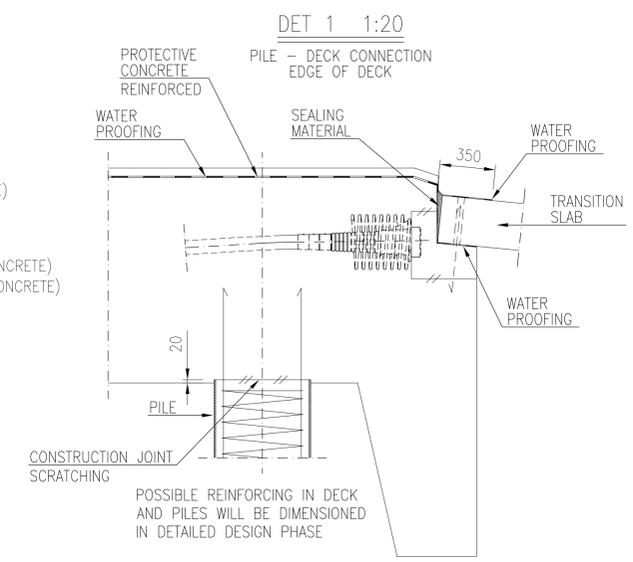


ESTIMATED AMOUNT OF CONCRETE
PILES: 17 m³
SUPERSTRUCTURE: 166 m³

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

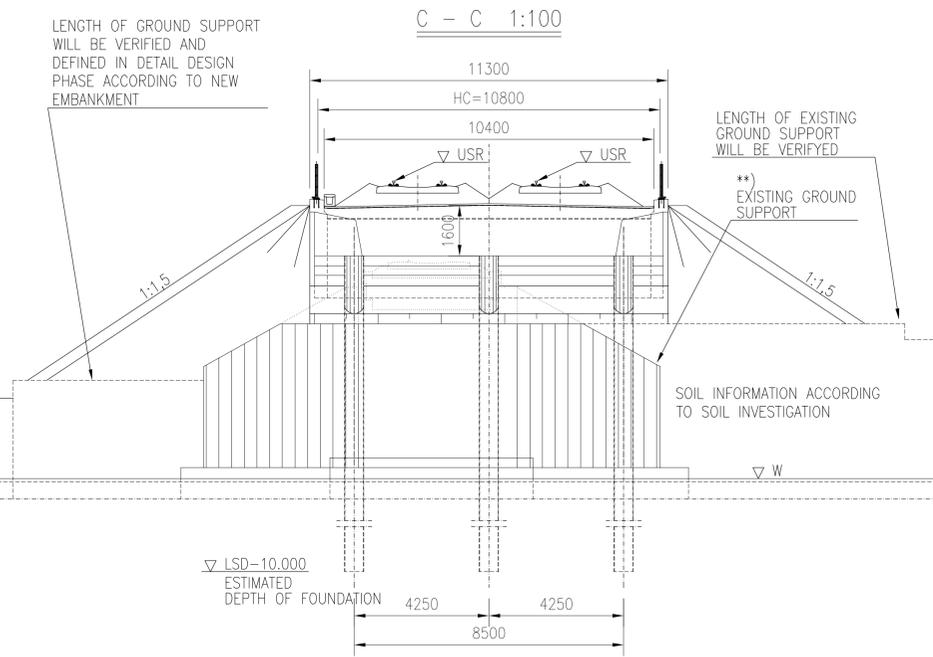
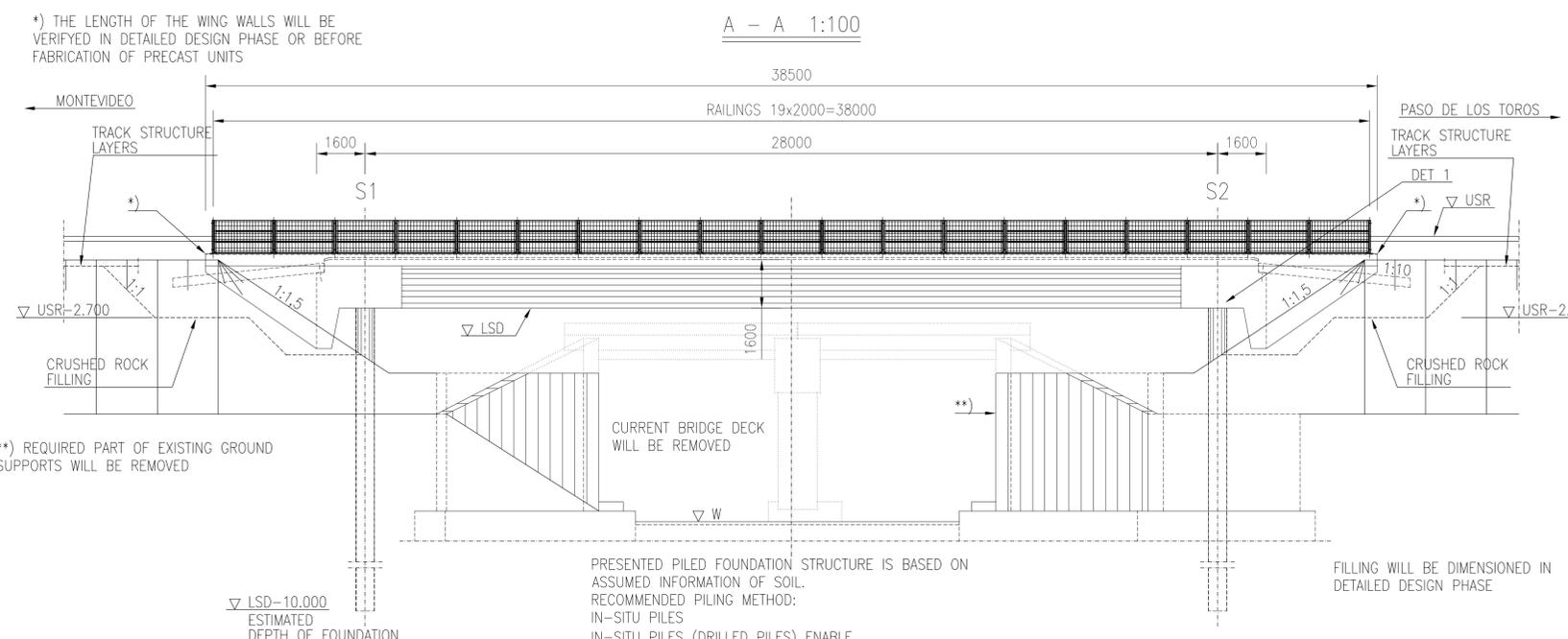
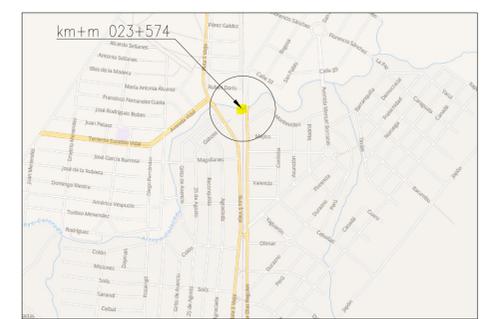
CONSTRUCTIONAL STEEL: S355 J2, HOT-DIP ZINC COATED

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



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

VERSION
23.10.2017

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

FILLING WILL BE DIMENSIONED IN DETAILED DESIGN PHASE

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

▽ LSD-10.000
ESTIMATED DEPTH OF FOUNDATION

Revision	Explanation	Date	Designer	Date	Acceptor
Customer	Project		Railway Project		
Supplier	Design phase		Pre-engineering, Phase 2		
	Content		Arroyo Colorado bridge Preliminary general drawing Km+m 023+574		
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