



- Legend:**
- Granular subbase (SGII)
 - Slab track
 - Ballast
 - Subbase gravel (BLII)
 - Filter gravel
 - Asphalt
 - Tiles
 - CW Contract
 - TS contract
 - Boundary
 - Existing terrain
 - Filling with excavated material

NOTE:
Slopes for LRT:

- 1H/1V cuttings
- 2H/1V embankments
- 3H/2V ballast, granular base and subbase gravel slopes in embankment
- 1H/1V ballast, granular base and subbase gravel slopes in cuttings or next to future road/cycle lane or sidewalk

Interface with TS:

- Distance between TOR to bottom of sleeper (L3-PAA-GEN=Gen-RU=IFM=IME-IFM-AGR-000406)
- turnouts with gooved rail: 369 mm
- turnouts with vignole rail: 384 mm
- Normal with gooved rail: 381 mm
- Normal with vignole rail: 354 mm
- Sleeper height (L3-PAA-GEN=Gen-RU=IFM=IME-IFM-AGR-000406)
- Vignole rail: 189 mm
- Grooved rail: 193 mm

General notes

- Dimensions in m, unless otherwise stated.
- Surface slopes in %.
- This drawing is a typical cross section (general for the corridors where applicable) the specific cross sections with its finishing for each stretch and specific clearance gauge see track alignment drawings L3-PAA-PRT=XX00-GL=GEN=GEN-DES-DWG-101Y01.
- Where:
 - XX: number of sector
 - Y=0 for right track, Y=1 for left track
- For the drainage definition see drawings L3-PAA-RXX=XX01-RU=ROD=DRA-DES-DWG-200001-00Y where XX: number of section and Y: number of drawing sheet.
- For ballasted track the contractual interface between the Civil Works Contractor and Transportation systems contracts is defined as the level 70 mm below the underside of the sleepers.
- The rail, fastening system, sleepers cable through and mast and its foundation shown are schematic, the details are to be defined by TS Contractor.
- The requirements for bearing capacity in slab track section are (in accordance with VDV 600):
 - o Above granular subbase $E_v > 80 \text{ MPa}$
 - o Above subbase gravel $E_v > 45 \text{ MPa}$
 - o Above existing ground $E_v > 30 \text{ MPa}$
- In order to verify previously indicated values of E modulus of the compacted fill layers, checking tests shall be performed during the construction phase. For that purpose different direct/indirect tests methods can be used (e.g. static plate load test, continuous compaction control (CCC) method, deflectometers (LWD). The use of different methods is appropriate if during construction phase correlations/calibrations between them have been documented and/or verified with trial sections.
- The requirement for the bearing capacity of the existing subgrade under road, bicycle path and footpath pavements is 20 Mpa. Pavement design is based on traffic (ADT) presented in table 1-A of CW-L-L3TFS-5.06 Bituminous Surfacing Technical/Functional specification.
- Refer to road pavement detail drawings for placement depths refer to road design detail drawings for edge and joint treatments which prevail over other pavements shown in these drawings
- The ballast shall be as per requirements in DS/EN 13450.
 - The SGII shall be:
 - o The sand equivalent shall be at least 30
 - o The content of uncrushed particles (round grains) shall not exceed 70% (see DS/EN 13242, category C NR/70)
 - o The loss by boiling according to the pVl method may not exceed 1.2 %.
- The Subbase Gravel (BL II) shall be:
 - o Grading: No grain size greater than 90 mm
 - o No more than 15% can be greater than 63 mm
 - o No more than 9% can be less than 0.063 mm
 - o Sand equivalent at least 30
 - o (cf. DS/EN 13285, category OC 85 and UF 9)
- The geotextiles will be according to EN-13250 and EN-ISO 10318.

This drawing has been printed from PDF-format - the scale cannot be expected to be correct.

Issued For Construction

Ver.	Date	Description	Prepared	Checked	Approved
4.0	2020-03-20	Final submission	JPV	MMM	AVM
3.0	2019-12-17	Final submission	JPV	MMM	TWST
2.0	2019-10-03	Final submission	JPV	MMM	TWST
1.0	2019-07-25	First submission	JPV	MMM	TWST

Hovedstadens Letbane	
CW-L	
Issued for construction	Prepared JPV
P15-P18	Designed JVB
Yellow Footprint	Checked MMM
Yellow Footprint	Checked MMM
TCS - Separated Ballast tracks	Approved AVM
Description	Scale As Shown
Issued for construction	Date 2020-08-21
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Separated ballasted tracks
Scale 1:25