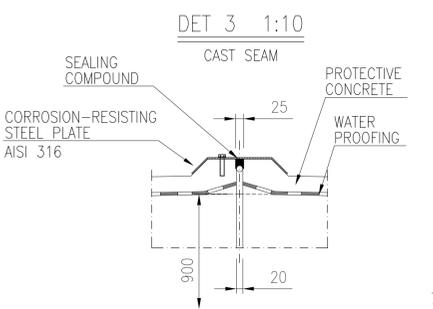
PILES: 3600 kg

COLUMNS: 260 kg/m³ (CONCRETE)

SUPERSTRUCTURE: 180 kg/m³ (CONCRETE)

TRANSITION SLABS: 325 kg/m³ (CONCRETE)

PROTECTIVE CONCRETE: 3 kg/m²



BRIDGE TYPE REINFORCED CONCRETE BRIDGE
CANTILEVER PLATE

SPANS 1.50m + 8.50m + 10.50m + 8.50m + 1.50m

HORIZONTAL CLEAR SPAN - VERTICAL CLEARANCE -

HORIZONTAL CLEARANCE 10.80 m

VERSION
23.10.2017

Revision	Explanation	Date	Designer	Date	Acceptor
Customer	<p>MINISTERIO DE TRANSPORTE Y OBRAS PÚBLICAS</p>	Project			
Supplier		Railway Project			
Drawer	<p>VR TRACK</p>	Design phase			
Designer		Pre-engineering, Phase 2			
Supervisor		Content			
Accept.	Underpass bridge				
Cust. acc.	Calleros - Heber Usher				
	Preliminary general drawing				
	Km+m 106+470				
	23.10.2017	Ilkka Tiito	23.10.2017	Ilkka Tiito	LM71-25
	23.10.2017	Ilkka Tiito	23.10.2017	Reima Niklander	Coordinate and elevation reference system WGS 84 UTM 21
					Railway line
					Archive Type Number Rev. Sheet
					UP xxxx - 1